



Smithsonian Institution

## Revitalization of the Historic Core (RoHC)

### Revised Concept Review Submission

U.S. Commission of Fine Arts  
17 February 2022

EYP-Loring LLC

# PROJECT OVERVIEW CFA COMMENTS

## US Commission of Fine Arts Concept Review Comments June 17, 2021

### Castle- Rooftop Mechanical Elements

- Interventions should not detract from the existing character of the buildings
- Concerns about the rooftop mechanical structures in the center part of the building - requested more detail about the design and visual impact

### Castle- East Wing 4th Floor Egress

- Strongly questioned the design of the large connecting monitor structure on the roof of the East Range
- Suggested further study to minimize the size of the connector, possibly cladding it entirely in copper
- Possible alternate to find a location within the existing building to accommodate the necessary egress

### Castle- Areaway Finish Treatment

- Requested further consideration of how the new areaway walls would be finished, both in the building yard and above the building's new foundations

### SIB- South Entrance Accessibility

- Noted that the ramps and landing on Independence Avenue would create an undesirable constrained condition in the public sidewalk - recommended refining the design to limit the impact on public space while creating a welcoming entrance
- Suggested that the composition of other elements- streetlights and trees- may help to make an appropriate frame for this entrance

### Landscape- Integration of Interventions

- Requested further study of proposed redesign around both buildings, particularly integration of egress paths, access ramps, perimeter security, and areaways

### Landscape- Fountain Garden in Haupt Garden

- Recommended further study of the design for reconstructing the fountain garden

### Cooling Towers

- Requested more information about the design
- Recommended that this environmental strategy needs to be considered more carefully in the context of the sustainable planning for the Mall



## PROJECT OVERVIEW OBJECTIVES



### Smithsonian Institution Building (SIB) – “The Castle”:

- State-of-the-art visitor services and amenities
- Restoration of exterior and rehabilitation of significant historic interiors
- Life safety and security upgrades
- Installation of energy efficient building systems

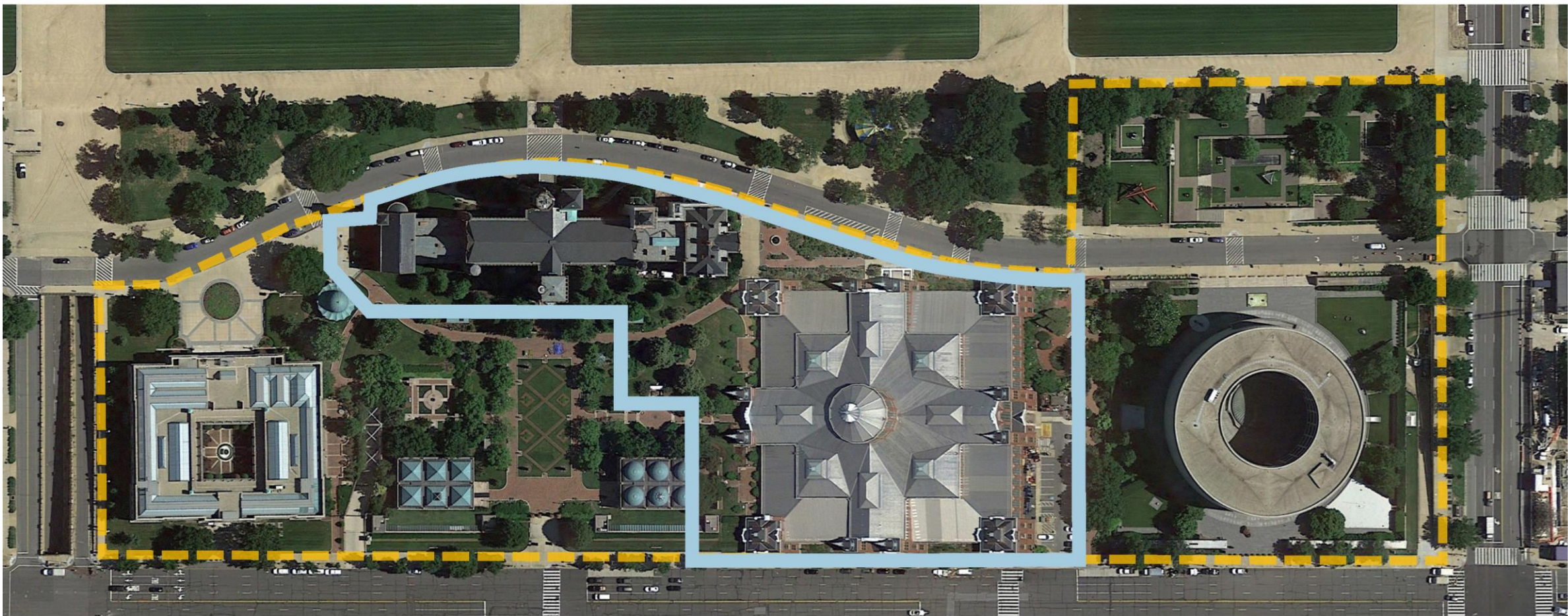
### Arts and Industries Building (AIB) :

- Reopen building to the public full-time
- Rehabilitation of significant historic interiors
- Life safety and security upgrades
- Installation of energy efficient building systems

### Central Utility Plant (CUP):

- Capacity for the entire South Mall Campus
- High efficiency and sustainable systems
- Self-sufficiency, redundancy, and resiliency
- Service and support to maximize public use of historic spaces



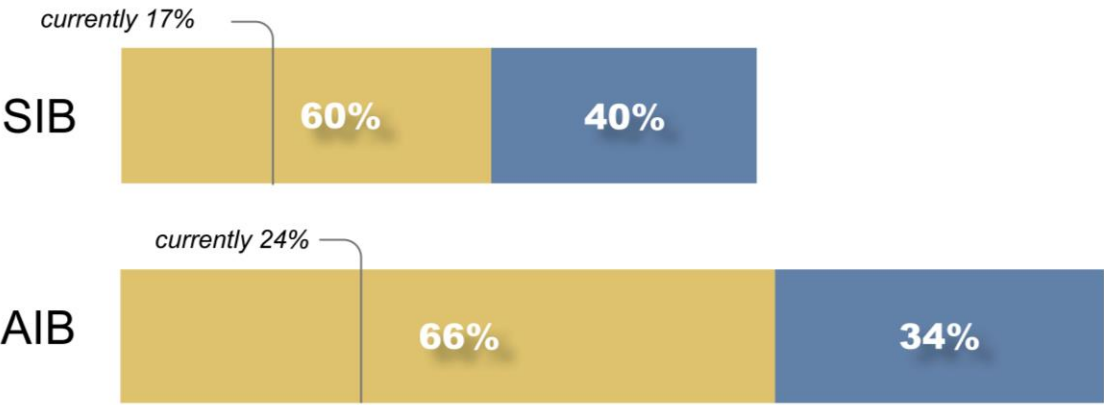


The “Historic Core” is comprised of the Smithsonian Institution Building (the “Castle”) and the Arts and Industries Building. These buildings are the two oldest in the Smithsonian portfolio located on the National Mall.

