FINDING OF NO SIGNIFICANT IMPACT

Rock Creek Park
Multi-Use Trail Rehabilitation

Rock Creek Park
Washington, DC

The National Park Service (NPS), in cooperation with the Federal Highway Administration (FHWA) and the District Department of Transportation (DDOT), proposes to rehabilitate the Rock Creek Park multi-use trail in Washington, DC. Rock Creek Park and the Rock Creek and Potomac Parkway are under the jurisdiction of the NPS, but implementation of the proposed action will be administered by DDOT and FHWA, and funded by FHWA. The NPS, in cooperation with FHWA and DDOT, completed an Environmental Assessment (EA) for this project in accordance with the National Environmental Policy Act of 1969 (NEPA), Section 106 of the National Historic Preservation Act (NHPA), NPS Director's Order #12: *Conservation Planning, Environmental Impacts Analysis and Decision-Making* (NPS 2001), FHWA *Technical Advisory* (T6640.8a): *Guidance for Preparing and Processing Environmental Documents*, and other applicable laws, regulations, and policies. The EA was released for agency and public review on December 2, 2011. DDOT held a public hearing on December 14, 2011.

The purpose of this action is to improve the overall condition and connectivity of the deteriorating Rock Creek Park multi-use trail system in order to enhance visitor use and experience within Rock Creek Park. The project will result in improved visitor safety, experience, and protection of park resources; improved access to the Rock Creek Park multi-use trail system from other pedestrian and bicycle facilities, as well as from the surrounding neighborhoods; and more effective drainage and erosion control, thereby reducing trail maintenance. The project is needed to improve safety conditions, protect park resources, and improve connectivity to the park from surrounding neighborhoods; to support the needs of diverse user groups who enjoy the trails; to improve visitor experience; and to enhance opportunities for interpretation of park history and resources.

The proposed action includes the rehabilitation of a 3.7-mile segment of the Rock Creek Park multi-use trail from Broad Branch Road to P Street, NW; a 4,300-foot (0.8 mile) segment of the Piney Branch Parkway trail from Beach Drive to Arkansas Avenue, NW; a new 1,247-foot (0.2 mile) paved trail segment from Broad Branch Road to Peirce Mill (referred to as the Peirce Mill Trail Spur); a 1,929-foot (0.4 mile) segment of the Rose Park trail from P Street, NW to M Street, NW; and a 363-foot ramp connecting the Rose Park trail to P Street, NW. The proposed action includes resurfacing, trail widening where environmentally feasible, modifications to the trail alignments and road crossings, directional and interpretive signage, and connections to and from the trails to other pedestrian and bicycle facilities. The proposed action would also include a number of spot improvements to effectively separate trail users from vehicular traffic; to improve safety at roadway crossings; to improve sight distance at approaches and curves; to improve user accessibility; and other related improvements, including installation of stormwater management infrastructure where practicable to improve drainage and erosion control. The majority of the proposed improvements are located on NPS land, with some improvements located within District of Columbia right-of-way, and some within National Zoological Park property. The proposed action does not involve any transfer of ownership or change of jurisdiction of the trail or the land within the project area. Ownership of the trail and land within the project area will remain with the current owners.

After consultation with DDOT and FHWA, and review of the EA and other supporting documentation, the NPS, in accordance with 43 CFR 46.320, is adopting this EA and making its decision to allow DDOT and FHWA to carry out the rehabilitation of the Rock Creek Park multi-use trail. This EA fulfills the requirements of NEPA and applicable regulations, and it meets the policies set forth in the NPS's Director's Order #12, *Conservation Planning, Environmental Impact Analysis and Decision-Making*, and accompanying Handbook.

NPS SELECTED ALTERNATIVE AND OPTIONS

Based on public comments and environmental analyses, DDOT, in conjunction with FHWA and NPS, identified Alternative 3: Trail Resurfacing and Widening as the selected alternative (described on pages 25-33 of the EA). In addition, Peirce Mill Trail Spur Option B: Eight-Foot Paved Trail Spur (described on page 33 of the EA), and Rose Park Trail Option B: Six-Foot Resurfaced Trail (described on page 34), were the selected options that would be implemented in conjunction with the selected alternative for the Rock Creek Multi-Use Trail Rehabilitation Project. NPS concurs with the selected alternative and options.

Selected Rock Creek Park Multi-Use Trail Rehabilitation Alternative

The selected alternative is the Rock Creek Park Multi-Use Trail Alternative 3. Under Alternative 3, the Rock Creek Park multi-use trail will be resurfaced and widened to a maximum 10-foot width; the width will vary depending on environmental and physical constraints. Of the approximately 5.2 miles of trail resurfacing under Alternative 3, 2.6 miles will be 10 feet in width. As discussed below, the proposed realignment of the trail in certain areas, along with additional spot improvements, would improve sight distance at approaches and curves, improve user accessibility, and improve drainage and erosion control.

The Piney Branch Parkway travel lanes are currently 12 feet wide and the Piney Branch Parkway Trail is 4.5 feet wide. By restriping this segment of the Parkway to 11-foot lanes, a six-foot trail will be achieved without creating a larger footprint. Depending on physical and environmental constraints, an approximately 50-foot segment of the Piney Branch Trail will be widened to separate trail users from vehicular traffic. Sections ranging from four to six feet wide will be located for a short segment along Piney Branch Parkway, through the Beach Drive tunnel, and along the connections to P Street, NW. A short segment of the trail from just north of Piney Branch Parkway to the National Zoological Park entrance will be widened to eight feet in width. The unpaved social trail connecting the Rock Creek Park multi-use trail to the Piney Branch Parkway trail will be paved to an eight-foot width. At the east end of the Piney Branch Parkway Trail, the social trail along Arkansas Avenue, NW will be resurfaced and will include new ADA sidewalk ramps that will tie into the existing sidewalks at 16th Street, NW and Taylor Street, NW. Existing drainage features along the 50-foot segment, such as curbs, will be shifted a maximum of two feet inward in order to accommodate the wider trail.

A new trail segment, which will separate trail users from vehicular traffic, will be constructed between the Broad Branch/Grove 2 North Parking Area and the Rock Creek Park multi-use trail. The new trail segment will replace an existing social trail to the east of the parking area. The new segment will tie into the existing Rock Creek Park multi-use trail immediately south of the parking area.

Under the selected alternative, the existing two-foot wide raised sidewalk along the west wall of the Beach Drive Tunnel will be widened to approximately four feet. To accommodate this widening within the existing tunnel, vehicular travel lanes will be reduced from 12 feet in width to approximately 11 feet. In developed areas, where there are stringent controls on design, the use of 10-foot lanes is the minimum acceptable practice, according to the American Association of State Highway and Transportation Officials (AASHTO) guidance. Signage at the tunnel approaches will alert drivers to the trail users ahead. Additionally, a barrier such as low-profile guardrail will further alert drivers of the trail within the tunnel. Current NPS plans include replacement of the tunnel's existing lighting with LED lights.

Under the selected alternative, a new pedestrian bridge will be constructed immediately adjacent to the west side of the existing bridge. The proposed structure will be equal in length and style to the existing bridge, and will be constructed within five feet of the current bridge abutment. The five-foot distance would allow for maintenance and future replacement of the existing bridge, if needed. The bridge materials will match the current concrete and stone aesthetics of the existing structure. The total width of the proposed bridge will be 12 feet, allowing for a 10

foot trail clearance. Currently, the Rock Creek Park multi-use trail crosses the bridge by way of a 3.5-foot raised sidewalk along the upstream (west) side of the bridge.

Currently sight distance at the Porter Street Bridge underpass is limited. However, physical and environmental constraints prevent realignment of the trail at this location. Under the selected alternative, centerline striping will be included at the approaches to this underpass to reduce potential user conflicts.

New crosswalks are proposed at Broad Branch Road, NW to the north of the parking area entrance, and at P Street, NW to connect the existing sidewalks along the west end of the P Street ramp. The existing at-grade crosswalk on Jewett Street, NW will be improved for trail user safety. In addition, the alignment of the crosswalk and approaches at the National Zoological Park entrance will be modified to create a shorter roadway crossing distance, and to improve sight distance for both trail users and vehicular traffic.

