# <u>Kennedy Center</u> <u>Potomac River Pedestrian Access Improvements</u> DRAFT SECTION 4(f) EVALUATION

## 1. INTRODUCTION

In accordance with Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 303) and 23 CFR 774, FHWA "may not approve the use of land from a significant publicly owned park, recreation area, or wildlife and waterfowl refuge, or any significant historic site unless a determination is made that: (i) there is no feasible and prudent alternative to the use of land from the property; and (ii) the action includes all possible planning to minimize harm to the property resulting from such use." The proposed Action Alternative would use land from a significant historic site; therefore, Section 4(f) of the U.S. Department of Transportation (DOT) Act of 1966, as amended, applies to the proposed project. This Section 4(f) evaluation includes documentation of the Section 4(f) resources, studies of alternative alignments, and consultations with appropriate agencies. In addition, this evaluation ensures that the proposed action includes all possible planning measures to minimize harm to the affected property.

## 1.1 Description of Section 4(f)

Section 4(f) legislation protects three basic types of resources: publicly owned park and recreation facilities, publicly owned wildlife and waterfowl refuges, and historic sites. Section 4(f) is codified into federal law under 49 USC Section 303 and 23 USC Section 138, and is implemented through the Code of Federal Regulations (CFR) 23 CFR 774.

Section 4(f) requires that the Secretary [of Transportation] may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to they property resulting from such use.

Section 4(f) further requires consultation with the US Department of the Interior and other Federal Agencies and appropriate State and/or local agencies that use or have jurisdiction over the lands protected by Section 4(f).

In determining that there is no prudent or feasible alternative, the Agency must find that supporting information demonstrates that there are unique problems or unusual factors involved in the use of alternatives that would avoid these properties; such as a finding that the cost, social, economic, and environmental impacts, or community disruption resulting from such alternatives reach extraordinary magnitudes.

## 1.2 Use of a 4(f) Resource

Use of a Section 4(f) resource occurs in the following circumstances:

- When land is permanently incorporated into a transportation facility;
- When there is a temporary occupancy of land that is adverse in terms of the statute's preservationist purpose; or
- When there is a constructive use of a Section 4(f) property.

This Section 4(f) evaluation has been prepared because a Section 4(f) resource would be permanently incorporated into a transportation facility.

## 1.3 Evaluation of Avoidance Alternatives

Per 23 CFR 774.17, a feasible and prudent avoidance alternative avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property. In assessing the importance of protecting the Section 4(f) property, it is appropriate to consider the relative value of the resource to the preservation purpose of the statute.

An alternative is not feasible if it cannot be built as a matter of sound engineering judgment. An alternative is not prudent if:

- It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- It results in unacceptable safety or operational problems;
- After reasonable mitigation, it still causes
- Severe social, economic, or environmental impacts;
- Severe disruption to established communities;
- Severe impacts to environmental resources protected under other Federal statutes;
- It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- It causes other unique problems or unusual factors; or
- It involves multiple factors in paragraphs (3)(i) through (3)(v) of this definition, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

#### 1.4 Measures to Minimize Impacts

If no feasible and prudent avoidance alternative is identified, all possible planning is applied to identify measures to minimize harm or to mitigate for adverse impacts to the Section 4(f) property. With regard to public parks and recreation areas, measures may include but are not limited to design modifications or design goals; replacement of land or facilities of comparable value and function; or monetary compensation to enhance the remaining property or to mitigate the adverse impacts of the project in other ways.

## 2.0 PROJECT DESCRIPTION

This section summarizes the Purpose and Need, both of which are described in more detail in Chapter 1 of the environmental assessment. Additional information regarding the alternatives can be found in Chapter 2 of the environmental assessment.

### 2.1 Purpose and Need

The purpose of the proposed action is to provide pedestrian access between the Kennedy Center River Terrace and the Potomac riverfront in Washington, DC. The action is needed because physical barriers and safety concerns currently discourage pedestrian traffic between these two resources.

