

# APPENDIX 14

## CULTURAL RESOURCES

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**A14-1 ITEM 1: MRL SEIS II PA INITIATION LETTER AND RESPONSES**

**A14-1.1 MRL SEIS II PA Initiation Letter**



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Jo Ann Battise, Principal Chief  
Alabama-Coushatta Tribe of Texas  
571 State Park Rd 56  
Livingston, TX 77351

Dear Principal Chief Battise:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Alabama-Coushatta Tribe of Texas pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and



information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- Slurry Trenches, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- Sheet Pile Cut-offs, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves

driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. Bryant J. Celestine, Historic Preservation Officer, Alabama Coushatta Tribe of Texas, [celestine.bryant@actribe.org](mailto:celestine.bryant@actribe.org).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

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Nelson Harjo, Chief  
Alabama-Quassarte Tribal Town  
P.O. Box 187  
Wetumka, OK 74883

Dear Chief Harjo:

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### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

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### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Ms. Samantha Robinson, Tribal Historic Preservation Officer, Alabama-Quassart Tribal Town, [aqhpo@mail.com](mailto:aqhpo@mail.com).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Bobby Komardley, Chairman  
Apache Tribe of Oklahoma  
Tribal Chairman  
P O Box 1330

Dear Mr. Komardley:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Apache Tribe of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and

information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

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- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- Slurry Trenches, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- Sheet Pile Cut-offs, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves

driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

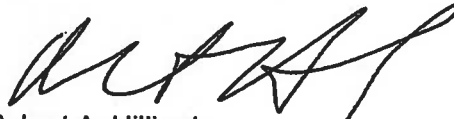
### **Conclusion**

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USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



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Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Lguy93@hotmail.com.





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

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Tamara Francis-Fourkiller, Chairman  
Caddo Nation of Oklahoma  
117 Memorial Lane  
P.O. Box 487

Dear Chairman Francis-Fourkiller:

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This letter is intended to notify the Caddo Nation of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter will be provided to Mr. Derrick Hill, THPO, Caddo Nation of Oklahoma, [dhill@caddo.xyz](mailto:dhill@caddo.xyz)



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Bill John Baker, Principal Chief  
Cherokee Nation of Oklahoma  
PO Box 948

Dear Mr. John Baker:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Cherokee Nation of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect historic properties, protected tribal resources, tribal rights, or Indian lands.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental



evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- Slurry Trenches, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- Sheet Pile Cut-offs, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased

resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Ms. Elizabeth Toombs, Tribal Historic Preservation Officer, [elizabeth-toombs@cherokee.org](mailto:elizabeth-toombs@cherokee.org).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Bill Anoatubby, Governor  
Chickasaw Nation  
PO Box 1548  
Ada, Ok 74821

Dear Mr. Anoatubby:

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This letter is intended to notify the Chickasaw Nation pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

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### **Development of Streamlined Section 106 Consultation Procedures**

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### **Consulting Parties and the Public**



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USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.


### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Ms. Karen Brunso, THPO, at [Karen.Brunso@chicksaw.net](mailto:Karen.Brunso@chicksaw.net) and to [HPO@chickasaw.net](mailto:HPO@chickasaw.net)



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Melissa Darden, Chairman  
Chitimacha Tribe of Louisiana  
P.O. Box 661  
Charenton, LA 70523

Dear Chairman Darden:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Chitimacha Tribe of Louisiana pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and

information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- Slurry Trenches, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- Sheet Pile Cut-offs, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves

driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### **Conclusion**

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Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mrs. Kimberly Walden, M. Ed., Cultural Director/Tribal Historic Preservation Officer, Chitimacha Tribe of Louisiana, kim@chitimacha.gov.





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Gary Batton, Chief  
Choctaw Nation of Oklahoma  
Attn: Choctaw Nation Historic Preservation Department  
P.O. Box 1210

Dear Chief Batton:

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This letter is intended to notify the Choctaw Nation of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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### **Development of Streamlined Section 106 Consultation Procedures**

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The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

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USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Dr. Ian Thompson, Director/Tribal Historic Preservation Officer, Choctaw Nation of Oklahoma, [ithompson@choctawnation.com](mailto:ithompson@choctawnation.com) and Ms. Lindsey Bilyeu, NHPA Section 106 Reviewer, Choctaw Nation



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

David Sickey, Chairman  
Coushatta Tribe of Louisiana  
P.O. Box 818  
Elton, LA 70532

Dear Chairman Sickey:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Coushatta Tribe of Louisiana pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

## **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and



information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- Slurry Trenches, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- Sheet Pile Cut-offs, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves

driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

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### Conclusion

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Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Dr. Linda Langley, Tribal Historic Preservation Officer, Coushatta Tribe of Louisiana, [llangley@coushattatribela.org](mailto:llangley@coushattatribela.org) and Mr. Johans Johns, [jonasj@coushattatribela.org](mailto:jonasj@coushattatribela.org).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Deborah Dotson, President  
Delaware Nation  
P.O. Box 825  
Anadarko, OK 73005

Dear Ms. Dotson:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Delaware Nation pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

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The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

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resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

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### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**



### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Ms Kim Penrod, Director, Historic Preservation at [kpenrod@delawarenation.com](mailto:kpenrod@delawarenation.com) and Ms. Nekole Allgood, NAGPRA Coordinator at [NAllgood@delawarenation.com](mailto:NAllgood@delawarenation.com).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Chester Brooks, Chief  
Delaware Tribe of Indians  
5100 Tuxedo Blvd  
Bartlesville, OK 74006

Dear Mr. Brooks:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Delaware Tribe of Indians pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf) ) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and

information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
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Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves

driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

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Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. Brice Obermeyer, Director at Delaware Tribes Historic Preservation Office, at [bobermeyer@delawaretribe.org](mailto:bobermeyer@delawaretribe.org) and [cbrookes@delawaretribe.org](mailto:cbrookes@delawaretribe.org).





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Richard Sneed, Principal Chief  
Eastern Band of Cherokee Indians  
P.O. Box 1927  
Cherokee, NC 28719

Dear Mr. Sneed:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Eastern Band of Cherokee Indians pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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## **Project Background**

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driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. Russel Townsend, Director, Historic Preservation at [rustown@nc-chokeee.com](mailto:rustown@nc-chokeee.com).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Glenna J. Wallace, Chief  
Eastern Shawnee Tribe of Oklahoma  
12755 S. 705 Rd.  
Wyandotte, Ok 74370

Dear Ms. Wallace:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Eastern Shawnee Tribe of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental



evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- **Seepage Berms**, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- **Relief Wells**, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- **Slurry Trenches**, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- **Sheet Pile Cut-offs**, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- **Floodwall Replacement**, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased

resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
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### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. Brett Barnes  
Tribal Historic Preservation Officer at [bbarnes@estoo.net](mailto:bbarnes@estoo.net).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

B. Cheryl Smith, Principal Chief  
Jena Band of Choctaw Indians  
P.O. Box 14  
Jena, LA 71342

Dear Principal Chief Smith:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Jena Band of Choctaw Indians pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

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information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

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- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves

driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.



### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mrs. Alina Shively, Tribal Historic Preservation Officer, Jena Band of Choctaw Indians, [ashively@jenachoctaw.org](mailto:ashively@jenachoctaw.org).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Lynn Williams, Tribal Chair  
Kaw Nation  
P O Box 50  
Kaw City, OK 74641

Dear Ms. Williams:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Kaw Nation pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect historic properties, protected tribal resources, tribal rights, or Indian lands.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
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resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

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Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to  
lwilliams@kawnation.com, fhacket@kawnatino.com and Ms. Crystal Douglas, Tribal  
Historic Preservation Officer at crystal\_douglas@kawnation.com.





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Jeremiah Hobia, Mekko  
Kialegee Tribal Town  
P.O. Box 332  
Wetumka, OK 74883

Dear Mekko Hobia:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Kialegee Tribal Town pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. David Cook, Heriate and Cultura Dept. Kialegee Tribal Town, david.cook@kialegeetribe.net and henry.harjo@kialegeetribe.net.



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Lester Randall, Chairman  
Kicapoo Tribe of Kansas  
824 111th Drive  
Horton, KS 66439

Dear Mr. Randall:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Kicapoo Tribe of Kansas pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and



information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

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USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to [eric.sheets@ktik-nsn.gov](mailto:eric.sheets@ktik-nsn.gov).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Johnathan Wilber, Tribal Administrator  
Menominee Indian Tribe of Wisconsin  
P O Box 910  
Keshena, WI 54135

Dear Mr. Wilber:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Menominee Indian Tribe of Wisconsin pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

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driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.



### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to [jwilber@mitw.org](mailto:jwilber@mitw.org) and Mr. David Grignon, Tribal Historic Preservation Officer and Director at [dgrignon@mitw.org](mailto:dgrignon@mitw.org).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Douglas G. Langford, Chief  
Miami Tribe of Oklahoma  
P O Box 1326  
Miami, OK 74355

Dear Mr. Langford:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Miami Tribe of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf) ) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and

information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

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Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to  
dlankford@miamination.com and Ms. Diane Hunter, THPO at dhunter@miamination.com.





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Cyrus Ben, Chief  
Mississippi Band of Choctaw Indians  
P.O. Box 6257  
Choctaw, MS 39350

Dear Chief Ben:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Mississippi Band of Choctaw Indians pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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### **Project Background**

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driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
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### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. Kenneth H. Carleton, Tribal Historic Preservation Officer/Archaeologist, Mississippi Band of Choctaw Indians, [kcarleton@choctaw.org](mailto:kcarleton@choctaw.org).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Mr. James Floyd, Principal Chief  
Muscogee (Creek) Nation  
Attn: Historic and Cultural Preservation Office  
P.O. Box 580

Dear Principal Chief Floyd:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Muscogee (Creek) Nation pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf) ) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and



information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

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Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Ms. Corain Lowe-Zepeda, Tribal Historic Preservation Officer, Muscogee (Creek) Nation, [section106@mcn-nsn.gov](mailto:section106@mcn-nsn.gov).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Geoffrey Standing Bear, Principal Chief  
Osage Nation of Oklahoma  
627 Grandview  
Pawhuska, OK 74056

Dear Mr. Standing Bear:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Osage Nation of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

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evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

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resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**



### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Dr. Andrea Hunter, THPO at [ahunter@osagenation-nsn.gov](mailto:ahunter@osagenation-nsn.gov) and [Jess.Hendrix@osagenation-nsn.gov](mailto:Jess.Hendrix@osagenation-nsn.gov).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

John R. Shotton, Chairman  
Otoe-Missouria Tribe of Oklahoma  
8151 Hwy 177  
Red Rock, OK 74651

Dear Mr. Shotton:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Otoe-Missouria Tribe of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- **Seepage Berms**, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- **Relief Wells**, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- **Slurry Trenches**, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- **Sheet Pile Cut-offs**, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- **Floodwall Replacement**, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased

resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

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### **Development of Streamlined Section 106 Consultation Procedures**

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The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided [jshotton@omtribe.org](mailto:jshotton@omtribe.org) and to Elsie Whitehorn, THPO, at [ewhitehorn@omtribe.org](mailto:ewhitehorn@omtribe.org).





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Craig Harper, Chief  
Peoria Tribe of Indians of Oklahoma  
118 S. Eight Tribes Trail  
Miami, OK 74354

Dear Mr. Harper:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Peoria Tribe of Indians of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf) ) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and

information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

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- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- Slurry Trenches, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- Sheet Pile Cut-offs, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves

driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided  
chiefharper@peoriatribes.com and to Logan Pappenfort, Second Chief and Tribal Historic  
Preservation Officer, at lpappenfort@peoriatribes.com.



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Stephanie Bryan, Chairwoman  
Poarch Band of Creek Indians  
5811 Jack Springs Road  
Atmore, AL 36502

Dear Chairwoman Bryan:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Poarch Band of Creek Indians pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and



information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
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The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

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### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

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Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Ms. Carolyn White, Acting Tribal Historic Preservation Officer, [cwhite@pci-nsn.gov](mailto:cwhite@pci-nsn.gov).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Douglas Rhodd, Chairman  
Ponca Tribe of Oklahoma  
20 White Eagle Drive  
Ponca City, Ok 74601

Dear Mr. Rhodd:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Ponca Tribe of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

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The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

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- **Relief Wells**, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- **Slurry Trenches**, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- **Sheet Pile Cut-offs**, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- **Floodwall Replacement**, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased

resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**



### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Halona Cabe, THPO, at [halona.clawson@ponca.com](mailto:halona.clawson@ponca.com).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

John Berrey, Chairman  
Quapaw Tribe of Oklahoma  
5681 South 630 Road  
Quapaw, OK 74363

Dear Mr. Berrey:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Quapaw Tribe of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- **Seepage Berms**, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
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resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

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The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Everett Bandy, THPO at [ebandy@quapawtribe.com](mailto:ebandy@quapawtribe.com).





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Tiauna Carnes, Chair  
Sac and Fox Nation of Missouri in Kansas and Nebraska  
305 N. Main Street  
Reserve, KS 66434

Dear Mr. Carnes:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Sac and Fox Nation of Missouri in Kansas and Nebraska pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

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Work Items to address **seepage deficiencies** include construction of:

- **Seepage Berms**, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- **Relief Wells**, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- **Slurry Trenches**, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- **Sheet Pile Cut-offs**, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- **Floodwall Replacement**, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased

resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An eletronic copy of this letter with enclosures will be provided to the  
egreen@sacandfoxcasino.com of the Historic Preservation Office Sac and Fox Nation of  
Missouri in Kansas and Nebraska.



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 3, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Kay Rhoads, Principal Chief  
Sac and Fox Nation of Oklahoma  
Administration Building  
920883 S. Hwy 99 Bldg A

Dear Ms. Rhoads:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as September 30, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Sac and Fox Nation of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances



and information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach providing a safe and levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
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- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involve driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.
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### **Development of Streamlined Section 106 Consultation Procedures**

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### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

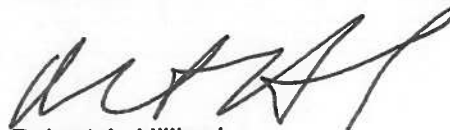
### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

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Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mrs. Lisa Montgomery, EPA Director at [lmontgomery@sacandfoxnation-nsn.gov](mailto:lmontgomery@sacandfoxnation-nsn.gov) and to Sandra Massey at [smassey@sacandfoxnation-nsn.gov](mailto:smassey@sacandfoxnation-nsn.gov).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Greg Chilcoat, Principal Chief  
Seminole Nation of Oklahoma  
P.O. Box 1498  
Wewoka, OK 74884

Dear Principal Chief Chilcoat:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Seminole Nation of Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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historic properties, protected tribal resources, tribal rights, or Indian lands.

## **Project Background**

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### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- Slurry Trenches, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- Sheet Pile Cut-offs, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves

driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.



### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. Theodore Isham, Tribal Historic Preservation Officer, Seminole Nation of Oklahoma, [isham.t@sno-nsn.gov](mailto:isham.t@sno-nsn.gov).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Marcellus W. Osceola, Chairman  
Seminole Tribe of Florida  
6300 Sterling Road  
Hollywood, FL 33024

Dear Chairman Osceola:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Seminole Tribe of Florida pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf) ) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and

information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

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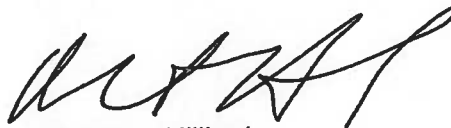
### Conclusion

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Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Dr. Paul N. Backhouse, Tribal Historic Preservation Officer, Seminole Tribe of Florida, THPOCompliance@semtribe.com; paulbackhouse@semtribe.com; and Mr. Bradley Mueller, Compliance Rev





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Ron Sparkman, Chief  
Shawnee Tribe  
P.O. Box 189  
Miami OK 74355

Dear Mr. Sparkman:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Shawnee Tribe pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

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### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
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Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to

meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

rondede1@gmail.com and to Ms. Tonya Tipton at shawneetribel@shawnee-tribe.com.



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Ryan Morrow, Town King/Mekko  
Thlopthlocco Tribal Town  
P.O. Box 188  
Okemah, OK 74859

Dear Mekko Morrow:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Thlopthlocco Tribal Town pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

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Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. Terry Clouthier, Tribal Historic Preservation Officer, [thpo@tttown.org](mailto:thpo@tttown.org).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Joey Barbry, Chairman  
Tunica-Biloxi Tribe of Louisiana  
P.O. Box 1589  
Marksville, LA 71351

Dear Chairman Barbry:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Tunica-Biloxi Tribe of Louisiana pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under Executive Order 13175, the National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to significantly affect

historic properties, protected tribal resources, tribal rights, or Indian lands.

### **Project Background**

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 ([1976 Final EIS - https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and

information that was not considered in the 1998 SEIS I nor through supplemental environmental evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- Seepage Berms, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- Relief Wells, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- Slurry Trenches, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- Sheet Pile Cut-offs, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves

driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.



### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.


### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. Earl J. Barbry, Jr., Cultural Director, Tunica-Biloxi Tribe of Louisiana, [earlii@tunica.org](mailto:earlii@tunica.org).



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Joey Bunch, Chief  
United Keetowah Band of Cherokee Indians in Oklahoma  
P O Box 746  
Tahlequah, OK 74464

Dear Mr. Bunch:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the United Keetowah Band of Cherokee Indians in Oklahoma pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

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resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

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### **Consulting Parties and the Public**

### Consulting Parties and the Public

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### Conclusion

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USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Ms. Shelia Bird, THPO, at [eoosahwee-voss@ukb-nsn.gov](mailto:eoosahwee-voss@ukb-nsn.gov) and Ms. Karen Pritchett at [kpritchett@ukb-nsn.gov](mailto:kpritchett@ukb-nsn.gov).





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Scott Kaufman, Director  
Arkansas Historic Preservation Program  
1100 North Street  
Little Rock, AR 72201

Dear Mr. Kaufman:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Arkansas Historic Preservation Program pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- **Seepage Berms**, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- **Relief Wells**, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- **Slurry Trenches**, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- **Sheet Pile Cut-offs**, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- **Floodwall Replacement**, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased

resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: Hard Copy Only



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Rachel Leibowitz, Ph.D., Deputy State Historic Preservation Officer  
Illinois Historic Preservation Agency  
1 Natural Resources Way.  
Springfield, IL 62702

Dear Ms. Leibowitz, Ph.D.:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Illinois Historic Preservation Agency pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

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### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: Hard Copy Only



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Nicholas Laracuate, State Historic Preservation Officer  
Kentucky Heritage Council  
The Barstow House  
410 High Street

Dear Mr. Laracuate:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Kentucky Heritage Council pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- **Seepage Berms**, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- **Relief Wells**, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- **Slurry Trenches**, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- **Sheet Pile Cut-offs**, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- **Floodwall Replacement**, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased

resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**



### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: Hard Copy Only



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Kristin Sanders, SHPO  
LA State Historic Preservation Officer  
P.O. Box 44247  
Baton Rouge, LA 70804-4241

Dear Ms. Sanders:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the LA State Historic Preservation Officer pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

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### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### **Consulting Parties and the Public**

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

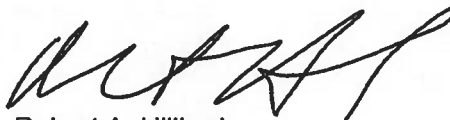
### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to the Section 106 Inbox, [section106@crt.la.gov](mailto:section106@crt.la.gov).





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Underwood John, Chief Archaeologist  
Mississippi Department of Archives and History  
Review and Compliance Officer  
P.O. Box 571

Dear Mr. John:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Mississippi Department of Archives and History pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

In partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental

evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- **Seepage Berms**, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- **Relief Wells**, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- **Slurry Trenches**, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- **Sheet Pile Cut-offs**, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- **Floodwall Replacement**, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased

resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to Mr. Hall Bell, MDAH Review and Compliance Officer, [hbell@mdah.ms.gov](mailto:hbell@mdah.ms.gov)



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Toni M. Prawl, Deputy State Historic Preservation Officer  
MO State Historic Preservation Office  
P.O. Box 176  
Jefferson City, MO 65102-0176

Dear Dr. Prawl:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the MO State Historic Preservation Office pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

The initiation of construction of the MRL feature predates the passage of both NEPA and the NHPA. Subsequent to the passage of those laws, USACE developed an Environmental Impact Statement completing it in 1976 (1976 Final EIS - [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1976\\_Final\\_EIS.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1976_Final_EIS.pdf)). A supplemental EIS was published in 1998 (1998 SEIS I- [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/1998\\_MRL\\_SEIS\\_Volume1.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/1998_MRL_SEIS_Volume1.pdf)) to supplement the earlier document and to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures focusing on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage. Since publication of these two documents, USACE has determined that various sections (reaches) of the mainline levee system are deficient in varying amounts, and that certain remedial measures need to be undertaken to control seepage and to raise and stabilize the deficient sections of the levee to protect the lower Mississippi River Valley against the PDF and maintain the structural integrity of the MRL system. To address the additional needs and due to significant new circumstances and information that was not considered in the 1998 SEIS I nor through supplemental environmental



evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

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### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**

### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: Hard Copy Only



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Patrick McIntyre, Jr., Executive Director and SHPO  
Tennessee Historical Commission  
2941 Lebanon Pike  
Nashville, TN 37243-0442

Dear Mr. McIntyre, Jr.:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Tennessee Historical Commission pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

As part of USACE's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA), USACE offers you the opportunity to review and comment on the potential of the proposed actions described in this letter to affect historic properties.

## Project Background

The MR&T Project is designed to provide flood risk reduction in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana. The MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. *The Mississippi River Levees (MRL) feature—the subject of the current effort—has been under construction since 1928 and continually augmented through time* (See Attachment A-Figure 1, and [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/MRT\\_Levees.pdf](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/MRT_Levees.pdf) for a more detailed description of the history of the construction effort).

The goal of the MR&T Project is to provide an environmentally sustainable project for comprehensive flood damage control, protection, and risk reduction from the “Project Design Flood (the PDF). The PDF is a hypothetical flood that was developed to determine the design flood to be used in designing the MR&T levee system in the lower Mississippi River Basin, and is defined as the “greatest flood having a reasonable probability of occurrence” when the operable features of the entire MR&T Project are considered. The PDF flowline upon which the current design for the construction of the mainline levee system and remaining unconstructed levees is based, is the “Refined 1973 MR&T PDF Flowline.” The Mississippi River mainline levees protect the lower Mississippi River Valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, overflows several levees designed to overtop and fill tributary basins, or is intentionally diverted into four floodway areas. (A figure which depicts the PDF in cubic feet per second is here [https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL\\_SEIS/ProjectDesignFlood.jpg](https://www.mvk.usace.army.mil/Portals/58/docs/PP/MRL_SEIS/ProjectDesignFlood.jpg)).

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evaluations (EA) since 1998, USACE has undertaken the development of additional NEPA documentation for the MR&T MRL. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach to providing a safe levee system.

### **Description of the Undertaking (MRL Construction Items)**

USACE's investigation into the current condition of the MRL system demonstrated that there are over 225 miles of MRL that are either grade deficient or are subjected to seepage at unacceptable levels. The purpose of the undertaking is to improve sections of deficient sections of the MRL to provide the authorized risk reduction against the PDF (i.e., modifying existing MRL features to include: levee enlargements; stability and seepage berms, installation of relief wells, sheet pile cutoffs walls and the construction of slurry trenches to accomplish this goal). The undertaking does not include reformulation or wholesale realignment of existing MRL features, only work on existing features.

At this time, these areas have been broken into 124 work items (see Attachment A). These proposed work items are represented on a pdf map on the project webpage: [https://www.mvk.usace.army.mil/Portals/58/Project\\_Map.pdf](https://www.mvk.usace.army.mil/Portals/58/Project_Map.pdf). They can generally be categorized into two groups: projects to address Levee Deficiencies, and projects to address Seepage Deficiencies. See the Levee Deficiency Visual Aid and the Seepage Control Visual aid on the project website of typical cross-sections and photos of these types of activities, as well as the narrative description below.

Work Items to address **seepage deficiencies** include construction of:

- **Seepage Berms**, which are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close sources.
- **Relief Wells**, which are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
- **Slurry Trenches**, which are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
- **Sheet Pile Cut-offs**, this is the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Work Items to address **levee deficiencies** include construction of:

- **Floodwall Replacement**, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased

resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.

- Levee Enlargement, which is raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and typically additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
- Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile (e.g. moving from a 1:3 to a 1:5 ratio) along reaches of the levee with recurrent levee slides. This action typically requires clearing and grubbing, re-working of the damaged levee section, and like the Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Development of Streamlined Section 106 Consultation Procedures**

USACE has determined that the proposed actions constitute undertakings as defined in 36 CFR § 800.16(y) and have the potential to cause effects on historic properties. This letter initiates formal Section 106 consultation pursuant to 36 CFR § 800.3(c). In accordance with E.O. 13807 “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects”, and USACE’s implementing policy for this E.O., dated 26 September 2018, USACE proposes to develop a project-specific PA pursuant to 36 CFR § 800.14(b)(3).

The goal of this Section 106 consultation is to provide a project-specific framework for addressing this complex series of undertakings and establish protocols for continuing consultation with the SHPOs, Tribal Governments, and other stakeholders. The PA would identify consulting parties, define applicability, establish review timeframes, stipulate roles and responsibilities of stakeholders, summarize Tribal consultation procedures, consider the views of the SHPO/Tribal Historic Preservation Officers and any other consulting parties, afford for public participation, develop programmatic allowances to exempt certain actions from Section 106 review, provide the measures USACE will implement to develop an Area of Potential Effects (APE) in consultation with external stakeholders, outline a standard review process for plans and specifications as they are developed, determine an appropriate level of field investigation to identify and evaluate historic properties within the APE and the potential to affect historic properties and/or sites of religious and cultural significance, streamline the assessment and resolution of Adverse Effects through avoidance, minimization, and programmatic treatment approaches for mitigation, establish reporting frequency and schedule, provide provisions for post-review unexpected discoveries and unmarked burials, and incorporate the procedures for amendments, duration, termination, dispute resolution, and implementation.

### **Consulting Parties and the Public**



### Consulting Parties and the Public

USACE is forwarding this letter and attachments to various consulting parties for their review and comments as required by 36 CFR §800.3, and we request that these potential consulting parties provide comments within the 30 days provided for in the regulations. At the present time, USACE has identified the parties in Attachment B. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the USACE. In addition to the efforts made under NEPA, USACE will provide to the public, via our project website, notice of the development of a programmatic agreement. The terms of the PA will provide a plan for project specific engagement of the public.

### Conclusion

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

USACE proposes to forward future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the development of the Section 106 agreement for the MRL SEIS II. Please let USACE know if this is impractical so that alternative arrangements can be made.

Please notify any of the District Tribal Liaisons or Archaeologists with questions or comments. Their contact information follows: Jason A. Emery, MVN Archaeologist and District Tribal Liaison at (504) 862-2364 or [jason.a.emery@usace.army.mil](mailto:jason.a.emery@usace.army.mil); Ms. Pam Lieb, MVM Archaeologist and District Tribal Liaison, at (901) 544-0710 or [pamela.d.lieb@usace.army.mil](mailto:pamela.d.lieb@usace.army.mil); Ms. Kristen Camp, MVK District Tribal Liaison at (601) 631-7934 or [Kristen.F.Camp@usace.army.mil](mailto:Kristen.F.Camp@usace.army.mil); and Ms. Ashely Fedoroff, MVK Archaeologist at (601) 631-5278 or [ashley.m.fedoroff@usace.army.mil](mailto:ashley.m.fedoroff@usace.army.mil). Should you want to respond via U.S. Mail, please send to: Regional Planning and Environment Division, South, Environmental Planning Branch, Attn: USACE-PDS-N, 7400 Leake Ave, New Orleans, LA 70118-3651.

Sincerely,



Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: Hard Copy Only



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT**  
**4155 CLAY STREET**  
**VICKSBURG, MISSISSIPPI 39183-3435**

September 11, 2019

SUBJECT: Notice of Intent to Prepare a Programmatic Agreement (PA) to support the "Supplement II to the Final Environmental Impact Statement, Mississippi River and Tributaries (MR&T) Project, Mississippi River Mainline Levees and Channel Improvement (SEIS II)" for proposed work items in the Memphis, Vicksburg, and New Orleans Districts of the U.S. Army Corps of Engineers

Reid Nelson, Chairman  
Office of Federal Agency Programs  
Advisory Council on Historic Preservation  
401 F. Street NW, Suite 308

Dear Mr. Nelson:

The United States Army Corps of Engineers (USACE), is initiating the process to develop a Programmatic Agreement for the currently identified authorized remaining work required to complete the Mississippi River Levees (MRL) Feature of the Mississippi River and Tributaries (MR&T) Project pursuant to section 106 of the National Historic Preservation Act 1966 as amended (NHPA) (54 U.S.C. § 300101 et seq.). USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). Additional communications will follow to firm up this date and time.

This letter is intended to notify the Office of Federal Agency Programs pursuant to 36 CFR Part 800.14(b) of our plan to develop a project-specific PA that establishes procedures to satisfy the USACE's Section 106 responsibilities with regard to the programmatic review of these work items and allows USACE to coordinate Section 106 reviews with its evaluation of the proposed action's potential for significant impacts to the human and natural environment required by the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.). The PA will address the potential to effect historic properties that are eligible for or listed on the National Register of Historic Places (NRHP), including archaeological sites, districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and/or sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these undertakings. Vicksburg District (MVK) acts as the lead USACE district for the development of the SEIS II for MRL construction activities on the MR&T Project, and invites the Ponca Tribe of Oklahoma to participate in this consultation which will result in the development of a PA that governs the application of the Section 106 process with regards to the proposed undertaking across three USACE Districts (Memphis, Vicksburg, and New Orleans Districts) and encompassing portions of seven States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana). USACE maintains a project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed PA here, when complete.

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### **Conclusion**

Again, USACE would like to propose a date and time for the initial Section 106 consultation meeting, via Teleconference, as October 7, 2019 at 1pm (CDT). The purpose of the initial meeting will be to discuss the proposed undertakings across the three districts and begin development of the stipulations in the Programmatic Agreement. USACE will provide an agenda, meeting materials, and webinar access to the various Consulting Parties regarding the meeting as soon as possible. Do not hesitate to notify USACE regarding any information your office may wish to provide at this time concerning the proposed undertaking and its potential to significantly affect historic properties and/or of any other relevant parties who you feel may have an interest in participating in this consultation.

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Sincerely,



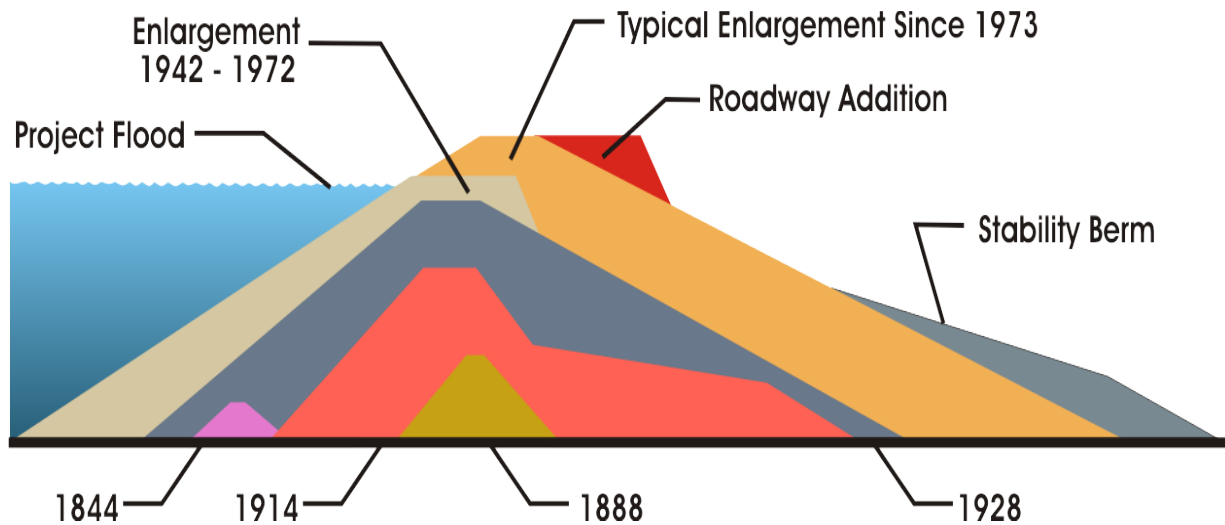
Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Enclosures

cc: An electronic copy of this letter with enclosures will be provided to the e-106 Inbox, e106@achp.gov and cdaniel@achp.gov.



## Attachment A & Figure 1.



**Figure 1.** Typical Section of MRL features. This is a conceptual profile of the levee features indicating the design form and date of construction.

## Projects By District and Work Item

### Memphis District (MVM) Projects

#### For West Bank Ohio River

1. Mound City to Cairo Levee 0/0+00 to 2/26+00. This item of work is 2.5 miles long and is located on right descending bank opposite river mile 965. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2 feet on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 3.2 acres of a cultivated field one mile northeast of Mound City, MO riverside of the mainline levee.
2. North Mound City, IL Sump. This item of work is 250 feet long on the right descending bank opposite river mile 962. It consists of installing relief wells with the associated drainage work to control seepage. Preliminary design indicates that the relief wells will be located at levee stations 2/45+00 to 2/47+50 landside of the levee.
3. Mound City to Cairo Levee 2/26+00 to 4/0+00. This item of work is 1.5 miles long and is located on right descending bank opposite river mile 962. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Borrow material for the embankment is

tentatively proposed to be obtained from 3.9 acres of a cultivated field one mile northeast of Mound City, MO riverside of the mainline levee.

4. Mound City to Cairo Levee 4/30+00 to 5/7+00. This item of work is less than a mile long and is located on right descending bank opposite river mile 961. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.8 acres of a cultivated field one mile northeast of Mound City, MO riverside of the mainline levee.
5. Mound City to Cairo, IL 7/50+00 to 8/4+00. This item of work is 200 feet long and is located on right descending bank opposite river mile 958. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2 foot on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.1 acres of a cultivated field one mile northeast of Mound City, MO riverside of the mainline levee.
6. Cairo, IL Floodwall. This item of work is 3.2 miles long and is located on the right descending bank opposite river mile 956. It consists of replacing the existing floodwall. Preliminary design indicates the new floodwall will be located on the landside of the existing floodwall or within the existing floodwall footprint.
7. Fish Market Gate/High 51 Closure. This item of work is 3,500 feet long and is located on the right descending bank opposite river mile 955. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2 foot on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 1.8 acres of a cultivated field riverside of levee stations 10/50+75 to 11/5+00.

#### For East Bank Mississippi River

8. Hickman Floodwall Embankment Tie-in. This item of work is 500 feet long and is located on the left descending bank opposite river mile 922. It consists of construction of levee that would extend from the existing floodwall to tie-in to high ground. Preliminary design indicates the levee will be 3 feet in height on average with a 5 foot crown. The design slopes 1 foot vertical on 3.5 feet horizontal will result in base width of the levee approximately 26 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.1 acres of cleared land 1000 feet west of the Levee Grade Raise adjacent to Hickman Harbor.
9. Hickman Levee Grade Raise. This item of work is 500 feet long and is located on the left descending bank opposite river mile 922. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2 feet on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.3 acres of cleared land 1000 feet west of the Levee Grade Raise adjacent to Hickman Harbor.
10. Island 8 Parcel 3, KY (4/0+00 to 5/20+00). This item of work is 1.4 miles long and is located on the left descending bank opposite river mile 918. It consists of installing relief wells with associated drainage work to control seepage. Preliminary design indicates that relief wells will be located at levee stations 4/0+00 to 5/20+00 landside of the levee.

11. Lake No. 9 – KY-TN State Line (21/3+80 to 21/7+30). This item of work is 350 feet long and is located on the left descending bank opposite river mile 902. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.2 acres of a cultivated field riverside of levee stations 21/2+79 to 21/4+79.
12. Great River Road Slope Flattening (12/45+00 to 15/0+00). This item of work is 2.2 miles long and is located on the left descending bank opposite river mile 848. It consists of flattening the landside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 41.5 acres of a cultivated field riverside of levee stations 13/0+00 to 15/0+00.
13. Great River Road Slope Flattening (20/0+00 to 37/0+00). This item of work is 2 miles long and is located on the left descending bank opposite river mile 832. It consists of flattening the landside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Preliminary design indicates that the slope flattening will be located at levee stations 20/0+00 to 21/0+00, 27/11+00, 32/5+00, 33/20+00, and 34/27+00 landside of the levee. Borrow material for the embankment is tentatively proposed to be obtained from 323.6 acres of a cultivated field riverside of levee stations 26/20+00 to 29/40+00.

#### For West Bank Mississippi River

14. Nash, MO Slope Flattening (11/12+00 to 12/0+00). This item of work is 0.8 miles long and is located on the right descending bank opposite river mile 49 AC. It consists of flattening the landside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 12.6 acres of a cultivated field riverside of levee stations 7/48+13 to 8/2+00.
15. Commerce to Birds Point (15/0+00 to 17/49+00). This item of work is 1.5 miles long and is located on right descending bank opposite river mile 29 AC. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 15/52+00 to 16/45+00, 16/30+00, and 17/30+00 to 17/49+00. Borrow material for the embankment is tentatively proposed to be obtained from 0.4 acres of a cultivated field riverside of levee stations 16/30+92 to 16/33+00.
16. Commerce to Birds Point (17/49+00 to 32/0+00). This item of work is 6 miles long and is located on right descending bank opposite river mile 22 AC. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 feet on average which will increase the base width of the levee approximately 45 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 17/49+00 to 20/14+69, 20/53+36 to 22/37+00, 27/25+63 to 32/0+00. Borrow material for the embankment is tentatively proposed to be obtained from 30.3 acres of cultivated fields riverside of levee stations 18/0+00 to 18/36+49, 18/38+00 to 19/17+00, 19/41+02 to 19/48+02, 20/10+00 to 20/14+69, 21/8+00 to 22/0+00, 22/44+28 to 23/0+00, 28/38+68 to 30/18+00, 31/15+00, 31/22+00 to 31/25+00, and 31/33+37 to 31/37+00, respectively.
17. Birds Point – New Madrid Setback (0/0+00 to 12/32+00). This item of work is 3.5 miles long and is located on right descending bank opposite river mile 947. It consists of raising the grade of the

existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 1/18+00 to 1/20+00, 2/2+00 to 2/14+00, 3/0+00 to 6/30+00 and 9/26+00. Borrow material for the embankment is tentatively proposed to be obtained from 8.2 acres of cultivated fields riverside of levee stations 1/52+93 to 2/1+85, 3/3+00 to 3/10+00, 3/20+00 to 4/20+00, and 5/26+00 to 5/39+00, respectively.

