Executive Director’s Recommendation
Commission Meeting: October 6, 2022

PROJECT
South Mall Campus Historic Core
Revitalization – Castle Perimeter Security
and Elevator Overrun
Smithsonian Institution
1000 Jefferson Drive, SW
Washington, DC

SUBMITTED BY
Smithsonian Institution

REVIEW AUTHORITY
Federal Projects in the District
per 40 U.S.C. § 8722(b)(1) and (d)

NCPC FILE NUMBER
8282

NCPC MAP FILE NUMBER
1.41(38.00)45513

APPLICANT’S REQUEST
Approval of revised preliminary site and building plans

PROPOSED ACTION
Approve revised preliminary site and building plans with comments

ACTION ITEM TYPE
Staff Presentation

PROJECT SUMMARY
The Smithsonian Institution (SI) has submitted revised preliminary site and building plans for two components of the larger Revitalization of the Historic Core (“RoHC”) project. The Commission approved the preliminary site and building plans for much of the project at the March 2022 meeting; however, two elements were not approved: the perimeter security and elevator overrun at the East Range of the Castle. The applicant has submitted revised plans for the perimeter security which has been significantly reduced in extent.

Since the last review, the RoHC scope has been revised to focus on the Castle. Improvements to the Arts and Industries Building (AIB), the new cooling towers, and the underground tunnel connections are no longer included. As such, the proposed perimeter security only includes the portion along Jefferson Drive in front of the Castle. The perimeter security along Independence Avenue, south of AIB, will be addressed under a separate project.

The Commission provided a number of comments on the perimeter security at the March 2022 review, and requested the applicant take a more comprehensive look at the proposed perimeter security approach. The updated design considers the full length of Jefferson Drive from 12th Street, SW to the Ripley Garden and relies on a palette of context-sensitive materials and elements. In addition, the applicant has evaluated the proposed elevator overrun at the Castle. After research, SI determined a “Machine-Room-Less” (MRL) elevator will be utilized in this location due to the historic preservation sensitivities of the Castle. No rooftop penthouse will be required. The existing elevator penthouse on the east side of the East Wing roof will be removed and the historic roofline restored.
KEY INFORMATION

- The South Mall Campus is located on the National Mall, generally between Independence Avenue, Jefferson Drive, 12th Street and 7th Street, SW in Washington, DC. The campus includes the Smithsonian Institution Building (SIB or the Castle) and Arts and Industries Building (AIB), among others.
- The Commission approved the South Mall Campus Master Plan in 2018. The proposed master plan is a guide for the development of the South Mall Campus over the next 20 to 30 years.
- The revitalization of the Castle and AIB were identified in the master plan, along with the proposed new central utility plant, seismic protection, and perimeter security.
- SIB, also known as “the Castle”, was designed by James Renwick, Jr., and was completed in 1855.
- The last major revitalization of the Castle, including upgrades of heating, cooling and ventilation systems, electrical and plumbing systems, was completed in 1968.
- The Castle is a National Historic Landmarks. The Quadrangle Historic District was added to the District of Columbia Inventory of Historic Sites in 2017. The entire campus is within the National Mall Historic District.
- A Programmatic Agreement (PA) was prepared in 2018 that outlines the process for subsequent consultation of individual projects implemented under the master plan, pursuant to Section 106 of the National Historic Preservation Act.
- SI has initiated the Section 106 review process for the RoHC project pursuant to the PA. A series of consulting party meetings have been held thus far, most recently on September 28, 2022.
- The Commission approved the preliminary plans for the project in March 2022 but did not approve the perimeter security or elevator overrun. The current submission addresses those two components.

RECOMMENDATION

The Commission:

Approves the preliminary site development plans for the proposed perimeter security along Jefferson Drive.

Supports the elimination of the existing elevator penthouse at the East Range of the Castle and the restoration of the historic roofline.

Commends the applicant for reevaluating the perimeter security approach and developing a more creative and successful solution.

Notes the overall project scope has been limited to focus on the Castle. Improvements to the Arts and Industries Building (AIB), the new cooling towers and underground infrastructure are not part of the current scope.
Perimeter Security

Notes that perimeter security is not proposed along Independence Avenue as part of this project. The deferral will allow for additional time to coordinate potential solutions, in collaboration with the District Department of Transportation.

