

**MEMORANDUM OF AGREEMENT
AMONG**

**THE U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT;
THE ILLINOIS STATE HISTORIC PRESERVATION OFFICE;
THE KENTUCKY STATE HISTORIC PRESERVATION OFFICE;
THE OSAGE NATION; AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION**

**REGARDING
THE OLMSTED LOCK AND DAM PROJECT
MCCRACKEN AND BALLARD COUNTIES, KENTUCKY
AND MASSAC AND PULASKI COUNTIES, ILLINOIS**

WHEREAS, the U.S. Army Corps of Engineers, Louisville District (Corps) constructed the Olmsted Lock and Dam (Olmsted) to replace Ohio River Locks and Dams 52 and 53 (L&D 52 and 53), Massac and Pulaski Counties, Illinois and McCracken and Ballard Counties, Kentucky; and, now that Olmsted is operational, the Corps intends to demolish the Marine Elements of L&D 52, complete the demolition of the Marine Elements of L&D 53 and transfer or demolition of the land-based elements at L&D 52 and 53; and

WHEREAS, the Corps has determined that the Land and Marine elements at L&D 52 and 53 are eligible for listing in the National Register of Historic Places (NRHP) under Criteria A and C; and

WHEREAS, the undertaking consists of the operation of Olmsted, the demolition of the marine elements at L&D 52 and 53, transfer of the land-based elements or demolition of them if they cannot be transferred to an appropriate entity; and

WHEREAS, the Corps previously executed a Memorandum of Agreement (MOA) for the removal of the Marine Elements of L&D 53 due to the imminent nature of the safety hazard, created by its continued presence and L&D 53 has been partially demolished; and

WHEREAS, the Area of Potential Effects (APE) for the purposes of this MOA is defined as all fee held land at Olmsted, all fee held land at L&D 52 and 53 to include both the Land and Marine Elements at L&D 52 and the Land Elements at 53 (see Appendix A for complete APE description); and

WHEREAS, the Corps has determined that demolition of the Marine Elements of L&D 52 and the potential demolition of the Land Elements at L&D 52 and 53 will have an adverse effect upon NRHP-eligible properties; and

WHEREAS, the Corps has consulted with the Illinois State Historic Preservation Officer (IL-SHPO) and the Kentucky State Historic Preservation Officer (KY-SHPO) in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (54 USC 306108: Historic Preservation (formerly 16 U.S.C. 470f) and its implementing regulations [36 C.F.R. 800.6(b)(1)] to resolve the adverse effect of the Undertaking on historic properties; and

WHEREAS, the communities of Brookport, Metropolis, and Olmsted, Illinois together with the Olmsted Historical Society (OHS), the River Discovery Center (RDC), Landmarks Illinois, and the Clermont County Park District (CCPD) also participated in the consultation and have been invited to concur in this MOA; and

WHEREAS, the Corps understands that Olmsted, and L&D 52 and 53 are located within a section of the Ohio River that encompasses the water route of the Trail of Tears and the removal route of the Miami Nation; and

WHEREAS, The Corps recognizes the sovereign status of Federally-recognized Tribes (Tribes) and the government-to-government relationship between the Corps and those Tribes which may attach religious and cultural significance to historic properties on lands managed by the Corps; and

WHEREAS, the Corps recognizes the Tribes' unique expertise with respect to their cultural resources, including Traditional Cultural Properties (TCP), properties of traditional religious and cultural importance, Sacred Sites, and human remains and associated cultural items; and

WHEREAS, properties of traditional religious and cultural importance to a Federally-recognized Tribe may be determined to be eligible for inclusion on the National Register (54 USC § 302706(a)); and

WHEREAS, in carrying out its responsibilities under 54 U.S.C § 306108, a Federal agency shall consult with any Federally-recognized Tribe that attaches religious and cultural significance to historic properties (54 USC § 302706(b)); and

WHEREAS, the Corps recognizes that inadvertent discoveries of cultural resources, historic properties, human remains, and graves of significance and concern for Tribes may occur during the Undertaking; and

WHEREAS, the Corps understands that respectful treatment of human remains and funerary objects is a paramount concern and will ensure that the views of living descendants and the Tribes are fully considered in the decision-making process; and

WHEREAS, nothing in this MOA alters, amends, repeals, interprets, or modifies Tribal sovereignty, any treaty rights, or other rights of a Federally-recognized Tribe, or preempts, modifies, or limits the exercise of any such rights; and

WHEREAS, the Absentee Shawnee Tribe, the Cherokee Nation, the Delaware Nation, the Miami Tribe, the Osage Nation, and the Ponca Tribe have been consulted on the development of the MOA; and

WHEREAS, as described in 36 C.F.R. § 800.6, the Corps, the KY-SHPO, the IL-SHPO, and the Advisory Council on Historic Preservation (ACHP) are Signatories to this MOA, and the Osage Nation has requested and been granted Invited Signatory status; and

WHEREAS, the Absentee Shawnee Tribe, the Cherokee Nation, the Delaware Nation, and the Ponca Tribe are therefore recognized as Concurring parties for development of this MOA; and

WHEREAS, the Miami Tribe of Oklahoma has chosen not to be an Invited Signatory or Concurring Party to this MOA but retains all legal rights under Section 106 of the NHPA to be notified and consulted with regarding inadvertent discoveries of human remains and/or properties to which the Miami Tribe of Oklahoma attaches religious or cultural significance; and

WHEREAS, in accordance with 36 C.F.R. § 800.6(a)(1), the Corps has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation, and the ACHP has chosen to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

NOW, THEREFORE, the Corps, the ACHP, IL-SHPO, the KY-SHPO, and the Osage Nation agree that the project shall be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties.

Stipulations

The Corps, subject to receiving funds appropriated by the Congress of the United States, shall provide project funds for fulfilling mitigation requirements. The Corps shall ensure that the following measures are carried out:

I. RECORDATION

A. Recordation of L&D 52 Marine Elements and History of L&D 52 Land-Based Elements

1. The Corps shall provide, or contract with a cultural resources consultant that meets or exceeds the Secretary of the Interior's Standards for Professional Qualification, to document the demolition of the Marine Elements of L&D 52 through digital photography.

Photo documentation shall include prints from digital images showing the marine structural elements pre-demolition, demolition of the marine elements as it occurs, post-demolition views, and views of the surrounding environmental setting. The Corps shall print a set of black and white prints on archival quality, acid-free paper and label each photograph with the resource name, specific element, and direction in pencil or archival pen. A digital copy of the photographs and the photograph log shall be saved on a compact disc (CD).

- a. The Corps shall distribute copies of the above material to the entities listed in Appendix B.
2. Additionally, in order to preserve a record of L&D 52's history, the Corps shall, within twelve (12) months of the execution of the MOA:
 - a. Review/update as needed the Illinois Architectural and Historical Survey Form and the Kentucky Historic Resources Individual Survey Form (KHC 91-1) for L&D 52;
 - b. Create a catalog of scanned photographs from the initial construction of L&D 53 and its demolition providing date, photo direction and subject when available;

- c. Make copies of the available as-builts for L&D 52; and
- d. Distribute copies of the above items to the entities listed in Appendix B. The entities will be provided with a CD with digital copies of the items.
- e. Certain entities listed in Appendix B have requested specific items for display. The Corps will provide the items, which are also listed in Appendix B, to the requesting entity, if possible. Additionally, the Corps shall prepare a list of salvageable items available for excessing and provide it to the OHS, the CCPD, and RDC within three (3) months of execution of the MOA. The list shall be provided to the CCPD, OHS, and RDC in pdf format.

B. Monitoring of Demolition L&D 52 Marine Elements

1. Tribal Monitoring.

- a. If the consulting Federally-recognized Tribes request that a Tribal monitor be present for the ground-disturbing activities conducted as part of the proposed removal of the Marine Elements of L&D 52 , the Corps shall provide funds for travel, food, and lodging for the duration of ground-disturbing activities for one monitor agreed upon by the consulting Federally-recognized Tribes. Each of the Federally-recognized Tribes shall provide written documentation to the Corps stating its decision with regard to the conduct of the Tribal monitoring.
- b. The Osage Nation Tribal monitor will provide the Osage Nation Historic Preservation Office Director/Tribal Historic Preservation Officer with daily reports detailing the work observed, the location of the observed work, cultural material observed during the monitoring, the status of the construction, and recommendations for the continuance and performance of the monitoring. The Osage Nation Historic Preservation Office Director/Tribal Historic Preservation Officer will then provide the Corps and Federally-recognized Tribes with the daily reports. Copies of the Tribal daily monitoring reports will be provided exclusively to the Corps and Federally-recognized Tribes. Distribution of the reports to another party or parties may occur with the written consent of the Federally-recognized Tribes.
- c. The Corps will safeguard information about historic properties of religious and cultural significance to the Federally-recognized Tribes, including location information, or non-public information provided by the Tribes to assist in the identification of such properties, to the extent allowed by the provisions of the Freedom of Information Act, Section 304 of the NHPA (54 USC § 307103), and other applicable laws. If dispute arises over the propriety of the Corps' actions, the matter will be brought to the attention of the ACHP under Section 36 CFR § 800.9(a).

C. Recordation of Above-Ground Elements at L&D 52 and 53.

1. The Corps shall complete, or contract with a cultural resources consultant that meets or exceeds the Secretary of the Interior's Standards for Professional Qualification, to complete Historic American Building Survey/Historic American Engineering Record (HABS/HAER) Level II documentation of the above-ground elements at L&D 52 and 53. Documentation shall include:

- a. Photographs of existing drawings, where available, with large-format negatives, or photographically reproduced on Mylar.
- b. Photographs with large-format negatives of exterior and interior views of all above-ground elements.
- c. A report describing the structures and detailing their history.

2. If the draft documentation is prepared by a consultant, the consultant shall submit the completed HABS/HAER document package to the Corps within sixty (60) days of completion of fieldwork. The Corps will then submit the draft documentation to the ILSHPO and the KYSHPO for review. If the documentation is prepared by the Corps, the Corps will submit the draft documentation to the ILSHPO and KYSHPO for review and comment.