18. Birds Point – New Madrid Frontline Levee (43/21+00 to 87/0+00). This item of work is 3 miles long and is located on right descending bank opposite river mile 920. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2.5 feet on average which will increase the base width of the levee approximately 50 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 49/25+00 to 49/28+00, 65/5+00, 72/0+00 to 73/8+00, 75/20+00 to 76/14+00 and 77/20+00 to 78/8+00. Borrow material for the embankment is tentatively proposed to be obtained from 9.1 acres of a cultivated fields riverside of levee stations 30/42+00 to 31/3+00.
19. Birds Point – New Madrid Setback (12/32+00 to 36/0+00). This item of work is 3 miles long and is located on right descending bank opposite river mile 915. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 15/25+00, 16/24+00, 17/16+00 to 17/23+00, 23/9+00 to 24/33+00, 27/46+00 to 27/48+00, and 28/37+00 to 34/0+00. Borrow material for the embankment is tentatively proposed to be obtained from 16.6 acres of a cultivated field riverside of levee stations 30/37+00 to 31/2+00.
20. Farrenburg Levee, MO Slope Flattening (1/50+00 to 2/21+00). This item of work is 0.5 miles long and is located on the right descending bank opposite river mile 889. It consists of flattening the waterside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 8.4 acres of a cultivated field riverside of levee stations 30/42+00 to 31/3+00.
21. New Madrid, MO to MO-AR Levee (5/0+00N to 0/0+00). This item of work is 0.5 miles long and is located on right descending bank opposite river mile 882. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 4/22+00N to 4/11+00N, 3/5+00N to 3/1+00N, 2/14+00N to 2/7+00N, and 0/35+00N to 0/13+00N. Borrow material for the embankment is tentatively proposed to be obtained from 1.1 acres of a cultivated fields riverside of levee stations 4/19+01N to 4/14+51N, 0/37+00 to 0/39+00, and 0/25+00 to 0/30+00.
22. New Madrid, MO to MO-AR Levee (2/0+00S to 2/30+00S). This item of work is 0.5 miles long and is located on right descending bank opposite river mile 877. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 foot on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.7 acres of a cultivated field riverside of levee stations 2/19+00S to 2/26+00.
23. Barfield, AR Slope Flattening (61/0+00 to 61/25+00). This item of work is 0.5 miles long and is located on the right descending bank opposite river mile 807. It consists of flattening the waterside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the

embankment is tentatively proposed to be obtained from 8.5 acres of a cultivated field riverside of levee stations 60/47+50 to 63/0+00.

24. Wilson, AR Slope Flattening (100/0+00 to 100/36+00). This item of work is 0.8 miles long and is located on the right descending bank opposite river mile 766. It consists of flattening the waterside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 13.1 acres of a cultivated field riverside of levee stations 100/4+01 to 100/37+48.
25. Pecan Point, AR Slope Flattening (116/40+00 to 117/45+00). This item of work is 1 miles long and is located on the right descending bank opposite river mile 762. It consists of flattening the waterside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 19.6 acres of a cultivated field riverside of levee stations 117/11+00 to 118/1+00.
26. St. Thomas, AR Berm Re-evaluation. This item of work is 6 miles long and is located on the right descending bank opposite river mile 762. It consists of installing relief wells with associated drainage work to control seepage. Preliminary design indicates that relief wells will be located at levee stations 120/0+00 to 126/0+00 landside of the levee.
27. MO-AR State Line to St. Francis River Levee Part 1 (134/0+00 to 138/0+00). This item of work is 2 miles long and is located on right descending bank opposite river mile 747. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 134/11+00 to 134/25+00, 134/50+00, 135/49+00 to 136/8+00, and 136/40+00 to 137/30+00. Borrow material for the embankment is tentatively proposed to be obtained from 3.5 acres of cultivated fields riverside of levee stations 134/8+00 to 134/14+00, 135/50+00 to 136/0+00, 136/48+00 to 137/5+00, and 137/14+00 to 137/18+00, respectively.
28. MO-AR State Line to St. Francis River Levee Part 2 (145/0+00 to 147/0+00). This item of work is 2 miles long and is located on right descending bank opposite river mile 741. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 feet on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 5.4 acres of cultivated fields riverside of levee stations 145/36+00 to 145/50+11 and 146/29+23 to 146/36+00.
29. West Memphis, AR Re-Evaluation. This item of work is 2 miles long and is located on the right descending bank opposite river mile 726. It consists of installing relief wells with associated drainage work to control seepage. Preliminary design indicates that relief wells will be located at levee stations 156/0+00 to 158/0+00 landside of the levee.
30. West Memphis, AR Seepage Remediation. This item of work is 2.8 miles long and is located on the right descending bank opposite river mile 723. It consists of installing relief wells with associated drainage work to control seepage. Preliminary design indicates that relief wells will be located at levee stations 158/40+00 to 161/29+00 landside of the levee.
31. Horseshoe Lake, AR. This item of work is 3.2 miles long and is located on the right descending bank opposite river mile 705. It consists of installing relief wells with associated drainage work to

control seepage. Preliminary design indicates that relief wells will be located at levee stations 177/0+00 to 180/11+00 landside of the levee.

32. MO-AR State Line to St. Francis Levee Part 3 (183/0+00 to 190/0+00). This item of work is 3.5 miles long and is located on right descending bank opposite river mile 697. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 183/8+00 to 183/44+00, 184/30+00 to 185/1+00, 186/28+00 to 186/39+00, and 187/0+00 to 190/0+00. Borrow material for the embankment is tentatively proposed to be obtained from 8.8 acres of cultivated fields riverside of levee stations 184/4+50 to 184/8+20, 184/39+00 to 184/43+00, 186/30+00 to 186/36+00, and 187/37+63 to 188/15+50, respectively.
33. MO-AR State Line to St. Francis Levee Part 4 (190/0+00 to 198/0+00). This item of work is 5.5 miles long and is located on right descending bank opposite river mile 693. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 feet on average which will increase the base width of the levee approximately 45 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 190/0+00 to 195/0+00, 195/42+00 to 196/15+00, and 197/18+00. Borrow material for the embankment is tentatively proposed to be obtained from 13.5 acres of a cultivated field riverside of levee stations 187/37+63 to 188/15+50.
34. MO-AR State Line to St. Francis Levee Part 5 (198/0+00 to 210/30+00). This item of work is 5.5 miles long and is located on right descending bank opposite river mile 682. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 feet on average which will increase the base width of the levee approximately 45 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 199/0+00, 199/25+00 to 204/42+00, and 208/8+00 to 210/25+00. Borrow material for the embankment is tentatively proposed to be obtained from 20.8 acres of cultivated fields riverside of levee stations 199/0+00 to 199/23+01, 204/30+00 to 204/31+00, and 209/30+20 to 209/40+20, respectively.
35. Elaine, AR to Laconia Circle Levee (48/4+00S to 48/8+90S). This item of work is 500 feet long and is located on the right descending bank opposite river mile 620. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.4 acres of a cultivated field riverside of levee stations 48/0+00 to 48/3+08.

### **Vicksburg District (MVK) Projects**

36. Deeson-Gunnison, MS, Berm, Item 611-L. This item of work is 7.2 miles long and located on the left descending bank opposite river mile 611. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 11-acre borrow location is assumed to be on the river side of the levee in a pasture area.
37. Rosedale, MS, Berm, Item 587-L. This item of work is 3.2 miles long and located on the left descending bank opposite river mile 587. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 20-acre borrow area for is assumed to be on the river side of the levee in a bottomland hardwood area.

38. Bolivar, MS, Berm, Item 577-L. This item of work is 2.8 miles long and located on the left descending bank opposite river mile 577. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 14-acre borrow location is assumed to be on the river side of the levee in a bottomland hardwood area.
39. Brunswick-Halpino, MS, Levee Enlargement and Seepage Remediation, Item 443-L. This item of work is 4.3 miles long and located on the left descending bank opposite river mile 443. The item consists of raising the levee an average of 3.5 feet with a river side shift of the centerline and will be further analyzed to determine if seepage measures are needed. The tentatively proposed 19-acre borrow location is assumed to be on the land side of the levee in a bottomland hardwood area.
40. Morville-Black Hawk, LA, Berm, Item 355-R. This item of work is 1.8 miles long and located on the right descending bank opposite river mile 355. The item consists of constructing a berm and/or enlarging two existing berms to control seepage. The tentatively proposed 11-acre borrow location is assumed to be on the land side of the levee in a cropland area.
41. Morville-Black Hawk, LA, Levee Enlargement, Item 351-R. This item of work is 4.5 miles long and located on the right descending bank opposite river mile 351. The item consists of raising the levee an average of 2.3 feet with a river side shift of the centerline. The tentatively proposed 51-acre borrow location is assumed to be on the river side of the levee in a pasture/bottomland hardwood area.
42. Morville-Black Hawk, LA, Berm, Item 348-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 348. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 13-acre borrow location is assumed to be on the river side of the levee in a cropland area.
43. Morville-Black Hawk, LA, Levee Enlargement and Berm, Item 345-R. This item of work is 3.4 miles long and located on the right descending bank opposite river mile 345. The item consists of raising the levee an average of 2.0 feet with a river side shift of the centerline. In addition, this item of work consists of constructing two berms and/or enlarging an existing berm to control seepage. The tentatively proposed 112-acre borrow location is assumed to be on both the river side and land side of the levee in cropland and bottomland hardwood areas.
44. Morville-Black Hawk, LA, Berm, Item 340-R. This item of work is 1.4 miles long and located on the right descending bank opposite river mile 340. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 18-acre borrow location is assumed to be on the river side of the levee in a shrub-scrub/bottomland hardwood area.
45. Morville-Black Hawk, LA, Levee Enlargement and Berm, Item 333-R. This item of work is 3.4 miles long and located on the right descending bank opposite river mile 333. The item consists of raising the levee an average of 1.2 feet with a river side shift of the centerline. In addition, this item of work also consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 39-acre borrow location is assumed to be on the river side of the levee in a cropland/bottomland hardwood area.
46. Morville-Black Hawk, LA, Levee Enlargement, Item 330-R. This item of work is 1.5 miles long and located on the right descending bank opposite river mile 330. The item consists of raising the levee an average of 1.0 foot with a river side shift of the centerline. The tentatively proposed 14-acre borrow location is assumed to be on the river side of the levee in a bottomland hardwood area.
47. Morville-Black Hawk, LA, Levee Enlargement, Item 326-R. This item of work is 2.8 miles long and located on the right descending bank opposite river mile 326. The item consists of raising the levee

an average of 1.0 foot with a river side shift of the centerline. The tentatively proposed 24-acre borrow location is assumed to be on the river side of the levee in a shrub/bottomland hardwood area.

48. Morville-Black Hawk, LA, Levee Enlargement and Seepage Remediation, Item 320-R. This item of work is 3.2 miles long and located on the right descending bank opposite river mile 320. The item consists of raising the levee an average of 2.2 feet with a river side shift of the centerline. Due to the proximity of Red River State Wildlife Management Area, relief wells will be installed instead of the standard berm embankment. The tentatively proposed 40-acre borrow location is assumed to be on the river side of the levee in a bottomland hardwood area.

### **New Orleans District (MVN) Projects**

49. Combined Lower/Upper 5th 308-317-W, LA, Levee, Item 312.5-R. This item of work is 4.7 miles long and located on the right descending bank opposite river mile 312.5. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a flood side shift of the centerline. The borrow area (approximate 16 acres) to construct the levee raise for this item is located on the river side of the levee in a bottomland hardwood wetland area.
50. Old River Lock - Levee, LA, Levee, Item 304-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 304. The item consist of raising the levee an average of 2.5 feet extending over the length of the work item with a levee lift straddling the existing levee centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland area.
51. Smithland to Lacour 289-298 R, LA, Levee and Berm, Item 293.5-R. This item of work is 8.4 miles long and located on the right descending bank opposite river mile 293.5. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with the levee lift straddling the existing levee centerline. The work also consist of constructing a berm for a portion of the item to control seepage. The borrow area (approximate 20 acres) to construct the levee raise and berm for this item is located on the land side of the levee in a bottomland hardwood wetland area.
52. Pt Coupee Levee Enlargement, LA, Levee, Item 268-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 268. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a flood side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland area.
53. Arbroth Levee Enlargement, LA, Levee, Item 253-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 253. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a flood side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland area.
54. Smithfield Levee Enlargement, LA, Levee, Item 246-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 246. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a flood side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area and/or bottomland hardwood wetland area.
55. Fancy Point, LA, Levee, Item 242.5-R. This item of work is 2.9 miles long and located on the right descending bank opposite river mile 242.5. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow



area (approximate 11 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area and/or bottomland hardwood wetland area.

56. Thomas Point, LA, Levee, Item 240.3-R. This item of work is 0.8 miles long and located on the right descending bank opposite river mile 240.3. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area and/or bottomland hardwood wetland area.
57. Port Allen, LA, Levee, Item 231-R. This item of work is 2.5 miles long and located on the right descending bank opposite river mile 231. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 9 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
58. Port Allen Lock – Levee, LA, Levee, Item 228-R. This item of work is 0.01 miles long and located on the right descending bank opposite river mile 228. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with the levee lift straddling the existing levee centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
59. Addis, LA, Levee, Item 223-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 223. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
60. Ben Hur Road, LA, Levee, Item 217.6-L. This item of work is 0.07 miles long and located on the left descending bank opposite river mile 217.6. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
61. Morrisonville, LA, Levee, Item 216-R. This item of work is 2.8 miles long and located on the right descending bank opposite river mile 216. The item consist of raising the levee an average of 2.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 9 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
62. Plaquemines Point, LA, Berm and/or Wells, Item 208-L. This item of work is 0.9 miles long and located on the left descending bank opposite river mile 208. The item consist of either embankment berm construction and/or relief wells to control seepage in the area. The borrow area (approximate 5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
63. Plaquemine/Reveille, LA, Levee, Item 206.7-R. This item of work is 2.7 miles long and located on the right descending bank opposite river mile 206.7. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 4 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
64. Lower Plaquemines Point, LA, Levee, Item 199-L. This item of work is 5.5 miles long and located on the left descending bank opposite river mile 199. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 14 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.

65. Bayou Goula to Alhambra, LA, Levee, Item 194.5-R. This item of work is 0.7 miles long and located on the right descending bank opposite river mile 194.5. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
66. Carville, LA, Levee, Item 189-L. This item of work is 0.7 miles long and located on the left descending bank opposite river mile 189. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1.5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
67. Claiborne Island, LA, Berm, Item 189-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 189. The work consist of constructing a berm for control seepage. The borrow area (approximate 3 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
68. Marchand, LA, Levee, Item 181-L. This item of work is 0.05 miles long and located on the left descending bank opposite river mile 181. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
69. ABLD-1 180 R, LA, Levee, Item 180-R. This item of work is 0.7 miles long and located on the right descending bank opposite river mile 180. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side or flood side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
70. Smoke Bend, LA, Levee, Item 178-R. This item of work is 3.3 miles long and located on the right descending bank opposite river mile 178. The item consist of raising the levee an average of 2.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 10 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
71. Stella Landing, LA, Levee, Item 173.9-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 173.9. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
72. Aben, LA, Levee, Item 172.6R. This item of work is 1.6 miles long and located on the right descending bank opposite river mile 172.6. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 4 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
73. Point Houmas (Lauderdale), LA, Levee, Item 165-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 165. The item consist of raising the levee an average of 2.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
74. Brilliant Point 163.5 R, LA, Levee, Item 163.5-R. This item of work is 1.7 miles long and located on the right descending bank opposite river mile 163.5. The item consist of raising the levee an

average of 2.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 10 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.

75. Romeville, LA, Levee, Item 163-L. This item of work is 0.05 miles long and located on the left descending bank opposite river mile 163. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
76. Barton Lane 159.7 R, LA, Levee, Item 159.7-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 159.7. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
77. St. Amelia 158R, LA, Levee, Item 158-R. This item of work is 0.02 miles long and located on the right descending bank opposite river mile 158. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
78. Romeville/College Point 156.8 L, LA, Levee, Item 156.8-L. This item of work is 0.1 miles long and located on the left descending bank opposite river mile 156.8. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
79. St. James Moonshine, LA, Levee, Item 156-R. This item of work is 1.3 miles long and located on the right descending bank opposite river mile 156. The item consist of raising the levee an average of 3.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
80. Welham Plantation, LA, Levee, Item 154-L. This item of work is 0.5 miles long and located on the left descending bank opposite river mile 154. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
81. Belmont, LA, Levee, Item 152-L. This item of work is 0.04 miles long and located on the left descending bank opposite river mile 152. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
82. Vacherie, LA, Levee, Item 149-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 149. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
83. Paulina/Lutcher/Gramercy, LA, Levee, Item 148-L. This item of work is 3.8 miles long and located on the left descending bank opposite river mile 148. The item consist of raising the levee an average of 2.5 feet extending over the length of the work item with a land side shift of the centerline.

The borrow area (approximate 10 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.

84. Wallace, LA, Levee, Item 147.3-R. This item of work is 0.8 miles long and located on the right descending bank opposite river mile 147.3. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
85. Gramercy.Mt. Airy/48 mile Point, LA, Levee, Item 144-L. This item of work is 0.3 miles long and located on the left descending bank opposite river mile 144. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
86. Oak Alley - Willow Grove 142.6-144 R, LA, Levee, Item 143.7-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 143.7. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
87. Upper Edgard 142 R, LA, Levee, Item 142-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 142. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
88. Reserve, LA, Levee, Item 136-L. This item of work is 2.1 miles long and located on the left descending bank opposite river mile 136. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 3 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
89. Lower Edgard (3) 135.2-136.2 R, LA, Levee, Item 135.7-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 135.7. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
90. Laplace, LA, Levee, Item 133-L. This item of work is 0.5 miles long and located on the left descending bank opposite river mile 133. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
91. Lower Edgard 131.7 R, LA, Levee, Item 131.7-R. This item of work is 0.4 miles long and located on the right descending bank opposite river mile 131.7. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
92. 35 Mile Point, LA, Levee, Item 130-L. This item of work is 0.6 miles long and located on the left descending bank opposite river mile 130. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 2.5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.

93. Hahnville, Flagville, Dufresne 120-128.5 R, LA, Levee, Item 124.3-R. This item of work is 0.4 miles long and located on the right descending bank opposite river mile 124.3. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
94. Bonnet Carre to New Sarpy, LA, Levee, Item 124-L. This item of work is 1.8 miles long and located on the left descending bank opposite river mile 124. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 4 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
95. Lone Star to Davis Pond, LA, Levee, Item 119.2-R. This item of work is 1.0 miles long and located on the right descending bank opposite river mile 119.2. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
96. Ama #2, LA, Levee, Item 117.3-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 117.3. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
97. Cyanamid, LA, Levee, Item 115.5-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 115.5. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
98. St. Rose (Kenner Revet), LA, Levee, Item 115-L. This item of work is 1.3 miles long and located on the left descending bank opposite river mile 115. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 3 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
99. Ama, LA, Levee, Item 113.5-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 113.5. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
100. Waggaman, LA, Levee, Item 110.4-R. This item of work is 0.4 miles long and located on the right descending bank opposite river mile 110.4. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
101. Upper Avondale, LA, Levee, Item 108.3-R. This item of work is 0.6 miles long and located on the right descending bank opposite river mile 108.3. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.

102. Lower Avondale, LA, Levee or Floodwall, Item 107-R. This item of work is 1.4 miles long and located on the right descending bank opposite river mile 107. The item consist of either raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of the floodwall an average of 2.0 feet for 1.4 miles. In order to meet the current design grade, the existing floodwall will be replaced completely with a new pile-founded concrete T-wall as well as adding steel gates across the ramps. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
103. Dugas to Celotex, LA, Levee, Berm and/or Wells, Item 100.4-R. This item of work is 0.7 miles long and located on the right descending bank opposite river mile 100.4. The item consist of raising the levee an average of 1.0 feet extending over the length of the work item with a land side shift of the centerline. The item also will consist of either embankment berm construction and/or relief wells to control seepage in the area. The borrow area (approximate 4.5 acres) to construct the levee raise and berm for this item is located on the land side of the levee in a pasture land area.
104. Barataria Blvd., LA, Levee, Item 99.5-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 99.5. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
105. Harvey Lock Forebay – Levee, LA, Levee or Floodwall, Item 98.3-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 98.3. The item consist of either raising the levee an average of 3.5 feet extending over the length of the work item with a flood side shift of the centerline. The item for a floodwall consists of raising the current elevation of levee with a new pile-founded concrete T-wall an average of 3.5 feet for 0.3 miles. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
106. Gretna Phase II 97-97.8 R, LA, Levee or Floodwall, Item 97.4-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 97.4. The item consist of either raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of levee with a new pile-founded concrete T-wall an average of 1.5 feet for 0.2 miles. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
107. Algiers Point 93.75-95.5 R, LA, Levee or Floodwall, Item 94.6-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 94.6. The item consist of either raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of levee with a new pile-founded concrete T-wall an average of 1.5 feet for 0.5 miles. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area and pasture land area.
108. IHNC Lock Forebay 92.6L - Levee, LA, Levee, Item 92.6-L. This item of work is 3.2 miles long and located on the left descending bank opposite river mile 92.6. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 7 acres) to construct the levee raise for this item is located on the land side of the levee in a marsh wetland area.
109. Holy Cross, LA, Levee, Item 92-L. This item of work is 0.4 miles long and located on the left descending bank opposite river mile 92. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area

(approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a marsh wetland area.

110. Domino Sugar, LA, Relief Wells, Item 91-L. This item of work is 0.6 miles long and located on the left descending bank opposite river mile 91. The item consist of installation of relief wells to control seepage in the area.
111. US Coast Guard Reservation, LA, Levee, Item 90.6-R. This item of work is 3.3 miles long and located on the right descending bank opposite river mile 90.6. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 6.5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area / pasture land area.
112. Algiers Lock – Levee, LA, Levee, Item 88-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 88. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1.5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area / pasture land area.
113. Chalmette Slip, LA, Levee or Floodwall, Item 90-L. This item of work is 0.4 miles long and located on the left descending bank opposite river mile 90. The item consist of either raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of the floodwall an average of 1.5 feet for 0.4 miles. In order to meet the current design grade, the existing floodwall will be replaced completely with a new pile-founded concrete T-wall. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood area.
114. Chalmette Battle Field (1), LA, Levee or Floodwall, Item 88.5-L. This item of work is 0.4 miles long and located on the left descending bank opposite river mile 88.5. The item consist of either raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of the floodwall an average of 1.5 feet for 1.25 miles. In order to meet the current design grade, the existing floodwall will be replaced completely with a new pile-founded concrete T-wall. The borrow area (approximate 3 acres) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood area.
115. Chalmette Battle Field (2), LA, Levee, Item 86.1-L. This item of work is 0.4 miles long and located on the left descending bank opposite river mile 86.1. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood area.
116. Stanton, LA, Levee, Item 84.3-R. This item of work is 0.6 miles long and located on the right descending bank opposite river mile 84.3. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area and pasture land area.
117. Oakville to Alliance, LA, Levee, Item 67-R. This item of work is 6.6 miles long and located on the right descending bank opposite river mile 67. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 10 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.

118. Carnaevon to Phoenix, LA, Levee, Item 67-L. This item of work is 7.0 miles long and located on the left descending bank opposite river mile 67. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 12 acres) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland area.
119. Alliance to Ironton, LA, Levee, Item 61.5-R. This item of work is 2.8 miles long and located on the right descending bank opposite river mile 61.5. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 5 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
120. Ironton to Deer Range, LA, Levee, Item 58-R. This item of work is 3.2 miles long and located on the right descending bank opposite river mile 58. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 6 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
121. Deer Range to W. Point a la Hache, LA, Levee, Item 52.5-R. This item of work is 7.7 miles long and located on the right descending bank opposite river mile 52.5. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 12 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
122. Phoenix to Bohemia, LA, Levee, Item 51-L. This item of work is 10.5 miles long and located on the left descending bank opposite river mile 51. The item consist of raising the levee an average of 2.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 19 acres) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland and marsh area.
123. W. Pt a la Hache to St. Jude, LA, Levee, Item 47.5-R. This item of work is 2.1 miles long and located on the right descending bank opposite river mile 47.5. The item consist of raising the levee an average of 2.0 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 5 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
124. Port Sulphur, LA, Levee, Item 37-R. This item of work is 1.1 miles long and located on the right descending bank opposite river mile 37. The item consist of raising the levee an average of 1.5 feet extending over the length of the work item with a land side shift of the centerline. The borrow area (approximate 2.5 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.



## **Attachment B - List of Recipients:**

### **Federally Recognized Tribes**

- 1 Absentee-Shawnee Tribe of Indians
- 2 Alabama-Coushatta Tribe of Texas
- 3 Alabama-Quassarte Tribal Town
- 4 Apache Tribe of Oklahoma
- 5 Caddo Nation of Oklahoma
- 6 Cherokee Nation of Oklahoma
- 7 Chickasaw Nation
- 8 Chitimacha Tribe of Louisiana
- 9 Choctaw Nation of Oklahoma
- 10 Coushatta Tribe of Louisiana
- 11 Delaware Nation
- 12 Delaware Tribe of Indians
- 13 Eastern Band of Cherokee Indians
- 14 Eastern Shawnee Tribe of Oklahoma
- 15 Jena Band of Choctaw Indians
- 16 Kaw Nation
- 17 Kialegee Tribal Town
- 18 Kicapoo Tribe of Kansas
- 19 Menominee Indian Tribe of Wisconsin
- 20 Miami Tribe of Oklahoma
- 21 Mississippi Band of Choctaw Indians
- 22 Muscogee (Creek) Nation
- 23 Osage Nation of Oklahoma
- 24 Otoe-Missouria Tribe of Oklahoma
- 25 Peoria Tribe of Indians of Oklahoma
- 26 Poarch Band of Creek Indians
- 27 Ponca Tribe of Oklahoma
- 28 Quapaw Tribe of Oklahoma
- 29 Sac and Fox Nation of Missouri in Kansas and Nebraska
- 30 Sac and Fox Nation of Oklahoma
- 31 Seminole Nation of Oklahoma
- 32 Seminole Tribe of Florida
- 33 Shawnee Tribe
- 34 Thlopthlocco Tribal Town
- 35 Tunica-Biloxi Tribe of Louisiana
- 36 United Keetowah Band of Cherokee Indians in Oklahoma

### **SHPOs**

- 37 Arkansas Historic Preservation Program
- 38 Illinois Historic Preservation Agency
- 39 Kentucky Heritage Council
- 40 LA State Historic Preservation Officer
- 41 Mississippi Department of Archives and History
- 42 MO State Historic Preservation Office
- 43 Tennessee Historical Commission

### **Federal Agencies**

- 44 Advisory Council on Historic Preservation, Office of Federal Agency Programs

## **A14-1.2 MRL SEIS II PA Initiation Letter Responses**



Preserving America's Heritage

September 25, 2019

Jason A. Emery  
Archaeologist  
U.S. Army Corps of Engineers  
New Orleans District  
7400 Leake Avenue  
New Orleans, LA 70118-3651

Ref: *Mainline Mississippi River Levees Multi-District Consultation*  
*Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee*

Dear Mr. Emery:

The Advisory Council on Historic Preservation (ACHP) has received your notification of adverse effect for the referenced undertaking that was submitted in accordance with Section 800.6(a)(1) of our regulations, "Protection of Historic Properties" (36 CFR Part 800). The background documentation included with your submission does not meet the specifications in Section 800.11(e) of the ACHP's regulations. We, therefore, are unable to determine whether Appendix A of the regulations, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, applies to this undertaking. Accordingly, we request that you submit the following additional information so that we can determine whether our participation in the consultation to resolve adverse effects is warranted.

- Copies or summaries of any views provided by consulting parties, the public, and the Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee State Historic Preservation Officers.
- Copies or summaries of any views or comments provided by any affected Indian tribe.

Upon receipt of the additional information, we will notify you within 15 days of our decision.

If you have any questions, please contact Christopher Daniel at 202-517-0223 or via e-mail at [cdaniel@achp.gov](mailto:cdaniel@achp.gov).

Sincerely,

Artisha Thompson  
Historic Preservation Technician  
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

401 F Street NW, Suite 308 • Washington, DC 20001-2637  
Phone: 202-517-0200 • Fax: 202-517-6381 • [achp@achp.gov](mailto:achp@achp.gov) • [www.achp.gov](http://www.achp.gov)

Hon. Aimee K. Jorjani  
Chairman

Leonard A. Forsman  
Vice Chairman

John M. Fowler  
Executive Director



March 27, 2020

The Honorable R.D. James  
Assistant Secretary for the Army for Civil Works  
Office of the Assistant Secretary of the Army (Civil Works)  
108 Army Pentagon  
Washington, DC 20310-0108

Ref: *Mainline Mississippi River Levees Multi-District Programmatic Agreement*  
*U.S. Army Corps of Engineers Memphis, Vicksburg, and New Orleans Districts*  
*ACHPConnect Log Number: 014473*

Dear Mr. James:

In response to the recent notification by the United States Army Corps of Engineers, the Advisory Council on Historic Preservation (ACHP) will participate in consultation to develop a Section 106 agreement document for the referenced undertaking. Our decision to participate in this consultation is based on the Criteria for Council Involvement in Reviewing Individual Section 106 Cases, contained within the regulations, "Protection of Historic Properties" (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act. The criteria are met for this proposed undertaking because it has the potential for procedural problems, presents important questions of policy or interpretation, and it presents issues of concern to Indian tribes.

Section 800.6(a)(1)(iii) of our regulations requires that we notify you, as the head of the agency, of our decision to participate in consultation. By copy of this letter, we are also notifying Colonel Robert A. Hilliard, Vicksburg District Commander, of this decision.

Our participation in this consultation will be handled by Mr. Christopher Daniel, who can be reached at 202.517.0223 or via e-mail at [cdaniel@achp.gov](mailto:cdaniel@achp.gov). We look forward to working with your agency and other consulting parties to reach agreement on appropriate measures to avoid, minimize, or mitigate adverse effects on historic properties.

Sincerely,

John M. Fowler  
Executive Director



TENNESSEE HISTORICAL COMMISSION  
2941 LEBANON PIKE  
NASHVILLE, TENNESSEE 37243-0442  
OFFICE: (615) 532-1550  
[www.tnhistoricalcommission.org](http://www.tnhistoricalcommission.org)

September 30, 2019

Col. Robert A. Hilliard  
U.S. Army Corps of Engineers, Vicksburg District  
Regional Planning and Environment Division, South  
Environmental Planning Branch: Attn: USACE-PDS-N  
7400 Leake Ave.  
New Orleans, LA 70118-3651

RE: COE-V / Vicksburg District/Corps of Engineers, Mainline Mississippi River Levees and  
Channel Improvement Project, Dyer and Lake Counties, TN

Dear Col. Hilliard:

In response to your request, we have reviewed the documents submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicants for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739).

Considering available information, concur that a multi-state programmatic agreement is an appropriate strategy for meeting your agency's Section 106 compliance responsibilities. We will continue to consult with your agency in the development of an agreement document. Please direct questions and comments to Jennifer M. Barnett (615 687-4780). We appreciate your cooperation.

Sincerely,

E. Patrick McIntyre, Jr.  
Executive Director and  
State Historic Preservation Officer

EPM/jmb

## A14-2 ITEM 2: LOWER MISSISSIPPI VALLEY CULTURAL TIMELINES

The provided timelines are based on archaeological research. While the cultural sequence is continuous and independent of the current states' jurisdictions. The timelines presented below are provided by each state to facilitate management of cultural resources in each state.

**Table A14- 1.Cultural Sequence for Illinois.**

<b>Historic</b>	Post War (A.D. 1946-present) Urban Industrial (A.D. 1901-1945) Early Industrial (A.D. 1871-1900) Frontier (A.D. 1841-1870) Pioneer (A.D. 1781-1840)
	Colonial (A.D. 1673-1780) <i>Historic Native American (A.D. 1650-1830)</i>
<b>Prehistoric</b>	<i>Late Mississippian (A.D. 1300-1673)</i> <i>Oneta Culture (A.D. 900-1650)</i> Mississippian (A.D. 900-1700) <i>Cahokia Culture (A.D. 900-1350)</i>
	Late Woodland (A.D. 350-900)
	Middle Woodland (200 B.C.-A.D. 350) <i>Havanna Hopewell Culture (500 B.C.-A.D. 400)</i>
	<i>Crab Orchard (600-200 B.C.)</i> Early Woodland (1000-200 B.C.) <i>Marion Culture (600-200 B.C.)</i>
	Late Archaic (3000-1000 B.C.) Middle Archaic (6000-3000 B.C.) Early Archaic (8000-6000 B.C.)
	PaleoIndian (10,000-8000 B.C.)

**Table A14- 2. Cultural Sequence for Kentucky.**

<b>Historic</b>	Industrial & Commercial Consolidation (A.D. 1915-1945) Postbellum Recovery & Industrialization (A.D. 1865-1915) Civil War (A.D. 1861-1865) Antebellum (A.D. 1820/1830-1860) Early Settlement (A.D. 1775-1820/1830)	
	Pre-Settlement Exploration (A.D. 1650/1700-1775)	<i>Historic Cherokee (A.D. 1650-1830)</i>
<b>Prehistoric</b>	Mississippian (A.D. 1150/1200-1700)	<i>Angel Culture (A.D. 1050-1350)</i>
		<i>Yankeetown Culture (A.D. 700-1000) Pisgah Culture (A.D. 600-1200) Plum Bayou Culture (A.D. 600-1000) Hamilton Culture (A.D. 400-900)</i>
	Late Woodland (A.D. 400/450-1150/1200)	<i>Hopewell Culture (100 B.C.-A.D. 500)</i>
	Middle Woodland (100 B.C.-A.D. 400/450)	<i>Crab Orchard (600-200 B.C.) Adena Culture (1000-200 B.C.)</i>
	Early Woodland (800-100 B.C.)	
	Late Archaic (3000-800 B.C.) Middle Archaic (6000-3000 B.C.) Early Archaic (8000-6000 B.C.)	
	PaleoIndian (9500-8000 B.C.)	<i>Dalton Culture (8500-7900 B.C.)</i>

**Table A14- 3. Cultural Sequence for Missouri.**

<b>Historic</b>	Urban/Industrial (A.D. 1960-1960) Early Industrial (A.D. 1866-1899) Civil War (A.D. 1861-1865) Territorial (A.D. 1804-1820) Colonial (A.D. 1700-1803)
<b>Prehistoric</b>	Mississippian (A.D. 1050-1650) <i>Nodena Culture (A.D. 1400-1650)</i> <i>Parkin Culture (A.D. 1350-1650)</i> <i>Cahokia Culture (A.D. 900-1350)</i>
	Late Woodland (A.D. 450-1050) <i>Plum Bayou Culture (A.D. 600-1000)</i> <i>Hamilton Culture (A.D. 400-900)</i>
	Middle Woodland (100 B.C.-A.D. 400) <i>Miller I Culture (100 B.C.-A.D. 200)</i>
	Early Woodland (700-100 B.C.) <i>Crab Orchard (600-200 B.C.)</i> <i>Adena Culture (1000-200 B.C.)</i>
	Late Archaic (3000-700 B.C.) Middle Archaic (5000-3000 B.C.) Early Archaic (7800-5000 B.C.)
	PaleoIndian (10,000-7800 B.C.) <i>Dalton Culture (8500-7900 B.C.)</i>



**Table A14- 4. Cultural Sequence for Tennessee**

<b>Historic</b>	Urban/Industrial (A.D. 1960-1960) Early Industrial (A.D. 1866-1899) Civil War (A.D. 1861-1865) Territorial (A.D. 1804-1820) Colonial (A.D. 1700-1803)
<b>Prehistoric</b>	<i>Nodena Culture (A.D. 1400-1650)</i> <i>Parkin Culture (A.D. 1350-1650)</i> Late Mississippian (A.D. 1350-1650)
	Middle Mississippian (A.D. 1100-1350)
	<i>Miller III Culture (A.D. 800-1100)</i> Early Mississippian (A.D. 900-1100)
	<i>Plum Bayou Culture (A.D. 600-1000)</i> <i>Hamilton Culture (A.D. 400-900)</i> <i>Baytown Culture (A.D. 300-700)</i> <i>Miller II Culture (A.D. 300-800)</i> Late Woodland (A.D. 400-900)
	<i>Miller I Culture (100 B.C.-A.D. 200)</i> Middle Woodland (200 B.C.-A.D. 400)
	<i>Crab Orchard (600-200 B.C.)</i> <i>Adena Culture (1000-200 B.C.)</i> Early Woodland (1000-200 B.C.)
	Late Archaic (3000-1000 B.C.) Middle Archaic (6000-3000 B.C.) Early Archaic (8000-6000 B.C.)
	<i>Dalton Culture (8500-7900 B.C.)</i> <i>Clovis Culture (11,400-9000 B.C.)</i> PaleoIndian (11,500-8000 B.C.)
	Pre-Clovis (Pre-11,400 B.C.)

**Table A14- 5. Cultural Sequence for Mississippi.**

<b>Historic</b>	Modern Era (post A.D. 1941) Pre World War II (A.D. 1900-1941) Reconstruction and Recovery (A.D. 1865-1900) Civil War (A.D. 1861-1865) Antebellum (A.D. 1818-1860) Colonial/Territorial (A.D. 1680-1817)	
	Protohistoric (A.D. 1550-1680)	<i>Plaquemine (A.D. 1200-1700)</i>
<b>Prehistoric</b>	Mississippian (A.D. 1000-1550)	<i>Plaquemine (A.D. 1200-1700)</i>
	Late Woodland (A.D. 500-1000)	<i>Miller III Culture (A.D. 700-1100)</i> <i>Coles Creek Culture (A.D. 600-1050)</i> <i>Phum Bayou Culture (A.D. 600-1000)</i> <i>Troyville Culture (A.D. 400-1100)</i> <i>Baytown Culture (A.D. 300-700)</i> <i>Miller II Culture (A.D. 300-700)</i>
	Middle Woodland (100 B.C.-A.D. 400/450)	<i>Miller I Culture (A.D. 100 B.C.-A.D. 200)</i> <i>Marksville Culture (200 B.C.-A.D. 400)</i>
	Early Woodland (500-0 B.C.)	<i>Tchefuncte Culture (600-200 B.C.)</i>
	Late Archaic (2000-500 B.C.)	<i>Poverty Point Culture (1730-1250 B.C.)</i> <i>Jaketown Culture (1800-1000 B.C.)</i>
	Middle Archaic (6000-2000 B.C.)	
	Early Archaic (8000-6000 B.C.)	
	PaleoIndian (10,000-8000 B.C.)	

**Table A14- 6. Cultural Sequence for Arkansas.**

<u>Historic</u>	<u>Modern Era (A.D. 1968-present)</u>	-
	<u>World War II Trough Faubus (A.D. 1941-1967)</u>	-
	<u>Early Twentieth Century (A.D. 1901-1940)</u>	-
	<u>Civil War - Reconstruction (A.D. 1861-1874)</u>	-
	<u>Louisiana Purchase - Early Statehood (A.D. 1803-1860)</u>	-
	<u>European Exploration (A.D. 1550-1680)</u>	<u>Late Caddo Culture (A.D. 1400-1800)</u>
<u>Prehistoric</u>		<u>Nodena Culture (A.D. 1400-1650)</u>
		<u>Parkin Culture (A.D. 1350-1650)</u>
		<u>Middle Caddo Culture (A.D. 1100-1400)</u>
	<u>Mississippian/Plaquemine (A.D. 900-1600)</u>	<u>Early Caddo Culture (A.D. 800-1100)</u>
		<u>Coles Creek Culture (A.D. 600-1050)</u>
		<u>Plum Bayou Culture (A.D. 600-1000)</u>
		<u>Baytown Culture (A.D. 300-700)</u>
	<u>Late Woodland (A.D. 300-900)</u>	<u>Marksville Culture (200 B.C.-A.D. 400)</u>
	<u>Middle Woodland (200 B.C.-A.D. 300)</u>	<u>Crab Orchard (600-200 B.C.)</u>
		<u>Tchefuncte Culture (600-200 B.C.)</u>
	<u>Early Woodland (650-200 B.C.)</u>	<u>Poverty Point Culture (1730-1250 B.C.)</u>
	<u>Late Archaic (3000-650 B.C.)</u>	-
	<u>Middle Archaic (5000-3000 B.C.)</u>	-
	<u>Early Archaic (8000-5000 B.C.)</u>	-
	<u>PaleoIndian (11,500-8000 B.C.)</u>	<u>Dalton Culture (8500-7900 B.C.)</u>

**Table A14- 7. Cultural Sequence for Louisiana.**

<b>Historic</b>	Post World War II (A.D. 1945-present) Industrial and Modern (A.D. 1890-1945) War and Aftermath (A.D. 1860-1890) Antebellum (A.D. 1803-1860)	
	Historic Exploration (A.D. 1541-1803)	<i>Late Caddo Culture (A.D. 1400-1800)</i>
<b>Prehistoric</b>	Mississippian/Plaquemine (A.D. 1200-1700)	<i>Middle Caddo Culture (A.D. 1100-1400)</i>
	Late Woodland (A.D. 400/450-1150/1200)	<i>Early Caddo Culture (A.D. 800-1100)</i> <i>Coles Creek Culture (A.D. 700-1100)</i> <i>Plum Bayou Culture (A.D. 600-1000)</i> <i>Troyville Culture (A.D. 400-700)</i> <i>Baytown Culture (A.D. 300-700)</i>
	Middle Woodland (100 B.C.-A.D. 400/450)	<i>Marksville Culture (200 B.C.-A.D. 400)</i>
	Early Woodland (800-100 B.C.)	<i>Tchefuncte Culture (600-200 B.C.)</i>
	Late Archaic (2000-800 B.C.) Middle Archaic (6000-2000 B.C.) Early Archaic (8000-6000 B.C.)	<i>Poverty Point Culture (1730-1250 B.C.)</i>
	PaleoIndian (11,500-8000 B.C.)	