Notes the applicant has taken a more comprehensive look at the proposed perimeter security along Jefferson Drive and extended the design study from the Freer Gallery on the west side to the Ripley Garden on the east.

Notes a continuous perimeter security line along Jefferson Drive is no longer proposed. Instead, protective elements are limited to building entrances and locations where visitors queue to enter the Castle, Freer Gallery and AIB. While the design approach includes all three buildings, only the Castle perimeter security is proposed for approval at this time.

Finds the revised perimeter security design reduces the use of bollards as compared to the previous proposal and utilizes landscape features and street furniture in a way that is much more sensitive to the setting and character of the Castle, AIB and Freer Gallery.

Requests the applicant reevaluate the proposed bench design and consider additional refinements, to include reducing the overall length and width; creating a more open base that does not appear as heavy; and/or creating multiple benches instead of one long bench.

Recommends the applicant continue to coordinate with the National Mall Streetscape Manual Interagency Working Group, as plans and details are developed regarding the streetscape along Jefferson Drive.

Elevator Overrun at East Wing

Notes the applicant has identified a design approach that eliminates the need for an elevator overrun, and the existing non-historic penthouse will be removed, and the historic roofline will be restored.

PROJECT REVIEW TIMELINE

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PROJECT ANALYSIS

Executive Summary

In response to comments received from the Commission and Consulting Parties, the design for the perimeter security on Jefferson Drive has been substantially revised. The updated design looks holistically at the perimeter security on Jefferson Drive from in front of the Freer Gallery to the east side of the Arts and Industries Building. The proposed design reduces the use of bollards and utilizes existing landscape features and new street furniture to provide the required secure perimeter. In addition, SI has determined the areas requiring security elements are much more limited, thereby reducing the overall extent. Overall, staff finds the new approach is much more sensitive to the setting and character of the Castle.

Further, in response to comments received from the Commission and consulting parties, the design for the elevator in the East Wing of the Castle has also been updated. SI determined a machine room-less elevator can be used. This eliminates the need for an overrun that would impact the roof. The new design allows for the removal of the non-historic elevator penthouse and restoration of the historic roofline. Given these changes, staff recommends the Commission approve the preliminary site development plans for the proposed perimeter security along Jefferson Drive, and express support for the elimination of the existing elevator penthouse at the East Range of the Castle and restoration of the historic roofline. In particular, the perimeter security has been significantly improved since the previous review, and staff recommends the Commission commend the applicant for reevaluating the perimeter security approach and developing a more creative and successful solution.

Analysis

Perimeter Security Overview

At the March 2022 review, the Commission requested the applicant evaluate a holistic approach to perimeter security that considered the entire length of Jefferson Drive in front of the Castle, Freer Gallery, and AIB that: minimized long stretches of bollards; minimized the number of locations where bollards cross sidewalks; minimized alterations in grade adjacent to the National Historic Landmarks; and considered using the existing building yards where possible. The Commission also requested additional plans and renderings of any new designs, information on any future perimeter security in front of the Freer Gallery on Jefferson Drive, and further coordination with NPS. Perimeter security along Independence Avenue is no longer part of the current project. It will be developed in the future. Staff notes this deferral will allow for additional time to coordinate potential solutions, in collaboration with District Department of Transportation.

A continuous perimeter security line along Jefferson Drive is no longer proposed. Instead, protective elements are limited to building entrances and locations where visitors queue to enter the Castle, Freer Gallery and AIB. While the design approach includes all three buildings, only the Castle perimeter security is proposed for approval at this time.
Overall, staff finds the revised perimeter security design has been significantly improved and is responsive to previous comments. In particular, we note the following enhancements since the last review:

1. The perimeter security approach is comprehensive and includes the entire length of Jefferson Drive from the Freer Gallery to AIB.
2. The security approach is focused on just a few key areas instead of the entire frontage.
3. Long lines of uninterrupted bollards have been eliminated.
4. Bollards at the curb have been eliminated.
5. Much of the perimeter security is located behind the sidewalk and within planted areas.
6. The level grade in front of the Castle has been retained.
7. The proposed materials and forms are consistent and compatible with the design and character of the Castle, Freer Gallery, and AIB.
8. Multi-functional elements, like benches, have been integrated into the design.