- SMITHSONIAN INSTITUTION  
HISTORIC CORE
- SOUTH MALL CAMPUS



# PROJECT OVERVIEW PROGRAM



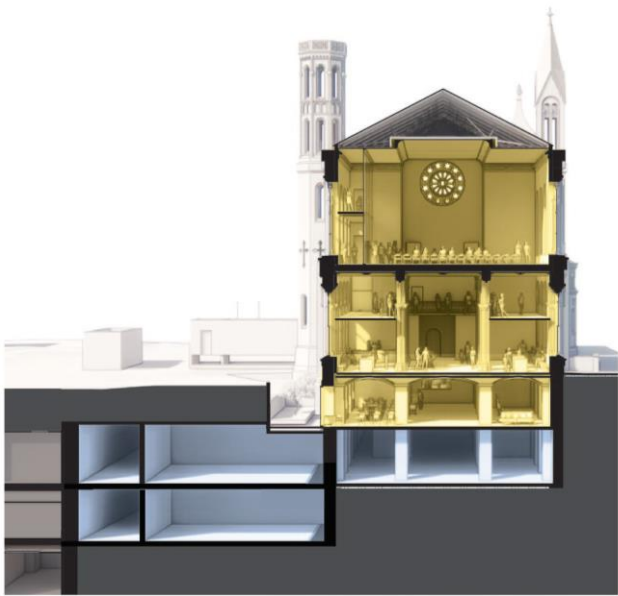
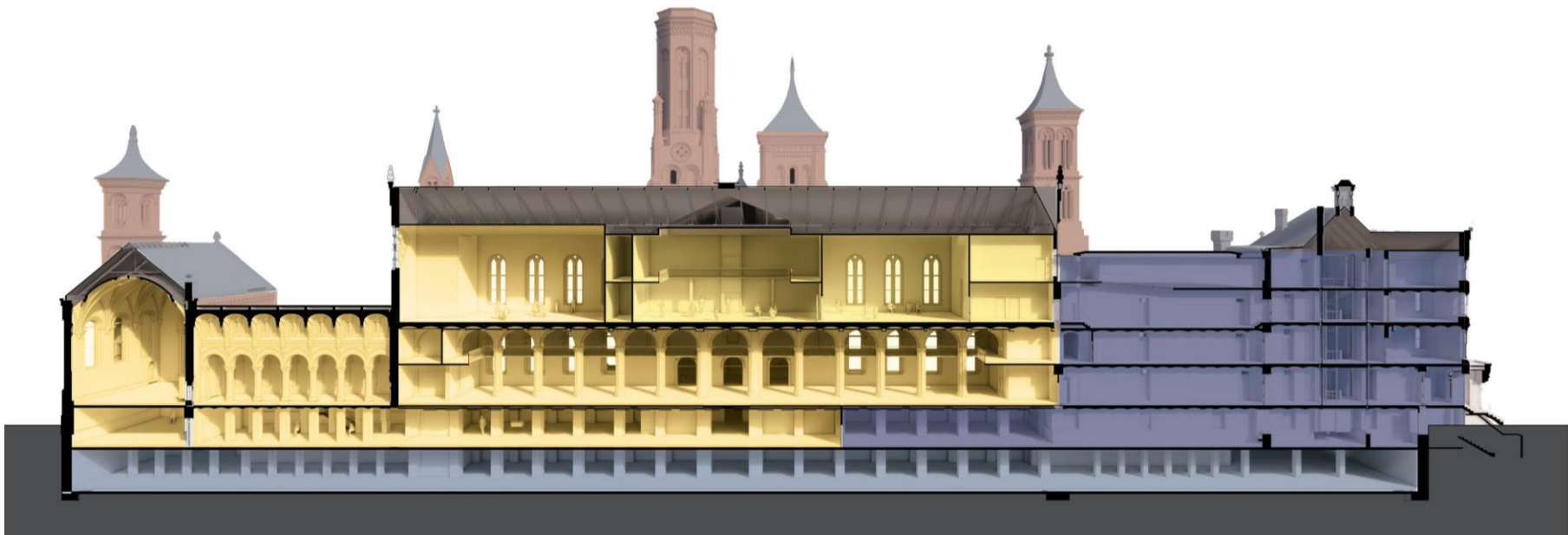
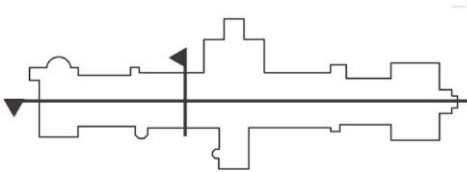
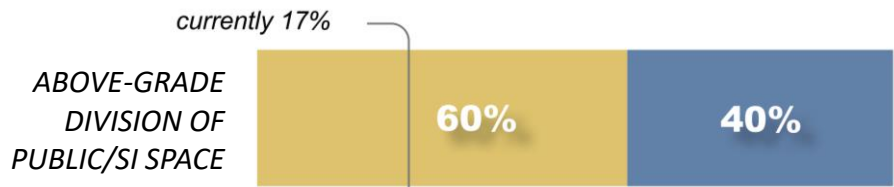
- A primary objective of the RoHC project is to utilize the buildings as much as possible for public activities.
- The new below grade construction is critical to “freeing up” space and preserving the character of the historic buildings.



# SMITHSONIAN INSTITUTION BUILDING "THE CASTLE"



# SMITHSONIAN INSTITUTION BUILDING (SIB)

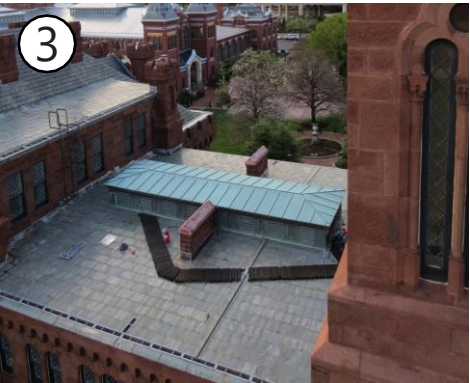
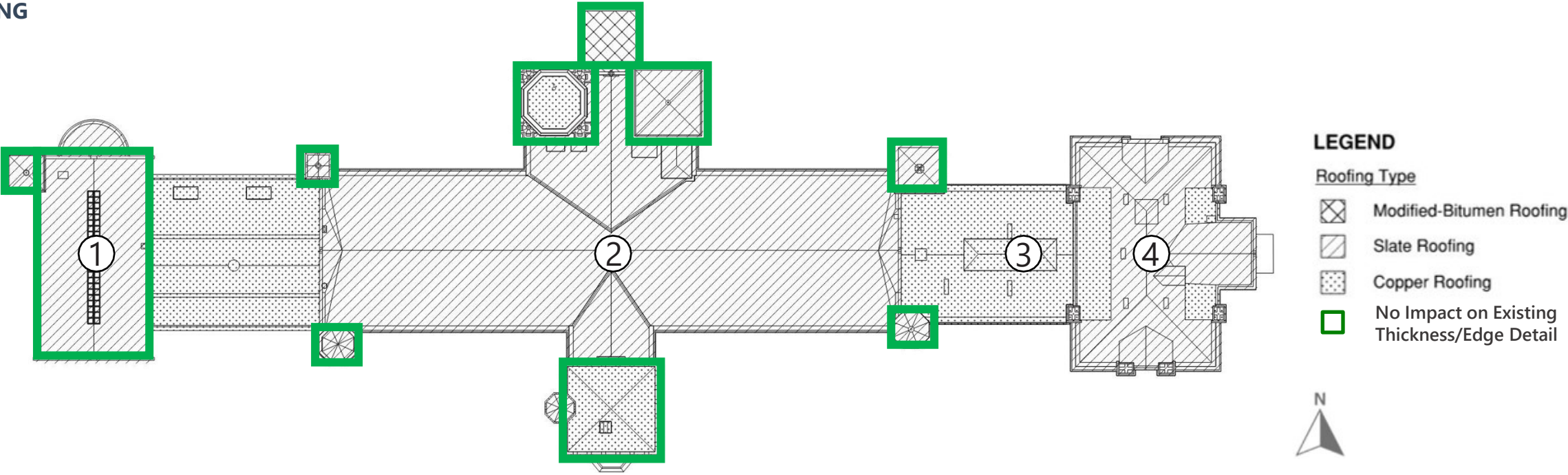


Longitudinal and transverse sections through the building illustrate the areas devoted to Public functions and Smithsonian Institution activities. The East Wing and East Range (shown in blue) have traditionally housed leadership offices for the Institution and will continue to do so.

- PUBLIC
- SI
- SUPPORT & SYSTEMS

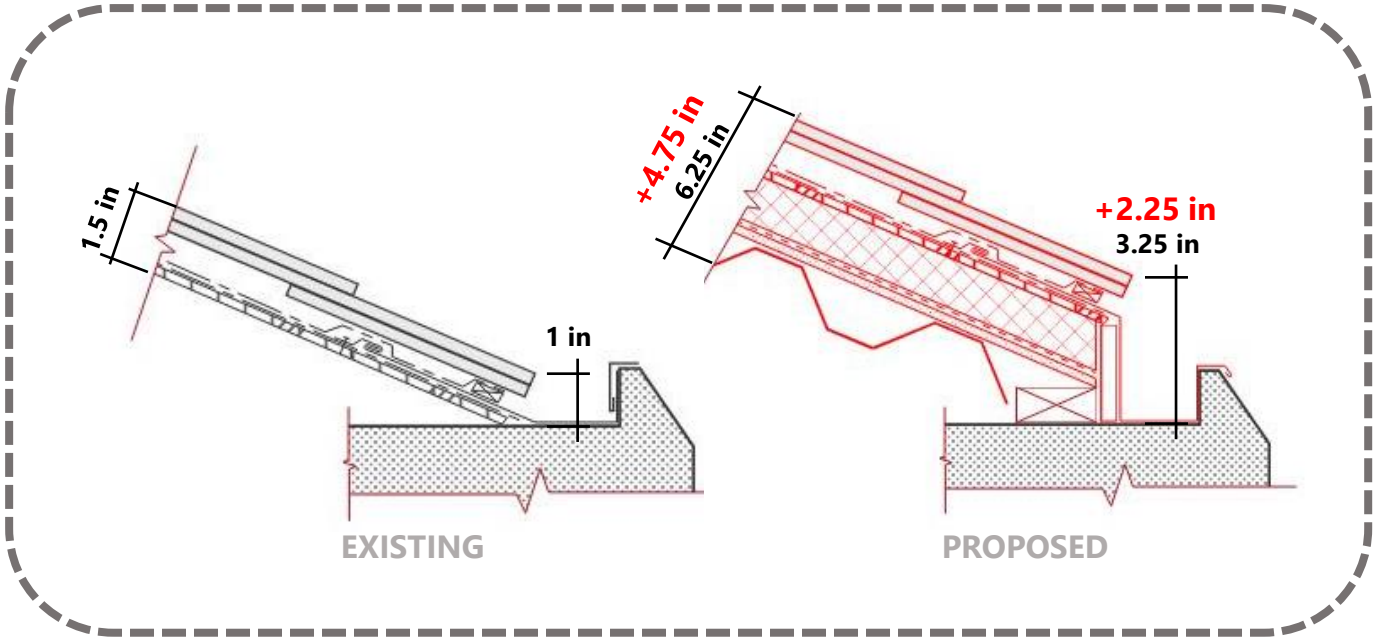
# SMITHSONIAN INSTITUTION BUILDING (SIB)