### A14-3 ITEM 3: SUMMARY OF CULTURAL RESOURCES PER WORK ITEM

**Table A14- 8. Memphis District Cultural Resources Summary.**

<b>MVM Work Item</b>	<b># of Cultural Resources in Work Item</b>	<b># of Cultural Resources in Vicinity (1 mile of Work Item/APE)</b>	<b>Additional Work Needed (Y/N)</b>
965-R	2	11	Yes
962.3-R	2	12	Yes
962.5-R	4	29	Yes
961-R	1	6	Yes
958-R	1	0	Yes
956-R	4	10	Yes
955-R	1	7	Yes
922-L	1	12	Yes
921-L	0	19	Yes
918-L	1	12	Yes
902-L	1	4	Yes
848-L	0	1	Yes
832-L	0	7	Yes
49-R AC	1	17	Yes
29-R AC	0	3	Yes
22-R AC	0	9	Yes
947-R	2	103	Yes
920-R	2	19	Yes
915-R	2	30	Yes
889-R	3	6	Yes
882-R	2	23	Yes
877-R	2	5	Yes
807-R	0	5	Yes
766-R	0	4	Yes
762-R	0	17	Yes
754-R	0	4	Yes
747-R	0	17	Yes
741-R	3	10	Yes
726-R	3	8	Yes
723-R	7	12	Yes
705-R	0	4	Yes
697-R	1	6	Yes
693-R	1	9	Yes
682-R	1	8	Yes
620-R	1	2	Yes

**Table A14- 9. Vicksburg District Cultural Resources Summary.**

<b>MRL Work Item</b>	<b># of Cultural Resources in Work Item</b>	<b># of Cultural Resources in Vicinity (1 mile of Work item/APE)</b>	<b>Additional Work Needed (Y/N)</b>
615-L	0	1	Yes
611-L	0	0	Yes
587-L	0	27	Yes
577-L	0	4	Yes
443-L	0	5	Yes
355-R	0	0	Yes
351-R	0	1	Yes
348-R	0	0	Yes
345-R	0	1	Yes
341-R	1	3	Yes
340-R	1	4	Yes
337-R	1	4	Yes
333-R	0	5	Yes
330-R	0	0	Yes
327-R	0	1	Yes
326-R	0	1	Yes
20-R	1	1	Yes

**Table A14- 10. New Orleans District Cultural Resources Summary.**

<b>MRL Work Item</b>	<b># of Cultural Resources in Work Item</b>	<b># of Cultural Resources in Vicinity (1 mile of Work item/APE)</b>	<b>Additional Work Needed (Y/N)</b>
312.5 R	1	0	Yes
304-R	2	3	Yes
293.5-R	2	23	Yes
268-R	0	2	Unlikely
253-R	0	1	Yes
246-R	0	4	Yes
242.5 R	0	6	Yes
240.3R	0	4	Yes
231-R	4	47	Yes
228-R	0	10	Unlikely, except for the NRHP Assessment of the Port Allen Lock
223-R	0	5	Yes
217.6-L	0	9	Yes
216-R	0	6	Yes
208-L	0	12	Yes
206.7 R	4	96	Yes
199-L	9	59	Yes
194.5-R	7	135	Yes
189-L	2	16	Yes
189-R	3	8	Yes
181-L	0	10	Yes
180-R	4	9	Yes
178-R	4	36	Yes
173.9-R	0	10	Yes
172.6-R	0	13	Yes
165-R	0	14	Yes
163.5-R	1	29	Yes
163-L	3	9	Yes, mitigation
159.7-R	16	15	Yes, cemetery
158-R	0	9	Yes
156.8-L	2	9	Yes
156-R	0	16	Yes
154-L	0	93	Yes
152-L	1	11	Yes
149-R	1	17	Yes
148-L	48	80	Yes
147.3-R	1	40	Yes
144-L	1	27	Yes
143.7-R	0	25	Yes
142-R	0	19	Yes
136-L	6	60	Yes
135.7R	2	37	Yes
133-L	1	5	Yes
131.7R	2	3	Yes
130-L	0	7	Yes
124.3-R	30	90	Yes

<b>MRL Work Item</b>	<b># of Cultural Resources in Work Item</b>	<b># of Cultural Resources in Vicinity (1 mile of Work item/APE)</b>	<b>Additional Work Needed (Y/N)</b>
124-L	0	42	Yes
119.2-R	1	6	Yes
118.5-R	0	3	Unlikely
117.3-R	1	27	Yes
115.5-R	1	13	Yes
115-L	0	20	Yes
113.5-R	2	11	Yes
109.6-R	0	3	Yes
110.4-R	0	4	Yes
108.3-R	1	5	Yes
107-R	0	4	Yes
102.1-R	0	34	Yes
100.4-R	0	10	Yes
100-L	0	38	Yes
99.5-R	0	7	Yes
98.7-L	0	32	Yes
98.3-R	2	20	Yes
98.1-L	2	59	Yes
97.4-R	2	64	Yes
96.5-L	3	116	Yes
95.3-L	0	181	Yes
95-L	0	142	Yes
94.8-L	7 (1 NHL)	207	Yes
94.6-R	4	156	Yes
94.5-L	4 (1 NHL)	204	Yes
94.1-L	8 (1NHL)	179	Yes
93.6-L	7	98	Yes
93-L	2	66	Yes
92.6L	5	109	Yes
92-L	4	101	Yes
91.2-L	7	75	Yes
91-L	1	50	Yes
90.8-L	0	43	Yes
90.6-R	4	51	Yes
90-L	2	37	Yes
88.5-L	2	29	Yes
88-R	1	1	Unlikely, except for the NRHP Assessment of the Port Allen Lock
86.1-L	2	16	Yes
84.3-R	0	9	Yes
67-R	7	33	Yes
67-L	11	88	Yes
61.5-R	5	31	Yes
58-R	0	19	Yes
52.5-R	5	35	Yes
51-L	13	81	Yes
47.5-R	2	21	Yes
37-R	8	39	Yes



<b>MRL Work Item</b>	<b># of Cultural Resources in Work Item</b>	<b># of Cultural Resources in Vicinity (1 mile of Work item/APE)</b>	<b>Additional Work Needed (Y/N)</b>
Upper Fifth MRL SEIS 2 Pit.	0	0	Unlikely
Atchafalaya Basin MRL SEIS 2 Pit 1	0	3	Unlikely
Atchafalaya Basin MRL SEIS 2 Pit 2	0	26	Yes
Pontchartrain MRL SEIS 2 Pit	0	7	Unlikely
Pits – West Jefferson	0	19	Unlikely
Algiers MRL SEIS 2 Pit	0	4	Unlikely
Orleans Pit	0	0	Unlikely
Lake Borgne Pit	1	5	Yes
Lafourche Pit	0	5	Yes
Grand Prairie MRL SEIS 2 Pit 1	0	9	No
Grand Prairie MRL SEIS 2 Pit 2	0	2	No
Plaquemines MRL SEIS 2 Pit	1	13	Yes

### **A14-3.1 Memphis District Cultural Resources Summary**

#### **For West Bank Ohio River**

1. Mound City to Cairo Levee 0/0+00 to 2/26+00, Item 965-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. Site 11PU141, although no longer existent, and the Trail of Tears boundary directly intersects the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
2. North Mound City, IL Sump, Item 962.3-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW, however, several significant sites with burials are adjacent to the project area and the Trail of Tears boundary directly intersects the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.

3. Mound City to Cairo Levee 2/26+00 to 4/0+00, Item 962.5-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. Sites 11PU140, 11PU141, and 11PU217, and the Trail of Tears boundary directly intersects the project area. Site 11PU140 is recommended as eligible. Historic cartographic, geomorphological, and soils data suggest portions of this project area have high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
4. Mound City to Cairo Levee 4/30+00 to 5/7+00, Item 961-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW, however the Trail of Tears boundary directly intersects the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
5. Mound City to Cairo, IL 7/50+00 to 8/4+00, Item 958-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW, however the Trail of Tears boundary directly intersects the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
6. Cairo, IL Floodwall, Item 956-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. Portions of the Cairo National Register District have been identified within the project ROW. In addition, the Trail of Tears boundary directly intersects the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
7. Fish Market Gate/High 51 Closure, Item 955-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW, however the Trail of Tears boundary directly intersects the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.

#### For East Bank Mississippi River

8. Hickman Floodwall Embankment Tie-in, Item 922-L. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
9. Hickman Levee Grade Raise, Item 921-L. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data

suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.

10. Island 8 Parcel 3, KY (4/0+00 to 5/20+00), Item 918-L. The entire work item for this project item was surveyed in 1982. Although it is unlikely any additional cultural resources would be located, the Trail of Tears boundary is located within the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
11. Lake No. 9 – KY-TN State Line (21/3+80 to 21/7+30), Item 902-L. There have been no previously recorded cultural surveys or cultural sites within the work item. However, the project item falls within the boundary of the American Battle Protection Program (ABPP) defined core area for the Civil War Battle of New Madrid therefore the area should be considered sensitive for significant historic resources. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
12. Great River Road Slope Flattening (12/45+00 to 15/0+00), Item 848-L. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
13. Great River Road Slope Flattening (20/0+00 to 37/0+00), Item 832-L. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.

#### For West Bank Mississippi River

14. Nash, MO Slope Flattening (11/12+00 to 12/0+00), Item 49-R AC. Portions of this work item have been previously surveyed for the presence of cultural deposits. The project item falls within the boundary of the ABPP defined core area for the Civil War Battle of Cape Girardeau, therefore, the area should be considered sensitive for significant historic resources. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
15. Commerce to Birds Point (15/0+00 to 17/49+00), Item 29-R AC. The entire work item for this project item was surveyed in 1982. Sites 23ST281, 282, and 283 are within the project area. Site 23ST283 was recommended for evaluation. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore

following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

16. Commerce to Birds Point (17/49+00 to 32/0+00), Item 22-R AC. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
17. Birds Point – New Madrid Setback (0/0+00 to 12/32+00), Item 947-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. Site 23MI187 has been identified within the project ROW and needs to be evaluated. In addition, the Benge Route of the Trail of Tears boundary directly intersects the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
18. Birds Point – New Madrid Frontline Levee (43/21+00 to 87/0+00), Item 920-R. There have been no previously recorded cultural surveys or cultural sites within the work item. However, the Crosno Fortified Village, a preserved temple Mound listed on the NRHP is just outside the project area. In addition, areas associated with the ABPP, particularly the Battle of New Madrid, as well as the Trail of Tears boundary are located within the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
19. Birds Point – New Madrid Setback (12/32+00 to 36/0+00), Item 915-R. There have been no previously recorded cultural surveys within the work item. However, Site 23MI47, an unevaluated prehistoric mound group falls within the project area. In addition, portions of the ABPP Battle of New Madrid boundary intersects the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
20. Farrenburg Levee, MO Slope Flattening (1/50+00 to 2/21+00), Item 889-R. There have been no previously recorded cultural surveys within the work item. However, the Hunter-Dawson House, the NRHP Trail of Tears and portions of the ABPP Battle of New Madrid Island Number 10 falls within the project area. In addition, portions of the Battle of New Madrid boundary intersects the project area. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
21. New Madrid, MO to MO-AR Levee (5/0+00N to 0/0+00), Item 882-R. Portions of this ROW have previously been surveyed for the presence of cultural deposits. Both the Trail of Tears and the ABPP Battle of New Madrid been identified within the work item. Historic cartographic,

geomorphological, and soils data suggest portions of this project area have high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

22. New Madrid, MO to MO-AR Levee (2/0+00S to 2/30+00S), Item 877-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. Both the Trail of Tears and the ABPP Battle of New Madrid and Island Number 10 have been identified within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
23. Barfield, AR Slope Flattening (61/0+00 to 61/25+00), Item 807-R. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
24. Wilson, AR Slope Flattening (100/0+00 to 100/36+00), Item 766-R. Portions of this work item have been previously surveyed for the presence of cultural deposits. There have been no previously recorded sites within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
25. Pecan Point, AR Slope Flattening (116/40+00 to 117/45+00), Item 762-R. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
26. St. Thomas, AR Berm Re-evaluation, Item 754-R. Portions of this work item have been previously surveyed for the presence of cultural deposits. There have been no previously recorded sites within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
27. MO-AR State Line to St. Francis River Levee Part 1 (134/0+00 to 138/0+00), Item 747-R. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
28. MO-AR State Line to St. Francis River Levee Part 2 (145/0+00 to 147/0+00), Item 741-R. Portions of this work item have been previously surveyed for the presence of cultural deposits. The Sultana shipwreck (3CT0370/40SY0739) is located on the western bank of Chicken Island and is considered

eligible. Additionally, the Trail of Tears Trail and the ABPP Battle of Memphis I study area are within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

29. West Memphis, AR Re-Evaluation, Item 726-R. Portions of this work item have been previously surveyed for the presence of cultural deposits. No known cultural sites are within the project ROW, however, the Trail of Tears Trail and the ABPP Battle of Memphis I study area are within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
30. West Memphis, AR Seepage Remediation, Item 723-R. The entire work item for this project was surveyed in 1980. All archaeological sites located within the project during this survey were found to be ineligible. However, the Trail of Tears Trail and the ABPP Battle of Memphis I study area are located within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
31. Horseshoe Lake, AR, Item 705-R. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
32. MO-AR State Line to St. Francis Levee Part 3 (183/0+00 to 190/0+00), Item 697-R. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
33. MO-AR State Line to St. Francis Levee Part 4 (190/0+00 to 198/0+00), Item 693-R. Portions of this work item have been previously surveyed for the presence of cultural deposits. No known cultural sites are within the project ROW, however, the Trail of Tears Trail is within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
34. MO-AR State Line to St. Francis Levee Part 5 (198/0+00 to 210/30+00), Item 682-R. Portions of this work item have been previously surveyed for the presence of cultural deposits. No known cultural sites are within the project ROW, however, the Trail of Tears Trail is within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area

have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

35. Elaine, AR to Laconia Circle Levee (48/4+00S to 48/8+90S), Item 620-R. Portions of this work item have been previously surveyed for the presence of cultural deposits. No known cultural sites are within the project ROW, however, the Trail of Tears Trail is within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

### **A14-3.2 Vicksburg District Cultural Resources Summary**

36. Cessions, MS, Seepage Remediation, Item 615-L. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
37. Deeson-Gunnison, MS, Seepage Remediation, Item 611-L. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
38. Rosedale, MS, Seepage Remediation, Item 587-L. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
39. Bolivar, MS, Seepage Remediation, Item 577-L. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
40. Brunswick-Halpino, MS, Levee Enlargement and Seepage Remediation, Item 443-L. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
41. Morville-Black Hawk, LA, Seepage Remediation, Item 355-R. There have been no previously recorded cultural surveys or cultural sites within the work item. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a potential for the

presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

42. Morville-Black Hawk, LA, Levee Enlargement, Item 351-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
43. Morville-Black Hawk, LA, Seepage Remediation, Item 348-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
44. Morville-Black Hawk, LA, Levee Enlargement and Seepage Remediation, Item 345-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
45. Morville-Black Hawk, LA, Seepage Remediation, Item 341-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. One (1) cultural site is located within the project ROW. Site 16CO52 has been assessed as Not NRHP Eligible applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
46. Morville-Black Hawk, LA, Seepage Remediation, Item 340-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. One (1) cultural site is located within the project ROW. Site 16CO53 has been assessed as Not NRHP Eligible applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
47. Morville-Black Hawk, LA, Seepage Remediation, Item 337-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. One (1) cultural site is located within the project ROW. Site 16CO54 has been assessed as Not NRHP Eligible applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have a high potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.



48. Morville-Black Hawk, LA, Levee Enlargement and Seepage Remediation, Item 333-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
49. Morville-Black Hawk, LA, Levee Enlargement, Item 330-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
50. Morville-Black Hawk, LA, Levee Enlargement and Seepage Remediation, Item 326-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. No cultural sites have been identified within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
51. Morville-Black Hawk, LA, Levee Enlargement and Seepage Remediation, Item 320-R. (Adverse Effect) Portions of this work item have previously been surveyed for the presence of cultural deposits. One (1) cultural site is located within the project ROW. Site 16CO51 has been assessed as NRHP eligible applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). The project as outlined would likely have an adverse effect/impact on this resource. Mitigation will be carried at this site following the terms of the MRL SEIS II PA. Additionally, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.

#### **A14-3.13 New Orleans District Cultural Resources Summary**

52. Combined Lower/Upper 5th 308-317-W, LA, Levee, Item 312.5-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. One (1) cultural site is located within the project ROW. Site 16CO196, a mid-twentieth century artifact scatter has not been assessed for NRHP eligibility (36 CFR 60.4 [a-d]). Additionally, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
53. Old River Lock - Levee, LA, Levee, Item 304-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. Two (2) cultural sites are located within the project ROW. Old River Navigation Canal Lift Bridge, and the Old River Lock, both are mid-twentieth century structures that are assessed as NRHP eligible (36 CFR 60.4 [a-d]). Additionally, historic

cartographic, geomorphological, and soils data suggest portions of this project area have a low potential for the presence of unidentified cultural resources. Therefore, following the process outlined in the MRL SEIS II PA for further historic property avoidance, minimization, and potential mitigation efforts are recommended.

54. Smithland to Lacour 289-298 R, LA, Levee and Berm, Item 293.5-R. No portions of this work item has previously been surveyed for the presence of cultural deposits. Two (2) cultural sites, cemeteries, are located immediately adjacent to/within the project ROW. St. Stephens cemetery dating from the early-19<sup>th</sup> century and Mt. Zion cemetery dating from the early-20<sup>th</sup> century are adjacent to the project item and will require special care to ensure avoidance measures are implemented. They have not been assessed for the NRHP criteria (36 CFR 60.4 [a-d]). Additionally, historic cartographic, geomorphological, and soils data suggest portions of this project area have high potential for the presence of unidentified cultural resources related to the late 19<sup>th</sup> to early-20<sup>th</sup> century (burials, historic structures, and landscapes), therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
55. Pt Coupee Levee Enlargement, LA, Levee, Item 268-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. While nine archaeological sites are in the vicinity of the work item, none are recorded within it. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of unidentified cultural resources related to the late 18<sup>th</sup> to early-20<sup>th</sup> century, however, based on past surveys it is unlikely to remain intact. Regardless, the process outlined in the MRL SEIS II PA for further consultation is recommended.
56. Arbroth Levee Enlargement, LA, Levee, Item 253-R. None of this work item has been previously surveyed for the presence of cultural deposits. A single historic period cemetery, the Glennon Cemetery, dating to the early-20<sup>th</sup> century that is considered significant for the NRHP is in close proximity to the work item. While the historic cartographic, geomorphological, and soils data do not suggest that there is a significant potential for unidentified resources, the presence of the cemetery in proximity to the project should be specifically addressed in terms of the processes outlined in the MRL SEIS II PA through further consultation.
57. Smithfield Levee Enlargement, LA, Levee, Item 246-R. No portion of this work item has been previously surveyed for the presence of cultural deposits. However, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
58. Fancy Point, LA, Levee, Item 242.5-R. No portion of this work item has been previously surveyed for the presence of cultural deposits. However, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

59. Thomas Point, LA, Levee, Item 240.3-R. No portion of this work item has been previously surveyed for the presence of cultural deposits. However, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
60. Port Allen, LA, Levee, Item 231-R. Portions of this work item have been previously surveyed for the presence of cultural deposits, but largely the area has not been surveyed. Two individually listed NRHP properties occur in close proximity to the project item: Monte Vista Plantation House (NPS# 80001769), and Poplar Grove Plantation House (NPS# 87002136), as well as two (2) archeological sites (16WBR7 and 16WBR16), both of which are shipwrecks that have not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Additionally, historic cartographic data and the presence of prehistoric archaeological deposits within the ROW strongly suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
61. Port Allen Lock – Levee, LA, Levee, Item 228-R. No portion of this work item has been previously surveyed for the presence of cultural deposits and no historic properties have been recorded. However, the Port Allen Lock, built in 1961, will require evaluation in terms of the NRHP; therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
62. Addis, LA, Levee, Item 223-R. No portion of this work item has been previously surveyed for the presence of cultural deposits. However, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, additionally a handful of historic archeological sites, cemeteries, and a single NRHP property dated from the nineteenth and twentieth centuries have been recorded in the area; therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
63. Ben Hur Road, LA, Levee, Item 217.6-L. No portion of this work item has been previously surveyed for the presence of cultural deposits. However, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources; therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
64. Morrisonville, LA, Levee, Item 216-R. No portion of this work item has been previously surveyed for the presence of cultural deposits. However, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources; therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
65. Plaquemines Point, LA, Berm and/or Wells, Item 208-L. No portion of this work item has been previously surveyed for the presence of cultural deposits. However, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources; therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

66. Plaquemine/Reveille, LA, Levee, Item 206.7-R. No portion of this work item has been previously surveyed for the presence of cultural deposits. However, historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources; therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
67. Lower Plaquemines Point, LA, Levee, Item 199-L. Portions of this work item have been previously surveyed for the presence of cultural deposits, but largely the area has not been surveyed. Two National Register Historic Properties (Bayou Plaquemine Lock, Plaquemine NRHD) have been recorded in the project area, as well as two (2) archeological sites (16IV129, 16IV130) both of which are related to the listed historic properties. Further investigation to determine the properties' NRHP eligibility under the Criteria for Evaluation (36 CFR 60.4 [a-d]) should be done, particularly for criteria d. Historic cartographic data and the presence of historic archaeological deposits within the ROW strongly suggest portions of this project area have potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended, and, if necessary, mitigation
68. Bayou Goula to Alhambra, LA, Levee, Item 194.5-R. Although multiple cultural resources investigations have occurred in the general vicinity of the work item, including several that intersected portions of this project item, and a number of historic archeological sites, standing structures, cemeteries, and National Register Historic Properties or Districts dated from the late eighteenth to twentieth centuries have been recorded in the area, large portions of the project item have not been subjected to systematic investigation for cultural resources. Seven archeological sites have been recorded in the project area (Sites 16IV131, 16IV135, 16IV139, 16IV141, 16IV163, 16IV191, and 16IV192), including both prehistoric and historic deposits. Four of these have not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]), and three have been assessed as not eligible. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the work item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended, and, if necessary, mitigation.
69. Carville, LA, Levee, Item 189-L. Although multiple cultural resources investigations have occurred in the general vicinity of the work item and several historic archeological sites, standing structures, and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, only portions of the project item have been subjected to systematic investigation for cultural resources. Two archeological sites have been recorded within the project area (Sites 16IV143 and 16IV144), which have been assessed as not eligible, applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Carville, Louisiana project item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
70. Claiborne Island, LA, Berm, Item 189-R. Although multiple cultural resources investigations have occurred in the general vicinity of the work item and several historic archeological sites and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself largely has not been subjected to systematic investigation for cultural resources. Three archeological sites have been recorded in the project area (Sites 16IV50, 16IV51, and 16IV226). Two of these, Sites 16IV50 and 16IV51, were determined to be eligible for listing on the

NRHP, and the remaining site has not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [ad]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the work item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended, and, if necessary, mitigation.

71. Marchand, LA, Levee, Item 181-L. Although a number of cultural resources investigations have occurred in the general vicinity of work item and several historic archeological sites, cemeteries, and structures dated from the nineteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that work item's has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
72. ABLD-1 180 R, LA, Levee, Item 180-R. Although a number of cultural resources investigations have occurred in the general vicinity of the Work Item and several historic archeological sites, cemeteries, and structures dated from the nineteenth to twentieth centuries have been recorded in the area, the project item itself largely has not been subjected to systematic investigation for cultural resources. Three archeological sites (16AN20, 16AN21, and 16AN22) and one historic standing structure (LHRI# 03-002620) are located partially within or in close proximity to the current project item, and these resources have not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Furthermore, data from historic map research indicate multiple buildings situated along portions of the project item, including several clusters of buildings that align well with recorded site locations several plantations. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that Work Item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
73. Smoke Bend, LA, Levee, Item 178-R. Multiple cultural resources investigations have occurred in the general vicinity of the work item and a number of historic archeological sites, cemeteries, and National Register properties or districts have been recorded in the area. These resources include three sites associated with historic plantations that are located partially within or in close proximity to the current project item., and have not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]) (i.e., Sites 16AN18-20). Furthermore, data from the examined historic maps show multiple structures encompassed within, and in the immediate vicinity of, the currently proposed project item. Although portions of the project item have been subjected to investigation for cultural resources, most of the project area has not been examined systematically; furthermore, data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Work Item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
74. Stella Landing, LA, Levee, Item 173.9-R. Multiple cultural resources investigations have occurred in the general vicinity of the work item and several historic archeological sites and National Register properties or districts dated from the nineteenth and twentieth centuries have been recorded in the area, and portions of the project item itself have been subjected to systematic investigation for cultural resources. Despite this, data from the previous cultural resources investigations in the area

coupled with information derived from historic maps and geomorphologic data indicate that the Work Item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

75. Aben, LA, Levee, Item 172.6R. Multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a handful of historic archeological sites, cemeteries, and an NRHP property dated from the nineteenth and twentieth centuries have been recorded in the area. Of particular note is Site 16AN118 (Viala Plantation), which was located partially within the project item and has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). The project item itself has not been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that there is a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
76. Point Houmas (Lauderdale), LA, Levee, Item 165-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites and one cemetery dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself only partially has been subjected to systematic investigation for cultural resources and no cultural resources have been recorded previously within the project item. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
77. Brilliant Point 163.5 R, LA, Levee, Item 163.5-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites and three cemeteries dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself only partially has been subjected to systematic investigation for cultural resources and one cultural resource (Site 16SJ17, Welcome Plantation) has been recorded previously within the project item. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that there is a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
78. Romeville, LA, Levee, Item 163-L. Multiple cultural resources investigations have occurred in the general vicinity of the Work Item, and a number of historic archeological sites that dated from the nineteenth to twentieth centuries, and one dated from the eighteenth century, have been recorded in the area. Additionally, one structure was recorded in or within close proximity of the project item, and the Colomb Plantation, a previously NRHP listed historic plantation with an associated cemetery, was located approximately 0.5 km (0.3 mi) east of the project item. The item lies entirely within Sites 16SJ20 and 16SJ21, and has been entirely subjected to cultural resources investigations. However, only those portions surveyed by the 1992 cultural resources investigations (Hinks et al. 1994) consisted of full coverage. The remaining portions (Pearson et al. 1980) should not be considered as having been investigated sufficiently for the presence of cultural resources. Although field methods in this area were described as pedestrian survey, shovel testing, and auger testing (Pearson et al. 1980:5-18), there are no maps indicating the location of each shovel test. It is noted that “[t]he failure to locate pre 1800 cultural remains on Helvetia is probably due to the ground cover

conditions (pasture) on the front lands of the plantation rather than to an actual absence of these materials in the area” (Pearson et al. 1980:7-1 to 7-2). This indicates that at least the eastern portion of the survey area, i.e., those portions located within the bounds of Site 16SJ21, were not investigated using subsurface methods. The identification of numerous localities within the bounds of Site 16SJ20 indicates that those portions of the project area were more extensively surveyed. However, reporting on the most recent fieldwork, performed at Site 16SJ21 in 2012 and 2013 by URS Corporation, is not currently available on the Louisiana Department of Culture, Recreation, and Tourism website as of the time of the current investigation. Without information regarding the recently investigated portions and their depositional integrity, an accurate appraisal of the most current known condition of the project area is not possible. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that there is a high potential for the presence of previously unrecorded cultural resources in those portions of the project item located within the boundaries of Site 16SJ21, and a low potential for the presence of previously unrecorded cultural resources in those portions of the project item located within the boundaries of Site 16SJ20; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

79. Barton Lane 159.7 R, LA, Levee, Item 159.7-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, and cemeteries dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself largely has not been subjected to systematic investigation for cultural resources. One archeological site, a cemetery that dates from the eighteenth century, has been recorded in the project area (Site 16SJ23), which has not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that there is a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
80. St. Amelia 158R, LA, Levee, Item 158-R. Although several cultural resources investigations have occurred in the general vicinity of the Work Item and a handful of historic archeological sites, NRHP properties, and a cemetery dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that there is a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
81. Romeville/College Point 156.8 L, LA, Levee, Item 156.8-L. Although some cultural resources investigations have occurred in the general vicinity of the Work Item and a handful of historic archeological sites, NRHP properties, and cemeteries dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources using modern standards. One known archeological site, Site 16SJ31, lies partially within and adjacent to the project area, and this site has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Romeville/ College Point 156.8-L, Louisiana work item location has a high potential for the presence of cultural resources; therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.

82. St. James Moonshine, LA, Levee, Item 156-R. Although some cultural resources investigations have occurred in the general vicinity of the Work Item and a handful of historic archeological sites, NRHP properties, and structures dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
83. Welham Plantation, LA, Levee, Item 154-L. Although some cultural resources investigations have occurred in the general vicinity of the Work Item and a handful of historic archeological sites, NRHP properties, and structures dated from the eighteenth to twentieth centuries have been recorded in the area, no known cultural resources occur directly within the project item, and the project item itself has not been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
84. Belmont, LA, Levee, Item 152-L. Although some cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, NRHP properties, and structures dated from the nineteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. Site 16SJ38, which occurs in close proximity to the current project item, has been evaluated and recommended as not eligible for listing on the NRHP, applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended..
85. Vacherie, LA, Levee, Item 149-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, National Register Historic Properties or Historic Districts, and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. One archeological site has been recorded in the immediate vicinity of the project area (Site 16SJ40), which has been mitigated by data recovery. However, data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project item location has a high potential for the presence of cultural resources; therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended..
86. Paulina/Lutcher/Gramercy, LA, Levee, Item 148-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, National Register Historic Properties or Historic Districts, and cemeteries dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has largely not been subjected to systematic investigation for cultural resources. Nine archeological sites have been recorded in the immediate vicinity of the project area, which were described as historic deposits or scatters that were dated from the mid to late nineteenth to the



twentieth centuries, and all were determined to be not eligible for listing on the NRHP. Additionally, a number of historic standing structures and several National Register individual properties and districts were recorded in the immediate or general vicinity. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended..

87. Wallace, LA, Levee, Item 147.3-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. One archeological site has been recorded in the project area (Site 16SJ108), which has not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
88. Gramercy.Mt. Airy/48 mile Point, LA, Levee, Item 144-L. Portions of this work item have previously been surveyed for the presence of cultural deposits. 27 cultural resources are located within 1 mile (1.6 km) of the project area. One (1) cultural resource is located within the project ROW. Site 16JB68 is considered Unknown for NRHP eligibility applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
89. Oak Alley - Willow Grove 142.6-144 R, LA, Levee, Item 143.7-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. 25 cultural resources are located within 1 mile (1.6 km) of the project area. No cultural resources are located within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
90. Upper Edgard 142 R, LA, Levee, Item 142-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. 19 cultural resources are located within 1 mile (1.6 km) of the project area. No cultural resources are located within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
91. Reserve, LA, Levee, Item 136-L. Portions of this work item have previously been surveyed for the presence of cultural deposits. 60 cultural resources are located within 1 mile (1.6 km) of the project area. 6 cultural resources are located within the project ROW. Site 16SJB67 is Not Eligible for NRHP, while sites 16SJB8 and 16SJB12 are considered Unknown for NRHP eligibility applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). 3 early 20th century historic structures were previously recorded within the project ROW but they are likely plotted incorrectly and thus believed to lie outside the direct project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore

following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended..

92. Lower Edgard (3) 135.2-136.2 R, LA, Levee, Item 135.7-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. 37 cultural resources are located within 1 mile (1.6 km) of the project area. 2 cultural resources are located within the project ROW. Site 16SJB27 is Eligible for the NRHP applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). 1 historic structure was previously recorded with in the project ROW but it likely plotted incorrectly and thus believed to lie outside the direct project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended..
93. Laplace, LA, Levee, Item 133-L. Portions of this work item have previously been surveyed for the presence of cultural deposits. 5 cultural resources are located within 1 mile (1.6 km) of the project area. 1 cultural resources are located within the project ROW. The late 19th century historic structure is considered Not Eligible for the NRHP applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
94. Lower Edgard 131.7 R, LA, Levee, Item 131.7-R. Portions of this ROW have previously been surveyed for the presence of cultural deposits. 3 cultural resources are located within 1 mile (1.6 km) of the project area. 2 cultural resources are located within the project ROW. Site 16SC31 is considered Unknown for NRHP eligibility applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Site 16SC88 is Not Eligible for the NRHP applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
95. 35 Mile Point, LA, Levee, Item 130-L. Portions of this ROW have previously been surveyed for the presence of cultural deposits. 7 cultural resources are located within 1 mile (1.6 km) of the project area. No cultural resources are located within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
96. Hahnville, Flagville, Dufresne 120-128.5 R, LA, Levee, Item 124.3-R. Portions of this ROW have previously been surveyed for the presence of cultural deposits. 98 cultural resources are located within 1 mile (1.6 km) of the project area. 30 cultural resources are located within the project ROW. Sites 16SC19, 16SC20, 16SC22, 16SC47, 16SC55-59, and 16SC72 are all considered Unknown for NRHP eligibility applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). 20 historic structures were previously recorded with in the project ROW but they are likely plotted incorrectly and thus believed to lie outside the direct project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.

97. Bonnet Carre to New Sarpy, LA, Levee, Item 124-L. Portions of this ROW have previously been surveyed for the presence of cultural deposits. 42 cultural resources are located within 1 mile (1.6 km) of the project area. 4 cultural resources are located within the project ROW. 4 historic structures were previously recorded within the project ROW but they are likely plotted incorrectly and thus believed to lie outside the direct project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
98. Lone Star to Davis Pond, LA, Levee, Item 119.2-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. 6 cultural resources are located within 1 mile (1.6 km) of the project area. 1 cultural resource is located within the project ROW. Site 16SC74 is considered Unknown for NRHP eligibility applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
99. Davis Pond Freshwater Diversion Structure Floodwall, LA, Floodwall, Item 118.5- R. Multiple cultural resources investigations have occurred in the general vicinity of work item and three historic archeological sites that dated from the nineteenth century have been recorded in the area. Previous work completed by Jones et al. (1994) and Wells et al. (2010) for the Davis Pond Diversion appears to have provided complete coverage of the currently proposed project item; furthermore, construction activities associated with the existing structure likely have destroyed all cultural resources in the immediate vicinity of the project item. While data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that there may have been a high potential for the presence of cultural resources, additional investigation for cultural resources may not be warranted. However, following the process outlined in the MRL SEIS II PA, USACE will document this.
100. Ama #2, LA, Levee, Item 117.3-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. 27 cultural resources are located within 1 mile (1.6 km) of the project area. 1 cultural resource is located within the project ROW. Site 16SC61 is Not Eligible for NRHP applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
101. Cyanamid, LA, Levee, Item 115.5-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. 13 cultural resources are located within 1 mile (1.6 km) of the project area. 1 cultural resource is located within the project ROW. Site 16SC63 is Not Eligible for the NRHP applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
102. St. Rose (Kenner Revet), LA, Levee, Item 115-L. Portions of this work item have previously been surveyed for the presence of cultural deposits. 20 cultural resources are located within 1 mile (1.6 km) of the project area. No cultural resources are located within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.