As such, staff recommends the Commission find the revised perimeter security design reduces the use of bollards as compared to the previous proposal and utilizes landscape features and street furniture in a way that is much more sensitive to the setting and character of the Castle, AIB and Freer Gallery. The project plans also provide specific information regarding each section of the streetscape, with accompanying renderings. Alternatives for several locations were also explored.

Perimeter Security Design Approach

The applicant has relied on historic design elements from the Castle, AIB, and the Freer Gallery to inform the materials and forms of the new perimeter security features. These include existing materials such as the Seneca stone of the Castle, the patterned brick of AIB, and the lighter stone of the Freer Gallery. Examples of building trim and ornamental metals used for low fencing and railings have also been considered. Details from the site, from the architecture, and from Smithsonian Gardens (SG) Horticultural Artifacts Collection inspire and inform proposed perimeter security features.

The proposed perimeter security elements have been designed to minimize adverse impacts on the character of the National Mall and of the historic architecture along Jefferson Drive while also meeting SI’s security needs. The proposed elements have been placed to primary protecting entries and queuing areas. The security features are primarily located along the southern edge of the Jefferson Drive sidewalk, and include a series of low walls, hardened ornamental metal grilles, site furnishings, and metal bollards, all sited to maximize the stand-off distance, to provide transparency of views of nearby vegetation, and to minimize visual impacts on the historic buildings. Staff notes that as part of this project, perimeter security will be installed only for the section immediately in front of the Castle.
The specific perimeter security interventions include a collection of site furnishings, stone walls, strengthened seating elements, hardened ornamental metal grilles, and related objects. The materials have a unified language of color, form, and texture. Generally, security features are 30 inches to 34 inches in height, spaced no more than four feet apart. Linear security features will follow the curvature of adjacent planted areas.

According to the applicant, the design is intended to balance protection of the historic buildings with the protection of pedestrians at key entry and queuing locations. Bollards will be used in tandem with other perimeter security elements, however quantities have been reduced from the previous design. Hardened signs may also be employed in specific areas to decrease the number of bollards. Retractable bollards will be used at specific locations to permit controlled access for small utility vehicles used for maintenance. Generally, the perimeter security is placed at the back of the sidewalk that parallels the south side of Jefferson Drive, rather than at the curb. This provides the opportunity to integrate the various components of the perimeter security system more fully with the hardscape and vegetated areas of the project area.

In general, staff finds the reduced extent of security elements and the applications of context-sensitive elements is a significant improvement over the previous design. However, staff recommends additional refinement of the bench designs. Two freestanding double-sided benches are proposed on either side of the Castle portico. Staff supports the notion of security elements that can also serve visitor use, such as benches. In this instance, the bench design seems quite large and bulky. Hardened benches are also proposed further to the east and west of the portico. These are integrated into low walls along the back side of the sidewalk. The benches also appear long and monolithic, with the potential to impact views to the Castle.

The benches would benefit from further development. Therefore, staff suggests the Commission request the applicant reevaluate the proposed bench design and consider additional refinements, to include reducing the overall length and width; creating a more open base that does not appear as heavy; and/or creating multiple benches instead of one long bench.

While many of the elements have been relocated outside of the sidewalk zone, SI should continue to update the National Park Service and others regarding changes along Jefferson Drive. As such, staff suggests the Commission recommends the applicant continue to coordinate with the National Mall Streetscape Manual Interagency Working Group, as plans and details are developed regarding the streetscape along Jefferson Drive.

**East Wing Elevator Overrun**

The existing elevators and wheelchair lifts in the Castle must be upgraded to meet code and to provide vertical access based on the proposed program requirements. An elevator is required in the East Wing for code and accessibility requirements. Previously, the applicant had considered an elevator system that would require an overrun projecting above the roof, thereby altering the historic roofline. After further research, SI determined a “Machine-Room-Less” (MRL) elevator will be utilized in this location due to the historic preservation sensitivities of the Castle. No rooftop penthouse will be required. The existing elevator penthouse on the east side of the East
Wing roof will be removed and the historic roofline will be restored. Staff supports this revised design.

