

## **FINDING OF NO SIGNIFICANT IMPACT**

### **SLOPE STABILIZATION PROJECT**

#### **SCENIC EASEMENT - GEORGETOWN UNIVERSITY PROPERTY**

#### **INTRODUCTION**

This Finding of No Significant Impact (FONSI) has been prepared in accordance with the National Environmental Protection Act (NEPA), regarding the proposed slope stabilization project to be undertaken by Georgetown University (University) on a portion of the University's property. This document describes Alternative 2, the "Environmentally Preferred Alternative," which outlines the University's proposed slope stabilization project, and provides an explanation of why the proposed project will not impart significant negative impacts to the human environment. As analyzed within an Environmental Assessment (EA) prepared by the National Park Service (NPS) and dated March 2007, the proposed slope stabilization project entails the comprehensive rehabilitation of a sloped segment of the University's property that is currently encumbered by a scenic easement interest held by the United States. This FONSI and the EA comprise the complete record of environmental impact analysis for the project.

#### **PURPOSE AND NEED**

The University's proposed slope stabilization project is intended to implement a series of much needed repairs to a segment of the existing slope located along the University's southwest perimeter. Located atop the slope is West Perimeter Road, a narrow paved roadway used exclusively by service vehicles that connects the north and south segments of the campus. The integrity of the slope and the roadway are currently threatened due to the combined factors of the slope's composition of unstable fill materials and continued erosion caused by storm water runoff from above the slope. The existing roadway does not include curbing or catch basins. As a result, storm water cascades over the western edge of the roadway and down the adjoining slope. The effects of the ongoing erosion along the slope are clearly evident. Several mature trees have toppled as their roots systems have been undermined. In addition, sloughing of large segments of the slope has occurred which threatens the integrity of West Perimeter Road. Unaddressed, erosion will continue to exacerbate the current conditions along the slope and will likely result in the collapse of a large segment of the roadway.

The Slope Stabilization Project includes the following components:

1. Demolition of a segment of the existing roadway.
2. Removal of existing solid waste and assorted debris along the face of the slope and on adjacent parkland.
3. Clearing existing vegetation from the unstable segment of the slope (approx. 300 feet in length).
4. Removal of previously deposited unstable fill material.
5. Placement of new, engineered fill material and geo-grid textile fabric.

6. Installation of new, multi-faceted storm water drainage system, including new curbing and catch basin along the western edge of West Perimeter Road.
7. Re-contouring of the slope to control storm water flow.
8. Construction of a natural stone-faced retaining wall at the base of the slope.
9. Installation of a new wooden timber guardrail and chain-link fencing with black vinyl masking within the roadway shoulder.
10. Implementation of a NPS-approved landscape plan for the disturbed portion of the slope.

## **BACKGROUND**

The western boundary of the University adjoins U. S. Reservation 450, Archbold Parkway between Canal Road, N.W., and Reservoir Road, N.W. In 2003, the United States acquired a scenic easement interest in a 2.5-acre portion of the University's property, which encompasses the slope adjacent to Archbold Parkway. The purpose of the scenic easement is to preserve and protect the vegetation along the slope that serves to effectively screen several University structures from the view of visitors to Archbold Parkway.

As contained in the terms of the existing easement, the construction of a roadway for service vehicles only and the cutting of trees to allow for the roadway's construction are permitted. Consequently, although all improvements associated with the proposed slope stabilization project will be located entirely upon the University's property, the presence of the existing easement requires NPS's authorization of the project.

Recognizing the ongoing deterioration of the slope and its resultant affects on the future viability of West Perimeter Road, the University, in coordination with NPS, sought to develop a comprehensive plan to address the problem. The environmentally preferred alternative serves to correct the 2 basic causes of the slope's deteriorating condition; its composition of unstable fill materials and erosion from unabated storm water run-off. The plan also incorporates a number of mitigation measures intended to enhance the slope's integrity and the value of NPS's scenic easement interest.