103. Ama, LA, Levee, Item 113.5-R. Portions of this work item have previously been surveyed for the presence of cultural deposits. 11 cultural resources are located within 1 mile (1.6 km) of the project area. 2 cultural resources are located within the project ROW. Site 16JE141 is Not Eligible for NRHP, while sites 16JE25 is considered Unknown for NRHP eligibility applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA further historic property identification and evaluation is recommended.
104. Waggaman and Bridge City Levee and Floodwall, LA, Floodwall, Item 109.6-R. Reported as 110R in RCGA report. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a few historic archeological sites, standing structures, and one NRHP property dated from the eighteenth through twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources, and no archeological sites have been recorded in the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a low potential for the presence of cultural resources. However, although the Huey P. Long Bridge (LRHI# 26- 00481) has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]), this structure likely would constitute an eligible historic resource and its presence within the project area should be given consideration in planning for the proposed undertaking; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended..
105. Waggaman, LA, Levee, Item 110.4-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a few archeological sites and cemeteries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources, and no archeological sites have been recorded in the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
106. Upper Avondale, LA, Levee, Item 108.3-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a few historic archeological sites, standing structures, and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, the project area itself has not been subjected to systematic investigation for cultural resources. One archeological site (Site 16JE143) has been recorded in close proximity to the project area, and it has been assessed as not eligible applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
107. Lower Avondale, LA, Levee or Floodwall, Item 107-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a few cemeteries and archeological sites dated from the eighteenth to twentieth centuries have been recorded in the area, the project area itself has only partially been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location

has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

108. Westwego Levee and Floodwall, LA, Floodwall, Item 102.1-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself only partially has been subjected to systematic investigation for cultural resources. No archeological sites or other cultural resources have been recorded directly within the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
109. Dugas to Celotex, LA, Levee, Berm and/or Wells, Item 100.4-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a few historic archeological sites dated from the nineteenth and twentieth centuries have been recorded in the area, the project area itself has only partially been subjected to systematic investigation for cultural resources. No archeological sites or other cultural resources have been recorded directly within the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
110. Nashville Ave. to Napoleon Ave. Floodwall, LA, Floodwall, Item 100-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. No archeological sites have been recorded in the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources, particularly those associated with historic industrial and commercial activities along the river; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
111. Barataria Blvd., LA, Levee, Item 99.5-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a handful of archeological sites, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself only partially has been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended..
112. Louisiana Avenue Wharves C&D, LA, Floodwall, Item 98.7-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of sites, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. No archeological sites have been recorded in the project area. Data from the

previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

113. Harvey Lock Forebay – Levee, LA, Levee or Floodwall, Item 98.3-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and several historic archeological sites and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project area itself has not been subjected to systematic investigation for cultural resources. Two archeological sites have been recorded in close proximity to the project area (Sites 16JE208 and 16JE209), and although neither site has been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]), they both were noted to be disturbed and lacked potential research value. While the data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that project location may once have had a high potential for the presence of cultural resources, land alterations associated with the construction of the existing lock likely have destroyed any archeological resources in the project area. However, the Harvey Lock structure itself may constitute a cultural resource, and the presence of this potential resource should be taken into consideration during planning for the proposed undertaking; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
114. Louisiana Ave to Jackson Ave Floodwall, LA, Floodwall, Item 98.1-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, the project area itself has not been subjected to systematic investigation for cultural resources. One archeological site (Site 16OR540) has been recorded in the project area; it has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]), but it was recommended to be potentially significant. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
115. Gretna Phase II 97-97.8 R, LA, Levee or Floodwall, Item 97.4-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties that dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. One archeological site has been recorded in the project area (Site 16JE211), which has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]), and one National Register Historic District, (the Gretna NRHD) occurs in close proximity to the project item. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
116. Jackson to Thalia, LA Floodwall, Item 96.5-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic

investigation for cultural resources. Two archeological sites have been recorded in the project area (Sites 16OR117 and 16OR177). Due to a high degree of disturbance observed Site 16OR117 was assessed as not eligible for listing on the NRHP, whereas Site 16OR177 has been assessed as eligible for listing on the NRHP, and mitigation prior to redevelopment of the location was recommended. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

117. Thalia St. to Poydras St. Floodwall, LA, Floodwall, Item 95.3-L. Multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area; however, the project area itself largely has not been subjected to systematic investigation for cultural resources. No archeological sites have been recorded directly within the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
118. Spanish Plaza, LA, Floodwall, Item 95-L. Multiple cultural resources investigations have occurred in the general vicinity of Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, and the project item itself has largely been subjected to systematic investigation for cultural resources. No archeological sites have been recorded in the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
119. Canal St. to Toulouse St. Floodwall, LA, Floodwall, Item 94.8-L. Multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area. Although the project item itself largely has been subjected to systematic investigation for cultural resources, six sites were located partially within or in close proximity to the project area (Sites 16OR98-103), and these sites have not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
120. Algiers Point 93.75-95.5 R, LA, Levee or Floodwall, Item 94.6-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself only partially has been subjected to systematic investigation for cultural resources. Three archeological sites have been recorded in the project area (Sites 16OR093, 16OR125, and 16OR711) and is located partially within the Algiers Point National Register Historic District. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project area location has high potential for the presence of cultural resources; therefore,

following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

121. Dumaine St. Floodwall, LA, Floodwall, Item 94.5-L. Multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area. Furthermore, much of the project area previously has largely been subjected to systematic investigation for cultural resources. Two archeological sites have been recorded in the project area (Sites 16OR52 and 16OR104), one of which is listed on the NRHP (16OR52) and the other has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
122. Barracks St. to Montegut St. Floodwall, LA, Floodwall, Item 94.1-L. Multiple cultural resources investigations have occurred in the general vicinity of Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area. Furthermore, the project item itself largely has been subjected to systematic investigation for cultural resources. Four archeological sites have been recorded in the project area (Sites 16OR52, 16OR105, 16OR106, and 16OR112). Site 16OR52 currently is listed on the NRHP, and the remaining three sites have not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
123. Montegut St. to Independence St. Floodwall, LA, Floodwall, Item 93.6-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has only partially been subjected to systematic investigation for cultural resources. Six archeological sites have been recorded in the project area (Sites 16OR109-114), which have not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
124. Independence St. to I.H.N.C. Floodwall, LA, Floodwall, Item 93-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, only a portion of the project item has not been subjected to systematic investigation for cultural resources. One archeological site has been recorded in the project area (Site 16OR107), which has been assessed as not eligible applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Furthermore, the project item extends within close proximity to the U.S. Army Supply Base National Register Historic District. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and



geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

125. IHNC Lock Forebay 92.6L - Levee, LA, Levee, Item 92.6-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, the project area itself has not been subjected to systematic investigation for cultural resources. Three archeological sites (Sites 16OR107, 16OR131, and 16OR134) have been recorded in the project area. Of these, Site 16OR134 was assessed as eligible applying the NRHP Criteria for Evaluation (36 CFR 60.4 [ad]), Site 16OR107 was assessed as not eligible, and Site 16OR131 has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Furthermore, the St. Claude Avenue Bridge (LHRI# 36-01802) also lies within or in close proximity to the current project area, and it also has been recommended as eligible for listing on the NRHP. Finally, the existing IHNC Lock structure itself is eligible for the NRHP constitutes a significant historic resource. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
126. Holy Cross, LA, Levee, Item 92-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself largely has not been subjected to systematic investigation for cultural resources. Three archeological sites have been recorded in the project area (Sites 16OR212, 16OR514, and 16OR658), which have not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]), although portions of Site 16OR212 (Jackson Barracks) are listed in the NRHP. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
127. Arabi Levee and Floodwall, LA, Floodwall, Item 91.2-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project area itself has not been subjected to systematic investigation for cultural resources. One archeological site has been recorded in the project area (Site 16SB119), which has not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [ad]). While data from the examined historic maps indicate little development in the area between the late nineteenth century and the mid-twentieth century, these do not constitute a comprehensive examination of the archeological potential of the area. Activities associated with nearby plantations and the Jackson Barracks, as well as the Chalmette Battlefield, all contribute to the archeological potential of this location. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

128. Domino Sugar, LA, Relief Wells, Item 91-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. No archeological sites have been recorded directly within the project area. While data from the examined historic maps indicate little development in the area between the late nineteenth century and the mid-twentieth century, these do not constitute a comprehensive examination of the archeological potential of the area. Activities associated with nearby plantations and the Jackson Barracks, as well as the Chalmette Battlefield, all contribute to the archeological potential of this location. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
129. Amstar Levee and Floodwall, LA, Floodwall, Item 90.8-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. No archeological sites have been recorded in the project area. While data from the examined historic maps indicate little development in the area between the late nineteenth century and the mid-twentieth century, these do not constitute a comprehensive examination of the archeological potential of the area. Activities associated with nearby plantations and the Jackson Barracks, as well as the Chalmette Battlefield, all contribute to the archeological potential of this location. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended..
130. US Coast Guard Reservation, LA, Levee, Item 90.6-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. Three archeological sites have been recorded in the project area (16OR123, 16OR124, and 16OR143); the first two were assessed as not eligible for listing on the NRHP, and the latter one has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
131. Chalmette Slip, LA, Levee or Floodwall, Item 90-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of archeological sites, standing structures, cemeteries, and NRHP properties dated from the nineteenth and twentieth

centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. One archeological site and NRHP District have been recorded partially within the project area: Site 16SB147 and the Chalmette National Historical Park (NPS# 66000889). Furthermore, the Chalmette Slip structure itself is approximately 100 years old, and may constitute a significant historic resource. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended..

132. Chalmette Battle Field (1), LA, Levee or Floodwall, Item 88.5-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. One archeological site has been recorded in the project area (Site 16SB147) and is listed on the NRHP. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location in St. Bernard Parish has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
133. Algiers Lock – Levee, LA, Levee, Item 88-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item, the project itself only partially has been subjected to systematic investigation for cultural resources. No cultural resources have been identified within the project item, and only one resource, a cemetery has been recorded within 1.6 km (1 mi) of the project area. Furthermore, constructing of the Algiers Lock and the Gulf Intracoastal Waterway likely have destroyed any archeological resources within the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a low potential for the presence of cultural resources. However, the existing Algiers Lock structure itself is over 50 years old, and may constitute a significant cultural resource; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
134. Chalmette Battle Field (2), LA, Levee, Item 86.1-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. Two archeological sites have been recorded in the project area (Sites 16SB104 and 16SB123), and of these, Site 16SB123 has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

135. Stanton, LA, Levee, Item 84.3-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item itself only partially has been subjected to systematic investigation for cultural resources. A single cemetery and several sites has been recorded within 1.6 km (1 mi) of the project item, although no known cultural resources occur within, or directly adjacent to, the project item. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
136. Oakville to Alliance, LA, Levee, Item 67-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites and cemeteries dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. Seven sites have been recorded in the project area (Sites 16PL85, 16PL86, 16PL111, 16PL115, 16PL122, 16PL169, and 16PL170). Two of these have been assessed as not eligible for listing on the NRHP, and five have not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Historic maps depict moderate to heavy occupation of the area from the late nineteenth century onward, and some historic maps depict the presence of cemeteries not depicted on modern maps or indicated by the cemetery records consulted for this study. In summary, the data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
137. Carnaevon to Phoenix, LA, Levee, Item 67-L. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself largely has not been subjected to systematic investigation for cultural resources. Ten archeological sites have been recorded partially within or in close proximity to the project area (Sites 16PL37, 16PL44, 16PL88, 16PL89, 16PL106, 16PL114, 16PL116, 16PL121, 16PL129, and 16PL171), and one historic cemetery (English Turn Cemetery) is located nearby. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
138. Alliance to Ironton, LA, Levee, Item 61.5-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, only a portion of the southern half of the project item itself has been subjected to systematic investigation for cultural resources. Five archeological sites have been recorded in or immediately adjacent to the project area (Sites 16PL105, 16PL109, 16PL110, 16PL261, 16PL269). Two of the sites have been assessed as not eligible for listing on the NRHP, and the remaining three sites have not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence

of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

139. Ironton to Deer Range, LA, Levee, Item 58-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and several historic archeological sites, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. No cultural resources have been identified directly within or adjacent to the current project item. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
140. Deer Range to W. Point a la Hache, LA, Levee, Item 52.5-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, cemeteries, and National Register Historic Properties or Districts dated from the late eighteenth to twentieth centuries have been recorded in the area, the project item itself largely has not been subjected to systematic investigation for cultural resources. Five archeological sites have been recorded in the project area (Sites 16PL102, 16PL125, 16PL126, 16PL157, and 16PL266), which have not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
141. Phoenix to Bohemia, LA, Levee, Item 51-L. Multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, and the project item itself has been subjected to systematic investigation for cultural resources. Ten archeological sites have been recorded in the project area (Sites 16PL12, 16PL83, 16PL84, 16PL101/137/141, 16PL103, 16PL135, 16PL136, 16PL143, 16PL144, and 16PL145). Two of these (Sites 16PL84 and 16PL135) have been assessed as eligible for listing on the NRHP applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Furthermore, the St. Thomas Cemetery (part of Site 16PL12) is located within or in very close proximity to the project item, while the Harlem Plantation House NRHP is located within about 20 m (65.6 ft) of the project item. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a moderate potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
142. W. Pt a la Hache to St. Jude, LA, Levee, Item 47.5-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. Two archeological sites have been recorded in the project area (Sites 16PL127 and 16PL266), which have not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the

project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

143. Port Sulphur, LA, Levee, Item 37-R. Although multiple cultural resources investigations have occurred in the general vicinity of the Work Item and a number of historic archeological sites, standing structures, cemeteries, and NRHP properties dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has only partially been subjected to systematic investigation for cultural resources. Seven archeological sites have been recorded in the project area (Sites 16PL131, 16PL132, 16PL222, 16PL225, 16PL229, 16PL231, and 16PL266), as was a single cemetery (Old St. Patrick's Cemetery), which was moved in 1952. Site 16PL231 was assessed as eligible for listing on the NRHP, five sites were determined to be not eligible for listing, and the single remaining site has not been assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Furthermore, although the Old St. Patrick's Cemetery was relocated in 1952, there remains the possibility that some burials were not relocated and still may be located within the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the project location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

#### **A14-3.4 New Orleans District Borrow Pits**

All Borrow Pits were reviewed independent of the supporting work items in the New Orleans District due to the later development of the borrow locations. The cultural resources summaries (below) will inform each of the Work Item packages as they are funded for construction and further evaluation by the USACE.

144. Upper Fifth MRL SEIS 2 Pit. Although multiple cultural resources investigations have occurred in the general vicinity of the Upper Fifth MRL SEIS 2 Pit, Louisiana project item, the project item itself has not been subjected to systematic investigation for cultural resources. No archeological sites have been recorded in the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Upper Fifth MRL SEIS 2 Pit, Louisiana project item location has a low potential for the presence of cultural resources. While it is unlikely to contain cultural resources, USACE must still consult following the process outlined in the MRL SEIS II PA to conclude the Section 106 process.
145. Atchafalaya Basin MRL SEIS 2 Pit 1. Only one cultural resources investigations have occurred in the general vicinity of the Atchafalaya Basin MRL SEIS 2 Pit 1 project item and a single historic archeological site and two modern cemeteries have been recorded in the area. The project item itself has not been subjected to systematic investigation for cultural resources, and due to the lack of data from previous investigations in the vicinity of this project item, any conclusions on its potential for cultural resources must be considered preliminary. The available data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data do suggest that the Atchafalaya Basin MRL SEIS 2 Pit 1 project item location has a low potential for the presence of cultural resources. While it is unlikely to contain cultural resources, USACE must still consult following the process outlined in the MRL SEIS II PA to conclude the Section 106 process.

146. Atchafalaya Basin MRL SEIS 2 Pit 2. Although some cultural resources investigations have occurred in the general vicinity of the Atchafalaya Basin MRL SEIS 2 Pit 2 project item and a handful of historic archeological sites, standing structures, and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Atchafalaya Basin Pit 2, Louisiana project item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
147. Pontchartrain MRL SEIS 2 Pit. Although multiple cultural resources investigations have occurred in the general vicinity of the Pontchartrain MRL SEIS 2 Pit and a handful of historic archeological sites, cemeteries, and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, no known cultural resources have been recorded directly within the project item and the project item itself has only partially been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps indicate that cultural resources in the vicinity tend to be situated in close proximity to the Mississippi River and its tributaries, while the proposed borrow pit is set back several hundred meters from the river and within agricultural fields. These data indicate that the Pontchartrain MRL SEIS 2 Pit location has a low potential for the presence of cultural resources. While it is unlikely to contain cultural resources, USACE must still consult following the process outlined in the MRL SEIS II PA to conclude the Section 106 process.
148. Lafourche MRL SEIS 2 Pit. No portions of this project work item have been previously been surveyed for the presence of cultural deposits. 5 cultural resources are located within 1 mile (1.6 km) of the project area. No cultural resources are located within the project ROW. Historic cartographic, geomorphological, and soils data suggest portions of this project area have potential for the presence of cultural resources, therefore following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
149. West Jefferson MRL SEIS 2 Pit. Although multiple cultural resources investigations have occurred in the general vicinity of the West Jefferson MRL SEIS 2 Pit and a handful of historic archeological sites and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. The project item is set back from the Mississippi River and within what formerly were undeveloped agricultural fields. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the West Jefferson MRL SEIS 2 Pit location has a low potential for the presence of cultural resources. While it is unlikely to contain cultural resources, USACE must still consult following the process outlined in the MRL SEIS II PA to conclude the Section 106 process.
150. Algiers MRL SEIS 2 Pit. Although a few cultural resources investigations have occurred in the general vicinity of the Algiers MRL SEIS 2 Pit, Orleans Parish, Louisiana project item and four historic archeological sites dated from the eighteenth and twentieth centuries have been recorded in the area, the project item itself has only partially been subjected to systematic investigation for cultural resources. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Algiers MRL SEIS 2 Pit, Orleans Parish, Louisiana project item location has a low potential for the presence of

cultural resources. While the Work Item is unlikely to contain cultural resources, USACE must still consult following the process outlined in the MRL SEIS II PA to conclude the Section 106 process.

151. Orleans MRL SEIS 2 Pit. Several cultural resources investigations have occurred in the general vicinity of the Orleans MRL SEIS 2 Pit, but the project item itself has not been subjected to systematic investigation for cultural resources. No archeological sites, cemeteries, or NRHP properties have been recorded in the area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Orleans MRL SEIS 2 Pit location has a low potential for the presence of cultural resources. While the Work Item is unlikely to contain cultural resources, USACE must still consult following the process outlined in the MRL SEIS II PA to conclude the Section 106 process.
152. Lake Borgne MRL SEIS 2 Pit. Although multiple cultural resources investigations have occurred in the general vicinity of the Lake Borgne MRL SEIS 2 Pit project item and a few archeological sites and cemeteries dated from the eighteenth to twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. One archeological site has been recorded in the project area (Site 16SB123), which has not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Furthermore, the Lake Borgne Canal, located approximately 75 m (246 ft) south of the proposed project item, is at least 117 years old and may constitute a significant cultural resource. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Lake Borgne Pit, Louisiana project item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
153. Grand Prairie MRL SEIS 2 Pit 1. Multiple cultural resources investigations have occurred in the general vicinity of the Grand Prairie Pit 1 project item and several historic archeological sites and cemeteries dated from the nineteenth and twentieth centuries have been recorded in the area, and the project item itself has been subjected to systematic investigation for cultural resources. No archeological sites have been recorded in the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Grand Prairie Pit 1 project item location has a low potential for the presence of cultural resources. While the Work Item is unlikely to contain cultural resources, USACE must still consult following the process outlined in the MRL SEIS II PA to conclude the Section 106 process.
154. Grand Prairie MRL SEIS 2 Pit 2. Although several cultural resources investigations have occurred in the general vicinity of the Grand Prairie Pit 2 project item and a couple of historic archeological sites and NRHP properties dated from the nineteenth and twentieth centuries have been recorded in the area, the project item itself has not been subjected to systematic investigation for cultural resources. No archeological sites have been recorded in the project area. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Grand Prairie Pit 2 project item location has a high potential for the presence of cultural resources; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.
155. Plaquemines MRL SEIS 2 Pit. Multiple cultural resources investigations have occurred in the general vicinity of the Plaquemines Pit project item and a number of historic archeological sites and one cemetery dated from the eighteenth to twentieth centuries have been recorded in the area, and



the project item itself has been subjected to systematic investigation for cultural resources. One archeological site has been recorded in the project area (Site 16PL107), which has not been investigated fully or assessed applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]). Furthermore, one historic cemetery (St. Rosalie Cemetery) is indicated in the general vicinity of the project area, but the exact location of this cemetery is unknown. Data from the previous cultural resources investigations in the area coupled with information derived from historic maps and geomorphologic data indicate that the Plaquemines Pit project item location has a high potential for the presence of cultural resources. Because the location already has been surveyed systematically for cultural resources, additional investigation using traditional survey methods (i.e., transect shovel testing) may not be warranted; however, further investigation may be required to complete an assessment of Site 16PL107 applying the NRHP Criteria for Evaluation (36 CFR 60.4 [a-d]), and to ascertain the location of the St. Rosalie Cemetery. Finally, it should be noted that the Plaquemines Pit project item extends partially within the proposed boundaries of the control structure for the Mid-Barataria Sediment Diversion Project, which is planned for construction beginning in 2022; therefore, following the process outlined in the MRL SEIS II PA for further historic property identification and evaluation is recommended.

**A14-4 ITEM 4: DRAFT MRL SEIS II PA**

**DRAFT**

**PROGRAMMATIC AGREEMENT**

**AMONG THE  
U.S. ARMY CORPS OF ENGINEERS (USACE), MEMPHIS, NEW ORLEANS, AND VICKSBURG  
DISTRICTS  
THE CHICKASAW NATION;  
THE CHOCTAW NATION OF OKLAHOMA;  
THE OSAGE NATION;  
THE QUAPAW NATION;  
THE ARKANSAS STATE HISTORIC PRESERVATION OFFICER;  
THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER;  
THE KENTUCKY STATE HISTORIC PRESERVATION OFFICER;  
THE LOUISIANA STATE HISTORIC PRESERVATION OFFICER;  
THE MISSISSIPPI STATE HISTORIC PRESERVATION OFFICER;  
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER;  
THE TENNESSEE STATE HISTORIC PRESERVATION OFFICER;  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING  
THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT:  
MISSISSIPPI RIVER LEVEE FEATURES**

**PREAMBLE**

**WHEREAS**, the mission of the U.S. Army Corps of Engineers (USACE), Memphis District (MVM), Vicksburg District (MVK), and New Orleans District (MVN), is to deliver vital public and military engineering services; partnering in peace and war to strengthen our Nation's security, energize the economy, and reduce risks from disasters; and

**WHEREAS**, the Mississippi River and Tributaries (MR&T) Project, authorized by the Flood Control Act of 1928, as amended, is designed to reduce flood risk in the Mississippi River alluvial valley for approximately 1,610 miles between Cape Girardeau, Missouri and the Head of Passes, Louisiana from the Project Design Flood (PDF); and

**WHEREAS**, the MR&T Project, including the Mississippi River Levee (MRL) feature assists in protecting the 36,000 square-mile Lower Mississippi River Valley from periodic overflows of the Mississippi River with a Project area in the alluvial valley that encompasses parts of the seven states of Missouri, Illinois, Kentucky, Tennessee, Arkansas, Mississippi, and Louisiana; and

**WHEREAS**, the MRL feature (levees and floodwalls) extends for nearly 1,610 miles along the Mississippi River beginning at the head of the alluvial valley near Cape Girardeau, Missouri and continues to approximately 10 miles above Head of Passes near the Gulf of Mexico and is considered the backbone of the MR&T flood risk management system; and

**WHEREAS**, there is an urgent need to design, build, maintain, operate, and repair the mainline MRL system to ensure that the MRL system provides protection up to the level of the PDF. A catastrophic failure of the MRL, at any point, would likely cause grievous loss of life and personal injury, extensive damage to property and natural resources, serious harm to river navigation, and significant and long-lasting economic and social upheaval; and

**WHEREAS**, the MR& T Project has four major elements 1) levees and floodwalls to contain flood flows; 2) floodways to pass excess flows past critical Mississippi River reaches; 3) channel improvement and stabilization measures to provide efficient navigation alignment, increased flood-carrying capacity, and protection of the levee system; and 4) tributary basin improvements, such as retention lakes and sediment reduction features. The MR&T Project functions as a system across portions of seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. The project was initiated under the authority of the Flood Control Act of 1928, as amended. The Mississippi River Levees (MRL) feature—the only component of the MR&T project addressed by this Programmatic Agreement (Agreement) —has been under construction since 1928 and continually augmented through time. The current effort contains 143 Work Items that are listed in Appendix A; and

**WHEREAS**, the planned MRL construction work (Work Items or Undertakings) will include a variety of measures including but not limited to, the construction of levee enlargements, stability berms, relief wells, stabilizing floodwalls, cutoff trenches, riverside blankets, slope paving, and other forms of under-seepage controls and erosion protections, to improve deficient sections of MRL levees and to achieve the authorized levee design grade and provide the required level of flood protection. The Undertakings will be limited to only the construction of remaining authorized MRL features of the MR&T Project; and

**WHEREAS**, USACE is the lead federal agency for purposes of the National Environmental Policy Act of 1969 (NEPA) and its implementing regulations, set out at 40 CFR Parts 1500-1508 (43 FR 55978), “Section 106” of the National Historic Preservation Act (NHPA) [54 U.S.C. § 300101 et seq.], as amended (54 U.S.C. § 306108), and its implementing regulations, set out at 36 CFR Part 800, and in accordance with 36 CFR § 800.2(a)(2) and 800.8; and

**WHEREAS**, USACE has conducted previous assessments of the MRL feature of the MR&T Project under NEPA. The 1976 Environmental Impact Statement (EIS) was filed with the Council of Environmental Quality on 8 April 1976. The Supplemental EIS Number 1 (SEIS I) was prepared to supplement the 1976 EIS to evaluate the effects of continued construction of the MRL levee enlargements, stability berms, seepage control, and erosion protection measures. SEIS I was filed with the Environmental Protection Agency on 31 July 1998. SEIS I focused on the levees of the MRL that were the most deficient in height and on seepage control measures for levee reaches with observable signs of seepage during previous high water events. This Agreement has been negotiated during USACE’s current effort to supplement and as necessary augment the earlier NEPA documents with a second Supplemental EIS (MRL SEIS II); and

**WHEREAS**, USACE plans to conduct design work and construction for each Work Item in order to provide flood risk reduction for the project design flood; the Non-Federal Sponsor (NFS) (Levee District, Levee Board, or other Local Sponsor) will be responsible for the designated cost share for the development of each Work Item including the Land, Easements, Rights-Of-Way, Relocation, and Disposal Areas (LERRDS); and

**WHEREAS**, USACE has informed local governments, and local non-federal sponsors during the development of this Agreement and will take appropriate steps to involve and notify those parties, as appropriate, during the implementation of the terms of this Agreement; and

**WHEREAS**, USACE has determined that the Work Items (Appendix A) constitute multiple “Undertakings”, as defined by 54 U.S.C. § 300320 and 36 CFR § 800.16(y), that may affect properties listed in or eligible for listing on the National Register of Historic Places (NRHP) pursuant to 36 CFR Part 60 (historic properties) and/or properties having religious and cultural significance to Tribes including sites that may contain human remains and/or associated cultural items; and

**WHEREAS**, in accordance with 36 C.F.R. §§ 800.4(b)(2) and 800.5(a)(3), USACE has elected to use a phased process to conduct identification and evaluation of historic properties, and for application of the

criteria of adverse effect, respectively, because the scope and programmatic nature of MRL features make it unreasonable to identify historic properties or determine the effects of site-specific Work Items at this time; and

**WHEREAS**, as USACE cannot fully determine at this time how these Undertakings may affect historic properties, the location of historic properties, or their significance and character, USACE has elected to negotiate a Agreement in consultation with stakeholders, as provided for in 36 CFR § 800.14(b)(1)(ii), to govern the implementation of this series of Undertakings and fulfill its obligations under Section 106 of the NHPA including the resolution of adverse effects for these Undertakings; and

**WHEREAS**, as used in this Agreement, “Signatories” is defined in 36 CFR § 800.6(c)(1), “Invited Signatories” is defined in 36 CFR § 800.6(c)(2), and “Concurring Party” is defined in 36 CFR § 800.6(c)(3); and

**WHEREAS**, a Consulting Party will be recognized by USACE as a Signatory, Invited Signatory, or Concurring Party starting on the date the Consulting Party signs this Agreement as a Signatory, Invited Signatory, or Concurring Party and provides USACE with a record of this signature; and

**WHEREAS**, in accordance with 36 CFR § 800.6(c)(1), a Signatory has the authority to execute, amend, or terminate the Agreement; and

**WHEREAS**, in accordance with 36 CFR § 800.6(c)(2), Invited Signatories who sign this Agreement are signatories with the authority to amend and terminate the Agreement; and

**WHEREAS**, in accordance with 36 CFR § 800.6(c)(3), a Concurring Party is a Consulting Party invited to concur in the Agreement but who does not have the authority to amend or terminate the Agreement; and

**WHEREAS**, USACE initiated consultation, via letter on September 11, 2019 with the Absentee-Shawnee Tribe of Indians of Oklahoma, the Alabama-Coushatta Tribe of Texas, the Alabama-Quassarte Tribal Town, the Apache Tribe of Oklahoma, the Caddo Nation of Oklahoma, the Cherokee Nation, the Chitimacha Tribe of Louisiana, the Coushatta Tribe of Louisiana, the Delaware Nation, Oklahoma, the Delaware Tribe of Indians, the Eastern Band of Cherokee Indians, the Eastern Shawnee Tribe of Oklahoma, the Jena Band of Choctaw Indians, the Kaw Nation, Oklahoma, the Kialegee Tribal Town, the Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas, the Menominee Indian Tribe of Wisconsin, the Miami Tribe of Oklahoma, the Mississippi Band of Choctaw Indians, the Otoe-Missouria Tribe of Indians, Oklahoma, the Peoria Tribe of Indians of Oklahoma, the Poarch Band of Creeks, the Ponca Tribe of Indians of Oklahoma, the Quapaw Nation, the Sac & Fox Nation of Missouri in Kansas and Nebraska, the Sac & Fox Nation, Oklahoma, the Seminole Tribe of Florida, the Shawnee Tribe, The Chickasaw Nation, The Choctaw Nation of Oklahoma, The Muscogee (Creek) Nation, The Osage Nation, The Seminole Nation of Oklahoma, the Thlopthlocco Tribal Town, the Tunica-Biloxi Tribe of Louisiana, the United Keetoowah Band of Cherokee Indians in Oklahoma, the Advisory Council on Historic Preservation (ACHP), the Missouri, Illinois, Kentucky, Tennessee, Arkansas, Mississippi, and Louisiana State Historic Preservation Officers (SHPOs), and the National Park Service’s National Trails Program; and

**WHEREAS**, in accordance with 36 CFR § 800.6(a)(1), the ACHP has been provided the required documentation and invited to participate in this Agreement. On March 27, 2020, the ACHP provided written notice that it has chosen to participate in the consultation; and

**WHEREAS**, USACE recognizes that the seven different State Historic Preservation Offices are organized in accordance with each state’s needs. However each has a body of staff, dedicated to historic preservation of the built-environment (divisions, commissions, or departments, etc.) and a body

of staff dedicated to archaeological sites (divisions, departments, surveys, etc.). Collectively, these staff fulfill the SHPO's role for each respective state in accordance with the NHPA. These collective units, regardless of how each state has organized them, will be referred to as the SHPO of jurisdiction. Any specific roles or authorities under state regulation will be defined, as appropriate; and

**WHEREAS**, USACE has consulted with the Missouri State Historic Preservation Officer (MOSHPO), Illinois State Historic Preservation Officer (IL SHPO), Kentucky State Historic Preservation Officer (KY SHPO) Tennessee State Historic Preservation Officer (TN SHPO), Arkansas State Historic Preservation Officer (AR SHPO) Mississippi State Historic Preservation Officer (MS SHPO), and Louisiana State Historic Preservation Officer (LA SHPO) on this Agreement pursuant to 36 C.F.R. § 800.14(b) and 36 C.F.R. § 800.6. Each SHPO of jurisdiction is a Signatory to this Agreement; and

**WHEREAS**, USACE recognizes that the Absentee-Shawnee Tribe of Indians of Oklahoma, the Alabama-Coushatta Tribe of Texas, the Alabama-Quassarte Tribal Town, the Apache Tribe of Oklahoma, the Caddo Nation of Oklahoma, the Cherokee Nation, the Chitimacha Tribe of Louisiana, the Coushatta Tribe of Louisiana, the Delaware Nation, Oklahoma, the Delaware Tribe of Indians, the Eastern Band of Cherokee Indians, the Eastern Shawnee Tribe of Oklahoma, the Jena Band of Choctaw Indians, the Kaw Nation, the Kialegee Tribal Town, the Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas, the Menominee Indian Tribe of Wisconsin, the Miami Tribe of Oklahoma, the Mississippi Band of Choctaw Indians, the Otoe-Missouria Tribe of Indians, Oklahoma, the Peoria Tribe of Indians of Oklahoma, the Poarch Band of Creeks, the Ponca Tribe of Indians of Oklahoma, the Quapaw Nation, the Sac & Fox Nation of Missouri in Kansas and Nebraska, the Sac & Fox Nation, Oklahoma, the Seminole Tribe of Florida, the Shawnee Tribe, The Chickasaw Nation, The Choctaw Nation of Oklahoma, The Muscogee (Creek) Nation, The Osage Nation, The Seminole Nation of Oklahoma, Thlopthlocco Tribal Town, Tunica-Biloxi Tribe of Louisiana, and the United Keetoowah Band of Cherokee Indians in Oklahoma, (collectively referenced as " Federally-recognized Tribes"), may have sites of religious and cultural significance on or off Tribal Lands [as defined in 36 CFR § 800.16(x)] that may be affected by these Undertakings, and in meeting its Federal trust responsibility, USACE invited Tribes to participate in government-to-government consultation starting in September 2019. Pursuant to 36 CFR § 800.2 (c)(2)(ii)(E), and in consideration of the confidentiality of information, USACE has invited the Tribes to enter into this Agreement that specifies how USACE will carry out Section 106 responsibilities for these Undertakings; and

**WHEREAS**, USACE may invite additional Federally-recognized Tribes that have sites of religious and cultural significance to enter into the terms of this Agreement as invited signatories or concurring parties in accordance with 36 CFR § 800.14(f), and nothing in this Agreement prevents a Federally-recognized Tribe from entering into a separate Programmatic Agreement or other agreement with USACE for administration of USACE Programs; and

**WHEREAS**, in accordance with 36 CFR § 800.6(c)(2), and based on each Tribe's response, the USACE has invited The Chickasaw Nation, The Choctaw Nation of Oklahoma, the Quapaw Nation, and The Osage Nation (collectively referenced as " Consulting Tribes" ) to be Invited Signatories in this Agreement and each has elected to sign the Agreement as Invited Signatories ; and

**WHEREAS**, in accordance with 36 CFR § 800.6 (c)(3), the Mississippi Band of Choctaw Indians, and the United Keetoowah Band of Cherokee Indians in Oklahoma (collectively included in "Consulting Tribes" reference) have been invited to participate in the development of this Agreement and have elected to sign as Concurring Parties in this Agreement; and

**WHEREAS**, as of the date of this Agreement, no Tribe(s) have declined to enter into this Agreement as a signatory party; and

**WHEREAS**, on August 28, 2020, in conjunction with the posting of the SEIS II, USACE posted a NHPA/NEPA Public Notice on the designated project website (<https://www.mvk.usace.army.mil/MRLSEIS/>) for a 45-day comment period requesting the public's input concerning: 1) the proposed Undertaking and its potential to significantly affect historic properties; 2) assistance in identifying any relevant parties who may have an interest in participating in this consultation, and; 3) USACE's proposal to develop an Agreement pursuant to 36 CFR § 800.14(b). <add # of/if any> comments were received; and

**WHEREAS**, for the review of specific Undertakings under this Agreement, USACE may invite other agencies, organizations, and individuals to participate as consulting parties; and

**WHEREAS**, each USACE District (Memphis, Vicksburg, or New Orleans), depending on the specific Work Item location, uses its own staff and authority and will consult with the SHPO of jurisdiction and the appropriate Federally-recognized Tribe(s) regarding specific Work Items within the respective districts; and

**WHEREAS**, The Signatories, Invited Signatories, and Concurring Parties have determined that USACE's Section 106 requirements can be effectively and efficiently implemented through a programmatic approach stipulating roles and responsibilities, exempting certain Undertakings from Section 106 review, establishing protocols for consultation, facilitating identification and evaluation of historic properties, and streamlining the assessment and resolution of adverse effects; and

**NOW THEREFORE**, USACE (each District), the ACHP, the Missouri SHPO, the Illinois SHPO, the Kentucky SHPO, the Tennessee SHPO, the Arkansas SHPO, the Mississippi SHPO, the Louisiana SHPO (Signatories), The Chickasaw Nation, The Choctaw Nation of Oklahoma, the Quapaw Nation, The Osage Nation (Invited Signatories) and the Mississippi Band of Choctaw Indians, and the United Keetoowah Band of Cherokee Indians in Oklahoma (Concurring Parties) agree that the Undertakings associated with the MRL shall be administered in accordance with the following stipulations in order to take into account the effects of the individual undertakings on historic properties and to satisfy USACE's responsibilities under Section 106 of the NHPA for all applicable undertakings.

## **STIPULATIONS**

To the extent of its legal authority, and in coordination with other Signatories, USACE shall ensure that the following measures are implemented **and shall not authorize an individual Undertaking until Section 106 review is completed pursuant to this Agreement.**

### **I. APPLICABILITY**

- A. This Agreement applies to undertakings in the New Orleans District (MVN), Vicksburg District (MVK) and/or Memphis District (MVM) of USACE for the currently identified authorized remaining work required to complete the MRL feature of the MR&T Project and any USACE proposed work co-located with existing MRL features.
  1. Co-located work includes any authorized and funded civil works project addressing the enhancement of the MRL features. This includes the co-location of features for the West Bank and Vicinity and Lake Pontchartrain and Vicinity (/LPV) Projects, but only the portions along the MRL.
  2. The current Work Items (i.e., the list of projects) are listed in Appendix A, which includes the Work Items addressed in the MRL SEIS II.

- B. USACE may utilize this Agreement to fulfill its Section 106 responsibilities and those of other Federal agencies that designate USACE as the lead Federal agency pursuant to 36 CFR § 800.2(a)(2) with appropriate notification to the other Signatories and ACHP regarding Undertakings that fall within the scope of this Agreement. When USACE is not designated as the lead Federal agency, all Federal agencies, including USACE, remain individually responsible for their compliance with Section 106. This provision does not prevent USACE from recognizing another Federal agency as lead Federal agency for specific Undertakings, as appropriate.
- C. If another Federal program or Federal agency has concluded Section 106 consultation review and approved an Undertaking within the past five (5)-years, and no new substantial information has been revealed, USACE has no further requirement for Section 106 compliance regarding that Undertaking provided that USACE:
1. Confirms that the Area of Potential Effects (APE) and effect [as defined by 36 CFR § 800.16(i)] of its Undertaking are the same as that of the Undertaking reviewed by the previous agency, and;
  2. Determines that the previous agency complied with Section 106, including Tribal consultation, appropriately and;
  3. Adopts the findings and determinations of the previous agency.
- D. USACE shall document these findings in its project file in order to confirm that the requirements of Section 106 have been satisfied. Should USACE, in consultation with the applicable SHPO and Consulting Tribes determine that the previous Section 106 review was insufficient or involved interagency disagreements about eligibility, effect determinations, and/or resolution of adverse effects (implementation of Treatment Measures), USACE shall conduct additional Section 106 consultation in accordance with the terms of this Agreement.
- E. USACE has determined that the following types of activities have limited or no potential to affect historic properties and USACE has no further Section 106 responsibilities with regard to them, pursuant to 36 CFR § 800.3(a)(1):
1. Administrative actions such as personnel actions, travel, procurement of services, and supplies (including vehicles and equipment) for the support of day-to-day operational activities, and the temporary storage of materials provided storage occurs within existing facilities or on previously disturbed soils.
  2. Providing funding for planning, studies, and design and engineering costs that involve no commitment of resources other than staffing and associated funding.
  3. Funding the administrative action of acquiring properties, including the real estate transactions and transfers.
  4. Boundary Surveying, monitoring, data gathering, and reporting in support of planning or design activities (e.g., conducting geotechnical boring investigations or other geophysical and engineering activities provided no clearing or grubbing is necessary).
  5. Demarcation of project areas and resources (e.g., cultural sites, wetlands, threatened and endangered species habitat).



## **II. POINTS OF CONTACT**

- A. Each USACE District will provide at a minimum a primary and secondary contact, which may include technical staff as well as liaisons). The primary contact is the contact to which all initial and formal correspondence is sent. If the individual designated as the primary point of contact is not available, communications shall be directed to the secondary contact.
- B. Consulting Parties, including Signatories, Invited Signatories and Concurring Parties, will each designate a primary and secondary point of contact. Each Consulting Party to this Agreement is requested to provide phone numbers, email addresses, and mailing addresses for the primary and secondary contacts.
- C. Federally-recognized Tribes will provide areas of interest in the form of a map or other listing that USACE can use to determine, on a county-by-county (parish-by-parish) basis which Tribes to consult regarding specific Work Items.
- D. USACE acknowledges that contacts and areas of interest may change over time. Addressing this is primarily a USACE responsibility with assistance from the Consulting Parties. The initial compilation is provided in Appendix B. Following the initial compilation, USACE and the Consulting parties shall follow the process outlined in the appropriate set of roles and responsibilities below to provide and distribute updated information. Alteration of Appendix B will not require executing an amendment to the Agreement.
- E. In accordance with the process laid out in the roles and responsibilities below, USACE will follow-up on returned email and hard-copy mail or disconnected phone lines to ensure that a POC is re-established and the relevant Consulting Party receives the necessary information.

## **III. ROLES AND RESPONSIBILITIES OF THE CONSULTING PARTIES**

- A. USACE:
  - 1. Shall not authorize implementation of an individual Undertaking (Work Item) until Section 106 review is completed pursuant to this Agreement.
  - 2. Shall notify and consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribes, and other Consulting Parties. Consultations may include face-to-face meetings, as well as communications by U.S. mail, e-mail, facsimile, and/or telephone. Times and places of meetings, as well as an agenda for meetings, will be developed with mutual acceptance and done in a timely manner.
  - 3. Shall maintain the POC List, Appendix B and distribute annually as part of the consultation, to the parties listed as the Primary POC. USACE will incorporate any changes to the POC listing as derived from the steps below into the annual distribution, as well as individual updates received in the interim.
    - a. USACE district staff engaged in consultation who receive a returned email, returned letter, or notification of a disconnected phone line, will follow up with the relevant Consulting Party to re-establish the appropriate point of contact. This will be communicated to necessary parties upon clarification and in the annual POC update.