- a. The ILSHPO and KYSHPO shall provide comments on the draft documentation to the Corps within thirty (30) days of receipt of the documentation package.
- b. The Corps shall distribute copies of the documentation to the entities listed in Appendix B.

II. ADDITIONAL MITIGATION

A. The Corps shall produce, or contract with a cultural resources consultant, that meets the Secretary of the Interior's qualifications, to produce a book detailing the history of L&Ds 52 and 53 from construction to removal. This history shall also highlight the life of workers and their families who resided at the locks and dams. The Corps shall provide one copy of this publication to the MOA Signatories/concurring parties, regional libraries, historical organizations and other public repositories.

1. The Corps in consultation with the ILSHPO and KYSHPO shall prepare a scope of work for the book that shall, at a minimum, address the primary focus of the book, a draft schedule of milestones for book production, and number of copies to be published. Based on consultation with ILSHPO and KYSHPO, the Corps shall

prepare the SOW and submit it to IL and KY SHPOS. The ILSHPO and KYSHPO shall provide comments to the Corps within thirty (30) days of receipt of the scope.

2. The Corps shall submit the draft copy of the book to the ILSHPO and KYSHPO for review and comment. The ILSHPO and KYSHPO shall provide comments to the Corps within thirty (30) days of receipt of draft.

B. The United States Congress has not authorized the Corps to directly dispose of the L&D 52 and 53 property and structures, therefore, they shall be disposed of through the Government Services Administration (GSA) process. In recognition of the historical significance of L&D 52 and 53 as the last remaining facilities associated with 1920s era wicket dams on the Ohio River, the Corps shall accept statements of interest from organizations for the preservation and rehabilitation of the land-based structures and property at L&D 52 and 53. The statements of interest comply with the following stipulations:

1. All statements of interest must be submitted to the Corps within 30 days of the execution of the final Olmsted Project MOA. The Corps shall notify potential interested parties via email that the MOA has been executed.

2. The statement of interest should detail the structure(s) and/or property in which the organization has an interest. It must also acknowledge that the structure(s) and/or property shall be accepted "as-is."

3. Any rehabilitation or adaptive reuse of the structures at L&D 52 and/or 53 shall be conducted in accordance with the Secretary of Interior Standards for historic building rehabilitation.

4. Statements of interest must demonstrate knowledge and understanding of the Secretary of Interior's standards.

The Corps shall provide all statements of interest to the GSA for use in their disposal process. All organizations submitting statements of interest shall be notified in writing when the statements are submitted to the GSA.

III. TREATMENT OF HUMAN REMAINS AND ITEMS OF RELIGIOUS AND CULTURAL IMPORTANCE

The Corps shall enforce the following stipulations until such time as the subject property is transferred from Federal ownership.

- A. If human remains, funerary objects, sacred objects, burial furniture, or objects of cultural patrimony are encountered during project field investigations or construction activities, the Corps will comply with all provisions outlined in Section III-C of this MOA.

The Corps will ensure that consultation with appropriate Federally-recognized Tribes for any human remains, funerary objects, sacred objects, or objects of cultural patrimony recovered from Federal lands will occur as promulgated by the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA).

- B. If items of religious and cultural importance to any of the Federally-recognized Tribes are encountered or collected, the Corps will comply with all provisions outlined in the appropriate Federal acts, statutes, guidance, provisions, etc. and any decisions regarding the treatment of items of religious and cultural importance will be made in consultation with the Federally-recognized Tribes.

- C. Plan for Inadvertent Discoveries of Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony.

In the case of an inadvertent discovery of human remains, funerary objects, sacred objects or objects of cultural patrimony, the Corps will follow the procedures outlined by NAGPRA (43 CFR § 10, Subpart B), the Archeological Resources Protection Act of 1979 (43 CFR § 7), and as otherwise stipulated herein.

1. Any contractor or applicant or their agents, representatives, or employees who knows or has reason to know that he or she has discovered inadvertently human remains, funerary objects, sacred objects, or objects of cultural patrimony must immediately notify the Corps by phone of the inadvertent discovery.
2. Upon encountering human remains, funerary objects, sacred objects items of cultural patrimony, or funerary objects during ground disturbing activities, the Corps will ensure that the construction contractor immediately stops work within a forty-five (45) meter radius buffer zone around the point of discovery. The Corps will assume responsibility for implementing additional measures, as appropriate, to protect the discovery from looting and vandalism until the requirements of NAGPRA have been completed, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.

3. The Corps will comply with IL and/or KY state laws as appropriate regarding notification of local law enforcement of the discovery of unmarked human remains or funerary objects and shall accompany local law enforcement personnel, as appropriate, during field investigations. If the law enforcement official determines that the remains are not involved in a legal investigation, the Corps shall implement NAGPRA protocol
4. The Corps will notify the Federally-recognized Tribes within forty-eight (48) to seventy-two (72) hours of the discovery of human remains, funerary objects, sacred objects, items of cultural patrimony, or burial furniture. This step is not intended to satisfy the requirements of 43 CFR § 10.4(d)(iii).
5. Concurrently, the Corps will notify the IL-SHPO and the KY-SHPO by telephone and email within forty-eight (48) to seventy-two (72) hours of the discovery of human remains or funerary objects and inform them of the steps already taken to address the discovery. If the law enforcement official determines that the remains are not involved in a legal investigation, the Corps shall implement Native American Graves Protection and Repatriation Act (NAGPRA) protocol.
6. The Corps will take immediate steps, if necessary, to further secure and protect inadvertently discovered human remains, funerary objects, sacred objects, or items of cultural patrimony, including, as appropriate, stabilization or covering with natural material such as canvas tarps.
7. Other than for crime scene investigation, no intentional excavation, examination, photographs, public access, publicity, or analysis of human remains suspected of being Native American, funerary objects, sacred objects, items of cultural patrimony, or burial furniture will be conducted by the Corps archaeologists or any other professional without first consulting with the Federally-recognized Tribes and securing permission from the Federally-recognized Tribes.
8. The Corps archaeologist, in consultation with the IL-SHPO and the KY-SHPO, as appropriate, and the Federally-recognized Tribes, will have seven (7) working days to determine if the skeletal remains are human, the degree to which they were disturbed, and, if possible, assess their potential age, cultural affiliation, and identity, if possible, without any further disturbance. Upon making their determination or at the end of the seven (7) days, whichever comes first, the Corps will notify the IL-SHPO, KY-SHPO, the ACHP, and the Federally-recognized Tribes of its findings. This notification must include pertinent information as to kinds of human remains, funerary objects, sacred objects, or items of cultural patrimony discovered inadvertently, their condition, and the circumstances of their inadvertent discovery.
9. The IL-SHPO and the KY-SHPO, as appropriate, and the Federally-recognized Tribes will have seventy-two (72) hours to respond verbally followed by written

response via U.S. mail and electronic mail. The response should specify each entity's intention to conduct or decline further consultation.

10. The Corps will consult with the Federally-recognized Tribes or identified lineal descendant regarding additional measures to avoid and protect or mitigate the adverse effect of the project on the human remains and grave site. These measures may include:
 - a. formal archaeological evaluation of the site;
 - b. visits to the site by the interested Federally-recognized Tribes;
 - c. exploration of potential alternatives to avoid the human remains or grave; and
 - d. development and implementation of a mitigation plan by the Corps in consultation and concurrence with the Federally-recognized Tribes, including procedures for disinterment and re-interment.
11. The Corps, in consultation with the Federally-recognized Tribes and other interested parties such as living descendants, may consult with a qualified physical anthropologist, forensic scientist, or other experts as may be needed to examine and assess the inadvertent discovery. Unless the remains were inadvertently removed, the evaluation will be conducted at the site of discovery. The consulting expert will be allowed to draw and measure the exposed remains and associated funerary objects. No photographs or digital images will be permitted. Drawings and other records will be curated at a State-approved curation facility in the state of discovery. Drawings cannot be published in any form or shown as part of scholarly presentations without the written permission of the affiliated Federally-recognized Tribe or nearest living descendant.
12. A report of findings describing the background history leading to and immediately following the reporting and resolution of an inadvertent discovery will be prepared in consultation with consulting Federally-recognized Tribes. This report must meet the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (49 FR 44716) guidelines. Each report will be distributed to the IL-SHPO and KY-SHPO, as appropriate, and the Federally-recognized Tribes.

IV. POST-REVIEW DISCOVERY

The Corps will communicate the procedures to be observed under Parts A and B of this section to all pertinent personnel and construction contractors and shall enforce the following stipulations until such time as the subject property is transferred from Federal ownership.

A. Plan for Unanticipated Discoveries of Cultural Resources and Historic Properties.

1. The construction contractor shall immediately stop all work activity within a forty-five (45) meter radius buffer zone. The Corps will notify the IL-SHPO, the KY-SHPO, the ACHP, Federally-recognized Tribes, and other consulting parties, as appropriate, of the discovery and implement interim measures to protect the discovery from looting and vandalism. Construction may continue outside the buffer zone. Within one 72 hours of receipt of this notification of the discovery, the Corps archaeologist shall:
 - a. inspect the work site to determine the extent of the discovery and ensure that work activities have halted within the forty-five (45) meter radius buffer zone;
 - b. clearly mark the area of the discovery;
 - c. implement additional measures, as appropriate, to protect the discovery from looting and vandalism; and
 - d. notify other consulting parties, if applicable, of the discovery.
2. The Corps will provide an assessment of the site's NRHP eligibility to the IL SHPO, the KY SHPO, Federally-recognized Tribes, and the ACHP within seven (7) working days of the discovery.
3. The IL-SHPO, the KY-SHPO, the ACHP, the Federally-recognized Tribes, and other consulting parties, as appropriate, will have seven (7) working days following notification to concur or disagree with the Corps' determination of the NRHP eligibility of the discovery.
4. If the find is determined to be potentially significant, the Corps will consult with the IL-SHPO, the KY-SHPO, the ACHP, the Federally-recognized Tribes, and other consulting parties, as appropriate, regarding the appropriate measures for site treatment pursuant to 36 CFR § 800.6(a). The IL-SHPO, the KY-SHPO, the ACHP, Federally-recognized Tribes, and other consulting parties, as appropriate, will have seven (7) working days to concur or disagree with the proposed actions. These measures may include:
 - e. formal archaeological evaluation of the site;
 - f. visits to the site by the IL-SHPO, the KY-SHPO, the ACHP, Federally-recognized Tribes, and other consulting parties, as appropriate;
 - g. exploration of potential alternatives to avoid the site; and

- h. preparation and implementation of a mitigation plan by the Corps in consultation and concurrence with the IL-SHPO, the KY-SHPO, the ACHP, the Federally-recognized Tribes, and other consulting parties, as appropriate.
 5. If the Corps archaeologist, in consultation with the IL-SHPO, the KY-SHPO, the ACHP, the Federally-recognized Tribes, and other consulting parties, as appropriate, determines the find is isolated, completely disturbed by construction activities, or will not be further disturbed by construction activities, construction may resume within the forty-five (45) meter radius buffer zone.
- B. If the unanticipated discovery is potentially Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony, the Corps will comply with the provisions detailed in Stipulation III above. All other unanticipated discoveries will be treated in accordance with Stipulation IV.