## ROOFING

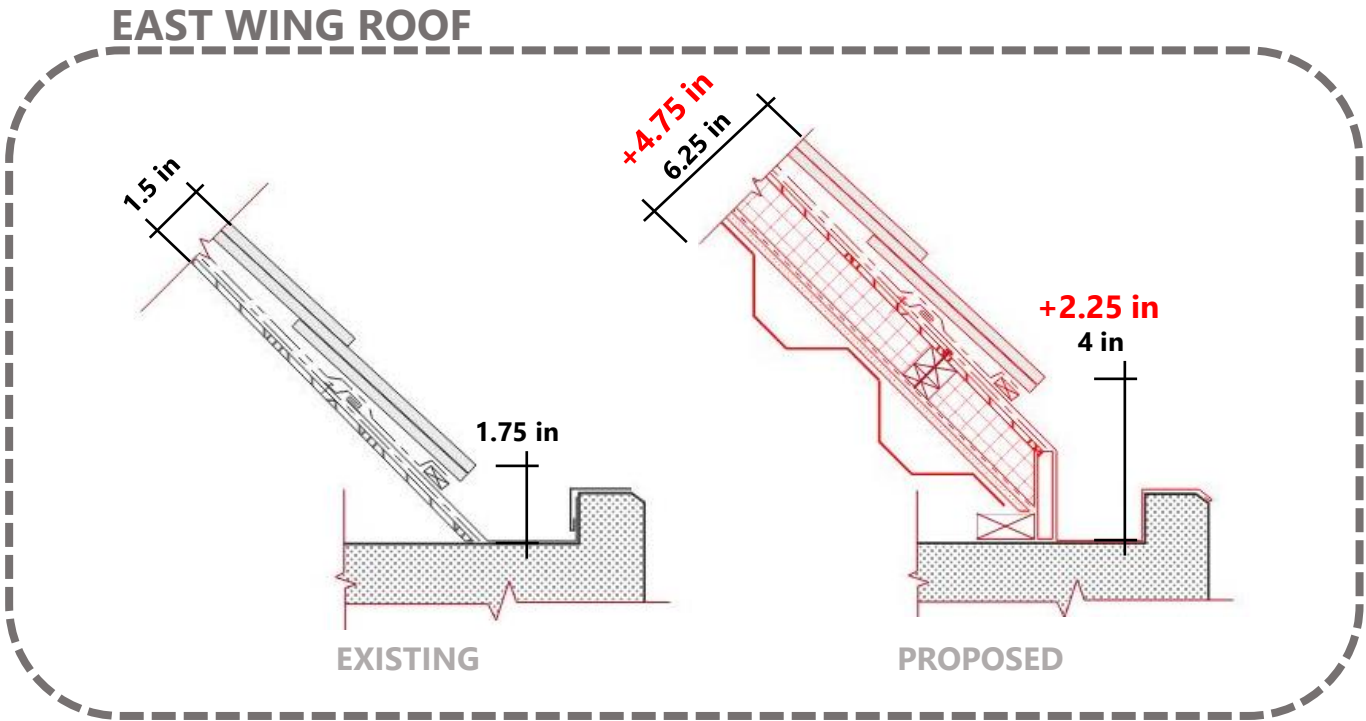


# SMITHSONIAN INSTITUTION BUILDING (SIB)

## GREAT HALL ROOF

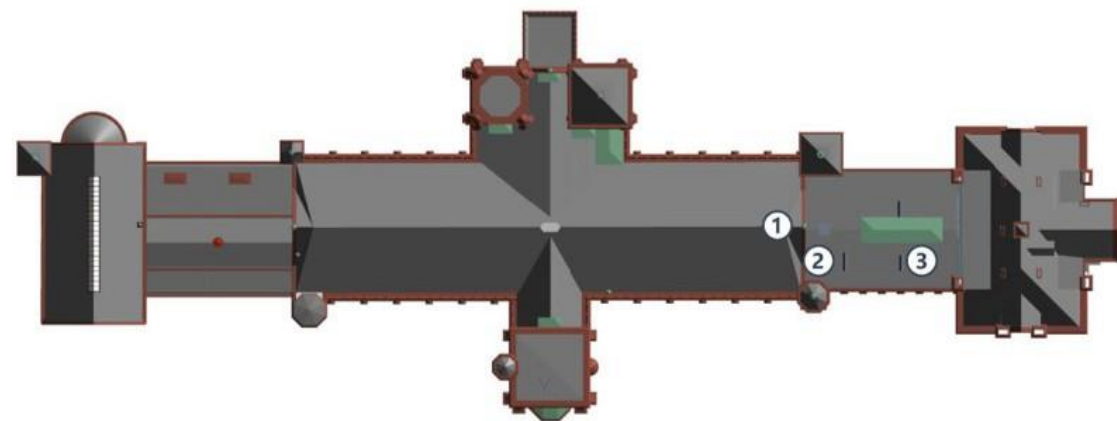


# SMITHSONIAN INSTITUTION BUILDING (SIB)



# SMITHSONIAN INSTITUTION BUILDING (SIB)

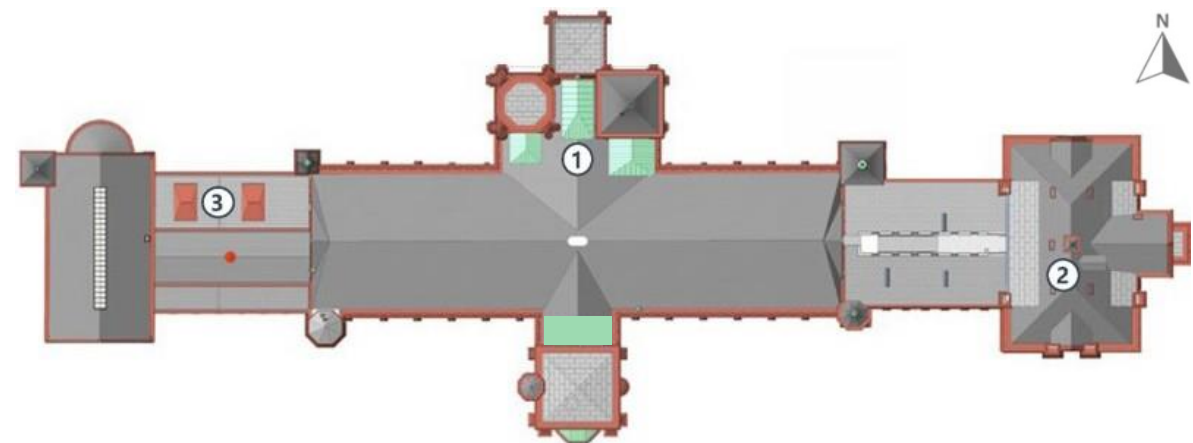
## MECHANICAL SYSTEMS - OUTSIDE AIR AND EXHAUST



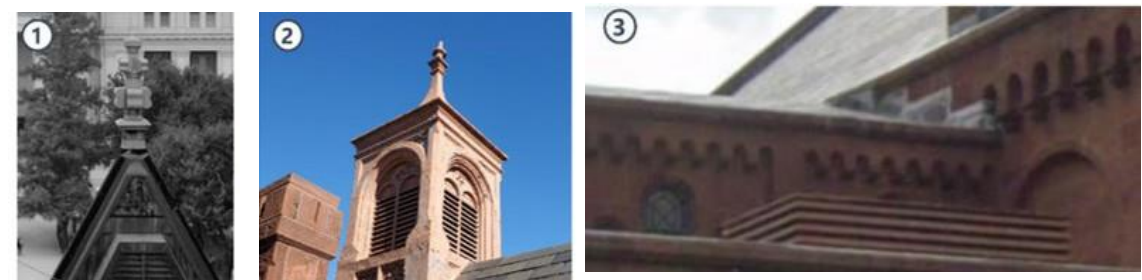
Overall roof plan, existing Conditions.



Great Hall roof louvers. East Wing roof louvers. East Range roof louvers.



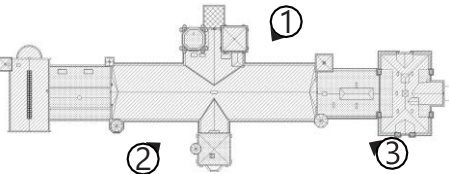
Overall roof plan, proposed outside air and exhaust.



Great Hall roof louvers. East Wing roof louvers. West Range roof louvers.

# SMITHSONIAN INSTITUTION BUILDING (SIB)

## MECHANICAL SYSTEMS



Existing copper clad elevator penthouse behind the North Tower viewed from the northeast.