## **ALTERNATIVES**

Two alternatives were evaluated by the EA. Alternative 1, the "No Action" alternative, describes the projected effects in the event that existing conditions are left unaddressed. Alternative 2, the "Environmentally Preferred Alternative" describes the elements of the proposed slope stabilization project.

### **No Action Alternative – Alternative 1**

Adopting the no action alternative would, in effect, condone the ongoing detrimental forces of erosion that threaten the integrity of West Perimeter Road and adjacent buildings, as well as continue to impart major adverse impacts to vegetation, wildlife habitat along the slope and to the cultural landscape and visitor use of the adjoining Archbold Parkway.

## **Environmentally Preferred Alternative -- Alternative 2 -- Slope Stabilization Project**

Based upon the results of a geotechnical analysis of the slope's soil conditions coupled with the urgent need to address unabated storm water run-off, a comprehensive slope stabilization plan was developed jointly by the University and NPS. Implementing the University's proposed slope stabilization plan, which is the environmentally preferred alternative, will result in the following actions:

- Demolition of a segment of West Perimeter Road.
- Removal of existing solid waste and assorted debris along the face of the slope and on adjacent parkland.
- Clearing the existing vegetation along an approximately 300-foot long segment of the slope.
- Removal of the existing unstable fill within the disturbed section of the slope.
- Placement of new, engineered fill and a geo-textile fabric.
- Installation of a new storm water drainage system that will include the following components:
  1. Curbing and gutter along the western edge of West Perimeter Road to channel storm water.
  2. Water quality inlet to collect storm water from the roadway and provide initial water quality treatment.
  3. Underground storm water drain pipe with water velocity dissipation structure at the base of the slope.
- Re-contouring of the newly placed fill material to better control storm water sheet flow.
- Construction of new natural stone-faced retaining wall at the base of the slope.
- Installation of new wooden timber guardrail, and chain link fencing with black vinyl masking within the roadway shoulder.
- Implementation of a NPS-approved landscape plan for the disturbed portion of the slope.

Initial clearing of the slope will impart short-term adverse impacts to vegetation, and wildlife habitat within the project footprint and to the cultural landscape and visitor use of the adjacent Archbold Parkway. However, long-term moderate to major beneficial impacts are projected to offset these short-term adverse impacts as a result of the mitigation measures associated with the project. It is for these reasons Alternative 2 has been selected as the environmentally preferred alternative.

### **Alternatives considered but not carried forward**

Several less extensive solutions were initially considered to repair the most severely impacted segments of the slope. However, it was agreed by University officials, their consultants and NPS representatives that a long term, comprehensive solution was required. In developing the scope and content of the current slope stabilization proposal, various elements of the plan were revised. These revisions were made to ensure the project not only served to rectify the problems of the slope's composition and the effects on unchecked erosion, but that it also enhanced the scenic character of the adjoining Archbold Parkway.

## **PUBLIC INVOLVEMENT**

The EA was made available for public review and comment for a thirty (30) day period beginning March 28, 2007, and ending April 27, 2007. Public notice of the availability of the EA was provided to individuals, organizations and agencies through notification on the park website: "<http://parkplanning.nps.gov/rocr>," and by means of a press release dated March 28, 2007. One comment was received wherein an extension of the public review period was requested. While the requestor did not specify a reason why additional time was needed, the requestor acknowledged awareness of the public review period's closing ten days prior to its closing. In response, NPS did not formally extend the public review period. However, we did encourage this individual to forward their comments at their earliest opportunity for our consideration. No comments were submitted.

## **AGENCY CONSULTATION**

Formal consultation with the U. S. Fish and Wildlife Service (FWS) was undertaken to assess the presence of endangered, rare or threatened species within and proximate to the location of the environmentally preferred alternative. In a response dated May 3, 2007, FWS concurred that the proposed project is not expected to have an effect on either the Bald Eagle or Hay's Amphipod, the only two federally listed species in the general vicinity of the project's location.