V. DISPUTE RESOLUTION

- A. Should any Signatory that signs the MOA object at any time in writing to the Corps regarding any action carried out or proposed with respect to the Undertaking or to the manner in which the terms of this MOA are implemented, the Corps shall consult with such party to resolve the objection. The Corps shall also notify the other Signatories and Concurring parties to this MOA of such objection and provide them the opportunity to participate in any consultations to resolve the objection. If the Corps determines that such objection cannot be resolved, the Corps will:
1. Forward all documentation relevant to the dispute, including the Corps' proposed resolution, to the ACHP. The ACHP shall provide the Corps 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 Corps shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, Signatories, and Concurring parties, and provide them with a copy of this written response.
 2. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, the Corps may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the Corps shall prepare a written response that takes into account any timely comments regarding the dispute from the Signatories and Concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.
 3. The Corps will then proceed with its final decision.
- B. The Corps' responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remains unchanged.

VI. TERMINATION

- A. If the Corps determines that the terms of this MOA cannot be implemented as stipulated or a Signatory that signs the MOA determines that the MOA is not being properly implemented, such party may propose to the other Signatories to the MOA that it be terminated in accordance with 36 C.F.R. § 800.6 (c)(1) and (8).
- B. The party proposing to terminate this MOA shall so notify all parties to the MOA, including the Concurring parties, explaining the reasons for termination and affording the parties at least thirty (30) days to consult and seek alternatives to termination.
- C. If, after the expiration of thirty (30) days an agreement to avoid termination cannot be reached, the Corps or other Signatory that signs the MOA may terminate the MOA by notifying all parties in writing.
- D. Should the MOA be terminated, the Corps shall:
 - 1. Consult with all parties in accordance with 36 C.F.R. § 800.6 to develop a new MOA or
 - 2. Request the comments of the ACHP pursuant to 36 C.F.R. § 800.7.

VII. AMENDMENTS

Any Signatory to this MOA may propose to the Corps that the MOA be amended, whereupon the Corps shall consult with the other parties to the MOA to consider such an amendment. The execution of any such amendment to the MOA shall be governed by 36 C.F.R. § 800.6(c)(1). The signatures of all of the Signatories shall be required for any amendment to take effect.

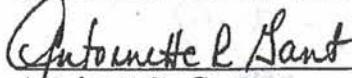
VIII. DURATION

- A. Stipulations III and IV shall remain in force until such time as the subject properties are transferred from Federal ownership. The remaining stipulations must be completed within three (3) years of the execution of this MOA. Prior to such time, the Corps may consult with the other signatories to reconsider the terms of the MOA, including the three-year time limit, and amend it in accordance with Stipulation VII above.
- B. This MOA shall be effective upon signature of the Signatories and Invited Signatories and shall remain in effect until the earliest of the following occurs: all of its terms are satisfied, it is amended or terminated and replaced, the two (2) year time limit has expired, or the Corps notifies the parties to the MOA the Corps has re-initiated review of the Undertaking.

Execution of the this MOA by the Corps, the ACHP, ILSHPO, KYSHPO and the Osage Nation, and implementation of its terms evidence that the Corps has taken into account of the effects of this undertaking on historic properties.

SIGNATORIES:

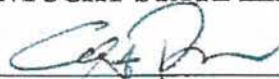
U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT



Antoinette R. Gant
Colonel, U.S. Army
District Commander

08 May 2019
Date

KENTUCKY STATE HISTORIC PRESERVATION OFFICE



Craig Potts
Executive Director and State Historic Preservation Officer
Kentucky Heritage Council

5-24-19
Date

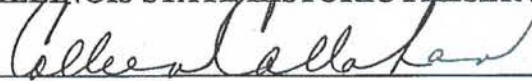
Approved as to form and legality:



William H. Adams II
Legal Counsel
Tourism, Arts & Heritage Cabinet

May 22, 2019
Date

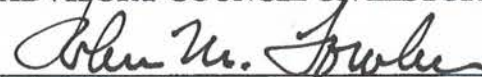
ILLINOIS STATE HISTORIC PRESERVATION OFFICE



Colleen Callahan
Director
Illinois Department of Natural Resources

6-12-19
Date

ADVISORY COUNCIL ON HISTORIC PRESERVATION



John M. Fowler
Executive Director

7/8/19
Date

APPROVED FOR EXECUTION

Date: 6/10/19
Legal Counsel: 

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

INVITED SIGNATORIES

OSAGE NATION



Geoffrey M. Standing Bear
Principal Chief

6-13-19
Date

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCURRING PARTIES

CONCUR:

Absentee Shawnee Tribe

By: _____ Date: _____
Edwina Butler-Wolfe, Governor

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCUR:

Cherokee Nation

By: _____ Date: _____
Bill John Baker, Principal Chief

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCUR:

Delaware Nation

By: _____ Date: _____
Deborah Dotson, President

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCUR:

Brookport, Illinois

By: _____ Date: _____
Tami Wessel, Mayor

Memorandum of Agreement
Olmsted Project; Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCUR:

Metropolis, Illinois

By: Billy McDaniel Date: 7/1/19
Billy McDaniel, Mayor

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCUR:

Olmsted, Illinois

By: _____ Date: _____
Curtis Marshall, Mayor

CONCUR:

Olmsted Historical Society

By: Marilyn Turner, President Date: 06/29/19
Marilyn Turner, President

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCUR:

River Discovery Center

By: _____ Date: _____
Julie Harris, Executive Director

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCUR:

Landmarks Illinois

By: _____ Date: _____
Bonnie McDonald, President and CEO

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCUR:

Clermont County Park District

By: 
Chris Clingman, Director

Date: 6/14/2019

Memorandum of Agreement
Olmsted Project: Locks and Dams 52 and 53
Ballard and McCracken Cos, KY and
Massac and Pulaski Cos, IL

CONCUR:

Louisville Waterfront Development Corporation

By: _____ Date: _____
Deborah Bilitski, Vice President

APPENDIX A
AREA OF POTENTIAL EFFECTS

Area of Potential Effects for the
Olmsted Lock and Dam Project as
Defined From Project Related Cultural Resources Reports and the Project Files

Introduction

This Area of Potential Effects (APE) is being prepared as a result of the 2016 restart of the US Army Corps of Engineers, Louisville District's (Corps) Section 106 consultation effort regarding the impacts of the Olmsted Lock and Dam Project (Olmsted Project) on the land and marine based elements of Ohio River Locks and Dams (L&Ds) 52 and 53, Massac and Pulaski Counties Illinois and Ballard and McCracken Counties, KY. The Olmsted Project was initiated in the 1980s at a time when defining the APE under Section 106 was not as formalized as it is now. This document is being prepared to formally define the APE for impacts to historic properties associated with the Olmsted Lock and Dam Project and to provide an overview of earlier Section 106 coordination between the Corps, the Illinois and Kentucky State Historic Preservation Offices (IL-SHPO and KY-SHPO), the Advisory Council on Historic Preservation (ACHP) and other Consulting Parties (CP). Taking this step was deemed useful as the Olmsted Project is still under construction and there are new staff members at the IL and KY-SHPOs, the ACHP, and Consulting Parties and Native American Tribes that were not part of the previous consultations.

Project and Section 106 Background

The purpose of the Olmsted Project is to replace existing L&Ds 52 and 53, which were completed in 1928 and 1929 respectively. The original dams were made of wooden wickets connected to 600-foot lock chambers. During periods of low water, the wickets were manually raised creating a 9-foot pool that enabled river traffic to the pass through the locks and continue on to various destinations. Construction of L&Ds 52 and 53 allowed for year round navigation of the Ohio River, one of the most important commercial waterways in the United States. The stretch of Ohio River between L&Ds 52 and L&Ds 53 is especially crucial to commercial navigation due to the connection it provides to the Tennessee, Cumberland, and Mississippi Rivers. Although L&Ds 52 and 53 represented state-of-the-art technology at the time of their construction, they were obsolete by the 1950s and struggled to handle increasing river traffic and greater tonnage. In 1969 and 1979, 1200-foot lock chambers were constructed at L&Ds 52 and 53, respectively, to prolong the usefulness of the locks and dams. The 1200-foot lock chambers allowed L&Ds 52 and 53 to continue operating, but both the age and design of the L&Ds have resulted in frequent repairs and river closures; and even when the L&Ds are operating as intended the average time to pass through each lock is 5 hours. The estimated time to lock through the Olmsted Lock and Dam will be one hour.

By the late 1970s/early 1980s, it became apparent that L&Ds 52 and 53 would need to be replaced, and the Corps of Engineers began planning a new lock and dam to replace 52 and 53. The Corps proposed constructing the new lock and dam at Ohio River Mile 964.4 near the community of Olmsted, Illinois. Construction of the Olmsted Lock and Dam project was authorized by Congress in the Water Resources Development Act of 1988 (WRDA)(Public Law 100-676). Over the course of nearly 30 years, construction would occur in fits and starts delayed by multiple issues including lack of funding and appropriations, engineering concerns, unpredictable river conditions and

design changes. Having overcome the majority of the issues, the Olmsted Lock and Dam is scheduled to open in October 2018.