The existing sidewalk along the east side of the Beach Drive Bridge (at the intersection with Broad Branch Road) will be extended north to a new at-grade crossing to the existing trail to the north of Beach Drive. Another means of access to the trail network on Blagden Avenue, NW is a sidewalk on the west side of Beach Drive. To connect sidewalks, an optional cross walk is proposed on Beach Drive south of Blagden Avenue, NW. This sidewalk extension will give users an alternative way to gain access to Blagden Avenue and eliminate the need to traverse multiple roadway crossings on the east side of Beach Drive.

The selected alternative also includes the construction of a new trail to connect the Rock Creek multi-use trail to the existing sidewalk along the Porter Street ramp, and new trails along both sides of the P Street ramp to include a new crosswalk that will connect the existing P Street sidewalk, Rock Creek and Potomac Parkway trail, and Rose Park trail. The selected alternative will also be compatible with the proposed trailhead at Klingle Valley.

Under the selected alternative, minor trail realignments will improve sight distance and approaches along the trail to the south of Peirce Mill and at the approach to the Devil's Chair (Lyon's Mill) Bridge. In addition, minor grading of the trail is proposed from south of Calvert Street to the National Zoological Park tunnel to reduce grades and better comply with Americans with Disabilities Act standards.

Soil erosion and ponding conditions occur along an approximately 1,100-foot segment of the Rock Creek Park multi-use trail south of Peirce Mill. The selected alternative includes raising the vertical profile of the trail to eliminate ponding, and stabilizing the slope between Beach Drive and this segment of the trail to improve soil erosion conditions. Additionally, restoration is proposed for a 45-foot timber retaining wall immediately adjacent to the trail. The wall is located approximately 100 feet southwest of the southern end of the Beach Drive tunnel. Deterioration of the wall is contributing to soil erosion between the trail and Rock Creek. Under the selected alternative, the timber retaining wall will be reconstructed to mitigate soil erosion. Another deteriorating wall is located in the project area along Piney Branch Parkway. The wall has been evaluated and will be stabilized under a separate project with the National Park Service and FHWA. This will occur prior to the rehabilitation of the Piney Branch Parkway trail.

Stormwater best management practices (BMPs) that meets the District Department of the Environment (DDOE) requirements (under District of Columbia Municipal Rule, Title 21, Chapter 5, Stormwater Regulations) will be used under the selected alternative to effectively manage stormwater along the multi-use trail. These BMPs will be designed to be sensitive to the natural and historic context of Rock Creek Park and may include the following: bioswales, infiltration trenches, grass swales, grass buffers, planting of trees, and subsurface storage facilities. All BMPs will promote infiltration of stormwater in order to reduce volume, improve quality, and increase groundwater recharge. Possible locations for these BMPs include but are not limited to the area adjacent to the Broad Branch/Grove 2 North parking area; adjacent to the trail between the Beach Drive tunnel and Tilden Street, NW, including the trail along Piney Branch Parkway; adjacent to the trail between Klingle Road, NW and Shoreham Drive, including the parking areas; and adjacent to the trail between the P Street, NW bridge and Oak Hill Cemetery. All BMPs designs and proposed locations will be reviewed and approved by the NPS. If upon review it is determined that there will be excessive ground disturbance or there are new features added that go beyond the scope of the EA or what has been agreed upon in the current NHPA Section 106 process, NPS may determine that additional consultation with the DC Historic Preservation Officer (DC SHPO) is warranted and that NEPA compliance may need to be revisited. In addition, DDOT and FHWA will ensure compliance with all

stormwater management regulations to assure effective stormwater management as the project progresses through the design phase and into the construction phase. DDOT and FHWA will continue coordination with NPS throughout the design of the project and final construction.

Additionally, the following options were selected for implementation in conjunction with the selected alternative:

Selected Peirce Mill Trail Spur Option

Peirce Mill Trail Spur Option B – Under this option, the existing unpaved social trail from south of the Broad Branch/Grove 2 North parking area to the Peirce Mill parking area will be resurfaced to a standard eight-foot width. Trail material selection will be considered during the detailed design phase of the project and be consistent with the treatments recommended in the Peirce Mill Complex Cultural Landscape Report (2009). Prior to any land disturbing activities, tree protection measures, erosion and sediment control measures, and other BMPs will be installed. Archeological testing along the spur alignment will be conducted if deemed necessary by the National Park Service, National Capital Region's Regional Archeologist. Limited testing in the area was undertaken as part of the Peirce Mill Rehabilitation project in 2010-2011.

Selected Rose Park Trail Option

Rose Park Trail Option B – Under this option, the Rose Park trail, from P Street, NW to M Street, NW, will be resurfaced along its current alignment to a six-foot width. A six-foot width is the standard width of a DDOT residential sidewalk and would be a zero to two-foot width increase along the length of the trail, depending on the section. The connection to the M Street sidewalk will follow the current alignment of the unpaved social trail as it deviates from the paved segment. Under Option B, a new safety railing would be constructed along the Rose Park Trail to provide protection from a steep embankment to the east. Existing chain link fencing in Rose Park would be removed to construct the railing, which would be comprised of timber posts and rails. Design of the new railing would match the character of other safety rails on the Rock Creek multi-use trail and would be consistent with AASHTO guidelines for shared use paths. The existing brick pathway connection to the M Street sidewalk will remain unchanged. Yield signs or speed limit signs could be installed in and around the park to calm traffic, and raise safety awareness on the trail. Special provisions would be considered to preserve the large oak tree at the Dumbarton Street playground area, such as alternative trail materials and/or modifying the trail to accommodate the tree. Prior to any land disturbing activities, tree protection measures, erosion and sediment control measures, and other BMPs will be installed. Archeological testing along this alignment will be conducted if deemed necessary by the National Park Service, National Capital Region's Regional Archeologist. Trail material selection will be considered during the detailed design phase of the project.

The total cost of the selected alternative and options will range from $9,069,000 to $9,228,000. The duration of construction is anticipated to be 12 to 18 months. As a cost saving measure, certain portions of the trail reconstruction will be done in conjunction with scheduled road rehabilitation by FHWA along Beach Drive. Implementation of the proposed action would be administered by DDOT and FHWA, through FHWA funding, under the Highway Trust Fund's Recreational Trails Program.

OTHER ALTERNATIVES CONSIDERED

In addition to evaluating the selected alternative and options, the EA evaluated a No Action Alternative (Alternative 1) and one additional alternative (Alternative 2) in conjunction with options to improve the Peirce Mill Trail Spur and the Rose Park Trail. Additionally, other alternatives and options were considered but not retained for detailed analysis.

Under the No Action Alternative (Rock Creek Park Multi-Use Trail Alternative 1), the Rock Creek Park multi-use trail from the Broad Branch/Grove 2 North parking area to P Street, NW will continue to be maintained by NPS. Neither the Rock Creek Park multi–use trail nor the Piney Branch Parkway trail will be rehabilitated, although basic maintenance such as spot repairs and debris removal will continue. The No Action Alternative was not chosen as the selected alternative because it does not meet the project purpose and need.

Under Rock Creek Park Multi-Use Trail Alternative 2: Trail Resurfacing, the Rock Creek Park multi-use trail will be resurfaced at its existing variable (six-foot to 10-foot) widths. Trail material selection will be considered

during the detailed design phase of the project. The unpaved social trail connecting the Rock Creek Park multi-use trail to the Piney Branch Parkway trail will be resurfaced to a six-foot width, and the Piney Branch Parkway trail will be resurfaced to a varying six-foot to eight-foot width, depending on physical and environmental constraints. Alternative 2 included all of the elements described above under the selected alternative except that Alternative 2 did not include trail widening. Rock Creek Park Multi-Use Trail Alternative 2 was not chosen as the selected alternative because it will not widen the trail and therefore will not resolve trail user conflicts and safety issues that are currently of concern.

