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U.S. Park Police H1 Stables Redevelopment Environmental Assessment
Washington, DC



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Environmental Assessment
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PURPOSE AND NEED

The National Park Service (NPS) is developing a design for the redevelopment of the United States Park Police (USPP) H1 Stables (the proposed project) on the National Mall in Washington, DC.

The purpose of the proposed project is to redevelop the horse stable facilities essential to the USPP mission, as included in the approved National Mall Plan. The project is intended to improve horse living and stable conditions, provide adequate administrative space and storage, improve operational access, reduce vehicular and pedestrian conflicts, address drainage concerns, and engage the public through limited education/interpretation program.

The project is needed to address the following concerns and ongoing issues affecting USPP's ability to carry out its mission:

- The appearance and quality of the existing facility is inconsistent with the character and quality of the National Mall identified in the National Mall Plan, and is directly visible from Ash Road and sensitive areas of the National Mall
- The existing facility lacks adequate paddock space, stalls, and storage for horses and equipment
- The existing storage facilities for food, bedding, hay, sawdust, and manure attract pests
- Poor drainage and grading results in stormwater affecting manure and other storage areas
- The existing interior office space and parking is insufficient
- Existing access to the facility is insufficient for optimal operations, and creates safety hazards along Ash Road
- The existing facilities are not energy-efficient or sustainable

PROJECT AREA

The approximately 3.3-acre project area is located on the National Mall between the Korean War Veterans Memorial and the District of Columbia War Memorial, and is bound by Ash Road to the north and the sidewalk parallel to Independence Avenue to the south (see **Figure 1** and **Figure 2**). The project area includes the existing H1 Stables facility, surrounded by a wooded area known as "Ash Woods" to the south, west, and east.

PLANNING ISSUES AND CONCERNS FOR DETAIL ANALYSIS

The NPS, participating agencies and stakeholders, and the public identified issues and concerns for detailed analysis during the internal and public scoping processes. These issues and concerns are included in the impact topics that are discussed in the "Affected Environment and Environmental Consequences" section of this Environmental Assessment (EA). The proposed project includes the replacement of four detached structures and an office trailer with a new stables building, which includes a public visiting space; the replacement of the single paddock with four paddocks, the addition of a new vehicle entry driveway, and the formalization of an existing social trail.



Figure 1: Project Area Map



Figure 2: Project Area Detail Map

The proposed project could introduce or change contributing elements of the documented historic properties listed in the National Register and cultural landscapes. The project area falls within the National Mall and East and West Potomac Parks Historic Districts and within the L'Enfant Plan of the City of Washington, which were listed in the National Register of Historic Places (NRHP) in 1981, 1973, and 1997, respectively. Other historic properties and cultural landscapes partially within the Area of Potential Effect (APE) include: the Lincoln Memorial Grounds Cultural Landscape, Washington Monument Grounds Cultural Landscape, Tidal Basin Cultural Landscape, and several memorials. The project's potential impacts on historic properties and cultural landscapes are analyzed in detail under the Historic Structures and Cultural Landscapes section in this EA.

The proposed project could negatively affect the 100-year floodplain. The project area is located almost entirely within the 100-year floodplain. The project's potential impact on the floodplain is analyzed in detail under the Floodplains section.

The proposed project could create a public attraction and new educational opportunities on the National Mall; reduce pedestrian, bicycle, and vehicle conflicts along Ash Road; and improve pedestrian connections between Independence Avenue and Ash Road. The existing H1 Stables facility contains no public amenities or educational programs. The horses are only visible to the public when the animals leave the facility. Pedestrians and bicycles share Ash Road with USPP, NPS, contractor, delivery, emergency, event permittee, and other official-use vehicles accessing the existing facility. An informal social trail currently provides pedestrian access between Independence Avenue and Ash Road. The project's potential impacts on visitor experience, opportunities, and circulation are analyzed in detail in the Visitor Use and Experience section in this EA.

PLANNING ISSUES AND CONCERNS DISMISSED FROM FURTHER ANALYSIS

Some issues and concerns identified during scoping were considered by the NPS but were ultimately dismissed from detailed analysis because they were determined not central to the proposal or not of critical importance. This section will provide brief descriptions of the issues and concerns determined to not warrant further consideration, as well as a summary justification for the dismissal of each issue.

Potential for the project to impact archeological resources. The topic of archeological resources was dismissed from detailed analysis because the ground has already been disturbed. The project site is located in West Potomac Park, which was once marshland formed by the Potomac River by silt deposits. In 1882, the U.S. Army Corps of Engineers began depositing dredged materials from the Potomac River in the marshland. In 1975, the USPP H1 Stables facility currently at the project site was constructed (NPS 1973, 1999a). The proposed project would be constructed within the same project site boundaries. Therefore, this topic was dismissed from detailed analysis.

Potential for the project to impact threatened and endangered species and common species of wildlife. Wildlife in the project area is limited to types of wildlife consistent with urban areas. Tree removal would occur between August 16th and March 14th in accordance with the Migratory Bird Act Treaty. Glass in large windows would be treated appropriately, if determined to be detrimental to migratory birds. Lighting would be consistent with the area, minimizing impacts on wildlife. Area wildlife could be temporarily dispersed during construction. However, it is expected that the urban wildlife would return to the project area once construction is complete.

Additionally, a waste management and integrated pest management plan would be developed prior to construction and occupation of the site.

In accordance with Section 7 of the Endangered Species Act, the NPS consulted with the U.S. Fish and Wildlife Service to determine the potential for, federally-listed protected species to be present at the project site. This consultation indicated the potential for the federally threatened Northern Long-Eared Bat (*Myotis septentrionalis*). However, because the project would have tree clearing of less than 15 acres (the level required for additional consultation for the Northern Long-Eared Bat), this topic was dismissed from analysis.

Potential for the project to impact water resources. The proposed project would include drainage improvements, which would protect drainage from manure and other storage areas, and would increase the total impervious surface area by 0.02 acres. During the construction phase, the NPS and/or its contractors would adhere to applicable Best Management Practices (BMPs) to minimize the erosion of exposed soils. The project would follow applicable stormwater requirements listed in the District of Columbia's 2013 Rule on Stormwater Management and Soil Erosion and Sediment Control and the federal Energy Independence Security Act (EISA). Because the project exceeds 5,000 square feet, the project would require appropriate site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the project site with regard to temperature, rate, volume, and duration of flow. Therefore, this topic was dismissed from further analysis in the EA.

Potential for the project to impact vegetation. The existing H1 Stables facility at the project site is surrounded by a mature, mixed deciduous forest. The project site contains 115 total trees, including 51 deciduous trees and 64 conifer trees. The site is within Ash Woods, which contains informal groves of elm, maple, beech, and oak trees. The proposed project would increase the number of trees by approximately 16 trees. Approximately 56 existing trees would be removed and 72 trees would be added. Given the size of the project area and the landscape character of West Potomac Park (i.e., open lawns bordered by trees), the increase in the number of trees would not result in significant adverse impacts on vegetation. During construction the dripline of trees would be protected to preserve tree health. Therefore, vegetation was dismissed from further analysis in the EA.