CONFORMANCE TO EXISTING PLANS, POLICIES AND RELATED GUIDANCE

Comprehensive Plan for the National Capital

Staff reviewed policies from the Urban Design, Historic Preservation, Parks and Open Space, and Visitors & Commemoration Elements. The analysis and recommendations described above are intended to support consistency with the Comprehensive Plan.

South Mall Campus Master Plan

The major project components included in the RoHC are generally identified in the South Mall Campus Master Plan. Staff notes the current project does not include improvements to the Quadrangle Building (located underneath the Haupt Garden), new entry pavilions or the removal and replacement of the Haupt Garden. SI has indicated in correspondence that they will undertake separate planning for the revitalization of the Quadrangle Building and Haupt Garden in approximately five years, at which time the South Mall Master Plan will be updated.

National Historic Preservation Act

The Smithsonian Institution and NCPC each have independent responsibilities to comply with Section 106 of the National Historic Preservation Act (NHPA). To fulfill the Section 106 requirements for the South Mall Master Plan, a Programmatic Agreement (PA) was prepared in 2018. Both SI and NCPC are signatories to the PA.

The Smithsonian Institution has initiated the Section 106 process for this project pursuant to the PA. A number of consulting party meetings have been held to-date, most recently on September 28, 2022. The Smithsonian has engaged with the NCPC, CFA, DC SHPO, NPS, and the Advisory Council on Historic Preservation (ACHP) as required by the South Mall Master Plan Programmatic Agreement. SI also maintains a project website at https://www.sifacilities.si.edu/historic-core

Several consulting parties have questioned whether SI should conduct consultation on the interior improvements proposed as part of the larger project. NCPC, SI and the ACHP have concluded discussions regarding this question. ACHP noted the legal concept that applies is whether interior and exterior components have “independent utility” from one another. In other words, do the interior and exterior components have separate and distinct functionality, or do they only work together. NCPC and the Advisory Council concurred on a memorandum on the extent of NCPC’s limited interior Section 106 obligation. Regarding the RoHC, two areas will require further consultation regarding the relationship of the interior and exterior work, to the include the new basement doors and the blast resistant windows. These components are not a part of the current submission.
NCPC is the lead agency for compliance with the National Environmental Policy Act (NEPA). The project components of the RoHC were identified in the Environmental Impact Statement (EIS) prepared as part of the South Mall Master Plan.

CONSULTATION

Coordinating Committee

The Coordinating Committee reviewed the project at their September 14, 2022 meeting. Without objection, the Committee forwarded the preliminary site and building plans to the Commission with the statement that the proposal has been coordinated with all participating agencies, with comments. Participating agencies included the National Park Service, General Services Administration, Washington Metropolitan Area Transit Authority, the District of Columbia State Historic Preservation Officer (DC SHPO), the District of Columbia Office of Planning (DCOP), the District Department of Transportation, and the District Department of Energy and the Environment (DOEE).

The SHPO noted they are coordinated subject to completion of the Section 106 process. SHPO indicated they reviewed concepts for the two aspects of the overall RoHC project, supports the most recent elevator overrun design which restores the historic roof condition, and believes the revised perimeter security designs are likely to result in fewer/less significant adverse effects than previous concepts. The SHPO stated they continue to have potential concerns about some unresolved aspects of the perimeter security proposal (e.g. the visibility/design of hardened benches near the main Castle entrance, the visibility of bollards in front of Freer Gallery) and other aspects of the overall RoHC scope including the new areaways, openings, and roof depth.

U.S. Commission of Fine Arts

The U.S. Commission of Fine Arts previously approved concept plans for the proposed perimeter security at their June 2021 meeting. The current design was approved at the September 15, 2022 meeting without presentation.

ONLINE REFERENCE

The following supporting documents for this project are available online at www_ncpc_gov:

- Submission Package
- Project Summary

POWERPOINT (ATTACHED)
South Mall Campus Historic Core Revitalization

1000 Jefferson Drive, SW, Washington DC

Approval of Revised Preliminary Site Development Plans

Smithsonian Institution
Site Location
At the March 3, 2022 meeting the Commission approved the preliminary site and building plans with comments for the Revitalization of the Historic Core project. The Smithsonian and the EYP-Loring design team have worked closely to review the comments issued by NCPC (shown in italics) and have addressed the comments for the Perimeter Security on Jefferson Drive and Elevator Overrun on the East Wing of the Castle in the attached updated Preliminary Design package as follows:

**PERIMETER SECURITY**

**Jefferson Drive**

Requests the applicant evaluate a holistic approach that considers the entire length of Jefferson Drive in front of the Castle and AIB that: minimizes long stretches of bollards; minimizes the number of locations where bollards cross sidewalks; minimizes alterations in grade adjacent to the National Historic Landmarks; and considers using the existing building yards where possible.