The NPS also corresponded with the District of Columbia Historic Preservation Office (DCHPO) to initiate compliance with Section 106 of the National Historic Preservation Act. In a response dated May 29, 2007, DCHPO stated that the project will not have adverse effects upon known historic properties. However, DCHPO went on to further advise that the possibility exists of unearthing historic or prehistoric artifacts or features in such a location when there is ground disturbance, and that if any such resources are uncovered, work is to stop immediately and DCHPO is to be contacted for on-site inspection. Thus, a condition will be incorporated into our subsequent permit to the University wherein work is to be suspended immediately upon the discovery of a known or suspected historic or prehistoric artifact.

## ***WHY THE ENVIRONMENTALLY PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE QUALITY OF THE HUMAN ENVIRONMENT***

The NPS utilized the following NEPA criteria and factors defined in 40 CFR § 1508.27 to evaluate whether the Environmentally Preferred Alternative would have a significant impact on the environment.

***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 EIS.***

Although the initial construction related activities associated with the Environmentally Preferred Alternative will impart short-term adverse impacts to vegetation, wildlife habitat within the project footprint and to the cultural landscape and visitor use of the adjacent Archbold Parkway, the impacts are not thought to be of a nature or to an extent that would require analysis by means of an EIS. Conversely, selection of the "No Action" alternative would almost certainly result in

significant adverse impacts to vegetation and wildlife habitat within the footprint of the project as well as to the cultural landscape and visitor use of Archbold Parkway. Moreover, the “No Action” alternative is likely to result in the subsequent failure of a portion of West Perimeter Road and endangering the integrity of adjoining structures.

***Degree of effect on Public Health or Safety***

The impacts of the Environmentally Preferred Alternative do not reach the level of significance to effect public health or safety. Identified adverse impacts are limited to short-term adverse impacts to vegetation and wildlife habitat anticipated to occur within the project footprint and to the cultural landscape and visitor use of the adjacent Archbold Parkway resulting from initial construction activities. Health and safety issues normally associated with construction activities such as noise and air quality impacts would be limited to short-term duration during construction.

***Unique characteristics of the geographic area in proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.***

The property upon which the project identified as the “Environmentally Preferred Alternative” will occur is a sloped portion of the University’s property located immediately adjacent to Archbold Parkway. In 2003, NPS acquired a scenic easement interest in a 2.5-acre portion of the University’s property encompassing the aforementioned slope in an effort to provide additional scenic protections to Archbold Parkway. The NPS recently nominated Archbold Parkway for inclusion on the National Register of Historic Places and is awaiting the response from the Keeper of the National Register pending their review. In light of NPS’s easement interest in the University’s property, NPS must provide its authorization of the slope stabilization project. As the project rectifies the problems currently impacting the scenic character of the slope and provides a series of enhancements to the immediate area, NPS is supportive of the proposed project and is willing to provide its conditioned authorization. The NPS intends to issue the University a short-term Special Use Permit to conduct the slope stabilization project subject to prescribed conditions aimed at protecting the existing landscape immediately adjacent to the project footprint and ensuring all agreed upon mitigation measures are completed to the satisfaction of NPS.

***Degree to which effects on the quality of the human environment are likely to be highly controversial.***

The project as proposed and as outlined within the EA is not viewed as controversial.

***Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.***

The potential impacts of the environmentally preferred alternative are well defined and have been analyzed thoroughly within the EA. Aside from short-term adverse impacts to the cultural landscape and visitor use of the adjacent Archbold Parkway and to vegetation and wildlife habitat within the project footprint resulting from initial construction activities, the potential

exists for the disturbance of historic and prehistoric artifacts or features within the project's limits. Thus, NPS will condition its authorization of the project by requiring the University to stop work immediately and contact the DCHPO and NPS in the event any such resource is uncovered.

***Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about future consideration.***

By authorizing the University to initiate the slope stabilization project, NPS is ensuring its existing scenic easement interest in a portion of the University's property will retain value into the future. As negotiated with the University, the project includes a series of mitigation measures intended to provide tangible benefits to the visitors of Archbold Parkway. Although the initial construction activities will clear all vegetation from a 300-foot long segment of the slope, the planned improvements will result in a rehabilitated slope comprised of stable fill material layered upon a geo-grid fabric, a new storm water drainage system, a natural stone-faced retaining wall, implementation of a NPS approved landscape plan and the removal of decades-old solid waste that has been scattered throughout the face of the slope. Practically speaking, there is no precedent established by this action. Conversely, NPS is supportive of the slope stabilization project as a means of enhancing and protecting its current interests for the future.

***Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.***

The action evaluated by the EA is unique to the University property. The environmentally preferred alternative is the only action currently under consideration, previously undertaken or under consideration for future action that will impact natural or cultural resources associated with Archbold Parkway.

***Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources.***

In that Archbold Parkway was recently nominated for inclusion on the National Register of Historic Places, and we are awaiting the results of the formal review by the Keeper of the National Register, additional scrutiny was applied to the proposed slope stabilization project.

As mentioned throughout this document, initial construction activities associated with the clearing of a 300-foot long segment of the existing slope will impart short-term adverse impacts to the cultural landscape and visitor use of the adjacent Archbold Parkway and to the vegetation and wildlife habitat within the project footprint. In addition, DCHPO cautions that "there is always the possibility of unearthing historic or prehistoric artifacts or features in such a location when there is ground disturbance" and "if any such resources are uncovered, work should stop immediately, and our office should be contacted for on-site inspection."

Our evaluation of current conditions and the "No Action" alternative left NPS with no option other than to proceed with a plan for the slope's stabilization. The ownership of a conservation easement interest in that portion of the University's property wherein the project is proposed enabled NPS to negotiate the adoption of a series of mitigation measures intended to provide long-term protections for not only the University's West Perimeter Road, but for the future viability of the natural and cultural resources associated with Archbold Parkway. If left unchecked, the existing conditions found along the slope would continue to worsen, imparting far greater adverse impacts to the natural and cultural resources within the project footprint and the adjacent Archbold Parkway than those envisioned from the initial clearing activities associated with the Environmentally Preferred Alternative. Upon implementation of the aforesaid mitigation measures, the short-term adverse impacts mentioned above will immediately begin to lessen, and are expected to become undetectable within the following 2-3 consecutive growing seasons.

***Degree to which the action may adversely affect an endangered or threatened species or its critical habitat.***

No impacts to endangered or threatened species are anticipated as a result of authorizing the Environmentally Preferred Alternative.

***Whether the action threatens a violation of federal, state, or local environmental protection law.***

Implementation of the Environmentally Preferred Alternative will not violate federal, state or local environmental laws. Additionally, our evaluation of the proposed action in the context of an EA, conducted pursuant to NEPA, documents compliance with current environmental laws and regulations.

**IMPAIRMENT**

The NPS may not allow the impairment of park resources and values unless directly and specifically provided for by legislation or by proclamation establishing the park unit. According to NPS Management Policies, impairment that is prohibited by the NPS Organic Act of 1916 and the General Authorities Act of 1970 is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. This policy, however, does not prohibit impacts to park resources and values. The NPS has the discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purpose of a park, so long as the impacts do not constitute impairment. Moreover, an impact is less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve and restore the integrity of park resources or values. In determining whether impairment may occur, park managers consider the duration, severity, and magnitude of the impact; the resources and values affected; and direct, indirect, and cumulative effects of the action.

In addition to reviewing the list of significant criteria, NPS has determined that authorization of the Environmentally Preferred Alternative and associated mitigation measures will not constitute impairment of NPS resources or values. There would be no major adverse impacts to a resource or value whose conservation is 1) necessary to fulfill specific purposes identified in Archbold Parkway's establishing legislation; 2) key to the natural or cultural integrity of Archbold Parkway or to opportunities for enjoyment of the Parkway; or 3) identified as a goal in Archbold Parkway's management plans or other relevant planning documents. This conclusion is based on a thorough analysis of the potential environmental impacts of the proposed slope stabilization project to be undertaken entirely upon the University's property as evaluated by the EA, public review of the EA, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction of NPS Management Policies, August 31, 2006.

