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**NATIONAL MALL**  
**WALKWAY IMPROVEMENTS (INSTALLATION OF EXPOSED AGGREGATE**  
**CONCRETE SIDEWALKS)**  
Northwest and Southwest Quadrants, Washington, D.C.

Report to the National Park Service

May 2, 2002

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*Abstract*

The National Park Service (NPS), with funds from the Federal Highway Administration (FHWA) D. C. Transportation Enhancement Activity Fund, has requested preliminary and final site development approval of four exposed aggregate concrete sidewalks on the National Mall, two on either side of 4<sup>th</sup> Street, one linking the National Gallery with the National Air and Space Museum and one adjacent to Madison Drive. The paved aggregate walkways are being installed to comply with the Americans with Disabilities Act (ADA). On March 2, 1995, the Commission approved the National Mall Walkway Improvements project design concepts – the four proposed sidewalks are generally consistent with that proposal. The new sidewalks would be compatible with existing gravel walks on the Mall, with an aggregate of similar color and texture to the gravel walkways throughout the Mall.

*Authority*

Section 5 of the National Capital Planning Act of 1952, as amended (40 U.S.C. 71d) and D.C. Code 5-432.

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*Commission Action*

The Commission:

- **Approves** the preliminary and final site development plans for the installation of four exposed aggregate concrete sidewalks on the National Mall, located in NW and SW, Washington, D.C., as shown on NCPC Map File No. 1.41(38.00)-41026;
- **Recommends** that NPS work closely with FHWA on the selection of the color and texture of the exposed aggregate concrete sidewalks in order to create a seamless transition between the concrete sidewalks and the gravel pathways, similar to the area

near the carousel along Jefferson Drive where there is little variation in texture or color between the two materials; and,

- **Encourages** NPS to consider removing the gravel north-south paths on either side of 4<sup>th</sup> Street once the exposed aggregate concrete sidewalk is installed, thereby opening up more green space on the Mall.

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## BACKGROUND AND STAFF EVALUATION

### *DESCRIPTION OF PROPOSAL*

#### Location

The area covered by the proposal includes the National Mall west of 3<sup>rd</sup> Street, east of 14<sup>th</sup> Street and north and south of Jefferson and Madison Drives, respectively. The National Mall is located in the Northwest and Southwest quadrants of Washington, D.C.

There is an existing network of gravel paths running north-south and east-west on the National Mall. Adjacent to Jefferson and Madison Drives, and through the center panels of the Mall's open space, are four paths measuring approximately 40 feet in width. Approximately 11 paths run north-south – the three walkways connecting the Smithsonian Museums are up to 40 feet in width, while the remaining paths measure roughly 15 feet wide. Many of the street sidewalks in the vicinity of the Mall are already constructed of exposed aggregate concrete similar in color to the Mall's gravel walks.

The following exposed aggregate concrete sidewalks already exist on the Mall:

- An east-west sidewalk along Jefferson Drive adjacent to the gravel walk.
- North-south sidewalks on each side of 14<sup>th</sup> Street, 7<sup>th</sup> Street, and 3<sup>rd</sup> Street.
- A five-foot-wide north-south sidewalk through the middle of the gravel path between the Smithsonian Metro Station and the Museum of American History.
- A six-foot-wide north-south sidewalk roughly on axis with 9<sup>th</sup> Street and occupying the east half of the path between the Sculpture Garden and the Hirshorn Museum.

#### Proposal

The NPS proposes to add exposed aggregate concrete sidewalks to the National Mall to provide improved access to physically handicapped and/or disabled persons. In 1994, the Park Service received a complaint from a citizen alleging that the walkways on the Mall were not accessible to physically handicapped persons. After looking at several alternatives, the Park Service determined that the best approach to address the concerns about handicapped accessibility would be to add exposed aggregate concrete over a portion of the east-west gravel walkways and all of

the north-south walks. Exposed aggregate concrete sidewalks have been added to the Mall sporadically since the mid-1990s as funding has become available.

The proposal before the Commission consists of preliminary and final site development plans for the installation of three north-south exposed aggregate concrete sidewalks and an east-west sidewalk adjacent to Madison Drive. The following elements would be consistent among all of the proposed sidewalks:

- The proposed exposed aggregate concrete sidewalks would be matched in color and texture with the existing gravel paths on the Mall consistent with the Interagency Initiative for National Mall Road Improvement Program's Streetscape Manual.
- The sidewalks would have a depth of 10", not 6" as originally proposed, in order to accommodate heavy trucks (i.e., trash compacting trucks, tree servicing trucks and semi-tractor trailers which must use the sidewalks during the Folklife Festival and the Inaugural festivities).
- Depending on their location, the new walks may be located within the existing footprint of the gravel path, either in the middle of the path or occupying an edge.

Specific details of each proposed sidewalk installation include:

#### 4<sup>th</sup> Street Sidewalks

The exposed aggregate concrete sidewalks would measure 8-10 feet wide and would be constructed between the existing gravel path and the curb line, where the existing worn paths are located, instead of added to the gravel walkways as originally proposed. Adjacent to an existing mature elm on the west side of 4<sup>th</sup> Street near Jefferson Drive the sidewalk would be reduced to six feet wide and form an arc around the tree. The depth of the sidewalk would also be reduced in this area to help preserve the tree.