Requests the following as part of the next review:

- Additional plans and renderings of any new alternatives to understand the potential visual and functional impacts as well as limitations. Views and renderings should include both the Castle and AIB.
- Information on any future perimeter security in front of the Freer Gallery on Jefferson Drive.
- Further coordination with NPS regarding any proposed improvements along Jefferson Drive.

**ELEVATOR OVERRUN AT CASTLE**

Requests the applicant provide additional design details, including material selections, renderings, and perspectives of the elevator overrun, minimizing the height and profile where possible.

**Actions**

Since the last meeting with the Commission and Section 106 Consulting Parties the design for the perimeter security on Jefferson Drive has been revised based on a revision to the overall security requirements as established by the Smithsonian Institution Office of Protection Services (OPS). The revised requirements focus on protecting the public entrances on Jefferson Drive for the Freer Gallery, the Smithsonian Institution Building (the Castle), and the Arts and Industries Building (AIB). The revised design is illustrated in Section 3.1.1.

The revised design was shared in Consulting Parties Meeting #5 on August 24, 2022.

In response to comments received from the Commission and Consulting Parties the design for the elevator in the East Wing of the Castle has been revised. In coordination with staff at the Smithsonian Institution an alternate type of elevator was studied which requires less overrun space. While this is not the standard type of elevator used in Smithsonian facilities it was accepted in this location to minimize exterior visual impacts to the Castle. Utilizing this alternate type of elevator will result in no rooftop penthouse, as illustrated in Section 3.3.1.

The revised design was shared in Consulting Parties Meeting #5 on August 24, 2022.
Perimeter Security Overview

3.1.1 PERIMETER SECURITY

EXISTING CONDITIONS — MATERIALS AND FORMS

Historic design elements from the Smithsonian Institution Building (SI Building or Castle), the Arts and Industries Building (AIB), and the Freer Gallery of Art inform the materials and forms of the new perimeter security features. Existing materials include the Seneca stone of the Castle, the patterned brick of the AIB, and the lighter stone of the Freer Gallery, as well as various examples of building trim and ornamental metals used for low fencing, railings, and the Haupt Garden fence. In some locations, lush plantings are clearly visible behind these transparent metal features. Paving materials include brick, exposed aggregate concrete, and decorative stone at several of the building entrances. Curbs are typically a medium gray granite.

JEFFERSON DRIVE — PERIMETER SECURITY

Proposed perimeter barriers are designed to minimize adverse impacts on the character of the National Mall and of the historic architecture along Jefferson Drive while also meeting the 2021 Interagency Security Committee Risk Management Process requirements. These elements, sited to protect selected building entries and queuing areas, are incorporated into the streetscape as a strategic sequence of landscape architectural interventions occurring at context-sensitive transition zones. The design of the proposed perimeter security is informed by the National Capital Planning Commission’s Urban Design Element of the Comprehensive Plan for the National Capital (2016), among other resources. Located primarily along the southern edge of the Jefferson Drive sidewalk, proposed anti-ram barriers comprise a hierarchical arrangement of stone and ornamental metal elements including low walls, hardened metal grilles, site furnishings, and metal bollards. These are sited to maximize the stand-off distance, to provide transparency of views, and to minimize visual intrusions upon the historic buildings.

