PROGRAMMATIC AGREEMENT (PA) AMONG

THE NATIONAL PARK SERVICE THE FEDERAL HIGHWAY ADMINISTRATION THE ADVISORY COUNCIL ON HISTORIC PRESERVATION THE NATIONAL CAPITAL PLANNING COMMISSION THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICE AND

THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES REGARDING

THE REHABILITATION AND REPAIR OF THE ARLINGTON MEMORIAL BRIDGE WASHINGTON, D.C.

WHEREAS, the George Washington Memorial Parkway was established pursuant to the Capper-Cramton Act, Public Law 71-284, 46 Stat. 482, (May 29, 1930), and became a unit of the National Park System pursuant to Executive Order 6166 of June 10, 1933 (effective August 10, 1933), and the George Washington Memorial Parkway (hereinafter Park) is administered by the National Park Service (hereinafter NPS);

WHEREAS, the NPS is charged in its administration of the units of the National Park System to meet the directives of other laws, regulations, and policies including the NPS Organic Act as codified in Title 54 US code Section 100101(a) to "conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations;" and

WHEREAS, the Arlington Memorial Bridge is under the administrative jurisdiction of the Park and spans the Potomac River between the Lincoln Memorial on the eastern shore and the Memorial Circle on the western shore of the river in the District of Columbia, as shown on the map on Attachment A; and

WHEREAS, in recognition of its national significance as a memorial to the reconciliation between the Union and Confederacy following the Civil War and for its significant architectural, engineering, sculptural, and landscape features, the Arlington Memorial Bridge was listed in the National Register of Historic Places (Hereinafter NRHP) on April 4, 1980; and

WHEREAS, the National Park Service (NPS) proposes to rehabilitate and repair the Arlington Memorial Bridge to correct structural problems and extend the life of the bridge 75 to 100 years (hereinafter Project); and

WHEREAS, the Project is described as Replacement of the Bascule Span with a New Span Comprised of Variable Depth Steel Girders, the preferred alternative (Alternative 1B) in the

Arlington Memorial Bridge Environmental Assessment prepared pursuant to the National Environmental Policy Act (NEPA); and

WHEREAS, the Project includes the replacement of the bascule span and repairs and/or the replacement of other bridge components including the concrete arch spans, concrete bridge piers, expansion joints and bearings, bridge deck and sidewalk, and other non-structural bridge components (Attachment B); and

WHEREAS, the NPS has determined that the Project constitutes an undertaking subject to review under Section 106 of the National Historic Preservation Act (hereinafter NHPA), 54 U.S.C. § 306108 (formerly 16 U.S.C. § 470f), and *Protection of Historic Properties*, its implementing regulations, 36 CFR Part 800, herein referred to as Section 106; and

WHEREAS, the NPS has consulted with the District of Columbia Historic Preservation Office (hereinafter DCSHPO) and the Virginia Department of Historic Resources, which is the Virginia State Historic Preservation Office (hereinafter VASHPO), pursuant to the 2008 Programmatic Agreement among the NPS (US Department of the Interior), the Advisory Council on Historic Preservation (Hereinafter ACHP), and the National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act (hereinafter 2008 PA) available at http://www.achp.gov/npspa.pdf and according to 36 CFR Part 800.14(b)(1)(ii) and has determined that the Project will have an adverse effect on the Arlington Memorial Bridge; and

WHEREAS, the NPS has determined that the mitigation efforts to revegetate aquatic vegetation (SAV) in the Potomac and Anacostia Rivers in areas identified in the project's Wetland Statement of Findings may have an adverse effect on historic properties and has consulted with the ACHP and other consulting parties pursuant to 36 CFR Part 800.14 (b)(1)(ii) to develop a project specific PA; and

WHEREAS, the NPS, in consultation with the DCSHPO, and VASHPO, has defined the Area of Potential Effects (hereinafter APE) as described in Attachment C to include the parcels, buildings, cultural landscapes, and view corridors surrounding the Project and to encompass the geographic areas within which the Project may directly or indirectly cause alterations in the characteristics of a historic property that qualify the property for inclusion in the NRHP; and

WHEREAS, pursuant to Section 10 and Section 404 of the Clean Water Act, permits from the Baltimore District of the United States Corps of Engineers (USACE) will be required for temporary and permanent impacts to the Potomac River and Federal Jurisdictional Wetlands that will result from the Project, and the USACE has designated the NPS as the lead federal agency to fulfill its federal responsibilities under Section 106 and has requested to be a concurring party to this PA; and

WHEREAS, under Section 9 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401, 403) and the General Bridge Act of 1946 (33 U.S.C. 525 – 533) a bridge permit for the construction of a fixed-span bridge on the Potomac River will be needed from the United States Coast Guard (USCG) and the USCG has designated the NPS as the lead federal agency to fulfill its responsibilities under Section 106; and

WHEREAS, the USCG has determined that it will not be a signatory to this PA; and

WHEREAS, the Federal Highway Administration (hereinafter FHWA) will assist the NPS with contracting and management of construction activities, may provide funding necessary to carry out Project in the future and has designated the NPS as the lead federal agency to fulfill its responsibilities under Section 106; and

WHEREAS, under its authorities specified in the National Capital Planning Act (40 U.S.C. 8701 et seq.), approval of the design of the Project is required by the National Capital Planning Commission (hereinafter NCPC) and the NCPC has designated the NPS as the lead federal agency to fulfill its responsibilities under Section 106; and

WHEREAS, in accordance with 36 CFR 800.2(c)(2)(ii), the NPS invited the Delaware Nation and Pamunkey Indian Tribe by letters dated May 8, 2014 and May 24, 2016, respectively, to participate in consultation on this Project: and

WHEREAS, the Delaware Nation declined to participate and the Pamunkey Indian Tribe did not respond to the invitation; and