More detailed descriptions of the trail alternatives and various options considered are provided in ***Chapter 2*** of the EA.

Peirce Mill Trail Spur Options

Under Peirce Mill Trail Spur Option A, the unpaved social trail south of the Broad Branch/Grove 2 North parking area to Peirce Mill will remain unchanged. No new construction will occur. This option will not meet the need to improve access to the Rock Creek Park multi-use trail system or to improve visitor safety and experience and protection of park resources. Option A was not chosen as the selected Peirce Mill Trail Spur option because it does not meet the project purpose and need.

Rose Park Trail Options

Under Rose Park Trail Option A, no new construction will occur along the four-foot to six-foot wide segment of the Rose Park trail between P Street, NW and M Street, NW. The NPS will continue to maintain the trail in its existing state. This option will not meet the need to improve visitor safety and experience and protection of park resources. Option A was not chosen as the selected Rose Park Trail option because it does not meet the project purpose and need.

Under Rose Park Trail Option C, the Rose Park trail, from P Street, NW to M Street, NW, will be resurfaced along its current alignment to a standard eight-foot width, which is the minimum AASHTO recommended width for a multi-use trail (FHWA 2001). The connection to the M Street, NW sidewalk will follow the current alignment of the unpaved social trail as it deviates from the paved segment. The existing brick pathway connection to the M Street, NW sidewalk will remain unchanged. Prior to any land disturbing activities, tree protection measures, erosion and sediment control measures, and other BMPs will be installed. If necessary, archeology testing also will be performed. Trail material selection will be considered during the detailed design phase of the project. Option C was not chosen as the selected Rose Park Trail option in consideration of nearby residents' concerns regarding the proximity of the widened trail to children's play areas and potential impacts to a large oak tree adjacent to the trail.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The NPS is required to identify the environmentally preferable alternative in its NEPA document for public review and comment. The NPS, in accordance with the Department of the Interior policies contained in the Departmental Manual (516 DM 4.10) and the Council on Environmental Quality's (CEQ) *NEPA's Forty Most Asked Questions*, defines the environmentally preferable alternative as the one that "causes the least damage to biological and physical environment." It is the alternative "which best protects, preserves, and enhances historic, cultural and natural resources" (Q6a).

Based on the analysis of environmental consequences of each alternative, the NPS determined that Rock Creek Park Multi-Use Trail Alternative 3, with Peirce Mill Trail Spur Option B, and Rose Park Trail Option B, is the environmentally preferable alternative. Alternative 3 will enhance visitor use and experience, public safety, park operations and maintenance, and transportation in the project area better or equal to the other options. Also, soil and water quality will be improved through stabilization and drainage improvements under Alternative 3. This alternative is preferable to the No Action alternative because resurfacing and widening of the trail will eliminate several adverse impacts associated with the existing trail. Alternative 3 improves the trail and fulfills the NPS's responsibility as trustee of the environment for succeeding generations. While Alternative 2 will result in similar impacts to those described in Alternative 3, the benefits to visitor use and safety resulting from spot improvements and trail widening under Alternative 3 will contribute the widest range of beneficial uses of the

trail. Alternative 3 assures for all generations safe, healthful, productive, and aesthetically and culturally pleasing surrounding and attains the widest range of beneficial uses while achieving negligible other undesirable and unintended consequences.

Peirce Mill Trail Spur Option B will enhance the use of Rock Creek Park by providing a new, paved trail surface to park visitors. Option B is preferable to Option A for the Peirce Mill trail spur, as the No Action (Option A) option will result in adverse impacts associated with the existing social trail on site.

Rose Park Trail Option B will enhance the use of Rose Park by providing a smooth, even trail surface at the standard width of a DDOT residential sidewalk. Option B is preferable to Option A for Rose Park because the No Action (Option A) option will result in adverse impacts associated with the existing trail. When compared to Rose Park Trail Option C, Option B better addresses the nearby residents concerns with widening the trail and has fewer environmental effects because of reduced impervious surface area.

MITIGATION MEASURES FOR THE SELECTED ALTERNATIVE AND OPTIONS

The NPS places a strong emphasis on mitigating adverse environmental impacts. To help ensure the protection of natural and cultural resources and the quality of the visitor experience, the following protective measures will be implemented as part of the selected alternative.

Mitigation Measures of the Selected Alternative and Options	
Resource Area	**Mitigation Measures**
Soils	During the design phase of the project, erosion and sediment control plans will be prepared in accordance with the DDOE current *Standards and Specifications for Soil Erosion and Sediment Control*. These plans will include specific measures and BMPs to avoid and/or minimize soil erosion and transport due to ground-disturbing activities such as grading. Such measures may include, but will not be limited to, stabilized construction entrances, silt fences, temporary sediment traps and filtering devices, and earth dikes. Once approved, these plans will be implemented during construction.
Water Quality	Implementation of erosion and sediment control practices, such as installation of silt fence, sediment trapping or filtering, and other BMPs, will help to avoid temporary impacts to water quality during construction. Stormwater management plans will be prepared and implemented onsite to address long-term stormwater runoff.
Vegetation	Protection measures and BMPs will be implemented to avoid impacts park vegetation to the extent possible. Vegetation protection measures will be detailed in the design phase of the project and may include, but will not be limited to, evaluation of large trees and development of a tree save plan by an arborist or licensed tree expert, installation of tree protection fencing, root pruning for trees whose critical root zones (CRZs) lie within the existing trail alignment or proposed construction area, and staging construction equipment to avoid damage to park vegetation. All revegetation will fulfill NPS functional and aesthetic requirements. Landscape plans will be developed in coordination with the NPS and DDOT's Urban Forestry Administration. Areas replanted following construction will be monitored to ensure successful establishment.
Wildlife	Best management practices will be utilized to minimize impacts to terrestrial and aquatic habitats. Detailed tree save plans will be developed and implemented during construction to protect surrounding trees that create forest habitat for park wildlife. Erosion and sediment control plans will also be prepared and implemented to avoid and minimize potential impacts to aquatic habitat within Rock Creek and Piney Branch that could be caused by soil erosion and sediment transport.
Historic Structures and Districts / Cultural Landscapes	All work proposed under the Action Alternatives and Options will be completed in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* in order to avoid and/or minimize any adverse impacts to cultural resources. Efforts to minimize impacts to cultural resources through design will include the following principles: trail improvements will retain the curvilinear design of the trail; proposed trail connections will be the minimum span needed to achieve the stated goals and will be laid directly on the existing topography; new trail connectors will be consistent in material and design features with the existing trails and will not introduce new elements inconsistent with other features found in Rock Creek Park and in Rock Creek and Potomac Parkway; minimal new paving will be used in areas of the trail that follow historic alignments; and spot improvements and trail widening will avoid damage to, and loss of, existing vegetation.
	Plans for construction staging of equipment and materials will be developed in order to minimize impacts on views within the cultural landscape. Landscape plans will be developed that consider the cultural landscape, and that are in accordance with NPS policies. The NPS has developed a cultural landscape report for the historic trails in the park. This documentation and planning effort was completed in Fiscal Year 2015.
Archeology	Mitigation for impacts to archeological resources may include, but will not be limited to, the following: Conducting a Phase IB survey within areas of the Limit of Disturbance (LOD) not previously surveyed, hand removal of vegetation to minimize impacts to identified archeological resources within the LOD, and retaining current trail widths within identified archeological resources. Testing areas will include, but will not be limited to, the location of the potential remnants of the historic headrace near Peirce Mill and other areas near Piney Branch. In locations where measures to avoid and minimize impacts to archeological resources cannot be instituted, mitigation through excavation within identified sites may be implemented. NPS, DDOT, and FHWA will continue to consult with the DC Historic Preservation Officer throughout the project to avoid impacts to potential archeological resources. Should unanticipated archaeological discoveries be encountered during any activity associated with this undertaking, DDOT will work with DC SHPO to determine the best mitigation measures.
Visitor Use and Experience	To notify trail users, park visitors, and motorized commuters of temporary closures or changes in traffic patterns, public notifications will be provided and may include electronic notification and detour signage, postings to the Rock Creek Park website, and email and listserv notices for stakeholders and interested parties. In addition, plans will be developed for construction equipment and materials staging areas that cause the least practicable disruption to park visitors.