ALTERNATIVES

This EA analyzes the potential environmental consequences of two alternatives. The elements of these alternatives are described in detail in this chapter. Impacts associated with the actions proposed under each alternative are outlined in the “Affected Environment and Environmental Consequences” chapter of this EA. In addition, several redevelopment concepts of the USPP H1 Stables were dismissed from further consideration. These concepts are described in this chapter under “Alternatives Considered but Dismissed.”

ALTERNATIVE A: NO ACTION

The No Action Alternative would retain the existing H1 Stables facility in its current condition (see **Figure 2**). Four approximately 12- to 16-foot tall, wood-framed, detached structures, and the 15-foot tall office trailer that surround a single paddock would remain. The detached structures would continue to house ten horse stalls and provide storage space. The saw dust storage structure, manure dumpster, and one-story 15-foot-tall water treatment plan would remain. These structures would continue to be located approximately 13 degrees off-axis from Ash Road and the Reflecting Pool.

The facility’s parking and loading area, which is accessible from Ash Road, would remain and continue to have undefined spaces and be highly visible from Ash Road. Ash Road would continue to provide USPP, NPS, contractor, delivery, emergency, event permittee, and other official-use vehicle access to the facility. An informal social pedestrian trail would continue to connect the sidewalk along Independence Avenue and Ash Road through Ash Woods.

The detached structures, paddock, sawdust storage structure, and manure dumpster would continue to be enclosed by the office trailer and a six-foot tall stockade fence. A similar-style fence would continue to partially surround the water treatment plant and parking and loading area. The facility would continue to be inaccessible to the public.

The existing 115 trees, including 51 deciduous trees and 64 conifer trees that currently surround the facility would remain. The JFK hockey fields to the north of the project site between Ash Road and the Reflecting Pool would remain a grass panel used for recreation.

ALTERNATIVE B: ACTION ALTERNATIVE

The Action Alternative proposes to replace the four detached structures and office trailer with a single taller, larger, symmetrical stables building (see **Figure 3**). The building would be oriented parallel to Ash Road and the Reflecting Pool. The building would accommodate 14 horse stalls; a quarantine stall; a show stall; a tack room; an operations office; a feed, tool, and outdoor storage area; and other features. An outdoor public visiting space centrally located on the north side of the building would include an educational component, but the project would not include a formal public engagement component. The public visiting space would connect to the tack room, show stall, and grooming stall. The public portion of the building would also house two public restrooms. The building would be approximately 24 feet tall and have a continuous pitched roof with five cupolas providing ventilation.

The single paddock would be replaced with four paddocks. Two paddocks, visible to the public from designed viewing areas, would be located between the north side of the building and Ash Road. One medical paddock would be located on the south side of the building out of public view. One private paddock, also out of public view, would be located to the west of the building.

The existing parking and loading area would be replaced with a new parking and loading area that accommodates eight employee parking spaces and four trailer-parking spaces. A new vehicle entry driveway from Independence Avenue would provide access to the new parking and loading area for USPP, delivery, maintenance, and other official use vehicles. A supported turf entry road from Ash Road would provide emergency vehicle access to the facility. The Action Alternative would also replace the existing social trail through Ash Woods with a designed path. No changes would occur to the existing water treatment plant.

A secure perimeter would surround the new building, paddocks, parking and loading area, and water treatment plant. The public paddocks would be enclosed by two wood post and rail fences located eight feet apart for the protection of the horses and the public. A five-foot tall paddock fence would face the horses and a four-foot public fence would face the National Mall. The remainder of the facility would be enclosed by a physical barrier combined with a partial or full visual barrier. Gates would be located at the Independence Avenue entry driveway and the entry road from Ash Road.

A buffer of vegetation would surround the facility. The Action Alternative would remove 56 existing trees and add 72 trees, increasing the number of trees in the project area by approximately 16. The Action Alternative would retain the existing water treatment plant in its current location. During the twelve- to 18-month construction period for the Action Alternative, a portion of the JFK hockey fields to the north of the project site would likely be used as a staging area.