Pedestrian access to the Kennedy Center is available at the east side of the building via the Entrance Plaza or via the North Plaza, by crossing F Street NW. Pedestrian visitors wishing to access the Kennedy Center form the Rock Creek and Potomac Parkway (RCPP) Trail must first cross the RCPP at grade, north of the Kennedy Center. Then proceed to cross F St NW a second time to access the North Plaza. Furthermore, while visitors to the Kennedy Center are currently able to enjoy views of the Potomac River from the River Terrace, an unrealized potential exists to unite these two resources. Pedestrian access improvements would enhance the aesthetic and physical connectivity of the Kennedy Center to the Potomac riverfront, while providing a safe pedestrian access facility, fully separated from the RCPP.

## 2.0 Proposed Action

The FHWA in cooperation with the NPS and Kennedy Center proposes to construct stairs that would connect the RCPP Trail to the Kennedy Center. Elevators would also be constructed to provide access to disabled and strollers. Two action alternatives were analyzed in detail, Alternative B and Alternative C. Additional information regarding the alternatives dismissed from consideration can be found in Chapter 2: Alternatives.

## Alternative B - Preferred Alternative

Alternative B includes a pair of curved staircases with integrated elevators that would provide pedestrian, wheelchair, and stroller access from the Kennedy Center to the Potomac riverfront. Portions of the existing terrace wall and planter structure would be removed and 20-foot wide platforms would be constructed to extend approximately 16 feet over the southbound lanes of the RCPP. Each platform would be centered on the existing terrace fountains and the entrances to the Hall of Nations and the Hall of States and connect to a staircase and hydraulic elevator. At the bottom of the stairs and elevator structures, a landscaped plaza of approximately 13,100 square feet would be constructed of asphalt, concrete, or pavers. The plaza would provide unimpeded accessibility to the RCPP trail and the Potomac Riverfront. In order to alert RCPP Trail users to the plaza approach, the segment of trail in front of the landscaped plaza would be resurfaced with a material unique but compatible with the surrounding trail and the new plaza. Signage may also be incorporated to further alert trail users to the approaching plaza. Landscaping would include the use of grasses and trees to mitigate for the loss of vegetation during construction and improve the aesthetics of the plaza area. With the implementation of Alternative B, the majority of

construction activities and the location of permanent structures would be within the 32-foot clear space between the RCPP and RCPP Trail. While this alternative would not include a landing or bulkhead to accommodate water taxi access to the site, this alternative would not preclude this possibility in the future.

#### Alternative C

Under Alternative C, a single formal staircase would descend toward the Potomac riverfront perpendicularly from the Kennedy Center River Terrace. The staircase would span approximately 180 feet, the width of the Kennedy Center River Terrace between the Hall of States and Hall of Nations. Depending on the final design of Alternative C, a portion of the central Kennedy Center River Terrace central planter could be removed to provide direct access to the proposed staircase. A plaza of asphalt, concrete, or pavers, up to a maximum of 9,800 square feet, would be constructed at the base of the proposed staircase. The RCPP Trail could be accommodated either in front of or behind the proposed central staircase. In order to alert RCPP Trail users to the plaza approach, the segment of trail in front of the Kennedy Center would be resurfaced with a material unique from the surrounding trail and the new plaza. Signage may also be incorporated to further alert trail users to the approaching plaza. The existing seawall would need to be relocated or piers would need to be constructed to support an additional 34 feet of structure extending over or into the Potomac River. This alternative would include the construction of an elevator situated between the North Plaza and the north end of the River Terrace to meet ADA accessibility requirements. While this alternative would not include a landing or bulkhead to accommodate water taxi access to the site, this alternative would not preclude this possibility in the future.

## 3.0 SECTION 4(f) PROPERTIES

Section 4(f) Resources were identified within the limits of construction of the action alternatives, Alternative B and Alternative C.

#### 3.1 Historic Resources

John F. Kennedy Center for the Performing Arts (Kennedy Center)

The Kennedy Center has the unique distinction of serving as both a national performing arts center and as the only presidential memorial to John F. Kennedy in the Nation's Capital. It is situated on an eminent site overlooking the Potomac River at the western edge of the Monumental Core of Washington, D.C. The Kennedy Center is the nation's busiest arts facility, producing and presenting a wide variety of performances and leading the nation in arts education and accessibility. It was designed by twentieth-century master architect Edward Durell Stone and was constructed between 1964 and 1971.