WHEREAS, in accordance with 36 CFR 800.2(a)(4), the NPS invited individuals and organizations with a demonstrated interest in the Project to participate as Consulting Parties in the Section 106 process, with the Consulting Parties that accepted the invitation presented Attachment D; and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), the NPS notified the Advisory Council on Historic Preservation (hereinafter ACHP) of the adverse effect determination and provided the documentation specified in 36 CFR 800.11(e), and the ACHP has elected to participate in consultation pursuant to 36 CFR 800.6(a)(1)(iii); and

WHEREAS, the NPS notified the public and conducted combined NEPA Scoping and Section 106 consultation meetings on April 23, 2013, and April 25, 2013, in order to inform the public of the Project and to solicit verbal and written comments, followed by Section 106 consultation meetings held on September 30, 2013; April 20, 2016; and August 31, 2016, to provide additional opportunities for the Consulting Parties to comment on historic preservation concerns regarding the Project; and

WHEREAS, through the process of consultation and design analysis, the Project has been adjusted to minimize potential adverse effects on historic properties, and these adjustments are reflected in the Project plans attached in Attachment B; and

NOW, THEREFORE, the NPS, ACHP, FHWA, NCPC, DCSHPO, and VASHPO (hereinafter Signatories), agree that the Project shall be carried out in accordance with the following stipulations in order to take into account the effects of the Project on historic properties.

STIPULATIONS

The NPS shall ensure that the following measures are carried out:

A. AVOIDANCE & MINIMIZATION:

In order to avoid and minimize adverse effects to historic properties as the Project design and implementation progresses, the NPS shall:

- 1. Protect statuary on and surrounding the bridge in place.
- 2. Protect vegetation within the staging areas, or if removal is required, restore the vegetation in-kind following construction activities.

B. MITIGATION

- Potential National Historic Landmark (hereinafter NHL) Nomination The NPS, in
 conjunction with the NPS NHL office, shall conduct research to determine if the Arlington
 Memorial Bridge qualifies as an NHL. If the determination is made that the bridge could
 qualify as an NHL, the NPS shall prepare a NHL nomination for submission by 2020 to the
 NHL Program for consideration by the Secretary of the Interior.
- 2. Virtual Tour The NPS, in conjunction with FHWA, shall prepare a virtual tour of the Arlington Memorial Bridge and its approaches, including demonstrations of the bascule span operations. The virtual tour will use technology, engineering drawings, photographs, and other media to provide a dynamic tour of the architectural and engineering features of the bridge. The virtual tour shall include a tour of the bridge before construction, as well as the bridge after construction. The virtual tour will be available to the public through the internet and hosted by the NPS through the Heritage Documentation Program or its equivalent. NPS shall coordinate with the DCSHPO and the VASHPO during production of the virtual tour. The final virtual tour shall be completed within 3 years after construction is complete.
- 3. Construction Demonstration Video The FHWA, in conjunction with NPS, shall prepare a video that explains the construction process to be used for the Project. The FHWA shall complete the video prior to the start of rehabilitation and use multi-media to illustrate the construction process, including repairs to bridge features and removal and replacement of the bascule span. The completed video will be posted on NPS and FHWA websites.
- 4. Interpretive Signage The NPS shall incorporate temporary outdoor interpretive signage into the construction of the Project. The NPS shall develop and implement temporary outdoor interpretive signage to be installed on staging area fencing and along the sidewalks of the Arlington Memorial Bridge during construction. The temporary interpretive signage shall broadly address the history of the Arlington Memorial Bridge and the memorial, architectural, engineering, landscape, and symbolic significance of the bridge. The signage shall include historic images and current representations of the bridge. The signage shall also explain the need for the Arlington Memorial Bridge Project and the construction process. The NPS shall provide the draft text and design of the signage to the DC and Virginia SHPOs for review and comment. The NPS shall address all comments received within 30 days of receipt of the complete review materials. The NPS will install the signage

within 6 months of the date that construction area fencing is installed, or sooner, and keep the signage in place for the duration of the construction.

- 5. Completion of a Cultural Landscape Report with Treatment Recommendations for Memorial Avenue Corridor Within 4 years of execution of this agreement and prior to the implementation of Stipulation B.6, the NPS shall complete a Cultural Landscape Report for the Memorial Avenue Corridor Cultural Landscape. This report, shall include a range of treatment recommendations rather than define a specific treatment, and shall help guide the efforts for improvements to the Memorial Avenue corridor. The final CLR will be provided to the DCSHPO and VASHPO.
- 6. Rehabilitation of Memorial Avenue Corridor The NPS shall undertake and provide funding not to exceed \$500,000 for rehabilitation of the landscape features along Memorial Avenue. Items to be improved may include curbs, gutters, sidewalks, vegetation, statuary, and signage. The Memorial Avenue corridor is a cultural landscape and all work shall be consistent with the treatment recommendations identified in the Cultural Landscape Report that is to be prepared by the NPS (Stipulation B.5). The NPS shall seek NCPC review and approval of improvements to Memorial Avenue and comply with Section 106 of the NHPA, as required prior to implementation of improvements. The NPS shall complete approved landscape improvements within 1-1/2 years following the completion of the Project.
- 7. Case Study The NPS, in coordination with FHWA, shall complete a case study of the Arlington Memorial Bridge and the circumstances that led to the need for a major rehabilitation. The case study shall document issues that have arisen from the original design of the bridge, assessment of past maintenance activities, documentation of the types of deterioration observed within the bridge, and provide recommendations for best practices to avoid such deterioration, and lessons learned during the project implementation. The NPS shall complete the case study within 1-1/2 years following the completion of construction activities for the Arlington Memorial Bridge rehabilitation. The case study shall be available to the public through NPS's and FHWA's websites. The NPS shall provide 1 hard copy and 1 electronic copy on disc of the case study to the DC and VA SHPOs, and 1 copy of the case study to the other consulting parties in a mutually agreed upon format upon request. The NPS and FHWA commit to providing outreach on the findings of the case study and shall make the case study available for presentation on websites and at conferences.
- 8. Preservation of Bridge Components During the final design process and prior to the onset of construction activities, the NPS shall identify bridge components that can be salvaged during the Project and coordinate their removal with the FHWA. Prior to their removal, the NPS shall develop a conservation plan for the bridge components which shall identify how and where they will be curated and include details about potential opportunities for display and interpretation of the bridge components. The NPS shall forward a copy of the draft conservation plan to the DC and VA SHPOs for review and