Concurrent with the planning and development of the Olmsted Project, the Section 106 process was initiated to comply with the National Historic Preservation Act of 1966. As part of the 106 process, potential interested parties were contacted and archaeological surveys were conducted at L&Ds 52 and 53 and the proposed Olmsted Lock and Dam Project location. The first archaeological survey was conducted in 1980 and examined the considered pool area for the proposed new lock and dam from Ohio River Mile 938.9 (L&D 52) to Ohio River Mile 975 (Mound City), which included the Olmsted location at Ohio River Mile 964.4. The survey resulted in the documentation of 53 previously unrecorded archaeological sites and re-examination of 6 previously documented sites. In a letter dated June 19, 1985, the IL-SHPO expressed concerns about the survey methodology; however, following a meeting with the Corps and being provided additional information including the fact that the considered pool would not “encroach over and above the crest of the extant floodplain,” the IL-SHO withdrew their concerns in a letter dated August 21, 1985. An archaeological survey conducted at the Olmsted Project location in 1985 found no significant archaeological resources. Based on the results of the archaeological survey, the Corps made a determination of no effect to archaeological resources at the Olmsted Project site. The IL-SHPO concurred with the Corps’ determination in a letter dated February 27, 1985. In 1988 an archaeological reconnaissance survey was conducted at the proposed Olmsted dam abutment site in Ballard and McCracken Counties, Kentucky; no archaeological sites were recorded, but the author recommended deep testing to assess the potential for deeply buried archaeological deposits. The KY-SHPO concurred with this recommendation in a letter dated November 3, 1988.

In 1993 the recommended subsurface reconnaissance was conducted at the proposed dam abutment site and no evidence of archaeological deposits was observed. In a letter dated March 2, 1993 the KY-SHPO concurred with the conclusions of the subsurface reconnaissance that the abutment would have no effect on any NRHP eligible or listed properties. Also in 1993, a Phase I survey was conducted at a proposed boat ramp location at the Olmsted Project, proposed access road locations, and at the fee-held land of locks and dam 52 and 53. No archaeological sites were identified at L&D 52 and 53 and shovel test excavation resulted in the recovery of modern trash. Three archaeological sites were identified along the selected alternative for the Olmsted access road and one archaeological site was identified in the proposed boat ramp location. The three sites recorded within the access road were determined to be confined to the plowzone and were recommended not eligible for the NRHP. The NRHP-eligibility of the site at the boat ramp location was not assessed because the decision was made to relocate the ramp to the L&D 53 property. The IL-SHPO concurred with the conclusions of the archaeological report in a letter dated April 14, 1993.

National Register of Historic Places eligibility discussion regarding L&Ds 52 and 53 initially focused on the land elements, such as housing and operations buildings, and did not address the marine elements of either locks and dam 52 or 53. The land elements were determined to be eligible for the NRHP, but no recommendation was made for the marine elements. In 1988 the marine elements were determined to be eligible by consent decree between the Corps and KY-SHPO. That same year, the Corps presented a draft Memorandum of Agreement to the IL and KY-SHPOS

and the ACHP. The Corps-proposed MOA was never finalized and in 1989 the IL-SHPO proposed their own draft MOA. The IL-SHPO-proposed MOA was not finalized either, and, in 1990, the IL-SHPO suggested executing a Programmatic Agreement; however, no Programmatic Agreement was developed. Aside from some additional archaeological surveys and internal discussions regarding alternatives analysis for L&Ds 52&53, the Section 106 process seems to have stalled until the early 2000s.

The Section 106 process partially resumed in 2005 when the town of Brookport, Illinois held a Design and Planning Workshop (charrette) to develop potential plans for the land elements of L&Ds 52. In 2005 the Corps also held preliminary discussion with the IL-SHPO staff regarding the 106 process. Consulting parties meetings were held in 2006 and 2007 to discuss potential mitigation for effects on L&Ds 52 and 53; and between 2007-2008, the Corps circulated a draft MOA internally. It is unclear if the internally-circulated MOA was finalized; however, the MOA does not appear to have been circulated to the IL and KY-SHPOs or other CPs. At this time the 106 process was again delayed, possibly due to funding concerns.

Section 106 consultation was re-initiated in 2016 and a series of five meetings with previous CPs were held between October 2016 and June 2017. The meetings examined possible mitigation for effects to L&Ds 52 and 53 and possible stipulations for an MOA. In late 2017, the marine elements of L&Ds 53 were removed from the overall Olmsted Project APE and a smaller APE consisting of just the marine elements of L&Ds 53 was created. The separate APE was created due to the need to remove the L&Ds 53 marine elements as soon as possible due to the danger they pose to life and navigation. A MOA mitigating for the adverse effects of the demolition of the marine elements was executed on August 8, 2018.

Area of Potential Effects

The APE for the Olmsted project consists of all land held in fee at the Olmsted Project location, all land held in fee at L&Ds 52 and 53, the marine elements associated with the Olmsted Project including the dam abutment area (KY) and the pool area, the marine elements of locks and dam 52, the footprint of the prototype dam constructed on the KY side of Smithland Locks and Dam (Ohio River Mile 918.5), and wildlife mitigation land located in Ballard County, KY. Figures 1, 2, 8, 9, and 10 show the fee-held land and the wildlife mitigation land.

The primary impact associated with construction of the Olmsted Locks and Dam, was ground disturbance in the footprint of the dam and associated land-based access, staging areas, and new buildings. Additionally, the Olmsted Project could result in a slight potential increase in water elevation that may impact the river bank. In regards to the marine and land based facilities at L&Ds 52 and land-based elements at L&Ds 53, the potential impacts include demolition and transfer out of government ownership.

No potential viewshed concerns were identified in the early project record, relative to either the construction of the Olmsted Project or the demolition of L&Ds 52 and 53. The latter is due to the isolated locations of all three facilities. All of the locations, except the operations area of L&D 52 are located well away from densely populated areas. Even L&D 52 which is located in the vicinity of Brookport, Illinois and Paducah, Kentucky is somewhat isolated. It is separated from Brookport by a long access road and it sits across from agricultural fields located outside the Paducah,

Kentucky city core. The APE locations and potential impacts are each described in greater detail below.

Olmsted Lock and Dam

The Olmsted Locks and Dam project consists of the construction of both land-based components and marine-based components. Each component will be discussed separately as the potential impacts may differ slightly. Figure 1 shows the Olmsted Project fee-held land.

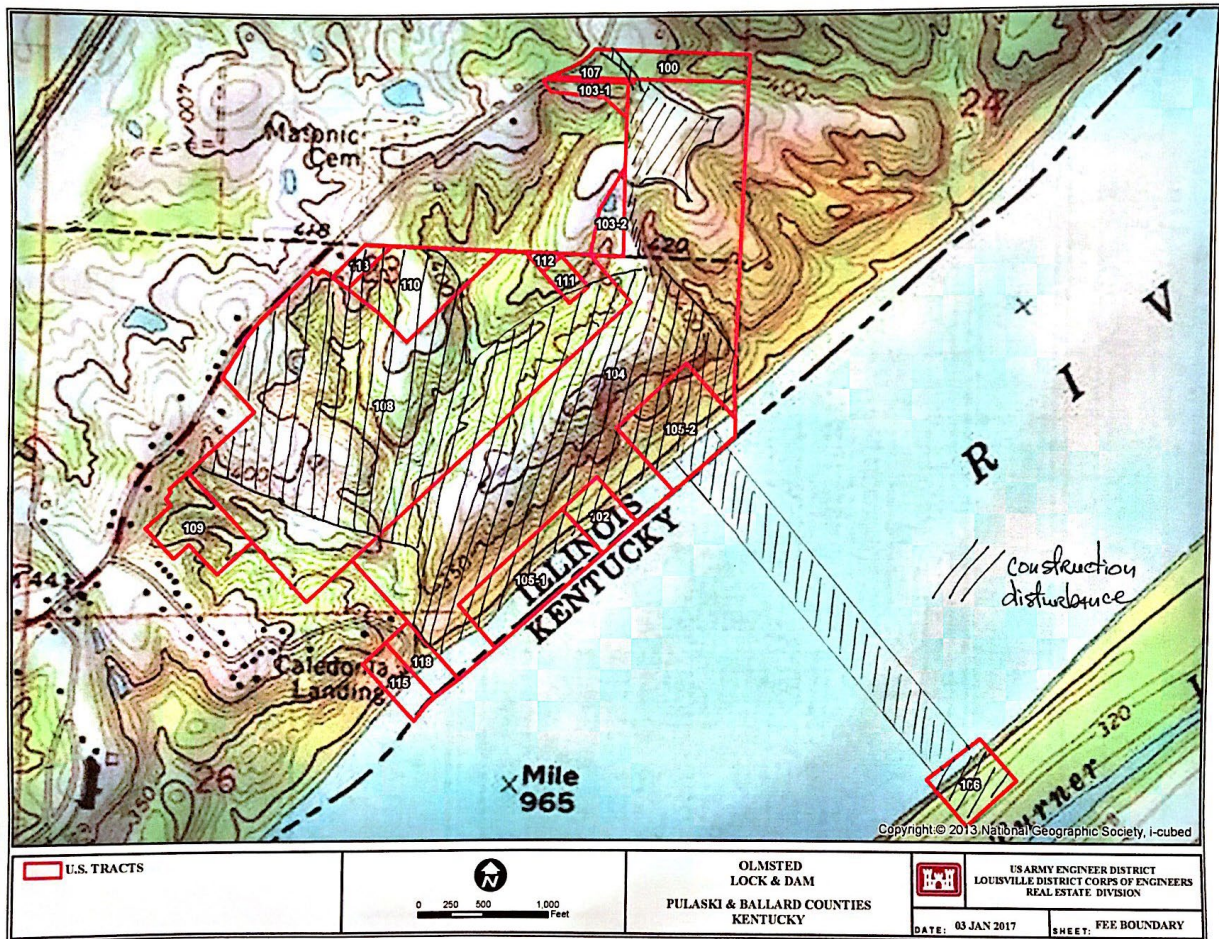


Figure 1. Olmsted Fee-Held Land and Area of Construction Disturbance

Construction of Land Based Structures and Use of Fee Held Land - The land based components consist of the construction of operation support buildings, parking, and storage areas. Fee-held land will be used for construction laydown, staging, and fabrication areas associated with the construction of the support buildings, parking, storage areas, and marine elements (locks and dam). Additionally some of the fee held land has been used for dredge material disposal, also associated with marine element construction.