The Kennedy Center possesses exceptional significance as the sole national memorial to President John F. Kennedy within the National Capital and its environs. The Kennedy Center is an important landmark that, more than any other memorial constructed in Kennedy's honor, successfully embodies his passion and appreciation for the arts and culture and symbolizes his belief that a civilization's legacy is shaped by the quality of its artistic contributions. By promoting the arts on a national level and making culture accessible to all, the Kennedy Center is

widely recognized as a reminder of Kennedy's enduring values and convictions. The Kennedy Center also possesses exceptional significance as an important example of the work of Edward Durell Stone, a nationally recognized master architect of the Modern Movement, and as a public monument to President John F. Kennedy that is immediately recognizable as one of the nation's most iconic memorials.

The Kennedy Center retains a high degree of exterior integrity for its location, feeling, association, design, workmanship, and to some degree its setting and materials and has two periods of significance. The first, 1964-71, corresponds to the dates of construction, and the second, 1971-present, corresponds to the period in which the Kennedy Center has functioned as a presidential memorial.

Character-defining features of the Kennedy Center include its bilateral symmetry; long, low horizontality; hierarchical facades; clear, geometric form; thin-clad marble and glass curtain walls; exterior columns (including penthouse columns); bronze lettering on east facade; vertical paired openings on east facade; louvered vents on penthouse facades; engraved lettering on west facade; footprint and cantilevered structure of the River Terrace; and the shape and location of planting boxes and fountains of the River Terrace.

## Rock Creek and Potomac Parkway (RCPP)

The RCPP, U.S. Reservation 360, occupies the gorge and rim of the lower Rock Creek Valley and a stretch of land along the Potomac River waterfront. A linear park in the northwest quadrant of Washington, D.C., comprised of approximately 180 acres, its dominant feature is the RCPP, which was officially authorized in 1913 to provide a landscaped connection between the Mall and Potomac Park (later renamed East and West Potomac Parks) and the already established Rock Creek Park and National Zoo. RCPP comprises a major component of the District's comprehensive park system developed following City Beautiful ideals during the early twentieth century. Originally conceived as a parkway for horse-drawn carriages, horseback riders, and pedestrians, protracted funding resulted in design changes that accommodated the automobile. The RCPP was the first parkway in the metropolitan region and one of the earliest parkways in the nation. It is significant in the areas of community planning and development, engineering, recreation, and landscape architecture during the period 1928 to 1951.

Contributing features of the RCPP include The Arts of Peace, the Roadway, the Millet Lampposts, the Trail Network, the Stone Seawall, the Sycamore Allee, Rock Creek, the Chesapeake & Ohio Canal, the K Street Bridge, the Sewer Pumping Station, Culverts (that incorporate headwalls), the Godey Lime Kilns, the Pennsylvania Avenue Bridge, the M Street Bridge, P Street Beach, P Street Bridge, the P Street Road Bridge, Dumbarton Bridge, the Median, Lyons Mill Footbridge, South Waterside Drive Overpass, the Washington City Tunnel Storage Shed, the Massachusetts Avenue Bridge, North Waterside Drive, Saddle Club Footbridge, Shoreham Hill, Shoreham Hill Road Bridge, the Quarry, the Connecticut Avenue Bridge, the Woodley Lane Bridge Abutments, the Calvert Street Bridge, and the Parkway Ending. The RCPP was listed in the D.C. Inventory of Historic Sites on November 8, 1964, and in the NRHP on May 4, 2005, under the multiple property listing "Parkways of the National Capital Region, 1913-1965" (NPS 2005a).

## Archeological Resources

All of the land in and around the Kennedy Center is reclaimed land from the Potomac River; therefore, there is no potential for previously undiscovered archeological sites within the project area.

## 3.2 Recreational Properties

Rock Creek and Potomac Parkway Trail

The RCPP Trail is a multi-use trail that follows the east bank of the Potomac River. The trail runs from the Kennedy Center Performing Arts Center and the Watergate to the mouth of Rock Creek, a distance of approximately 1.5 miles. The trail then follows Rock Creek for approximately 2.8 miles and connects to the southern ends of the Western Ridge Trail and the Valley Trail. The Western Ridge Trail and the Valley Trail continue to the north end of Rock Creek Park.

