



Appendices

Jefferson National Expansion Memorial
Environmental Assessment for Implementing CityArchRiver Initiative Elements

APPENDIX A
DRAFT FLOODPLAIN STATEMENT OF FINDINGS



National Park Service
U.S. Department of the Interior

Jefferson National
Expansion Memorial

11 North 4th Street
St. Louis, MO 63102

314-655-1700 phone
314-655-1641fax

Midwest Region

FLOODPLAIN STATEMENT OF FINDINGS

For the implementation of the CityArchRiver 2015 at the East Slopes and Central Riverfront

St. Louis, Missouri

September, 2012

Recommended:

Tom Bradley
Superintendent JEFF
Date

Concurred:

Bill Jackson
Division Chief - Water Resources
Date

Approved:

Michael Reynolds
Regional Director – Midwest Region
Date

STATEMENT OF FINDINGS

INTRODUCTION

Executive Order 11988 (“Floodplain Management”) requires the National Park Service (NPS) and other agencies to evaluate the likely impacts of actions in floodplains. It is NPS policy to preserve floodplain values and minimize potentially hazardous conditions associated with flooding. If a proposed action is in an applicable regulatory floodplain, then flood conditions and associated hazards must be identified, and a formal Statement of Findings (SOF) must be prepared. The NPS Procedural Manual #77-2, Floodplain Management provides direction for the preparation of a floodplain SOF. This SOF has been prepared to comply with EO 11988 and with Procedural Manual #77-2.

PROJECT DESCRIPTION

The National Park Service (NPS) has prepared an Environmental Assessment (EA) to evaluate a range of alternatives to implement elements of the CityArchRiver 2015 Initiative (Figure 1) at Jefferson National Expansion Memorial (the park) in St. Louis, Missouri. Some of the actions contemplated in the EA would occur between the East Slopes of the park and the Mississippi River within the regulated floodplain. This includes the revitalization of the Central Riverfront by Great Rivers Greenway District (GRG), which the NPS has provided funding for, and is located adjacent to the park. As part of this action, Leonor K. Sullivan (LKS) Boulevard, from Chouteau Avenue to Biddle Street, will be raised to reduce the frequency and impact of flood events. The proposed improvements would also convert the existing 2-lane roadway section with periodic left turn lanes into a narrower 2-lane roadway section with designated areas for bus drop-off/pick-up lanes and establish a new 2-way bike path separated from the vehicle travel lanes. A new pedestrian Promenade would be created between the bike path and the historic cobble of the levees adjacent to the river. Traffic calming measures include raised pedestrian crossings at the base of the Grand Staircase and at the new crosswalk locations at the base of the East Slope paths.

Raising the elevation of LKS would require modifications to the floodwall and levee system along the Mississippi River. Modifications to floodwall closure structures at Chouteau Avenue, Poplar Street, and Carr Street would be required. This work would include raising the sills of the closure structures and modifications to the closure structure panel systems at each location. Additionally, raising LKS would require the placement of fill against existing structures within the public right-of-way as well as construction of new retaining walls along the levee.

In addition, the East Slopes would be regraded, and subsequently replanted, to develop two-four universally accessible serpentine paths between the riverfront and Arch grounds and raise the sidewalk at the base of the slopes to meet the new roadway elevations. Grading of the slopes would be performed to balance cut and fill in an effort to limit the import and export of fill when feasible. The general form of the existing slopes would be retained while accommodating the myriad of new path systems.

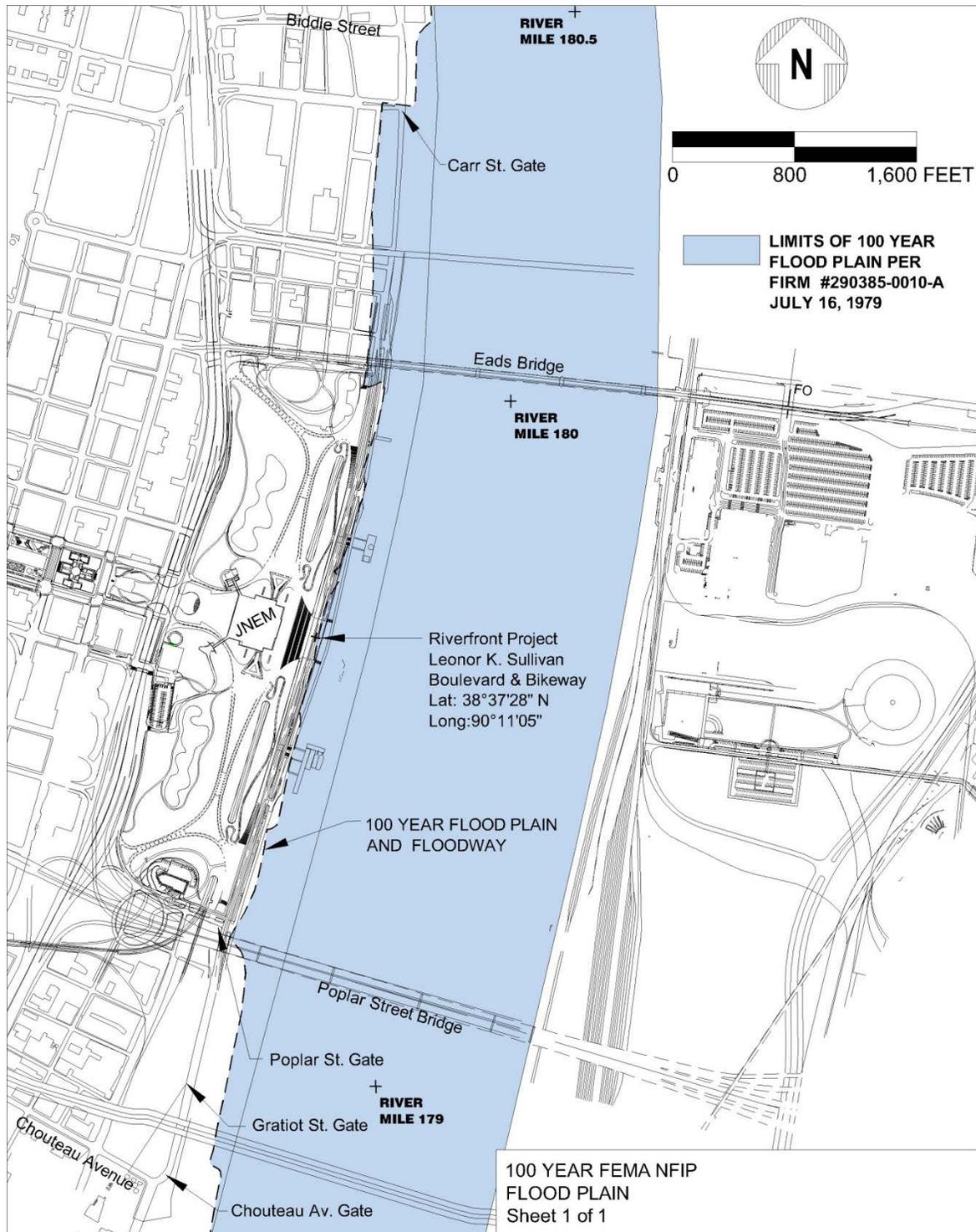


Figure 1: 100-year FEMA Floodplain and the Project Area

SITE DESCRIPTION

Portions of the East Slopes in the park and entire Central Riverfront project area lies within the regulatory 100-year (1%) Mississippi River floodplain as mapped by the Federal Emergency Management Association (FEMA) National Flood Insurance Program (NFIP). The floodway portion of the River is confined by a floodwall/levee system on both the east side of the River (Illinois bank) and the west side of the River (Missouri bank). The floodwall/levee system essentially “squeezes” the floodplain into a relatively narrow floodway.

Floodplains are defined by the NPS Procedural Manual 77-2: Floodplain Management (NPS 2003) as “the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, and including, at a minimum, that area subject to temporary inundation by a regulatory flood.” Typically floodplains function to contain flood waters. Floodplains can also provide habitat for various flora and fauna especially the islands that are temporarily formed by shifting river sediments. This portion of the Mississippi River floodplain has been highly industrialized with several river ports / transfer loading facilities located within what is referred to as the St Louis Harbor.

JUSTIFICATION FOR USE OF THE FLOODPLAIN

Portions of the project area are located within designated high hazard floodplains. Although the NPS is under executive order and policy to reduce or eliminate development in floodplains, this is not possible in the project area because the proposed improvements to the East Slopes, Central Riverfront, and LKS Boulevard are located within a 100-year floodplain.