Impacts to this portion of the Olmsted Project APE consist of filling, cutting and grading to sculpt the land surface for drainage and to level areas for construction purposes. All of the area held in

fee, as shown in Figure 1, has likely been impacted to some degree by earth moving activities. The central portion is currently in active use for construction.

Archaeological examination of this area prior to start of construction identified no archaeological resources. Since receiving cultural resource concurrence from the IL-SHPO on August 21, 1985 and from the KY-SHPO on November 3, 1988, Olmsted project work in this area includes placement of the Olmsted Dam abutment and stone river-dikes.

Construction of Marine Elements – Activities in the river consist of the construction of two locks, a dam, river dikes and mooring cells.

Impacts to this portion of the Olmsted Project APE consist of dredging and filling to sculpt the river bottom for placing/anchoring the lock wall and dam. The mooring cells and river dikes require much less sculpting and primarily consist of the placement of material in the river. Mooring cells do require that the outer form be driven into the river bottom. The river dikes, being placed to direct flow, require some keying into the river bottom at their landward most end to ensure they are secure.

No potential impacts to cultural resources were identified in the early project record relative to the in-river construction of the Olmsted Locks and Dam and, thus, no underwater archaeological surveys were conducted. However, the river bottom was scanned as part of the design activities and no unusual anomalies that could be shipwrecks were identified. Also, the Olmsted facility is about two miles downstream of L&D 53. These facilities are within sight of each other. This placement would support that no wrecks have been impacted by Olmsted construction as they would have been close enough to have been noted and cleared as hazards to navigation downstream of L&D 53.

Olmsted Pool Area – The proposed maximum pool elevation to be maintained by the Olmsted Project is 300' to 302' mean sea level (MSL, Ohio River Datum) during periods of low flow. The Olmsted pool will be operated as a “hinged pool”, such that when low flows necessitate, the dam will be operated to maintain a minimum elevation of 300' msl at the Paducah gauge and a minimum elevation of 302' msl at the tailwater gauge of Smithland L&D. The elevation at the Olmsted project will be maintained at the lowest elevation that will allow the upstream targets at Paducah and Smithland L&D to be maintained, but will not be lower than elevation 295' msl and normally not more than elevation 300' msl at the Olmsted L&D Upstream gauge. In extreme low flow conditions, elevations could potentially be maintained as high as 301.5' msl at Olmsted L&D upper gauge for generally short durations to ensure navigation within the pool. Pool level for L&Ds 52 is 302' amsl for the upper pool and 290' amsl for the lower pool; pool level for L&Ds 53 is 290' amsl for the upper pool. Prior to the Olmsted L&D project, Ohio River elevations below L&D 53 were uncontrolled and subject to natural flow conditions; this will continue to be true for the reaches downstream of Olmsted L&D. The Olmsted pool is not projected to drop below that of L&Ds 52 and 53 so there is little potential for the exposure of archaeological sites in newly exposed river bank.

Potential impacts to this portion of the Olmsted Project APE consist of continuous inundation as opposed to occasional inundation. It also includes some ground disturbance.

This area was initially subjected to archaeological survey in 1980, the results of which were documented in a report dated 1981. At the time of the initial survey the proposed location of the new locks and dam was the Mound City, Illinois area so the survey examined the pool area from Ohio River Mile 938.9 (L&D 52) to Ohio River Mile 975 (Mound City), which included the Olmsted location at Ohio River Mile 964.4. In 1987 (documented in a report dated 1988) additional survey work on the Kentucky side of the pool was undertaken. This was done to clear up some issues with the initial survey efforts. By the time this work was undertaken the proposed location for the new locks and dam had moved upstream to the Olmsted, Illinois area and the proposed maximum pool elevation had also changed. Table 1 shows the proposed Olmsted Pool elevations.

L&D 52 (Land and Marine Elements) – There are two components to Locks and Dam 52: the land-based elements and the marine elements. Each component will be discussed separately as the potential impacts may differ slightly. Currently, only concept information is available for the demolition of the marine elements of L&D 52. It should, however, be very similar to the demolition of the marine elements of L&D 53.

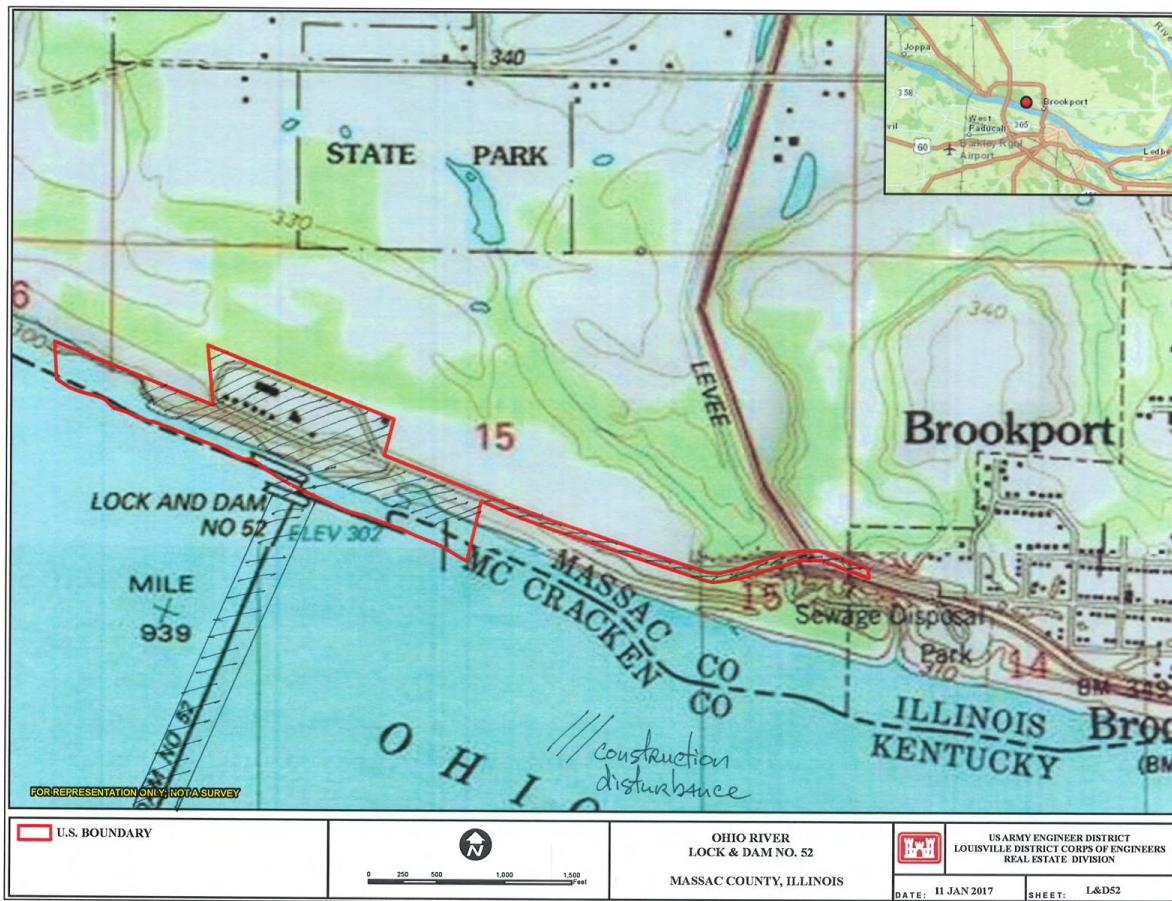


Figure 2. L&D 52 Fee Held Land and Area of Construction Disturbance

L&Ds 52 Land Elements - The land based elements consist of the active operation support buildings, parking, storage areas, the unutilized residential structures and their associated outbuildings, and all associated infrastructure. A listing of the above-ground structures is provided in Table 2.

Table 2 – Structure Type By Locks and Dam

STRUCTURE TYPE	LOCKS & DAM 52
Powerhouse/Operations Building	Y
Dwelling (Brick)	Y
Dwelling (Brick)	Y
Office/Former Dwelling (Frame)	Y
Dwelling (Frame)	Y
Dwelling (Frame)	Y
Dwelling (Frame)	Y
Dwelling (Frame)	Y
Dwelling (Frame)	Y
Dwelling (Frame)	N
Paint/Oil House	Y
2-Story Garage & Warehouse	Y
Storage Building	Y
Storage Building	N
Storage Building	N
Storage Building	N
Open Storage Pole Barn	Y
Sewage Treatment Plant	Y
500 Gallon Fuel Tank	Y
500 Gallon Fuel Tank	Y
Flagpole	N
Water Tower	N
Garage	N
2 Car Garage	N
Warehouse	N
Fire Hose House	N
Fire Hose House	N
Fire Hose House	N

Impacts to this portion of the Olmsted Project APE consists of demolition of the land-based structures and excessing the land held in fee through the General Services Administration (GSA). Prior to either of these impacts the power would be turned off to the powerhouse, hydraulic fluid would be drained and the hydraulic lines from the powerhouse to the lock features would be removed as part of the marine elements demolition. The land-based structures and the marine elements are eligible for listing on the NRHP and demolition would constitute an adverse effect.

All of the area held in fee, as shown in Figure 2, would have been subjected to earth moving disturbances during the construction of L&D 52.

Demolition of L&D 52 Marine Elements – The demolition plan for L&D 52 marine elements is currently at the concept stage; however the work will be similar to the plan for demolishing the marine elements of L&D 53 so that is what is presented here.

A partial list of Marine Elements at L&D 52 to be demolished to elevation 284 includes: the 1200 foot temporary lock chamber; all timber and steel wickets; bear traps, the fixed weir, bebout weir, and chanoine weir, and a pier. Although not shown on the conceptual demolition plan, the demolition is likely to include items similar to those at L&D 53 such as: mechanical equipment, fixtures and piping from the connection to the lock structure, connections to miter gates and filling/emptying valves; hydraulic and compressed air piping, electrical equipment, and fixtures and wiring associated with the previous elements. The demolition work to be undertaken will be accomplished from the river and much of the demolition will likely occur underwater due to river levels.