comment for a period of 30 days. The NPS shall address all comments and respond to the consulting parties and provide each SHPO and consulting party with a copy of the final report. The NPS shall ensure that once removed, the bridge components are appropriately curated and permanently retained as part of the park's museum collection or in another appropriate collection in accordance with the final conservation plan. Should the display or curation of the bridge components require compliance with Section 106 of the NHPA, NPS will undertake the compliance prior to completion of this stipulation.

C. DESIGN CONSULTATION

- 1. Design Review. Prior to the FHWA's release of construction design documents, the FHWA shall provide the proposed design documentation to the NPS at the 30%, 70%, and 95% design phases for consideration and consultation as follows:
 - a. The NPS shall review the proposed design documentation focusing on any changes from the preliminary plans and make a determination as to whether the proposed design may result in new adverse effects that have not already been resolved and/or the intensification of known adverse effects on historic properties.
 - b. The NPS shall forward, via electronic media, its determination in C.1(a), and the FHWA's proposed design documentation to the Signatories for a 30-day review and comment period. The NPS shall simultaneously post its determination and the proposed design documentation on NPS's Planning, Environment & Public Comment (PEPC) website to notify the Consulting Parties so that they may review and comment.
 - c. If the NPS determines that no new adverse effects may result or no known adverse effects on historic properties would be intensified, and no Signatories or Consulting Parties object within the 30-day review period, the NPS shall authorize FHWA to proceed with the next phase of design or construction.
 - d. If the NPS determines that no new adverse effects may result or no known adverse effects on historic properties would be intensified and a Signatory or Concurring Party objects in writing within the 30 day review period, the NPS shall notify the Signatories and the Signatories shall consult to seek ways to resolve the objection. If the NPS determine that the objection cannot be resolved, the NPS shall follow the procedures in the Dispute Resolution clause of this Agreement.
 - e. If the NPS determines that no new adverse effects may result or no known adverse effects on historic properties would be intensified and a Consulting Party objects in writing within the 30-day review period, the NPS shall notify the Signatories, consider the objection, and submit the written objection(s), any NPS position on the objection(s), and the proposed design documentation to the Signatories for their formal approvals.

- f. If the NPS determines that a new adverse effect may result or a known adverse effect on a historic property would be intensified, the NPS shall immediately notify the Signatories and other consulting parties, and provide the FHWA an opportunity to revise the design documentation to avoid, minimize, or mitigate the new or intensified adverse effect and to submit a revised design documentation package for review by NPS. After the FHWA has revised the design documentation package, the NPS shall reevaluate to determine whether new or intensified adverse effects remain. If unavoidable adverse effects on historic properties may result or be intensified, the NPS shall consult with the Signatories to determine whether the proposed design documentation warrants an Amendment to this Agreement which would identify additional measures that will be carried out to avoid, minimize, or mitigate any new or intensified adverse effects.
- g. If the Agreement is amended, NPS shall notify the Consulting Parties and provide or post the Amendment on the National Park Service's Planning, Environment and Public Comment PEPC site. Otherwise, the NPS shall submit the proposed design documentation to the NCPC and the US Commission of Fine Arts (CFA) for their formal approvals, as appropriate.

D. ARCHEOLOGY

- 1. The proposed action does not result in adverse effects on archaeology; however, the preferred alternative requires compensatory mitigation for 1.4 acres of temporary impacts and 6.0 acres of permanent impacts within the causeway/platform areas, Barge Staging Areas 1 and 2 and associated dredging area. The NPS plans to limit its mitigation efforts to revegetate submerged aquatic vegetation (SAV) in the Potomac and Anacostia Rivers in areas identified in the project's Wetland Statement of Findings and in areas that have no or low potential for archeology based on the archeological assessment as shown in Attachment E.
- 2. Following approval of the mitigation plan by the USACE, the NPS will provide the final plan to the DC and VA SHPOs. Provided the mitigation efforts are limited to the areas depicted in Attachment E, the NPS, DCSHPO and VASHPO agree that no further archeological investigations are warranted. If the mitigation plan will include areas not included in Attachment E such that excavation is required on land, or if additional areas within the Potomac River drainage are dredged or disturbed, NPS will consult with the appropriate SHPO(s) to determine the need for further identification efforts.
- 3. If the NPS determines in consultation with the appropriate SHPO (s) that further identification efforts are needed, the NPS shall ensure that an archeological survey program, for identification of terrestrial and submerged archeological sites within the Project APE, is developed in consultation with the appropriate SHPO and other consulting parties. Prior to affecting any potentially eligible archeological site, the NPS shall develop a testing program of sufficient intensity to provide an evaluation of eligibility for the National Register of Historic Places (NRHP) in consultation with

appropriate SHPO and other consulting parties, following the regulations outlined in 36 CFR Part 800.4(c).