DESCRIPTION OF SITE-SPECIFIC FLOOD RISK

The Central Riverfront lies at a low elevation and is relatively flat. The project area, stretching from Choteau Avenue to Biddle Street from the bank of the Mississippi River to the railroad on the East Slopes within the park is currently designated as Zone AE, which is within the 100-year floodplain (per the current FEMA mapping). West of this area, the park is shown to be protected from the 1% annual chance or greater flood hazard due to the levee system that has been provisionally accredited (per current FEMA mapping).

A one-hundred-year flood is calculated to be the level of flood water expected to be equaled or exceeded every 100 years on average. The 100-year flood can also be thought of as a 1 percent flood, since it is a flood that has a 1 percent chance of being equaled or exceeded in any single year. Along the Central Riverfront, flood occurrences that just overtop LKS Boulevard are far more frequent than the larger 100-year flood events that close the floodgates. These higher-frequency floods typically last up to two weeks and cause the closure of LKS.

DESCRIPTION AND EXPLANATION OF FLOOD MITIGATION PLANS

The proposed project itself constitutes a strategy for the reduction of flood risk. By raising LKS Boulevard along the Central Riverfront, the project aims to mitigate the effects of annual flooding and the associated impacts to public safety, visitor use and experience, and historic resources. Because the City of St. Louis is a member of the National Flood Insurance Program, Great Rivers Greenway District would need to apply for and obtain a Floodplain Development Permit. A Riverine Hydraulic Analysis of the proposed improvements must be completed in advance to assure the City that a “no-rise” to the 100-year base flood elevation will exist after the proposed improvements are constructed. As a result, the project would be designed to minimize the number of flood events that closes the roadway but would not affect the 100-year flood base elevations.

During site preparation and construction, efforts to preserve existing vegetation within the floodplain would be undertaken as standard procedures. Any vegetation removed to accommodate the proposed improvements would be replaced within the flood zone. Floodplain values would be protected to the maximum extent possible. Although the project must occur within the floodplain, the extent of development, placement of structures, and types of structures would be selected to minimize impacts.

SUMMARY

The proposed project constitutes enhancements for public safety, visitor use and experience, and historic resources, and must be carried out within the 100-year floodplain. Specifically, the proposed improvements to the East Slopes, Central Riverfront, and Leonor K. Sullivan Boulevard are within the 100-year floodplain. There are no other siting alternatives that could be considered for this project. Mitigation and compliance with regulations and policies to prevent impacts to water quality, floodplain values and loss of property or human life would be strictly adhered to during and after construction. Potential flood hazards would be minimized and there would be no long-term adverse impacts to the 100-year designated floodplain. To the contrary, the decreased flood events along the Central Riverfront would have beneficial effects on public safety, visitor use and experience, and historic resources at Jefferson National Expansion Memorial and along the Central Riverfront.

APPENDIX B
U.S. FISH AND WILDLIFE CORRESPONDENCE



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Jefferson National Expansion Memorial
11 North Fourth Street
St. Louis, Missouri 63102-1882

August 28, 2012

L76 (JEFF)
XD18

Memorandum

To: Amy Salveter, Field Supervisor, Columbia Ecological Services Field Office,
U.S. Fish & Wildlife Service

From: Tom Bradley, Superintendent, Jefferson National Expansion Memorial,
National Park Service

Subject: Informal Consultation under the Endangered Species Act—Implementation of
CityArchRiver 2015 Initiative at Jefferson National Expansion Memorial and Along
the Central Riverfront

Per our initial communication dated July 22, 2011, the National Park Service (NPS), in accordance with the National Environmental Policy Act, is preparing an Environmental Assessment (EA) to evaluate alternatives for implementing CityArchRiver 2015 initiative elements at Jefferson National Expansion Memorial (the park) in St. Louis, Missouri. The scope of the EA has since been expanded to include not only projects within the park boundary, but also the central riverfront, as depicted in figure 1.

The proposed action involves physical changes to the park and the central riverfront as a method for improving visitor access and experience, while better connecting the river and the park into downtown St. Louis. The project does not involve the development of any properties on the east side of the Mississippi River.

The major components of the project currently under consideration include:

- a landscaped "Park Over the Highway" (to be constructed by the Missouri Department of Transportation) over the depressed lanes of Interstate 70 between the Gateway Arch grounds and downtown;
- renovation of the underground museum and a new entrance;

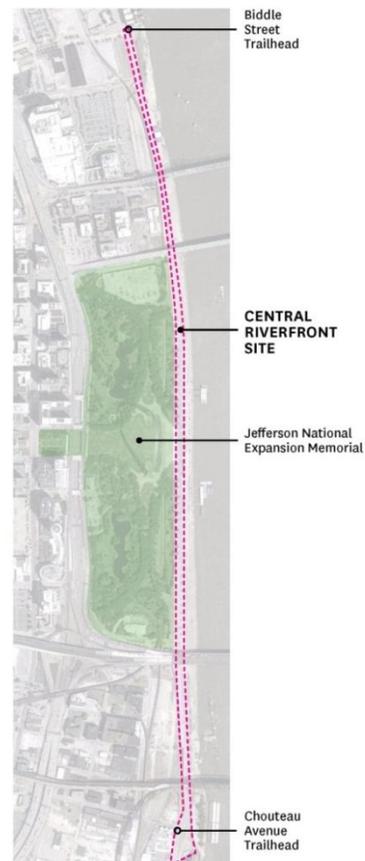


Figure 1. Project Area

- accessibility improvements and new exhibits in the Old Courthouse;
- development of accessible trails from the park to the riverfront;
- expanded visitor programming and amenities on the Gateway Arch grounds;
- improvements to the sustainability of the landscape at the park;
- raising the elevation of Leonor K. Sullivan Boulevard from Chouteau Avenue to Biddle Street; and
- development of pedestrian and two-way bicycle paths along the central riverfront.

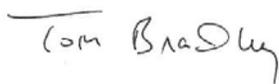
According to the U.S. Fish and Wildlife Service's website, the following listed threatened and endangered species are known to occur in St. Louis County, Missouri and St. Clair County, Illinois: Gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), Least tern (*Sterna antillarum*), Pallid sturgeon (*Scaphirhynchus albus*), Pink mucket (pearlymussel) (*Lampsilis abrupta*), Scaleshell mussel (*Leptodea leptodon*), Sheepnose mussel (*Plethobasus cyphus*), Snuffbox mussel (*Epioblasma triquetra*), Spectaclecase (*Cumberlandia monodonta*), Illinois cave amphipod (*Gammarus acherondytes*), Decurrent false aster (*Boltonia decurrens*), Mead's milkweed (*Asclepias meadii*), Eastern prairie fringed orchid (*Platanthera leucophaea*), and Running buffalo clover (*Trifolium stolonifereum*).

While the above listed threatened and endangered species may be present at locations within St. Louis County, Missouri and St. Clair County, Illinois, the project area includes only those lands in downtown St. Louis within the existing Memorial boundary and the adjacent central riverfront (see figure 1).

No species are known to be present within the project area. In addition, the urban environment and associated disturbances make it highly unlikely that suitable habitat to support listed species would be available, now or in the future. Additionally, although improvements to the east slopes of the park and the central riverfront would occur within the 100-year floodplain of the Mississippi River, the project must be designed to ensure no rise in the 100-year base flood elevation after improvements are constructed. This would minimize potential for any impacts to listed species which may occur in or near the river.

Based on these considerations, the NPS has concluded that the project would have no effect on listed species, their habitats, or proposed or designated critical. The NPS will provide the U.S. Fish and Wildlife Service a copy of the EA when released, which will provide additional details about the alternatives being considered and their impacts on the human environment. Your input will help ensure that the environmental impacts of the proposal are properly considered.

Thank you and if you have any questions or require any further information please contact me at 314-655-1630.



Thomas A. Bradley

cc: Matt Mangan, Interim Field Supervisor, U.S. Fish and Wildlife Service, Marion Illinois Sub-Office, 8588 Route 148 Marion, Illinois 62959



United States Department of the Interior

NATIONAL PARK SERVICE
Jefferson National Expansion Memorial
11 North Fourth Street
St. Louis, Missouri 63102-1882

IN REPLY REFER TO:

July 22, 2011

L76(JEFF)
XD18

Memorandum

To: Charlie Scott, Field Supervisor, Columbia Ecological Services Field Office,
U.S. Fish & Wildlife Service

From: Tom Bradley, Superintendent, Jefferson National Expansion Memorial
National Park Service

Subject: Informal Consultation under the Endangered Species Act—Revitalizing Jefferson
National Expansion Memorial

The National Park Service (NPS), in accordance with the National Environmental Policy Act, is preparing an Environmental Assessment (EA) to evaluate alternatives for revitalizing Jefferson National Expansion Memorial (the park) in St. Louis, Missouri. As part of the goal of revitalizing the park, this EA will consider the impacts to park resources resulting from implementation of the winning design from the City Arch River 2015 International Design Competition, held in 2010. The proposed action involves physical changes to the park and facilities as a method for improving visitor access and experience, while better integrating the park into downtown St. Louis.