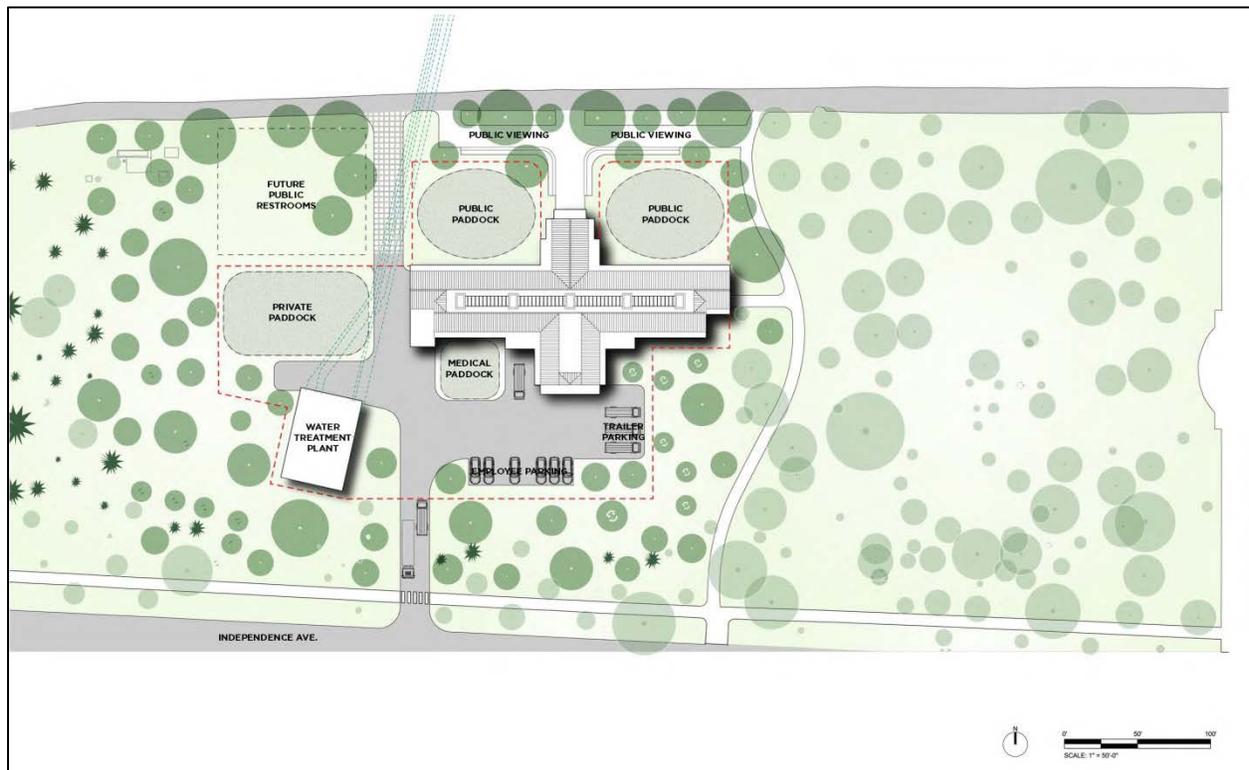


Figure 3: Alternative B: Action Alternative

ALTERNATIVES CONSIDERED BUT DISMISSED

The NPS considered a wide range of redevelopment concepts of the USPP H1 Stables during scoping, including three other design concepts. Some concepts were ultimately dismissed from further consideration. A description of these concepts is provided in **Appendix A**.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes current environmental conditions in and around the project area. The discussion is focused on resources that could potentially be affected by the implementation of the proposed project, and provides a baseline for understanding the current condition of the resources. This section also includes an analysis of the environmental consequences, or “impacts,” of the No Action and Action alternatives.

The Affected Environment description is followed by the Environmental Consequences analysis for each resource topic. The resource topics analyzed here correspond to the planning issues and concerns described in the Purpose and Need section of this EA.

In accordance with the Council on Environmental Quality (CEQ) regulations, the environmental consequences analysis includes the direct, indirect, and cumulative impacts potentially resulting from the proposed alternatives (40 CFR 1502.16). The intensity of the impacts is assessed in the context of the park’s purpose and significance, and any resource-specific context that may be applicable (40 CFR 1508.27). Where appropriate, mitigating measures for adverse impacts are described and their effect on the severity of the impact is noted. The methods used to assess impacts vary depending on the resource being considered, but are generally based on a review of pertinent literature and park studies, information provided by on-site experts and other agencies, professional judgment, and park staff knowledge and insight.

Cumulative Impacts Methodology: The EA also considers cumulative impacts – defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative impacts are addressed in this EA by resource topic for both the action and no action alternatives. To determine the potential cumulative impacts, past, current, and anticipated future projects within the project site and the surrounding area were identified. These cumulative projects are summarized in **Table 1**. A description of these cumulative projects is provided in **Appendix B**.

Table 1: Anticipated Cumulative Projects In and Around the Project Site

Past, Present, or Future	Cumulative Impact Project	Description
Past/Present/Future	National Mall Plan/Environmental Impact Statement (2010)	The National Mall Plan presents a vision about the kinds of resource conditions, visitor experiences, and facilities that will best fulfill the purposes of the National Mall. The Plan proposes to rehabilitate and refurbish the National Mall so that very high levels of use can be perpetuated.
Past/Present/Future	Comprehensive Plan for the National Capital: Federal Elements (2016)	The Federal Elements provide principles, goals, and planning policies for the growth and development of the national capital during the next 20 years and address matters related to federal properties and interests in the National Capital Region. The Federal Elements includes policies related to parks and open space.

Past, Present, or Future	Cumulative Impact Project	Description
Future	Korean War Veterans Memorial Wall of Remembrance	The Korean War Veterans Memorial would add a Wall of Remembrance and other enhancements, which could potentially include landscaping and circulation changes, to the existing memorial.
Future	Washington, D.C. and Vicinity Flood Risk Management Project Improvements	The U.S. Army Corps of Engineers plan to raise the levee embankment at 23rd Street NW and Constitution Avenue NW and along the Lincoln Memorial Reflecting Pool.
Future	Potomac River Tunnel	DC Water plans to construct the Potomac River Tunnel and supporting infrastructure to provide control for seven combined sewer overflow outfalls along the Potomac River.

HISTORIC STRUCTURES

Historic properties were identified within the project's APE (see **Figure 4**). As defined by 36 CFR 800.16(d), the APE represents "the geographic area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." Historic properties in the APE are documented in the NRHP nominations for the L'Enfant Plan of the City of Washington, District of Columbia (1997), National Mall (1981, updated 2016), East and West Potomac Parks (1973, revised 1999), and Memorials in Washington, D.C. Multiple Property Listing (n.d.); in a Cultural Landscape Report (CLR) for the Lincoln Memorial Grounds (1999); in Cultural Landscapes Inventories (CLIs) for the Washington Monument Grounds (2009b) and the District of Columbia War Memorial (2009a); and in a Historic American Landscapes Survey (HALS) for the Tidal Basin.

In this EA, the different types of historic properties are addressed by resource type to best describe the impacts of the proposed project on the APE. The NPS evaluates historic structures, cultural landscapes, and archeological resources as different resource categories. This section specifically addresses historic structures that have been included in or have been determined eligible for the NRHP, all of which are encompassed by at least one historic district or multiple property listing. Cultural landscapes are addressed in the Cultural Landscapes section that follows.

Affected Environment

The APE is located in the L'Enfant Plan of the City of Washington (L'Enfant Plan). The National Mall and East and West Potomac Parks Historic Districts encompass the entire project site and APE. Additional historic resources located in the APE include the Lincoln Memorial (and Statue of Lincoln), Korean War Veterans Memorial, Martin Luther King, Jr. Memorial, District of Columbia War Memorial, and World War II Memorial. A description of these historic properties is provided in **Appendix C**, the Assessment of Effects (AOE) prepared for the proposed project as part of the Section 106 process. Specific resources that contribute to these historic properties and are located in the APE are summarized in **Table 2**.