Figure 3.1.1a - Site plan. Perimeter security diagram.
Perimeter Security Inspiration

**HISTORIC ARCHITECTURAL DETAILS**

Details from the site, from the architecture, and from Smithsonian Gardens (SG) Horticultural Artifacts Collection inspire and inform proposed perimeter security features. Pictured are existing fences at the Enid A. Haupt Garden and the Kathrine Dulin Folger Rose Garden, a cast stone lighting base and stone arched entryway at the AIB, a settee and arbor from the SG Collection, grille work at a window of the Freer Gallery of Art, and paving details. Proposed perimeter security elements strive to be compatible with the existing and historic features of the Castle, the AIB, and the Freer Gallery. These features will be designed such that, if SI chooses to expand perimeter security to locations adjacent to the RoHC project area, a compatible system can be developed using many of the proposed elements. Proposed pedestrian gates at the Ripley Garden’s Jefferson Drive entrance will be inspired by the fences and site furnishings. The pedestrian gates will be furthered during a future project.
Hardened Objects

HARDBENED OBJECTS

Perimeter security objects include anti-ram bollards and hardened ornamental urn bases (Figure 3.1.1.k). Fixed bollards will be simple, metal bollards with articulated rounded tops. Retractable bollards meeting the security design criteria are required in areas where vehicular access will be needed. Both fixed and retractable bollards will be of similar color and finish for a cohesive appearance. The design team is also studying opportunities for decorative textures on the bollards at selected building locations. In two locations flanking the Castle’s north tower, stone pedestals with hardened cores will be used for perimeter security. Inspired by an urn on display to the west of the North Tower, these may be used for the exhibition of objects from the Smithsonian Horticultural Artifacts Collection. Fixed bollards and the urn base will be filled with 4,000 pound-force per square inch (psi) normal weight concrete.

Figure 3.1.1.k - Perimeter security objects...
HARDCENED STONE WALLS

Hardened stone walls will serve as a unifying component of the perimeter security strategy. The walls will range from 12 inches to 34 inches in height. The walls will support hardened grilles and seating elements, accessible ramp edges, and signage as described later in this report. The detailing of the granite walls is informed by bush-hammered stone features at the Castle. Thermal finishing is also being studied. Selection of granite alternatives, terminal wall endings, and finishing will be determined during Design Development.
HARDCENERED STONE WALLS WITH HARDCENERED GRLILES

In some locations, such as at the Freer Gallery, a 12-inch tall stone wall will be employed as perimeter security. It will consist of granite finished to match that of the taller stone wall. Metal bollards will be incorporated into the low stone wall, with a clear space between them of no greater than four feet. Ornamental metal panels will be erected between the bollards. The panels reflect the design of the fences that enclose the Haupt Garden, with metal pickets and geometric accents. In the section west of the Castle, the accents are proposed to be diamonds to reflect detailing found at the Freer Gallery. The details and materials of the walls and grilles will be furthered during the Design Development phase of the project.

Figure 3.1.1.m - Hardened grille on low stone wall.
HARDENED SEATING ELEMENTS

Strengthened seating elements will comprise metal benches attached to the hardened stone walls. These elements will be used at strategic locations along the Castle's frontage in relation to the east and west ranges looking out to the National Mall. The benches may be off-the-shelf or custom elements. A double-sided bench is anticipated at the porte-cochère entrance to the Castle. Single-sided bench units are suggested along planted areas. Detailing of the benches will be undertaken during the Design Development phase of the project.

Figure 3.1.1n - Hardened promenade bench on hardened wall.
HAR DENED SEATING ELEMENTS

Flanking both sides of the Castle’s porte-cochère, alternative bench designs are being studied. The alternatives consist of a low (12-inch-tall) stone wall with metal bollards spaced to meet the security design criteria. Attached to the bollards and wrapping over top of them, a metal filigree bench will extend the full length of the low stone wall, providing opportunities for seating at these locations. The benches are designed to be double-sided, providing views of both the Mall and the Castle. The design of the metal bench will provide greater transparency in this critical area and will integrate perimeter security with other site furnishings. Single-sided version of this bench is also being considered for other strategic locations along the Castle’s frontage.