The mowed grass area between the RCPP and the RCPP Trail provide green space for the public to enjoy views of the National Capital area, including Georgetown, Theodore Roosevelt Island, and the Theodore Roosevelt Memorial Bridge.

#### Potomac River Water Trail

The Potomac River Water Trail was designated as a National Recreational Trail in 2006. The Potomac River Water Trail (PRWT) follows the navigable portions of the Potomac River from high in the Appalachian Mountains to the Chesapeake Bay. The trail traverses over 300 miles and its creation is a result of cooperation and the desire to highlight and preserve a regional and national treasure. The trail offers exciting opportunities to experience the varied landscapes and rich history of the Potomac River. The River transects four distinct physiographic provinces, each associated with the development of our nation and each shaped by the interaction of climate, topography, geology, flora and fauna and human activities. Our heritage is a product of these landscapes, reflecting patterns of human activity shaped by geography, both through the physical features that remain and the traditions that have evolved in them.

Recreational uses on the PRWT include boating, fishing, swimming, and wildlife observation.

## 4.0 IMPACTS ON THE SECTION 4(F) RESOURCES

## Kennedy Center

Alternative B: Two 20-foot wide portions of the existing terrace perimeter walls – composed of a marble paneled fascia, granite knee wall, planted hedges, and handrail – would be removed for the construction of staircase platforms. Construction of the stairs would require removal of 120 square feet of the perimeter planter planted with Japanese holly shrubs. Each platform would be centered on the existing terrace fountains and the entrances to the Hall of Nations and the Hall of States. The footprint and cantilevered structure of the Kennedy Center River Terrace has been identified as a character-defining feature of the Kennedy Center. The construction of the staircase platforms in Alternative B would extend portions of the River Terrace to the west, altering its footprint. Additionally, the cantilevered quality of the River Terrace would be altered, as stairs would extend to the RCPP Trail.

Other character-defining features of the Kennedy Center would also be impacted by Alternative B. The long, low horizontality and clear, geometric form of the building are significant components of its design. The central pair of stairs that would be constructed under Alternative B would diminish the overall horizontality of the building by introducing breaks into the continuous linear composition of the west facade. Additionally, the curved form of the staircases would contrast with the clear geometric form and massive monumentality of the Kennedy Center.

The pair of staircase platforms would alter the external appearance of the Kennedy Center River Terrace. This would impact views from Arlington Memorial, Memorial Circle, Lady Bird John Park, the Mount Vernon Trail near the Potomac River shore, and portions of the George Washington Memorial Parkway.

<u>Alternative C:</u> A 180-foot wide section of the existing terrace perimeter wall would be removed for the opening of the staircase. A second section of the River Terrace perimeter wall would be removed to provide access to the elevator. Construction of the stairs would require removal of approximately 540 square feet of the perimeter planter. Additionally, depending on the final design of Alternative C, a portion of the Kennedy Center River Terrace central planter could be removed to provide direct access to the proposed staircase.

The footprint and cantilevered structure of the Kennedy Center River Terrace has been identified as a character-defining feature of the Kennedy Center. The construction of the central staircase and elevator in Alternative C would alter the perceived footprint of the Kennedy Center River Terrace, extending it west over the RCPP and the RCPP Trail. Additionally, the cantilevered quality of the Kennedy Center River Terrace would be altered.

Other character-defining features of the Kennedy Center would also be impacted by Alternative C. The Kennedy Center's long, low horizontality and its symmetry are significant components of its design. The central staircase that would be constructed under Alternative C would diminish the overall horizontality of the building by introducing a significant break into the continuous linear composition of the west facade. Additionally, the location of the elevator under Alternative C would slightly alter the symmetry of the west facade.