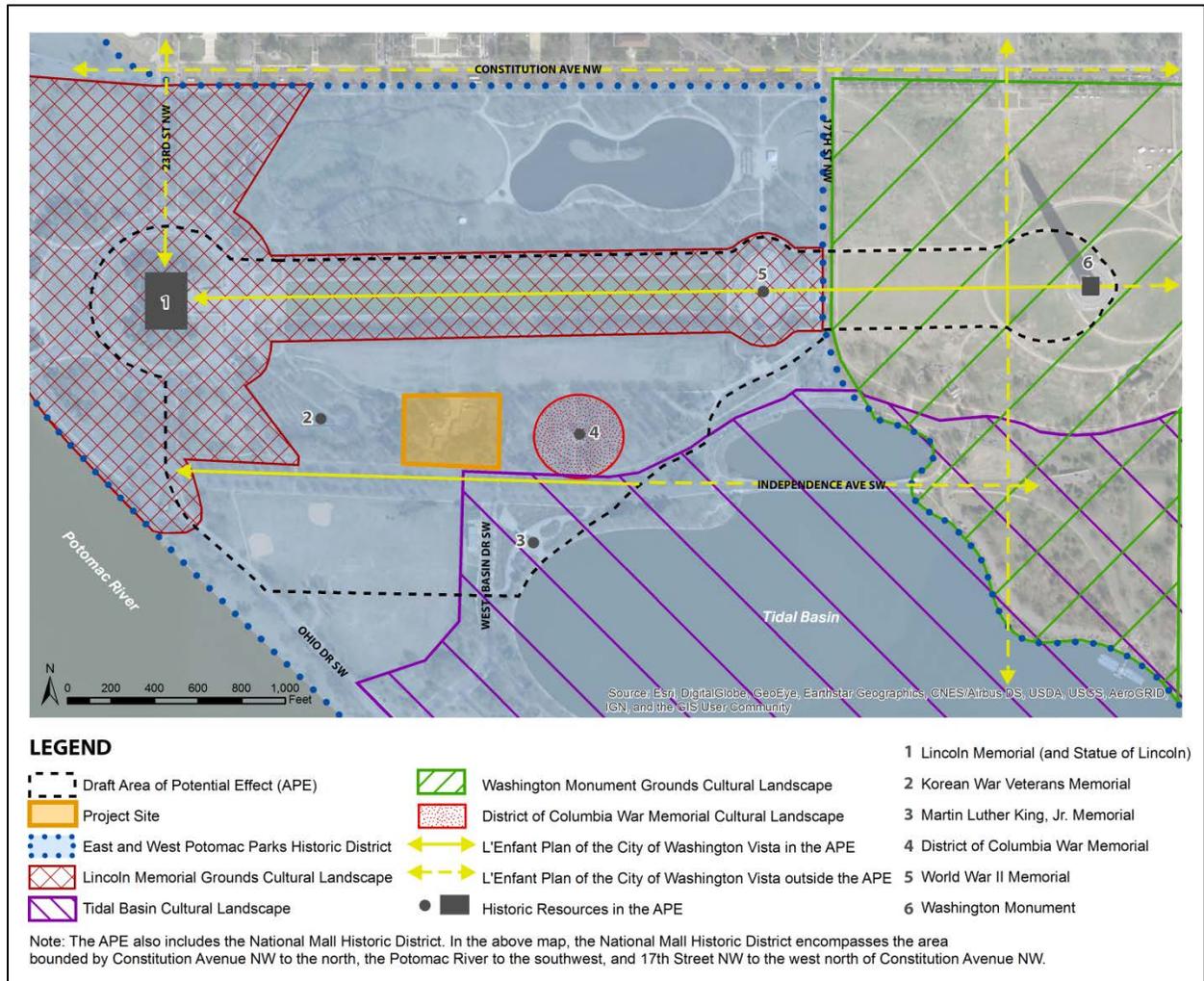


Figure 4: Area of Potential Effect

Table 2: Contributing Resources

Contributing Resources	Individually Listed	Resources contribute to:		
		L'Enfant Plan	National Mall HD	East and West Potomac Parks HD
West Potomac Park (Reservation No. 332)		✓	✓	
Washington Monument Grounds (Reservation No. 2)			✓	
Independence Avenue		✓	✓	✓
17 th Street NW		✓	✓	
Daniel French Drive			✓	
Lincoln Circle			✓	

Contributing Resources	Resources contribute to:			
	Individually Listed	L'Enfant Plan	National Mall HD	East and West Potomac Parks HD
Vista from the Lincoln Memorial to the Washington Monument		✓	✓	✓
Vista from the White House across the Ellipse to the Jefferson Memorial		✓	✓	
Independence Avenue (Capitol Grounds, Mall, and Potomac Parks) vista		✓		
23 rd Street vista		✓		✓
17 th Street vista from Constitution Avenue to its southern terminus				✓
Reflecting Pool			✓	✓
Dutch Elm trees that line and shade the gravel walkways along the north and south sides of the Reflecting Pool				✓
Tidal Basin			✓	✓
Japanese Cherry Trees sited around the Tidal Basin			✓	✓
Lincoln Memorial	✓		✓	✓
Lincoln Memorial grounds			✓	✓
Korean War Veterans Memorial			✓	✓
Martin Luther King, Jr. Memorial			✓	
District of Columbia War Memorial	✓		✓	✓
District of Columbia War Memorial grounds			✓	
World War II Memorial			✓	
Washington Monument	✓		✓	

About the Analysis

Potential impacts on historic structures affect the historic character and integrity of the property as defined by the NRHP. The impacts, direct or indirect, adverse or beneficial, are analyzed in consideration of additional regulations and guidance provided by NEPA, Section 106 of the NHPA, and the *Secretary of Interior's Standards for the Treatment of Historic Properties, NPS Management Policies 2006*, and *Director's Order 28*.

As part of the Section 106 process, an AOE has been prepared for the proposed project and will be submitted to the District of Columbia State Historic Preservation Office (SHPO) for consultation and concurrence in conjunction with this EA.

Impacts of Alternative A: No Action

Under Alternative A, no changes would occur to the L'Enfant Plan, National Mall and East and West Potomac Parks Historic Districts, and other historic resources in the APE.

Cumulative Impacts: Alternative A would have no impact on the L'Enfant Plan, National Mall and East and West Potomac Parks Historic Districts, and other historic resources within the APE. Therefore, Alternative A would not contribute to cumulative impacts on these historic structures.

Conclusion: Alternative A would result in no impacts on the L'Enfant Plan, National Mall and East and West Potomac Parks Historic Districts, and other historic resources within the APE and would not contribute to cumulative impacts on these historic structures.

Impacts of Alternative B: Action Alternative

New Stables Facility

The Action Alternative would add a new structure and trail in West Potomac Park and the National Mall which would be visible in the park. The proposed facility would also be visible from Daniel French Drive, Lincoln Circle, Independence Avenue, Reflecting Pool, Dutch Elm trees, Japanese Cherry Trees on the northwest side of the Tidal Basin near the Martin Luther King, Jr. Memorial, Lincoln Memorial grounds, Korean War Veterans Memorial, Martin Luther King, Jr. Memorial, District of Columbia War Memorial grounds, and World War II Memorial either during the winter or during both the summer and winter. Trees would partially screen views from these contributing resources to the facility. During the winter, the proposed facility may also be visible from the Lincoln Memorial, Washington Monument Grounds (Reservation No. 2), and the base of the Washington Monument. Views from these contributing resources to the facility would be partially filtered through trees. From the top of the Monument, the project site is visible, but the existing H1 Stables facility is virtually hidden by trees during the summer. The stables facility could be visible from the elevated perspective at the top of the Monument.

Although the new stables facility, which would be approximately 24 feet tall with five cupolas, may be visible from the Lincoln Memorial and Washington Monument, the visual axis between the Lincoln Memorial and Washington Monument is reinforced by the Reflecting Pool and the double row of elms along the Reflecting Pool. Therefore, the view between the Lincoln Memorial and Washington Monument would not be altered because the project site is outside the dominant sight line.

