
SMITHSONIAN INSTITUTION
VOYAGE, OUTDOOR SCALE MODEL OF THE SOLAR SYSTEM
South Sidewalk of Jefferson Drive, SW

Report to the Smithsonian Institution

May 4, 2000

Abstract

The Smithsonian Institution, in collaboration with the Challenger Center for Space Science and Education and the National Aeronautics and Space Administration has submitted preliminary and final site development plans for the project, “Voyage: Outdoor Scale Model of the Solar System.” The model will offer a walking tour of the solar system to scale, allowing visitors to the National Mall the opportunity to make educational connections to the solar system.

Authority

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

Commission Action

The Commission **approves** the preliminary and final site development plans for “Voyage: Outdoor Scale Model of the Solar System,” as shown on NCPC Map File No. 1.41(38.00)-40789, with the understanding that the exhibit will be in place for up to ten years.

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BACKGROUND AND STAFF EVALUATION

DESCRIPTION OF PROPOSAL

The Smithsonian Institution in collaboration with the Challenger Center for Space Science and Education and the National Aeronautics and Space Administration has submitted preliminary and final site development plans for “Voyage: Outdoor Scale Model of the Solar System” (Voyage). The proposal is the construction an outdoor exhibit of a scale model of the solar system on the south sidewalk of Jefferson Drive. It features individual kiosk units of system elements in relative scale and distance. The kiosk units will also have written information about the individual elements and the system as a whole. The exhibit is designed to be child friendly and handicap accessible.

Location

The proposed exhibit will be located on the south side of Jefferson Drive within the existing planting beds, facing the sidewalk. The exhibit will extend from just west of 4th Street on the eastern end of the National Air and Space Museum to just west of the Smithsonian Castle at 10th Street, a distance of approximately 1,950 feet.

Site

The site is on the south side of the National Mall in an urban park setting. The exhibit will be placed within the existing planting beds separating the south sidewalk from the traffic lanes of Jefferson Drive. The existing planting bed is surrounded by a gray granite curb that is approximately four inches in height, is planted with American Elm trees, and covered with mulch.

Development

The proposed exhibit consists of 13 kiosk units that feature the nine planets, the sun, a small bodies unit (asteroids/comets), and an introductory unit at each end of the exhibition. Each of the kiosk units consists of a single vertical fin with a perpendicular elliptical plate and a scale model of the solar system elements (integrated into the vertical kiosk element). The elliptical plate contains graphic and text information on the element. The Smithsonian Horticultural Division has agreed to clean and maintain the exhibition for ten years.

- The vertical fin will be 7 feet 6 inches tall and provide exhibit information at a height that will allow viewers to read the information even when the base of the unit is crowded.
- The horizontal information surface is designed to be wheelchair accessible and offer primary content information at a height and tilt that is ideal for access by a large number of Mall visitors. The surface will be a porcelain enamel plaque on which high-resolution full-colored imagery will be displayed.

- The round glass matrix will be placed vertically to allow visitors to view the scale model worlds from all sides. Through each model's space, the next unit will be visible. This three-dimensional illusion will bring into focus the enormous distances between planets.
- The exhibit units will be made of steel with a durable epoxy-based paint coating in a warm neutral tone.
- The proposed exhibit units will stand alone and provide self-contained information, including directions to other units.

PREVIOUS COMMISSION ACTION

The Commission approved the design concept for Voyage for the National Mall on April 8, 1999.

EVALUATION

Staff recommends preliminary approval of Voyage, the proposed project. At this time, the Smithsonian has not yet submitted material samples, therefore staff recommends preliminary approval until the samples are provided. Staff understands that this project is planned to be in place for a period of ten years and after that time it would be removed or resubmitted to the Commission for renewal consideration.

The Smithsonian Institution has adequately addressed staff comments and consideration set forth in previous Commission actions.