- b. At a minimum the MVD Cultural staff will make a round of phone calls to confirm the current POC listed for each of the Federally-recognized Tribes contained in the POC listing.
  - c. District Archaeologists will ensure that the contact information for the SHPOs within their district have not changed.
- 4. Shall consult with any Federally-recognized Tribe on a government-to-government basis in recognition of its sovereign status, whether a signatory to this Agreement or not, but particularly regarding sites that may have traditional, religious, and/or cultural importance to Federally-recognized Tribes. In meeting its Federal trust responsibility, USACE alone shall conduct all government-to-government consultation with Federally-recognized Tribes.
- 5. Shall be responsible for determining the APE, identifying historic properties located within the APE, providing NRHP eligibility determinations, and findings of effect, in consultation with SHPO, appropriate Federally-recognized Tribes, and other Consulting Parties.
- 6. Shall ensure all Cultural Resources review is conducted by qualified professional staff as outlined in Stipulation VI.A. 2.
- 7. Shall ensure that all documentation generated as part of the NHPA process resulting from these Undertakings shall be consistent with applicable *Standards (State and Federal)* (Stipulation VI.A) and confidentiality provisions outlined in Stipulation IV.
- 8. Shall use Federal staff who meet the Secretary's Professional Qualifications as set forth in the Federal Register at 48 Fed. Reg. 44716-01 (September 29, 1983), as amended (Qualified Staff) in applying the Programmatic Allowances (Allowances) listed in Appendix D, defining APE boundaries, completing identification and evaluation of all historic properties, and making determinations of effects.
- 9. Shall ensure, to the greatest extent practicable, that the SHPO of jurisdiction and the appropriate Federally-recognized Tribe(s) are consulted at the same time. And will, prior to submitting any determinations of eligibility and/or finding of effect as part of the consultation, review National Register eligibility recommendations provided by a cultural resources contractor and make its own determination.
- 10. USACE contractors shall not consult directly with any SHPO/THPO, Consulting Tribes, or Federally-recognized Tribes. Consultation with SHPO/THPO, Consulting Tribes, or Federal recognized Tribes remains a federal responsibility. This is/will be documented in any SOW for Cultural Resource Management activities or other construction work.
- 11. Shall, when authorizing individual Undertakings requiring environmental/cultural conditions pursuant to this Agreement, include all stipulations and conditions negotiated as part of the Section 106 Process. USACE will ensure that this information is communicated to the NFS and USACE contractor, and will be available for technical questions related to its implementation. This information is conveyed through the Buildability, Constructability, Operability, Environmental and Sustainability Reviews (BCOES Process), per Engineering Regulation 415-1-11, leading to solicitation.
- 12. Shall ensure that a written record of all stipulations and conditions pursuant to this Agreement regarding any Work Item location for which a particular NFS has jurisdiction

are provided to the NFS, and USACE will be available to the NFS technical questions related to its implementation. Additionally, USACE shall provide the NFS with information and technical guidance on the treatment of any historic properties, if applicable.

13. Shall ensure that all documentation (e.g., identification, evaluation, and mitigation reports) resulting from Undertakings reviewed pursuant to this Agreement is consistent with the SHPO of jurisdiction and appropriate Consulting Tribes' Tribal guidelines, per Stipulation VI A. 3, and the confidentiality provisions of 54 U.S.C. § 307103 and 36 CFR § 800.11(c), per Stipulation IV A-E.
14. Shall ensure that, on Federal and Tribal land, that the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. §3001-3013, 18 U.S.C. § 1170) and the Archaeological Resources Protection Act of 1979 (ARPA)(16 U.S.C. §470aa – 470mm) are followed.
15. Shall ensure that the provisions of the appropriate States' burial laws, including specific authorities outlined in Stipulation IX- Treatment of Human Remains and Items of Religious and Cultural Importance are provided to the NFS. USACE will provide any necessary technical guidance on the implementation of the these laws, in support of the Designated Authority on NFS, State, or private land, subject to this agreement.
16. Annual Reporting: USACE shall provide Consulting Parties to this Agreement, with an annual report for the previous calendar year on or about July 30th of each year that this Agreement is in effect.
  - a. This annual report summarizes the actions taken to implement the terms of this Agreement, such as, statistics on Undertakings meeting Allowances; emergency reviews; streamlined project review; resolution of adverse effects; after-the-fact consultations; use of other agency's determinations; the progress and completion of all treatment measures; and recommends any actions or revisions to be considered, including updates to the appendices, A, B, D, and E.
  - b. USACE shall convene a conference call within thirty (30)-days from the distribution of the Annual Report. During the conference call, USACE invites the Signatories, Consulting Tribes, and interested parties to review the annual report and discuss issues, if any, regarding implementation of the Agreement.
17. The District Tribal Liaison shall consult to establish protocols regarding which Federally-recognized Tribes to engage in specific geographical areas and the District shall follow those protocols. The results will be reflected in the list of POCs.

B. SHPOs:

1. The SHPO of jurisdiction shall coordinate with USACE, to identify Consulting Parties, including any communities, organizations, or individuals that may have an interest in a specific Undertaking and its effects on historic properties.
2. The SHPO of jurisdiction shall consult with USACE regarding USACE's determination of the Areas of Potential Effects (APE), National Register eligibility, and findings of effect responding within timeframes set out in Stipulation V.
3. On a per Work Item basis, the SHPO of jurisdiction shall provide, as part of the

consultation, available information about historic properties (such as access to site files, GIS data, survey information, geographic areas of concern) for the purposes of addressing effects to historic properties. Only Qualified Staff, per Stipulation VI A. 1. shall be afforded access to protected historic property information. USACE and any SHPO of jurisdiction may execute a written agreement to clarify and memorialize data sharing if it extends beyond any basic fee structure or access schedule.

4. The SHPO staff of jurisdiction (typically Division of Historic Preservation and Division of Archaeology staff members or equivalent) shall be reasonably available as a resource and for consultation through site visits, written requests, telephone conversations or electronic media. In those instances where consultation has occurred, USACE shall provide a written summary via e-mail or regular mail to SHPO, including any decisions that were reached.
5. All seven SHPOs, based on availability, shall participate in annual reviews convened by USACE to discuss the effectiveness of this Agreement in accordance with Stipulation III. A. 16.

C. Federally Recognized Tribes:

1. USACE acknowledges that Federally-recognized Tribes possess special expertise in assessing the National Register eligibility of properties with religious and cultural significance to that particular Tribe. Tribal leaders, and as appropriate, their representatives, shall decide the individual for the Tribe who meets appropriate qualifications/standards for the Tribe's review of Undertakings affecting properties with religious and cultural significance to that particular Tribe. Designations such as this will follow the intent and processes laid out in USACE's 2012 Tribal Consultation Policy.
2. Federally-recognized Tribes (THPOs and other designees) may coordinate with USACE, to identify Consulting Parties, including any communities, organizations, or individuals that may have an interest in a specific Undertaking and its effects on historic properties.
3. Federally-recognized Tribes (THPOs and other designees) may consult with USACE regarding USACE's determination of the Areas of Potential Effects (APE), National Register eligibility, and findings of effect responding within timeframes set out in Stipulation V.
4. On a per Work Item basis, Federally-recognized Tribes (THPOs and other designees) may provide, as part of the consultation, available information about historic properties (such as access to site files, GIS data, survey information, geographic areas of concern) for the purposes of addressing effects to historic properties. Only Qualified Staff, per Stipulation VI A. 1. shall be afforded access to protected historic property information. USACE and any Federally-recognized Tribe may execute a written agreement to clarify and memorialize data sharing, if it extends beyond any basic fee structure or access schedule.
5. Federally-recognized Tribes (THPOs and other designees) shall be reasonably available as a resource and for consultation through site visits, written requests, telephone conversations or electronic media. In those instances where consultation has occurred, USACE shall provide a written summary via e-mail or regular mail to THPO, including any decisions that were reached.
6. Federally-recognized Tribes (THPOs and other designees) shall, based on availability,

participate in annual reviews convened by USACE to discuss the effectiveness of this Agreement in accordance with Stipulation III. A. 16.

D. ACHP:

1. ACHP will provide guidance and advisory information to resolve disputes that may occur during the implementation of this Agreement, pursuant to the Dispute Resolution process in Stipulation XII.
2. ACHP will advise USACE if it will participate in consultations to resolve adverse effects.
3. ACHP will participate in the annual reviews convened by USACE to review the effectiveness of this Agreement.

E. The Public:

1. USACE recognizes that the views of the public are essential to informed decision making throughout the Section 106 consultation process. USACE shall notify the public of proposed Undertakings in a manner that reflects the nature, complexity, significance of historic properties likely affected by the Undertaking, the likely public interest given USACE's specific involvement, and any confidentiality concerns of Federally-recognized Tribe(s), private individuals and organizations.
2. USACE may consult with the relevant SHPO/THPO, Consulting Tribes, or Federally-recognized Tribe(s), and other consulting parties, to determine if there are individuals or organizations with a demonstrated interest in historic properties that should be included as a consulting party for the Undertaking in accordance with 36 CFR § 800.2(c)(5). If such parties are identified or identify themselves to USACE, USACE shall provide them with information regarding the Undertaking and its effects on historic properties, consistent with the confidentiality provisions of 36 CFR § 800.11(c).
3. In accordance with the public outreach strategy developed for an Undertaking in consultation with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), USACE shall identify the appropriate stages for seeking public input during the Section 106 consultation process. USACE shall consider all views provided by the public regarding an Undertaking.
4. USACE shall also provide public notices and the opportunity for public comment or participation in an Undertaking through the public participation process of the National Environmental Policy Act (NEPA) and its implementing regulations set out at 40 CFR Parts 1500-1508, and/or Executive Orders 11988 and 11990 relating to floodplains and wetlands, and if applicable, Executive Order 12898, Environmental Justice, provided such notices specifically reference Section 106 as a basis for public involvement and provide the notices on a webpage established to address MRL Projects (see Appendix A for the specific web addresses).

#### **IV. CONFIDENTIALITY OF HISTORIC PROPERTY INFORMATION**

- A. USACE will safeguard information about historic properties to the extent allowed by Section 304 of NHPA (54 U.S.C. § 307103), Section 9 of the Archaeological Resources Protection Act (ARPA), and other applicable Federal laws, as well as implementing restrictions conveyed to USACE by SHPO and Federally-recognized Tribes, consistent with state and tribal

guidelines. These safeguards will be included in any developed cultural resources Scopes of Work, as well.

- B. Only USACE staff meeting the Professional Standards (Stipulation VI. A. 1.) , shall be afforded access to protected historic property information provided by any SHPO and/or Federally-recognized Tribes;
- C. Regarding sensitive information shared by Federally-recognized Tribes, USACE, in accordance with provisions of federal law, will not share non-public information, without first confirming (in writing with the provider of the information) the appropriateness of sharing.
- D. USACE shall provide to all Consulting Parties the documentation specified in 36 CFR § 800.11 subject to the confidentiality provisions of 36 CFR § 800.11(c) and such other documentation as may be developed during consultation to resolve adverse effects to the extent permitted by federal law.
- E. SHPO/THPO, Consulting Tribal staff, and Federally-recognized Tribal staff and/or designee(s), shall safe guard historic property information (locational and other non-public) in accordance with the provisions of Section 304 of the NHPA and applicable State and Tribal legal authorities.
- F. USACE anticipates the presentation of historic property data as part of any Standard Treatment Measure (STM) or Memorandum of Agreement Treatment Measure (MOA TM) but shall ensure that these products, presentations, or other publications are adequately coordinated and consulted upon before release/presentation to ensure that any otherwise protected information is being represented appropriately.

## **V. CONSULTATION STANDARDS, TIMEFRAMES, AND CORRESPONDENCE**

### **A. Consultation Standards:**

- 1. Consultation among all Consulting Parties to this Agreement will continue throughout the implementation of this Agreement. Consultation is mutual, meaningful dialogue regarding the fulfillment of this Agreement, the process of Section 106 compliance, and the treatment of historic properties that may be affected by USACE undertakings.
- 2. USACE, when consulting with any Federally-recognized Indian Tribe, whether a signatory to this Agreement or not, will do so on a government-to-government basis in recognition of their sovereign status.
- 3. USACE will consult with the SHPOs, Federally-recognized Tribes, and other consulting parties, based on expressed areas of interest in the case of Federally-recognized Tribes or jurisdiction in case of SHPO offices. Consultations may include face-to-face meetings, as well as communications by regular mail, electronic mail, and/or telephone. Times and places of meetings, as well as an agenda for meetings, will be developed with mutual acceptance and done in a timely manner.

### **B. Timeframes:**

- 1. All time designations in this Agreement shall be in calendar days unless otherwise expressly stipulated in writing in this Agreement:

- a. For Emergency Undertakings as reviewed under Stipulation VII.B, USACE shall follow the timeframes as indicated in 36 CFR 800.12 (b) (2.).
  - b. For Undertakings associated with all other activities, following the Streamlined Project Review Stipulation VII. C. provisions of this Agreement, the response time for each request for concurrence shall be a maximum of thirty (30) days, unless otherwise agreed to by the parties to the specific consultation on a case-by-case basis.
2. The review period will be extended until the next business day, if a review period included in this Agreement concludes on a Saturday, Sunday, State, or Federal, or Tribal holiday. If requested, USACE may consider an extension of a review period consistent with the time designations in this Agreement for parties affected by an unanticipated state office closure (any state) (e.g., hurricane, tornado or similar).
  3. Any electronic communication forwarding plans or other documents for review under the terms of this Agreement that is sent after 4:00 pm Central Time will be deemed to have been received by the reviewing party on the next business day.
  4. E-mail comments by the Signatories on any documents submitted for review under this Agreement are timely if they are received at any time on or before the last day of a review period. Responses sent by mail will be accepted as timely if they are postmarked by the last day allowed for the review.
  5. If any Signatory does not object to USACE's finding or determination related to an Undertaking within an agreed upon timeframe, USACE may proceed to the next step in the consultation process as described in Stipulation VII, Project Review.
  6. Timeframes are contingent upon USACE ensuring that its findings and determinations are made by Qualified Staff and supported by documentation as required by 36 CFR § 800.11(d) and 36 CFR § 800.11(e), and consistent with USACE guidance.

C. Correspondence:

1. The consulting parties may send and accept official notices, comments, requests for further information and documentation, and other communications required by this Agreement in accordance with the protocol in Appendix B.
  - a. If the size of an e-mail message is unusually large or an e-mail is returned to a sender because its size prevents delivery, the sender will contact the intended recipient(s) and determine alternative methods to deliver the information (including available file sharing platforms).

Time-sensitive information that is not sent by e-mail should be sent by overnight mail, courier, or hand-delivered. The timeframe for requests for review not sent by e-mail will be measured by the date the delivery is signed for by the SHPO of jurisdiction, Federally-recognized Tribe, or other organization representing the Consulting Party.

## VI. STANDARDS

- A. This Agreement uses the definitions presented in the subsequent paragraphs to establish standards for performing all cultural resource project reviews and investigations required

under the terms of this Agreement including, but not limited to, site identification, NRHP eligibility evaluations, and as appropriate, STM or MOA TM for the resolution of adverse effects to historic properties:

1. "Qualified Staff" – shall mean staff who meet, at a minimum, the SOI Professional Qualifications Standards set forth at 48 FR 44738 (September 29, 1983), for History, Archaeology, Architectural History, Architecture, or Historic Architecture ([https://www.nps.gov/history/local-law/arch\\_stnds\\_9.htm](https://www.nps.gov/history/local-law/arch_stnds_9.htm)) and the appropriate qualifications presented in Professional Qualifications (36 CFR Part 61, Appendix A).
2. "Standards" -- shall mean the Secretary of the Interior's (SOI) Standards and Guidelines for Archaeology and Historic Preservation [Federal Register 48(190) 1983:44716-44737] ([https://www.nps.gov/history/local-law/arch\\_stnds\\_0.htm](https://www.nps.gov/history/local-law/arch_stnds_0.htm));
3. "Meeting Professional Standards" -- shall mean that all cultural resource investigations shall be performed by, or under the direct (in-field) supervision of appropriate professional(s) or by contractors, who are "Qualified Staff.";
4. "Field and Reporting Standards" – shall mean the current historic standing structure and archaeological guidance from the SHPO's Office of jurisdiction, depending on the work item location:
  - Arkansas Historic Preservation Program and the Arkansas Archeological Survey, or
  - Illinois State Historic Preservation Office (DNR), or
  - Kentucky Heritage Council, or
  - LA State Historic Preservation Office, or
  - Mississippi Department of Archives and History, or
  - MO State Historic Preservation Office, or
  - Tennessee Department of Environment and Conservation, Division of Archeology and Tennessee Historical Commission;
5. "Policies and Guidelines" -- shall mean guidance from any of the following:
  - a) The National Park Service publication *The Archaeological Survey: Methods and Uses* (National Park Service 1978);
  - b) ACHP's Treatment of Archeological Properties: A Handbook (1980) (<https://www.achp.gov/sites/default/files/documents/2018-11/Treatment%20of%20Archeological%20Properties-A%20Handbook-OCR.pdf>);
  - c) Identification of Historic Properties: A Decision-making Guide for Managers (1988, joint ACHP-NPS publication);
  - d) Consulting About Archeology Under Section 106 (1990);
  - e) ACHP's [Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites](#) (1999);
  - f) ACHP's Policy Statement Regarding the Treatment of Burial Sites, Human Remains and Funerary Objects (2007) (<https://staging.achp.gov/sites/default/files/policies/2018-06/ACHPPolicyStatementRegardingTreatmentofBurialSitesHumanRemainsandFuneraryObjects0207.pdf>); and



- g) Section 106 Archaeology Guidance: A reference guide to assist federal agencies in making effective decisions about archaeological sites (2009)  
<https://www.achp.gov/sites/default/files/guidance/2017-02/ACHP%20ARCHAEOLOGY%20GUIDANCE.pdf>)
- B. In developing Scopes of Work (SOW) for identification and evaluation studies, STM or MOA TM(s), or any other cultural resources activities required under the terms of this Agreement, USACE will comply with the requirements of the Standards, Field and Reporting Standards, and the Policies and Guidelines, in existence at the time this work is performed.
- C. Additionally, in developing SOW for identification and evaluation studies, STM or MOA TM(s), or any other cultural resources activities required under the terms of this Agreement, and where geographically appropriate, USACE will take into account the following guidance:
  - 1. Guidance from the Osage Nation *National Historic Preservation Act Section 106 Protocol and Standards*, *Archaeological Survey Standards*, and *Archaeological Resources Protection Act Violation Procedures*; and
  - 2. Any additional area-specific guidance beyond that provided for under VI A 1. – 4 (e.g., additional Federally-recognized Tribal guidance, or local preservation ordinances).

## VII. PROJECT REVIEW

### A. Programmatic Allowances:

- 1. If USACE determines an Undertaking conforms to one or more allowances in Appendix D of this Agreement, USACE shall complete the Section 106 review process by documenting this determination in the project file, without SHPO or Federally-recognized Tribal review or notification, excepting in the annual report.
- 2. If USACE determines any portion of an Undertaking's scope of work does not conform to one or more Allowances listed in Appendix D, USACE shall conduct Section 106 review, as appropriate, for the entire Undertaking in accordance with Stipulation VII.B, Review for Emergency Undertakings, or Stipulation VII.C, Streamlined Project Review.
- 3. Allowances may be revised and new Allowances may be added to this Agreement in accordance with Stipulation XII, Amendments.

### B. Review for Emergency Undertakings:

- 1. For review of actions that are emergencies, USACE shall follow the provisions of 36 CFR 800.12 (b).

### C. Streamlined Project Review:

For Undertakings not falling under VII. A. or VII. B, USACE shall ensure that the following project review steps are implemented. In the interest of streamlining, USACE may combine some or all of these steps during consultation in accordance with 36 CFR § 800.3(g).

1. Consulting Parties: USACE shall consider all written requests of individuals and organizations to participate as consulting parties, and consult with the SHPO of jurisdiction and the appropriate Federally-recognized Tribe(s) to identify any other parties that meet the criteria to be consulting parties and invite them to participate in the Section 106 process. USACE may invite others to participate as consulting parties as the Section 106 consultation proceeds.
2. Area of Potential Effects (APE): For all projects undergoing streamlined project review, Qualified Staff shall determine the APE in consultation with the SHPO of Jurisdiction and appropriate Federally-Recognized Tribe(s).

The APE will be defined as all areas to be impacted by construction activities and areas of associated ground disturbance including but not limited to haul roads, borrow areas, staging and stockpiling areas. The APE would generally include all areas for which a Right-of-Entry is sought by USACE or the NFS. Additional effects to consider include visual, auditory, and off-site anticipated erosion resulting from the constructed feature. USACE may consider information provided by other parties, such as local governments and the public, when establishing the APE.

APE Definition Factors:

- a. For standing structures not adjacent to or located within the boundaries of a National Register listed or eligible district, Qualified Staff may define the APE as the individual structure or structures when the proposed Undertaking is limited to its repair or rehabilitation (e.g. floodwalls, or other appurtenant structures to the levees, etc.).
  - b. For archaeological sites the USACE should consider the nature of likely properties in unsurveyed areas, the fact that mound sites may have been incorporated into the levee profile or may have been excavated and used as fill material in the levee.
3. Identification and Evaluation: Qualified Staff shall determine, in consultation with SHPO and Tribe(s), if the APE contains historic properties, including properties of religious and cultural significance to Federally-recognized Tribes. This may include the review of newly developed or previously produced documentation in coordination with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and any additional Consulting Parties.
    - a. Level of Effort: USACE shall make a reasonable and good faith effort to identify historic properties in accordance with 36 CFR § 800.4(b)(1). USACE shall consult with the SHPO of jurisdiction and appropriate Federally-recognized Tribe(s) to determine the level of effort, methodology necessary to identify and evaluate a variety of historic property types, and any reporting requirements. For properties of religious and cultural significance to affected Federally-recognized Tribe(s), USACE shall consult with the affected Tribe(s) to determine if the APE contains such properties and determine the necessary level of effort to identify and evaluate or avoid any such historic properties. All Identification and Evaluation studies will comply with the Standards (Stipulation VI).
    - b. Timing:

- i. With respect to each Work Item, USACE shall achieve compliance with all relevant terms of this Agreement prior to initiating physical construction of that Work Item.
    - ii. The results of all field investigations will be subject to a review and comment period of no less than thirty (30) days by the appropriate Consulting Parties, following the receipt by the SHPO of jurisdiction and the appropriate Federally-recognized Tribe(s) of the completed reporting document (architectural survey, Phase I or II archaeological reports, and any other supporting documentation.
    - iii. Coordination of consultation will be through the designated Points of Contact (Stip. II).
  - c. National Historic Landmarks (NHL): When USACE identifies an Undertaking with the potential to affect an NHL, USACE will adhere to 36 CFR 800.10 Special Requirements for Protecting NHL's. USACE shall contact NPS NHL Program Manager of the Southeast NPS Regional Office in addition to the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties. The purpose of this notification is to ensure early coordination for the Undertaking, which USACE later may determine adversely affects the NHL as outlined in Stipulation VII C. 7, Assessing Adverse Effects.
- 4. Determinations of Eligibility: USACE shall make determinations of National Register eligibility based on identification and evaluation efforts, and consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other Consulting Parties regarding these determinations. Should the SHPO of jurisdiction, or appropriate Federally-recognized Tribe(s) disagree with the determination of eligibility, USACE shall:
  - a. Consult further with the objecting party to resolve the objection;
  - b. Treat the property as eligible for the National Register; or
  - c. Obtain a determination of eligibility from the Keeper of the National Register in accordance with 36 CFR § 63.2(d)-(e) and 36 CFR § 800.4 (c) 2.
- 5. Findings of No Historic Properties Affected:
  - a. Basis for Finding. USACE shall make a finding of "no historic properties affected" under the following circumstances:
    - i. If no historic properties are present in the APE; or
    - ii. The Undertaking shall avoid alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register (including cumulative effects); or
  - b. USACE shall notify the SHPO of jurisdiction, appropriate Federally-recognized Tribes(s), and any other consulting parties of this finding and provide supporting documentation in accordance with 36 CFR § 800.11(d). Unless consulting parties object to the finding, or request additional information, within 30-days, the Section 106 review of the Undertaking will have concluded.

- c. If the SHPO of jurisdiction and/or appropriate Federally-recognized Tribes(s), objects to a finding of “no historic properties affected,” USACE shall consult with the objecting party to resolve the disagreement.
  - i. If the objection is resolved, USACE either may proceed with the Undertaking in accordance with the resolution or reconsider effects on the historic property by applying the criteria of adverse effect pursuant to Stipulation VII.C.6., Application of the Criteria of Adverse Effect, below.
  - ii. If USACE is unable to resolve the disagreement, it will forward the finding and supporting documentation to ACHP and request that ACHP review USACE’s finding in accordance with the process described in 36 CFR § 800.4(d)(1)(iv)(A) through 36 CFR § 800.4(d)(1)(iv)(C).). USACE shall, pursuant to 800.4(d)(1)(iv)(C), prepare a summary of its decision that contains the rationale for the decision and evidence of consideration of the ACHP’s opinion, and provide this to the SHPO of jurisdiction, appropriate Federally-recognized Tribes(s), and all other consulting parties. If USACE’s final determination is to reaffirm its “no historic properties affected” finding, the Section 106 review of the Undertaking will have concluded. If USACE will revise its finding, then it shall proceed in accordance with Stipulation VII.C.5., 6, below.
- 6. Assessing Adverse Effects: If, through consultation, USACE finds an Undertaking may affect historic properties in the APE, including those of religious or cultural significance to affected Federally-recognized Tribe(s), USACE shall apply the criteria of adverse effect to historic properties within the APE(s), including cumulative effects, taking into account the views of the consulting parties and the public concerning effects in accordance with 36 CFR § 800.5(a).
  - a. *Findings of No Adverse Effect:* If, through consultation, USACE determines that an Undertaking does not meet the adverse effect criteria, pursuant to 36 C.F.R. § 800.5(a)(1), USACE shall propose a finding of “no adverse effect” and consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribes(s) and Consulting Parties in accordance with 36 CFR § 800.5(b) and following steps i-iii below, or will move to subparagraph b.
    - i. USACE shall notify all consulting parties of its finding; describe any project specific conditions and/or modifications required to avoid or minimize effects to historic properties; and provide supporting documentation pursuant to 36 CFR §800.11(e).
    - ii. Unless a consulting party objects within thirty (30)-days, USACE will proceed with its “no adverse effect” determination and conclude the Section 106 review.
    - iii. If a consulting party objects to a finding of “no adverse effect,” USACE will consult with the objecting party to resolve the disagreement.
      - a) If the objection is resolved, USACE shall proceed with the Undertaking in accordance with the resolution; or

- b) If the objection cannot be resolved, USACE shall request that ACHP review the findings in accordance with 36 CFR § 800.5(c)(3)(i)-(ii) and submit the required supporting documentation. USACE shall, pursuant 800.5(c)(3)(ii)(B), prepare a summary of its decision that contains the rationale for the decision and evidence of consideration of the ACHP's opinion, and provide this to the SHPO of jurisdiction, appropriate Federally-recognized Tribes and all other consulting parties. If USACE's final determination is to reaffirm its "no adverse effect" finding, the Section 106 review of the Undertaking will have concluded. If USACE will revise its finding then it shall proceed to Stipulation VI 6. b., below.
- b. *Avoidance and Minimization of Adverse Effects:* If USACE, during its initial review, finds the Undertaking may adversely affect historic properties, USACE may make a further internal review to consider ways to avoid or minimize effects to historic properties. The review will consider revising the elements of the scope of work affecting historic properties to substantially conform to the SOI Preservation Standards or otherwise avoid or minimize adverse effects.
  - i. If USACE modifies the scope of work following its initial internal review to avoid or minimize effects below the "criteria of adverse effect" (36 CFR 800.5 (a)(1), (i.e., to the point USACE can make a finding of No Adverse Effect), USACE shall consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and all other consulting parties providing the *original and modified* Scopes of Work as part of its finding of "no adverse effect" following the process in Stipulation VII.C.6.a.
  - ii. If USACE is unable to modify the Undertaking to avoid or minimize effects below the "criteria of adverse effect", USACE shall initiate consultation to resolve the adverse effect(s) in accordance with Stipulation VII.C.7, Resolution of Adverse Effects.

7. Resolution of Adverse Effects: If USACE determines that an Undertaking may adversely affect a historic property, it shall resolve the effects of the Undertaking in consultation with the SHPO of jurisdiction, the appropriate Federally-recognized Tribe(s), ACHP, if participating, and other consulting parties, by one of the methods, described in VII.C.7.(a-c). USACE may use the Abbreviated Resolution Process (ABR) to resolve adverse effect and propose it to parties, and if the parties agree, will use the ABR. If the parties do not agree, then USACE will move to the standard MOA resolution process. When, through consultation, USACE determines an Undertaking will adversely affect an NHL, USACE shall notify and invite the Secretary of the Interior and ACHP, as well as notifying Regional National Park Service staff to participate in consultation in accordance with 36 CFR § 800.10.

- a. *Abbreviated Resolution Process:* USACE may propose in writing to the consulting parties to resolve the adverse effects of the Undertaking through the application of one or more Treatment Measures outlined in Appendix E (Historic Property Treatment Plan). USACE shall ensure that the provisions of the Historic Property Treatment Plan, as outlined in the consultation and agreed to by consulting parties, are documented in writing and implemented. The use of these Treatment Measures in a Historic Property Treatment Plan shall not require the

execution of an individual Memorandum of Agreement or Secondary Programmatic Agreement.

- i. In consultation with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, USACE shall propose in writing the implementation of a specific Historic Property Treatment Measure, or combination of Treatment Measures, with the intent of expediting the resolution of adverse effects, and provide documentation as required by 36 CFR § 800.11(e) and subject to the confidentiality provisions of 36 CFR § 800.11(c)). The correspondence will include a Historic Properties Treatment Plan that outlines roles and responsibilities for accomplishment of the selected treatment measures, specify the deliverables, and define the timeline.
  - ii. The ACHP at its discretion may participate in the development of Historic Property Treatment Plans, under the Abbreviated Resolution Process, only when requested by USACE, the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), or other consulting parties, or when the ACHP determines that its participation is warranted.
  - iii. Unless a consulting party or the ACHP objects to USACE's proposed Historic Property Treatment Plan within the timeframe outlined in Stipulation V. B Timeframes, USACE shall proceed with the implementation of the Historic Property Treatment Plan and will conclude the Section 106 review.
  - iv. If any of the consulting parties or ACHP objects within the timeframe outlined in Stipulation V.B. Timeframes, to the resolution of adverse effects through the application of the Abbreviated Consultation Process, USACE shall resolve the adverse effect(s) using procedures outlined below in Stipulation VII.C.7 (b), MOA or Stipulation VII.C.7 (c), Programmatic Agreement. USACE shall invite any individual or organization that will assume a specific role or responsibility outlined in a Memorandum of Agreement or Secondary Programmatic Agreement to participate as an invited signatory to the undertaking-specific agreement.
  - v. Because funding and implementation details of a Historic Property Treatment Plan for specific Undertakings may vary by State and Non-Federal Sponsor, USACE shall provide written notice to the Consulting Parties within sixty (60) days of the completion of the Historic Property Treatment Measure(s). This written notice will serve as confirmation that the Historic Property Treatment Measure(s) for a specific Undertaking have been implemented. USACE also shall include information pertaining to the progress and completion of Historic Property Treatment Plans in the annual report pursuant to Stipulation III A. 16. USACE Roles and Responsibilities.
- b. *Memorandum of Agreement (MOA)*: USACE shall provide ACHP with an adverse effect notice in accordance with 36 CFR § 800.6(a)(1) if it has not already provided such under the Abbreviated Consultation Process of this Agreement, if a consulting party or ACHP objects in accordance with Stipulation II.C.6(a)(iii), or if USACE in consultation with SHPO/THPO, Tribe(s), and other consulting parties has determined that an MOA would be more appropriate than

the Abbreviated Consultation Process to resolve the adverse effect(s). In consultation with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, including ACHP (if participating), USACE shall develop an MOA, in accordance with 36 CFR § 800.6(c) to agree upon Treatment Measures to avoid, minimize, and/or mitigate adverse effects on historic properties. The MOA may also include Treatment Measures that serve an equal or greater public benefit in promoting the preservation of historic properties in lieu of the Treatment Measures outlined in Appendix E.

- c. *Programmatic Agreement (Secondary PA)*: Should the execution of an MOA be inappropriate given the similar nature of effects on historic properties, the inability to determine effects prior to approval of an Undertaking, or where other circumstances warrant, USACE, shall consult with SHPO/THPO, Tribe(s), ACHP, if participating, and any other consulting parties to develop a Programmatic Agreement in accordance with 36 CFR § 800.14(b) and to identify programmatic conditions or Treatment Measures to govern the resolution of potential or anticipated adverse effects from certain complex project situations for an Undertaking or for multiple, but similar Undertakings by a single agent or contractor.
8. Objections: Should any signatory or consulting party object within the timeframes established by this Agreement to any plans, specifications, or actions taken pursuant to resolving an adverse effect, USACE shall consult further with the objecting party to seek resolution. If USACE determines the objection cannot be resolved, USACE shall address the objection in accordance with Stipulation XI, Dispute Resolution.
9. Reports:
- a. USACE shall ensure that all reports and other documents resulting from the actions pursuant to this Agreement will be provided in a format acceptable to the SHPO of jurisdiction and appropriate Federally-recognized Tribes. USACE will ensure that all such reports (e.g., identification surveys, evaluation reports, treatment plans, and data recovery reports) meet or exceed the Department of the Interior's *Format Standards for Final Reports of Data Recovery* (42 FR 5377-79) and the *Field and Report Standards* identified in Stipulation II.A.1(d).
  - b. USACE shall provide all documentation for these efforts to the SHPO of jurisdiction, appropriate Federally-recognized Tribes, or other Consulting Parties, as appropriate, consistent with the confidentiality provisions of Stipulation IV. of this Agreement.
  - c. Once supporting documentation is received, SHPO and Tribes will have thirty (30)-days to review supporting documentation (e.g., site forms and reports). If the SHPO of jurisdiction or appropriate Federally-recognized Tribes intend to review and comment on documentation, and are unable to do so within the thirty (30)-day review period, a request for additional review time must be made in writing to USACE and specify the anticipated completion date. USACE will consider the request and work with the requesting party to come to a mutually agreeable timeframe. USACE will notify other Consulting Parties of any mutually approved extension by e-mail.

## VIII. CURATION

Recovered archaeological collections from a USACE-required archaeological survey, evaluation, and/or mitigation remain the property of the land owner (either private, State, Federal, etc.). USACE, in coordination with the SHPO of jurisdiction and appropriate Federally-recognized Tribe(s) may, as determined through consultation, encourage private land owners to transfer any recovered artifacts and related documentation to an appropriate archive or public or Federally-recognized Tribal entity. USACE, in coordination with SHPO and Federally-recognized Tribe(s), shall work with all Tribal, State, and local agents to support steps that ensure the long-term curation of these artifacts and documents through the transfer of the materials to a suitable repository as agreed to by USACE, the SHPO of jurisdiction, and appropriate Federally-recognized Tribes(s) and following applicable State or Tribal guidelines. USACE shall ensure that collections from federal or tribal land, including field and laboratory records sufficient to document the collection, are curated at a repository meeting federal standards (36 C.F.R. 79) as agreed to by USACE, SHPO, and affected Federally-recognized Tribe(s), and follow that repository's guidelines.

## **IX. TREATMENT OF HUMAN REMAINS AND ITEMS OF RELIGIOUS AND CULTURAL IMPORTANCE**

A. **Documenting Human Remains:** The recordation of human remains in a burial context or as individual elements is a task that requires sensitivity and good judgment, as defined through consultation. Consultation is a necessary part of documenting any human remains (in a discovery situation or during the treatment of historic properties) following the provisions of this stipulation. In planning how to document human remains (photography, drawing for the purposes of illustration, videography, or other), the determination will be made in consultation and concurrence with the SHPO of Jurisdiction, Federally-recognized Tribe(s), and, as appropriate, other descendant communities. Even if it is determined to photo document the human remains, the photographs should not be published or made publicly available in any way. The USACE will maintain records for the purpose of management of the human remains, with the intent of satisfying the protection provisions of the federal and state laws governing human remains, the records will be hardcopy and digital. When the records are digital, they will not be connected to externally available electronic resources like GIS servers or other and marked as restricted (per NHPA, FOIA, and, as appropriate, ARPA). As part of the consultation for each Work Item where Human Remains are present, the USACE will ensure that the consultation happens as appropriate to each jurisdiction to determine the course of action for each situation.

### **B. General Human Remains Discovery Process:**

1. In the event that previously unreported or unanticipated human remains, burials, funerary objects, Native American sacred objects, or Native American objects of cultural patrimony are encountered during field investigations, laboratory work, or during construction or maintenance activities originating from Federal, state, or private lands (Federal and Non-Federal Lands) USACE shall notify the relevant historic preservation interests (SHPO's of Jurisdiction, and interested Federally-recognized Tribal representatives) within 24-hrs of the discovery. Concurrently, USACE will implement the provisions 2 thru 6 below:
2. Any USACE employee or contractor(s) who knows or has reason to know that they have inadvertently discovered human remains, burials, funerary objects, Native American sacred objects, or Native American objects of cultural patrimony must provide immediate telephone notification of the inadvertent discovery to the responsible Federal construction official, with written confirmation, to the appropriate USACE District's Point of Contact in



this agreement. The written notification should contain the results, if any, of the field evaluation. The appropriate USACE District's Cultural Resources Staff and Tribal Liaison will begin to develop a plan of action to inform the appropriate District Commander of the consultation tasks necessary to address the discovery. No Photographs should be taken at this time of the human remains.

3. All fieldwork, construction or maintenance activities, must stop immediately within a one hundred (100) meter (328 ft.) radius buffer zone around the point of discovery; unless there is reason to believe that the area of the discovery may extend beyond the one hundred (100) meter (328 ft.) radius buffer zone in which case the buffer zone will be expanded appropriately, within the APE. USACE will implement measures to protect the discovery from theft and vandalism. Any human remains or other items in the immediate vicinity of the discovery must not be removed or otherwise disturbed. USACE will take immediate steps, if necessary, to further secure and protect inadvertently discovered human remains, burials, funerary objects, Native American sacred objects, or Native American objects of cultural patrimony, as appropriate, including stabilization, or covering the find location.
4. USACE will notify local law enforcement, coroner, or Medical Examiner, as appropriate, and the SHPO of jurisdiction, per the POC in Appendix B, by telephone to assess the nature and age of the human skeletal remains within twenty-four (24) hours of the discovery of unmarked human remains and accompany local law enforcement personnel during all field investigations. USACE will also notify interested Federally-recognized Tribes of the discovery within the same period. If the appropriate local law enforcement official determines that the remains are not involved in a criminal investigation, USACE will follow jurisdictional guidelines as provided for based on land ownership (per Stipulation IX. B.).
  - a. In cases where human remains, burials, funerary objects, Native American sacred objects, or Native American objects of cultural patrimony are discovered during the implementation of a USACE-funded undertaking on Federal Land, USACE will notify by telephone and e-mail, the SHPO of jurisdiction, Tribes, and other affected parties (e.g., living descendants) that may that might attach religious and cultural significance to the discovery at the earliest possible time, but no later than forty-eight (48) hours and inform them of the steps already taken to address the discovery.
  - b. In cases where the human remains are discovered on Non-Federal Lands and are determined to be Native American, the individual state's Designated Authority will notify and coordinate with Tribes as required by the appropriate state law, but not later than forty-eight (48)-hours from the time of their notification. As requested and to the extent of its legal authority, USACE will assist the Designated Authority, to consult with Tribes and affected parties, as appropriate.
  - c. In cases where the human remains are discovered on Non-Federal Lands and determined to be other than Native American, the individual state's Designated Authority will notify and coordinate in accordance with the appropriate state law. As requested and to the extent of its legal authority, USACE will assist the Designated Authority to consult with the affected parties, as appropriate.
5. USACE will consult with SHPO, THPOs, and appropriate Federally-recognized Tribes, and other affected parties to develop a mutually agreeable action plan with timeframes to

take into account the effects of the Undertaking on the discovery; resolve adverse effects if necessary; and ensure compliance with applicable federal laws and their implementing regulations, if the discovery of Native American human remains, funerary objects, Native American sacred objects, or Native American objects of cultural patrimony occurs on Federal Land (see Stipulation IX B. for the detailed process).

6. Following the outcome of any consultation (Federal Lands or Non-Federal Lands) to address the discovery of human remains, USACE will coordinate with any contractor(s) regarding any required scope of project modification necessary to implement recommendations from the consultation and facilitate proceeding with the Undertaking.