Mitigation Measures of the Selected Alternative and Options	
Resource Area	Mitigation Measures
Human Health and Safety	To minimize risk to public safety, short-term safety measures will be implemented in proposed construction areas throughout the Rock Creek Park multi-use trail. Signage will be utilized in order to warn pedestrians and bicyclists in zones that are under construction. Staging areas that house equipment and materials will be fenced off from the public. At road crossings, maintenance of traffic (MOT) during construction stages will be conducted to provide safe conditions for trail users, drivers and workers. After construction, NPS will follow established maintenance practices such as removal of debris and repairs to potholes and cracks to ensure trail safety for park visitors.
Traffic and Transportation	Plans to maintain traffic during construction will be developed to minimize impacts to trail users and motorized commuters. Advance notifications of temporary closures or changes in traffic patterns will be implemented and may include electronic notification and detour signage, postings to the Rock Creek Park website, and email and listserv notices for stakeholders and interested parties. At some locations, such as the Beach Drive tunnel, work will be scheduled to avoid times of peak traffic volumes.

WHY THE SELECTED ALTERNATIVE AND OPTIONS WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As documented in the EA, the NPS has determined that the selected alternative and options can be implemented without significant adverse effects. As defined in 40 CFR § 1508.27, significance is determined by examining the following criteria:

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an Environmental Impact Statement: Soils, water quality, wildlife, visitor use and experience, human health and safety, and traffic and transportation will experience both beneficial and adverse impacts as a result of implementing Rock Creek Park Multi-Use Trail Alternative 3, the selected alternative. Implementation of Peirce Mill Trail Spur Option B will result in both beneficial and adverse impacts to soils and human health and safety, while implementation of Rose Park Trail Option B will result in both beneficial and adverse impacts to soils, human health and safety, and traffic and transportation. Overall, the impacts of stormwater management practices on resources in the project area are expected to be beneficial in the long-term, including water quality, soil, human health and safety, and traffic and transportation. There would be minor adverse short-term impacts expected from the stormwater management practices during construction of related infrastructures to resources, such as soil and vegetation. DDOT will prepare the appropriate Stormwater Management Plan and Landscaping Plan to minimize these impacts further. No significant impacts were identified that will require analysis in an Environmental Impact Statement (EIS).

Soils

The selected alternative will result in short-term negligible adverse impacts to soil resources from construction and long-term beneficial impacts from the stabilization of social trails, discouragement of social trail use, rehabilitation of existing paved trails, and rehabilitation of the 45-foot timber retaining wall. The selected Peirce Mill Trail Spur option will result in short-term minor adverse impacts to soil resources during construction and long-term beneficial impacts due to the stabilization of disturbed soils and rehabilitation of the trail segment. Implementation of the selected Rose Park Trail option will result in short-term minor adverse impacts to soils from construction and long-term beneficial impacts due to the stabilization of soils.

Water Quality

Under the selected alternative and options, soil disturbance associated with construction activities will result in short-term negligible adverse impacts to water quality due to the increased risk of sediment transport into nearby water bodies. Long-term beneficial impacts will occur under the selected alternative based on improvements to drainage infrastructure. The selected options for the Peirce Mill Trail Spur and the Rose Park Trail will also result in long-term negligible adverse impacts due to the paving of each trail segment and the associated increase in impervious surface.

Vegetation

Under the selected alternative and options, short-term minor adverse impacts will occur to vegetation in small localized areas during construction. Long-term minor adverse impacts will occur to herbaceous vegetation and potential impacts to large trees may occur from trail widening under the selected alternative. The selected Peirce

Mill Trail Spur and Rose Park Trail options will both result in long-term negligible to minor adverse impacts due to the loss of herbaceous vegetation and potential impacts to large trees.

Wildlife

The selected alternative and options will have short-term negligible adverse impacts to aquatic resources from soil disturbance during construction and the associated increase in sediment transport to nearby water bodies. Long-term beneficial impacts to aquatic resources will result from soil stabilization, the rehabilitation of existing retaining walls, and improved drainage infrastructure. Short- and long-term negligible adverse impacts to terrestrial species will occur under the selected alternative and options due to disturbances during construction and vegetation removal and the associated loss of terrestrial wildlife habitat.

Historic Structures and Districts

The selected alternative and options will introduce additional paving within the project's Area of Potential Effect (APE), resulting in local direct long-term minor adverse impacts to the historic resources of Rock Creek Park and Rock Creek and Potomac Parkway. However, the actions proposed under the selected alternative and options will not significantly diminish the overall integrity of any of the historic resources or cultural landscapes in the APE. The determination of effect for the selected alternative and options for purposes of Section 106 is *no adverse effects*.

Cultural Landscapes

Impacts to the cultural landscape under the selected alternative and options will be modest, and the historic alignments and characteristics of the trails and their cultural landscape setting will be appropriately treated to respect character-defining features of Rock Creek Park and of Rock Creek and Potomac Parkway. With the exception of the new trail along Piney Branch Parkway, all new trails will be short spans and will not significantly diminish the overall integrity of the historic resources or cultural landscapes within the APE. The selected Peirce Mill Trail Spur option will result in a long-term beneficial impact due to the improvement of the deteriorated grounds where social trails exist and is consistent with the treatments recommended in the Peirce Mill Complex Cultural Landscape Report (2009). There will be additional long-term beneficial impacts created by utilizing the historic millrace alignment, which will help engage the public with the historic landscape patterns. There will be no effect on cultural landscapes from the implementation of the selected Rose Park Trail option because Rose Park is not a component of Rock Creek Park's cultural landscape. The determination of effect for the selected alternative and options for purposes of Section 106 is *no adverse effects*.

Archeology

Trail widening and spot improvements under the selected alternative and options will result in limited and localized ground disturbance activities. The selected Peirce Mill Trail Spur option will result in the paving of an existing social trail within a known archeological resource (51NW154) that has not been evaluated for listing in the National Register of Historic Places (NRHP). The selected Rose Park Trail option will result in widening and repaving in areas that have not been surveyed for the presence of archeological resources. Avoidance, minimization, and mitigation within known archeological resources such as 51NW154, or as yet unidentified archeological resources, will result in *no adverse effects* under Section 106.

Visitor Use and Experience

Under the selected alternative and options, short-term moderate adverse impacts to visitors will occur because construction will temporarily impede trail use and construction equipment and noise will detract from the park aesthetics and natural soundscape. However, the selected alternative will result in long-term beneficial impacts to visitors based on overall improvements because the trail will be smoother and more aesthetically pleasing, and trail widening will reduce the potential for user conflicts. The selected Peirce Mill Trail Spur option will have a long-term beneficial impact as trail users of multiple types will be given another trail option to experience the park's resources. The selected Rose Park Trail option will result in a long-term beneficial impact because safety issues will be mitigated by the trail resurfacing, widening, and access provided by new connections.

Human Health and Safety

The selected alternative and options will result in short-term negligible adverse impacts during construction. Long-term beneficial impacts will result under the selected alternative from improved separation of trail users from vehicular traffic, improved roadway crossings, trail resurfacing, minor realignments, and trail widening. The selected Peirce Mill Trail Spur option will have long-term beneficial impacts to human health and safety because resurfacing the social trail will provide safe access to a wider variety of users, including those using wheelchairs. The selected Rose Park Trail option will have a long-term beneficial impact from the addition of paved connections and resurfacing.