Design and construction of the new facility would be undertaken in a way that is compatible with the design of other structures on the National Mall and is consistent with the Secretary of Interior's Standards for the Treatment of Historic Properties. Design of the new facility would use building materials that have an earth color palette and are compatible with the color and texture of other structures on the National Mall.

As a result, the stables facility would have direct, adverse impacts on the L'Enfant Plan. The new stables facility would also have indirect, adverse impacts on the National Mall and East and West Potomac Parks Historic Districts, Washington Monument, Lincoln Memorial, Korean War Veterans Memorial, Martin Luther King, Jr. Memorial, District of Columbia War Memorial, and World War II Memorial.

New Vehicle Entry Driveway

The new vehicle entry driveway at Independence Avenue would add a break to the existing structure of the view corridor characterized by a sidewalk, vegetated strip, and vegetated site area at the intersection with West Basin Drive. The new intrusion of a driveway, curb cut, and apron would be visible, but would be similar in character to other curb cuts in the view corridor. The driveway would also be visible from the Martin Luther King, Jr. Memorial and Japanese Cherry Trees on the northwest side of the Tidal Basin near the Martin Luther King, Jr. Memorial. Views from the memorial and trees to the facility would be partially filtered through trees. As a result, the new entry driveway would have indirect, adverse impacts on the L'Enfant Plan, National Mall and East and West Potomac Parks Historic Districts, and Martin Luther King, Jr. Memorial.

Construction Staging Area

During construction of the Action Alternative, the character of a portion of the JFK hockey fields, the lawn area to the north of the project site, would potentially be altered if the fields are used as a construction staging area. The construction staging area would also be visible from Daniel French Drive, Lincoln Circle, Reflecting Pool, the Dutch Elm trees, Lincoln Memorial Grounds, Korean War Veterans Memorial, District of Columbia War Memorial, District of Columbia War Memorial grounds, and World War II Memorial either during the winter or during both the summer and winter. During the winter, the construction staging may also be visible from the Lincoln Memorial, Washington Monument Grounds (Reservation No. 2), and the base of the Washington Monument. Trees would partially screen views from these contributing resources to the construction staging area. From the top of the Washington Monument, temporary changes to the JFK hockey fields to the north of the project site would also be visible during the construction of the Action Alternative.

After construction is complete, revegetation of the JFK hockey fields would be undertaken in a way that is consistent with the *National Mall and Memorial Parks (NAMA) Turf Plan*. Efforts would be made to maintain the wooded character of Ash Woods surrounding the facility by planning construction routes and methods to avoid damage to large trees and to minimize vegetation disturbance. Ash Road could be temporarily closed to allow construction access to the site, rerouting visitors to memorials and maintenance staff to the water treatment plant.

The use of the JFK hockey fields as a construction staging area would have temporary adverse impacts on the L'Enfant Plan, National Mall and East and West Potomac Parks Historic Districts, Washington Monument, Lincoln Memorial, Korean War Veterans Memorial, District of Columbia War Memorial, and World War II Memorial.

Alternative B would result in no changes to 17th Street NW, the vista from the White House across the Ellipse to the Jefferson Memorial, the 23rd Street vista, 17th Street vista from Constitution Avenue to its southern terminus, or the Tidal Basin. The project site is not visible from these contributing resources or is entirely blocked by trees.

Cumulative Impacts: Other past, present, and reasonably foreseeable future projects that have or will likely have cumulative impacts on historic structures include the National Mall Plan, the Federal Elements of the Comprehensive Plan for the National Capital, the Korean War Veterans Memorial Wall of Remembrance, the Flood Risk Management Project Improvements, and the Potomac River Tunnel. The National Mall Plan's proposed elements to rehabilitate and refurbish the National Mall and the Federal Element's policies related to parks and open space could have no detectable, adverse, or beneficial impacts on the historic structures depending on the National

Mall Plan's elements and Federal Element's policies implemented. The Korean War Veterans Memorial Wall of Remembrance would alter the existing memorial and its landscape that could result in adverse impacts on the existing memorial and its landscape, the National Mall and East and West Potomac Park Historic Districts, and the Lincoln Memorial. The Flood Risk Management Project Improvements could result in adverse impacts on the East and West Potomac Park Historic Districts and the Lincoln Memorial due to alterations in topography and the landscape. The Potomac River Tunnel could result in adverse impacts on the National Mall and East and West Potomac Parks Historic Districts, the Lincoln Memorial, and the Washington Monument. Therefore, when the adverse impacts of Alternative B are combined with the impacts of these other projects, an overall adverse cumulative impact would result.

Conclusion: Alternative B would result in detectable adverse impacts on historic structures and would contribute adverse impacts on the overall adverse cumulative impact on historic structures. The new facility's design would minimize impacts on historic structures by using building materials that have an earth color palette and are compatible with the color and texture of other structures on the National Mall. The stables building would also be oriented parallel to Ash Road and the Reflecting Pool, reinforcing the spatial definition of the National Mall. Alternative B would also result in temporary adverse impacts during construction; however, the impacts would be short-term and within a site-specific area of the JFK hockey fields. Following construction, construction materials and equipment would be removed from the JFK hockey fields, impacted grass would be re-vegetated, and recreational use of this portion of the fields could resume. Overall, changes to historic structures would be noticeable but would not result in their delisting from the NRHP or their eligibility for NRHP listing.

CULTURAL LANDSCAPES

Cultural landscapes consist of "a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) associated with a historic event, activity, or person, or exhibiting other cultural or aesthetic values." Cultural landscapes include the features and systems that compose the existing landscape and convey the historic character of the landscape associated with a historic period of significance. Landscapes provide a setting for historic buildings and structures. Cultural landscape characteristics include natural systems and features, topography, spatial organization, vegetation, land use, circulation, views and vistas, buildings and structures, and small-scale features that contribute to the landscape's historic character.

Affected Environment

Cultural landscapes in the APE include the Lincoln Memorial Grounds, Washington Monument Grounds, District of Columbia War Memorial, and the Tidal Basin:

- **Lincoln Memorial Grounds:** A Cultural Landscape Report (CLR) was completed by the NPS for the Lincoln Memorial Grounds in 1999. The grounds consist of 94 acres of West Potomac Park and have significance as an essential part of the McMillan Plan. The distinct formal landscape of the Lincoln Memorial grounds occupies a highly symbolic site within the National Mall, and the designed vistas between the Lincoln Memorial and other memorial sites and landscape features are important elements of the landscape character. Noted landscape architects, architects, and engineers, including Frederick Law Olmsted, Jr., James L. Greenleaf, Charles F. McKim, Henry Bacon, and the U.S. Army Corps of Engineers, all made significant contributions to the design and execution of the plans for the grounds.

Among the contributing features are the Mall axis vista from and to the Lincoln Memorial to Washington Monument to U.S. Capitol and recreational land use (NPS 1999b).