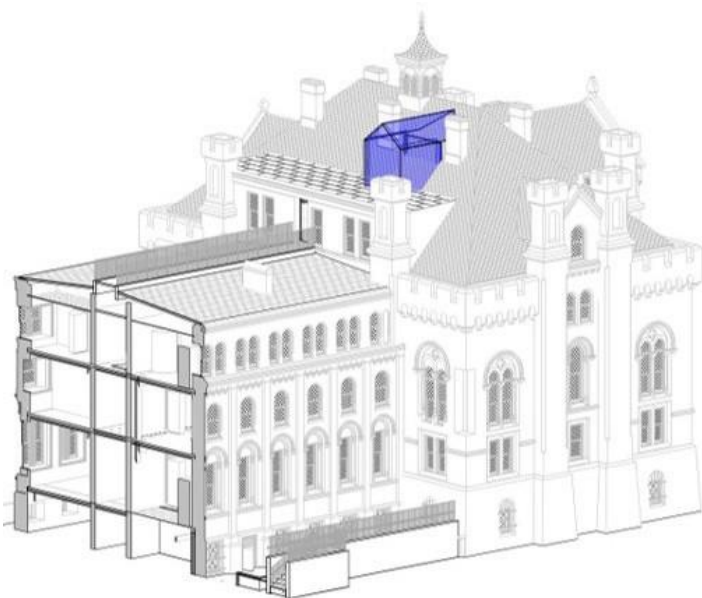
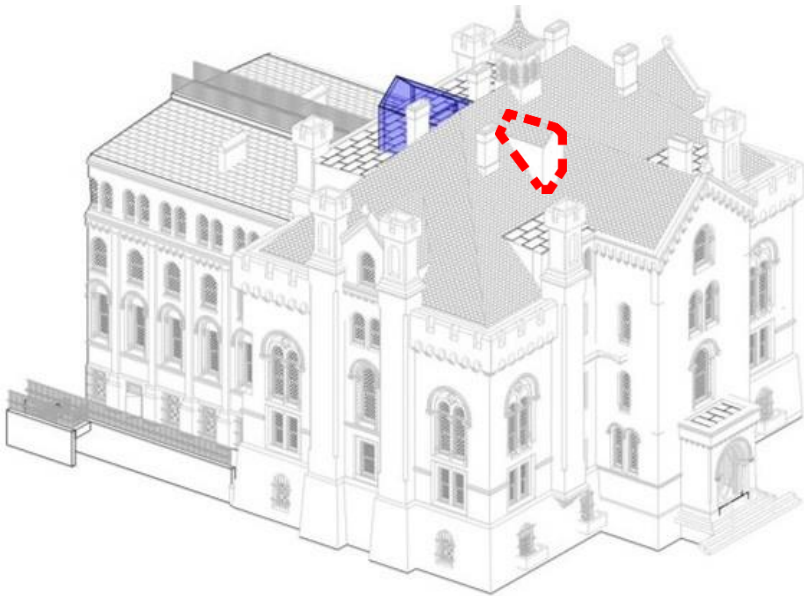
Existing louvered penthouse located behind the South Tower viewed from the southwest in the Haupt Garden.



Existing louvered penthouse located behind the South Tower viewed from the southeast in the Haupt Garden.

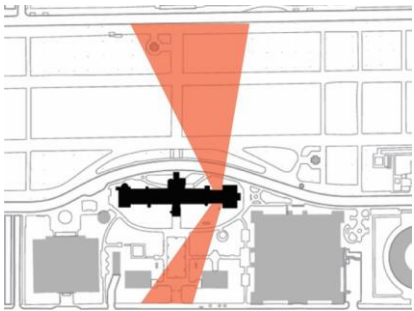
# SMITHSONIAN INSTITUTION BUILDING (SIB)

## EAST WING ELEVATOR ROOF IMPACT PREVIOUS DESIGN



Southeast roof. Existing elevator penthouse to be removed (shown in dashed red lines).

Southeast roof. New rooftop penthouse required for elevator overrun (shown in blue).



East wing from Haupt Garden.



Southeast roof. Existing elevator penthouse to be removed (shown in dashed red lines).

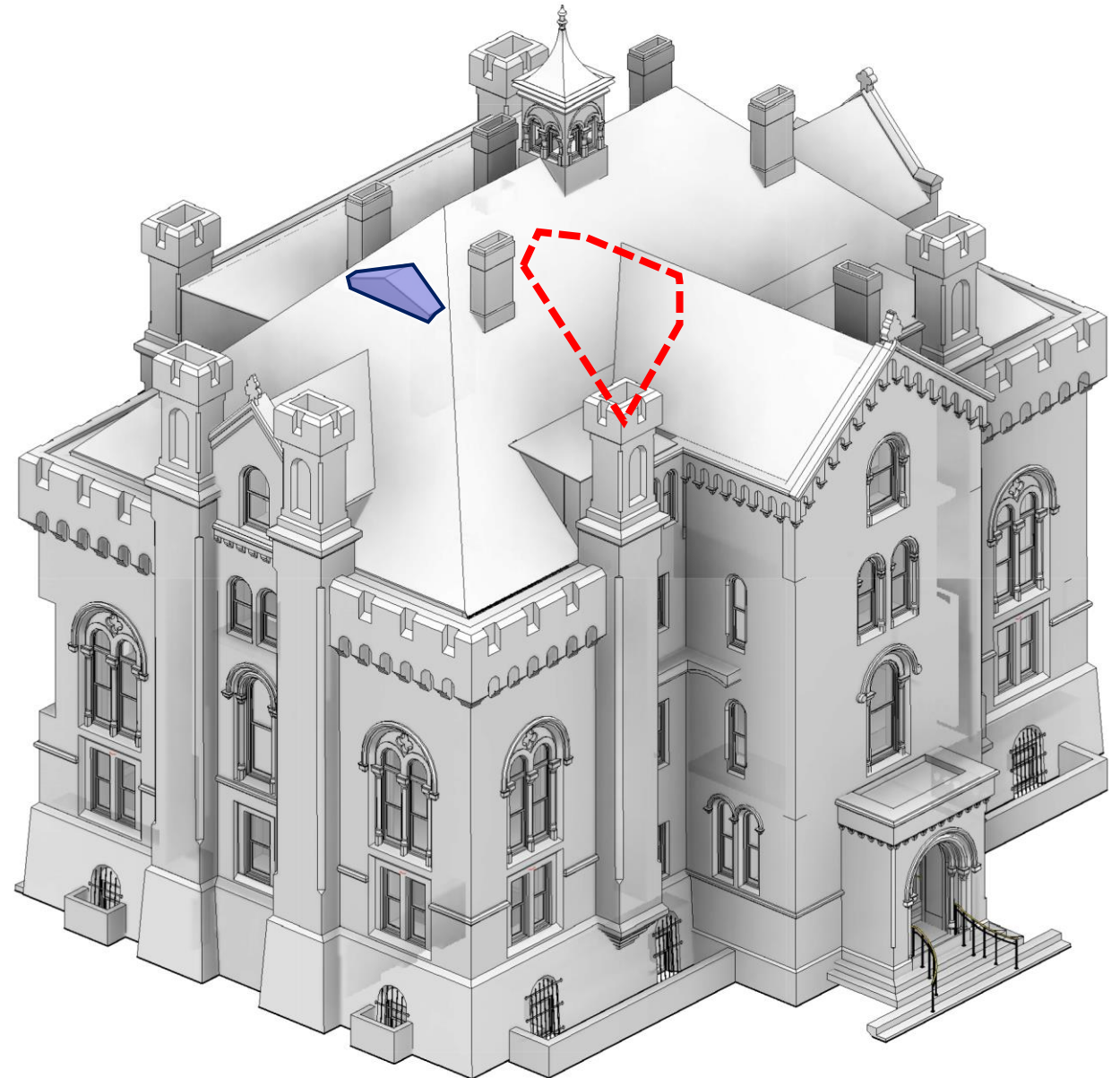


Southeast roof from Haupt Garden. New rooftop penthouse required for elevator overrun.