If any steel wickets are salvageable, they will be retained and stored onsite until the Olmsted Project consultation is completed. All other metal material recovered during demolition will be loaded on barges and taken to be scrapped. Concrete and rock generated by demolition will be placed in the 600' lock chamber against the 600' lock land wall and will also be used to fill a scour hole located just downstream (south) of the dam.

Figure 3 presents the concept for L&D 52 demolition. This figure, while considered draft, does show what sections of L&D 52 are to be demolished and to what elevation they will be taken down to in order to remove navigational hazards. There is no information yet on the area to be used by a contractor for staging the floating work barges necessary for the demolition work.

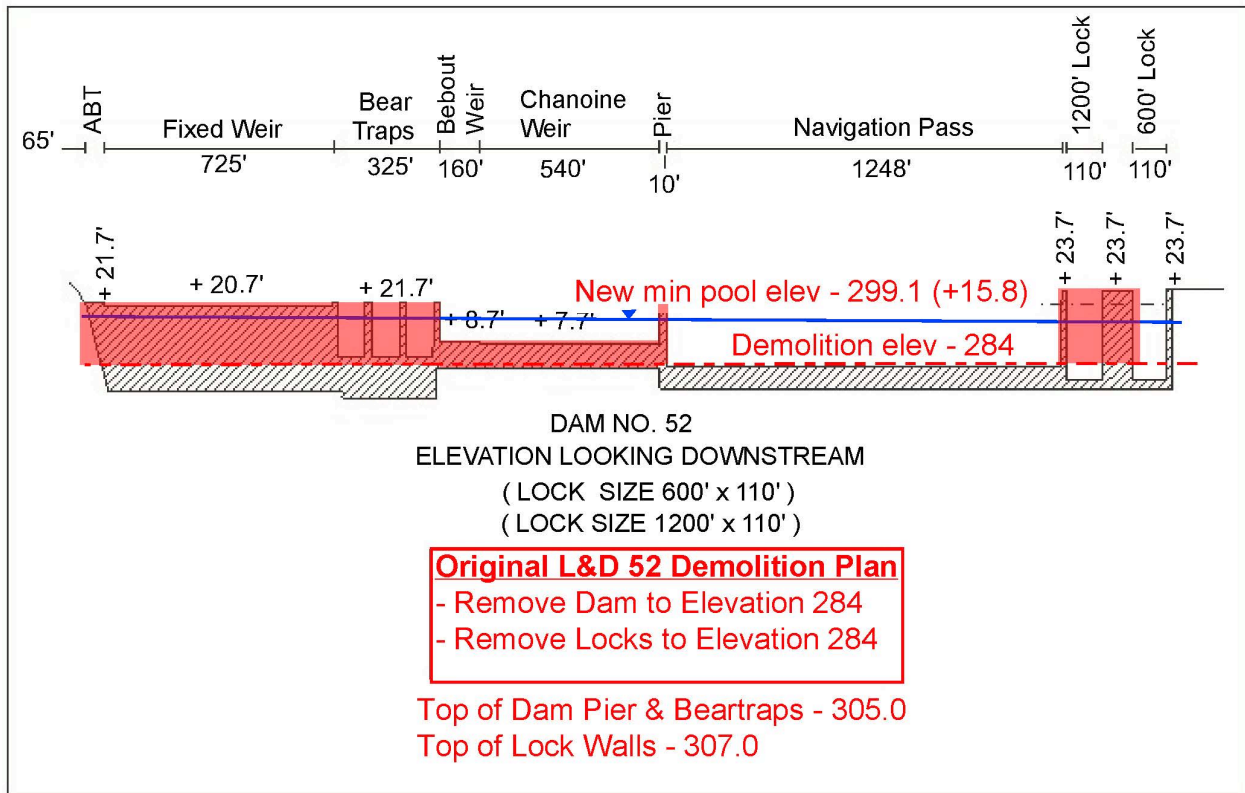


Figure 3. Demolition Concept for L&D 52

The impact to this portion of the Olmsted Project APE consists of demolishing the marine based elements down to elevation 284' amsl. The marine elements are considered eligible for listing in the NRHP; therefore demolition constitutes an adverse effect.

As in the case of L&D 53, construction photographs from the initial construction (Figures 4 –7) show that a very wide corridor of river bottom was exposed and disturbed during construction. Therefore the demolition of L&D 52 would occur within a highly disturbed area and the potential to impact significant unrecorded archaeological sites is low.

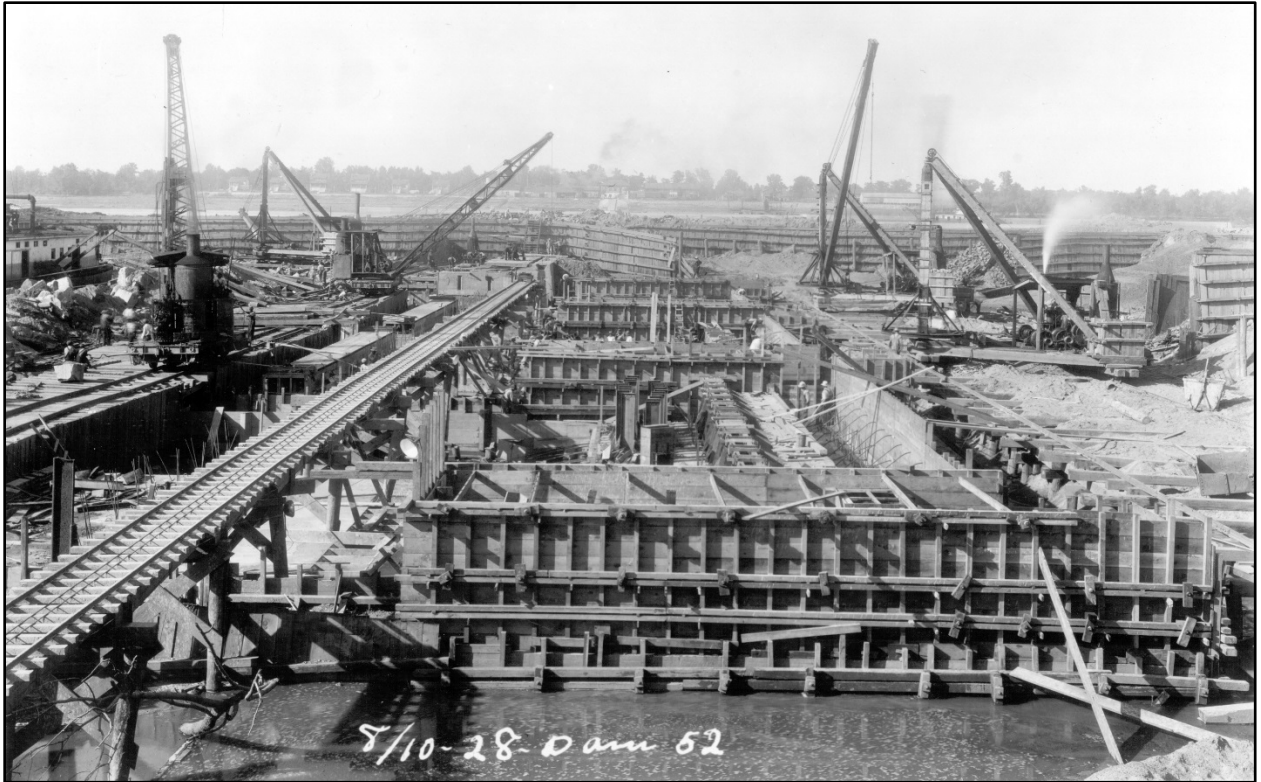


Figure 4. Marine Based Construction Activity at L&D 52, August 1928.



Figure 5. Marine Based Construction Activity at L&D 52, July 1926.



Figure 6. Marine Based Construction Activity at L&D 52, July 1926.

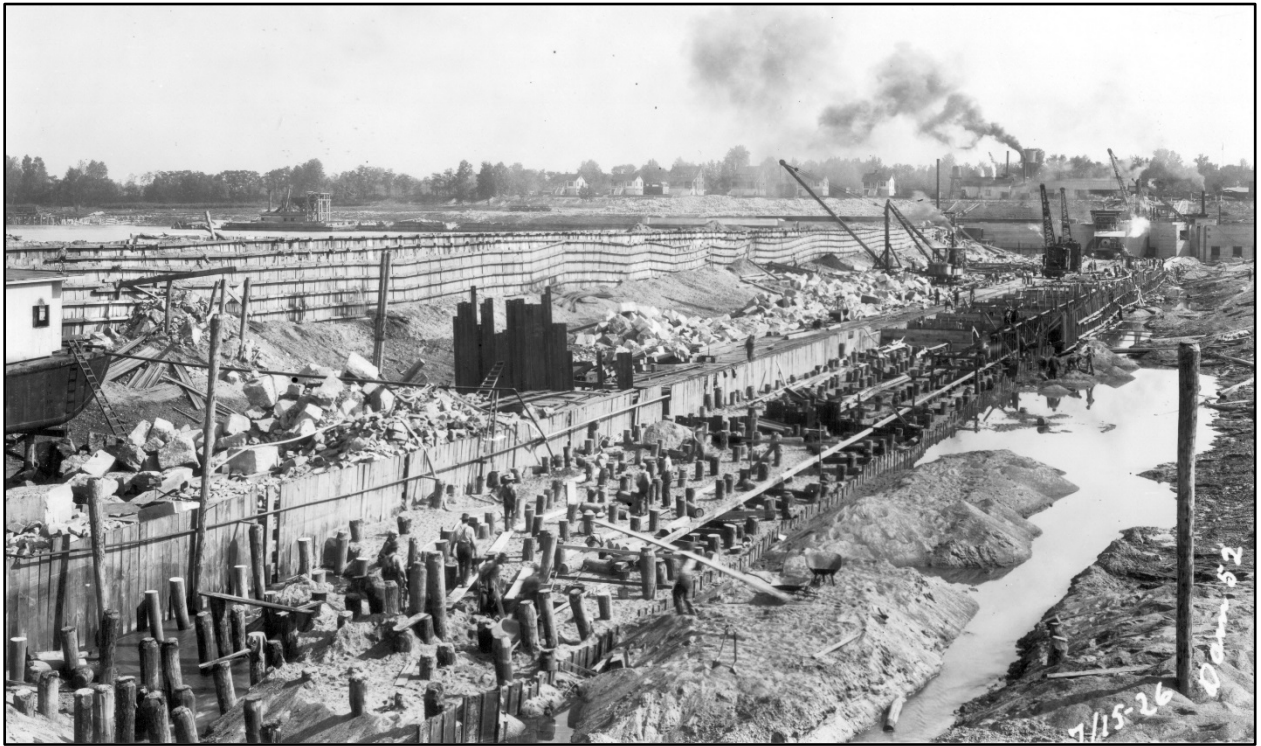


Figure 7. Marine Based Construction Activity at L&D 52, July 1926.