- Washington Monument Grounds: A Cultural Landscape Inventory (CLI) was completed by the NPS for the Washington Monument Grounds in 2009. At the center of the monumental core, the Washington Monument Grounds comprise 106 acres including U.S. Reservation 2, designated by the L'Enfant Plan of the City of Washington, and occupy a pivotal symbolic space in the urban design of the nation's capital. The principal feature of the grounds is the Washington Monument, which is visible from multiple vantage points throughout the city, including from Ash Road adjacent to the project site. Character-defining features of the Washington Monument Grounds include the view from the top of the Monument, as well as views and vistas from the Monument and site to the Lincoln Memorial (NPS 2009b, 2016).
- District of Columbia War Memorial: A CLI was completed by the NPS for the District of Columbia War Memorial in 2009. The District of Columbia War Memorial site encompasses approximately two acres in West Potomac Park. The Memorial is significant for its artistic and commemorative value as a monument honoring those District of Columbia residents who served in World War I. Among the contributing features are circulation along Ash Road and Independence Avenue (NPS 2009a).
- Tidal Basin Cultural Landscape Area: The NPS is currently drafting a CLR for the Tidal Basin. A Historic American Landscapes Survey (HALS) was completed by the NPS for the Tidal Basin in 2018. The creation of the Tidal Basin and surrounding landscape was a significant engineering feat at the turn of the twentieth century. The landscape is world renowned for thousands of flowering cherry trees and memorials to significant American leaders (NPS 2017).

About the Analysis

Potential impacts on cultural landscapes affect the historic character and integrity of the landscape as defined in CLRs and CLIs. The impacts, direct or indirect, adverse or beneficial, are analyzed in consideration of additional regulations and guidance provided by NEPA, Section 106 of the NHPA, and the *Secretary of Interior's Standards for the Treatment of Historic Properties, NPS Management Policies 2006, Director's Order 28*, and other NPS guidance for the treatment of cultural landscapes.

As part of the Section 106 process, an AOE has been prepared for the proposed project and will be submitted to the District of Columbia SHPO for consultation and concurrence in conjunction with this EA.

Impacts of Alternative A: No Action

Under Alternative A, no changes would occur to the contributing features of the Lincoln Memorial Grounds cultural landscape and the character-defining features of the Washington Monument Grounds, District of Columbia War Memorial, and Tidal Basin Cultural Landscapes.

Cumulative Impacts: Alternative A would have no impact on the Lincoln Memorial Grounds, Washington Monument Grounds, District of Columbia War Memorial, and Tidal Basin Cultural Landscapes. Therefore, Alternative A would not contribute to cumulative impacts on these cultural landscapes.

Conclusion: Alternative A would result in no impacts on the Lincoln Memorial Grounds, Washington Monument Grounds, District of Columbia War Memorial, and Tidal Basin Cultural Landscapes and would not contribute to cumulative impacts on these cultural landscapes.

Impacts of Alternative B: Action Alternative

New Stables Facility

The Mall axis vista from and to the Lincoln Memorial to Washington Monument to U.S. Capitol would not be altered as described in the impacts of Alternative B on the L'Enfant Plan in the Historic Structures section. From the top of the Washington Monument, the project site is visible, but the existing H1 Stables facility is virtually hidden by trees during the summer; the stables building could be detectable from the elevated perspective at the top of the Monument, especially in winter.

The stables building and secure perimeter barrier would be visible from the District of Columbia War Memorial and Martin Luther King, Jr. Memorial across Independence Avenue. Views from the memorials to the facility would be partially filtered through trees. Design and construction of the new facility would be undertaken in a way that is compatible with the design of other structures on the National Mall and is consistent with the Secretary of Interior's Standards for the Treatment of Historic Properties. The new facility's design would minimize impacts on cultural landscapes by using building materials that have an earth color palette and are compatible with the color and texture of other structures on the National Mall.

As a result, Alternative B would not result in adverse impacts on the Lincoln Memorial Grounds, Washington Monument Grounds, District of Columbia War Memorial, or the Tidal Basin Cultural Landscapes.

New Vehicle Entry Driveway

The new vehicle entry driveway at Independence Avenue would add a break to the existing structure of the view corridor characterized by a sidewalk, vegetated strip, and vegetated site area at the intersection with West Basin Drive. The new intrusion of a driveway, curb cut, and apron would be visible, but would be similar in character to other curb cuts in the view corridor. The driveway would also be visible from the Martin Luther King, Jr. Memorial and American Elms lining Independence Avenue. Views from the memorial and trees to the facility would be partially filtered through trees. As a result, the new entry driveway would have indirect, adverse impacts on the Tidal Basin Cultural Landscape.

Construction Staging Area

During the construction of Alternative B, a portion of the grass panel to the north of the project site would likely temporarily close to active recreation use. If the site is utilized, following construction, construction materials and equipment would be removed and impacted grass would be re-vegetated. After construction is complete, revegetation of the JFK hockey fields would again allow recreational use of this portion of the fields and would be undertaken in a way that is consistent with the Secretary of Interior's Standards for the Treatment of Historic Properties. Efforts would be made to maintain the wooded character of Ash Woods surrounding the facility by planning construction routes and methods to avoid damage to large trees and to minimize vegetation disturbance. Ash Road could be temporarily closed to allow construction access to the site, rerouting visitors to memorials and maintenance staff to the water treatment plant.

Overall, Alternative B would result in temporary adverse impacts on the Lincoln Memorial Grounds, Washington Monument Grounds, and District of Columbia War Memorial Cultural Landscapes during construction; however, the impacts would be short-term and within a site-specific area of the grass panel to the north of the project site.

Cumulative Impacts: Other past, present, and reasonably foreseeable future projects that have or will likely have cumulative impacts on cultural landscapes include the National Mall Plan, the Federal Elements of the Comprehensive Plan for the National Capital, the Korean War Veterans Memorial Wall of Remembrance, the Flood Risk Management Project Improvements, and the Potomac River Tunnel. The National Mall Plan's proposed elements to rehabilitate and refurbish the National Mall and the Federal Element's policies related to parks and open space could have no detectable, adverse, or beneficial impacts on the cultural landscapes depending on the National Mall Plan's elements and Federal Element's policies implemented. Similarly, depending on the design, implementation of the Korean War Veterans Memorial Wall of Remembrance could result in potential adverse impacts on the Lincoln Memorial Grounds and the Washington Monument Grounds Cultural Landscapes due to changes in the visual characteristics and circulation. The Flood Risk Management Project Improvements could result in adverse impacts on the Lincoln Memorial Grounds due to changes in the recreational use of the site and landscape elements. The Potomac River tunnel could result in potential visual intrusions into the Lincoln Memorial Grounds Cultural Landscape. Therefore, when the temporary and long-term adverse impacts of Alternative B are combined with the impacts of these other projects, an overall adverse cumulative impact would result.