While views from the Kennedy Center River Terrace would remain unaltered because the entire structure would be constructed below sightlines, views of the Kennedy Center would be impacted. The central staircase would become a focal point of the western façade of the Kennedy Center due to the mass of the staircase. This would impact views from Arlington Memorial Bridge, Memorial Circle, Lady Bird John Park, Mount Vernon Trail near the Potomac River shore, and portions of the George Washington Memorial Parkway.

<u>Alternative B:</u> Under Alternative B, elements of the RCPP and RCPP Trail would be directly impacted by the construction of two 20-foot wide staircase platforms that would extend approximately 16 feet out over the southbound lanes of the RCPP. Each platform would connect to a staircase and hydraulic elevator that would provide pedestrian access to the riverfront. At the bottom of the staircases would be constructed a landscaped plaza, of approximately 13,100 square feet, that would tie into the RCPP Trail.

Vegetative removal would be necessary in order to construct the pair of stairs. Below the terrace and between the RCPP and the RCPP Trail, nine trees would be removed in order to accommodate the central pair of stairs and plaza. No rare or unique tree species are present in the group. Each of the trees identified for removal are Japanese flowering crabapples.

The RCPP is two lanes wide at the Parkway approach and four lanes as it passes under the Kennedy Center River Terrace. The River Terrace cantilevers over the two northbound lanes of the RCPP Roadway. Under Alternative B, the staircase platforms would extend over the two southbound lanes of the Roadway. This would have a minor increase the tunnel effect of passing under the Kennedy Center River Terrace and would screen views of the Potomac River along this section of the roadway. It is estimated that views of the Potomac and points west would be veiled for less than 5 seconds (25 mph for a length of 180 ft). Conversely, views from the RCPP Trail toward the Potomac River would remain virtually unchanged, excepting the replaced rail along the riverfront; however, the aesthetics of the trail would be altered due to the use of pavers or other asphalt material for the reconstructed trail within the project area. Additionally, the aesthetics of the space between the RCPP and RCPP Trail would be altered through the addition of the proposed staircases and elevators with a landscaped plaza. The presence of a landscaped plaza would impact the perceived width and character of the trail at this point and would alter design elements such as the paving materials and landscaping.

The improved connection between the Kennedy Center and the Potomac riverfront proposed would accommodate and be consistent with the increased bicycle/pedestrian usage proposed through future DC and NAMA projects. Additionally, this connection would be safer than the existing RCPP and F Street at grade crossings for bicycle and pedestrians coming from the RCPP Trail and Georgetown to access Kennedy Center by reducing potential conflicts with motor vehicles.

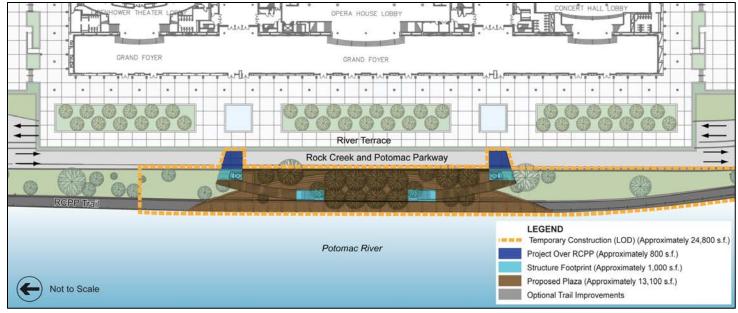


Figure 1. Land Use of Alternative B

<u>Alternative C:</u> Elements of the RCPP and RCPP Trail would be directly impacted by the construction of a 180-foot wide staircase extending over the southbound lanes of the RCPP and the existing RCPP Trail to provide pedestrian access to the riverfront. A plaza of asphalt, concrete, or pavers, up to a maximum of 9,800 square feet, would be constructed at the base of the proposed staircase.

Vegetative removal would be necessary in order to construct the central stairs. Below the terrace and between the RCPP and the RCPP Trail, nine trees would be removed in order to accommodate the central stairs and plaza. No rare or unique tree species are present in the group. Each of the trees identified for removal are Japanese flowering crabapples.