L&D 53 Land Elements – As with L&D 52 there are both land and marine elements associated with L&D 53; however, only the land elements will be discussed herein. The marine elements of L&D 53 were removed from the overall Olmsted APE and a separate APE, consisting of just the L&D 53 marine elements was created. This was deemed necessary as the Corps determined that the Marine Elements of L&D 53 needed to be removed prior to the completion of the overall Olmsted Project consultation because the marine elements posed an unacceptable risk to safe navigation and potential loss of life due to L&D 53’s close proximity to the Olmsted Project’s construction area. A memorandum of agreement (MOA) mitigating for the adverse effect to a NRHP-eligible structure was executed on August 8, 2018.

Land Elements - The land based component consists of the active operation support buildings, parking, storage areas, the unutilized residential structures and their associated outbuildings, and all associated infrastructure. A listing of above-ground structures is provided in Table 3.

Impacts to this portion of the Olmsted Project APE consist of demolition of the land-based structures and excessing of the land held in fee through the GSA. Prior to either of these impacts the power would be turned off to the powerhouse, hydraulic fluid would be drained and the hydraulic lines from the powerhouse to the lock features they operate would be removed as part of the demolition of the marine elements of L&D 53.

All of the area held in fee, as shown in Figure 8, would have been subjected to earth moving disturbances during the construction of the L&D 53 with the possible exception of the sliver of land to the northwest which is not directly connected to the main portion of L&D 53. Based on what is in the real estate record this sliver is still held in fee. The only way to verify this would be a deed search.

Table 3. Structure Type By Locks and Dam

STRUCTURE TYPE	LOCKS & DAM 53
Powerhouse/Operations Building	Y
Dwelling (Brick)	Y
Dwelling (Brick)	Y
Office/Former Dwelling (Frame)	N
Dwelling (Frame)	Y
Dwelling (Frame)	Y
Dwelling (Frame)	Y
Dwelling (Frame)	Y
Dwelling (Frame)	Y
Dwelling (Frame)	Y
Paint/Oil House	Y
2-Story Garage & Warehouse	N
Storage Building	Y
Storage Building	Y
Storage Building	Y
Storage Building	Y
Open Storage Pole Barn	N
Sewage Treatment Plant	Y

500 Gallon Fuel Tank	Y
500 Gallon Fuel Tank	Y
Flagpole	Y
Water Tower	Y
Garage	Y
2 Car Garage	Y
Warehouse	Y
Fire Hose House	Y
Fire Hose House	Y
Fire Hose House	Y

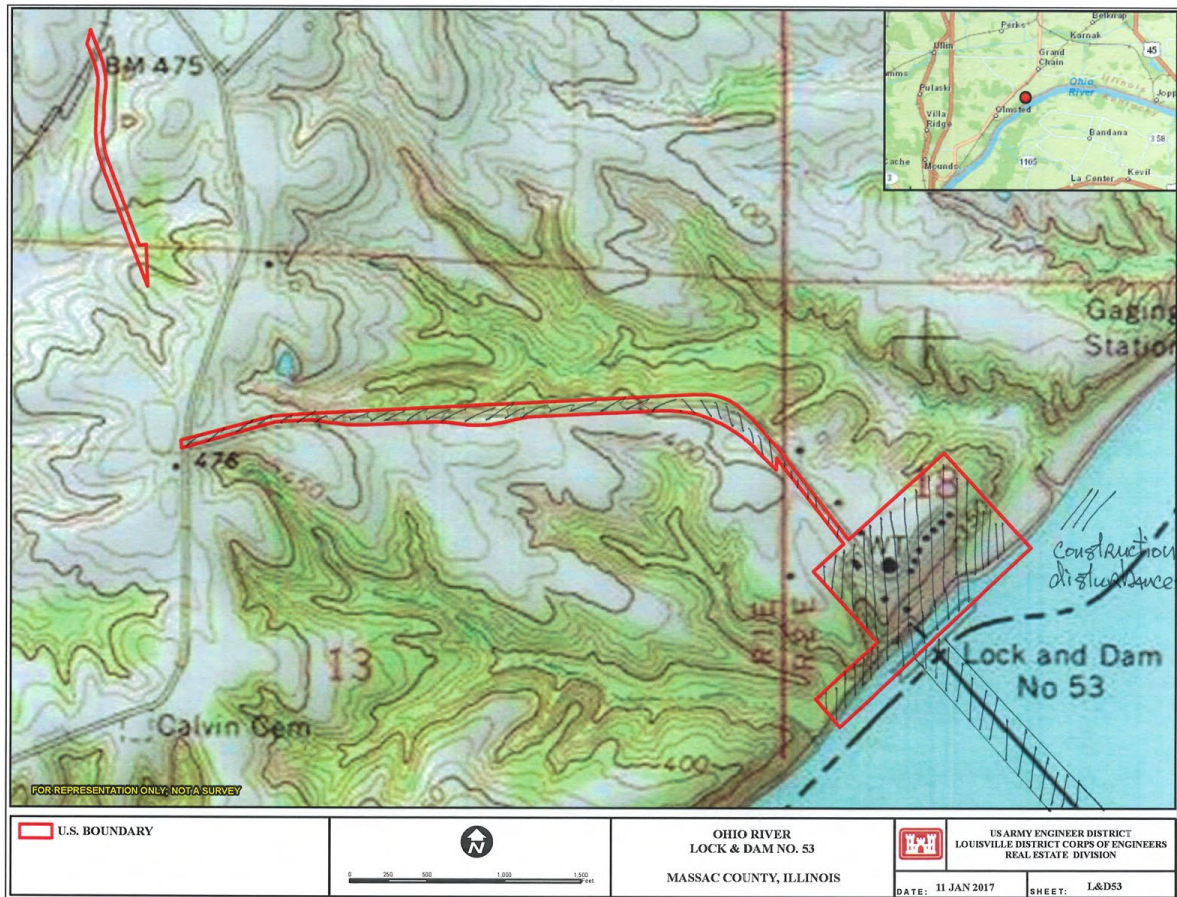


Figure 8. L&D 53 Fee Held Land and Area of Construction Disturbance

Mitigation Lands – In accordance with the Threatened and Endangered Species Act, the Corps acquired approximately 2,073 acres of land in Ballard County, Kentucky (Figures 9-10) to mitigate for impacts to threatened and endangered species associated with the Olmsted Project construction. At the time the land was acquired in 1999/2000 it was being used for fishing, hunting and agricultural purposes. It is currently being managed by the Kentucky Department of Fish and Wildlife Resources for wildlife values.

The mitigation parcels are located in an isolated, rural area away from any Kentucky communities, although some parcels are located across the Ohio River from Mound City and Cairo, Illinois. The proposed mitigation is unlikely to have any effect on the viewshed of listed or eligible properties in Illinois.

No cultural resources surveys were undertaken as part of the acquisition process as it is not a requirement of acquisition. If and when activities associated with the management of the land for wildlife values are proposed then compliance with applicable laws would be addressed.

One archaeological reconnaissance has been undertaken on the property since acquisition. The survey examined portions of parcels 401, 404, 405, 406, and 407 (Figure 9) and was conducted in advance of a proposed seasonal water impoundment. The survey resulted in the identification of multiple archaeological sites and, in coordination with the Kentucky State Historic Preservation Office, the project was redesigned to avoid several archaeologically sensitive areas.

Potential impacts to this portion of the Olmsted Project APE consist of ground disturbance activities associated with managing the land for wildlife values. The type of activity most likely to occur would be the creation of seasonal water impoundment areas using low head levees and water control structures. Any impacts to the mitigation areas would be considered a Corps undertaking and subject to Corps approval and all applicable federal laws including the National Historic Preservation Act.