- 4. All investigations within the District of Columbia will follow the Guidelines for Archaeological Investigations in the District of Columbia (1998, as amended) and, if in Virginia, the Guidelines for Conducting Historic Resources Survey in Virginia (2011) as well as the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (1983) and will be conducted under the direct supervision of an archeologist that meets or exceeds the pertinent qualifications in the Secretary of the Interior's Professional Qualifications Standards. In the event that archeological investigations are required on NPS land, in accordance with the Archaeological Resource Protection Act (ARPA), upon receipt of an application from the archeological contractor and the subsequent 90-day review allowed under the law, NPS will issue a permit to the contractor to ensure that all archeological work will follow the appropriate SHPO's guidelines, the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (1983), and NPS Director's Order 28: Cultural Resource Management (1998).
- 5. If, as a result of the testing program, archeological sites are identified within the Project APE that are determined eligible for the NRHP, the NPS shall develop a plan for their avoidance, protection, or recovery of information in consultation with the appropriate SHPO and other consulting parties. Prior to implementation, the plan shall be submitted to the appropriate SHPO and other consulting parties for a 30 calendar day review and comment period starting upon receipt.
- 6. All data recovery plans prepared under the terms of this Agreement shall include the following elements:
 - Information on the archeological property or properties where data recovery is to be carried out, and the context in which such properties are eligible for the National Register;
 - b. Information on any property, properties, or portions of properties that will be destroyed without data recovery;
 - c. Discussion of the research questions to be addressed through the data recovery with an explanation/ justification of their relevance and importance;
 - d. Description of the recovery methods to be used, with an explanation of their pertinence to the research questions; and
 - e. Information on arrangements for any regular progress reports or meetings to keep the SHPO and other consulting parties up to date on the course of the work. The plan should contain the expected timetable for excavation, analysis, and preparation of the final report.

- f. NPS shall ensure that the approved treatment plan or data recovery plan is implemented prior to those project activities that could affect the archeological site(s).
- 7. NPS shall notify the appropriate SHPO and the other consulting parties in writing once the fieldwork portion of the treatment plan or data recovery plan is complete and provide a brief management summary so that a site visit may be scheduled, if requested. Project activities may proceed following this notification while the technical report is in preparation. NPS may proceed with implementation of construction or construction related ground disturbing activities in the area and within the boundary of the affected archeological site(s) while the technical report is in preparation.
- 8. Preparation and Review of Reports. The NPS shall submit a draft of all archeological reports, treatment plans and other documentation to the DCSHPO in an agreed upon format and (and, if appropriate, to the VASHPO in two bound hardcopies and one electronic copy in Adobe® Portable Document Format) and to other consulting parties one copy in an agreed upon format for a 30-day review and comment. The NPS shall address all comments received within 30 calendar days of confirmed receipt in the revised technical report/documentation. The NPS shall provide final reports to the DCSHPO in an agreed upon format, and if appropriate to the VASHPO, two copies, bound and on acid-free paper, and one electronic copy in Adobe® Portable Document Format (.pdf) and one copy to other consulting parties, if requested, in an agreed upon format.
- 9. The SHPOs and other consulting parties agree to provide comments on all technical reports, treatment plans, and other documentation arising from this Agreement within 30 calendar days of receipt. If no comments are received from the SHPOs or other consulting parties within the 30 day review period, the NPS may assume the non-responding party has no comments.
- 10. Unanticipated Discoveries. The NPS and FHWA shall include provisions in the construction permit and documents for the treatment of unanticipated archeological discoveries, including human remains, during excavation, construction, or other ground-disturbing activities resulting from the Project.
 - a. In the event that a previously unidentified archeological resource is discovered during activities in the APE, the NPS shall immediately halt all ground-disturbing activities in the area of the resource and in the surrounding area where further subsurface remains can reasonably be expected to occur.
 - b. The NPS shall notify the appropriate SHPO by email and by telephone immediately upon discovery of previously unidentified archeological resources. The NPS, or their representatives, shall visit the site within 48 hours of such notification, inspect the work site, and determine the nature and extent of the affected archaeological property and establish a resource area. Construction may then continue outside the newly established boundaries of the resource area.

- c. Within 3 working days of the original notification of discovery, the NPS, in consultation with the appropriate SHPO and other consulting parties, shall determine the NRHP eligibility of the resource.
- d. The NPS, in consultation with the appropriate SHPO and other consulting parties, shall ensure compliance with 36 CFR 800.13. Work in the resource area shall not proceed until either: (a) the development and implementation of an appropriate data recovery or other recommended mitigation procedures; or (b) the determination is made that the located archeological remains are not eligible for inclusion in the NRHP.
- e. The NPS shall ensure that all investigations are conducted under the direct supervision of an archeologist who meets or exceeds the pertinent qualifications in the Secretary of the Interior's Professional Qualifications Standards.
- f. In the event that archeological investigations are required on NPS land, in accordance with ARPA, upon receipt of an application from the archeological contractor and the subsequent 90-day review allowed under the law, NPS shall issue a permit to the contractor to ensure that all archeological work will within the District of Columbia follow the Guidelines for Archaeological Investigations in the District of Columbia (1998, as amended) and if in Virginia, the Guidelines for Conducting Historic Resources Survey in Virginia (2011) follow the Guidelines for Archaeological Investigations in the District of Columbia (1998, as amended), as well as the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (1983) and NPS Director's Order 28: Cultural Resource Management (1998).
- g. The NPS shall ensure that all materials and records resulting from data recovery are curated in accordance with 36 CFR Part 79 by an institution or organization selected in consultation with the DCSHPO (and the VASHPO if applicable). All associated reports will meet contemporary professional standards, according to the Department of the Interior's Format Standards for Final Reports of Data Recovery Programs (42 FR 5377-79), and also meet the standards as set out in Guidelines for Archaeological Investigations in the District of Columbia (1998, as amended) or the VASHPO's Guidelines for Conducting Historic Resources Survey in Virginia (2011), as appropriate.
- 11. Human Remains The NPS shall make all reasonable efforts to avoid disturbing gravesites and associated funerary artifacts. The NPS shall treat all human remains in a manner consistent with the ACHP's "Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects" (February 23, 2007; www.achp.gov/docs/hrpolicy0207.pdf) or ACHP policy in effect at the time remains and funerary artifacts are handled.