Park Operations and Management

Under the selected alternative and options, trail improvements, detours and closings, and MOT will be conducted by DDOT or FHWA, depending on the particular trail section. DDOT and FHWA will implement temporary traffic controls along the sections of trail each will construct and at road-associated crossings as needed. Overall, construction of the trail will be relatively simple, will be completed by small groups of workers, and will require relatively small equipment and machinery. Construction of the bridge, for which DDOT will be responsible, will have short-term minor adverse impacts. DDOT and FHWA will perform all of the temporary trail closings, MOT, and trail rehabilitation. During construction of the selected alternative and options, short-term, minor adverse impacts to park operations and management will occur to NPS staff resources because of their participation in the planning and coordination efforts. Implementation of the selected alternative will result in long-term beneficial impacts to park operations by reducing the maintenance needs of the Rock Creek Park multi-use trail. The selected Peirce Mill Trail Spur option will have a long-term minor adverse impact from the additional maintenance required for the newly paved trail spur. The selected Rose Park Trail option will have a long-term beneficial impact due to the reduction in maintenance needs of the trail.

Traffic and Transportation

The selected alternative will result in short-term moderate adverse impacts from temporary inconveniences caused by road and trail detours and closings and extended travel times. Long-term beneficial impacts will occur as a result of the selected alternative due to reductions in user conflicts between trail users and motorists, and enhanced connectivity between the trail system and surrounding bicycle and pedestrian networks. The selected Peirce Mill Trail Spur option will result in long-term beneficial impacts by providing trail users with additional access to Rock Creek. The selected Rose Park Trail option will result in short-term moderate adverse impacts due to detours and temporary trail and roadway closures during construction, but long-term beneficial impacts will result due to the additional access to M Street, NW.

Degree of effect on public health or safety: The selected alternative and options will have an overall beneficial impact on public health and safety. During construction, safety measures will be implemented such as posting signs to warn pedestrians and bicyclists of active construction zones, and constructing fences surrounding staging areas that house equipment and materials to eliminate public entry. Maintenance of traffic will be implemented at road crossings during construction to provide safe conditions for trail users, drivers, and workers. When the project has concluded, the selected alternative will result in improved separation of trail users from vehicular traffic, improved roadway crossings, smooth trail surfaces, and minor trail realignments and widening that will improve safety and reduce user conflicts. In addition, paving the Peirce Mill Trail Spur will benefit the public by providing safe access to a wider variety of users, including those using wheelchairs. Improvements to the Rose Park Trail will benefit the public due to the addition of paved trail connections and trail resurfacing.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, wetlands, prime farmlands, wild and scenic rivers, or ecologically critical areas: No prime farmlands, wild and scenic rivers, ecologically critical areas, sites sacred to American Indians, or other significant ethnographic resources occur within or adjacent to the project area, and none will be impacted by the actions associated with the selected alternative and options.

The U.S Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping identifies Rock Creek and Piney Branch as riverine wetland systems that are located within the project area of the selected alternative. However, Rock Creek and Piney Branch will not be impacted by the selected alternative and options; therefore, a Statement of Findings for Wetlands was not prepared for this project per Director's Order 77-1: *Wetland Protection*. Also, because the Rock Creek multi-use trail is already in place, and the selected alternative and options will not affect the existing flood hazard within the project area, a Statement of Findings for Floodplains was not required per Director's Order 77-2: *Floodplain Management*.

The Rock Creek multi-use trail is within the Rock Creek Park and Rock Creek and Potomac Parkway historic districts, which are listed in the National Register of Historic Places. The Rock Creek Park Historic District meets the National Eligibility Criteria A, B, and C and includes areas significant for architecture, community planning and development, conservation, entertainment and recreation, industry, landscape architecture, military and horticulture. The Rock Creek and Potomac Parkway is significant under Criteria A and C in the areas of community planning and development, landscape architecture, architecture, and recreation during the period 1791 to 1951 (NPS 2005). Rock Creek Park has also been determined to meet the criteria for listing in the NRHP as a historic designed landscape. In addition, two component landscapes of the park, Linnaean Hill and Peirce Mill, were found to be individually eligible elements and contribute to the significance of the Rock Creek Park cultural landscape.

Portions of both the Rock Creek Park and Rock Creek and Potomac Parkway are located within the project's Area of Potential Effects (APE), which is defined as a 200-foot band flanking the trail, expanded as appropriate to capture key adjacent historic properties. Due to the dense vegetation and topography of the project area, as well as the minimal visual qualities of the proposed improvements, impacts to historic views and vistas will be limited. For the purposes of evaluation, the proposed APE for historic resources included the area from which the project site is readily visible, as well as resources that could be impacted due to changes in the character of the area. The APE for archeological resources comprises the Limit of Disturbance (LOD) as identified by project planners for the various proposed construction-related activities that will result in ground disturbance. Impacts to historic structures, districts, cultural landscapes, and archeology are described on pages 7-8 of this FONSI. There was a no adverse effect determination under Section 106 of the NHPA for the selected alternative and options.

Degree to which effects on the quality of the human environment are likely to be highly controversial: No highly controversial effects on the quality of the human environment as a result of the selected alternative and options were identified during the preparation of the EA or by the public during the public comment period.

Degree to which the possible effects on the quality of the human environment are highly uncertain, or involve unique or unknown risks: No highly uncertain, unique, or unknown risks were identified during the preparation of the EA or through public comment.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The selected alternative and options neither establish a NPS precedent for future actions with significant effects nor represent a decision in principle about a future consideration.

Whether the action is related to other actions with individually but cumulatively significant impacts: Implementation of the selected alternative and options will have no significant cumulative impacts. As described in the EA, other past, present, and future actions and projects within the project area were identified that could affect soils, water quality, vegetation, wildlife, historic structures and districts, cultural landscapes, archeological resources, visitor use and experience, human health and safety, park operations and management, and traffic and transportation. These projects include: the Blagden Avenue Hiker/Biker Trail; Peirce Mill Rehabilitation; the Historic Trails Cultural Landscape Report; the Rock Creek Park and the Rock Creek and Potomac Parkway General Management Plan (Rock Creek Park GMP); Reconstruction and Rehabilitation of Beach Drive and the Rock Creek and Potomac Parkway; Reconstruction and Rehabilitation of Rock Creek and Potomac Parkway Southbound at Waterside Drive, NW; Rehabilitation of Oregon Avenue, NW; the Klingle Valley Trail project; Rehabilitation of Broad Branch Road, NW; the Rock Creek Watershed Implementation Plan; the Clean Rivers Project; and the National Zoological Park Facilities Master Plan.

Soils

Stream restoration activities at Klingle Creek and low impact development programs of the Rock Creek Watershed Implementation Plan will result in beneficial impacts to soils. The selected alternative and options will have beneficial impacts from the stabilization of social trails, discouragement of social trail use, rehabilitation of existing paved trails, and rehabilitation of the 45-foot timber retaining wall. The selected options will also have beneficial impacts to soils from soil stabilization and trail rehabilitation. When combined with the impacts from the cumulative actions, the selected alternative and options will contribute to the long-term beneficial cumulative impacts to soils within the project area.

Water Quality

Stream restoration and stormwater management BMPs proposed under the Klingle Valley Trail project will result in long-term beneficial impacts to water quality. In addition, the Rock Creek Watershed Implementation Plan proposes multiple water resources improvement programs such as rain leader disconnection, green roof retrofitting, and permeable pavement that are anticipated to have beneficial impacts on water quality. The selected alternative and options will result in long-term beneficial impacts to water quality as a result of reduced erosion and stabilization of non-vegetated areas from trail resurfacing and rehabilitation, and improvements to drainage infrastructure. Adverse impacts to Rock Creek and its tributaries will continue as a result of pollution from urbanization and stormwater runoff. The beneficial impacts of the cumulative actions and the selected alternative and options will not contribute to the adverse cumulative impact to the water quality of the Rock Creek watershed. Furthermore, the selected options will result in long-term negligible adverse impacts to water quality due to paving of each trail segment. When combined with the adverse impacts to the Rock Creek watershed from urbanization and runoff, the selected options will have a negligible contribution to the long-term adverse cumulative impact to the water quality of the Rock Creek watershed.

Vegetation

Reforestation, riparian planting, and wetland creation are proposed under the Rock Creek Watershed Implementation Plan that will result in long-term beneficial impacts to vegetation. The selected alternative and options will have a long-term minor adverse impact from the removal of herbaceous vegetation and potential impacts to large trees due to trail construction and rehabilitation. When combined with the impacts from the cumulative actions, the selected alternative and options will contribute a minor adverse impact to the cumulative effect of projects in the region. However, cumulative impacts to vegetation will still be beneficial.