C. **Specific Authorities and Processes for Addressing Human Remains:** If human remains, funerary objects, Native American sacred objects, or Native American objects of cultural patrimony are encountered during project field investigations or laboratory work or during construction activities, the USACE will comply with the provisions based on the nature of the land ownership at the time remains or objects are encountered, in accordance with Engineering Regulation 1102-2-100 (Policy & Guidance), Appendix C-4.

1. Federal Lands: If discovered/recovered from *Federal lands*, USACE shall concurrently implement processes defined in this Agreement, satisfying NHPA, as well as

- ensuring consultation with appropriate Federally-recognized Tribes for any human remains, funerary objects, Native American sacred objects, or Native American objects of cultural patrimony (objects) as required by the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), as amended (25 U.S.C. §§ 3001-3014) and its implementing regulations (43 C.F.R. Part 10; and
  - ensuring the appropriate provisions of the Archaeological Resources Protection Act, 16 USC §§ 470aa et seq., are followed.
- a. For discoveries of human remains, burials, funerary objects, Native American sacred objects, or Native American objects of cultural patrimony, USACE will continue to consult with the SHPO of jurisdiction, claimant Federally-recognized Tribes, and other affected parties, as appropriate, whether they are Signatories to this Agreement or not, regarding additional measures to avoid and protect or mitigate the adverse effect of the Undertaking. These measures may include:
    - i. Visits to the site by the SHPO of jurisdiction, claimant Federally-recognized Tribes, and other affected parties, as appropriate;
    - ii. Formally evaluate the archaeological site for NRHP-eligibility;
    - iii. Explore potential avoidance alternatives;
    - iv. Develop and implement a mitigation plan in consultation and concurrence with the SHPO of jurisdiction, claimant Federally-recognized Tribes, and other affected parties, as appropriate, including procedures for disinterment and re-interment.
  - b. Initial Determination of nature of discovered Human Remains when from Federal Lands (Native American or Other)
    - i. USACE, in consultation with the SHPO of jurisdiction and claimant Federally-recognized Tribes, whether they are Signatories to this Agreement or not,

and other affected parties, may consult with a qualified physical anthropologist, forensic scientist, or other experts as may be needed to examine and assess the discovery. Unless the remains were inadvertently removed, the evaluation will be conducted at the site of discovery. Other than for crime scene investigation, no excavation, examination, photographs, or analysis of Native American human remains or remains suspected of being Native American will be conducted or allowed by USACE archaeologists or any other professional without first consulting with the claimant Federally-recognized Tribes, whether they are Signatories to this Agreement or not. The consulting expert will be allowed to draw and measure the exposed remains and associated funerary objects. Drawings cannot be published in any form or shown as part of scholarly presentations without the written permission of the appropriate Tribes or next living descendant.

- ii. USACE, in consultation with the SHPO of jurisdiction, claimant Federally-Recognized Tribes, and other affected parties, as appropriate, whether they are Signatories to this Agreement or not, will have seven (7)-days to determine if the skeletal remains are human, the degree to which they were disturbed, and if possible, using reasonable measures to assess their potential age, cultural affiliation, and identity, without any further disturbance. Upon making a determination or at the end of the seven (7)-days, whichever comes first, USACE will notify the appropriate affected parties of its findings. This notification will include pertinent information as to kinds of human remains, funerary objects, Native American sacred objects, or Native American items of cultural patrimony discovered, their condition, and the circumstances of their inadvertent discovery.
  - iii. If the remains are determined NOT to be Native American in origin, USACE will follow the principals outlined in the 2007 ACHP "Policy Statement Regarding Treatment Of Burial Sites, Human Remains and Funerary Objects" to respectfully treat the remains and determine proper disposition, disinterment, re-interment, and memorialization, as well as any Real Estate guidance at the time of the discovery.
- c. Initiating NAGPRA Consultation following Inadvertent Discoveries/Recovery of Human Remains from Federal Lands
- i. For the purposes of notification and consultation of an inadvertent discovery, USACE considers the Consulting Tribes, and Federally-recognized Tribes who have identified the County/Parish as an area of interest are likely to be cultural affiliated with inadvertently discovered NAGPRA items found on a specific Work Item.
  - ii. Upon certification of an inadvertent discovery of NAGPRA items by the responsible Federal official, the USACE shall notify the consulting Federally-recognized Tribes. This notification will be made via email and telephone call to the appropriate consulting Tribes' Primary POC within twenty-four (24) hours, and include concurrent hard copy written notification, via regular mail. Notifications shall include a copy of the field documentation and a list of all other parties being notified.

- iii. No later than three (3) days after the email and telephone notification, the consulting Federally-recognized Tribes and/or claimant Federally-recognized Tribe shall agree to a date and time for a teleconference to begin the consultation process.
- d. Consultation for Inadvertent Discoveries//Recovery of Human Remains from Federal Lands that are Native American
  - i. Consultation will begin with the teleconference with all consulting Federally-recognized Tribes and/or claimant Federally-recognized Tribe. At this time both parties may determine that the cause of the inadvertent discovery is not on-going, that the location where the discovery occurred is secure (or can be secured), and that the NAGPRA items do not need to be removed.
  - ii. If all consulting parties participating in the consultation reach the same conclusion under A above, then the USACE will issue a written notice to all parties concluding that the location of the inadvertent discovery is secure and that the NAGPRA items will be left in place. If any consulting parties disagree with this assessment, then consultation will progress with all consulting parties including the signatories to this Agreement.
  - iii. If consensus is not attained, the USACE will notify, in writing, all consulting Federally-recognized Tribes of its intent to complete consultation with a written plan of action in accordance with 43 CFR § 10.5(e). The USACE will produce a NAGPRA plan of action which details the steps it will follow to complete the NAGPRA consultation process (43 CFR § 10.5(e)). This plan will contain a) a list of all materials considered to be NAGPRA items, b) the planned treatment, care, and handling of the materials, c) any planned recording of the find location as an archaeological site, d) any analysis planned for the remains, e) and a description of any anticipated summary reports. USACE and the consulting Federally-recognized Tribes will create a template plan of action to be on file.
  - iv. Within thirty (30) days of receipt of notice to consult and the action plan, the consulting Federally-recognized Tribes agree to provide a summary response containing the names and contact info for any potential lineal descendants, recommendations on any topics that should be included in consultation, request for any additional consultation meetings, recommendations for any treatment actions for the location of the discovery, and a list of any items that should be considered as NAGPRA items. Submission of this report does not preclude on-going discussion on any of these topics as consultation progresses.
  - v. Based on the responses received, USACE may choose to update and resubmit the plan of action to all consulting parties, but at a minimum will notify all consulting parties in writing of its intent to implement the plan of action previously presented to the consulting parties.
  - vi. At the conclusion of implementation of the plan of action, USACE will provide all of the consulting parties, in writing, copies of the draft Notice of Intended Disposition, and will provide the consulting parties thirty (30) days to comment.

- e. Process to Determine Disposition of Native American Human Remains from Federal Lands
  - i. Once the thirty (30) days has commenced after providing the consulting parties with the draft copy of the Notice of Intended Disposition, and considering all comments, USACE will publish the Notice of Intended Disposition in a newspaper of general circulation in the local area, and also in a newspaper of general circulation in the local area for the Tribes. Both notices will be published a second time, at least one week later.
  - ii. Copies of the Notice of Intended Disposition, as well as a description of when and where it was published, will be provided to the National Parks Service, National NAGPRA program.
  - iii. USACE anticipates that during the notice period described above, discussions will begin with the appropriate claimant Federally-recognized Tribe/s regarding disposition. Disposition will generally take the form of a physical transfer of custody and reburial on USACE lands, or the claimant Federally-recognized Tribe/s may choose to rebury privately once the Tribe assumes control over the NAGPRA items.
- 2. Non-Federal Lands: If human remains are recovered *from NFS, State, or other private land*, USACE will require that the laws of the state of jurisdiction are followed, as outlined by each state's statute. As requested and to the extent of its legal authority, USACE will support the state lead (Designated Authority) in following the State's processes related to discovery, disposition, disinterment, re-interment, and memorialization.
  - a. Arkansas: Arkansas Burial Law.
    - i. Arkansas Act 753 of 1991, as amended – "An act to prohibit the desecration of human skeletal burial remains in unregistered cemeteries; to prohibit trade of commercial display of human skeletal remains or associated burial furniture; and for other purposes."
    - i. Arkansas Act 1533 of 1999 – "An act to increase the penalties for displaying human skeletal remains and desecrating burial grounds."
    - ii. Arkansas Act 705 of 2011 – "An act to amend Arkansas law concerning burial furniture associated with human skeletal burial remains."
    - iii. In the event of an inadvertent discovery of a human burial on non-federal lands, we recommend securing the area-to include a cessation of work at the site, establishing an appropriate buffer, providing protection as necessary, and notifying the following: local law enforcement, the federal agency Point of Contact, the State Archeologist, and the Director and/or Section 106 Manager of the Arkansas Historic Preservation Program. Personnel should refrain from taking photographs except as necessary and directed by authorized authorities. All burials and associated furniture should be treated with respect and dignity. In the event the burial is determined to be archeological in nature, the Arkansas Historic Preservation Program staff will work with the

federal agency, State Archeologist, and other parties, consult and enact appropriate measures in accordance with existing Arkansas law.

- iv. Excavation of an unregistered burial by qualified personnel will require completion of a Burial Permit-Application for Excavation Authorization and compliance with Sections 7 through 9 of Act 753.
- b. Illinois: Illinois Human Skeletal Remains Protection Act (20 ILCS 3440)
- i. <http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=376&ChapAct=20%26nbsp%3bILCS%26nbsp%3b3440/&ChapterID=5&ChapterName=EXECUTIVE+BRANCH&ActName=Human+Skeletal+Remains+Protection+Act>
  - ii. Implementation Rules are here:  
<http://www.ilga.gov/commission/jcar/admincode/017/01704170sections.html>
  - iii. The notification protocols are outlined in Section 4170.200. Since these rules were written, oversight of this law is no longer a responsibility of the SHPO office. Notification and oversight is carried out by Illinois DNR's Office of Realty and Environmental Planning, Dawn Cobb, archeologist at (217) 785-4992. She is the person to notify, per Section 4170.200(b), despite the definitions in Section 4170.110.
  - iv. Per 20 ILCS 3440/16, Section 106 projects are exempted from the permitting process outlined in the regulation and rules but the notification process outlined is to be followed.
- c. Kentucky: Kentucky statutes related to the discovery and proper treatment of human remains are spread across several different revised statutes. The statutes also treat public land and private land differently regarding the discovery of and potential removal of human remains.
- i. Notification of Legal Authorities When Human Remains are Discovered (KRS 72.020), This process must be followed upon discovery;
  - ii. Desecration of Venerated Objects (KRS 525.105), Violation of Graves (KRS 525.115) and Abuse of a Corpse (KRS 525.120). These define both the nature of violations and penalties;
  - iii. Kentucky Antiquities Act (KRS 164.705-KRS 164.735; KRS 164.990) governs the Removal of "Burial Grounds" from "lands of the Commonwealth," meaning public lands. While KRS Chapter 381 governs the processes for having a cemetery declared abandoned and removed from private lands;
  - iv. The language of each statute can be found here: Kentucky Revised Statute Search--<https://apps.legislature.ky.gov/lrcsearch#tabs-3>.
  - v. For unanticipated discoveries on private, county, or state land in Kentucky, the Kentucky Heritage Council (KHC) (i.e. SHPO) is the lead authority and will consult with USACE, Tribe(s), landowner, and descendants as appropriate to determine the necessary course of action. If human remains

are found on city, county, or state lands, the KHC will notify the State Archaeologist.

- d. Louisiana: Louisiana Statutes related to the discovery of human remains are found in the Unmarked Human Burial Sites Preservation Act (R,S, 8:671-681).
  - i. <https://www.crt.state.la.us/cultural-development/archaeology/CRM/cemeteries-burials/index>
  - ii. For unanticipated discoveries on private, parish, or state land in Louisiana, the Louisiana Unmarked Human Burial Sites Preservation Act (R,S, 8:671-681) applies. The Louisiana Division of Archaeology is the lead agency and will consult with USACE, Tribe(s), landowner, and descendants as appropriate to determine the necessary course of action.
- e. Mississippi: Mississippi statutes related to the discovery of human remains are collected below.
  - i. Burial Excavation Permits (Native American only). Miss. Code §§ 25-59-1, 39-7-19 (1972, as amended);
  - ii. Abandoned Cemeteries, House Bill 780. <https://www.mdah.ms.gov/historic-preservation/archaeology/permits>
  - iii. For unanticipated discoveries on private, county, or state land in Mississippi, which are Native American, The Chief Archaeologist is the lead authority and will consult with USACE, Tribe(s), landowner, and descendants as appropriate to determine the necessary course of action.
- f. Missouri: Missouri Unmarked Human Burial Sites.
  - i. <http://revisor.mo.gov/main/OneChapter.aspx?chapter=194>
  - ii. The process for notice and proper treatment of unmarked human burial sites is contained in Missouri State Law under section 194.
  - iii. For unanticipated discoveries on private, county, or state land in Missouri, the MO SHPO has jurisdiction and will consult with USACE, Tribe(s), landowner, and descendants as appropriate to determine the necessary course of action.
- g. Tennessee: Tennessee statutes related to the discovery and treatment of human remains are collected below.
  - i. <https://www.tn.gov/environment/program-areas/arch-archaeology/services-and-resources/human-remains-and-burials.html>
  - ii. Discovery of sites, artifacts or human remains Notice to division, contractors and authorities: TCA 11-6-107d;

- iii. Desecration of Venerated Objects and Proper Treatment of Corpses: TCA 39-17-(311-312);
- iv. For unanticipated discoveries on private, county, or state land in Tennessee, the TN SHPO is the lead authority and will consult with USACE, Tribe(s), landowner, and descendants as appropriate to determine the necessary course of action.
- h. Regardless of state, if the human remains recovered are determined to be Native American, USACE, in conjunction with the NFS, will identify and secure a mutually agreeable reburial location in which to reinter the human remains removed from the project area. Other arrangements may be defined at the time it is determined that Native American human remains have been recovered, but will include at a minimum:
  - i. In person consultation regarding the human remains and any objects;
  - ii. The identification of a reburial location as close to the disinterment location as feasible;
  - iii. A commitment on the part of USACE to facilitate the reburial by an affiliated Tribe and to protect the human remains and associated grave goods, at no cost to the Federally-recognized Tribes, or the SHPO of jurisdiction.
  - iv. Acknowledgment of the establishment of the cemetery in the administrative record and in the real estate records as determined best at time of reburial.
- i. If the remains are determined NOT to be Native American in origin, USACE will follow the principals outlined in the 2007 ACHP "Policy Statement Regarding Treatment Of Burial Sites, Human Remains and Funerary Objects" to respectfully treat the remains and determine proper disposition, disinterment, re-interment, and memorialization, as well as any USACE real estate guidance at the time of the discovery.

## **X. Provisions for Post-Review Discoveries (Non-Human Remains)**

- A. USACE is responsible for complying with 36 C.F.R. § 800.13(a) in the event of inadvertent discoveries of Historic Properties during implementation of the Project. Discoveries of previously unidentified Historic Properties or unanticipated adverse effects to known Historic Properties are not anticipated, however if there is an inadvertent discovery or unanticipated effect, USACE will ensure that the following stipulations are met. These provisions will be included in all construction, operations, and maintenance plans and project managers will brief field personnel.
- B. If previously unreported properties that may be eligible for nomination to the NR or that may be of significance to Federally-recognized Tribes, and/or, if unanticipated effects on historic properties are found during the construction phase, USACE will implement the provisions outlined below that are intended to ensure that the Undertaking is in compliance with all applicable federal and state laws and regulations, including Section 106 of the NHPA:



- C. If there is no reasonable expectation that the property contains human remains, funerary objects, Native American sacred objects, or Native American objects of cultural patrimony, all work within a fifty (50) meter (164 ft.) radius buffer zone must stop immediately. If Human Remains are located or suspected, provision of Stipulation XII will be followed. USACE will notify SHPO and Federally-recognized Tribes, as appropriate, as well as any other affected party, of the discovery, and implement interim measures to protect the discovery from theft and vandalism. Construction may continue outside the fifty (50) meter (164 ft.) radius buffer zone. Within seventy-two (72) hours of receipt of notification of the discovery, USACE, as appropriate, will:
1. Inspect the work site to determine the extent of the discovery and ensure that work activities have halted within the fifty (50) meter (164 ft) radius buffer zone;
  2. Clearly mark the area of the discovery;
  3. Implement additional measures, as appropriate, to protect the discovery from theft and vandalism; and
  4. Provide an initial assessment of the site's condition and eligibility to the SHPO of jurisdiction and appropriate Federally-recognized Tribes; and
  5. Notify other Consulting Parties, if applicable, of the discovery.
- D. If USACE, in consultation with the SHPO of jurisdiction, Consulting Tribes, and other Consulting Parties, as appropriate, determines the site is either isolated, does not retain integrity sufficient for listing on the NRHP, or will not be further disturbed by construction activities, construction may resume within the fifty (50) meter (164 ft) radius buffer zone.
- E. If USACE determines that the cultural resource site or artifact either is, or may be, eligible for inclusion on the NRHP, USACE will consult with the SHPO, Consulting Tribes, and other Consulting Parties, as appropriate, regarding appropriate measures for site treatment pursuant to 36 C.F.R. § 800.6(a). SHPO and Tribes will have seven (7)-days to provide their objections or concurrence on the proposed actions. These measures may include:
1. Formal archaeological evaluation of the site;
  2. Visits to the site by SHPO and/or Consulting Tribes;
  3. Exploration of potential alternatives to avoid the site;
  4. Preparation and implementation of a mitigation plan by USACE in consultation and concurrence with the SHPO, Consulting Tribes, and other Consulting Parties, as appropriate.
- F. The notified Consulting Parties will have seven (7)-days following notification to provide comment regarding USACE's determination of the NRHP eligibility of the discovery.
- G. A report of findings describing the background history leading to and immediately following the reporting and resolution of an inadvertent discovery will be prepared by USACE within thirty (30)-days of the resolution of each inadvertent discovery.
- H. USACE will communicate the procedures to be observed with its contractors and personnel.

- I. USACE will provide Notice to Proceed to the contractor to work in the area. Notices to Proceed may be issued by USACE for individual construction segments, defined by USACE in its construction specifications, after the identification and evaluation of historic properties has been completed.

## **XI. DISPUTE RESOLUTION**

- A. Should any Signatory or Invited Signatory to this Agreement object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, the USACE shall consult with such party to resolve the objection. If USACE determines that such objection cannot be resolved, the USACE will forward all documentation relevant to the dispute, including the USACE's proposed resolution, to the ACHP. The ACHP shall provide USACE with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the USACE shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, Signatories, and Invited Signatories, and provide them with a copy of this written response. The USACE will then proceed according to its final decision.
- B. If the ACHP does not provide its advice regarding the dispute within the thirty (30)- day time period, the USACE may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, USACE shall prepare a written response that takes into account any timely comments regarding the dispute from the Signatories and Invited Signatories to the Agreement, and provide them and the ACHP with a copy of such written response.
- C. The USACE's responsibility to carry out all other actions subject to the terms of this Agreement that are not the subject of the dispute remain unchanged.

## **XII. SEVERABILITY AND TERMINATION**

- A. In the event any provision of this Agreement is deemed by a Federal court to be contrary to, or in violation of, any applicable existing law or regulation of the United States of America, only the conflicting provision(s) shall be deemed null and void, and the remaining provisions of the Agreement shall remain in effect.
- B. Signatories and Invited Signatories, who execute this Agreement, may terminate this Agreement by providing thirty (30) days written notice to the other Signatories, provided that the Signatories consult during this period to seek amendments or other actions that would prevent termination. If this Agreement is terminated, USACE shall comply with Section 106 through other applicable means pursuant to 36 CFR Part 800. Upon such determination, USACE shall provide all other Signatories and ACHP with written notice of the termination of this Agreement.
- C. A Consulting Tribe may notify the other Signatories that it is fully withdrawing from participation in the Agreement. Following such a withdrawal, USACE shall review Undertakings that may affect historic properties of religious and cultural significance to the Consulting Tribe, and Undertakings that occur on the Tribal lands of the relevant Consulting Tribe, in accordance with 36 CFR §§ 800.3 through 800.7, 36 CFR § 800.8(c), or an applicable alternative under 36 CFR § 800.14. Withdrawal from this Agreement by a

Consulting Tribe does not terminate the Agreement. At any time that this Agreement remains in effect, a Consulting Tribe that has withdrawn from the Agreement may notify USACE and SHPO in writing that it has rescinded its notice withdrawing from participation in the Agreement.

- D. This Agreement may be terminated by the implementation of a subsequent Agreement, pursuant to 36 CFR § 800.14(b), that explicitly terminates or supersedes this Agreement, or by USACE's implementation of Alternate Procedures, pursuant to 36 CFR § 800.14(a).

### **XIII. AMENDMENTS**

A. Body of the Programmatic Agreement:

May be amended when such an amendment is agreed to in writing by all Signatories and Invited Signatories. The amendment will be effective on the date a copy signed by all of the Signatories and Invited Signatories is filed with the ACHP.

B. Appendices:

May be amended at the request of USACE or another Signatory or Invited Signatory in the following manner:

1. USACE, on its own behalf or on behalf of another Signatory or Invited Signatory, shall notify the Signatories of the intent to modify the current Appendix or Appendices and shall provide a draft of the updated Appendix or Appendices to all Signatory parties.
2. If no Signatory or Invited Signatory objects in writing within thirty (30) days of receipt of USACE's proposed modification, USACE shall date and sign the amended Appendix and provide a copy of the amended Appendix to the other Signatories. Such an amendment shall go into effect on the date USACE transmits the amendment to the other Signatories.

3. Current List of Appendices:

- a. Appendix A: Proposed Work Items
- b. Appendix B: Point of Contacts (POC)
- c. Appendix C: (Reserved)
- d. Appendix D: Programmatic Allowances
- e. Appendix E: Treatment Measures

- C. Any Amendments to the Body of the Agreement or the Appendices, shall be posted to the websites currently tracking the implementation of the individual Work Items.

### **XIV. PERIODIC REVIEW AND DURATION**

- A. The Agreement shall expire ten (10) years from the date of the last signature. One (1) year prior to the expiration of the Agreement, the USACE shall review the Agreement in order to determine whether it should be reissued or allowed to expire. If the Agreement requires reissue, the USACE shall consult with the Consulting Parties, as well as amend the

Agreement in order to ensure compliance with the most current version of the Federal regulations implementing the NHPA.

- B. The Signatories and Invited Signatories may collectively agree to extend this Agreement to cover additional calendar years, or portions thereof, through an amendment provided that the original Agreement has not expired.

## **XV. ANTI-DEFICIENCY ACT**

USACE's obligations under this Agreement are subject to the availability of appropriated funds, and the stipulations of this Agreement are subject to the provisions of the Anti-Deficiency Act. USACE shall make reasonable and good faith efforts to secure the necessary funds to implement this Agreement in its entirety. If compliance with the Anti-Deficiency Act alters or impairs USACE's ability to implement the stipulations of this Agreement, USACE shall consult in accordance with the amendment procedures found at Stipulation XIII and termination procedures found at Stipulation XII.

## **XVI. EXECUTION AND IMPLEMENTATION**

- A. Nothing in this Agreement is intended to prevent the USACE from consulting more frequently with the Consulting Parties concerning any questions that may arise or on the progress of any actions falling under or executed by this Agreement.
- B. This Agreement shall be executed in counterparts, with a separate page for each Signatory, and shall become effective on the date the agreement is signed by or filed with the ACHP.
- C. USACE shall ensure that each Signatory and Invited Signatory is provided with an electronic (pdf) and physical copies of the Agreement including signatures. USACE shall provide electronic copies of additional executed signature pages to the Consulting Parties as they are received. USACE shall provide a complete copy of the Agreement with original signatures to any Signatory on request.
- D. Execution of this Agreement and implementation of its terms evidence that USACE has taken into account the effects of this undertaking on historic properties and afforded ACHP a reasonable opportunity to comment on USACE's Proposed Actions at MRL Features.

**SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

**AMONG THE  
U.S. ARMY CORPS OF ENGINEERS (USACE), MEMPHIS, NEW ORLEANS, AND VICKSBURG  
DISTRICTS  
THE CHICKASAW NATION;  
THE CHOCTAW NATION OF OKLAHOMA;  
THE OSAGE NATION;  
THE QUAPAW NATION;  
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THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER;  
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THE MISSOURI STATE HISTORIC PRESERVATION OFFICER;  
THE TENNESSEE STATE HISTORIC PRESERVATION OFFICER;  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING  
THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT:  
MISSISSIPPI RIVER LEVEE FEATURES**

**U.S. Army Corps of Engineers, New Orleans District (CEMVN)**

\_\_\_\_\_  
Stephen F. Murphy  
Colonel, Corps of Engineers  
District Commander

Date: \_\_\_\_\_

**SIGNATORY PAGE**

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REGARDING  
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MISSISSIPPI RIVER LEVEE FEATURES**

**U.S. Army Corps of Engineers, Vicksburg District (CEMVK)**

\_\_\_\_\_  
Robert A. Hilliard  
Colonel, Corps of Engineers  
District Commander

Date: \_\_\_\_\_

**SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

**AMONG THE  
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REGARDING  
THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT:  
MISSISSIPPI RIVER LEVEE FEATURES**

**U.S. Army Corps of Engineers, Memphis District (CEMVM)**

\_\_\_\_\_  
Zachary L. Miller  
Colonel, Corps of Engineers  
District Commander

Date: \_\_\_\_\_

**SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

**AMONG THE  
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REGARDING  
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MISSISSIPPI RIVER LEVEE FEATURES**

**The Arkansas State Historic Preservation Officer**

\_\_\_\_\_  
Secretary Stacy Hurst  
Arkansas State Historic Preservation Officer

Date: \_\_\_\_\_



**SIGNATORY PAGE**

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REGARDING  
THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT:  
MISSISSIPPI RIVER LEVEE FEATURES**

**The Illinois State Historic Preservation Officer**

\_\_\_\_\_  
Robert Appleman  
Illinois Deputy SHPO

Date: \_\_\_\_\_

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**PROGRAMMATIC AGREEMENT**

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REGARDING  
THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT:  
MISSISSIPPI RIVER LEVEE FEATURES**

**The Kentucky State Historic Preservation Officer**

\_\_\_\_\_  
Craig Potts  
Executive Director and State Historic Preservation Officer  
Kentucky Heritage Council

Date: \_\_\_\_\_

**SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

**AMONG THE  
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REGARDING  
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MISSISSIPPI RIVER LEVEE FEATURES**

**The Louisiana State Historic Preservation Officer**

\_\_\_\_\_  
Kristin P. Sanders,  
Louisiana State Historic Preservation Officer

Date: \_\_\_\_\_

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**PROGRAMMATIC AGREEMENT**

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REGARDING  
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MISSISSIPPI RIVER LEVEE FEATURES**

**The Mississippi State Historic Preservation Officer**

\_\_\_\_\_  
Katie Blount  
Mississippi State Historic Preservation Officer

Date: \_\_\_\_\_

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**AMONG THE  
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AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING  
THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT:  
MISSISSIPPI RIVER LEVEE FEATURES**

**The Missouri State Historic Preservation Officer**

\_\_\_\_\_  
Toni M. Prawl, Ph.D.  
Director and Deputy State  
Historic Preservation Officer

Date: \_\_\_\_\_

**SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

**AMONG THE  
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REGARDING  
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MISSISSIPPI RIVER LEVEE FEATURES**

**The Tennessee State Historic Preservation Officer**

\_\_\_\_\_  
Mr. E. Patrick McIntyre, Jr.  
Tennessee SHPO

Date: \_\_\_\_\_

**SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

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MISSISSIPPI RIVER LEVEE FEATURES**

**The Advisory Council on Historic Preservation**

\_\_\_\_\_  
Aimee Jorjani, Chairman  
ACHP

Date: \_\_\_\_\_

**INVITED SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

**AMONG THE  
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REGARDING  
THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT:  
MISSISSIPPI RIVER LEVEE FEATURES**

**Chickasaw Nation**

Nothing in this Agreement shall be construed to waive the sovereign rights of the Chickasaw Nation, its officers, employees, or agents.

\_\_\_\_\_  
Bill Anoatubby, Governor  
Chickasaw Nation

Date: \_\_\_\_\_



**INVITED SIGNATORY PAGE**

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AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING  
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MISSISSIPPI RIVER LEVEE FEATURES**

**The Choctaw Nation of Oklahoma**

**Add sovereignty Clause.**

\_\_\_\_\_  
Gary Batton, Chief  
Choctaw Nation of Oklahoma

Date: \_\_\_\_\_

**INVITED SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

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MISSISSIPPI RIVER LEVEE FEATURES**

**OSAGE NATION**

\_\_\_\_\_  
Geoffrey M. Standing Bear  
Principal Chief

Date: \_\_\_\_\_

**INVITED SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

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MISSISSIPPI RIVER LEVEE FEATURES**

**THE QUAPAW NATION**

\_\_\_\_\_  
Joseph Byrd,  
Quapaw Nation Chairman

Date: \_\_\_\_\_

**CONCURRING PARTY SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

**AMONG THE  
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REGARDING  
THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT:  
MISSISSIPPI RIVER LEVEE FEATURES**

**Mississippi Band of Choctaw Indians**

\_\_\_\_\_  
Ben Cyrus, Chief

Date: \_\_\_\_\_

**CONCURRING PARTY SIGNATORY PAGE**

**PROGRAMMATIC AGREEMENT**

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THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT:  
MISSISSIPPI RIVER LEVEE FEATURES**

**United Keetoowah Band of Cherokee Indians in Oklahoma**

\_\_\_\_\_  
Chief Joe Bunch  
United Keetoowah Band of Cherokee Indians in Oklahoma

Date: \_\_\_\_\_

## **Appendix A: Proposed Work Items Mississippi River Levee (MRL) Agreement As of 5 March 2020**

The project descriptions below include the latest information regarding Work Items that will be reviewed in accordance with this Agreement. They are organized by USACE district, moving from north to south along the Mississippi River. These items are subject to change as additional information and analyses are conducted. In addition, Work Items may be added from other project authorities, but only for alteration or enhancement of the MRL features. USACE maintains a project website for the SEIS effort for Mississippi River Levee (<https://www.mvk.usace.army.mil/MRLSEIS/>) with current information and previous environmental documentation and will post the completed Agreement there.

\*\*item highlighted in yellow represents to previous items.

### **MVM Boundaries:**

#### **For West Bank Ohio River**

1. Mound City to Cairo Levee 0/0+00 to 2/26+00, Item 965-R. This item of work is 2.5 miles long and is located on right descending bank opposite river mile 965. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2 feet on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 3.2 acres of a cultivated field one mile northeast of Mound City, IL riverside of the mainline levee.
2. North Mound City, IL Sump, Item 962.3-R. This item of work is 250 feet long on the right descending bank opposite river mile 962.3. It consists of installing relief wells with the associated drainage work to control seepage. Preliminary design indicates that the relief wells will be located at levee stations 2/45+00 to 2/47+50 landside of the levee.
3. Mound City to Cairo Levee 2/26+00 to 4/0+00, Item 962.5-R. This item of work is 1.5 miles long and is located on right descending bank opposite river mile 962.5. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 3.9 acres of a cultivated field one mile northeast of Mound City, IL riverside of the mainline levee.
4. Mound City to Cairo Levee 4/30+00 to 5/7+00, Item 961-R. This item of work is less than a mile long and is located on right descending bank opposite river mile 961. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.8 acres of a cultivated field one mile northeast of Mound City, IL riverside of the mainline levee.
5. Mound City to Cairo, IL 7/50+00 to 8/4+00, Item 958-R. This item of work is 200 feet long and is located on right descending bank opposite river mile 958. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2 foot on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for

the embankment is tentatively proposed to be obtained from 0.1 acres of a cultivated field one mile northeast of Mound City, IL riverside of the mainline levee.

6. Cairo, IL Floodwall, Item 956-R. This item of work is 3.2 miles long and is located on the right descending bank opposite river mile 956. It consists of replacing the existing floodwall. Preliminary design indicates the new floodwall will be located on the landside of the existing floodwall or within the existing floodwall footprint.
7. Fish Market Gate/High 51 Closure, Item 955-R. This item of work is 3,500 feet long and is located on the right descending bank opposite river mile 955. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2 foot on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 1.8 acres of a cultivated field riverside of levee stations 10/50+75 to 11/5+00.

#### For East Bank Mississippi River

8. Hickman Floodwall Embankment Tie-in, Item 922-L. This item of work is 500 feet long and is located on the left descending bank opposite river mile 922. It consists of construction of levee that would extend from the existing floodwall to tie-in to high ground. Preliminary design indicates the levee will be 3 feet in height on average with a 5 foot crown. The design slopes 1 foot vertical on 3.5 feet horizontal will result in base width of the levee approximately 26 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.1 acres of cleared land 1000 feet west of the Levee Grade Raise adjacent to Hickman Harbor.
9. Hickman Levee Grade Raise, Item 921-L. This item of work is 500 feet long and is located on the left descending bank opposite river mile 921. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2 feet on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.3 acres of cleared land 1000 feet west of the Levee Grade Raise adjacent to Hickman Harbor.
10. Island 8 Parcel 3, KY (4/0+00 to 5/20+00), Item 918-L. This item of work is 1.4 miles long and is located on the left descending bank opposite river mile 918. It consists of installing relief wells with associated drainage work to control seepage. Preliminary design indicates that relief wells will be located at levee stations 4/0+00 to 5/20+00 landside of the levee.
11. Lake No. 9 – KY-TN State Line (21/3+80 to 21/7+30), Item 902-L. This item of work is 350 feet long and is located on the left descending bank opposite river mile 902. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.2 acres of a cultivated field riverside of levee stations 21/2+79 to 21/4+79.

12. Great River Road Slope Flattening (12/45+00 to 15/0+00), Item 848-L. This item of work is 2.2 miles long and is located on the left descending bank opposite river mile 848. It consists of flattening the landside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 41.5 acres of a cultivated field riverside of levee stations 13/0+00 to 15/0+00.
13. Great River Road Slope Flattening (20/0+00 to 37/0+00), Item 832-L. This item of work is 2 miles long and is located on the left descending bank opposite river mile 832. It consists of flattening the landside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Preliminary design indicates that the slope flattening will be located at levee stations 20/0+00 to 21/0+00, 27/11+00, 32/5+00, 33/20+00, and 34/27+00 landside of the levee. Borrow material for the embankment is tentatively proposed to be obtained from 323.6 acres of a cultivated field riverside of levee stations 26/20+00 to 29/40+00.

For West Bank Mississippi River

14. Nash, MO Slope Flattening (11/12+00 to 12/0+00), Item 49-R AC. This item of work is 0.8 miles long and is located on the right descending bank opposite river mile 49 above the confluence (AC) of the Ohio River. It consists of flattening the landside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 12.6 acres of a cultivated field riverside of levee stations 7/48+13 to 8/2+00.
15. Commerce to Birds Point (15/0+00 to 17/49+00), Item 29-R AC. This item of work is 1.5 miles long and is located on right descending bank opposite river mile 29 AC. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 15/52+00 to 16/45+00, 16/30+00, and 17/30+00 to 17/49+00. Borrow material for the embankment is tentatively proposed to be obtained from 0.4 acres of a cultivated field riverside of levee stations 16/30+92 to 16/33+00.
16. Commerce to Birds Point (17/49+00 to 32/0+00), Item 22-R AC. This item of work is 6 miles long and is located on right descending bank opposite river mile 22 AC. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 feet on average which will increase the base width of the levee approximately 45 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 17/49+00 to 20/14+69, 20/53+36 to 22/37+00, 27/25+63 to 32/0+00. Borrow material for the embankment is tentatively proposed to be obtained from 30.3 acres of cultivated fields riverside of levee stations 18/0+00 to 18/36+49, 18/38+00 to 19/17+00, 19/41+02 to 19/48+02, 20/10+00 to 20/14+69, 21/8+00 to 22/0+00, 22/44+28 to 23/0+00, 28/38+68 to 30/18+00, 31/15+00, 31/22+00 to 31/25+00, and 31/33+37 to 31/37+00, respectively.



17. Birds Point – New Madrid Setback (0/0+00 to 12/32+00), Item 947-R. This item of work is 3.5 miles long and is located on right descending bank opposite river mile 947. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 1/18+00 to 1/20+00, 2/2+00 to 2/14+00, 3/0+00 to 6/30+00 and 9/26+00. Borrow material for the embankment is tentatively proposed to be obtained from 8.2 acres of cultivated fields riverside of levee stations 1/52+93 to 2/1+85, 3/3+00 to 3/10+00, 3/20+00 to 4/20+00, and 5/26+00 to 5/39+00, respectively.
18. Birds Point – New Madrid Frontline Levee (43/21+00 to 87/0+00), Item 920-R. This item of work is 3 miles long and is located on right descending bank opposite river mile 920. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 2.5 feet on average which will increase the base width of the levee approximately 50 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 49/25+00 to 49/28+00, 65/5+00, 72/0+00 to 73/8+00, 75/20+00 to 76/14+00 and 77/20+00 to 78/8+00. Borrow material for the embankment is tentatively proposed to be obtained from 9.1 acres of a cultivated field riverside of levee stations (BP-NM setback levee) 30/42+00 to 31/3+00.
19. Birds Point – New Madrid Setback (12/32+00 to 36/0+00), Item 915-R. This item of work is 3 miles long and is located on right descending bank opposite river mile 915. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 15/25+00, 16/24+00, 17/16+00 to 17/23+00, 23/9+00 to 24/33+00, 27/46+00 to 27/48+00, and 28/37+00 to 34/0+00. Borrow material for the embankment is tentatively proposed to be obtained from 16.6 acres of a cultivated field riverside of levee stations (BP-NM setback levee) 30/37+00 to 31/2+00.
20. Farrenburg Levee, MO Slope Flattening (1/50+00 to 2/21+00), Item 889-R. This item of work is 0.5 miles long and is located on the right descending bank opposite river mile 889. It consists of flattening the waterside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 8.4 acres of a cultivated field riverside of levee stations (BP-NM setback levee) 30/42+00 to 31/3+00.
21. New Madrid, MO to MO-AR Levee (5/0+00N to 0/0+00), Item 882-R. This item of work is 0.5 miles long and is located on right descending bank opposite river mile 882. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 4/22+00N to 4/11+00N, 3/5+00N to 3/1+00N, 2/14+00N to 2/7+00N, and 0/35+00N to 0/13+00N. Borrow material for the embankment is tentatively proposed to be obtained from 1.1 acres of a cultivated fields riverside of levee stations 4/19+01N to 4/14+51N, 0/37+00 to 0/39+00, and 0/25+00 to 0/30+00.