#### North-South Sidewalk Between the National Gallery and the National Air and Space Museum

The third north-south exposed aggregate concrete sidewalk would be located in the center of the existing 40-foot north-south gravel path connecting the National Gallery of Art and the National Air and Space Museum. The new path would measure 13'4" wide; ultimately, the entire width of this path will be constructed of exposed aggregate concrete to comply with the National Mall Walkway Improvement plan.

#### East-West Path adjacent to Madison Drive

An exposed aggregate, 11-foot-wide concrete sidewalk would be added along the length of Madison Drive, from 14<sup>th</sup> Street to 3<sup>rd</sup> Street, on the inside southern edge of the existing gravel path. The remaining 29 feet of the east-west walkway would remain gravel.

Funding for the proposed walkway improvements is through District of Columbia Transportation Enhancement Activity Fund. The remaining paths to be completed include the east-west paths

through the center of the Mall and most of the north-south connections. The next phase of construction has not been specifically identified, although funding may become available as early as fiscal year 2004.

#### *PREVIOUS COMMISSION ACTION*

At its March 2, 1995 meeting, the Commission approved the master plan modification/National Mall Walkway Improvements project design concepts, with a number of recommendations. The Commission took the following action:

The Commission:

1. Strongly supports the National Park Service's objectives to provide physically disabled persons convenient and universal access to the Mall and its buildings;
2. Approves the design concepts for NPS's National Mall Walkways Improvements, as shown on NCPC Map File No. 1.40(38.00)-40068; and,
3. Recommends that NPS in preparation of preliminary design plans provide:
  - A. Information on the effect of the new paved walks on the root system of the existing Elm trees, especially in conjunction with proposed construction activities and soil compaction caused by general milling in the area of the walks;
  - B. Details on the juncture between the exposed aggregate concrete surface and the gravel pathways to assure that settling of the paved surface or erosion of the gravel bed will not occur over time;
  - C. A stormwater drainage plan for accommodating the additional run-off created by the new impervious surfaces; and,
  - D. A phasing plan outlining the schedule for the installation of the new walks.

As a related recommendation, the Commission recommended that the NPS work together with the Commission of Fine Arts and NCPC to resolve any outstanding issues, including design treatment of the east-west walkways, prior to its submission of preliminary design plans.

#### *RESPONSE TO PREVIOUS COMMISSION ACTION*

##### Elm Root System

NPS has expressed their continued interest in maintaining the health of the elm trees on the National Mall. By confining the new exposed aggregate concrete sidewalks to the footprint of the existing gravel walks and the compacted areas along 4<sup>th</sup> Street, they will be not be disturbing

areas not already impacted by walkways. NPS believes that the new sidewalks will actually reduce some of the surrounding compaction problems because people will choose to walk on the sidewalks and not the grass areas around the trees as they currently do in some locations.

With respect to the proposed installation along Madison Drive, NPS believes that the location of the new sidewalk will impact only a very small percentage of the existing tree roots since the nearest edge of the proposed exposed aggregate concrete sidewalk will be 19 and 20 feet respectively from the existing trees. The existing trees are very hardy and the NPS specialists believe that the trees will adapt well.

Along 4<sup>th</sup> Street the sidewalks will be closer to the tree line, but there are fewer elms impacted by the sidewalk and many of the existing street trees are in poor condition requiring removal sometime in the future. The one healthy mature elm in the vicinity of the new sidewalk will be accommodated by a reduction in the sidewalk width and depth around the tree.

#### Aggregate/Gravel Juncture

In response to the Commission's concern about the joint between the gravel and the aggregate material separating and becoming unsafe, the Park Service has found that any problems in this area can be handled through routine maintenance. Where the condition already exists, NPS trail crews have found that maintaining a smooth surface between the exposed aggregate concrete sidewalk and gravel is a relatively minor task.

#### Stormwater Drainage

The District's Water and Sewer Authority has approved the stormwater management plans for the project, as well as the temporary plan during construction. Given that there is significant permeable surface area between the proposed exposed aggregate concrete sidewalks and the curb catch basins, there is no additional requirement for stormwater structures other than those already in place.

#### Phasing

As noted above, the NPS, with funding from the District of Columbia Transportation Enhancement Activity Fund, proposes to construct a sidewalk along Madison Drive and three north-south sidewalks. Additional funds may be made available starting in FY 2004 to construct the remainder of the exposed aggregate concrete sidewalks on the Mall.

#### Coordination with NCPC and Commission of Fine Arts

After the Commission acted on the conceptual design plans for the National Mall Walkway Improvements project the Commission of Fine Arts reviewed and approved the project in concept as well.