The general aesthetics of the RCPP would remain unaffected by the proposed action; however views from the RCPP towards the Potomac River would be eliminated by the proposed staircase for less than 5 seconds (travelling at 25 mph for a length of 180 ft). This would intensify the tunnel effect of passing under the Kennedy Center River Terrace. Views from the RCPP Trail toward the Potomac River would be determined by the final design of this alternative. Should the trail be maintained at its current location the trail would be bridges by the proposed staircase, eliminating views of the Potomac River and surrounding sites for a length of 180 linear feet. Based on an average walking or biking speed (5 or 15 miles per hour, respectively), this would result in an elimination of views for a period of approximately 25 or 8 seconds, respectively). Should the trail relocated along the proposed plaza and river's edge, views of the Potomac River would be enhanced by separating the trail user from the existing shoreline and allowing unrestricted views across the Potomac River. In both cases the aesthetics of the trail would be altered due to the use of pavers or other asphalt material for the reconstructed trail within the project area. Additionally, the aesthetics of the space between the RCPP and RCPP Trail would be altered through the addition of the proposed staircase and plaza, introducing a thoroughly formal design to the naturally landscaped aesthetics of the RCPP Trail. The presence of a

landscaped plaza has the potential of impacting the perceived width and character of the trail at this point and may impact design elements such as the paving materials and landscaping.

The improved connection between the Kennedy Center and the Potomac riverfront proposed under Alternative C would accommodate and be consistent with the increased bicycle/pedestrian usage proposed through future DC and NAMA projects. Additionally, this connection would be safer than the existing RCPP and F Street at grade crossings for bicycle and pedestrians coming from NAMA and Georgetown to access Kennedy Center by reducing potential conflicts with motor vehicles; however, visitors requiring the use of the elevator would be required to cross the RCPP and F Street to access the elevator at the North Plaza under this alternative.

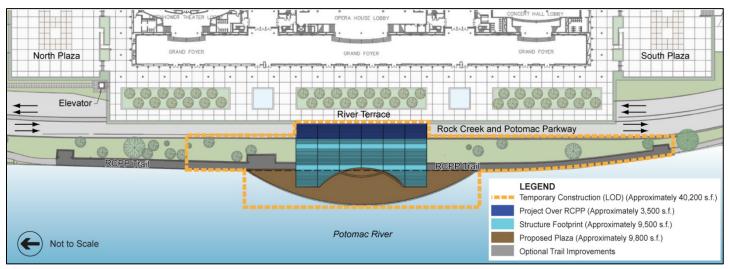


Figure 2. Land Use of Alternative C

Potomac River Water Trail

<u>Alternative B:</u> Under Alternative B, no construction is proposed within the Potomac River. The addition of new staircases and elevator structures would require the removal of existing groundcover and trees. Removal of existing vegetation and the addition of approximately 14,100 square feet (0.32 acre) of impervious surface near open waters would have imperceptible effects on water quality. Due to the relative magnitude of the Potomac River and its watershed, the impact of a small increase in impervious area would not result in an appreciable effect. Recreational uses of the PRWT would not be impacted by Alternative B.

<u>Alternative C:</u> Under Alternative C, a plaza would be constructed that would extend approximately 34 feet into the Potomac River for a length of approximately 180 feet. The plaza would cover approximately 9,800 square feet of the River. Recreational opportunities would not be impacted. Removal of existing vegetation and the addition of approximately 19,300 square feet (0.44 acre) of impervious surface near open waters would have imperceptible effects on water quality. Due to the relative magnitude of the Potomac River and its watershed, the impact of a small increase in impervious area would not result in an appreciable effect. Recreational uses of the PRWT would not be impacted by Alternative C.

## 5.0 AVOIDANCE ANALYSIS

## **5.1** Avoidance Alternatives

There are no avoidance action alternatives. The purpose of the project is to make modifications to the RCPP and RCPP Trail and Kennedy Center to provide better pedestrian access between the two. Both the RCPP and RCPP Trail and Kennedy Center are Section 4(f) Resources, and any modifications to construct pedestrian access would result in a use of these properties.

#### No Action Alternative

The No Action Alternative would continue current management operations. The No Action Alternative does not meet the purpose and need of the project.

## **5.2** Partial Avoidance Alternatives

While no action alternative avoids all of the Section 4(f) resources in the project area, alternatives do exist that avoid one or more of the Section 4(f) resources.