22. New Madrid, MO to MO-AR Levee (2/0+00S to 2/30+00S), Item 877-R. This item of work is 0.5 miles long and is located on right descending bank opposite river mile 877. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 foot on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.7 acres of a cultivated field riverside of levee stations 2/19+00S to 2/26+00.
23. Barfield, AR Slope Flattening (61/0+00 to 61/25+00), Item 807-R. This item of work is 0.5 miles long and is located on the right descending bank opposite river mile 807. It consists of flattening the waterside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 8.5 acres of a cultivated field riverside of levee stations 60/47+50 to 63/0+00.
24. Wilson, AR Slope Flattening (100/0+00 to 100/36+00), Item 766-R. This item of work is 0.8 miles long and is located on the right descending bank opposite river mile 766. It consists of flattening the waterside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 13.1 acres of a cultivated field riverside of levee stations 100/4+01 to 100/37+48.
25. Pecan Point, AR Slope Flattening (116/40+00 to 117/45+00), Item 762-R. This item of work is 1 miles long and is located on the right descending bank opposite river mile 762. It consists of flattening the waterside levee slopes from 1 foot vertical on 3.5 feet horizontal to 1 foot vertical on 5 feet horizontal which will increase the base width of the levee approximately 65 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 19.6 acres of a cultivated field riverside of levee stations 117/11+00 to 118/1+00.
26. St. Thomas, AR Berm Re-evaluation, Item 754-R. This item of work is 6 miles long and is located on the right descending bank opposite river mile 754. It consists of installing relief wells with associated drainage work to control seepage. Preliminary design indicates that relief wells will be located at levee stations 120/0+00 to 126/0+00 landside of the levee.
27. MO-AR State Line to St. Francis River Levee Part 1 (134/0+00 to 138/0+00), Item 747-R. This item of work is 2 miles long and is located on right descending bank opposite river mile 747. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 134/11+00 to 134/25+00, 134/50+00, 135/49+00 to 136/8+00, and 136/40+00 to 137/30+00. Borrow material for the embankment is tentatively proposed to be obtained from 3.5 acres of cultivated fields riverside of levee stations 134/8+00 to 134/14+00, 135/50+00 to 136/0+00, 136/48+00 to 137/5+00, and 137/14+00 to 137/18+00, respectively.
28. MO-AR State Line to St. Francis River Levee Part 2 (145/0+00 to 147/0+00), Item 741-R. This item of work is 2 miles long and is located on right descending bank opposite river mile 741. It

consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 feet on average which will increase the base width of the levee approximately 45 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 5.4 acres of cultivated fields riverside of levee stations 145/36+00 to 145/50+11 and 146/29+23 to 146/36+00.

29. West Memphis, AR Re-Evaluation, Item 726-R. This item of work is 2 miles long and is located on the right descending bank opposite river mile 726. It consists of installing relief wells with associated drainage work to control seepage. Preliminary design indicates that relief wells will be located at levee stations 156/0+00 to 158/0+00 landside of the levee.
30. West Memphis, AR Seepage Remediation, Item 723-R. This item of work is 2.8 miles long and is located on the right descending bank opposite river mile 723. It consists of installing relief wells with associated drainage work to control seepage. Preliminary design indicates that relief wells will be located at levee stations 158/40+00 to 161/29+00 landside of the levee.
31. Horseshoe Lake, AR, Item 705-R. This item of work is 3.2 miles long and is located on the right descending bank opposite river mile 705. It consists of installing relief wells with associated drainage work to control seepage. Preliminary design indicates that relief wells will be located at levee stations 177/0+00 to 180/11+00 landside of the levee.
32. MO-AR State Line to St. Francis Levee Part 3 (183/0+00 to 190/0+00), Item 697-R. This item of work is 3.5 miles long and is located on right descending bank opposite river mile 697. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 183/8+00 to 183/44+00, 184/30+00 to 185/1+00, 186/28+00 to 186/39+00, and 187/0+00 to 190/0+00. Borrow material for the embankment is tentatively proposed to be obtained from 8.8 acres of cultivated fields riverside of levee stations 184/4+50 to 184/8+20, 184/39+00 to 184/43+00, 186/30+00 to 186/36+00, and 187/37+63 to 188/15+50, respectively.
33. MO-AR State Line to St. Francis Levee Part 4 (190/0+00 to 198/0+00), Item 693-R. This item of work is 5.5 miles long and is located on right descending bank opposite river mile 693. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 feet on average which will increase the base width of the levee approximately 45 feet on average. Preliminary design indicates that the grade raise will be located at levee stations 190/0+00 to 195/0+00, 195/42+00 to 196/15+00, and 197/18+00. Borrow material for the embankment is tentatively proposed to be obtained from 13.5 acres of a cultivated field riverside of levee stations 187/37+63 to 188/15+50.
34. MO-AR State Line to St. Francis Levee Part 5 (198/0+00 to 210/30+00), Item 682-R. This item of work is 5.5 miles long and is located on right descending bank opposite river mile 682. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1.5 feet on average which will increase the base width of the levee approximately 45 feet on average. Preliminary design indicates that the grade raise will be located at levee stations

199/0+00, 199/25+00 to 204/42+00, and 208/8+00 to 210/25+00. Borrow material for the embankment is tentatively proposed to be obtained from 20.8 acres of cultivated fields riverside of levee stations 199/0+00 to 199/23+01, 204/30+00 to 204/31+00, and 209/30+20 to 209/40+20, respectively.

35. Elaine, AR to Laconia Circle Levee (48/4+00S to 48/8+90S), Item 620-R. This item of work is 500 feet long and is located on the right descending bank opposite river mile 620. It consists of raising the grade of the existing levee to control overtopping. The grade raise is approximately 1 foot on average which will increase the base width of the levee approximately 35 feet on average. Borrow material for the embankment is tentatively proposed to be obtained from 0.4 acres of a cultivated field riverside of levee stations 48/0+00 to 48/3+08.

### **MVK Boundaries:**

36. Cessions, MS, Seepage Remediation, Item 615-L. This item of work is 1.4 miles long and located on the left descending bank opposite river mile 615. The item consist of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 55-acre borrow location is assumed to be on the land side of the levee in a bottomland hardwood area.
37. Deeson-Gunnison, MS, Seepage Remediation, Item 611-L. This item of work is 7.2 miles long and located on the left descending bank opposite river mile 611. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 25-acre borrow location is assumed to be on the river side of the levee in an agricultural field.
38. Rosedale, MS, Seepage Remediation, Item 587-L. This item of work is 3.2 miles long and located on the left descending bank opposite river mile 587. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 20-acre borrow area for is assumed to be on the river side of the levee in a bottomland hardwood area.
39. Bolivar, MS, Seepage Remediation, Item 577-L. This item of work is 2.8 miles long and located on the left descending bank opposite river mile 577. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 29-acre borrow location is assumed to be on the river side of the levee in a bottomland hardwood area.
40. Brunswick-Halpino, MS, Levee Enlargement and Seepage Remediation, Item 443-L. This item of work is 4.3 miles long and located on the left descending bank opposite river mile 443. The item consists of raising the levee an average of 3.5 feet with a river side shift of the centerline and will be further analyzed to determine if seepage measures are needed. The tentatively proposed 19-acre borrow location is assumed to be on the land side of the levee in a bottomland hardwood area.
41. Morville-Black Hawk, LA, Seepage Remediation, Item 355-R. This item of work is 1.8 miles long and located on the right descending bank opposite river mile 355. The item consists of constructing a berm and/or enlarging two existing berms to control seepage. The tentatively

proposed 11-acre borrow location is assumed to be on the land side of the levee in a cropland area.

42. Morville-Black Hawk, LA, Levee Enlargement, Item 351-R. This item of work is 4.5 miles long and located on the right descending bank opposite river mile 351. The item consists of raising the levee an average of 2.3 feet with a river side shift of the centerline. The tentatively proposed 51-acre borrow location is assumed to be on the river side of the levee in a pasture/bottomland hardwood area.
43. Morville-Black Hawk, LA, Seepage Remediation, Item 348-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 348. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 13-acre borrow location is assumed to be on the river side of the levee in a cropland area.
44. Morville-Black Hawk, LA, Levee Enlargement and Seepage Remediation, Item 345-R. This item of work is 3.4 miles long and located on the right descending bank opposite river mile 345. The item consists of raising the levee an average of 2.0 feet with a river side shift of the centerline. In addition, this item of work consists of constructing two berms and/or enlarging an existing berm to control seepage. The tentatively proposed 112-acre borrow location is assumed to be on both the river side and land side of the levee in cropland and bottomland hardwood areas.
45. Morville-Black Hawk, LA, Seepage Remediation, Item 341-R. This item of work is 1.3 miles long and located on the right descending bank opposite river mile 341. The item consist of installing relief wells to control seepage, therefore no borrow material is expected to be required.
46. Morville-Black Hawk, LA, Seepage Remediation, Item 340-R. This item of work is 3.0 miles long and located on the right descending bank opposite river mile 340. The item consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 18-acre borrow location is assumed to be on the river side of the levee in a shrub-scrub/bottomland hardwood area.
47. Morville-Black Hawk, LA, Seepage Remediation, Item 337-R. This item of work is 3.0 miles long and located on the right descending bank opposite river mile 337. The item consist of installing relief wells to control seepage. The item consist of installing relief wells to control seepage, therefore no borrow material is expected to be required.
48. Morville-Black Hawk, LA, Levee Enlargement and Seepage Remediation, Item 333-R. This item of work is 3.4 miles long and located on the right descending bank opposite river mile 333. The item consists of raising the levee an average of 1.2 feet with a river side shift of the centerline. In addition, this item of work also consists of constructing a berm and/or enlarging an existing berm to control seepage. The tentatively proposed 39-acre borrow location is assumed to be on the river side of the levee in a cropland/bottomland hardwood area.
49. Morville-Black Hawk, LA, Levee Enlargement, Item 330-R. This item of work is 1.5 miles long and located on the right descending bank opposite river mile 330. The item consists of raising the levee an average of 1.0 foot with a river side shift of the centerline. The tentatively proposed 14-acre borrow location is assumed to be on the river side of the levee in a bottomland hardwood area.

50. Morville-Black Hawk, LA, Levee Enlargement and Seepage Remediation, Item 326-R. This item of work is 5.1 miles long and located on the right descending bank opposite river mile 326. The item consists of raising the levee an average of 1.0 foot for approximately 2.8 miles with a river side shift of the centerline and constructing a berm and/or enlarging an existing berm to control seepage. The project will require two borrow areas, with one tentatively proposed 24-acre borrow location assumed to be on the river side of the levee in a shrub/bottomland hardwood area and a 45-acre borrow location is assumed to be on the river side of the levee in a cropland/bottomland hardwood area.
51. Morville-Black Hawk, LA, Levee Enlargement and Seepage Remediation, Item 320-R. This item of work is 3.2 miles long and located on the right descending bank opposite river mile 320. The item consists of raising the levee an average of 2.2 feet with a river side shift of the centerline. Due to the proximity of Red River State Wildlife Management Area, relief wells will be installed instead of the standard berm embankment. Approximately 55-acres of borrow material is expected to be required and is assumed to be on the river side of the levee in a bottomland hardwood area.

**MVN Boundaries:**

52. Combined Lower/Upper 5th 308-317-W, LA, Levee, Item 312.5-R. This item of work is 4.7 miles long and located on the right descending bank opposite river mile 312.5. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a flood side shift of the centerline. The borrow area (approximate 16 acres) to construct the levee raise for this item is located on the river side of the levee in a bottomland hardwood wetland area.
53. Old River Lock - Levee, LA, Levee, Item 304-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 304. The item consist of raising the levee an average of 2.5 feet extending over the length of the Work Item with a levee lift straddling the existing levee centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland area.
54. Smithland to Lacour 289-298 R, LA, Levee and Berm, Item 293.5-R. This item of work is 8.4 miles long and located on the right descending bank opposite river mile 293.5. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with the levee lift straddling the existing levee centerline. The work also consist of constructing a berm for a portion of the item to control seepage. The borrow area (approximate 20 acres) to construct the levee raise and berm for this item is located on the land side of the levee in a bottomland hardwood wetland area.
55. Pt Coupee Levee Enlargement, LA, Levee, Item 268-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 268. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a flood side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland area.
56. Arbroth Levee Enlargement, LA, Levee, Item 253-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 253. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a flood side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland area.
57. Smithfield Levee Enlargement, LA, Levee, Item 246-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 246. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a flood side shift of the centerline. The borrow area

(approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area and/or bottomland hardwood wetland area.

58. Fancy Point, LA, Levee, Item 242.5-R. This item of work is 2.9 miles long and located on the right descending bank opposite river mile 242.5. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 11 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area and/or bottomland hardwood wetland area.
59. Thomas Point, LA, Levee, Item 240.3-R. This item of work is 0.8 miles long and located on the right descending bank opposite river mile 240.3. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area and/or bottomland hardwood wetland area.
60. Port Allen, LA, Levee, Item 231-R. This item of work is 2.5 miles long and located on the right descending bank opposite river mile 231. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 9 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
61. Port Allen Lock – Levee, LA, Levee, Item 228-R. This item of work is 0.01 miles long and located on the right descending bank opposite river mile 228. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with the levee lift straddling the existing levee centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
62. Addis, LA, Levee, Item 223-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 223. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
63. Ben Hur Road, LA, Levee, Item 217.6-L. This item of work is 0.07 miles long and located on the left descending bank opposite river mile 217.6. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
64. Morrisonville, LA, Levee, Item 216-R. This item of work is 2.8 miles long and located on the right descending bank opposite river mile 216. The item consist of raising the levee an average of 2.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 9 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
65. Plaquemines Point, LA, Berm and/or Wells, Item 208-L. This item of work is 0.9 miles long and located on the left descending bank opposite river mile 208. The item consist of either embankment berm construction and/or relief wells to control seepage in the area. The borrow area (approximate 5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
66. Plaquemine/Reveille, LA, Levee, Item 206.7-R. This item of work is 2.7 miles long and located on the right descending bank opposite river mile 206.7. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area

(approximate 4 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.

67. Lower Plaquemines Point, LA, Levee, Item 199-L. This item of work is 5.5 miles long and located on the left descending bank opposite river mile 199. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 14 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
68. Bayou Goula to Alhambra, LA, Levee, Item 194.5-R. This item of work is 0.7 miles long and located on the right descending bank opposite river mile 194.5. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
69. Carville, LA, Levee, Item 189-L. This item of work is 0.7 miles long and located on the left descending bank opposite river mile 189. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1.5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
70. Claiborne Island, LA, Berm, Item 189-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 189. The work consist of constructing a berm for control seepage. The borrow area (approximate 3 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
71. Marchand, LA, Levee, Item 181-L. This item of work is 0.05 miles long and located on the left descending bank opposite river mile 181. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
72. ABLD-1 180 R, LA, Levee, Item 180-R. This item of work is 0.7 miles long and located on the right descending bank opposite river mile 180. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side or flood side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
73. Smoke Bend, LA, Levee, Item 178-R. This item of work is 3.3 miles long and located on the right descending bank opposite river mile 178. The item consist of raising the levee an average of 2.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 10 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
74. Stella Landing, LA, Levee, Item 173.9-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 173.9. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
75. Aben, LA, Levee, Item 172.6R. This item of work is 1.6 miles long and located on the right descending bank opposite river mile 172.6. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 4 acres) to construct the levee raise for this item is located on the river side of the levee in a cropland area.



76. Point Houmas (Lauderdale), LA, Levee, Item 165-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 165. The item consist of raising the levee an average of 2.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
77. Brilliant Point 163.5 R, LA, Levee, Item 163.5-R. This item of work is 1.7 miles long and located on the right descending bank opposite river mile 163.5. The item consist of raising the levee an average of 2.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 10 acres) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
78. Romeville, LA, Levee, Item 163-L. This item of work is 0.05 miles long and located on the left descending bank opposite river mile 163. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
79. Barton Lane 159.7 R, LA, Levee, Item 159.7-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 159.7. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
80. St. Amelia 158R, LA, Levee, Item 158-R. This item of work is 0.02 miles long and located on the right descending bank opposite river mile 158. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
81. Romeville/College Point 156.8 L, LA, Levee, Item 156.8-L. This item of work is 0.1 miles long and located on the left descending bank opposite river mile 156.8. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
82. St. James Moonshine, LA, Levee, Item 156-R. This item of work is 1.3 miles long and located on the right descending bank opposite river mile 156. The item consist of raising the levee an average of 3.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 5 acres) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
83. Welham Plantation, LA, Levee, Item 154-L. This item of work is 0.5 miles long and located on the left descending bank opposite river mile 154. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
84. Belmont, LA, Levee, Item 152-L. This item of work is 0.04 miles long and located on the left descending bank opposite river mile 152. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.

85. Vacherie, LA, Levee, Item 149-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 149. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
86. Paulina/Lutcher/Gramercy, LA, Levee, Item 148-L. This item of work is 3.8 miles long and located on the left descending bank opposite river mile 148. The item consist of raising the levee an average of 2.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 10 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
87. Wallace, LA, Levee, Item 147.3-R. This item of work is 0.8 miles long and located on the right descending bank opposite river mile 147.3. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
88. Gramercy.Mt. Airy/48 mile Point, LA, Levee, Item 144-L. This item of work is 0.3 miles long and located on the left descending bank opposite river mile 144. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
89. Oak Alley - Willow Grove 142.6-144 R, LA, Levee, Item 143.7-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 143.7. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
90. Upper Edgard 142 R, LA, Levee, Item 142-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 142. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
91. Reserve, LA, Levee, Item 136-L. This item of work is 2.1 miles long and located on the left descending bank opposite river mile 136. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 3 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
92. Lower Edgard (3) 135.2-136.2 R, LA, Levee, Item 135.7-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 135.7. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
93. Laplace, LA, Levee, Item 133-L. This item of work is 0.5 miles long and located on the left descending bank opposite river mile 133. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area.

94. Lower Edgard 131.7 R, LA, Levee, Item 131.7-R. This item of work is 0.4 miles long and located on the right descending bank opposite river mile 131.7. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
95. 35 Mile Point, LA, Levee, Item 130-L. This item of work is 0.6 miles long and located on the left descending bank opposite river mile 130. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 2.5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
96. Hahnville, Flagville, Dufresne 120-128.5 R, LA, Levee, Item 124.3-R. This item of work is 0.4 miles long and located on the right descending bank opposite river mile 124.3. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
97. Bonnet Carre to New Sarpy, LA, Levee, Item 124-L. This item of work is 1.8 miles long and located on the left descending bank opposite river mile 124. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 4 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.
98. Lone Star to Davis Pond, LA, Levee, Item 119.2-R. This item of work is 1.0 miles long and located on the right descending bank opposite river mile 119.2. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 2 acres) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
99. Davis Pond Freshwater Diversion Structure Floodwall, LA, Floodwall, Item 118.5- R. This item of work is 0.05 miles long capped sheet pile floodwall and located on the right descending bank opposite river mile 118. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
100. Ama #2, LA, Levee, Item 117.3-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 117.3. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
101. Cyanamid, LA, Levee, Item 115.5-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 115.5. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the river side of the levee in a cropland area.
102. St. Rose (Kenner Revet), LA, Levee, Item 115-L. This item of work is 1.3 miles long and located on the left descending bank opposite river mile 115. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 3 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area.

103. Ama, LA, Levee, Item 113.5-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 113.5. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
104. Waggaman and Bridge City Levee and Floodwall, LA, Floodwall, Item 109.6-R. This item of work is 0.24 miles long floodwall and located on the right descending bank opposite river mile 110. The item consist of work on the floodwall only, removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
105. Waggaman, LA, Levee, Item 110.4-R. This item of work is 0.4 miles long and located on the right descending bank opposite river mile 110.4. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
106. Upper Avondale, LA, Levee, Item 108.3-R. This item of work is 0.6 miles long and located on the right descending bank opposite river mile 108.3. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
107. Lower Avondale, LA, Levee or Floodwall, Item 107-R. This item of work is 1.4 miles long and located on the right descending bank opposite river mile 107. The item consist of either raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of the floodwall an average of 2.0 feet for 1.4 miles. In order to meet the current design grade, the existing floodwall will be replaced completely with a new pile-founded concrete T-wall as well as adding steel gates across the ramps. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
108. Westwego Levee and Floodwall, LA, Floodwall, Item 102.1-R. This item of work is 0.49 miles long floodwall and located on the right descending bank opposite river mile 105. The item consist of work on the floodwall only, removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
109. Dugas to Celotex, LA, Levee, Berm and/or Wells, Item 100.4-R. This item of work is 0.7 miles long and located on the right descending bank opposite river mile 100.4. The item consist of raising the levee an average of 1.0 feet extending over the length of the Work Item with a land side shift of the centerline. The item also will consist of either embankment berm construction and/or relief wells to control seepage in the area. The borrow area (approximate 4.5 acres) to construct the levee raise and berm for this item is located on the land side of the levee in a pasture land area.
110. Nashville Ave. to Napoleon Ave. Floodwall, LA, Floodwall, Item 100-L. This item of work is 1.37 miles long floodwall and located on the left descending bank opposite river mile 100. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
111. Barataria Blvd., LA, Levee, Item 99.5-R. This item of work is 0.1 miles long and located on the right descending bank opposite river mile 99.5. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.

112. Louisiana Avenue Wharves C&D, LA, Floodwall, Item 98.7-L. This item of work is 0.14 miles long floodwall and located on the left descending bank opposite river mile 92.7. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
113. Harvey Lock Forebay – Levee, LA, Levee or Floodwall, Item 98.3-R. This item of work is 0.3 miles long and located on the right descending bank opposite river mile 98.3. The item consist of either raising the levee an average of 3.5 feet extending over the length of the Work Item with a flood side shift of the centerline. The item for a floodwall consists of raising the current elevation of levee with a new pile-founded concrete T-wall an average of 3.5 feet for 0.3 miles. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
114. Louisiana Ave to Jackson Ave Floodwall, LA, Floodwall, Item 98.1-L. This item of work is 0.28 miles long floodwall and located on the left descending bank opposite river mile 97.2. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall
115. Gretna Phase II 97-97.8 R, LA, Levee or Floodwall, Item 97.4-R. This item of work is 0.2 miles long and located on the right descending bank opposite river mile 97.4. The item consist of either raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of levee with a new pile-founded concrete T-wall an average of 1.5 feet for 0.2 miles. The borrow area (less than an acre) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
116. Jackson to Thalia, LA Floodwall, Item 96.5-L. This item of work is 1.18 miles long floodwall and located on the left descending bank opposite river mile 95.6. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
117. Thalia St. to Poydras St. Floodwall, LA, Floodwall, Item 95.3-L. This item of work is 0.64 miles long floodwall and located on the left descending bank opposite river mile 95. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
118. Spanish Plaza, LA, Floodwall, Item 95-L. This item of work is 0.02 miles long floodwall and located on the left descending bank opposite river mile 95. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
119. Canal St. to Toulouse St. Floodwall, LA, Floodwall, Item 94.8-L. This item of work is 0.43 miles long capped and uncapped floodwall and located on the left descending bank opposite river mile 94.9. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
120. Algiers Point 93.75-95.5 R, LA, Levee or Floodwall, Item 94.6-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 94.6. The item consist of either raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of levee with a new pile-founded concrete T-wall an average of 1.5 feet for 0.5 miles. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area and pasture land area.
121. Dumaine St. Floodwall, LA, Floodwall, Item 94.5-L. This item of work is 0.47 miles long floodwall and located on the left descending bank opposite river mile 94.5. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.

122. Barracks St. to Montegut St. Floodwall, LA, Floodwall, Item 94.1-L. This item of work is 0.67 miles long floodwall and located on the left descending bank opposite river mile 93.9. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
123. Montegut St. to Independence St. Floodwall, LA, Floodwall, Item 93.6-L. This item of work is 0.35 miles long floodwall and located on the left descending bank opposite river mile 93.3. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
124. Independence St. to I.H.N.C. Floodwall, LA, Floodwall, Item 93-L. This item of work is 0.6 miles long floodwall and located on the left descending bank opposite river mile 92.8. The item consist of removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
125. IHNC Lock Forebay 92.6L - Levee, LA, Levee, Item 92.6-L. This item of work is 3.2 miles long and located on the left descending bank opposite river mile 92.6. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 7 acres) to construct the levee raise for this item is located on the land side of the levee in a marsh wetland area.
126. Holy Cross, LA, Levee, Item 92-L. This item of work is 0.4 miles long and located on the left descending bank opposite river mile 92. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a marsh wetland area.
127. Arabi Levee and Floodwall, LA, Floodwall, Item 91.2-L. This item of work is 0.43 miles long capped and uncapped floodwall and located on the left descending bank opposite river mile 91.2. The item consist of work on the floodwall only, removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
128. Domino Sugar, LA, Relief Wells, Item 91-L. This item of work is 0.6 miles long and located on the left descending bank opposite river mile 91. The item consist of installation of relief wells to control seepage in the area.
129. Amstar Levee and Floodwall, LA, Floodwall, Item 90.8-L. This item of work is 0.16 miles long capped and uncapped floodwall and located on the left descending bank opposite river mile 90.8. The item consist of work on the floodwall only, removing the existing I-wall and replacing with a pile-founded, concrete T-wall.
130. US Coast Guard Reservation, LA, Levee, Item 90.6-R. This item of work is 3.3 miles long and located on the right descending bank opposite river mile 90.6. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 6.5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area / pasture land area.
131. Chalmette Slip, LA, Levee or Floodwall, Item 90-L. This item of work is 0.4 miles long and located on the left descending bank opposite river mile 90. The item consist of either raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of the floodwall an average of 1.5 feet for 0.4 miles. In order to meet the current design grade, the existing floodwall will be replaced completely with a new pile-founded concrete T-wall. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood area.

132. Chalmette Battle Field (1), LA, Levee or Floodwall, Item 88.5-L. This item of work is 0.4 miles long and located on the left descending bank opposite river mile 88.5. The item consist of either raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The item for a floodwall consists of raising the current elevation of the floodwall an average of 1.5 feet for 1.25 miles. In order to meet the current design grade, the existing floodwall will be replaced completely with a new pile-founded concrete T-wall. The borrow area (approximate 3 acres) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood area.
133. Algiers Lock – Levee, LA, Levee, Item 88-R. This item of work is 0.5 miles long and located on the right descending bank opposite river mile 88. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1.5 acres) to construct the levee raise for this item is located on the land side of the levee in a cropland area / pasture land area.
134. Chalmette Battle Field (2), LA, Levee, Item 86.1-L. This item of work is 0.4 miles long and located on the left descending bank opposite river mile 86.1. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood area.
135. Stanton, LA, Levee, Item 84.3-R. This item of work is 0.6 miles long and located on the right descending bank opposite river mile 84.3. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 1 acre) to construct the levee raise for this item is located on the land side of the levee in a cropland area and pasture land area.
136. Oakville to Alliance, LA, Levee, Item 67-R. This item of work is 6.6 miles long and located on the right descending bank opposite river mile 67. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 10 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
137. Carnaevon to Phoenix, LA, Levee, Item 67-L. This item of work is 7.0 miles long and located on the left descending bank opposite river mile 67. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 12 acres) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland area.
138. Alliance to Ironton, LA, Levee, Item 61.5-R. This item of work is 2.8 miles long and located on the right descending bank opposite river mile 61.5. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 5 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
139. Ironton to Deer Range, LA, Levee, Item 58-R. This item of work is 3.2 miles long and located on the right descending bank opposite river mile 58. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 6 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
140. Deer Range to W. Point a la Hache, LA, Levee, Item 52.5-R. This item of work is 7.7 miles long and located on the right descending bank opposite river mile 52.5. The item consist of raising the levee an

average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 12 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.

141. Phoenix to Bohemia, LA, Levee, Item 51-L. This item of work is 10.5 miles long and located on the left descending bank opposite river mile 51. The item consist of raising the levee an average of 2.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 19 acres) to construct the levee raise for this item is located on the land side of the levee in a bottomland hardwood wetland and marsh area.
142. W. Pt a la Hache to St. Jude, LA, Levee, Item 47.5-R. This item of work is 2.1 miles long and located on the right descending bank opposite river mile 47.5. The item consist of raising the levee an average of 2.0 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 5 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.
143. Port Sulphur, LA, Levee, Item 37-R. This item of work is 1.1 miles long and located on the right descending bank opposite river mile 37. The item consist of raising the levee an average of 1.5 feet extending over the length of the Work Item with a land side shift of the centerline. The borrow area (approximate 2.5 acres) to construct the levee raise for this item is located on the land side of the levee in a pasture land area.



## Appendix B: Point of Contacts (POC)

### CONTACT INFORMATION FOR SIGNATORIES AND FEDERALLY RECOGNIZED TRIBES

Signatories shall provide USACE with updated contact information as it becomes available, and revisions to this Table will be made without an amendment to this Agreement. This Table will be updated annually by USACE and included in the Annual Report.

Some will be all email (excepting reports) others will be all paper. Just a matter of capturing so that district archaeologist/TL has the right tool to communicate in the future.

<b>Federally-Recognized Tribes</b>	
<p><b>Absentee-Shawnee Tribe of Indians</b></p> <p><u>Primary:</u>  Ms. Devon Frazier, THPO  Office of the Governor Building  2025 S Gordon Cooper Drive  Shawnee, OK 74801  (405) 275-4030 x 6243  <a href="mailto:dfrazier@astribe.com">dfrazier@astribe.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Absentee-Shawnee Tribe of Indians</b></p> <p><u>Secondary:</u>  Edwina Butler-Wolfe, Governor  Office of the Governor Building  2025 S Gordon Cooper Drive  Shawnee, OK 74801</p>
<p><b>Alabama-Coushatta Tribe of Texas</b></p> <p><u>Primary:</u>  Bryant Celestine, THPO  Alabama-Coushatta Tribe of Texas  571 State Park Rd. 56  Livingston, TX 77351  (936) 563-1181  <a href="mailto:celestine.bryant@actribe.org">celestine.bryant@actribe.org</a></p> <p>Method of contact for project notification and documentation: email to <a href="mailto:hispres@actribe.org">hispres@actribe.org</a> and copy to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Alabama-Coushatta Tribe of Texas</b></p> <p><u>Secondary:</u>  Joann Battise, Chairwoman  Alabama-Coushatta Tribe of Texas  571 State Park Rd. 56  Livingston, TX 77351  (936) 563-1181</p> <p>Email: <a href="mailto:hispres@actribe.org">hispres@actribe.org</a></p>

<p><b>Alabama-Quassarte Tribal Town</b></p> <p><u>Primary:</u> Samantha Robison, THPO PO Box 187 Wetumka, OK 74883 (405) 452-3881 <a href="mailto:rwind@alabama-quassarte.org">rwind@alabama-quassarte.org</a>; <a href="mailto:jlowe@alabama-quassarte.org">jlowe@alabama-quassarte.org</a> Method of contact for project notification and documentation: email to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Alabama-Quassarte Tribal Town</b></p> <p><u>Secondary:</u> Nelson Harjo, Chief Tarpie Yargee, Town King PO Box 187 Wetumka, OK 74883 <a href="mailto:chief@alabama-quassarte.org">chief@alabama-quassarte.org</a></p>
<p><b>Apache Tribe of Oklahoma</b></p> <p><u>Primary:</u> Wamblee Smith, Apache EPA PO Box 1330 Anadarko, OK 73005 (405) 247-9493 x111/109 <a href="mailto:apachetribeepa@gmail.com">apachetribeepa@gmail.com</a> <a href="mailto:epa4apachetribeok@gmail.com">epa4apachetribeok@gmail.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Apache Tribe of Oklahoma</b></p> <p><u>Secondary:</u> Bobby Komardley, Chairman PO Box 1330 Anadarko, OK 73005</p>
<p><b>Caddo Nation</b></p> <p><u>Primary:</u> Derrick Hill, THPO Caddo Nation 117 Memorial Lane Binger, OK 73009 (405) 656-2344 <a href="mailto:dhill@mycaddonation.com">dhill@mycaddonation.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Caddo Nation</b></p> <p><u>Secondary:</u> Tamara Francis Fourkiller, Chairman Caddo Nation PO Box 487 Binger, OK 73009 <a href="mailto:tffourkiller.cn@gmail.com">tffourkiller.cn@gmail.com</a></p>

<p><b>Cherokee Nation</b></p> <p><u>Primary:</u>  Elizabeth Toombs, THPO  PO Box 948  Tahlequah, OK 74465-0948  (918) 453-5389  <a href="mailto:elizabeth-toombs@cherokee.org">elizabeth-toombs@cherokee.org</a></p> <p>Method of contact for project notification and documentation: email to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Cherokee Nation</b></p> <p><u>Secondary:</u>  Chuck Hoskin Jr. Principal Chief  PO Box 948  Tahlequah, OK 74465-0948  (918) 458-5580  <a href="mailto:Chuck-hoskin@cherokee.org">Chuck-hoskin@cherokee.org</a></p>
<p><b>Chickasaw Nation</b></p> <p><u>Primary:</u>  Karen Brunso, THPO  Division of Historic Preservation  PO Box 1548  Ada, Oklahoma 74821  (580) 272-1106  <a href="mailto:Karen.Brunso@chickasaw.net">Karen.Brunso@chickasaw.net</a></p> <p><a href="mailto:HPO@chicksaw.net">HPO@chicksaw.net</a></p> <p>Method of contact for project notification and documentation: email to <a href="mailto:HPO@chicksaw.net">HPO@chicksaw.net</a>.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Chickasaw Nation</b></p> <p><u>Secondary:</u>  Bill Anoatubby, Governor  PO Box 1548  Ada, Ok 74821  (580) 436-2603</p>
<p><b>Chitimacha Tribe of Louisiana</b></p> <p><u>Primary:</u>  Kimberly S. Walden, THPO  Chitimacha Tribe of Louisiana  155 Chitimacha Loop  Charenton, LA 70523  (337) 923-9923  <a href="mailto:kim@chitimacha.gov">kim@chitimacha.gov</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Chitimacha Tribe of Louisiana</b></p> <p><u>Secondary:</u>  Chairman Melissa Darden  Chitimacha Tribe of Louisiana  155 Chitimacha Loop  Charenton, LA 70523  (337) 924-4973</p>

<p><b>Choctaw Nation of Oklahoma</b></p> <p><u>Primary:</u>  Ian Thomson  Historic Preservation Department  Choctaw Nation of Oklahoma  P.O. Box 1210  Durant, OK 74702  (580) 924-8280  <a href="mailto:ithompson@choctawnation.com">ithompson@choctawnation.com</a></p> <p>Lindsey D. Bilyeu, MS  Senior Compliance Review Officer  <a href="mailto:lbilyeu@choctawnation.com">lbilyeu@choctawnation.com</a></p> <p>Method of contact for project notification and documentation: email Senior Compliance Review Officer with a copy to THPO.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Choctaw Nation of Oklahoma</b></p> <p><u>Secondary:</u>  Gary Batton, Chief  Choctaw Nation of Oklahoma  Attn: Choctaw Nation Historic Preservation Department  P.O. Box 1210  Durant, OK 74702-1210  (800) 522-6170  <a href="mailto:gbatton@choctawnation.com">gbatton@choctawnation.com</a></p>
<p><b>Coushatta Tribe of Louisiana</b></p> <p><u>Primary:</u>  Dr. Linda Langley  Cultural Preservation Officer  Coushatta Tribe of Louisiana  1940 C.C. Bell Road  Elton, LA 70532  (337) 584-1567  <a href="mailto:llangley@coushattatribela.org">llangley@coushattatribela.org</a></p> <p>Jonas Johns, Director of the Coushatta Heritage Department. E-mail:  <a href="mailto:jonasj@coushattatribela.org">jonasj@coushattatribela.org</a></p> <p>Kassie Dawsey, Section 106 Coordinator.  <a href="mailto:khenry@coushattatribela.org">khenry@coushattatribela.org</a></p> <p>Method of contact for project notification and documentation: email to Primary contact with a copy to Director of Heritage Dept. and Section 106 coordinator.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Coushatta Tribe of Louisiana</b></p> <p><u>Secondary:</u>  Chairman Kevin Sickey  Coushatta Tribe of Louisiana  1940 C.C. Bell Road  Elton, LA 70532  (337) 584-2998</p>

<p><b>Delaware Nation</b></p> <p><u>Primary:</u>  Nekole Allgood, NAGPRA Coordinator  Delaware Nation Historic Preservation Office  PO Box 825  Anadarko, OK 73005  (405) 247-2448  NAllgood@delawarenation-nsn.gov</p> <p>Method of contact for project notification and documentation: email to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Delaware Nation</b></p> <p><u>Secondary:</u>  Deborah Dotson, President  Delaware Nation  PO Box 825  Anadarko, Ok 73005  (405) 247-2448</p>
<p><b>Delaware Tribe of Indians</b></p> <p><u>Primary:</u>  Brice Obermeyer, Director  Delaware Tribe Historic Preservation Office  1200 Commercial St. Roosevelt Hall, RM 212  Emporia, KS 66801  (918) 335-7026  <a href="mailto:bobermeyer@delawaretribe.org">bobermeyer@delawaretribe.org</a></p> <p>Method of contact for project notification and documentation: email to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Delaware Tribe of Indians</b></p> <p><u>Secondary:</u>  Chester Brooks, Chief  5100 Tuxedo Blvd.  Bartlesville, Ok 74006  (918) 337-6590  <a href="mailto:cbrookes@delawaretribe.org">cbrookes@delawaretribe.org</a></p>
<p><b>Eastern Band of Cherokee Indians</b></p> <p><u>Primary:</u>  Russell Townsend, THPO  Qualla Boundary Reservation  PO Box 455  Cherokee, NC 28719  (828) 497-1584  <a href="mailto:russtown@nc-cherokee.com">russtown@nc-cherokee.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Eastern Band of Cherokee Indians</b></p> <p><u>Secondary:</u>  Richard Sneed, Principal Chief  PO Box 1927  Cherokee, NC 28719  (828) 359-7002</p>

<p><b>Eastern Shawnee Tribe of Oklahoma</b></p> <p><u>Primary:</u>  Brett Barnes, THPO  12705 E. 705 Road  Wyandotte, OK 74370  (918) 666-2435 x1845  <a href="mailto:bbarnes@estoo.net">bbarnes@estoo.net</a></p> <p>Method of contact for project notification and documentation: email to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Eastern Shawnee Tribe of Oklahoma</b></p> <p><u>Secondary:</u>  Glenna J. Wallace, Chief  12755 S. 705 Rd.  Wyandotte, OK 74370  (918) 666-2435</p>
<p><b>Jena Band of Choctaw Indians</b></p> <p><u>Primary:</u>  Alina J. Shively, THPO  Jena Band of Choctaw Indians  PO Box 14  Jena, LA 71342  (318) 992-1205  <a href="mailto:ashively@jenachoctaw.org">ashively@jenachoctaw.org</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Jena Band of Choctaw Indians</b></p> <p><u>Secondary:</u>  B. Cheryl Smith, Chief  Jena Band of Choctaw Indians  1052 Chanaha Hina Street  Trout, LA 71371  (318) 992-2717  <a href="mailto:chief@jenachoctaw.org">chief@jenachoctaw.org</a></p>
<p><b>Kaw Nation</b></p> <p><u>Primary:</u>  Crystal Douglas, THPO  PO Box 50  Kaw City, OK 74641  (580) 269-2552 x235  <a href="mailto:crystal_douglas@kawnation.com">crystal_douglas@kawnation.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Kaw Nation</b></p> <p><u>Secondary:</u>  Lynn Williams, Tribal Chair  PO Box 50  Kaw City, OK 74641  (580) 269-2552  <a href="mailto:lwilliams@kawnation.com">lwilliams@kawnation.com</a></p>

<p><b>Kialegee Tribal Town</b></p> <p><u>Primary:</u> Henry Harjo, EPA Director PO Box 332 Wetumka, OK 74883 (405) 452-3262 <a href="mailto:dc13.dc4@gmail.com">dc13.dc4@gmail.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Kialegee Tribal Town</b></p> <p><u>Secondary:</u> Tiger Hobbia, Mekko PO Box 332 Wetumka, OK 74883 (405) 452-3262</p>
<p><b>Kickapoo Tribe of Kansas</b></p> <p><u>Primary:</u> Fred Thomas, Vice Chair PO Box 271 Horton, KS 66439 (785) 486-2601 x8 <a href="mailto:eric.sheets@ktik-nsn.gov">eric.sheets@ktik-nsn.gov</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Kickapoo Tribe of Kansas</b></p> <p><u>Secondary:</u> Lester Randall, Chairman 824 111th Drive Horton, KS 66439 (785) 486-2131</p>
<p><b>Menominee Indian Tribe of Wisconsin</b></p> <p><u>Primary:</u> David Grignon, THPO and Director Menominee Cultural Museum and Logging Museum W3426 Cty VV West Keshena, WI 54135-0910 (715) 799-5258 <a href="mailto:dgrignon@mitw.org">dgrignon@mitw.org</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Menominee Indian Tribe of Wisconsin</b></p> <p><u>Secondary:</u> Johnathan Wilber, Tribal Administrator PO Box 910 Keshena, WI 54135 (715) 799-5154 <a href="mailto:jwilber@mitw.org">jwilber@mitw.org</a></p>