- a. The NPS shall contact law enforcement and emergency personnel as appropriate in the jurisdiction where the human remains are discovered. The NPS shall immediately notify appropriate SHPO of the discovery of human remains. The NPS shall ensure that all ground-disturbing activities in the immediate area of the discovery ceases immediately and stays halted in accordance with the protocols established by the District of Columbia Metropolitan Police Department, if appropriate or other law enforcement entity with jurisdiction.
- b. If the remains found on federal lands are determined to be of Native American origin, the NPS shall comply with the provisions of the Native American Graves Protection and Repatriation Act, 25 USC § 3001 et seq. and the accompanying regulations at 43 CFR part 10. If the remains are found in Virginia on non-federal lands or are determined not to be of Native American origin, the NPS shall comply with the Commonwealth of Virginia's Regulations Governing Permits for the Archaeological Removal of Human Remains (published in the Virginia Register on September 20, 2016, 17VAC5-and found in the Code of Virginia 10.1-2305 et seq., Virginia Antiquities Act, Section 10.1-2305 of the Code of Virginia, final regulations adopted by the Virginia Board of Historic Resources and published in the Virginia Register on July 15, 1991, or subsequent revisions; or follow appropriate regulations established by the state of jurisdiction.
- c. The NPS shall use reasonable efforts to ensure that the general public is excluded from viewing any burial site or associated funerary artifacts. Subject to applicable law, the SHPOs and the consulting parties to this Agreement shall release no photographs or images of any burial site or associated funerary artifacts to anyone including the press and general public. If they do release such photographs or images, accidentally, voluntarily, or pursuant to applicable law, they shall notify the NPS and the other consulting parties as soon as possible. The NPS shall notify the appropriate federally recognized tribes when burials, human skeletal remains, or funerary artifacts are encountered on the project; or follow appropriate regulations established by the state of jurisdiction.

E. ADMINISTRATION

- Updates and Reporting. The NPS shall update the Signatories and the Consulting Parties
 on the actions taken to implement the terms of this Agreement. The update will take the
 form of a Report submitted on an annual basis from the effective date of the execution of
 this Agreement until its completion, at minimum. The annual Reports shall include
 information regarding activities undertaken pursuant to this Agreement and information
 on the overall status of the Project.
- 2. Duration. This Agreement shall be valid for a period of 15 years from the date of execution by the last Signatory. If the Project has not been fully constructed after 15 years from the date of execution, the Signatories shall reconsider the terms of this Agreement.

3. Dispute Resolution.

- a. Should any consulting party object in writing to the NPS regarding any action carried out in accordance with this Agreement, the Signatories shall consult to resolve the objection. Should the Signatories be unable to resolve the disagreement, the NPS shall forward its background information on the dispute as well as NPS's proposed resolution of the dispute to the ACHP. Within 45 business days after receipt of all pertinent documentation, the ACHP shall provide the NPS with written recommendations, which the NPS shall consider in reaching a final decision regarding the dispute, or notify the NPS that it shall comment pursuant to 36 CFR 800.7(c) and then proceed to comment. The NPS shall take the ACHP comments into account, in accordance with 36 CFR 800.7(c)(4). Any ACHP recommendation or comment shall be understood to pertain only to the subject matter of the dispute; the NPS's responsibility to carry out all actions under this Agreement that are not subjects of the dispute shall remain unchanged.
- b. At any time during implementation of the measures stipulated in this Agreement, should an objection pertaining to this Agreement or the effect of the Project on historic properties be raised by a member of the public, the NPS shall notify the other signatories and consulting parties, and attempt to resolve the objection. If the NPS determines that the objection cannot be resolved, the NPS 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 the objecting member of the public with a copy of this written response. The NPS will then proceed according to its final decision.
- 4. Amendments. This Agreement may be amended when an Amendment is agreed to in writing by all Signatories. The Amendment will be effective on the date of the last signature.
- 5. Termination. If any Signatory or Concurring Party to this Agreement determines that the terms of the Agreement cannot be or are not being carried out, that party shall so notify the other Signatories in writing and consult with them to seek resolution or Amendment of the Agreement. If within 60 business days a resolution or Amendment cannot be reached, any Signatory or Concurring Party may terminate the Agreement upon written notification to the other Signatories. Once the Agreement is terminated, and prior to work continuing on the Project, the NPS must either execute a new Agreement or request, take into account, and respond to the comments of the ACHP per 36 CFR 800.7. NPS is not required to select the same option recommended by the ACHP. The NPS will notify the Signatories as to the course of action it will pursue.
- 6. Anti-Deficiency Act. The obligations of federal agencies under this Agreement are pursuant to 31 USC 1341(a)(1), therefore nothing in this Agreement shall be construed as binding the United States to expend in any one fiscal year any sum in excess of

appropriations made by Congress for this purpose, or to involve the United States in any contract or obligation for the further expenditure of money in excess of such appropriations.

- 7. Emergencies. Should an emergency situation occur which represents an imminent threat to public health or safety, or creates a hazardous condition, after the NPS learns of it and notifies appropriate law enforcement and emergency personnel as necessary, the NPS shall immediately notify the appropriate Signatories and the ACHP of the condition which has initiated the situation and the measures taken to respond to the emergency or hazardous condition. Should the SHPO or the ACHP desire to provide technical assistance to the NPS, they shall submit comments to NPS within 7 calendar days from notification, if the nature of the emergency or hazardous condition allows for such coordination.
- 8. Electronic Copies. Within 1 week of the last signature on this Agreement, the NPS shall provide each Signatory and Concurring Party with one legible, color, electronic copy of this fully-executed Agreement and all of it attachments. Internet links shall not be used as a means to provide copies of attachments since web-based information often changes. If the electronic copy is too large to send by email, the NPS shall provide each Signatory and Concurring Party with a copy of this Agreement on a compact disc.
- 9. Upon the completion of all stipulations to this Agreement, the NPS shall provide to the signatories and other consulting parties a signed memorandum documenting that the NPS has fulfilled all its responsibilities under this Agreement.