- Staff recommended that the exhibit be located between the National Air and Space Museum and the Smithsonian Castle. The Smithsonian has relocated the exhibition to the recommended location.
- Staff recommended that the scale of the planets in the exhibitions be carefully considered. The Smithsonian has sized the elements to an appropriate and readable scale.
- Staff recommended that the color of the exhibition be integrated with the surrounding buildings. Through its choice of design and color (a warm neutral tone of glazing), the Smithsonian has made selections that will integrate the elements of the exhibition with its surroundings.
- Staff recommended that the information panel reinforce the orbital ring of the planet. The Smithsonian incorporates an elliptical information plate that reinforces the planetary orbital ring.
- Staff recommended that the Smithsonian investigate incorporating sound into the exhibition. The Smithsonian considered this recommendation but, due to the cost of developing and installing an audio program, did not include audio capacity as part of the exhibit.

Detailed drawings of the site and individual units along with material colors have been provided. The proposed exhibit will provide the opportunity for millions of visitors to have an educational experience that is unique and enlightening. Voyage:

- Takes advantage of the location to provide access to millions of visitors annually.
- Provides information in an attractive manner.
- Is child friendly and handicap accessible.

The design of Voyage takes into consideration the subject matter and the setting for the exhibit. Voyage:

- Does not produce adverse visual effects on the National Mall or the adjacent Smithsonian Institution Buildings.
- Is designed to accurately convey the scale and scope of the subject.

The proposed project has no outstanding environmental or historic preservation issues.

COORDINATION

Coordinating Committee

The Coordinating Committee reviewed this item at its meeting on April 12, 2000, 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 Fire Department; the Department of Housing and Community Development; the General Services Administration; the National Park Service; and the Washington Metropolitan Area Transit Authority.

CONFORMANCE

The Commission on Fine Arts

The Commission on Fine Arts reviewed the proposal at its meeting on April 19, 2000 and requested that the submitting agency prepare a mock-up of the project element on-site.

Comprehensive Plan

The proposed model of the solar system would be located on the Mall, which is a historic landscape and a designated national landmark. The proposal is consistent with applicable policies in the Comprehensive Plan that provide for the protection and preservation of historic landscapes and historic properties.

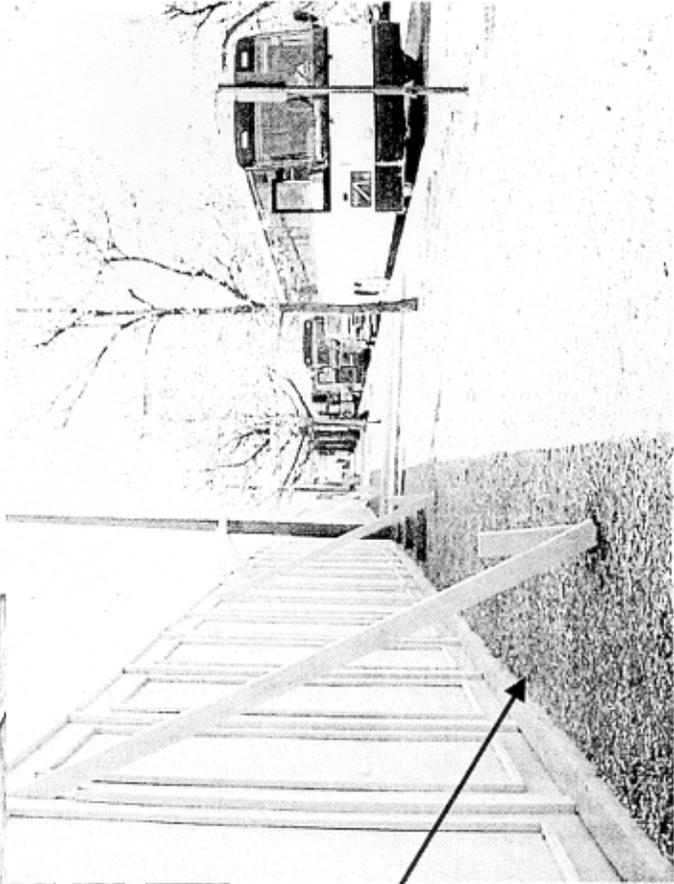
National Environmental Protection Act

Pursuant to the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, the Smithsonian Institution has determined that the proposed project does not require a separate and specific environmental document under its environmental policies and procedures. The environmental determination equates to a categorical exclusion.

National Historic Preservation Act

The Smithsonian Institution has consulted with the DC SHPO and has completed its responsibilities under NHPA.

Jefferson Drive



Element Location



Typical Exhibition Elements