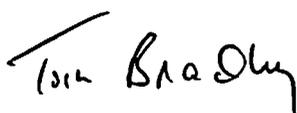
Although specific alternatives have not yet been clearly defined at this stage of the planning process, the major components of the project currently under consideration include:

- a landscaped “lid” over the depressed lanes of Interstate 70 between the Gateway Arch grounds and downtown;
- renovation of the underground museum and a new entrance;
- accessibility improvements and new exhibits in the Old Courthouse;
- development of accessible trails to the riverfront;
- expanded visitor programming and amenities on the Gateway Arch grounds; and
- improvements to the sustainability of the landscape at the park.

According to the U.S. Fish and Wildlife Service’s (USFWS) website, the following listed threatened and endangered species are known to occur in St. Louis County, Missouri: Pink mucket (pearlymussel) (*Lampsilis abrupta*), Scaleshell mussel (*Leptodea leptodon*), Pallid sturgeon (*Scaphirhynchus albus*), Mead's milkweed (*Asclepias meadii*), Decurrent false aster (*Boltonia decurrens*), Running buffalo clover (*Trifolium stoloniferum*), Indiana bat (*Myotis sodalis*), and Gray bat (*Myotis grisescens*).

While the above threatened and endangered species may be present at locations within St. Louis County, the NPS project area includes only those lands in downtown St. Louis within the existing Memorial boundary and does not involve the development of any properties on the east side of the Mississippi River. Prior telephone conversations between NPS staff and U.S. Fish and Wildlife biologists in 2003 indicated that no species were present within the existing Memorial grounds and due to the urban environment and associated disturbances suitable habitat to support the listed species was highly unlikely to be available in the future. At the present time, the Memorial grounds continue to function as a modified urban park environment and it remains highly unlikely that any of the listed species occur within the project area. Therefore, the NPS has concluded that the project is not likely to have an adverse effect on listed species, their habitats, or proposed or designated critical habitat.

Thank you for your review and consideration of this determination. Your input will help ensure that the environmental impacts of the proposal are properly considered. If you have any questions or require any further information please contact me at 314-655-1630.

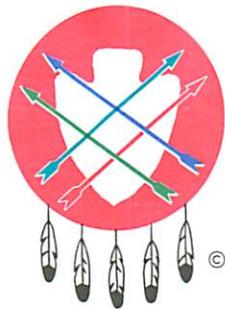
A handwritten signature in black ink that reads "Tom Bradley". The signature is written in a cursive style with a prominent initial "T" and a long, sweeping underline.

cc:

Joyce Collins, U.S. Fish and Wildlife Service, Marion Illinois Sub-Office, 8588 Route 148
Marion, Illinois 62959

APPENDIX C
TRIBAL CONSULTATIONS

AH 9/7/11



PEORIA TRIBE OF INDIANS OF OKLAHOMA

118 S. Eight Tribes Trail (918) 540-2535 FAX (918) 540-2538
P.O. Box 1527
MIAMI, OKLAHOMA 74355

CHIEF
John P. Froman

SECOND CHIEF
Jason Dollarhide

September 1, 2011

U.S. Department of Interior
National Park Service
Attn: Ann Honious
NEPA Coordinator and Chief of Museum Services
Jefferson National Expansion Memorial
11 North Fourth Street
St. Louis, MO 63102-1882

RE: Jefferson National Expansion Memorial

Thank you for notice of the referenced project. The Peoria Tribe of Indians of Oklahoma is interested in consulting on the project. Please include us on all mailing lists pertaining to this site. Please share all information concerning this project as it pertains to Native American interests.
Contact information is:

Frank Hecksher
Special Projects/NAGPRA Manager
118 S. Eight Tribes Trail
Miami, OK 74354
918-540-2535
fhecksher@peoriatribes.com

John P. Froman
Chief

TREASURER
John Sharp

SECRETARY
Don Giles

FIRST COUNCILMAN
Carolyn Ritchey

SECOND COUNCILMAN
Jenny Rampey

THIRD COUNCILMAN
Alan Goforth



Tom / AH
Fraake / AH
Ann AH 9.29.11

TRIBAL HISTORIC PRESERVATION OFFICE

Date: September 23, 2011

File: 1112-24MO-10

RE: NPS Jefferson National Expansion Memorial (Gateway Arch) Implementation of the Winning Design of the Framing a Modern Masterpiece International Design Competition

Jefferson National Expansion Memorial
Thomas A. Bradley
11 North Fourth Street
St. Louis, MO 63102-1882

Dear Mr. Bradley,

The Osage Nation Historic Preservation Office has received notification and accompanying information for the proposed project listed as NPS Jefferson National Expansion Memorial (Gateway Arch) Implementation of the Winning Design of the Framing a Modern Masterpiece International Design Competition. **The Osage Nation requests a copy of the Environmental Assessment.**

In accordance with the National Historic Preservation Act, (NHPA) [16 U.S.C. 470 §§ 470-470w-6] 1966, undertakings subject to the review process are referred to in S101 (d)(6)(A), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Osage Nation has a vital interest in protecting its historic and ancestral cultural resources. **The Osage Nation anticipates reviewing and commenting on the planned Environmental Assessment for the proposed NPS Jefferson National Expansion Memorial (Gateway Arch) Implementation of the Winning Design of the Framing a Modern Masterpiece International Design Competition.**

Should you have any questions or need any additional information please feel free to contact me at the number listed below. Thank you for consulting with the Osage Nation on this matter.

James Munkres
Archaeologist I

APPENDIX D
PROGRAMMATIC AGREEMENT

**PROGRAMMATIC AGREEMENT
AMONG
THE UNITED STATES DEPARTMENT OF THE INTERIOR (NATIONAL PARK SERVICE),
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AND
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER
REGARDING
IMPLEMENTATION OF THE WINNING DESIGN OF THE FRAMING A MODERN
MASTERPIECE INTERNATIONAL DESIGN COMPETITON**

WHEREAS, the United States Department of the Interior, National Park Service, Jefferson National Expansion Memorial (NPS) and the CityArchRiver 2015 Foundation (Foundation) propose to implement the winning design of the *Framing a Modern Masterpiece* International Design Competition (the Design Competition) by carrying out the physical and programmatic elements called for by that design in Appendix A (the Undertaking) and in doing so must meet the requirements of Sections 106 and 110(f) of the National Historic Preservation Act (16 U.S.C. 470f, 470h-2(f)); and

WHEREAS, the Design Competition was undertaken after being identified as the preferred alternative of the October 2009 General Management Plan/Environmental Impact Statement (GMP/EIS) for Jefferson National Expansion Memorial (the Park); and

WHEREAS, the Foundation sponsored the Design Competition focusing on the Park, a National Historic Landmark (NHL), to result in the selection of a design “to integrate the park, the east and west sides of the Mississippi River, the surrounding attractions and the downtown into a single and vibrant dynamic destination;” and

WHEREAS, the Federal Highway Administration (FHWA) has satisfied the requirements of Section 106 for transportation improvements associated with the Foundation’s Design Competition (see Appendix A) including the proposed construction of a 300-foot wide landscaped ‘lid’ over the sunken lanes of I-70 between Market and Chestnut streets and associated road and ramp changes as demonstrated by a concurrence by the Missouri SHPO dated September 30, 2011 with FHWA’s finding of a no adverse effect; and

WHEREAS, the NPS has identified the Area of Potential Effect (APE) and assembled a list of historic properties within the APE that have the potential to be affected by the Undertaking as indicated in Appendix B; and

WHEREAS, NPS has determined that effects on historic properties cannot be fully evaluated prior to approval of the undertaking, and has developed this Programmatic Agreement (PA) establishing a process to assess and resolve adverse effects in accordance with 36 CFR Part 800.14(b)(1)(ii); and

WHEREAS, the Secretary of the Interior has been invited to participate in recognition of the potential effects to two National Historic Landmarks (Jefferson National Expansion Memorial and Eads Bridge); and

WHEREAS, any portion of the winning design that extended beyond the referenced APE will not be implemented under this PA, except as noted herein or as amended pursuant to the terms herein; and