Wildlife

Regional projects will have long-term beneficial impacts to wildlife by improving existing aquatic habitat. The Blagden Avenue Hiker/Biker Trail, Klingle Valley Trail, Rock Creek Watershed Implementation Plan, and the Clean Rivers Project will all improve water quality and aquatic habitat conditions. The installation of a fish passage structure at Peirce Mill has resulted in increased aquatic habitat, and other projects proposed under the Rock Creek Watershed Implementation Plan will remove barriers to fish passage. Terrestrial wildlife will experience short-term negligible adverse impacts as a result of the regional projects. Construction activities will cause wildlife to avoid the construction areas, but the wildlife is expected to return following construction. In the long term, terrestrial habitat area may increase due to reforestation under projects such as the Rock Creek Watershed Implementation Plan. The selected alternative and options will have long-term beneficial impacts to aquatic resources from soil stabilization, the rehabilitation of existing retaining walls, and improved drainage infrastructure, and short- and long-term negligible adverse impacts to terrestrial wildlife during construction and from the removal of vegetation. Combining the impacts from the cumulative actions with the selected alternative and options will result in cumulative long-term beneficial impacts to aquatic wildlife and long-term negligible adverse cumulative impacts to terrestrial wildlife.

Historic Structures and Districts

The Peirce Mill Rehabilitation and other improvements identified in the Rock Creek Park GMP will have direct long-term beneficial impacts on the Rock Creek Park and Rock Creek and Potomac Parkway historic districts. If any of the improvements identified in the Rock Creek Park GMP were constructed concurrently with the selected

alternative and options, a short-term minor adverse cumulative effect on historic districts and structures will result. The selected alternative and options will introduce additional paving within the project's APE, resulting in local direct long-term minor adverse impacts to the historic resources of Rock Creek Park and Rock Creek and Potomac Parkway. However, the actions proposed under the selected alternative and options will not significantly diminish the overall integrity of any of the historic resources within the APE. An overall beneficial cumulative impact to historic structures and districts will result when the impacts of the cumulative actions are combined with the impacts of the selected alternative and options.

Cultural Landscapes

The implementation of projects in accordance with the Rock Creek Park GMP and the Peirce Mill Complex Cultural Landscape Report (2009) will result in short-term minor adverse cumulative effects on the cultural landscape, depending on the duration and extent of construction activities. However, these projects will result in direct long-term beneficial impacts to the cultural landscape. Impacts to the cultural landscape under the selected alternative will be minor and will not significantly diminish the overall integrity of the cultural landscape. The selected Peirce Mill Trail Spur option will result in a long-term beneficial impact to the cultural landscape due to the improvement of the deteriorated grounds where social trails exist. There will be additional long-term beneficial impacts created by utilizing the historic millrace alignment, which will help engage the public with the historic landscape patterns. When combined with the impacts from the cumulative actions, the selected alternative and the Peirce Mill Trail Spur option will contribute a direct long-term beneficial impact to cultural landscapes within the APE.

Archeological Resources

Although past actions may have affected archeological resources, it is anticipated that present and reasonably foreseeable future actions will not impact archeological resources in the study area. Trail improvements under the selected alternative and options have the potential to impact archeological sites within the APE that have not yet been surveyed. Under Peirce Mill Trail Spur Option B, paving within previously recorded archeological site 51NW154 will not have the potential to impact archeological deposits at the Peirce Mill site.

Visitor Use and Experience

The Blagden Avenue Hiker/Biker Trail and the Klingle Valley Trail will both have beneficial impacts on visitor use and experience by improving connectivity and access to the Rock Creek Park multi-use trail. The rehabilitation of Peirce Mill will have a beneficial impact, as this will provide Rock Creek Park visitors with educational and historical preservation opportunities. The Rock Creek Park GMP will also have a beneficial impact on visitor use and experience as the plan establishes long-term goals and outlines improvements to retain and improve the current scope of visitor uses at the park. Overall, long-term beneficial impacts to visitor use and experience will result from cumulative project impacts. Trail improvements and enhanced access within Rock Creek Park under the selected alternative and options will result in long-term beneficial impacts to visitor use and experience because the condition of the Rock Creek Park multi-use trail system will be improved. Therefore, the selected alternative and options will result in a beneficial contribution to the beneficial cumulative impacts on visitor use and experience.

Human Health and Safety

The Rock Creek Park GMP will have a beneficial impact on human health and safety, as the plan calls for rehabilitation of the Rock Creek Park multi-use trail in selected areas, and construction of a paved Piney Branch Parkway trail. Rehabilitation is also proposed for Rock Creek Park trail segments located along Oregon Avenue, Beach Drive, and the Rock Creek and Potomac Parkway. The Rock Creek Watershed Implementation Plan will also have a beneficial impact on human health and safety, as the plan involves improvements that address the pollutant problem in the watershed. In addition to these projects, the NPS will continue to provide an environment at Rock Creek Park that is conducive to human health and safety to the extent possible. Under the selected alternative, long-term beneficial impacts will result from improved separation of trail users from vehicular traffic, improved roadway crossings, trail resurfacing, minor realignments, and trail widening. The selected Peirce Mill Trail Spur option will have long-term beneficial impacts to human health and safety because resurfacing the social trail will provide safe access to a wider variety of users, including those using wheelchairs.

The selected Rose Park Trail option will have a long-term beneficial impact from the addition of paved connections and resurfacing. Therefore, the selected alternative and options will result in a beneficial contribution to the beneficial cumulative impacts on human health and safety.

Park Operations and Management

The Rock Creek Park GMP will have a beneficial impact on park operations and management, as the plan calls for rehabilitating deteriorated trail segments and proposes upgrades to park administrative staff and U.S. Park Police facilities. Park operations will be disrupted during construction of improvements within Rock Creek Park, but in the long-term, park operations and management will largely benefit from the upgrades. During construction, short-term, minor adverse impacts to park operations and management will occur to NPS staff resources under the selected alternative and options because of their participation in the planning and coordination efforts. DDOT and FHWA will perform all of the temporary trail closings, MOT, and trail rehabilitation. Implementation of the selected alternative will result in long-term beneficial impacts to park operations by reducing the maintenance needs of the Rock Creek Park multi-use trail. The selected Peirce Mill Trail Spur option will have a long-term minor adverse impact from the additional maintenance required for the newly paved trail spur. The selected Rose Park Trail option will have a long-term beneficial impact due to the reduction in maintenance needs of the trail. Therefore, when combined with the impacts of the cumulative actions on park operations and management, the selected alternative and the selected Rose Park Trail option will contribute a beneficial impact, resulting in a beneficial cumulative impact. The selected Peirce Mill Trail Spur option will contribute a long-term minor adverse impact to the cumulative actions, resulting in a long-term negligible adverse cumulative impact.