# SMITHSONIAN INSTITUTION BUILDING (SIB)

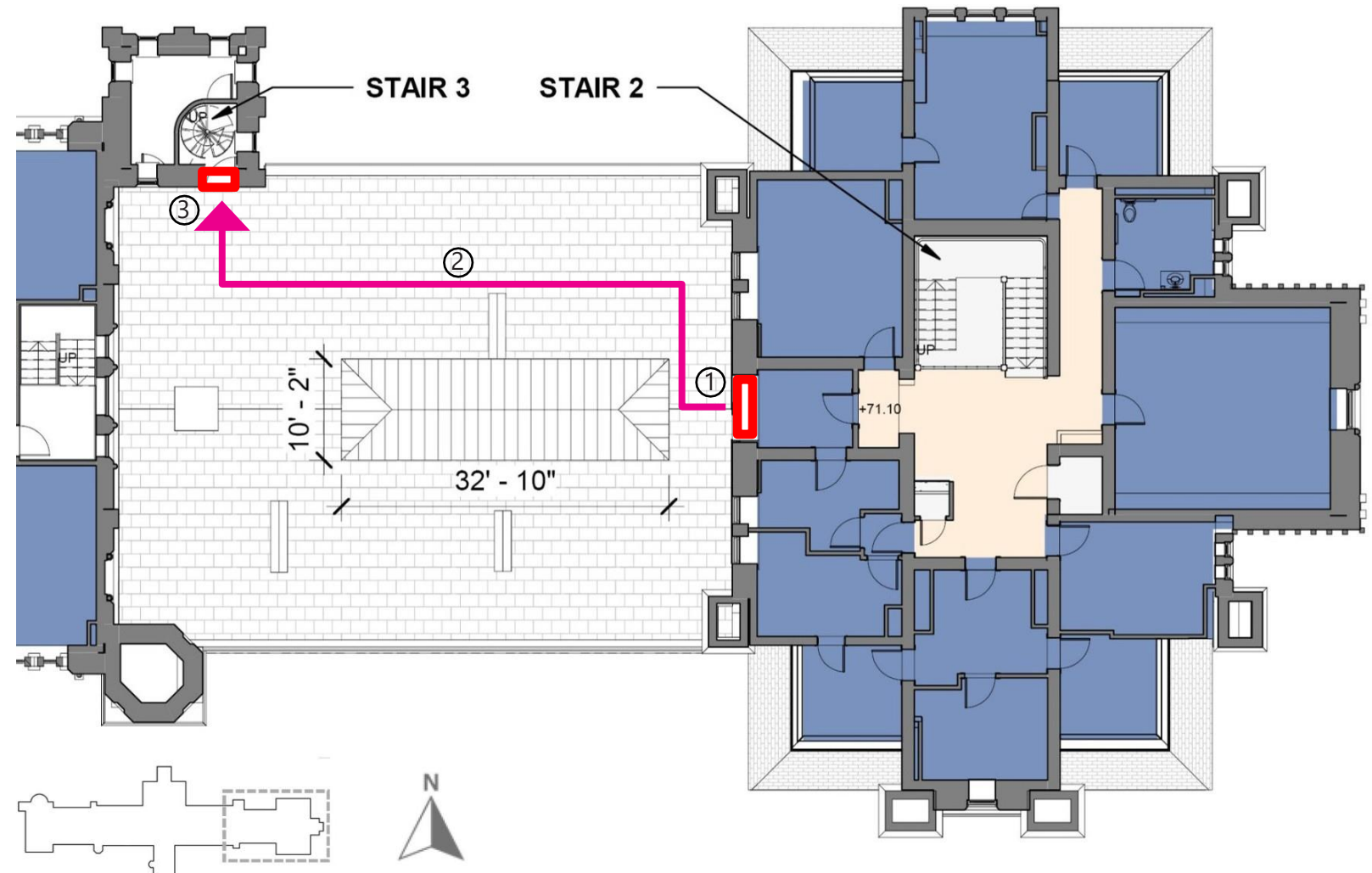
## EAST WING ELEVATOR ROOF IMPACT PROPOSED DESIGN

- Minimal penthouse apparent on the roof.
- Centered in the center of the roof to avoid impact to historic chimneys at the roof level.
- Existing elevator hoistway popup to be removed. Internal portion of hoistway can be used as utility riser.



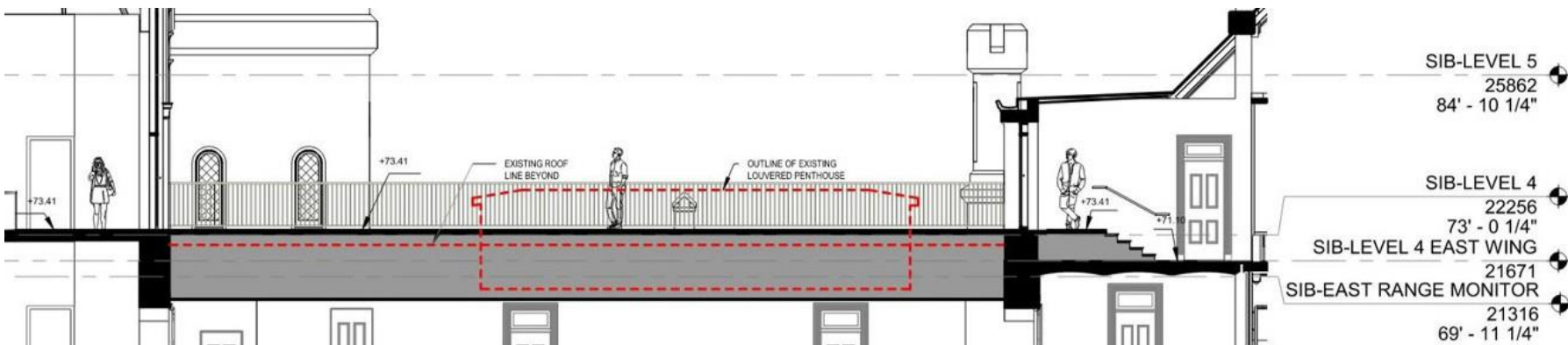
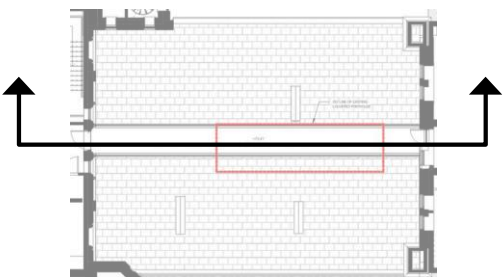
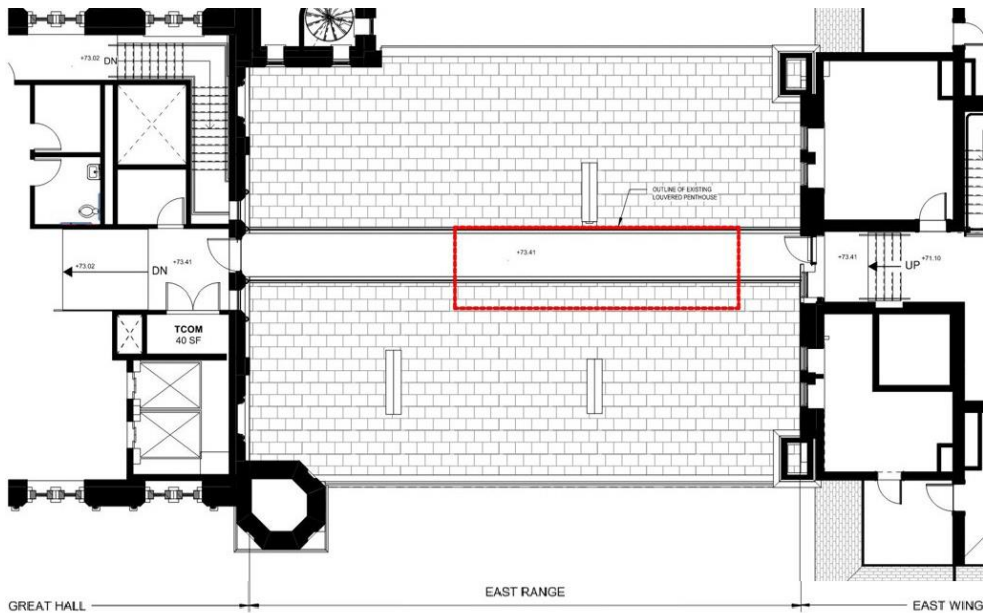
## SMITHSONIAN INSTITUTION BUILDING (SIB)