WHEREAS, the NPS acknowledges that removal of parking will create a demand for parking accommodation beyond the confines of the Park, and the connection to this Undertaking, if any, will be clarified and NPS agrees to undertake separate review of that action under 36 CFR Part 800, as appropriate; before the removal of the parking garage will commence; and

WHEREAS, the NPS, consulted with the Advisory Council on Historic Preservation (ACHP) and the ACHP will be a signatory to this PA; and

WHEREAS, the development and execution of this PA fulfills stipulation IV.H of the Memorandum of Agreement among the NPS, ACHP, Illinois and Missouri SHPOs and the Foundation executed July 13, 2010 to guide the design completion; and

WHEREAS, the NPS consulted with the Missouri and Illinois State Historic Preservation Officers (SHPO) and the Illinois SHPO declined to participate in negotiations to develop the PA or be a signatory to the PA; and

WHEREAS, the NPS consulted with the Absentee-Shawnee Tribe of Indians of Oklahoma, Delaware Nation of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Iowa Tribe of Kansas and Nebraska, Iowa Tribe of Oklahoma, Kaw Nation, Kickapoo Tribe in Kansas, Miami Tribe of Oklahoma, Muscogee Creek Nation, Osage Nation, Ponca Tribe of Nebraska, Peoria Tribe of Oklahoma, Quapaw Tribe of Oklahoma, Sac and Fox Tribe of the Missouri in Kansas and Nebraska, Sac and Fox Tribe of the Mississippi in Iowa, Sac and Fox Nation of Oklahoma concerning the Undertaking and historic properties of cultural significance to them; and

WHEREAS, the Peoria Tribe of Oklahoma, Miami Tribe of Oklahoma, and Quapaw Tribe of Oklahoma (here after referred to as "other Interested Tribes") desire to continue participating in consultations and have been invited to sign the agreement as a Concurring Party (acknowledging that the Tribes have read and understand the PA and are in agreement with the terms of the PA); and

WHEREAS, the Osage Nation desires to continue participating in consultations and has been invited to execute this agreement; and

WHEREAS, the NPS has and continues to provide the public with information about the Undertaking and shall continue to seek and consider the views of the public regarding the Undertaking; and

WHEREAS, Missouri Preservation has participated in consultations and has been invited to sign this agreement as a Concurring Party; and

WHEREAS, the National Trust for Historic Preservation has participated in consultations and has been invited to sign this agreement as a Concurring Party;

NOW, THEREFORE, the NPS, the ACHP, and the Missouri SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties.

STIPULATIONS

Consistent with assurances contained in the GMP/EIS for the Park, the National Park Service will *not allow the implementation of a project that would cause impairment to the Memorial, and all of the enhancements would be required to be located in such a manner as to preserve the integrity of the National Historic Landmark and National Register Historic District.* In furtherance of this assurance, the National Park Service will ensure that the following measures are carried out.

I. APPLICABILITY AND SCOPE

This PA applies to the design and construction of the Undertaking defined in Appendix A. The NPS is the lead federal agency for fulfilling the Section 106 requirements in accordance with this PA.

II. PROFESSIONAL QUALIFICATIONS AND STANDARDS

A. The NPS will ensure that all work performed on the Site that has the potential to have an effect, directly or indirectly, on contributing structures and/or landscape features is performed or supervised by qualified individuals and/or teams that meet the *Secretary of the Interior's Historic Preservation Professional Qualification Standards*, 62 Fed. Reg. 33,707 (June 20, 1997), for history, architectural history, architecture, historic architecture and conservation, landscape architecture and/or archeology, as appropriate. Nothing in this stipulation may be interpreted to preclude NPS or any agent or contractor thereof from using the properly supervised services of persons who do not meet the professional qualification standards.

B. Any testing, inventory or documentation of potential or known historic properties pursuant to implementation of the PA shall conform to the provisions of the Secretary of the Interior's *Standards and*

Guidelines for Archeology and Historic Preservation (48 FR. 44716-44740) and applicable standards and guidelines for historic preservation established by the Missouri SHPO.

III. IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES

A. **Historic Structures, Buildings, Objects and Landscapes.** Through its management of the Park, the NPS has compiled extensive documentation on the presence and significance of historic properties as documented on the park's CAR2015 Design Center web site at <http://www.nps.gov/jeff/parkmgmt/cardocuments.htm>. This documentation includes analysis of the existing contributing features and contributing landscape features of the Memorial and identification of known historic properties and their qualifying characteristics within the APE (Appendix B). NPS will ensure that this documentation is fully taken into account. Additionally, NPS will ensure that this documentation is available to all consulting parties and the public except for sensitive archeological documentation, which may be kept private in accordance with stipulation III.F below. In carrying out the components of the Undertaking identified in Appendix A, the NPS will not need to undertake any additional studies to identify at grade historic properties, unless otherwise set forth in this PA.

B. **Archeological Resources - Identification.** Implementation of the Undertaking may result in damage to previously unknown archeological resources. Accordingly, the NPS will consult with the Missouri SHPO and Osage Nation and carry out needed archeological surveys to determine if any such archeological sites are present and whether such sites are eligible for inclusion in the National Register. Although NPS files indicate that large amounts of sediments were imported from another location during monument landscape construction, the source and degree of integrity at specific locations within the park is currently unknown. Before any ground disturbing activities take place, all locations that may be impacted by these activities will be tested and evaluated for potential to contribute archeological information during the course of each project component. The NPS will conduct identification and assessment of archeological resources consistent with the following measures.

1. *Survey Scope.* The NPS, in consultation with the Missouri SHPO and the Osage Nation, will identify all surface areas that may be altered in any way by construction activities, to include any areas subject to temporary disturbance due to construction activities, lay-down areas, access roads, etc. An archeological identification effort will be carried out for these areas with the exception of any areas for which sufficient archeological information is already known or there is clear evidence that an area has been disturbed by previous activity to the extent that the presence of significant archeological deposits is highly unlikely.
2. *Survey Timing.* The NPS will schedule survey activities to reflect the sequential nature of construction activities and to ensure that survey activities and consultation on the identification, effects, and resolution of any adverse effects are completed well in advance of any construction related soil disturbance activities.
3. *Survey Methodology.* The NPS will consult with the Missouri SHPO and the Osage Nation and develop an efficient and effective survey methodology, ensuring that it is sufficient to generate information necessary to apply the National Register Criteria to any identified sites. The NPS shall ensure that the determinations of eligibility are consistent with the National Register Bulletin: *How to Apply the National Register Criteria for Evaluation* and follow the format consistent with the *State of Missouri, Department of the Natural Resources, Preliminary National Register of Historic Places Eligibility Assessment* (<http://www.dnr.mo.gov/forms/780-1878-f.pdf>) or another format mutually agreed upon by the NPS and Missouri SHPO.
4. *Outcome.* Based on its analysis of survey results and further consultation with appropriate signatories to this PA, NPS will apply the National Register Criteria and determine what, if any, identified archeological sites are eligible for inclusion in the National Register.

C. **Archeological Resources – Treatment.** For identified archeological properties determined to be eligible for the National Register, the NPS, in consultation with the Missouri SHPO and the Osage Nation, will develop treatment measures. Priority will be given to avoidance alternatives, to include burying sites under fill or incorporating them into the Undertaking, provided that the long-term protection of the archeological site can be assured by such measures. If avoidance options are not practical, NPS will undertake a data recovery plan for the recovery of archeological data from the site. Archeological

treatment plans and/or data recovery plans will be developed during the Design Development phase of design once options to avoid sites have been explored. Data recovery will be guided by a scope of work that includes:

1. Research questions to be addressed through the data recovery or through other research means.
2. Methods to be used, with an explanation of their relevance to the research questions.
3. Methods to be used in the analysis, data management, and dissemination of data, including a schedule.
4. Proposed disposition of recovered materials and records. And,
5. Proposed methods for involving the public and disseminating results of the work to the public.

The NPS will ensure that the data recovery plan is carried out and the signatories to the PA notified of the results.

D. Consultation Protocols. In carrying out the measures set forth in stipulation V. B, the NPS will ensure that consultation with the Missouri SHPO and the Osage Nation is conducted in a manner in which:

1. Meaningful input and opportunity for resolving disagreements is encouraged;
2. Any reviewing party for any scopes of work, National Register evaluations, treatment plans, and data recovery plans is provided 30 calendar days from the time of receipt to conduct review and submit comments unless otherwise negotiated; and,
3. Comments received are taken fully into account and the commenting party is notified of how the NPS responded to its comments.