Execution of this Agreement by the NPS, FHWA, NCPC, DCSHPO, and VASHPO and the implementation of its terms is evidence that the NPS has considered the effect of these Undertakings on historic properties and afforded the ACHP a reasonable opportunity to comment, and thereby satisfied their Section 106 responsibilities.

SIGNATURES FOLLOW ON SEPARATE PAGES

ATTACHMENTS

Attachment A: Arlington Memorial Bridge Project Area

Attachment B: Arlington Memorial Bridge Preferred Alternative

Attachment C: Area of Potential Effects

Attachment D: List of Consulting Parties

Attachment E: Submerged Aquatic Vegetation Mitigation - Archeological Assessment

Attachment F: Summary of Adverse Effects Determination

SIGNATORY PAGE

Alexcy Romero

Date

Superintendent, George Washington Memorial Parkway, National Park Service

SIGNATORY PAGE

Melisa Ridenour, Division Director

Eastern Federal Lands Highway Division, Federal Highway Administration

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SIGNATORY PAGE

Marcel Acosta

Date

Executive Director, National Capital Planning Commission

SIGNATORY PAGE

Julie V. Langan

✓ Irginia State Historic Preservation Officer

Date

SIGNATORY PAGE

David Maloney

Date

District of Columbia State Historic Preservation Officer

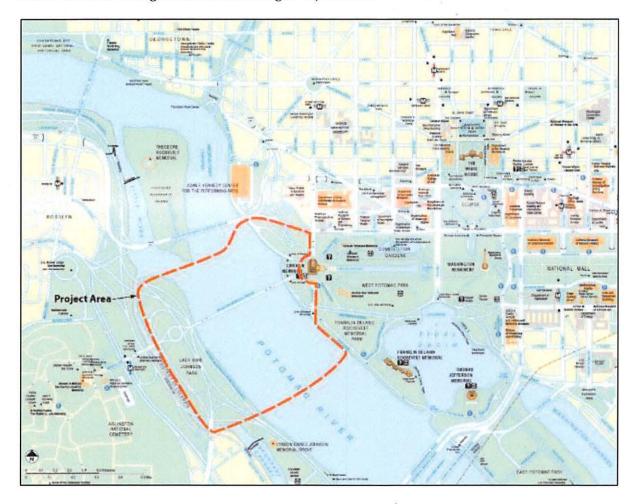
John M. Fowler Date Executive Director, Advisory Council on Historic Preservation

CONCURRING PARTY PAGE

Kathy Anderson

U.S. Army Corps of Engineers, Baltimore District

Attachment A: Arlington Memorial Bridge Project Area



Attachment B: Arlington Memorial Bridge Preferred Alternative

Replacement of the Bascule Span with a New Span Comprised of Variable Depth Steel Girders (Alternative 1B):

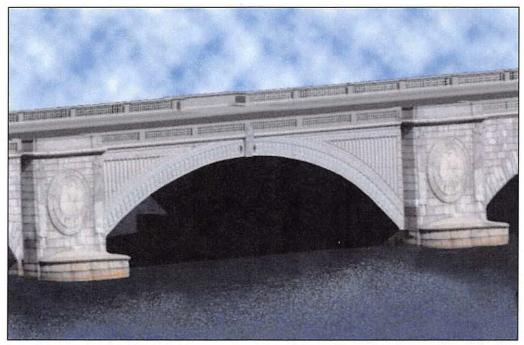
The Arlington Memorial Bridge Project includes:

- Replacement of the bascule span with a fixed span of variable depth steel girders;
- Repairs to the concrete arch spans, such as filling cracks with epoxy, patching concrete spalling with concrete repair compound, and replacing the concrete edge beams/frames;
- Repairs to the concrete bridge piers, such as filling cracks in the bridge piers/abutments using
 an epoxy suitable for underwater applications, and then wrapping the piers/abutments with
 fiber reinforced polymer; filling undermined footing areas with grout; and addressing
 scouring by placing scour countermeasures, such as stone (riprap) placed on or below the
 river bottom around the piers, for protection;
- Replacement of expansion joints and bearings;
- Replacement of the bridge deck and sidewalks, including replacing the existing concrete
 bridge deck with concrete deck designed to minimize water intrusion; installing a
 concrete/polymer concrete overlay on top of the deck that would serve as the road surface;
 and replacing the existing exposed aggregate sidewalks with an exposed aggregate
 concrete/polymer concrete sidewalk;
- Repair bridge railings and other nonstructural bridge components, such as the following:
 - The balustrade railings would be removed, inspected for any needed repair or in-kind replacement, and put back in the original positions;
 - The existing bridge drainage system including pipes, drains, inlets, and grates would be cleaned or repaired. Certain aspects of the drainage system may need to be replaced or upgraded where significant deterioration has occurred or to conform to current stormwater management guidelines;
 - The granite curbs that run along the roadside edge of the sidewalks would be removed to
 install the new bridge deck and sidewalks. As these structures are installed, the existing
 granite curbs would be reset into place. Some sections of granite curb are cracked or
 chipped and would be replaced;
 - The light poles would be removed prior to the removal of the existing bridge deck and sidewalks. Each light pole would be painted and reset as part of the new sidewalk construction. To conform to current electrical standards, an upgraded lighting system would be installed with conduits inside each arch span;
 - The stone façade that adorns each side of the concrete arch spans would be cleaned, repaired, or replaced in kind as needed; and

 Throughout the bridge, existing access hatches, ladders, and personnel platforms for inspections and maintenance access would be repaired or replaced as needed.