Traffic and Transportation

Proposed trail improvements such as construction of the Blagden Avenue Hike/Biker Trail will occur at the northern extents of the Rock Creek Park multi-use trail project area, and construction of the Klingle Valley Trail will occur in the corridor of Klingle Creek, connecting with the Rock Creek Park multi-use trail at Porter Street, NW and Rock Creek. Implementation of these projects will enhance connectivity throughout Rock Creek Park, providing additional non-motorized commuter options. Roadway projects, including the rehabilitation of Oregon Avenue, Broad Branch Road, and Beach Drive and the RCPP, will improve the overall road conditions of the region, providing traffic and transportation benefits. In addition, regional management plans address traffic congestion due to the high volume of visitors to Rock Creek Park. The National Zoological Park Facilities Master Plan calls for improvement of the Zoo's road network, in order to accommodate high volumes of visitors, and the Rock Creek Park GMP calls for traffic-calming and speed enforcement measures to maintain safe circulation throughout the park. The effects of trail and roadway improvements and transportation planning will result in a beneficial impact to traffic and transportation within Rock Creek Park. The selected alternative and options will result in beneficial impacts to traffic and transportation by reducing trail user and motorist conflicts and providing greater connectivity and access to the Rock Creek Park trail and roadway systems. As a result, a beneficial cumulative impact will occur when the beneficial impacts of the selected alternative and options are combined with the impacts of the cumulative actions.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: The selected alternative and options will introduce additional paving within the Area of Potential Effect (APE), resulting in local direct long-term minor adverse impacts to the historic resources of Rock Creek Park and Rock Creek and Potomac Parkway. However, the actions proposed under the selected alternative and options will not significantly diminish the overall integrity of any of the historic resources or cultural landscapes in the APE. The determination of effect for the selected alternative and options for purposes of Section 106 is *no adverse effects.*

Impacts to the cultural landscape under the selected alternative will be modest, and the historic alignments and characteristics of the trails and their cultural landscape setting will be appropriately treated to respect character-defining features of Rock Creek Park and Rock Creek and Potomac Parkway. With the exception of the new trail along Piney Branch Parkway, all new trails will be introduced in short spans and will not significantly diminish the overall integrity of the historic resources or cultural landscapes within the APE. The selected Peirce Mill Trail

Spur option will result in a long-term beneficial impact due to the improvement of the deteriorated grounds where social trails exist. There will be additional long-term beneficial impacts created by utilizing the historic millrace alignment, which will help engage the public with the historic landscape patterns. There will be no effect on cultural landscapes from the implementation of the selected Rose Park Trail option because Rose Park is not a component of Rock Creek Park's cultural landscape. The determination of effect for the selected alternative and options for purposes of Section 106 is *no adverse effects*.

Trail widening and spot improvements under the selected alternative and options will result in limited and localized ground disturbance activities. The selected Peirce Mill Trail Spur option will result in the paving of an existing social trail within a known archeological resource (51NW154) that has not been evaluated for listing in the NRHP. The selected Rose Park Trail option will result in widening and repaving in areas that have not been surveyed for the presence of archeological resources. Avoidance, minimization, and mitigation within known archeological resources such as 51NW154, or as yet unidentified archeological resources, will result in *no adverse effects* under Section 106.

The NPS has determined that this project will have *no adverse effect* under the implementing regulations for Section 106 of the NHPA (36 CFR 800.5(a)(2)(ii)). DDOT/FHWA submitted an Assessment of Effect Report to the DC SHPO on September 18, 2011 for the project and received DC SHPO concurrence that the project will have *no adverse effect* on October 19, 2011 (see Attached). Due to delay, NPS re-engaged with the DC SHPO in January 2015 to discuss design details that were not fully developed in the previous 2011 determination of *no adverse effect.* On April 7, 2015, the DC SHPO concurred with their previous conclusion of *no adverse effect* on historic properties, provided that a Phase I archeology survey is conducted in consultation with the DC SHPO where ground disturbing activities are proposed for areas that have not been previously surveyed.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: No rare, threatened, or endangered species will be impacted by the proposed action. In accordance with Section 7 of the Endangered Species Act, a consultation letter was sent to the U.S. Fish and Wildlife Service (USFWS) requesting information regarding the presence of rare, threatened, and endangered species in the vicinity of the project area of the Rock Creek Park Multi-Use Trail Rehabilitation. In a letter dated April 20, 2011, the USFWS confirmed that there are no known federally listed species or habitat within the project limits. Prior to construction, during design review, DDOT/FHWA will consult the NPS to determine whether the Section 7 consultation is still valid or needs to be updated based on either new species listings or design changes. Additional consultation with USFWS and or DDOE will be done as required.

Whether the action threatens a violation of federal, state, or local environmental protection law: No federal, state, or local environmental protection laws will be violated.

PUBLIC INVOLVEMENT

Public scoping for the proposed action was originally initiated by NPS in 2006. A meeting was held on October 26, 2006 at Peirce Mill to give the public the opportunity to share ideas on the potential rehabilitation of the trail. Based on comments received during the 2006 scoping, a project to prepare an EA commenced in 2009. During this time, federal and local agencies, as well as community stakeholders, were invited to provide comments on the scope of the EA and the proposed action. Three letters were received from the public during the scoping period. A letter from Friends of Peirce Mill was received describing the restoration efforts underway at the Mill in 2009. The Friends of Rose Park commented on their preference to see the Rose Park Trail renovated in its current location and at its current width. The Beall Court Condominium Association also commented that the Rose Park Trail should not be widened. Prior to the release of the EA, the project was put on hold.

In November 2010, the Rock Creek Park Multi-Use Trail Rehabilitation was reinitiated. In addition to an agency scoping period, a public scoping period was opened January 28, 2011 through February 28, 2011. During this time, the public was invited to provide comments on the proposed action and scope of the EA, and issues and concerns regarding natural, socioeconomic and cultural resources. Public notices were posted on the National Park Service's Planning, Environment, and Public Comment website (PEPC), the DDOT website and Facebook pages, and were advertised in *The Washington Post* and *The Current* newspapers. The project team also sent

email notices and/or posted to list-servs of Advisory Neighborhood Commissions (ANC), community groups, and potential stakeholders, including individuals and groups who previously expressed an interest in the project.

A public scoping meeting was held on February 23, 2011, at the National Zoological Park Visitor Center Auditorium, 3001 Connecticut Avenue, NW, Washington, DC. The purpose of this meeting was to solicit public input on the purpose, need, and objectives of the project, major issues, and alternatives. A total of fifty-four (54) people signed in to the meeting. The meeting was held in an open-house format followed by an open microphone session in which attendees could sign up to speak at a microphone. The open microphone session was recorded by a court reporter. Attendees could also comment in writing.

About six hundred (600) comments were received during the scoping period from January 28, 2011 through February 28, 2011. In general, the comments articulated support for the action alternatives. The vast majority of commenters favored Rock Creek Park Multi-Use Trail Alternative 3, Peirce Mill Trail Spur Option B, and Rose Park Trail Option C. Many commenters replied that the portion of the Rock Creek Park multi-use trail on the National Zoological Park property should remain open 24 hours-a-day or improvements should be made to the trail as it runs through the Beach Drive tunnel detour. Commenters articulated concern over trail detours during construction and stated that detours should be well marked and easy to use. Many commenters expressed safety concerns due to trail deterioration, poor visibility, and road crossings. Some commenters asked that signage be added to the trail indicating trail connections and distances. Other concerns included trail maintenance, natural resource protection, and stormwater management. Comments were received from the Friends of Rose Park stating preference for the Rose Park trail to be resurfaced, but not moved or widened. Some commenters asked that speed control measures be used in Rose Park to slow bikers.

In addition to public scoping, the team from DDOT and the District of Columbia Department of Parks and Recreation held a meeting with the Friends of Rose Park on April 13, 2011. At the meeting, Rose Park Trail options were presented and comments were received. Comments received from the Friends of Rose Park expressed concerns regarding widening of the trail, the proximity of the trail to children's play areas, and the preservation of an oak tree adjacent to the trail at the Dumbarton Street playground area.

Following the release of the EA, DDOT held a public meeting on December 14, 2011. The meeting provided the public with an opportunity to review the Rock Creek Park Multi-Use Trail Rehabilitation EA and Section 106 Evaluation and provide formal comments. The majority of hearing comments indicated Alternative 3 as the preferred alternative for the Rock Creek Park multi-use trail. No comments were received in support of Alternative 2. For the Rose Park Trail, the majority of hearing comments were in favor of Option B, C, or either option. However, comments were received questioning the safety of Options B and C, and the protection of vegetation in Rose Park.

DDOT addressed these comments and changes were made in the Final EA as appropriate. Responses to comments received on the EA are provided in Appendix E of the Final EA.