E. Review Materials. At a minimum, the Missouri SHPO and the Osage Nation will be provided with the following items for their information and/or review:

1. Scopes of work and/or survey methodologies;
2. Draft and final archeological reports and memorandums at each stage of archeological investigation;
3. Archeological treatment and/or data recovery plans; and,
4. Responses to comments.

F. Site Disclosure. All archeological resources identified in carrying out the terms of this PA are subject to the provisions of section 304 of the National Historic Preservation Act, relating to the disclosure of archeological site information and NPS will ensure that all actions and documentation prescribed by this PA are consistent with said sections.

IV. OUTREACH TO AND INVOLVEMENT OF TRIBES

A. The NPS is committed to working with the Osage Nation and other Interested Tribes to assist in identifying and minimizing project impacts on important cultural resources, graves, and isolated human remains and recognizes that tribal monitoring is a vital contributing element in this effort.

B. Other Interested Tribes, as identified in the whereas clause of this PA, will receive all notifications and review materials stipulated in this PA for informational purposes.

C. Tribal monitoring will follow protocols and procedures established through consultation as set forth in Appendix C.

D. Unanticipated Discovery of Human Remains or Graves.

1. In the case of an unanticipated discovery of human remains or graves on Federal land, the NPS shall follow the procedures outlined by the Native American Graves Protection and Repatriation Act, as amended (43 C.F.R. 10, Subpart B), and pursuant to the Archeological Resources Protection Act of 1979 (43 C.F.R. 7) and as clarified in Appendix D.
2. If remains are found not to be Native American and not associated with a crime scene, every effort will be made to avoid impacting burial areas and graves. NPS will attempt to consult with individuals and groups linked by demonstrable ties of kinship or culture to potentially identifiable human remains. Reinterment at the same park may be permitted or another agreement reached

as to their treatment. If no consulting groups are identified, NPS will consult with the Missouri SHPO to determine an appropriate course of action.

V. DESIGN DEVELOPMENT

The Undertaking will be designed consistent with design objectives expressed in the outcome of the winning design. Implementation of the design and development of design documents and specifications for the various component parts of the Undertaking will present overlapping and demanding schedules to meet construction schedules. To accommodate these factors while ensuring that there is adequate opportunity for input from consulting parties, NPS will implement the following measures.

A. **Design Standards.** The NPS and Foundation will ensure that all design contractors working on the Undertaking are provided design standards, to include at a minimum, the following:

1. The Secretary of the Interior's *Standards for the Rehabilitation of Cultural Landscapes*.
2. The Secretary of the Interior's *Standards for the Treatment of Historic Properties*.
3. Formatting and content consistent with the NPS Denver Service Center Design Workflows guidelines for schematic, design, and construction documents <http://www.nps.gov/dscw/designbidbuild.htm>.
4. A copy of this executed PA. And,
5. Other design standards recommended by signatories to this PA as deemed appropriate by the NPS and Foundation.

The NPS and the Foundation will ensure that the design contractors adhere to these standards in the development of all design documents including change orders necessitated after award of any construction contracts implementing the Undertaking or part thereof.

B. **Establishment of Collaborative Design Review Team.** To ensure that signatories and consulting parties to this PA have opportunity to assist the NPS in meeting its design goal that the Undertaking preserve the integrity of this historic setting, the NPS, with assistance from the Foundation, will establish and provide administrative support to a Collaborative Design Review Team.

1. *Membership.* Membership on the team will consist of a representative of the NPS, the Foundation, the Missouri SHPO, and Missouri Preservation. Additional members would be added to this team at the discretion of its members and based on the nature of the particular component of the Undertaking being reviewed. Consulting parties wishing to participate in design review of specific components of the Undertaking will let their interest be known by notification to the NPS. The NPS shall notify the National Trust for Historic Preservation as early as possible in advance of all Collaborative Design Review Team meetings to help ensure that it has an opportunity to request participation by joining the meeting.
2. *Team Mission.* The primary purpose of the team will be to review draft schematic and design documents and evaluate how project design and specifications may affect qualifying characteristics of properties included in or eligible for inclusion in the National Register and to make recommendations on how relationships between the design and historic properties might be improved and/or adverse effects avoided.
3. *Team Support.* The NPS, with assistance from the Foundation, will facilitate the function of this Team by providing for regularly scheduled meetings during the design process, ensuring that Team members are provided all appropriate construction documents in a timely fashion, and documenting the outcome of team meetings. At its initial meetings, the Collaborative Design Review Team will establish its general operating procedures and the NPS will ensure that these procedures are distributed consistent with stipulation V.B.4. below.
4. *Consulting Party and Public Notification of Team Activities.* Through use of appropriate websites or other notification techniques, the NPS will ensure that consulting parties and the public are provided information about the purposes of the Collaborative Design Review Team and its general schedule of activities, along with the schedule of design review process for the Undertaking as it may relate to the activities of the Collaborative Design Review Team. Upon

request, the NPS, on behalf of the Collaborative Design Review Team, will respond to consulting party and/or the public inquiries about how comments were taken into account in the decision making process.

5. *Team Outcome and Dispute Resolution.* The members of the Team will strive diligently to work toward mutually agreeable outcomes on design issues addressed by the Team. If, during the course of Team review of a design proposal an impasse is reached, any member of the Team can take steps to have the dispute resolved through the provisions set forth in stipulation X of this PA.
6. *Team Duration.* The Team will remain in place until the close of the design process, to include development of pertinent design construction documents and specifications, for the components of the Undertaking or sooner if mutually agreed to by all of the Team members.

VI. PUBLIC OUTREACH

Until such time as the Undertaking is completed, the NPS, with assistance from the Foundation, will take necessary steps to ensure that the public is provided timely information on the status of the Undertaking and steps taken to meet the terms of the PA. At a minimum, these efforts will include use of relevant websites to update the public and solicit ongoing input and suggestions as it may relate to the relationship of the Undertaking to historic properties. Information to be exchanged with the public will include project design and construction schedules, the activities of the Collaborative Design Review Team, as discussed in stipulation V.B.4, the results of further historic property identification efforts, as discussed in stipulation III.A, new interpretive features, and component design plans. Throughout this outreach effort, the NPS will encourage input from the consulting parties to this PA and other groups, organizations, and individuals that did not participate in consultation leading to this PA.

VII. DOCUMENTATION

A. The NPS shall prepare Historic American Landscape Survey (HALS) recordation of the NHL prior to alterations in the Design Competition's rehabilitation of or introduction of new features into the historic landscape. HALS documentation will be completed prior to the commencement of any construction activities.

B. Following implementation of the Undertaking the NPS shall update the NHL documentation to reflect modifications that resulted from the Undertaking, and to include more information about the significance of the historic landscape to the overall NHL designation.

VIII. INADVERTANT DISCOVERIES AND UNANTICIPATED EFFECTS

In the event that previously unreported and unanticipated historic properties or unanticipated effects to already known historic properties are found during activities conducted by or on behalf of the NPS, the NPS will ensure that the procedures set forth in Appendix E are fully carried out.

IX. INTERPRETIVE TREATMENTS

A. The NPS will seek to interpret for future visitors to the Jefferson National Expansion Memorial the changes that have occurred at the Park as a consequence of the Design Competition and implementation of the Undertaking. The NPS will consider a wide range of options for how best to achieve this interpretive program, including a permanent exhibit within the Museum, explaining the Design Competition and resulting changes to the appearance and character of the JNEM, using models, documents, etc. from the Competition and/or other electronic media, waysides or exhibits.

B. In the development of this interpretive program the NPS will consult with the signatories to this PA and examine possible techniques and interpretive techniques that will provide visitors with information on historic properties known to have existed prior to construction of the Arch and Grounds and archeological features preserved in place in carrying out the Undertaking unless pursuant to stipulation III.F. above the nature and location of a remaining archeological site(s) should be kept confidential.

X. DISPUTE RESOLUTION

A. Should the signatories executing this PA at any time object in writing to the manner in which the terms of this PA are implemented, to any action carried out or proposed with respect to implementation of this

PA, or to any document prepared in accordance with and subject to the terms of this PA, the objecting party shall notify the other signatories, and the signatories shall consult within seven calendar days to resolve the objection.

B. If the objection is resolved through consultation, the NPS may proceed with the disputed action in accordance with the terms of such resolution.