Conclusion: Alternative B would result in detectable adverse impacts on the Tidal Basin Cultural Landscape and would contribute adverse impacts on the overall adverse cumulative impact on cultural landscapes. The new facility's design would minimize impacts on cultural landscapes by using building materials that have an earth color palette and are compatible with the color and texture of other structures on the National Mall. Alternative B would also result in temporary adverse impacts on cultural landscapes during construction; however, the impacts would be short-term and within a site-specific area of the JFK hockey fields. Following construction, construction materials and equipment would be removed, impacted grass would be re-vegetated, and recreational use of this portion of the fields could resume.

FLOODPLAINS

Affected Environment

The project area is almost entirely located in flood zone AE, the 100-year floodplain (see **Figure 5**). Less than approximately one percent of the project area, specifically in the northwest corner, is located in flood zone X, the 500-year floodplain (FEMA 2017).

Executive Order 11988: Floodplain Management requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains, and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative (FEMA, 2015).

The NPS Director's Order (DO) #77-2: Floodplain Management outlines NPS policies and procedures for proposed actions that could adversely affect natural resources and functions of floodplains (NPS 2003). The procedure calls for the classification of the action based on the



Figure 5: Floodplains in the Project Area

project and its location within a defined regulatory floodplain. If a proposed action is found to be within an applicable regulatory floodplain and cannot be relocated, then the NPS must:

- Prepare and approve a Statement of Findings that quantifies and documents the flood conditions and associated hazards;
- Take all reasonable actions to minimize the impact to the natural resources of floodplains;
- Use non-structural measures as much as practicable to reduce hazards to human life and property; and
- Ensure that structures and facilities are designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program.

The site is located within the FEMA-established 100-year floodplain of the Potomac River. In a 100-year flood event, flood waters would inundate the site by up to 2.8' depth and a velocity of approximately 1.2 feet/second. Based on the velocity during a flood event, sedimentation can occur during a flood. In such cases, sediment and debris are cleared from the site.

The project site contains limited natural resources within the flood plain due to the existing structures and development.

About the Analysis

Impacts on floodplains located at and/or in the vicinity of the project site resulting from the implementation of the alternatives were analyzed in consideration of the proposed actions occurring in the floodplains, the requirements of Executive Order 11988, DO #77-2 and other applicable regulations, and professional judgement.

Impacts of Alternative A: No Action

The implementation of Alternative A would have no impacts on floodplains located at and/or in the vicinity of the project site. Existing conditions would continue.

Cumulative Impacts: Alternative A would have no impacts on floodplains located at and/or in the vicinity of the project site. Therefore, Alternative A would have no potential to contribute to cumulative impacts when considered with past, present, and reasonably foreseeable future projects occurring at and in the vicinity of the project site.

Conclusion: Alternative A would have no impacts on floodplains and would not contribute to cumulative impacts on floodplains.

Impacts of Alternative B: Action Alternative

Alternative B would implement a number of improvements throughout the project site and 100-year floodplain, including replacement of the four detached structures and office trailer with a single stables building. The proposed project would increase the total impervious surface area at the project site by 0.02 acres.

The NPS would adhere to procedures set forth in *Procedural Manual 77-2: Floodplain Management* to eliminate or minimize impacts on the 100-year floodplain to the extent possible. Although the project would be located within the 100-year floodplain, it does not include critical actions such as schools or hospitals. The redevelopment of the stables would not alter the natural resources in the floodplain. Structures within the floodplain would incorporate elements of construction to increase flood resiliency and minimize flood damage, as contained in the National Flood Insurance Program *Floodplain Management Criteria for Flood-Prone Areas* (44 CFR 60.3). The NPS would develop an evacuation plan in event of a flood. The NPS would also obtain all necessary federal and District permits for projects occurring in the 100-year floodplain, and would adhere to applicable requirements set forth in the permits to avoid, mitigate, or otherwise minimize floodplain impacts. Adherence to the requirements of Executive Order 11988, *Procedural Manual 77-2*, and applicable federal and District permits would ensure that the proposed project would have minimal potential to affect the capacity of the 100-year floodplain to store or convey floodwaters, or to result in the displacement of floodwaters. In accordance with Executive Order 11988 and DO #77-2, the NPS has prepared a Floodplains Statement of Findings report for the proposed project (see **Appendix D**). As a result, Alternative B would have no detectable impacts on floodplains.

Cumulative Impacts: Alternative B would have no impacts on the floodplain and would not contribute to cumulative impacts on the floodplain.

Conclusion: No impacts would occur to the floodplain under Alternative B. The alternative would not contribute to cumulative impacts on the floodplain.

VISITOR USE AND EXPERIENCE

Affected Environment

The existing H1 Stables facility does not contain public amenities or educational programs. The detached stables structures and paddock are not visible or accessible to the public. The structures and paddock are enclosed by an office trailer and a six-foot tall stockade fence. Horses are only visible to the public when they leave the facility.

The facility's parking and loading area is highly visible from Ash Road. Ash Road currently provides pedestrian and bicycle circulation within the National Mall between memorials, recreational areas, and the project site. Ash Road also provides USPP, NPS, contractor, delivery, emergency, event permittee, and other official-use vehicle access to the existing H1 Stables facility's parking and loading area on a daily basis from the World War II Memorial parking lot on Home Front Drive. Ash Road also provides emergency vehicle access to the facility and maintenance vehicle access to other facilities along Ash Road. Designated spaces for pedestrians, bicycles, and vehicles are not defined on Ash Road.

To the east of the existing facility, an informal social trail through Ash Woods provides pedestrian access between Ash Road, the sidewalk along Independence Avenue, and the Martin Luther King, Jr. Memorial across Independence Avenue south of the project site. The JFK hockey fields to the north of the project site serve as multipurpose recreation fields.

The closest public restrooms to the project site are located to the east of the District of Columbia War Memorial along Ash Road, or at the Lincoln Memorial.

About the Analysis

Potential impacts on visitor use and experience at and in the project site were analyzed in consideration of the current visitor uses and activities, the proposed elements included in the alternatives, the estimated increase in visitors that would result from the implementation of each alternative, and professional knowledge and judgment.

Impacts of Alternative A: No Action

Alternative A would not add public amenities or educational programs within the site. The stables structures and paddock would remain out of public view and would remain inaccessible to the public. The horses would continue to be out of public view, except when leaving the facility.

The facility's parking and loading area would continue to be highly visible from Ash Road. Pedestrians and bicycles would continue to share Ash Road with USPP, NPS, contractor, delivery, emergency, event permittee, and other official-use vehicles. Pedestrians would also continue to use the social trail through Ash Woods for access between Ash Road and Independence Avenue. The JFK hockey fields would continue to provide open space for active recreation.

Cumulative Impacts: Alternative A would have no impacts on visitor use and experience and would not contribute to cumulative impacts on visitor use and experience.

Conclusion: No impacts would occur to visitor use and experience under Alternative A. The alternative would not contribute to cumulative impacts on visitor use and experience.