## EAST RANGE 4<sup>TH</sup> FLOOR CORRIDOR – EXISTING CONDITIONS



# SMITHSONIAN INSTITUTION BUILDING (SIB)

## EAST RANGE 4TH FLOOR CORRIDOR – PROPOSED DESIGN

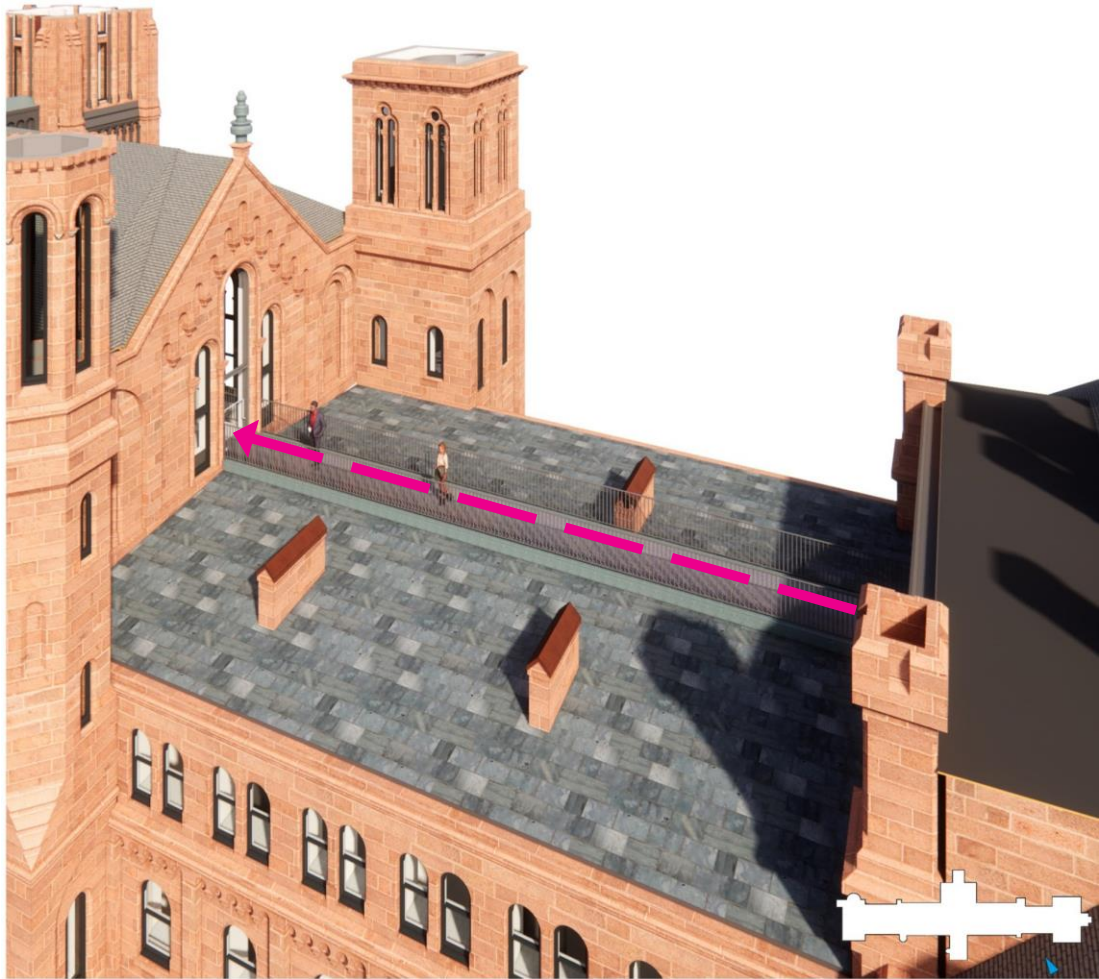


# SMITHSONIAN INSTITUTION BUILDING (SIB)

## EAST RANGE 4TH FLOOR CORRIDOR – PROPOSED DESIGN



Southeast roof, existing egress path.



Southeast roof, proposed new egress connection.

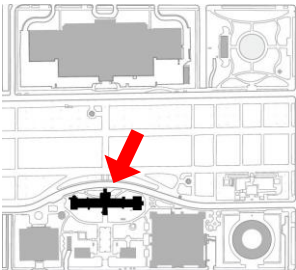
# SMITHSONIAN INSTITUTION BUILDING (SIB)

## EAST RANGE 4<sup>TH</sup> FLOOR CORRIDOR – PROPOSED DESIGN



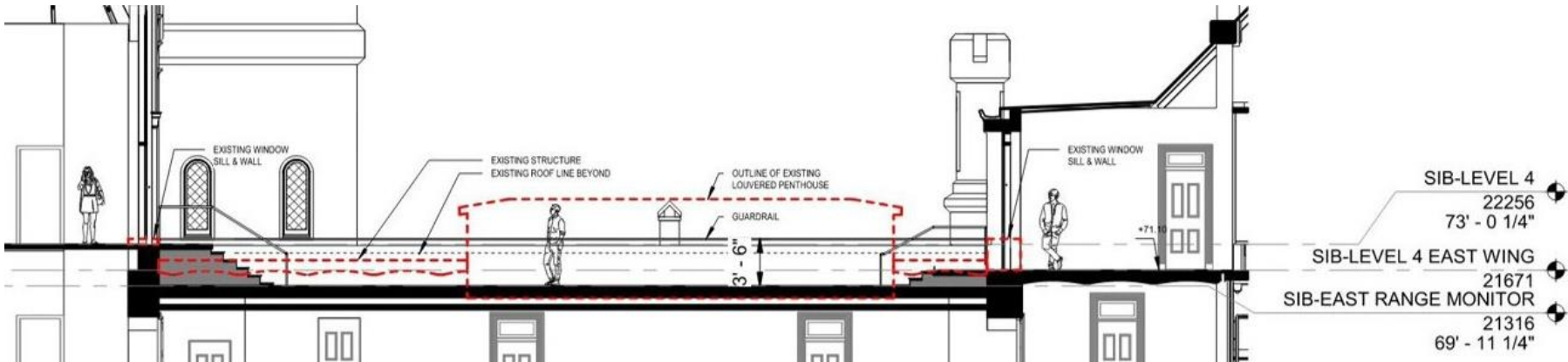
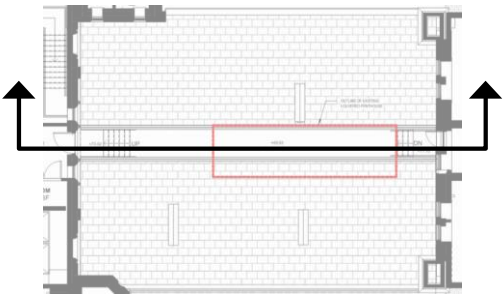
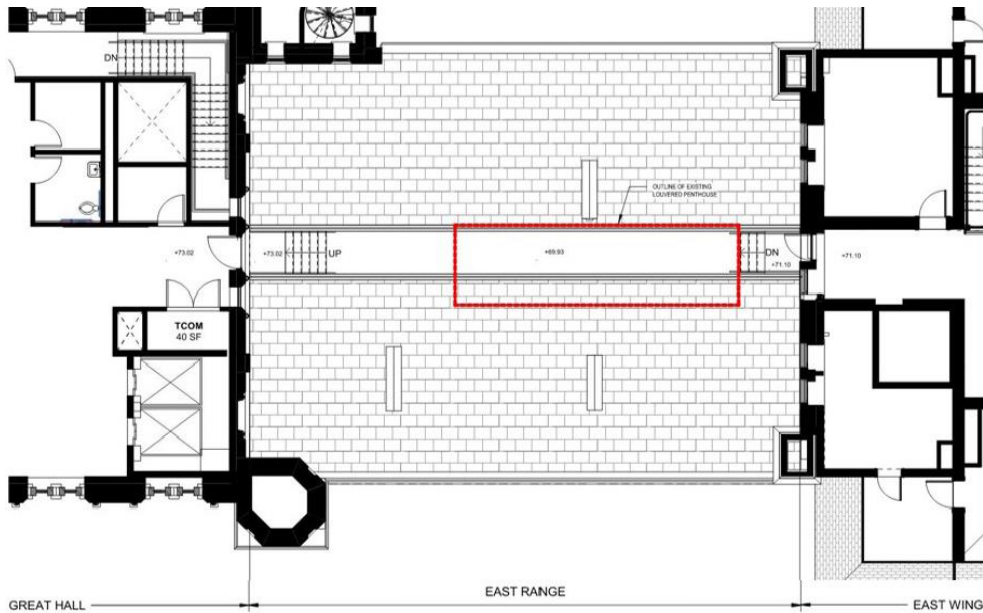
# SMITHSONIAN INSTITUTION BUILDING (SIB)

EAST RANGE 4<sup>TH</sup> FLOOR CORRIDOR –  
PROPOSED DESIGN



# SMITHSONIAN INSTITUTION BUILDING (SIB)

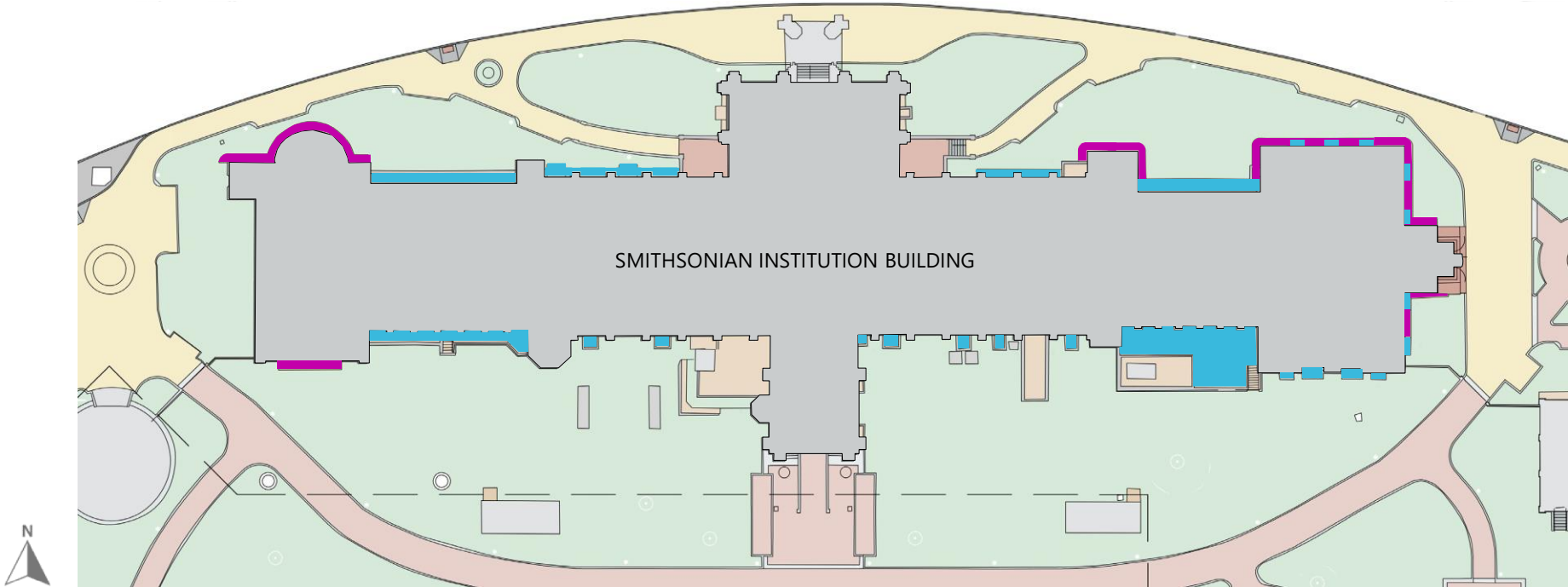
## EAST RANGE 4TH FLOOR CORRIDOR – PREVIOUS DESIGN STUDY



# SMITHSONIAN INSTITUTION BUILDING (SIB)

## AREAWAYS- EXISTING

- EXISTING AREAWAY
- EXISTING APRON



Existing Southeast areaway.