C. If, after initiating consultation, the NPS determines that the objection cannot be resolved through consultation, or if the duration of the consultation has exceeded 15 days from the commencement of consultation to resolve the dispute, the NPS shall forward all documentation relevant to the objection to the ACHP, including the NPS's proposed resolution of the objection, with the expectation that the ACHP shall within 30 days after receipt of such documentation:

1. Advise the NPS that the ACHP concurs in the NPS's proposed resolution of the objection, whereupon the NPS shall notify the signatories executing this PA, and NPS shall resolve the objection accordingly; or
2. Provide the NPS with recommendations, which the NPS shall take into account in reaching a final decision to resolve the objection. The NPS shall notify the signatories executing this PA of its final decision.

D. The procedures outlined in stipulations X.A to X.C, above, shall apply only to the subject of the objection. The NPS's responsibility to carry out all actions under this PA that are not the subjects of the objection, and which do not foreclose the consideration of alternatives to resolve the objection, shall remain unchanged.

XI. ADMINISTRATIVE PROVISIONS

A. Amendments. Any signatory executing this PA may propose that this PA be amended, whereupon the NPS and other executing signatories shall consult to consider such amendment. This PA may be amended only upon the written agreement of the executing signatories. The amendment shall be effective on the date a copy signed by all of the signatories is filed with the ACHP by the NPS.

B. Termination. If any signatory executing this PA proposes termination of the PA, the party proposing termination shall, in writing, notify the other signatories executing this PA, explain the reasons for proposing termination, and consult to seek alternatives to termination. Should such consultation fail, the signatory proposing termination may terminate this PA by promptly notifying in writing the other executing signatories. Termination shall render this PA without further force or effect. Should this PA be terminated, the NPS shall consult regarding the Undertaking with the executing signatories in accordance with 36 CFR Part 800.

C. Duration of the PA. Unless terminated pursuant to stipulation XI.B, the duration of this PA is five years from the date of its execution. NPS may initiate consultation with the signatories executing this PA approximately one (1) year prior to the expiration date of this PA to reconsider its terms. Reconsideration may include the continuation or revision of this PA by amendment or termination.

D. Effective date of the PA. This PA shall take effect on the date that it has been signed by the last executing signatory.

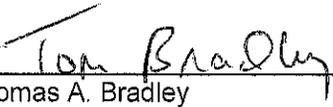
E. Anti-deficiency Act. Any requirement for the payment or obligation of funds by the Government established by the terms of this PA shall be subject to availability of appropriated funds. No provision in this PA shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 USC Section 1341. If the availability of funds and compliance with the Anti-Deficiency Act impair the NPS' ability to perform under this PA, then the NPS shall consult in accordance with stipulation XI.B of this PA.

Execution of this PA and implementation of its terms evidence that the NPS has taken into account the effects of this Undertaking on historic properties and has afforded the ACHP an opportunity to comment on the Undertaking and its effect on historic properties.

PROGRAMMATIC AGREEMENT
AMONG
THE UNITED STATES DEPARTMENT OF THE INTERIOR (NATIONAL PARK SERVICE),
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AND
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER
REGARDING
IMPLEMENTATION OF THE WINNING DESIGN OF THE FRAMING A MODERN
MASTERPIECE INTERNATIONAL DESIGN COMPETITON

SIGNATORY

NATIONAL PARK SERVICE



Thomas A. Bradley

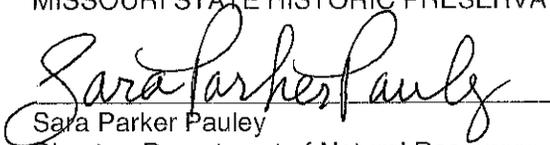
Superintendent, Jefferson National Expansion Memorial

Date: 9/18/12

PROGRAMMATIC AGREEMENT
AMONG
THE UNITED STATES DEPARTMENT OF THE INTERIOR (NATIONAL PARK SERVICE),
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AND
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REGARDING
IMPLEMENTATION OF THE WINNING DESIGN OF THE FRAMING A MODERN
MASTERPIECE INTERNATIONAL DESIGN COMPETITON

SIGNATORY

MISSOURI STATE HISTORIC PRESERVATION OFFICER


Sara Parker Pauley

Date: 10/26/12

Director, Department of Natural Resources and State Historic Preservation Officer

SIGNATORIES

NATIONAL PARK SERVICE

Thomas A. Bradley
Superintendent, Jefferson National Expansion Memorial

Date: _____

MISSOURI STATE HISTORIC PRESERVATION OFFICER

Sara Parker Pauley
Director, Department of Natural Resources and State Historic Preservation Officer

Date: _____

ADVISORY COUNCIL ON HISTORIC PRESERVATION



John M. Fowler
Executive Director

Date: 11/15/12

Invited Signatories:

OSAGE NATION

John D. Red Eagle
Principal Chief

Date: _____

CITYARCHRIVER 2015 FOUNDATION

Maggie Hales
Executive Director

Date: _____

PROGRAMMATIC AGREEMENT
AMONG
THE UNITED STATES DEPARTMENT OF THE INTERIOR (NATIONAL PARK SERVICE),
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AND
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER
REGARDING
IMPLEMENTATION OF THE WINNING DESIGN OF THE FRAMING A MODERN
MASTERPIECE INTERNATIONAL DESIGN COMPETITION

Invited Signatory:

OSAGE NATION



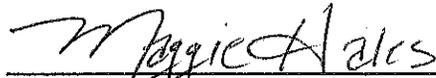
John D. Red Eagle
Principal Chief

Date: 10/19/12

PROGRAMMATIC AGREEMENT
AMONG
THE UNITED STATES DEPARTMENT OF THE INTERIOR (NATIONAL PARK SERVICE),
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Invited Signatory:

CITYARCHRIVER 2015 FOUNDATION



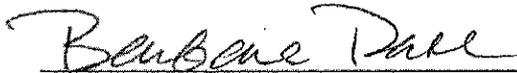
Maggie Hales
Executive Director

Date: 9/18/2012

PROGRAMMATIC AGREEMENT
AMONG
THE UNITED STATES DEPARTMENT OF THE INTERIOR (NATIONAL PARK SERVICE),
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AND
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER
REGARDING
IMPLEMENTATION OF THE WINNING DESIGN OF THE FRAMING A MODERN
MASTERPIECE INTERNATIONAL DESIGN COMPETITON

Concurring Party:

NATIONAL TRUST FOR HISTORIC PRESERVATION



Barbara Pahl
Vice-President of Western Field Offices

Date: 9-19-12

Concurring Parties:

MISSOURI PRESERVATION

Karen Bode Baxter
President

Date: _____

NATIONAL TRUST FOR HISTORIC PRESERVATION

Barbara Pahl
Vice-President of Western Field Offices

Date: _____

PEORIA TRIBE OF OKLAHOMA

John Froman
Chairman

Date: _____

MIAMI TRIBE OF OKLAHOMA

Thomas Gamble
Chief

Date: _____

QUAPAW TRIBE OF OKLAHOMA

John Berrey
Chairman

Date: _____

APPENDIX A

THE UNDERTAKING

The overall concept of the Undertaking is informed by the goals established in the Framing a Modern Masterpiece: The City + The Arch + The River competition, as well as extensive stakeholder and public input. The overall design approach of the Undertaking was guided by the 2009 Final Jefferson National Expansion Memorial General Management Plan/Environmental Impact Statement (GMP) and the analysis and treatment recommendations included in the Jefferson National Expansion Memorial Cultural Landscape Report (CLR). The Undertaking includes the following project areas:

- The West Gateway project includes a new park landscape at Luther Ely Smith Square, a new park landscape spanning the depressed lanes of I-70, and new landscaping associated with the Museum of Westward Expansion.
- The Museum of Westward Expansion project renovates existing facilities and exhibits at the visitor center and museum, as well as provides a new universally accessible entrance and lobby facility.
- The North Gateway project includes the removal and replacement of the existing parking garage with an open landscape, and construction of a shared pedestrian/bicycle path between the Arch grounds, city, and riverfront.
- The East Slopes project comprises the east side slopes that surround the railroad open cut walls and tunnels. An accessible connection would be created between the Arch Grounds and the Mississippi riverfront via new pedestrian pathways, and a more sustainable planting strategy will be implemented.
- The Reflecting Ponds project comprises the areas surrounding and including the Reflecting Ponds located between I-70 and the Processional Walks. New, accessible pedestrian pathways through these areas will be created and new planting, grading, and drainage strategies to improve the water quality of the Reflecting Ponds implemented.
- The Processional Walks project area includes the existing system of pedestrian walkways and allées of trees. Existing ash trees, currently threatened by the invasive emerald ash borer, will be replaced with a more suitable but compatible species. The soil, irrigation and drainage network that support the allées will be improved. The walks will be resurfaced or replaced as required with exposed aggregate concrete.
- The Old Courthouse project will renovate selected gallery spaces and develop new exhibits. ADA access improvements will be provided to the first and second floors through ramp and elevator improvements.