Figure 3.1.1.a - Metal filigree bench on low stone wall.
Hardened Benches

**FILIGREE BENCH**

The filigree bench concepts incorporate bollards into the design. The armrests of the bench are associated with the locations of the bollards and would be spaced just over four feet apart (the bollards are four-feet clear from edge to edge). Alternative bench designs, such as the concepts pictured here, will be studied further during the Design Development phase of the project.
JEFFERSON DRIVE – FREER GALLERY, THE CASTLE, THE AIB

Along Jefferson Drive, a unified system of perimeter security interventions will protect select building entrances and queuing areas, establishing site-specific setbacks from the buildings while creating a cohesive, orderly, and integrated experience. Bollards will be used in tandem with other perimeter security elements. Hardened signs may also be employed in specific areas to decrease the number of bollards. Retractable bollards will be used strategically to permit controlled access for small utility vehicles used for maintenance. Except where space prohibits, the perimeter security interventions will be placed at the back of the sidewalk that parallels the south side of Jefferson Drive, rather than at the curb. This provides the opportunity to integrate the various components of the perimeter security system more fully with the landscape and vegetated areas of the project area. Alternative layouts for perimeter security along Jefferson Drive in front of the Freer Gallery, the Castle, and the AIB were studied and are provided for reference at the end of this section. Detailed plans for the perimeter security interventions are presented in this report from west to east.
JEFFERSON DRIVE – FREER GALLERY

Because of the generous setback from Jefferson Drive to the Freer Gallery of Art, there is ample space to provide a satisfactory set back of perimeter security elements. The geometries and materials palette of the existing forecourt and planted circle shall be retained. A sequence of retractable bollards will be installed on an existing east-west paving band that is aligned to the center of the planted circle in the forecourt. Through the employment of retractable bollards, the forecourt will continue to be used for programmed activities while allowing for controlled vehicular access. The planted circle will be retained, as will its existing curb on the north side; on the south side of the circle, a low stone wall with hardened grille will serve as perimeter security.

Figure 3.1.1.2 - Proposed Jefferson Drive perimeter security enlargement, Freer Gallery.
Rendering in front of the Freer Gallery

Figure 3.1.1aa - Rendered view of proposed perimeter security interventions at the Freer Gallery, looking southwest.
Castle Center and Porte-Cochere

THE CASTLE

The minor redesign of the landscape that embraces the Castle's North Tower responds to the design of the proposed seismic protection features and the symmetry of the building in this location. As such, the perimeter security elements associated with the Castle are also symmetrical on either side of the North Tower (Figures 3.1.1ab, 3.1.1ac, 3.1.1ad, and 3.1.1ae).

Extending along the transition from the Jefferson Drive sidewalk to the Smithsonian's planted area to the north of the Castle, the perimeter security interventions will be integrated into the landscape. A low stone wall with hardened grille will mark the transition from hardscape to vegetated areas, with plantings located to the south of the wall. A hardened seating element will be installed. At the sidewalk along Jefferson Drive, a hardened pedestal in a planted circle will be installed. This is approximately the location of an existing planted circle that is used for the display of an urn from the Smithsonian Gardens Horticultural Artifacts Collection. The hardened pedestal will function as a fixed bollard, with an urn placed atop it. Retractable bollards will also be installed in this area to provide controlled access for routine maintenance vehicles.

At the porte-cochère where standoff distance is minimal (roughly four feet from the porte-cochère columns to the Jefferson Drive curb) a combination of bollards and hardened seating elements will be used. Retractable bollards in the sidewalk will permit controlled vehicular access for maintenance vehicles. Fixed bollards will be installed to provide anti-ram protection of the porte-cochère columns, which will provide an additional measure of perimeter security. Flanking the east and west sides of the porte-cochère, freestanding walls with integrated hardened seating elements will be installed. Replacing existing freestanding signs, hardened stone museum signs will be installed.

Figure 3.1.1ab - Proposed Jefferson Drive perimeter security enlargement: Castle.
Castle Center Rendering

Figure 3.3.1.ae - Rendered view of proposed perimeter security interventions at the Castle, looking east.
Castle Center Elevation

Figure 3.1.1.4c: Proposed Jefferson Drive SW perimeter security elevation: Castle

Figure 3.1.1.ad: Proposed Jefferson Drive perimeter security elevation: Castle (enlargement).
ARTS AND INDUSTRIES BUILDING

Perimeter security elements for the AIB are concentrated at the North Tower entrance. An array of fixed anti-ram bollards will be installed at the base of the steps, sited to provide entrance protection while also maintaining pedestrian circulation to the stairs and points beyond. Flanking the AIB north entrance steps and accompanying the introduction of accessible entrance paths, a low stonewall with hardened grille will be installed, with plantings located to the north of it.