Existing Southwest areaway.



Existing window well.

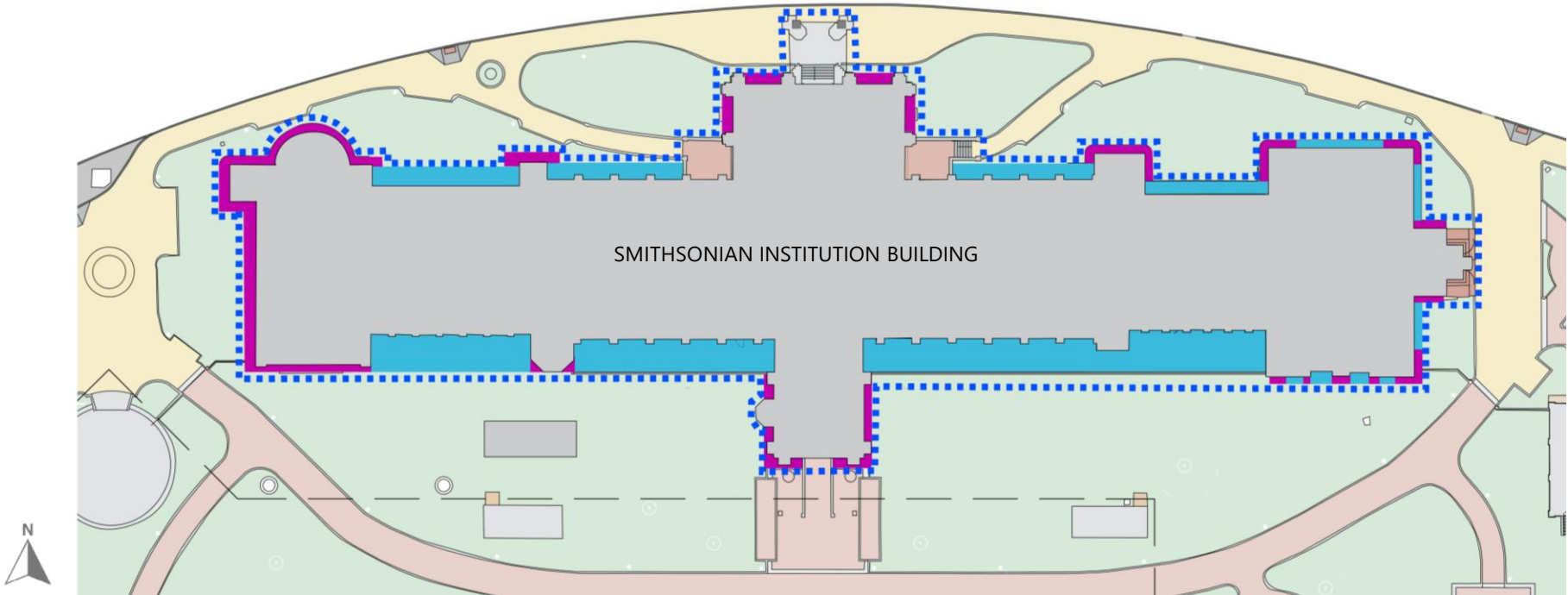


Existing exterior window well.

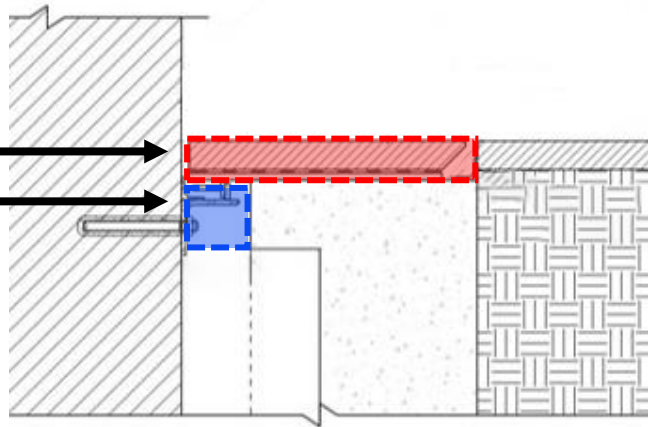
# SMITHSONIAN INSTITUTION BUILDING (SIB)

## AREAWAYS - PROPOSED

- PROPOSED AREAWAY
- PROPOSED APRON
- PROPOSED SEISMIC JOINT 6" +/-
- PROPOSED SEISMIC JOINT COVER



SEISMIC JOINT COVER  
SEISMIC JOINT



Seismic joint cover detail example.



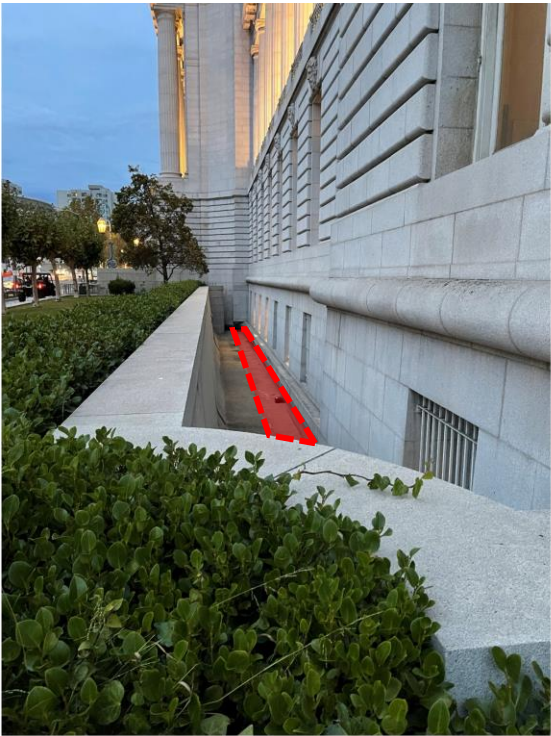
Salt Lake City County Building, seismic joint cover.



San Francisco City Hall, seismic joint cover.

# SMITHSONIAN INSTITUTION BUILDING (SIB)

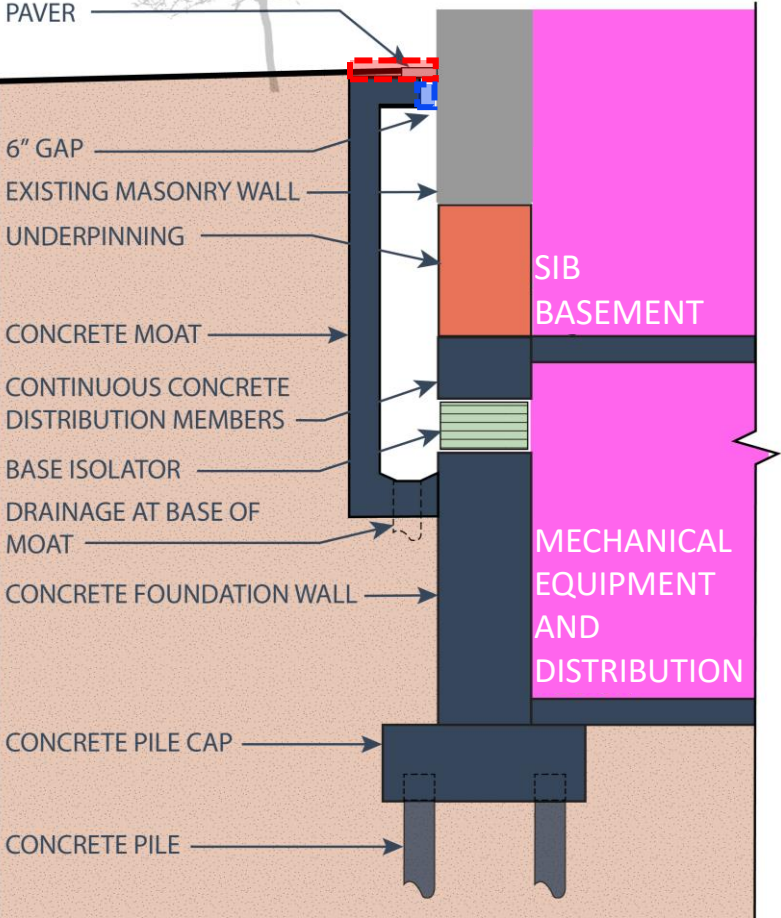
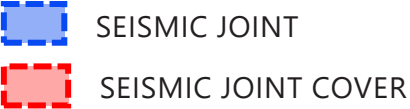
## SEISMIC BASE ISOLATION



Integrated seismic joint cover examples.