<p><b>Miami Tribe of Oklahoma</b></p> <p><u>Primary:</u>  Diane Hunter, THPO  PO Box 1326  Miami, OK 74355  (918) 541-8966  <a href="mailto:dhunter@miamination.com">dhunter@miamination.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Miami Tribe of Oklahoma</b></p> <p><u>Secondary:</u>  Douglas G. Langford, Chief  PO Box 1326  Miami, OK 74355  (918) 541-1300  <a href="mailto:dlankford@miamination.com">dlankford@miamination.com</a></p>
<p><b>Mississippi Band of Choctaw Indians</b></p> <p><u>Primary:</u>  Ken Carleton, Tribal Archeologist  Mississippi Band of Choctaw Indians  101 Industrial Road  Choctaw, MS 39350  (601) 656-5251  <a href="mailto:ken.carleton@choctaw.org">ken.carleton@choctaw.org</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Mississippi Band of Choctaw Indians</b></p> <p><u>Secondary:</u>  Ben Cyrus, Chief  Mississippi Band of Choctaw Indians  101 Industrial Road  Choctaw, MS 39350  (601) 656-5251  <a href="mailto:info@choctaw.org">info@choctaw.org</a></p>
<p><b>Muscogee (Creek) Nation</b></p> <p><u>Primary:</u>  Ms. Corain Lowe-Zepeda, THPO  Muscogee (Creek) Nation  Historic &amp; Cultural Preservation Office  P.O. Box 580  Okmulgee, OK 74447  (918) 732-7733  <a href="mailto:clowe@mcn-nsn.gov">clowe@mcn-nsn.gov</a>  <a href="mailto:Section106@mcn-nsn.gov">Section106@mcn-nsn.gov</a></p> <p>Method of contact for project notification and documentation: email to <a href="mailto:Section106@mcn-nsn.gov">Section106@mcn-nsn.gov</a> and a copy to the Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Muscogee (Creek) Nation</b></p> <p><u>Secondary:</u>  Principal Chief, Mr. James Floyd  Muscogee (Creek) Nation  Historic &amp; Cultural Preservation Office  P.O. Box 580  Okmulgee, OK 74447</p>



<p><b>Osage Nation</b></p> <p><u>Primary:</u>  Dr. Andrea A. Hunter  Tribal Historic Preservation Officer/Director  Osage Nation  627 Grandview Avenue  Pawhuska, OK 74056  918-287-5671  <a href="mailto:ahunter@osagenation-nsn.gov">ahunter@osagenation-nsn.gov</a></p> <p>Method of contact for project notification and documentation: postal mail/courier (post-pandemic). Email to Deputy THPO and CC the THPO until return to normal business.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Osage Nation</b></p> <p><u>Secondary:</u>  Jess Hendrix  Deputy THPO  Osage Nation  627 Grandview Avenue  Pawhuska, OK 74056  918-287-5427  <a href="mailto:Jess.Hendrix@osagenation-nsn.gov">Jess.Hendrix@osagenation-nsn.gov</a></p> <p>Method of contact for project notification and documentation: postal mail/courier</p> <p>Method of contact for other communication: email, phone call</p>
<p><b>Otoe-Missouria Tribe of Oklahoma</b></p> <p><u>Primary:</u>  Elsie Whitehorn, THPO  8151 Hwy 177  Red Rock, OK 74056  (580) 723-4466 x202  <a href="mailto:ewhitehorn@omtribe.org">ewhitehorn@omtribe.org</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Otoe-Missouria Tribe of Oklahoma</b></p> <p><u>Secondary:</u>  John R. Shotton, Chairman  8151 Hwy 177  Red Rock, OK 74651  (580) 723-4466 x107  <a href="mailto:jshotton@omtribe.org">jshotton@omtribe.org</a></p>
<p><b>Peoria Tribe of Indians of Oklahoma</b></p> <p><u>Primary:</u>  Logan Pappenfort, THPO and Second Chief  Peoria Tribe of Indians of Oklahoma  118 S. Eight Tribes Trail  Miami, Ok 74354  (918) 540-2535 x33  <a href="mailto:lpappenfort@peoriatribe.com">lpappenfort@peoriatribe.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Peoria Tribe of Indians of Oklahoma</b></p> <p><u>Secondary:</u>  Craig Harper, Chief  118 S. Eight Tribes Trail  Miami, Ok 74354  (918) 540-2535  <a href="mailto:chiefharper@peoriatribe.com">chiefharper@peoriatribe.com</a></p>

<p><b>Poarch Band of Creek Indians</b></p> <p><u>Primary:</u>  Larry Haikey, THPO  5811 Jack Springs Road  Atmore, AL 36502  (251) 368-9136 x2072  lhaikey@pci-nsn.gov</p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Poarch Band of Creek Indians</b></p> <p><u>Secondary:</u>  Stephanie A. Bryan, Tribal Chair and CEO  5811 Jack Springs Road  Atmore, AL 36502  (251) 368-9136 x2202</p>
<p><b>Ponca Tribe of Oklahoma</b></p> <p><u>Primary:</u>  Staci Hesler, THPO  121 White Eagle Drive  Ponca City, OK 74601  (580) 763-0120  <a href="mailto:staci.hesler@ponca.com">staci.hesler@ponca.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Ponca Tribe of Oklahoma</b></p> <p><u>Secondary:</u>  Douglas Rhodd, Chairman  20 White Eagle Drive  Ponca City, Ok 74601  (580) 763-0120</p>
<p><b>Quapaw Nation</b></p> <p><u>Primary:</u>  Everett Bandy, Historic Preservation Officer  Quapaw Nation Historic Preservation Program  PO Box 765  Quapaw, O.K. 74363-0765  Telephone: (918) 238-3100  <a href="mailto:ebandy@quapawnation.com">ebandy@quapawnation.com</a></p> <p>Routine: Section email.  Section106@quapawnation.com / specific responses directed to THPO.</p> <p>Method of contact for project notification and documentation: hard copy letter directly to THPO (post-pandemic) and email to Primary contact. In the meantime, continue email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Quapaw Nation</b></p> <p><u>Secondary:</u>  Joseph Byrd,  Quapaw Nation Chairman  PO Box 765  Quapaw, O.K. 74363-0765  joseph.byrd@quapawnation.com</p> <p>Follow guidance in letter. CC to Chairman</p>

<p><b>Sac and Fox Nation of Missouri in Kansas and Nebraska</b></p> <p><u>Primary:</u>  Historic Preservation Office  Sac and Fox Nation of Missouri in Kansas and Nebraska  920883 S. Hwy 99 Bldg A  Stroud, OK 74079</p> <p>Method of contact for project notification and documentation: address to Primary contact and email to Secondary Contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Sac and Fox Nation of Missouri in Kansas and Nebraska</b></p> <p><u>Secondary:</u>  Tiauna Carnes, Chair  305 N. Main Street  Reserve, KS 66434  <a href="mailto:tiauna.carnes@sacandfoxks.com">tiauna.carnes@sacandfoxks.com</a></p>
<p><b>Sac and Fox Nation of Oklahoma</b></p> <p><u>Primary:</u>  Mr. Jeremy Fincher , EPA Director  305 N. Main Street  Reserve, KS 66434  (918) 968-3526  <a href="mailto:jfincher@sacandfoxnation-nsn.gov">jfincher@sacandfoxnation-nsn.gov</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Sac and Fox Nation of Oklahoma</b></p> <p><u>Secondary:</u>  Kay Rhoads, Principal Chief  Sac and Fox Nation Administration Building  920883 S. Hwy 99 Bldg A  Stroud, Ok 74079  (918) 968-9526</p>
<p><b>Seminole Nation of Oklahoma</b></p> <p><u>Primary:</u>  Mr. Theodore Isham  THPO  Seminole Nation of Oklahoma  P.O. Box 1498  Wewoka, OK 74884  Telephone: (405) 257-7200  <a href="mailto:isham.t@sno-nsn.gov">isham.t@sno-nsn.gov</a></p> <p>Method of contact for project notification and documentation: email to Primary Contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Seminole Nation of Oklahoma</b></p> <p><u>Secondary:</u>  Principal Chief Greg Chilcoat  Seminole Nation of Oklahoma  P.O. Box 1498  Wewoka. OK 74884  Telephone: (405) 257-7200  <a href="mailto:principalChief@seminolenation.com">principalChief@seminolenation.com</a></p>

<p><b>Seminole Tribe of Florida</b></p> <p><u>Primary:</u>  Paul Backhouse, Ph.D., THPO  Seminole Tribe of Florida  Ah-Ta-Thi-Ki Museum  30290 Josie Billie Hwy, PMB 1004  Clewiston, FL 33440  (863) 983-6549 x12244  <a href="mailto:THPOCompliance@semtribe.com">THPOCompliance@semtribe.com</a>;  <a href="mailto:paulbackhouse@semtribe.com">paulbackhouse@semtribe.com</a></p> <p>Method of contact for project notification and documentation: email to <a href="mailto:THPOCompliance@semtribe.com">THPOCompliance@semtribe.com</a> and copy to Primary Contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Seminole Tribe of Florida</b></p> <p><u>Secondary:</u>  Marcellus W. Osceola, Chairman  Seminole Tribe of Florida  6300 Sterling Road  Hollywood, FL 33024  (954) 966-6300  <a href="mailto:trishanastrom@semtribe.com">trishanastrom@semtribe.com</a></p>
<p><b>Shawnee Tribe</b></p> <p><u>Primary:</u>  Ms. Tonya Tipton, THPO  PO Box 189  Miami, OK 74355  <a href="mailto:shawneetribe@shawnee-tribe.com">shawneetribe@shawnee-tribe.com</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Shawnee Tribe</b></p> <p><u>Secondary:</u>  Ron Sparkman, Chief  29 S Hwy 69A  Miami OK 74355  <a href="mailto:rondede1@gmail.com">rondede1@gmail.com</a></p>
<p><b>Thlopthlocco Tribal Town</b></p> <p><u>Primary:</u>  Terry Clouthier, THPO  PO Box 188  Okemah, OK 74859  (918) 560-6113  <a href="mailto:thpo@tttown.org">thpo@tttown.org</a></p> <p>Method of contact for project notification and documentation: email to Primary contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Thlopthlocco Tribal Town</b></p> <p><u>Secondary:</u>  Ryan Morrow, Town King  PO Box 188  Okemah, OK 74859  (918) 560-6198</p>

<p><b>Tunica-Biloxi Tribe of Louisiana</b></p> <p><u>Primary:</u>  Mr. Earl J. Barbry, Jr., THPO  Tunica-Biloxi Tribal Historic Preservation  Office  P.O. Box 1589  Marksville, LA 71351  Telephone: (318) 253-8174 x 6451  <a href="mailto:earlii@tunica.org">earlii@tunica.org</a></p> <p>Method of contact for project notification and  documentation: email to Primary Contact.</p> <p>Method of contact for other communication:  email, phone call</p>	<p><b>Tunica-Biloxi Tribe of Louisiana</b></p> <p><u>Secondary:</u>  Vice-Chairman Marshall Pierite  Tunica-Biloxi Tribe of Louisiana  151 Melancon Drive  Marksville, LA 71351  Telephone: (318) 253-1946  <a href="mailto:joeypbarbry@tunica.org">joeypbarbry@tunica.org</a></p>
<p><b>United Keetoowah Band of Cherokee Indians in Oklahoma</b></p> <p><u>Primary:</u>  Ms. Whitney Warrior, Environmental Services  &amp; Historic Preservation Director  PO Box 746  Tahlequah, OK 74464  <a href="mailto:wwarrior@ukb-nsn.gov">wwarrior@ukb-nsn.gov</a>  <a href="mailto:kpritchett@ukb-nsn.gov">kpritchett@ukb-nsn.gov</a>  Phone: (918) 871-2800 x2838</p> <p>Method of contact for project notification and  documentation: email to Primary contact.</p> <p>Method of contact for other communication:  email, phone call</p>	<p><b>United Keetoowah Band of Cherokee Indians in Oklahoma</b></p> <p><u>Secondary</u>  Chief Joe Bunch  PO Box 746  Tahlequah, OK 74464</p> <p>(918) 871-2800</p>

<p><b>SHPOS &amp; Other Non-Federal Organizations</b></p> <p><b>Advisory Council on Historic Preservation</b></p> <p><u>Primary:</u>  Christopher Daniel, Program Analyst  Advisory Council on Historic Preservation  401 F Street NW, Suite 308  Washington DC 20001-2637  (202) 517-0223  e106@achp.gov; <a href="mailto:cdaniel@achp.gov">cdaniel@achp.gov</a></p> <p>Method of contact for project notification and documentation: email to <a href="mailto:e106@achp.gov">e106@achp.gov</a> and copy to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Advisory Council on Historic Preservation</b></p> <p><u>Secondary:</u>  Aimee Jorjani, Chairman  Office of Federal Agency Programs  Advisory Council on Historic Preservation  401 F. Street NW, Suite 308  Washington, DC 20001-2637  (202) 517-0228  <a href="mailto:achp@achp.gov">achp@achp.gov</a></p> <p>Method of contact for project notification and documentation: email to <a href="mailto:e106@achp.gov">e106@achp.gov</a> and copy to Primary contact email.</p> <p>Method of contact for other communication: email, phone call</p>
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<p><b>Illinois Historic Preservation Agency</b></p> <p><u>Primary:</u>  Robert Appleman, Deputy SHPO  1 Old State Capitol Plaza  Springfield, IL 62701  shpo.review@illinois.gov</p> <p>Method of contact for project notification and documentation: email at <a href="mailto:shpo.review@illinois.gov">shpo.review@illinois.gov</a> cc as necessary.</p> <p>Archaeological Site Forms: Submit to via email:  archaeology.sitefiles@illinoisstatemuseum.org</p> <p>Reports: 2 Hard copies and 1 PDF on CD</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Illinois Historic Preservation Agency</b></p> <p><u>Secondary:</u>  Jeff Kruchten  Chief Archaeologist  Illinois State Historic Preservation Office  Attn: Review and Compliance  1 Old State Capitol Plaza  Springfield, Illinois 62701  (217) 785-1279  Jeffery.Kruchten@illinois.gov</p>
<p><b>Kentucky Heritage Council</b></p> <p><u>Primary:</u>  Christopher M. Gunn, Ph.D.  Archaeology Review Coordinator  The Barstow House  410 High Street  Frankfort, KY 40601  Telephone: (502) 892-3615  <a href="mailto:chris.gunn@ky.gov">chris.gunn@ky.gov</a></p> <p>Method of contact for project notification and documentation: Mail to Primary address, with KHC Coversheet; email to Secondary Contact for visibility.</p> <p>Archaeological Site Forms: Submit via email to Secondary Contact.</p> <p>Reports: PDF and hardcopy mailed to Primary Contact.</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Kentucky Heritage Council</b></p> <p><u>Secondary:</u>  Jennifer Ryall  Environmental Review Coordinator  The Barstow House  410 High Street  Frankfort, KY 40601  (502) 892-3619  <a href="mailto:jennifer.ryall@ky.gov">jennifer.ryall@ky.gov</a></p>

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<p><b>Mississippi Department of Archives and History</b></p> <p><u>Primary:</u>  Hal Bell  State Historic Preservation Office  Mississippi Department of Archives and History  Historic Preservation Division  P.O. 571  Jackson, Mississippi 39205-0571  Telephone: Office (601) 576-6957  <a href="mailto:hbelle@mdah.ms.gov">hbelle@mdah.ms.gov</a></p> <p>Method of contact for project notification and documentation: email at <a href="mailto:section106@mdah.ms.gov">section106@mdah.ms.gov</a> with a copy to the Primary and Secondary contact.</p> <p>Archaeological Site Forms: Submit to via email</p> <p>Reports: Hard copy and PDF on CD</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>Mississippi Department of Archives and History</b></p> <p><u>Secondary:</u>  Cindy Carter-Davis, Review and Compliance Officer  PO Box 571  Jackson, MS 39205-0571  Telephone(office): 601-576-6945  Telephone (cell): 601-307-0133  E-mail: <a href="mailto:ccarterdavis@mdah.ms.gov">ccarterdavis@mdah.ms.gov</a></p>



<p><b>MO State Historic Preservation Office</b></p> <p><u>Primary:</u>  Dr. Toni M. Prawl, Director  Section 106 Review  PO Box 176  Jefferson City, MO 65102-0176</p> <p>Method of contact for project notification and documentation: hardcopy mail to address of primary contact. During Pandemic (<a href="mailto:tempE106@dnr.mo.gov">tempE106@dnr.mo.gov</a> )</p> <p>Archaeological Site Forms: Submit to via email <a href="mailto:amy.rubingh@dnr.mo.gov">amy.rubingh@dnr.mo.gov</a></p> <p>Public Notice – <a href="mailto:MOSection106@dnr.mo.gov">MOSection106@dnr.mo.gov</a></p> <p>Reports: 1 Hard copy and PDF on CD</p> <p>Method of contact for other communication: email, phone call</p>	<p><b>MO State Historic Preservation Office</b></p> <p><u>Secondary:</u>  Amy Rubingh  Section 106 Review  PO Box 176  Jefferson City, MO 65102-0176</p>
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<b>U.S. Army Corps of Engineers (USACE) Districts</b>	
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<b>New Orleans District (CEMVN)</b>  <u>Primary</u> Jason A. Emery, Cultural Resources RTS and District Tribal Liaison CEMVN-PDS-N 4700 Leake Ave. New Orleans, LA 70118 (504) 862-2364 <a href="mailto:Jason.a.emery@usace.army.mil">Jason.a.emery@usace.army.mil</a>  Method of contact for project notification and documentation: email or receipt of hard copy  Method of contact for other communication: email, phone call	<b>New Orleans District (CEMVN)</b>  <u>Secondary:</u> Edward P. Lambert Chief, Environmental Compliance Branch Regional Planning and Environmental Division South, USACE 167 N. Main St., Room B-202, Memphis, TN 38103-1894 Telephone: Office (901)544-0707 Mobile (901) 634-2461 E-mail: <a href="mailto:Edward.P.Lambert@usace.army.mil">Edward.P.Lambert@usace.army.mil</a>
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## Appendix C: (Reserved)

## Appendix D: Programmatic Allowances

### Introduction

USACE has determined in consultation with the other Consulting Parties, that the Programmatic Allowances (Allowances) enumerated below no or minimal effect on historic properties, if implemented as specified in this Appendix. It is agreed by the consulting parties that the activities specified in the Allowances will not require review by the SHPO of Jurisdiction or Federally-recognized Tribe(s). Should a Post-Review Discovery, or discovery of Human Remains occur, work must stop and compliance with Stipulations IX and X is required.

The activities identified in Appendix A and those anticipated as part of any Co-location project can be divided into two (2) categories, and sub-divided into seven (7) project types.

Category 1: Work Items to address **seepage deficiencies** include construction of four (4) project Types:

1. Seepage Berms, are berms placed on the protected side of the levee to increase the weight of the soil and decrease its permeability thereby forcing seepage away from the toe of the levee. This technique requires the use of suitable borrow material from a close source.
2. Relief Wells, are relatively small wells placed near the toe of the protected side of the levee to capture the seeping water and pump/redirect it. This strategy uses existing drainage ditches as much as possible, but could require excavation of collector ditches, re-ditching, and/or hardening of ditches (e.g. rip-rap) to provide proper erosion control to account for the volume of captured water from the wells.
3. Slurry Trenches, are trenches excavated to a determined depth to stop levee under-seepage on the river side of the existing levee and filled with impervious materials or sheet piling. This activity typically requires temporary access roads, clearing and grubbing of the work area, deep excavation and stockpiling of materials.
4. Sheet Pile Cut-offs, involve the installation of a sheet pile cut-off wall within the existing levee section. This typically requires the construction of temporary access roads, clearing and grubbing of the levee, degrading of the levee to a certain elevation, installation of sheet pile, and reconstruction of the authorized levee profile.

Category 2: Work Items to address **levee deficiencies** include construction of three (3) project Types:

1. Floodwall Replacement, typically occurs in urban areas where there is little space to expand the footprint of a flood protection feature. This type of undertaking involves driving additional piles and tying those into the existing structure to ensure increased resistance to water loads, or the removal of the existing wall to place new floodwalls to meet the current design elevation, referred to as the authorized grade. While these undertakings typically have a smaller footprint than other activities to address grade deficiencies, they occur in areas with dense urban archaeological deposits and are more likely to affect NRHP-eligible or listed districts including National Historic Landmark Districts.
2. Levee Enlargement, involves raising the elevation of the top of the levee to its proper grade through the placement of suitable material. This technique requires clearing and grubbing, the use of suitable borrow material from close sources, and, typically, additional land side/protected site right-of-way to account for the additional widening or shifting of the centerline of the levee.
3. Slope Flattening, this activity goes beyond ordinary maintenance with the objective of reducing the slope of the levee by increasing the ratio of height to width of the levee profile along reaches of the levee with recurrent levee slides (e.g. moving from a 1:3 to a 1:5 ratio). This action typically requires clearing and grubbing, re-working of the damaged levee section, and, like the

Levee Enlargement, the addition of suitable borrow material from a close source, as well as increasing the right-of-way.

### **Allowances by Activity**

***Allowances can only be used by staff meeting the applicable SOI Professional Qualifications Standards in accordance with Stipulation VI. of this Agreement.*** In accordance with Stipulation VII.A, Undertakings composed entirely of work described by the Allowances do not require further Section 106 review.

- I. ADMINISTRATIVE ACTIONS:** USACE has determined that the following types of activities have limited or no potential to affect historic properties.
  - A. Monitoring, existing data gathering, or non-ground disturbing data gathering, and reporting in support of project design, internal QA/QC reviews such as, District Quality Control (DQC), Agency Technical Review (ATR), and the like.
  - B. Permissions for planning, studies, design and engineering costs that involve no commitment of resources other than staffing and associated funding.
  - C. Funding the administrative action of acquisition or lease of existing facilities where planned uses conform to past use.
- II. GROUND DISTURBING ACTIVITIES AND SITE WORK.** Project review should take into account the entirety of the proposed activities including staging, site access, site cleanup, and possible site work (e.g. grading for positive drainage, vegetation removal), and excavation of borrow material as potential ground-disturbing activities.
  - A. General. If a cultural resources survey to the current guidelines has been completed, consultation and concurrence with the SHPO of Jurisdiction and the Federally-recognized Tribe(s) has occurred (in the past 15 years or meets current state standards), the Civil Works feature is less than 50-years old, and no known eligible or unassessed historic properties are within the area of project activities, then the following activities can be proceed without further consultation. Otherwise standard Project Review per Stipulation VII.C., will apply.
    - 1. Relief Well construction.
    - 2. Seepage Berms
    - 3. Sheet Pile Cut-offs
    - 4. Slurry Trenches
    - 5. Flood Wall Replacement
    - 6. Levee Enlargements
    - 7. Slope Flattening
    - 8. Excavation of Borrow Material

- a. In addition to the specifics above, USACE will inspect the borrow site to ensure that the borrow material is not a mound or other cultural resource.
  - b. Alternative means of certifying a borrow area are: If it was included in a previous cultural resources review as part of a State Certification; or Present on Borrow Listing as maintained by the state of jurisdiction; or is in certified and in active use
- B. Haul Roads. This assumes NO timber clearing or other grubbing for new routes.
  - 1. Re-establishment, armoring, and/or minor upgrading of existing roadway ditches.
  - 2. In-kind repair or in-kind replacement of traffic control devices such as traffic signs or signals.
  - 3. Installation and removal of temporary traffic control devices, (e.g., pre-formed concrete barriers and fencings).
  - 4. In-kind repair or in-kind replacement of roadway safety elements such as barriers, guardrails, and impact-attenuation devices. In the case of guardrails, the addition of safety end treatments is permitted.
  - 5. Enhancement of existing utilized roadway corridors, with gravel and other road surfaces.
  - 6. Transportation of borrow Material to Work Items via existing or enhanced roadways.

### **III. STANDING STRUCTURES.**

- A. Demolition activities related to the removal of buildings or structures less than forty-five (45)-years of age (construction date as noted in the project documentation, or by the NFS, or by a photograph/site visit) so long as the demolition activity is substantially limited to the existing footprint and vertical disturbance and the buildings or structures are not located within or adjacent to a National Register-listed or eligible historic district or within five hundred (500) feet of a known eligible or unassessed archaeological site or cemetery. Project review should take into account the entirety of the proposed activities including staging, site access, site cleanup, and possible site work (e.g. grading for positive drainage, vegetation removal), and excavation of borrow material as potential project activities, additionally documentation of an existing cultural resources survey to the current guidelines and subsequent consultation and concurrence with the SHPO of Jurisdiction and the Federally-recognized Tribe(s) (in the past 15 years or meeting current state standards), otherwise standard Project Review per Stipulation VII.C., will apply.

## Appendix E: Treatment Measures

As provided in Stipulation VII C. 7, if an Undertaking may adversely affect a historic property, USACE may propose to resolve the adverse effect through the application of one or more of the Treatment Measures set out below. The selected measures will be developed by USACE after discussions with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, and will be documented in writing (in a Treatment Plan). USACE will provide the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, with the opportunity to concur on the proposed Treatment Measures as set out in VII.C.7.A.3.

The Treatment Plan shall identify, at a minimum and as appropriate: the responsible party/entity that will implement and complete each treatment measure; the scope of work and the standards that will apply to the preparation and distribution of a deliverable; the deliverable(s) (e.g. the quantity, approximate size, materials, content, final ownership/copyrights); measures to ensure that any treatment measure documenting the condition of or requiring the data recovery on the historic property is implemented before the property is adversely affected; any professional qualifications that will be required to prepare deliverable(s) described in the Treatment Measure(s); the repositories and/or parties that will receive copies of a deliverable and the disposition of any deliverable that is not curated; points when USACE, NFS, agent or contractor, SHPO/THPO, and/or Federally-recognized Tribes, and other consulting parties, as appropriate, will be given the opportunity to review and comment on the deliverable; and timeframes for each review and deliverable.

USACE will provide written notice to the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, within sixty (60) days of the completion of the Treatment Measures as required by Stipulation VII. C.7. USACE shall include information pertaining to the progress of and completion of all Treatment Measures in the annual report pursuant to Stipulation III. A. 16. USACE Roles and Responsibilities.

Any dispute regarding the implementation of a Treatment Plan will be resolved following the process set out in Stipulation XI, Dispute Resolution.

This Appendix may be amended in accordance with the process set out in Stipulation XIII B. of this Agreement for amending appendices.

**\*\*Reminder\*\*** should there be human remains associated with/anticipated during implementation of a Treatment Plan, review Stipulation IX Treatment of Human Remains to ensure accepted protocols are followed.

If USACE, in consultation with the SHPO of jurisdiction, Federally-recognized Tribes, and other consulting parties, determines that a treatment measure, including Alternative Mitigation\*, *not included* in the list below is in the public interest and is the most appropriate means to resolve an adverse effect, USACE will initiate consultation to develop an MOA or a Programmatic Agreement as set out in Stipulation VII.C.7 (b) or (c).

\*Alternate Mitigation means something alternative to either the location or the action that is agreed to be a meaningful offsetting of the adverse effects. Easy examples are for survey of lands unaffected by the project in exchange for no mitigation/data recovery for the specified archaeological site. Agencies have a difficult time justifying the funding for these actions, unless it can clearly be demonstrated to be in the public interest.

## List of Treatment Measures:

1. **PHOTOGRAPHIC RECORDATION:** USACE, in consultation with the SHPO of jurisdiction, and/or, Federally-recognized Tribe(s), and other consulting parties, will select the photographic medium or mediums from the options described below and identify a list of photographs that will serve to document the historic property that will be adversely affected by an Undertaking. The photographic specifications set out below were previously determined by USACE, in consultation with the appropriate SHPO, to meet archival standards and are provided for guidance. Photographic images may include existing drawings and plans. If the parties determine that it is in the public interest to document a property through the preparation of measured drawings, USACE will initiate consultation to develop an MOA.
- A. **Recordation for Standing Structures (Flexible Standards):** The responsible entity will **ensure that a trained professional** photograph the exterior and/or interior, if it is accessible, in the selected photographic format(s) with an emphasis on documenting those portions of the exterior and/or interior that will be altered. The trained professional will take photographs of the views identified by USACE, in consultation with the NFS, agent or contractor, SHPO of Jurisdiction, and/or Federally-recognized Tribe(s), and other consulting parties, as appropriate, and will print specifically identified images
  1. Digital Photography: The digital photography and color photographs must comply with the “Best” category of requirements from the National Register Photo Policy Fact Sheet:  
[http://www.nps.gov/nr/publications/bulletins/photopolicy/Photo\\_Policy\\_update\\_2013\\_05\\_15.pdf](http://www.nps.gov/nr/publications/bulletins/photopolicy/Photo_Policy_update_2013_05_15.pdf), with the following additional requirements:
    - Image files must be saved as both TIFF and JPEG files.
    - Color images must be produced in RGB (Red/Green/Blue) color mode as 24-bit or 48-bit color files.
    - In addition to the requirements specified by the latest National Register Photo Policy, photographs will be digitally labeled to state the address (name of facility, street number, street name, city, and state); date of photograph; description of view, including direction of camera; and name of photographer/agency.
  2. 35mm Black/White and Color Photography: Photographs must be taken with a 35MM SLR Camera or a 35 MM point-and-shoot camera using 35 MM black/white or color film. Photographs taken with disposable cameras are not acceptable.
    - The 35 mm film black/white or color film photography package will include one (1) full set of 35mm film black/white or color photographs printed on acid free paper specifically designed for color prints, the corresponding 35mm film negatives in acid free sleeves.
    - Photographs will be labeled in pencil on the back to state the address, name of facility, street number, street name, city, and state; date of photograph; description of view, including direction of camera; and name of photographer/agency.
  3. Large Format Photography: Photographs must be taken with a large-format view camera with ample movement for perspective correction. The minimal complement of lenses includes a sharp rectilinear wide angle, a normal, and a mildly telephoto lens.
    - Acceptable film formats are 4x5, 5x7, and 8x10. Acceptable polyester-based films include those of medium and slow speed (100 and 400 ASA) produced by Kodak, Ilford, and others.



- The large format film photography package will include one (1) full set of 4 x 5 or 5 x 7-inch photographs printed on acid free paper, the corresponding 4 x 5 or 5 x 7-inch negatives in acid free sleeves.
  - Photographs will be labeled in pencil on the back to state the address name of facility, street number, street name, city, and state; date of photograph; description of view, including direction of camera; and name of photographer/agency.
4. Video: A video documentary regarding the historic property may include on-camera interviews, archival footage and/or images, current footage of the historic property, and current footage of other similar historic properties. The content and length of the video will be described in the treatment measure.
  5. Narrative History: A narrative history may be prepared to provide a context for the photographs following the Historic American Building Survey (HABS) Historical Reports: Short or Outline format.
  6. Recordation Package: The recordation package will include a photo log, printed copies of selected photographs, digital copies of photographs, and may include a narrative history. The recordation package may include reproductions of historic photographs, existing building plans, contemporary sketch plans, and/or maps. All materials will be packaged in archival sleeves and boxes. Archival disks will be used for all digital materials.
  7. Review: The responsible entity may informally consult with USACE and SHPO, and/or Tribe(s) to select photographs and other images that will be included in the recordation materials. The process to review and finalize the photographs and other images will be described in the treatment measure.
  8. Distribution: The responsible entity will prepare a minimum of three archival quality copies of the recordation materials and will forward two copies to SHPO of jurisdiction and one copy to the U.S. Army Corps of Engineers, Office of History, Humphreys Engineer Center. In consultation with the NFS, SHPO of jurisdiction, and/or Federally-recognized Tribe(s), and other consulting parties, as appropriate, may identify additional archives and/or parties that will receive copies of the recordation materials. The responsible entity will provide USACE with documentation confirming that the recordation materials have been archived as described in the treatment measure.

**B. Recordation for Standing Structures (Established Standards):** The treatment plan will document the proposed Level and Standard that will be most appropriate to capturing the significance of the historic property prior to alteration and define the responsible entity. Choices will be made between the **Historic American Building Standards (HABS)**, the **Historic American Engineering Standards (HAER)**; or the **Historic American Landscape Standards (HALS) at Level III, Level II or Level I**. During the development of the Treatment Plan USACE will coordinate with the NPS, SHPO of jurisdiction and appropriate Federally-recognized Tribe(s), as necessary to make the selection. For any project requiring recordation to any of these standards, USACE will ensure that a trained professional photograph the exterior and/or interior, if it is accessible, in the selected standard with an emphasis on documenting those portions of the historic property that will be altered or demolished. The trained professional will take photographs of the views identified by USACE, in consultation with the NFS, SHPO of jurisdiction, and/or the appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, and will print specifically identified images and produce the required historical narrative:

## **2. Public Interpretation**

USACE, and/or the NFS shall consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, to design an educational or public interpretive plan. The educational or public interpretive plan may include historical markers, signs, displays, educational pamphlets, websites, workshops, videos, and other similar mechanisms to educate the public on historic properties within the local community, state, or region. In certain instances the SHPO of jurisdiction may request that the proposed historical marker conform to the requirements of the state in question, and request that the NFS apply to state programs to provide for a uniform interpretive program.

## **3. Historical Context Statements**

USACE, and/or the NFS shall consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate to identify the topic; audience; framework of a historic context statement; and format for the final deliverable. The context statement may focus on an individual property, a historic district, a set of related properties, or relevant themes as identified in the specific statewide preservation plan or the National Park Service's National Historic Landmark Thematic Framework.

## **4. Oral History Documentation**

USACE, and/or the NFS shall consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, to identify the list of potential interview candidates; the parameters of the oral history project; qualifications of the individual or individuals conducting the oral interviews; the process for any ongoing coordination with the appropriate SHPO and relevant Tribe(s); and format for the final deliverable.

## **5. Historic Property Inventory**

USACE, and/or the NFS shall consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, to establish the appropriate level of effort to accomplish an inventory/re-inventory. Efforts may be directed toward the resurvey of previously designated historic properties, per 36 CFR 800.16(l), which have undergone change or lack sufficient documentation, or the survey of new historic properties and/or districts that lack formal designation. The proposed treatment measure will describe the boundaries of the survey area and the data collection method in keeping with the SHPO of jurisdiction's guidance for surveys and define the survey objective.

## **6. National Register and National Historic Landmark Nominations**

USACE, and/or the NFS shall consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, to identify the individual properties that would benefit from a completed National Register of Historic Places (NRHP) or National Historic Landmark (NHL) nomination form. Once the parties have agreed to a property, the responsible entity will continue to coordinate with USACE, the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, through the drafting of the NRHP nomination form or will contact the NHL Program to begin the nomination process. The SHPO of jurisdiction and/or Federally-recognized Tribe(s) will provide adequate guidance to the responsible entity during the preparation of the nomination form. The responsible entity will work

with the SHPO of jurisdiction to ensure the completed NRHP form is presented to the particular state's National Register Review Committee in a timely manner for consideration by the State Historic Preservation Officer and the Keeper of the Register.

## **7. Geo-References of Historical Maps and Aerial Photographs**

USACE, and/or the NFS shall consult with the SHPO of jurisdiction, appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, to identify the historical maps and/or aerial photographs for scanning and geo-referencing. Once a list of maps and/or aerial photographs have been agreed upon, the responsible entity will continue to coordinate with USACE, the appropriate SHPO, Tribe(s), and other consulting parties, SHPO, and/or Tribe(s), and other consulting parties, as appropriate, through the scanning and geo-referencing process and will submit drafts of paper maps and electronic files to USACE, the appropriate SHPO, Tribe(s), and other consulting parties, SHPO, and/or Tribe(s), and other consulting parties, as appropriate, for review. The final deliverable produced by the responsible entity will include a 1) paper copy of each scanned image, 2) a geo-referenced copy of each scanned image, 3) original high-resolution digital image of map/aerial photograph in TIFF file format, 4) copies of the user agreements for every geo-referenced image with transferability of use to all parties, 5) a process report outlining the research, and 6) the metadata relating to both the original creation of the paper maps and the digitization process.

## **8. Archaeological Research Design and Data Recovery Plan**

USACE shall develop and implement a data recovery plan with a research design in consultation with the SHPO of jurisdiction, appropriate Federally-recognized tribe(s), and other consulting parties, as appropriate, to recover data from archaeological properties listed in, or eligible for listing in the NRHP, which will be adversely affected by ground-disturbing activities that are part of the Undertaking. The research design and data recovery plan will be consistent with the Secretary of the Interior's Guidelines for Archaeological Documentation ([http://www.nps.gov/history/local-law/arch\\_stnds\\_7.htm](http://www.nps.gov/history/local-law/arch_stnds_7.htm)) ACHP's recommendations on the recovery of significant information from archaeological sites. <http://www.achp.gov/archguide.html>. All work shall conform to the most current guidelines per the SHPO of jurisdiction and as augmented by Federally-recognized Tribal or other local guidelines, as provide in Stipulation VI. Standards, and, if applicable, Stipulation IX. Treatment of Human Remains and Items of Religious and Cultural Importance.

## **9. Marketing Plan for Demolition or Abandonment**

USACE, and/or the NFS shall consult with the SHPO of jurisdiction, appropriate Federally-recognized tribe(s), and other consulting parties, as appropriate, to develop and implement a feasible marketing plan to advertise the availability of historic structures identified for demolition or abandonment for sale and/or relocation. A good faith and reasonable marketing plan will include publicizing and advertising the property in newspapers, magazines, and/or websites of record for a specific period of time. The plan may require the purchaser to relocate the property outside of the Special Flood Hazard Area (100-year floodplain), and the plan will give preference to a purchaser who proposes to use a professional house mover that follows the recommendations in Moving Historic Buildings by John Obed Curtis (1975, reprinted 1991 by W. Patram for the International Association of Structural Movers) or other similar updated reference material. If a good faith and reasonable marketing effort does not result in the identification of a party or parties willing to purchase and, if necessary, relocate the property, the property may be demolished or abandoned. This marketing plan will be used in conjunction with Treatment Measure I, Recordation Package. USACE will ensure that the property is recorded prior to relocation or demolition.

## **10. Salvage**

The NFS or contractor shall work with USACE, the SHPO of jurisdiction, and/or appropriate Federally-recognized Tribe(s), and other consulting parties, as appropriate, to identify selective architectural elements that may be salvaged from a building/structure slated for demolition. The elements will be removed at the agent or contractor's expense. The salvaged elements may be re-used in another structure or in displays for educational purposes. As an alternative, the agent or contractor, in consultation with USACE, NFS, SHPO, and/or Tribe(s), and other consulting parties will attempt to identify a private or public not-for-profit local or regional historic preservation organization interested in receiving a donation of the architectural features. The organization may sell the architectural features to the general public for the specific purpose of raising funds to support future historic preservation activities in the region. . Any income derived by the agent or contractor from the sale of architectural features may be considered project income by the program to be deducted from proceeds of the grant. Salvage activities shall not occur at or below grade in order to avoid affecting unevaluated archaeological resources.

## **11. Assessment and Reduction of Vibratory Affects**

USACE, and/or the NFS shall consult with the SHPO of jurisdiction, appropriate Federally-recognized tribe(s), and other consulting parties, as appropriate, to develop and implement a feasible vibratory reduction strategy. The plan will follow the best practices outlined in NCHRP 25-25, *Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects* (2012) or similar. Generalized steps are the following: 1) Consultation between historic building owner, Project Delivery Team and reviewing agencies such as SHPO and local planning departments to identify potential risks, negotiate changes and agreement on protective measures. 2) Documentation of the condition of the building prior to commencement of adjacent work, including a detailed photo survey of existing damage as specified in the particular treatment plan. 3) Establishment of vibration limits not to be exceeded based on condition of building, founding soil conditions, and type of construction vibration. 4) Implementation of protective measures at both the construction site and the historic building, which could include specific means and methods to be used and those that will not be used and as specified in the BCOES. 5) Implement regular monitoring during construction to identify damage, evaluate the efficacy of protective measures already in place and to identify and implement additional corrective steps. The results of any implemented plan will be shared with the consulting parties to the particular adverse effect and summarized in the annual plan.