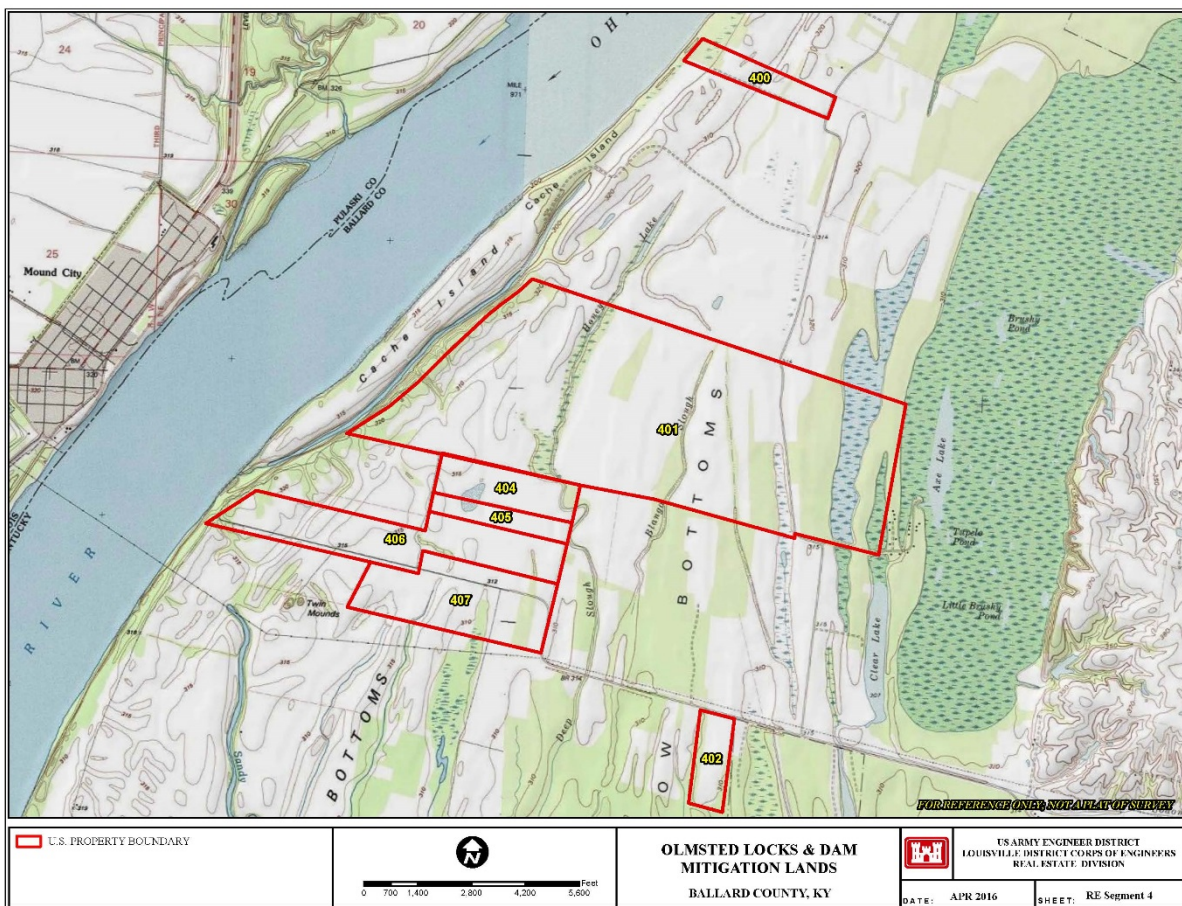


Figure 9. Mitigation Lands, Ballard County, KY.

Memorandum of Agreement
 Olmsted Locks and Dam
 Ballard County, KY and
 Pulaski County, IL

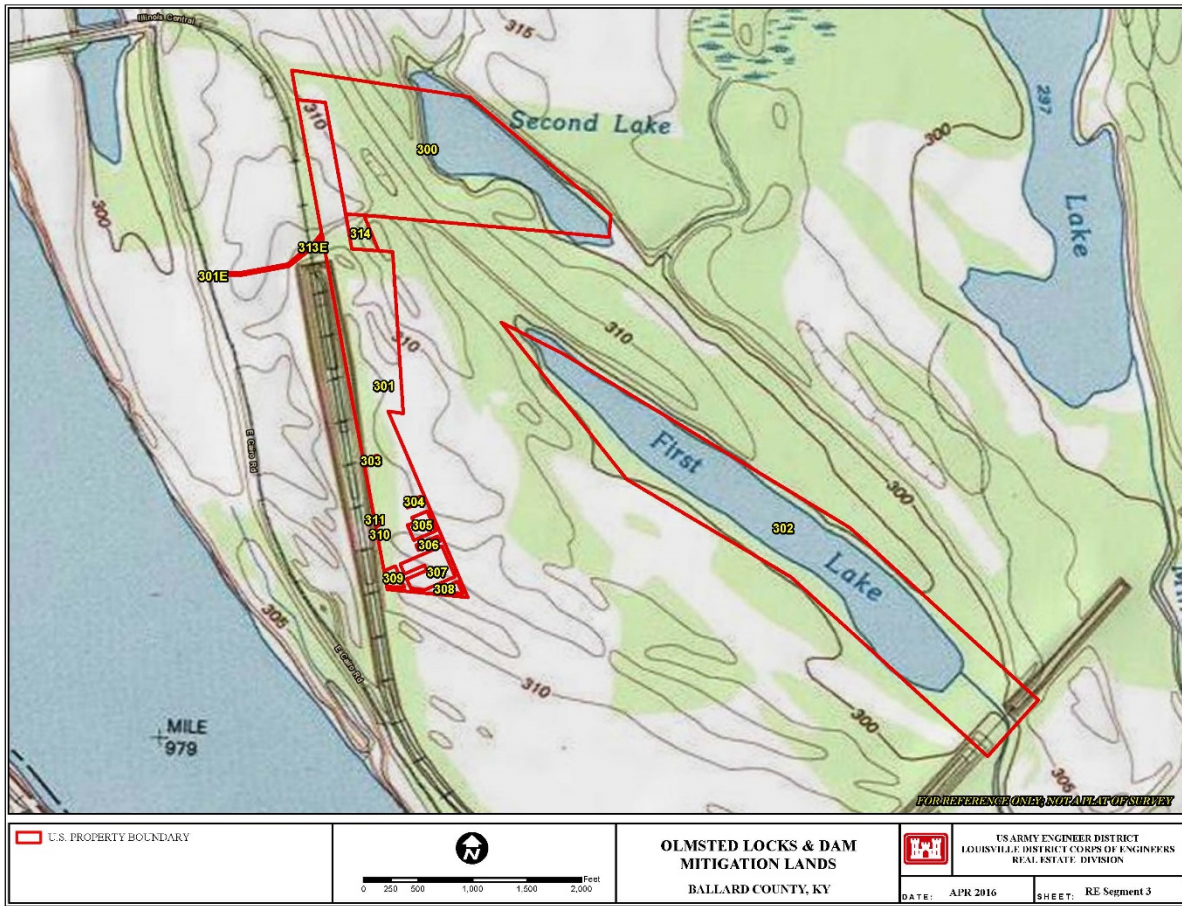


Figure 10. Mitigation Lands, Ballard County, KY.

Memorandum of Agreement
Olmsted Locks and Dam
Ballard County, KY and
Pulaski County, IL

APPENDIX B

**DISTRIBUTION LIST FOR STRUCTURES DOCUMENTATION AND ITEMS
AVAILABLE FOR DISPLAY**

Memorandum of Agreement
Olmsted Locks and Dam
Ballard County, KY and
Pulaski County, IL

Illinois State Historic Preservation Officer

Kentucky State Historic Preservation Officer

Olmsted Historical Society

River Discovery Center

Clermont County Park District Chilo Lock 34 Park Visitor Center and Museum

Louisville Waterfront Development Corporation

Specific Items Requested

1. **Olmsted Historical Society:** Whistle, identification plate, ratchet levers, brake arms, boiler pressure gauge, hook rod and tailing rod, plus any other items of interest from the L&D 53 maneuver boat.
2. **Louisville Waterfront Development Corporation:** Lock and Dam 52 maneuver boat.

Memorandum of Agreement
Olmsted Locks and Dam
Ballard County, KY and
Pulaski County, IL

APPENDIX C
CONTACT LIST

Memorandum of Agreement
Olmsted Locks and Dam
Ballard County, KY and
Pulaski County, IL

U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT

Primary contact:

Amy Babey
Chief, Civil Works- Planning, Programs and Project Management Branch
US Army Corps of Engineers, Louisville District
P.O. Box 59
Louisville, KY 40201-0059
502-315-6880
Amy.S.Babey@usace.army.mil
Method of contact for project notification and documentation: email
Method of contact for other communication: postal mail, phone call

Secondary contact:

Leiellen Atz
Archaeologist, Regulatory Division
CELRL-RD
P.O. Box 59
Louisville, KY 40201-0059
502-315-6688
Leiellen.M.Atz@usace.army.mil
Method of contact for project notification and documentation: email
Method of contact for other communication: postal mail, phone call

ILLINOIS STATE HISTORIC PRESERVATION OFFICE

Primary contact:

Anthony Rubano
Acting Cultural Resources Coordinator
Illinois Department of Natural Resources
State Historic Preservation Office
217-782-7459
Anthony.rubano@illinois.gov
Method of contact for project notification and documentation: postal mail or email
Method of contact for other communication: email, phone call

Secondary contact:

Jeffery Kruchten
Chief Archaeologist
Illinois Department of Natural Resources
State Historic Preservation Office
217-785-1279
Jeffery.kruchten@illinois.gov
Method of contact for project notification and documentation: postal mail or email
Method of contact for other communication: email, phone call

Memorandum of Agreement
Olmsted Locks and Dam
Ballard County, KY and
Pulaski County, IL

KENTUCKY STATE HISTORIC PRESERVATION OFFICE

Primary contact:

Craig Potts
Executive Director and State Historic Preservation Officer
410 High Street
Frankfort, KY 40601
502-564-7005
craig.potts@ky.gov
Method of contact for project notification and documentation: postal mail
Method of contact for other communication: email, phone call

Secondary contact:

Nick Laracuenta
Program Administrator
410 High Street
Frankfort, KY 40601
502-892-3614
nicolas.laracuenta@ky.gov
Method of contact for project notification and documentation: postal mail
Method of contact for other communication: email, phone call

OSAGE NATION

Primary Contact:

Dr. Andrea A. Hunter
Tribal Historic Preservation Officer/Director
Osage Nation
627 Grandview Avenue
Pawhuska, OK 74056
918-287-5671
ahunter@osagenation-nsn.gov
Method of contact for project notification and documentation: postal mail/courier
Method of contact for other communication: email, phone call

Secondary contact:

Jess Hendrix
Archaeologist
Osage Nation
627 Grandview Avenue
Pawhuska, OK 74056
918-287-5328
jess.hendrix@osagenation-nsn.gov
Method of contact for project notification and documentation: postal mail/courier
Method of contact for other communication: email, phone call

Memorandum of Agreement
Olmsted Locks and Dam
Ballard County, KY and
Pulaski County, IL

ADVISORY COUNCIL ON HISTORIC PRESERVATION

Primary contact:

Christopher Daniel

Program Analyst

401 F Street NW, Suite 308

Washington, DC 20001

202-517-0223

cdaniel@achp.gov

Method of contact for project notification and documentation: postal mail or email

Method of contact for other communication: email, phone call

Secondary contact:

Thomas McCulloch

Assistant Director

401 F Street NW, Suite 308

Washington, DC 20001

202-517-0222

tmcculloch@achp.gov

Method of contact for project notification and documentation: postal mail or email

Method of contact for other communication: email, phone call