## *EVALUATION*

Staff supports the Park Service's request for approval of preliminary and final site development plans for the construction of three north-south aggregate walks and an east-west path along Madison Drive in order to provide improved access for handicapped and able-bodied persons on the Mall. On July 26, 1990, the American with Disabilities Act (ADA) was enacted to ensure that physically handicapped and other disabled persons enjoy the same convenient and universal access to buildings and other facilities that the general population enjoys. The gravel walkways, approved for the Mall in 1974, have not been as successful as envisioned in allowing wheelchair-bound and other temporarily or permanently disabled persons to negotiate unimpeded throughout the Mall. Because of this, the Park Service initiated the National Mall Walkway Improvement project.

In response to the Commission's 1995 comments, NPS staff, including the NPS arborist, regional horticulturalist, and landscape architect, have asserted that the proposed exposed aggregate concrete sidewalks will have minimal impact on the Mall's mature elm trees. Where the impact could be greater, NPS has varied the depth and width of the sidewalk to lessen the impact of the proposed sidewalk on the tree. Furthermore, NPS indicates that where the exposed aggregate concrete sidewalks exist they have found that trail crews have been able to maintain the edge condition between the gravel and the aggregate such that the joints do not create unsafe conditions. In addition, the Park Service has found, in coordination with the D. C. Water and Sewer Authority, that additional stormwater management is not necessary as a result of the proposed project. Finally, the remaining sidewalks identified on the National Mall Walkway Improvements conceptual plan may take place during FY 2004 and beyond.

With the current proposal, there are two areas that require greater discussion: the color and texture of the exposed aggregate concrete, and the potential removal of the existing gravel paths on either side of 4<sup>th</sup> Street.

### Exposed Aggregate Concrete Color and Texture

A number of exposed aggregate concrete sidewalks have already been installed on the Mall, and provide an opportunity to evaluate how compatible the sidewalks are with the existing gravel paths – some of the exposed aggregate concrete sidewalks are clearly more visually compatible than others. Staff encourages NPS to work closely with FHWA to ensure that the proposed exposed aggregate concrete sidewalks are constructed using an aggregate that closely matches the color and texture of the existing gravel walks on the Mall. The area near the carousel and Jefferson Drive should be used as a model. In this particular location the color and texture of the sidewalks closely matches the adjacent gravel walk and the joint between the two is virtually seamless. Staff understands that the NPS intends to take an active role in choosing the appropriate exposed aggregate concrete for the proposed sidewalks.

### 4<sup>th</sup> Street Gravel Path

The proposed location of the new exposed aggregate concrete sidewalks along 4<sup>th</sup> Street would be constructed on the existing worn path that pedestrians have created because it is on-axis with the sidewalks on either side of the Mall. Although this is not the originally proposed location for the exposed aggregate concrete sidewalk (the NPS originally envisioned an exposed aggregate concrete path within the footprint of the existing gravel path), it is logical to locate the sidewalk in the area most utilized by pedestrians. However, Staff would urge NPS to consider removing the existing gravel path as the two walkways may be redundant, opening up the existing gravel walk for additional green space on the Mall.

### *CONFORMANCE*

#### Comprehensive Plan

The proposed exposed aggregate concrete sidewalks would be located on the Mall and would provide hard surfaces to accommodate handicapped visitors. The Mall is a national landmark and a designated Special Place in the Preservation and Historic Features Element of the Comprehensive Plan. Policies in this element applicable to the proposal state:

The distinguishing qualities or character of Historic Landscapes should be protected and enhanced.

Pedestrian usage of Special Streets and Places should be encouraged by emphasizing extra widths and other special amenities of sidewalks, where feasible...

The proposed walkways would provide improved convenience for handicapped visitors to the Mall and are consistent with these policies.

#### Master Plan

The proposal is generally consistent with the Development Concepts for the Mall, approved by the Commission on September 15, 1966, as shown on NCPC Map File No. 1.40 (05.12)-24636.

#### Coordinating Committee

The Coordinating Committee reviewed this item at its meeting on April 10, 2002 and forwarded the proposal to the Commission with the statement that the project has been coordinated with all agencies participating. The participating agencies were NCPC; the District of Columbia Office of Planning; the Department of Public Works; the General Services Administration; the National Park Service; and the Washington Metropolitan Area Transit Authority.

Commission of Fine Arts

The Commission of Fine Arts approved the proposed walkway improvements at their April 18, 2002 meeting.

National Historic Preservation Act

NPS determined that the proposed project meets the conditions for an exclusion under its 1995 Servicewide Programmatic Agreement for Section 106 compliance. The replacement of walkways is eligible for the exclusion. NPS made the determination on April 15, 2002. The National Mall is listed in the National Register of Historic Places. The gravel paths are not historic features; they were installed pursuant to the Skidmore, Owings, and Merrill Plan for the Mall.

National Environmental Policy Act

Pursuant to the National Environmental Policy Act (NEPA), NPS and the Federal Highway Administration (FHWA) reviewed the potential environmental effects of the proposed action.

FHWA has determined the action of the walkway replacement is a Categorical Exclusion in accordance with the FHWA procedural NEPA review requirements at 23 CFR, Section 771.117. A review checklist was utilized in the determination and a summary record of the review was accomplished by the FHWA in April 2002.