I, as Superintendent of Rock Creek Park, which includes supervision of Archbold Parkway, have determined that authorization of the Environmentally Preferred Alternative, the University's proposed slope stabilization project, will not constitute an impairment to the resources or values of Archbold Parkway and will not violate the provisions of the NPS Organic Act. This conclusion is based on a thorough analysis of the environmental impacts described in the EA, public review of the EA, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in Section 1.4 of NPS Management Policies, August 31, 2006. Authorization of the environmentally preferred alternative will not result in major adverse impacts to a resource or value whose conservation is 1) necessary to fulfill specific purposes identified in Archbold Parkway's establishing legislation; 2) key to the natural or cultural integrity of Archbold Parkway or to opportunities for enjoyment of the Parkway; or 3) identified as a goal in Archbold Parkway's management plans or other relevant planning documents.

## **MITIGATION MEASURES**

Mitigation is intended to reduce the negative impacts of a particular action. The Council of Environmental Quality (CEQ) calls for a discussion of the "appropriateness" of mitigation, and NPS Director's Order No. 12 – Conservation, Planning, Environmental Impact Analysis, and Decision Making (NPS 2001) requires an analysis of the effectiveness of mitigation. For the purpose of this FONSI, mitigation measures as described in the EA are intended to offset short-term adverse impacts associated with initial construction activities of the slope stabilization project and provide long-term enhancements to NPS resources and values heretofore nonexistent. Specific mitigation measures that would be implemented as a result of the proposed slope stabilization project include the following actions:

- Removal of an assortment of construction rubble, solid waste and organic matter that has been previously dumped along the face of the slope.
- Installation of a heretofore nonexistent storm water drainage system that will include curbing along the western edge of West Perimeter Road, a water quality inlet structure within the shoulder of West Perimeter Road connected to a 12-inch diameter drain pipe to be placed beneath the surface of the newly contoured slope, and an endwall with a level spreader storm water dissipater located at the base of the slope.

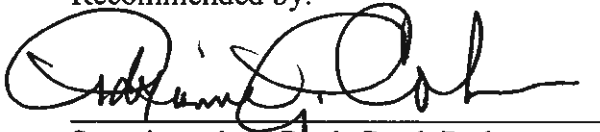


- Construction of an 8-foot high natural stone-faced retaining wall at the base of the slope.
- Installation of an 8-foot high chain-link fence coated with black vinyl and 2.5-foot high timber guardrail along the western edge of West Perimeter Road to screen the roadway, and several of the University's operational facilities.
- Implementation of a NPS-approved landscape plan along the disturbed portion of the slope.
- Installation of a new 6-foot high chain-link fence along the property line between the University's property and NPS property.

## CONCLUSION

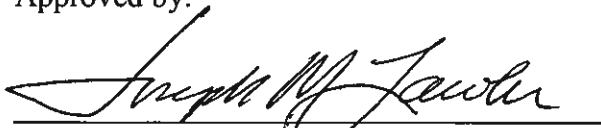
The NPS has considered the information contained in the Environmental Assessment "Slope Stabilization Project- Georgetown University Archbold Parkway March 2007" and other information as summarized or provided in this document. This evaluation takes into account applicable law, regulations and NPS guidance. The NPS selects the Environmentally Preferred Alternative as described in the EA, using criteria of 40 CFR Section 1500 *et seq.* On this basis, NPS has determined that the slope stabilization project does not constitute a major federal action significantly affecting the quality of the human environment as defined in NEPA. The proposed slope stabilization project is not environmentally highly controversial, nor is it committing NPS to specific future actions that would constitute a significant or controversial impact. The impacts of the proposed project are not of a cumulative nature either in itself, or in conjunction with other federal or non-federal projects. Therefore, pursuant to Section 102(c) of NEPA, CEQ guidelines, and NPS guidelines (NPS D.O. No. 12), the preparation of an Environmental Impact Statement is not required.

Recommended by:

  
Superintendent, Rock Creek Park

7/11/07  
Date

Approved by:

  
Regional Director, National Capital Region

7/12/07  
Date