Further explanation of the Undertaking's project elements can be found in the environmental assessment prepared for the project which, when completed, will be available on the NPS Planning, Environment and Public Comment web site at <http://parkplanning.nps.gov/projectHome.cfm?projectID=37612> and archived on the park CAR2015 Design Center web site at <http://www.nps.gov/jeff/parkmgmt/cardocuments.htm>.

Design Competition Elements Not Covered by this PA

Several design elements of the Foundation's Design Competition will be carried out independently of the NPS and with little or no control by the NPS or are largely undefined and thus Section 106 compliance for these elements will not be covered by this PA. Should cumulative impacts associated with these project elements be identified by the Collaborative Design Review Team, the cumulative impacts will be considered during Section 106 review of other project components as designs proceed. These elements are listed below.

Transportation Improvements

MoDoT has initiated a separate undertaking for transportation needs associated with the Foundation's Design Competition. The MoDoT undertaking is not covered by this PA. It includes the following elements:

- Closure of Memorial Drive northbound between Walnut Street and Washington Avenue and southbound between Chestnut Street and Market Street;

- Construction of a park over the highway spanning the geographically depressed section of I-70 between Market Street and Chestnut Street;
- Changes to ramps on I-70 at Washington Avenue;
- Connection of two sections of Third Street by “punching” through the existing concrete island barrier at the MLK Bridge;
- Connection to downtown from eastbound I-70 at Tucker Boulevard;
- Removal of bridges at Walnut, Market, Chestnut, and Pine Street;
- Construction and reconfiguration of a new Walnut Street bridge ;
- Construction of a new land bridge from Market to Chestnut Street.

Central Riverfront Improvements

Great Rivers Greenway and the City of St. Louis will undertake improvements along Leonor K. Sullivan Boulevard from Chouteau Avenue to Biddle Street to promote economic development along the riverfront. The project may receive funding from the Federal Transit Authority, Federal Highway Department, and National Park Service. It may need federal permits from the Army Corps or additional federal agencies and will affect land owned by the National Park Service. NEPA compliance for this project will be folded into NEPA compliance for the Design Elements on NPS land. Section 106 will be done separately with the Lead Federal Agency to be determined. Elements of the undertaking may include:

- Raising the elevation of Leonor K. Sullivan Boulevard an average of 2.9 feet across the project site, varying between one foot and 4.5 feet, to reduce the frequency and impact of flood events;
- Establishing a new multi-modal greenway/roadway, providing a critical link in the regional system of bike trails;
- Conversion of the existing two-lane roadway into a narrower two-lane roadway section with a two-way bike path separated from the vehicle travel lanes;
- Establishment of designated areas for bus drop-off/pick-up lanes.

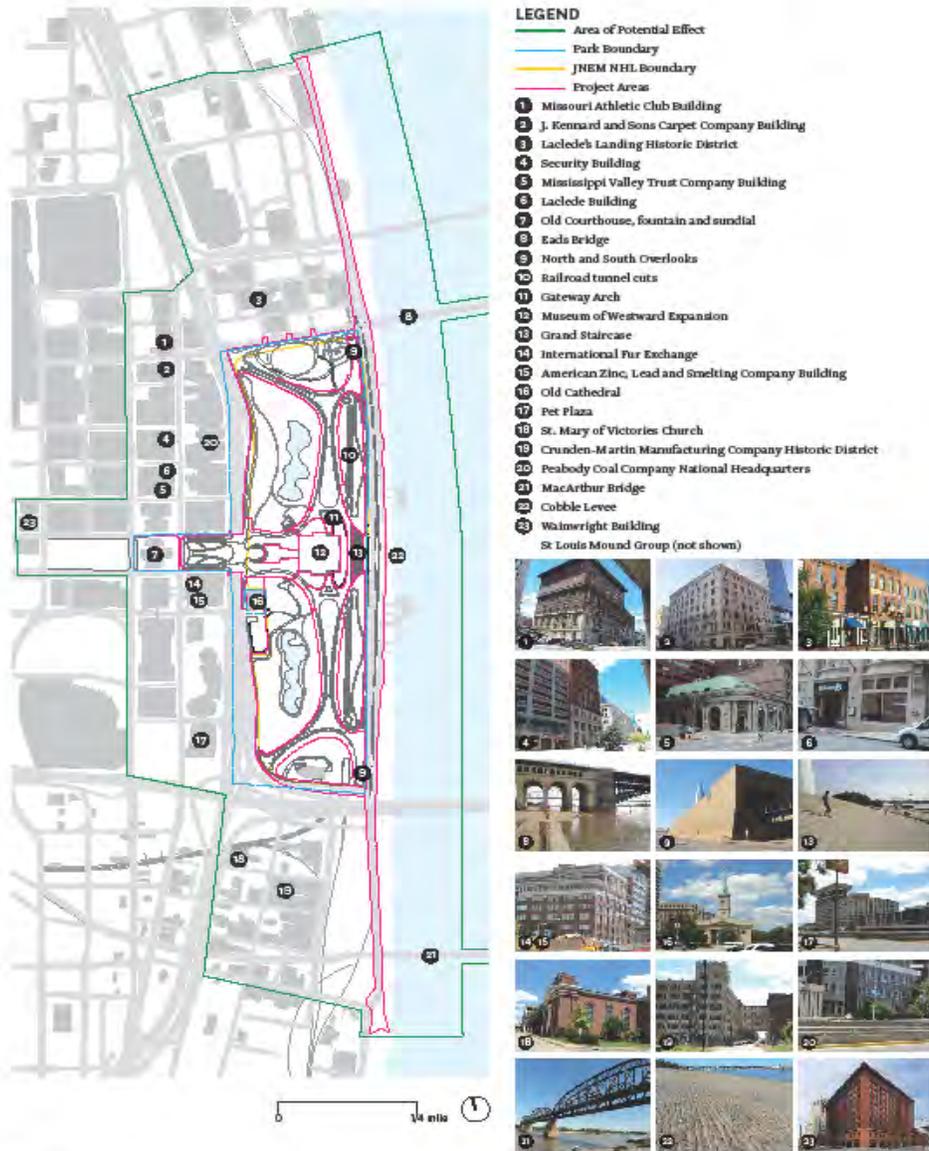
Kiener Plaza Improvements

Redevelopment of Kiener Plaza will be undertaken by the City of St. Louis using city and private funds. No federal permitting, funding or involvement is expected.

Illinois Design Elements

The Design Competition called for the development of a park on the Illinois side of the Mississippi River and construction of a gondola to promote connections between the new park and the Memorial. This project would likely involve the National Park Service and other federal permitting and funding agencies. This undertaking is currently relatively undefined. It will be covered under separate compliance if and when it becomes feasible.

APPENDIX B AREA OF POTENTIAL EFFECTS



2 JULY 2012

APPENDIX C
TRIBAL MONITORING PLAN

- A. The NPS is committed to working with the Osage Nation (the Tribe) to assist in identifying and minimizing the Undertaking's impacts on important cultural resources, graves, and isolated human remains.
- B. In general, tribal monitors are hired by the Tribe to monitor areas during the historic property identification and evaluation process and ground disturbing activities related to construction. The NPS will reimburse the Tribe at an agreed upon daily rate. The monitors are required to have adequate training and must follow strict protocols while in the field. The tribal monitors shall be selected by the Tribe. There will be clear lines of communication among the tribal monitors, the Tribe, and the NPS representatives and their consultants and contractors. Reports will be shared with the NPS, other tribes, and other consulting parties that will be identified through the consultation process.
- C. The Osage Nation and interested tribes will be apprised of the scopes of work and scheduling of identification efforts. Pending the results of these initial identification efforts, NPS will consult with the Tribe to determine where tribal monitoring may be necessary and appropriate. Tribal monitoring will be considered in areas where initial identification efforts have indicated that historic properties of importance to the Osage Nation may be affected by the Undertaking.
- D. The objective of the tribal monitoring program is to develop a reasonable monitoring process while minimizing the potential for adverse effects from identification and project activities to historic properties and sites of religious and cultural significance. This plan provides guidelines to assist in the decision-making process when consulting with the Tribe and to implement an effective communication system.
- E. Tribal Monitors Position Description
 - 1. During ground-disturbing activities the tribal monitor will provide assistance with the identification of traditional cultural resources of significance to the Tribe.
 - 2. Tribal monitors may not direct construction personnel or equipment.
 - 3. It is the responsibility of the tribal monitor to actively observe and report any cultural artifact or human remains found either on the surface or subsurface within the project boundaries to the NPS representative.
 - 4. The tribal monitor is required to adhere to the PA and report to the NPS if an archaeological or cultural resource is discovered.
 - 5. Monitors must abide by all safety rules and wear protective equipment at all times while on site.
 - 6. NPS representatives will seek the advice and input of tribal monitors when unanticipated discoveries are encountered.
 - 7. Only if the tribal monitor feels that extremely sensitive materials, such as human remains, are in immediate danger of being damaged or destroyed, they may notify the operator and request that they cease operations in that area until their respective Tribe and the NPS representative can be notified.
- F. Credentials and qualifications of the tribal monitors shall be within the purview of the individual Tribe. The individuals selected will be officially recognized by the Tribe as having the capabilities to perform the duties as described in the job description. The NPS will coordinate the activities of the monitors according to the survey, evaluation, or construction schedule. It is anticipated that the Tribe will administer the activities of the monitors from a tribal perspective. The Osage Nation can also contract out monitoring work to other Native

American Tribes who have qualified staff provided that each tribe officially delegates such authority in writing, stating that they endorse the candidate.