Conceptual rendering of variable depth steel girders (underside) under Alternative 1B



Conceptual rendering of the existing steel facade planned for reuse under Alternative 1B



Attachment C: Area of Potential Effects



Attachment D: List of Consulting Parties

Advisory Council on Historic Preservation

Commission of Fine Arts

National Capitol Planning Commission

U.S. Coast Guard

U.S. Army Corps of Engineers

Arlington National Cemetery

District of Columbia Historic Preservation Office

Virginia Department of Historic Resources

Arlington County Dept. of Community Planning, Housing & Development

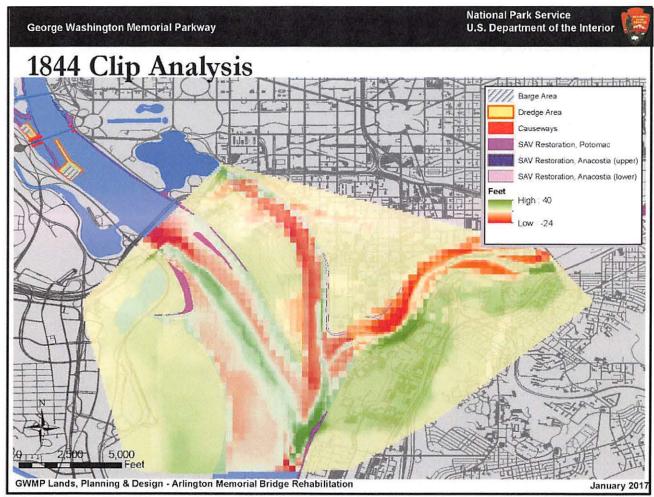
American Institute of Architects

Arlington Historical Society

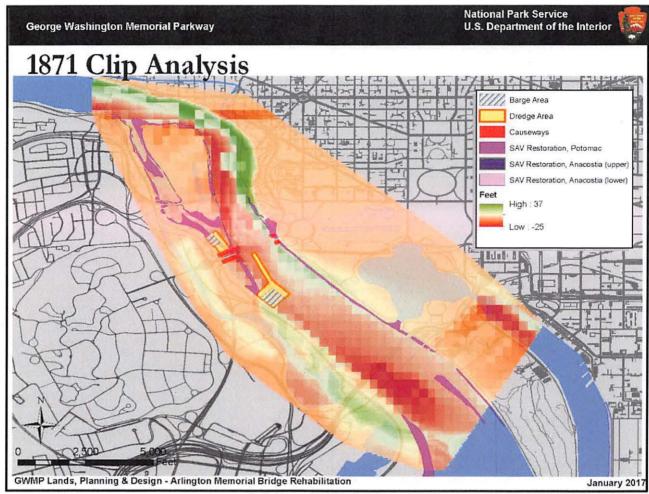
National Trust for Historic Preservation

Attachment E: Proposed Areas for Submerged Aquatic Vegetation Restoration with No or Low Potential for Archeological Resources

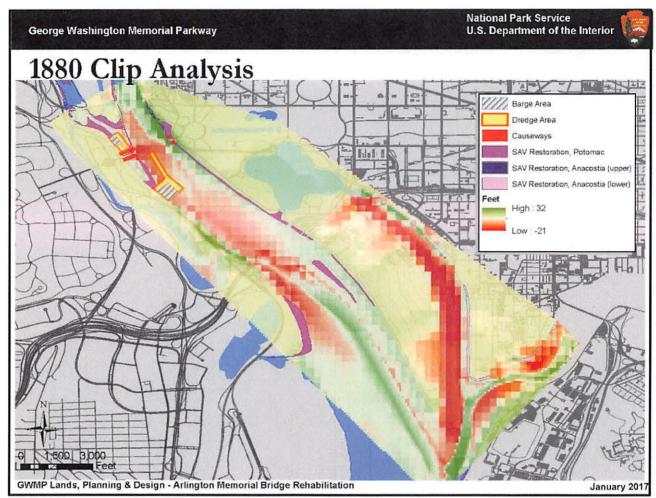
To assess the probability of submerged cultural resources (e.g., old shipwrecks, docks) existing within the vicinity of Arlington Memorial Bridge and the larger project APE, a cut and fill clip analysis was completed for the Potomac River from approximately Theodore Roosevelt Island to Ronald Reagan National Airport. Any action that has modified the depth and morphology of the river, such as dredging or land reclamation, diminishes the potential for such resources to exist with their integrity intact. Data from six historic maps and navigation charts (i.e., 1844, 1871, 1880, 1890, 1894, and 1911) were compared against modern bathymetry to determine which areas of the river have experienced disturbance over the past 170 years. A series of comparative maps were produced for each historic map analyzed graphically showing the differences in river depths resulting from river improvement projects. Areas with positive values are locations where water was historically deeper and since filled in (i.e., green), whereas negative values are historically higher areas that have since been cut or dredged (i.e., red). The comparative maps show a significant transformation of the Potomac River starting in the 1870s. The main channel was repeatedly dredged, parkland was created along the eastern and western shores, and a number of bridges were built spanning the river. Given the extensive modification to the river bottom and shorelines, there is an extremely low potential for submerged archeological material to exist intact within the project's APE. This includes both the immediate project area surrounding the bridge and nearby discontiguous areas planned for mitigation (i.e., submerged aquatic vegetation restoration).