## North Plaza Access Options

Multiple concept designs were considered that would provide pedestrian access from the Kennedy Center's North Plaza to the Potomac riverfront. However, each of these options has been dismissed from further analysis in this EA (see Chapter 2: Alternatives, Alternatives Considered but Dismissed) because they do not meet the purpose and need of the project. They would not provide a direct link for pedestrians to access the Potomac riverfront unimpeded by the physical barrier presented by the RCPP. These alternatives included the construction of a single elevator, a curved ramp, or a spiral ramp. Each would be constructed between the North Plaza and the north end of the River Terrace. These options would no longer use the RCPP and RCPP Trail or PRWT, but would continue to use the Kennedy Center.

### Temporary Construction Easements

The temporary construction easements for the project do not constitute a "use" under Section 4(f) because the areas occupied for temporary construction activity will be restored to a condition equal to or better than which existed prior to the project.

#### 6.0 LEAST OVERALL HARM

Pursuant to 23 CFR 774.3(c), if the avoidance analysis determines that there is no feasible and prudent avoidance alternative, then only the alternative that uses the least overall harm to the Section 4(f) property may be approved. Since the previous discussion demonstrates that there is no feasible and prudent avoidance alternative, Alternatives B and C were evaluated to determine which alternative would cause the least overall harm to Section 4(f) property. This section evaluates those alternatives, including alternatives that would eliminate or reduce the use of individual Section 4(f) properties.

There are seven factors to be considered in identifying the alternative that would cause the least overall harm per 23 CFR 774.3(c)(1).

- i. The ability to mitigate adverse impacts to each Section 4(f) property (including all measures that result in benefits to the property).
  - a. Alternative B: Ability to mitigate impacts and enhance certain attributes.
  - b. Alternative C: Less of an ability to mitigate impacts and enhance certain attributes, because Alternative C has a greater structural mass.
  - c. North Plaza Access Options: Ability to mitigate impacts and enhance certain attributes.
- ii. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection.
  - a. Alternative B: Harm to Kennedy Center, RCPP and RCPP Trail. No harm to Potomac River Water Trail.
  - b. Alternative C: Harm to Kennedy Center, RCPP and RCPP Trail, and Potomac River Water Trail.
  - c. North Plaza Access Options: Harm to Kennedy Center. No harm to RCPP and RCPP Trail or Potomac River Water Trail.
- iii. The relative significance of each Section 4(f) property.
  - a. Each Section 4(f) property is considered to be of equal value.
- iv. The views of the officials with jurisdiction over each Section 4(f) property.
  - a. A MOA that mitigates the effects to the historic properties from Alternative B is anticipated.
- v. The degree to which each alternative meets the purpose and need for the project
  - a. Alternative B: meets the project purpose and need.
  - b. Alternative C: meets the project purpose and need.
  - c. North Plaza Access Options: does not meet the project purpose and need.
- vi. After reasonable mitigation the magnitude of any adverse impacts to the properties not protected by Section 4(f).
  - a. No significant difference in the magnitude of any adverse impacts to the properties not protected by Section 4(f).
- vii. Substantial differences in costs among the alternatives.
  - a. No substantial difference in costs among the alternatives.

## 7.0 ALL POSSIBLE PLANNING TO MINIMIZE HARM

Minimization and mitigation measures were incorporated into the project to minimize the impact to the Section 4(f) resources.

All of the designs, including the initial design concepts, have been reviewed by the Commission on Fine Arts and the National Capital Planning Commission to incorporate a design that is architecturally compatible with the Kennedy Center, and in accordance with the Secretary of

Interior's Standards for the Treatment of Historic Properties with Guidelines for Treatment of Cultural Landscapes (NPS 1998). A facet of this review was to identify concepts that would minimize the impact to the Kennedy Center, and dismiss those with unacceptable impacts to the Kennedy Center structure and appearance. The curvilinear design of the central ramp in the Central Ramp Alternative was inconsistent with the current character of the Kennedy Center design; therefore, this Alternative was dismissed from further consideration. In the Single Stair Alternative, the visual weight of the proposed staircase would not be fully balanced by the elevator and would, therefore, be architecturally incompatible with the Kennedy Center design. Therefore, this Alternative was dismissed from further consideration.