- G. The NPS and the Tribe will agree, through the consultation process, upon the extent of and locations of tribal monitoring. Tribal monitoring will be conducted on areas identified by the Tribe as having significance to that Tribe and areas identified by the Tribe during the Section 106 process.
- H. Tribal monitors will work together with the NPS representative to assist in cultural resource identification and perform monitoring activities in areas targeted for survey, evaluation, or construction. If a cultural resource is discovered, NPS representatives will follow the terms of the PA, as well as all local, state, and federal laws governing the protection and discovery of archaeological and cultural resources. Tribal monitors will communicate with the NPS representative and will not direct construction personnel or equipment. The authority to stop work will rest on the NPS representative except as is outlined in E.7.
- I. It will be the responsibility of the NPS representative to contact, in person, or via email, text, or telephone, the tribal monitor(s) and notify them of emergencies or potential emergencies affecting the entire project areas, such as inclement or violent weather.
- J. The tribal monitor will not remove cultural material unless directly instructed to do so by the NPS representative. Should they be instructed to move the cultural material, they will place the material in an appropriate container and properly label the container to preserve the provenience of the material and deliver it directly to the NPS representative. Transfer of the cultural material to the NPS representative's custody will be documented within a report provided by the monitor or their represented Tribe.
- K. Disputes arising out of this agreement will be resolved in the most efficient manner appropriate to the dispute. If an agreement cannot be reached in this manner, the parties shall engage a mutually agreed-upon mediator. The mediator's decision shall be binding upon the parties. The parties shall share the cost of mediation.

APPENDIX D
UNANTICIPATED DISCOVERY OF HUMAN REMAINS AND NAGPRA ITEMS

Procedures for Inadvertent Discoveries of Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony as Defined by 43 CFR Part 10.1(b)(iii)92) During Cultural Resources Investigation Efforts, Construction, and Maintenance:

- A. 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 provide immediate telephone notification of the inadvertent discovery, with written confirmation, to the superintendent.
- B. Upon encountering human remains, funerary objects, sacred objects, or items of cultural patrimony during ground disturbing activities, the NPS will ensure that the cultural resource investigator or construction contractor immediately stops work within the ninety (90) meter radius buffer zone around the point of discovery. The NPS will assume responsibility for implementing additional measures, as appropriate, to protect the discovery from looting and vandalism until the requirements of the Native American Graves Protection and Repatriation Act (NAGPRA) have been completed, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.
- C. The NPS will immediately notify law enforcement by telephone of the discovery of unmarked human remains.
- D. The NPS will notify the Osage Nation by telephone and email within forty-eight (48) hours of the discovery of human remains, funerary objects, sacred objects, or items of cultural patrimony. This step is not intended to satisfy the requirements of 43 CFR 10.4(d)(iii).
- E. The NPS 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.
- F. Other than for crime scene investigation, no excavation, examination, or analysis of human remains will be conducted without first securing permission from the Osage Nation.
- G. If upon investigation, the local enforcement officer determines that the remains are not involved in a legal investigation, the protocol implementing NAGPRA applies.
- H. The NPS, in consultation with the Osage Nation, 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 NPS will notify the Osage Nation and other Interested 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. If it is determined that the skeletal remains are not Native American, then the provisions in stipulation IV.D.2. will apply.
- I. The Osage Nation will have seventy-two (72) hours to respond verbally followed by written response via U.S. mail or electronic mail. The response should specify the Osage Nation's intention to conduct or decline further consultation.
- J. The NPS will consult with the Osage Nation 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:
 - 1) formal archeological evaluation of the site;
 - 2) visits to the site by the Osage Nation and/or interested Tribes;
 - 3) exploration of potential alternatives to avoid the human remains or grave;

- 4) implementation of a mitigation plan by the NPS in consultation and concurrence with the Osage Nation, including procedures for disinterment and re-interment; and
 - 5) implementation of the mitigation plan.
- K. The NPS or its agents, in consultation with the Osage Nation, Interested 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 Missouri. Drawings cannot be published in any form or shown as part of scholarly presentations without the written permission of the Osage Nation or nearest living descendant.
- L. A report of findings describing the background history leading to and immediately following the reporting and resolution of an inadvertent discovery will be prepared within thirty (30) calendar days of the resolution of each inadvertent discovery. This report must meet the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (49 FR 44716) guidelines.

APPENDIX E
INADVERTENT DISCOVERY OF HISTORIC PROPERTIES

- A. Objectives: The following procedures shall be used in the event that previously unreported and unanticipated historic properties are found during activities conducted by or on behalf of the NPS.
- B. Pending the results of initial identification and evaluation efforts, NPS will consult with the Missouri SHPO, Osage Nation to determine whether archeological monitoring during construction will be necessary and appropriate. Monitoring will be considered in areas where initial identification and evaluation efforts have indicated that significant historic properties may exist. If deemed necessary, archeological monitors meeting the standards outlined in stipulation II.A. of this PA will be on call to help with the identification and evaluation of historic properties that may be inadvertently discovered during the course of excavation.
- C. The construction contractor must immediately stop all work activity within a ninety (90) meter radius buffer zone, notify the NPS of the discovery, and implement interim measures to protect the discovery from looting and vandalism. Construction may continue outside the buffer zone. Within forty-eight (48) hours of receipt of this notification of the discovery, the NPS shall:
- 1) inspect the work site to determine the extent of the discovery and ensure that work activities have halted within the ninety (90) meter radius buffer zone;
 - 2) clearly mark the area of the discovery;
 - 3) implement additional measures, as appropriate, to protect the discovery from looting and vandalism;
 - 4) notify the Missouri SHPO, Osage Nation of the discovery; and
 - 5) recommend revisions to the construction buffer zone depending upon the nature of the resource discovered.
- D. The NPS, in consultation and concurrence with the Missouri SHPO, and Osage Nation shall have seven (7) business days following notification to determine the National Register of Historic Places eligibility of the discovery. The NPS may assume the newly discovered property to be eligible for the National Register for the purposes of Section 106 pursuant to 36 CFR §800.13(c).
- E. If the find is National Register eligible, the NPS shall consult with the Missouri SHPO and Osage Nation regarding appropriate measures for site treatment pursuant to 36 CFR §800.6(a). The Missouri SHPO, Osage Nation shall have seven (7) business days to provide their objections or concurrence on the proposed actions. Concurrence on the part of the Missouri SHPO and Osage Nation is required for all adverse effect resolution measures. These measures may include:
- 1) formal archeological evaluation of the site;
 - 2) visits to the site by the Missouri SHPO, Osage Nation;
 - 3) exploration of potential alternatives to avoid the site;
 - 4) preparation of a mitigation plan by the NPS in consultation and concurrence with the Osage Nation for approval by the Missouri SHPO; and
 - 5) implementation of a mitigation plan.
- F. If the find is determined to be isolated, discrete, or completely disturbed by construction activities, the NPS shall consult with the Missouri SHPO and Osage Nation prior to resuming construction within the ninety (90) meter radius buffer zone.
- G. The buffer zone radius may be lessened if conditions warrant. Missouri SHPO and Osage Nation, shall have seven (7) business days to comment on the lessening of a buffer zone, but shall be encouraged to respond more quickly in the case of isolated, discrete or completely disturbed resources. In the case of historic resources, the Osage Nation will be notified, but the construction radius may be lessened with just the approval of the Missouri SHPO. In the case of resources with associations to Native American culture, the Osage Nation must also be consulted.



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