Impacts of Alternative B: Action Alternative

Alternative B would create opportunities for the public to view and learn about the USPP horses, reduce pedestrian, bicycle, and vehicle conflicts along Ash Road, and provide formal pedestrian access between Ash Road and Independence Avenue.

Two public paddocks off of Ash Road would allow the public to directly view the horses. The public visiting space inside the stables building would provide additional opportunities for the public to view horses in the show and grooming stalls, and would offer opportunities to learn about the USPP through the space's educational component. The public visiting space would also include two restrooms that would be available to the public.

The new vehicle entry driveway from Independence Avenue to the facility would eliminate the need for USPP, NPS, contractor, delivery, emergency, event permittee, and other official-use vehicles to use Ash Road to access the facility. The removal of these vehicles on Ash Road would reduce pedestrian, bicycle, and vehicle conflicts and provide a safer and more comfortable environment for pedestrians and bicycles on Ash Road. However, pedestrians and bicycles would need to continue to be mindful of emergency vehicles and maintenance vehicles. Emergency vehicle access to the facility and other facilities on Ash Road would continue to be provided via Ash Road when needed. Maintenance vehicles accessing other facilities would continue to use Ash Road on a daily basis. The facility's parking and loading area would be entirely out of public view from Ash Road, and partially or fully screened from public view from the Independence Avenue sidewalk.

The driveway from Independence Avenue to the facility would intersect the Independence Avenue sidewalk. Drivers, pedestrians, and bicycles would need to exercise caution exiting the facility and crossing the driveway. Although the driveway would be used by USPP, NPS, contractor, delivery, emergency, event permittee, and other official-use vehicles on a daily basis, the driveway would not be in continuous use throughout the day. The replacement of the existing social trail through Ash Woods with a designed path would establish a formal pedestrian connection between Ash Road, Independence Avenue, and the Martin Luther King, Jr. Memorial.

During the construction of Alternative B, a portion of the JFK hockey fields would likely close temporarily for active recreation use. Following construction, construction materials and equipment would be removed, impacted grass would be re-vegetated according to the NAMA Turf Management Plan, and active recreation use of this portion of the JFK hockey fields could resume. Traffic would increase across Ash Road between the JFK hockey fields and the project site as a result of construction equipment and materials accessing the site. Ash Road could be temporarily closed to allow construction access to the site, rerouting visitors to the Korean Veterans War Memorial and maintenance staff to the water treatment plant.

Cumulative Impacts: Alternative B would have noticeable beneficial impacts on visitor use and experience at the project site. Other past, present, and reasonably foreseeable future projects that have or will likely have cumulative impacts on visitor use and experience at and in the vicinity of the project site include the National Mall Plan, the Federal Elements of the Comprehensive Plan for the National Capital, the Korean Veterans Memorial Wall of Remembrance, the Flood Risk Management Project Improvements, and the Potomac River Tunnel. The National Mall Plan would provide public amenities along Ash Road, including seating and pedestrian lighting; a restroom facility closer to the project site, and a refreshment stand in the same area, if warranted.

The National Mall Plan and Federal Elements would both improve pedestrian circulation and accessibility. The National Mall Plan would also provide upgraded walking surfaces, consistent and identifiable crosswalks, larger pedestrian waiting areas at intersections, automatic and extended pedestrian crossing times in signal phasing, traffic-calming measures, and pedestrian link improvements between the Korean War Veterans Memorial, the Reflecting Pool, and Independence Avenue. The Federal Elements would plan circulation routes that accommodate visitors and that would meet accessibility requirements to connect the memorial and park space with the adjacent transportation network. The Federal Elements would contribute to the continued visitor enjoyment of the National Mall by protecting or restoring viewsheds that contribute to the visitor experience of the parks and open space system, protecting the character of parks and open space, and preserving and maintaining cultural landscapes. The changes that would occur as part of implementation of the National Mall Plan and Federal Elements would result in beneficial impacts on visitor use and experience. The Korean War Veterans Memorial Wall of Remembrance would provide expanded commemorative experiences and could include additional connections to adjacent pedestrian routes. The Flood Risk Management Project Improvements would change the topography of the multipurpose recreation fields at the southwest corner of 23rd Street and Constitution Avenue, which could affect use of the site. The Potomac River Tunnel would temporarily alter the visitor experience of the National Mall due to changes in circulation and access to recreation fields. The Potomac River Tunnel could permanently alter the visitor experience due to changes in vegetation.

Alternative B would result in an overall beneficial impact associated with the addition of public paddocks, a public visiting space with an education component, a new vehicle entry driveway from Independence Avenue, and the formalization of the social pedestrian path. When the beneficial incremental impact of Alternative B is combined with the beneficial impacts of these other projects, an overall noticeable beneficial cumulative impact would result.

Conclusion: The addition of public paddocks, a public visiting space with an educational component, and a new vehicle entry driveway from Independence Avenue, and the formalization of the social pedestrian path, would create a new public attraction on the National Mall, provide educational opportunities, and improve pedestrian and bicycle safety along Ash Road and connectivity between Independence Avenue and Ash Road. Alternative B would prohibit visitor use on a portion of the JFK hockey fields, including during large events such as the Presidential Inauguration, and could alter circulation along Ash Road during the construction phase, resulting in temporary noticeable adverse impacts; however, the impacts would be short-term and within a site-specific area of the JFK hockey fields and Ash Road. Following the construction period, Alternative B would have noticeable beneficial impacts on visitor use and experience and would contribute to cumulative beneficial impacts on visitor use and experience.

CONSULTATION AND COORDINATION

The NPS involved the public during the NEPA process to provide an opportunity for the public to comment on the proposed project. Consultation and coordination with federal and state agencies and other interested parties was also conducted to refine the alternatives and identify issues and/or concerns related to park resources. This section provides a brief summary of the public involvement and agency consultation and coordination that occurred during planning:

- The NPS held one public scoping meeting during the 30-day public scoping comment period, at which time the public, agencies, and interested parties were invited to submit comments on the proposed project.
- The NPS initiated consultation with the District of Columbia SHPO in a letter dated February 19, 2019. The NPS has prepared an AOE report for the proposed project and will send it to the SHPO for review in conjunction with this EA. The SHPO concurred with the initial determination of no adverse effect on historic properties on June 10, 2019. NPS will notify and consult with the SHPO on any revisions that may be proposed to the project design.
- The NPS initiated Section 7 consultation via the USFWS's online Information for Planning and Consultation (IPaC) system on November 29, 2018. Ongoing consultation would occur during implementation of the proposed action.
- Both the National Capital Planning Commission (NCPC) and U.S. Commission of Fine Arts (CFA) have reviewed the concept design on multiple occasions. NCPC reviewed the concept design on April 4, 2019 and provided comments. CFA reviewed and approved the concept design on March 21, 2019.

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