Figure 3.1.1 Afghan - Proposed Jefferson Drive perimeter security enlargement: Arts and Industries Building (AIB).
Figure 3.1.1: AIB Rendering - Rendered view of proposed perimeter security interventions at the AIB, looking southeast.
3.2.1 OLMCSTED LIGHT FIXTURE

As part of the perimeter security improvements, the existing pole lighting along the south side of Jefferson Drive will be replaced with Olmsted fixtures in keeping with the lighting along the National Mall. Detailed studies of existing plans, satellite imagery, and site visits were used to survey existing pole locations. Throughout the Mall, the Olmsted poles are not perfectly aligned.

In developing the proposed layout of Olmsted fixtures, several options were studied, resulting in three main alternative alignments. The preferred option employs an “aligned radial” configuration as shown in Figure 3.2.1a. This option integrates the fixtures most readily into the existing conditions and proposed improvements. Other options studied were found to create conflicts in the landscape, especially in key areas of pedestrian circulation and in places where perimeter security elements are required.
3.3.1 EAST WING ELEVATOR ROOF IMPACT

The existing elevators and wheelchair lifts in the building are older equipment in need of an upgrade to meet code and to provide vertical transportation based on the proposed programmatic uses. A larger elevator is required in the East Wing for code and accessibility requirements.

The impact to the roofscape is caused by the elevator overrun, similar to the existing. The design intent is to minimize the roof impact as much as possible.

The previous proposal placed the elevator penthouse on the west side of the east wing. This penthouse was determined through Section 106 consultation to have an adverse effect from its visibility and impacts to the east wing decorative roofscape.

Figure 3.3.1.a - Previous design, visualization of southeast roof. Existing elevator penthouse to be removed (shown in dashed red lines).

Figure 3.3.1.b - Previous design, visualization of southwest roof. New rooftop penthouse required for elevator overrun (shown in blue).

Figure 3.3.1.c - Image of east wing from Haupt Garden.

Figure 3.3.1.d - Image of southeast roof. Existing elevator penthouse to be removed (shown in dashed red lines).

Figure 3.3.1.e - Previous design, visualization of southeast roof from Haupt Garden. New rooftop penthouse required for elevator overrun.
East Wing Elevator Overrun - Eliminated

A revised design limited the elevator overrun to a small eyebrow dormer projection on the south side of the east wing roof. This minor projection would still be visible from within the Haupt Garden and from the west but had less visual impact than the previous design.

Utilizing an alternate type of elevator that requires less space above the elevator or overrun was studied with the Smithsonian facilities team. This type of elevator, referred to as a “Machine-Room-Less” (MRL) elevator, will be utilized in this location due to the historic preservation sensitivities of the Castle. No rooftop penthouse will be required. The existing elevator penthouse on the east side of the East Wing roof will be removed and the historic roofline restored.

Figure 3.3.1 - Area of visibility

Figure 3.3.1.b - Revised design, visualization of southeast roof. Existing elevator penthouse to be removed (shown in dashed red lines).

Figure 3.3.1.j - Photograph of the East Wing viewed looking northeast from the Haupt Garden. The red arrow indicates the location of the proposed elevator penthouse.

Figure 3.3.1.k - Image of the East Wing from Haupt Garden.
22 September 2022

Dear Mr. Cortez:

In its public meeting of 15 September conducted by videoconference, the Commission of Fine Arts approved, based on its prior review of the submission materials, the revised concept design proposal by the Smithsonian Institution for the renovation of and additions to properties in its historic core—the Smithsonian Institution Building (the Castle) and the Arts and Industries Building, located at 1000 and 900 Jefferson Drive, SW—and associated perimeter security elements.

The Commission members expressed appreciation for the responsiveness to their previous advice, and they look forward to reviewing additional elements and outstanding details of the project. Please coordinate the next submission with the staff which, as always, is available to assist you.

Sincerely,

Thomas E. Luebke, FAIA
Secretary

Ronald Cortez
Under Secretary for Administration
Smithsonian Institution
P.O. Box 37012
Washington, DC 20013-7012

cc: Matt Chalifoux, EYP/Loring
    Faye Harwell, Rhodeside & Harwell