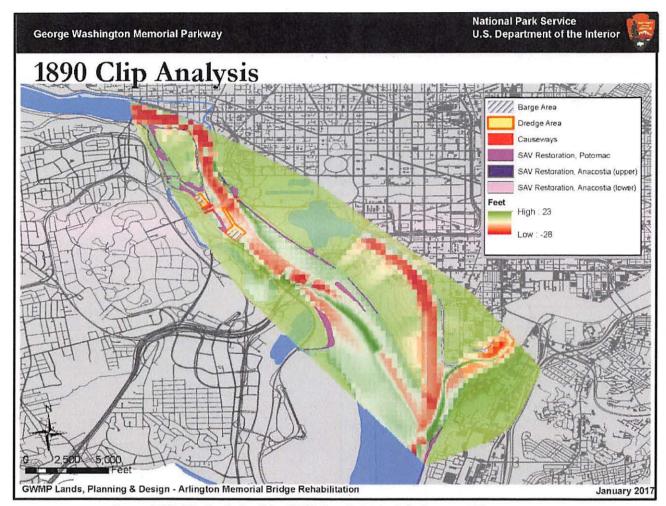
Cut and Fill Clip Analysis of the 1844 Historic Map of the Potomac River.



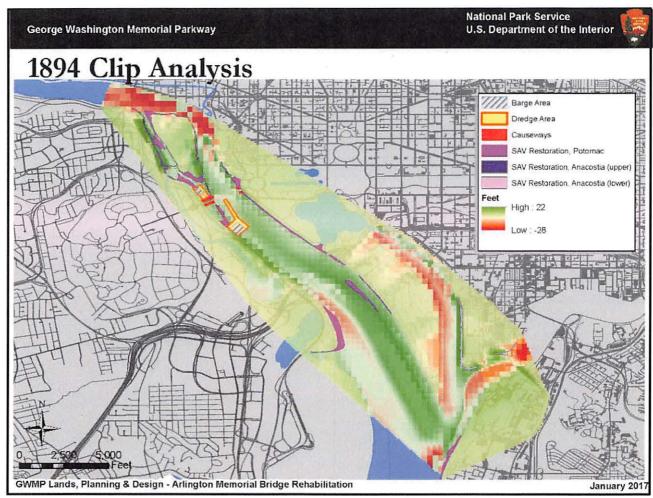
Cut and Fill Clip Analysis of the 1871 Historic Map of the Potomac River



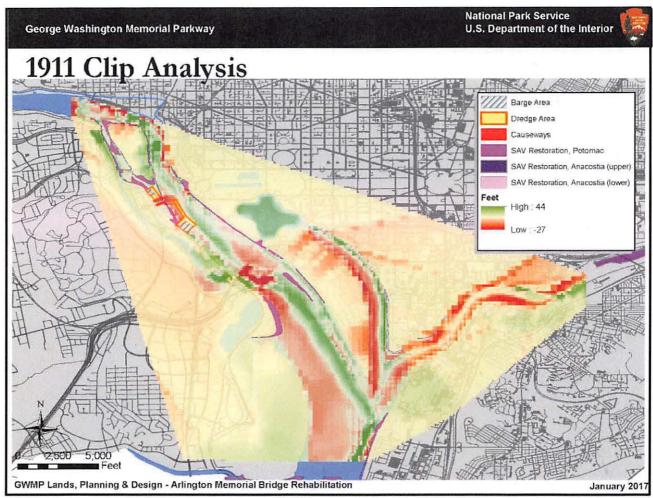
Cut and Fill Clip Analysis of the 1880 Historic Map of the Potomac River.



Cut and Fill Clip Analysis of the 1890 Historic Map of the Potomac River.



Cut and Fill Clip Analysis of the 1894 Historic Map of the Potomac River.



Cut and Fill Clip Analysis of the 1911 Historic Map of the Potomac River.

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- 1911 Potomac River Mattawoman Creek to Georgetown; Washington Harbor [Map]. Coast and Geodetic Survey, Washington, D.C. Electronic document, available online from NOAA at http://historicalcharts.noaa.gov/historicals/preview/image/560-07-1911, accessed December 2016.
- 2012 Potomac River Mattawoman Creek to Georgetown; Washington Harbor [Map]. Chart 12289. National Ocean Service, Coast Survey, Washington, D.C. Electronic document, available online from NOAA at http://www.charts.noaa.gov/OnLineViewer/12289.shtml, accessed December 2016.

Washington Board of Trade

1894 Potomac River at Washington D.C., plan showing how reclaimed area may be utilized [Washington: The Board] [Map]. Electronic document, available online from the Library of Congress, https://www.loc.gov/item/88690509/, accessed December 2016.

Attachment F: Summary of Adverse Effects

	Alternative A: No Action	Alternative 1: Replace Bascule Span with Precast Concrete Girders	Alternative 1B Replace Bascule Span with Variable Depth Steel Girders	Alternative 2: Replace Bascule Span with Welded Steel Truss	Alternative 3: Rehabilitate Existing Bascule Span			
Resource								
Arlington Memorial Bridge and Related Structures	Adverse Effect – Continued deterioration of contributing features	Adverse Effect -Temporary trunnion shoring project and permanent removal of the bascule span	Adverse Effect -Temporary trunnion shoring project and permanent removal of the bascule span	Adverse Effect -Temporary trunnion shoring project and permanent removal of the bascule span	No Adverse Effect			
Memorial Avenue Corridor	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
Lady Bird Johnson Park	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
National Mall Historic District	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
Watergate Steps	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
George Washington Memorial Parkway	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
Arlington House	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
Robert E. Lee Memorial	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
Theodore Roosevelt Island	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
Rock Creek and Potomac Parkway	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
East and West Potomac Parks	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
Lincoln Memorial	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			

	Alternative A: No Action	Alternative 1: Replace Bascule Span with Precast Concrete Girders	Alternative 1B Replace Bascule Span with Variable Depth Steel Girders	Alternative 2: Replace Bascule Span with Welded Steel Truss	Alternative 3: Rehabilitate Existing Bascule Span			
Resource								
Navy Marine Memorial	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
Georgetown Historic District	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			
John F. NPS for the Performing Arts	No adverse effect	No adverse effect	No adverse effect	No adverse effect	No adverse effect			