CONCLUSION

The National Park Service, working in close cooperation with FHWA and DDOT, concurs with the following selected alternative and options for implementation: Alternative 3: Trail Resurfacing and Widening; Peirce Mill Trail Spur Option B: Eight-foot Paved Trail Spur; and Rose Park Trail Option B: Six-Foot Resurfaced Trail. In light of the impacts described in the EA for the project and with guidance from NPS *Management Policies 2006*, natural and cultural resources information, professional judgment, and considering agency and public comments, the impacts that will result from the selected alternative and options will not impair park resources and values (See Attachment Non-Impairment Determination). The selected alternative and options do not constitute an action that normally requires preparation of an environmental impact statement (EIS). The selected alternative and options will not have a significant effect on the human environment. Negative environmental impacts that could occur are negligible to moderate in intensity. There are no significant impacts to wetlands; floodplains; vegetation; wildlife and habitat; rare, threatened, and endangered species; cultural resources (historic structures and districts, cultural landscapes, and archeology); visitor use and experience; public health and safety; park operations and management; land use; socioeconomics; and environmental justice. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the selected alternative will not violate any federal, state, or local environmental protection law.

Based on the foregoing, an EIS is not required for this action and therefore will not be prepared. This is a finding of no significant impact.

Recommended: _____ 4/29/15

Acting Tara Morrison
Superintendent
Rock Creek Park

Date

Approved: Lisa Mandelson-Telmini 4/29/15

Acting Robert Vogel
Regional Director
National Capital Region

Date

NON-IMPAIRMENT DETERMINATION OF PARK RESOURCES OR VALUES

In addition to reviewing the list of criteria for significant impacts, the NPS has determined that implementing the selected alternative and options will not constitute an impairment of resources or values for Rock Creek Park and Rock Creek and Potomac Parkway. This conclusion is based on a thorough analysis of the impacts described in the EA, agency and public comments received, and the professional judgment of the decision-makers in accordance with NPS *Management Policies 2006*. Implementation of the selected alternative and options will not result in impairment of resources or values whose conservation is: (1) necessary to fulfill specific purposes identified in the establishing legislation for the park and parkway, (2) key to the natural or cultural integrity of the park and parkway or to opportunities for enjoyment of the park and parkway, or (3) identified in the Rock Creek Park and the Rock Creek and Potomac Parkway General Management Plan or other relevant NPS planning documents as being of significance.

While the selected alternative and options will result in negligible to moderate short-term to long-term adverse impacts to some of the park's natural and cultural resources (soils, water quality, vegetation, wildlife, historic structures and districts, cultural landscapes, and archeology), these impacts will not affect the National Park Service's ability to fulfill specific purposes identified in establishing legislation for Rock Creek Park and the Rock Creek and Potomac Parkway. These impacts will not affect resources key to the natural or cultural integrity of the park and parkway, will not affect opportunities for enjoyment of the park and parkway, and will not impair any significant resources identified in the Rock Creek Park and the Rock Creek and Potomac Parkway General Management Plan or relevant NPS planning documents.

Soils

The selected alternative and options will have minimal effects on soils. Impacts to soils during construction will be negligible to minor and will ultimately result in beneficial impacts from the stabilization of social trails, discouragement of social trail use, rehabilitation of existing paved trails, and rehabilitation of deteriorating retaining walls. During construction, erosion and sediment controls and other BMPs will be implemented to avoid and/or minimize soil erosion and transport caused by ground-disturbing activities. Overall, the selected alternative and options will result in minimal impacts to soils but will not result in significant impacts. Because no significant adverse impacts will occur to harm the overall integrity or value of soils within Rock Creek Park and the Rock Creek and Potomac Parkway or to opportunities for enjoyment of the park and parkway, the selected alternative and options will not result in an impairment of soils.

Water Quality

Soil disturbance associated with construction activities and an increase in impervious surface will result in adverse impacts to water quality due to the increased risk of sediment transport into nearby water bodies. However, it is anticipated that these impacts will be negligible. Implementation of erosion and sediment controls and other BMPs during construction will help to avoid temporary impacts to water quality. Stormwater BMPs will be implemented onsite to address long-term stormwater runoff. Following construction, water quality will benefit from soil stabilization and improvements to drainage infrastructure. Because no significant adverse impacts will occur to harm the overall integrity or value of water quality within the Rock Creek Park and the Rock Creek and Potomac Parkway or to opportunities for enjoyment of the park and parkway, the selected alternative and options will not result in an impairment of water quality.

Vegetation

Construction of the proposed trail improvements and trail widening will result in the removal of herbaceous vegetation and potential impacts to large trees in small localized areas. To avoid and/or minimize impacts to park vegetation, tree protection measures and other BMPs will be implemented during construction. Following construction, disturbed areas will be revegetated and closely monitored to ensure successful establishment. Overall, the selected alternative and options will result in negligible to minor adverse impacts to vegetation but will not result in significant impacts. Because no significant adverse impacts will occur to harm the overall integrity or value of park or parkway vegetation resources or to opportunities for enjoyment of the park and parkway, the selected alternative and options will not result in an impairment of vegetation.

Wildlife

The selected alternative and options will have negligible adverse impacts to aquatic resources from soil disturbances during construction and the associated increase in sediment transport into nearby water bodies. Ultimately, aquatic wildlife will benefit from improved water quality caused by soil stabilization, the rehabilitation of existing retaining walls, and improved drainage infrastructure. Vegetation removal and the associated loss of terrestrial wildlife habitat will result in adverse impacts to terrestrial species, but it is anticipated that impacts will be negligible. BMPs will be utilized to minimize impacts to terrestrial and aquatic habitats. Detailed tree save plans will be developed and implemented during construction to protect surrounding trees that form forest habitat for park wildlife. Erosion and sediment control plans will also be implemented to avoid and minimize potential impacts to aquatic habitat within Rock Creek and Piney Branch that could be caused by soil erosion and sediment transport. Overall, the selected alternative and options will result in adverse impacts to wildlife but will not result in significant impacts. Because no significant adverse impacts will occur to harm the overall integrity or value of park and parkway wildlife resources or to opportunities for enjoyment of the park and parkway, the selected alternative and options will not result in an impairment of wildlife.

Historic Structures and Districts

The selected alternative and options will introduce additional paving within the project's Area of Potential Effect (APE), resulting in adverse impacts to the historic resources of the Rock Creek Park and Rock Creek and Potomac Parkway historic districts. However, the actions proposed under the selected alternative and options will not significantly diminish the overall integrity of any of the historic resources within these historic districts. All work proposed will be completed in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* in order to avoid and/or minimize any adverse impacts to cultural resources. Because no significant adverse impacts will occur to harm the overall integrity or value of park and parkway historic structures or to opportunities for enjoyment of the park and parkway, the selected alternative and options will not result in an impairment of historic structures and districts.

Cultural Landscapes

Impacts to the cultural landscape under the selected alternative and options will be modest, and the historic alignments and characteristics of the trails and their cultural landscape setting will be appropriately treated to respect character-defining features of Rock Creek Park and the Rock Creek and Potomac Parkway. Therefore, it is anticipated that the selected alternative and options will not significantly diminish the overall integrity of the historic resources or cultural landscapes of the Rock Creek Park and Rock Creek and Potomac Parkway historic districts. In addition, the cultural landscape will benefit from improvements along the Peirce Mill Trail Spur and by utilizing the historic millrace alignment, which will help engage the public with historic landscape patterns. Overall, cultural landscapes will mostly benefit from the selected alternative and options and therefore significant impacts will not occur. Because no significant adverse impacts will occur to harm the overall integrity or value of park and parkway cultural landscapes or to opportunities for enjoyment of the park and parkway, the selected alternative and options will not result in an impairment of cultural landscapes.

Archeology

Trail widening and spot improvements under the selected alternative and options will result in limited and localized ground disturbance activities. The selected Peirce Mill Trail Spur option will result in the paving of an existing social trail within a known archeological resource (51NW154) that has not been evaluated for listing in the NRHP. The selected Rose Park Trail option will result in widening and repaving in areas that have not been surveyed for the presence of archeological resources. Avoidance, minimization, and mitigation within known archeological resources such as 51NW154, or as yet unidentified archeological resources, will result in minimal impacts to archeology. Because no significant adverse impacts will occur to harm the overall integrity or value of park and parkway archeological resources or to opportunities for enjoyment of the park and parkway, the selected alternative will not result in an impairment of archeological resources.