Design modifications were incorporated into the design of the Alternatives to minimize their impact on the Section 4(f) resources. Under Alternative B, the pair of curved staircases was design to be light, and blend into the façade of the north side of the Kennedy Center. The staircases would be partially constructed of glass, imparting a transparent quality to the design. The plazas in Alternative B and C were designed to marry the modern aesthetics of the Kennedy Center with the naturally landscaped aesthetics of the RCPP Trail, minimizing aesthetic impacts of the proposed action to the RCPP Trail. The proposed plazas would provide a defined throughway for users of the RCPP Trail through integration of different surface materials from those proposed for the remainder of the plaza area. The proposed plaza would also enhance aesthetics for RCPP Trail users and Kennedy Center visitors with improved landscaped design, while, encouraging interaction with the Potomac riverfront and promoting walk-ability in and around neighborhoods. The central stair structure proposed under Alternative C could be utilized as an informal seating area overlooking the Potomac River. Under Alternative C, final design would be required to propose materials from which to construct the proposed staircase. Materials would be considered that would work to minimize this impact or complement the existing Kennedy Center design.

Trees and shrubs would be planted following construction based on an approved landscape plan. The revegetation would mitigate impacts to trees, shrubs, and ground cover that would be removed for the construction of the proposed pedestrian access improvements.

Public access to the RCPP and the Kennedy Center would be maintained throughout construction. A temporary walkway would be provided during construction to allow for continued trail use by pedestrians and non-motorized vehicles. A staging area would be located immediately south of the proposed construction between the RCPP and RCPP Trail. This area would be fenced off from the public. Erosion and sediment controls and various other BMPs would be employed as needed during construction to reduce soil erosion and to prevent contamination of the water by sediment. Temporary impacts to drivers along the RCPP would be mitigated through the timing of closures outside of peak use periods to minimize the disruption to users of this resource. Further mitigation for traffic along RCPP is described below. In order to mitigate impacts to traffic and transportation during construction, a traffic control plan would be implemented to ensure a safe and continued flow of traffic during partial lane closures. This plan would include directional signage to inform travelers on the RCPP and RCPP Trail of all construction zones, associated speed limits, lane closures, and trail detours. Additionally, a public notice of the construction schedule would be provided to local media outlets.

## 8.0 SUMMARY

Modifying the proposed action to avoid all Section 4(f) resources would not be feasible and/or prudent because the purpose of the action is to modify a Section 4(f) resource and the project objectives would not be met. Based upon the analysis presented in this report, the Preferred Alternative (Alternative B) would cause the least harm to the Section 4(f) resources. Alternative C would use three Section 4(f) Resources (RCPP and RCPP Trail, Kennedy Center, and PRWT), whereas Alternative B would only impact two Section 4(f) Resources (RCPP and RCPP Trail and Kennedy Center). Although the use of RCPP and RCPP Trail is greater in area under Alternative B, the intensity of the use is greater under Alternative C. Alternative C would require relocation of the RCPP Trail. The intensity of the use of the Kennedy Center is also greater under Alternative C than Alternative B.

Alternative B includes all possible planning to minimize harm to the Section 4(f) resources resulting from such use, and would:

- 1. have the lowest level of effects to the natural environment;
- 2. provide safer access to the Kennedy Center;
- 3. and, minimize conflicts between bicycles/pedestrians and vehicular traffic on RCPP.

The recreational opportunities would be more accessible as a result of the proposed action.

## 8.1 <u>Coordination</u>

Agencies with jurisdiction over Section 4(f) resources were contacted to identify resources and areas of concern. Agencies contacted include the National Park Service and the Kennedy Center. Other agencies with special expertise were contacted, including the District Department of Transportation, Commission of Fine Arts, and the National Capital Planning Commission. The EA and Draft Section 4(f) Evaluation will be sent to the Department of Interior for review and comment concurrently with the release of the EA to the public for a minimum of 45 days in accordance with 23 CFR 774.5.