### Project Scope

- Seismic joint cover will be visible at grade, but there are a variety of options to minimize the visual impact and incorporate it into the site conditions.
- Many joint cover examples shown are for areas of the country that experience a large amount of seismic movement.
- The RoHC project will only require a 6-inch seismic joint.



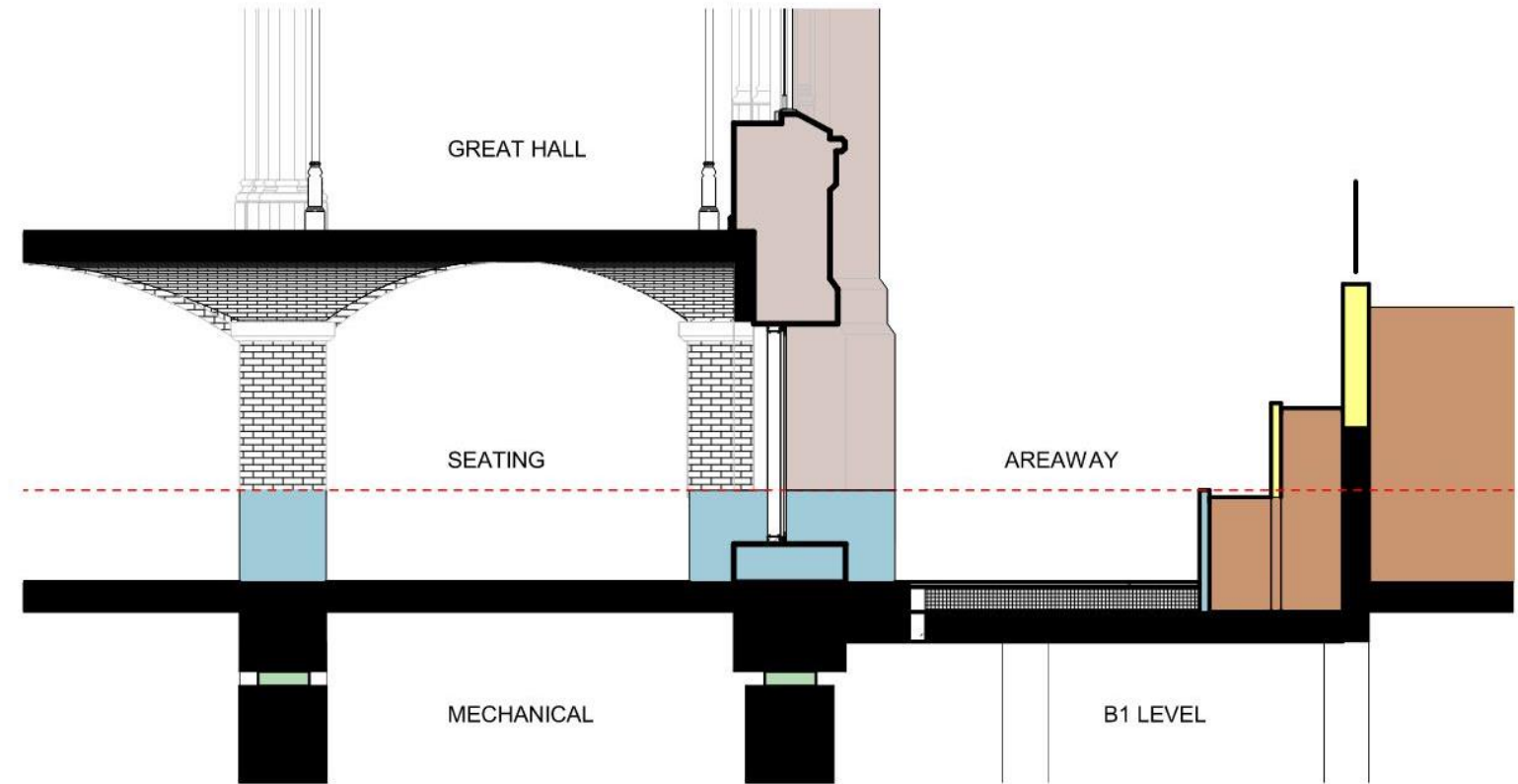
Section through foundation showing base isolation strategy.

# SMITHSONIAN INSTITUTION BUILDING (SIB)






## AREAWAYS – PROPOSED SECTIONS

### Project Scope

- The floor of the areaway is the roof of the new B1 level below grade.
- Areaway retaining wall flush or stepped.
- Railings for fall protection.
- Daylight studies will be done to show the impact of natural light in the basement.
- Seismic joint is conceptually incorporated into the areaway wall – there are a variety of ways to integrate and conceal the joint that will be studied in future phases.



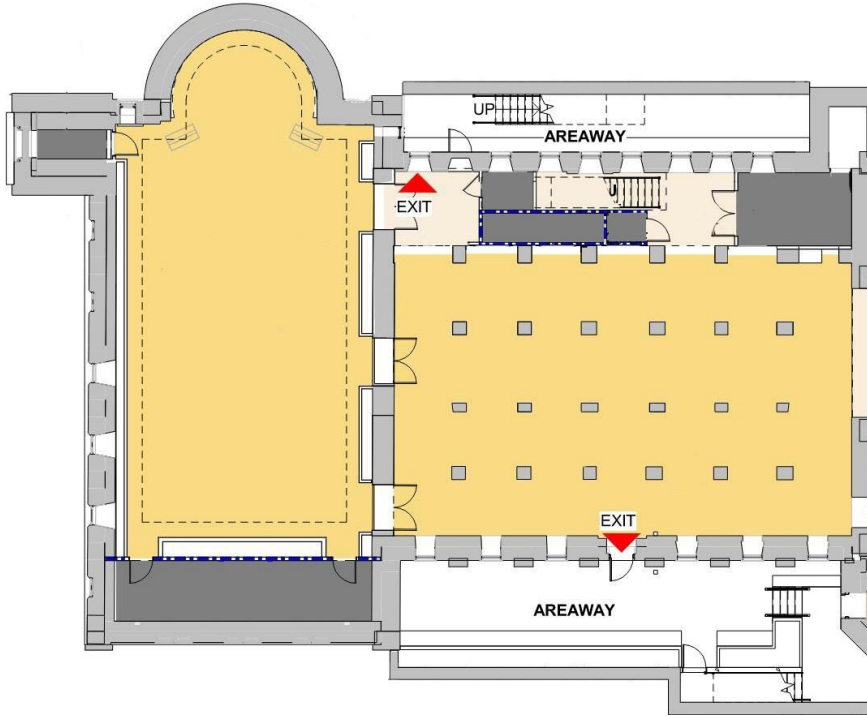
### Material Legend

 Parged Concrete (Color TBD)	 Soil / Landscaping
 Existing Seneca Sandstone	 Base Isolation
 Cast Stone	



# SMITHSONIAN INSTITUTION BUILDING (SIB)

## NEW BASEMENT EGRESS DOORS



Plan of egress doors at basement.



Existing window in south areaway.



Existing window in south areaway converted to a door.

## Project Scope

- Several egress doors will be required at the basement level of the SIB. Exact locations are still pending.
- Windows on the building have been converted to doors through past projects. We anticipate following the same strategy for any new egress doors on the SIB.
- Treatment of the exterior wall will be reviewed at the next submission.

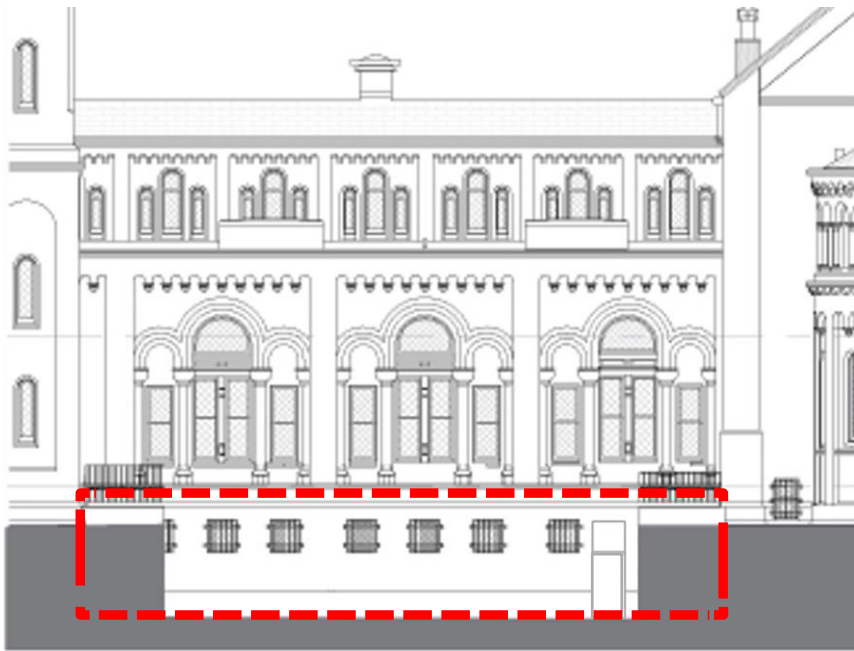


# SMITHSONIAN INSTITUTION BUILDING (SIB)

## AREAWAYS – NORTH ELEVATION AT EAST RANGE



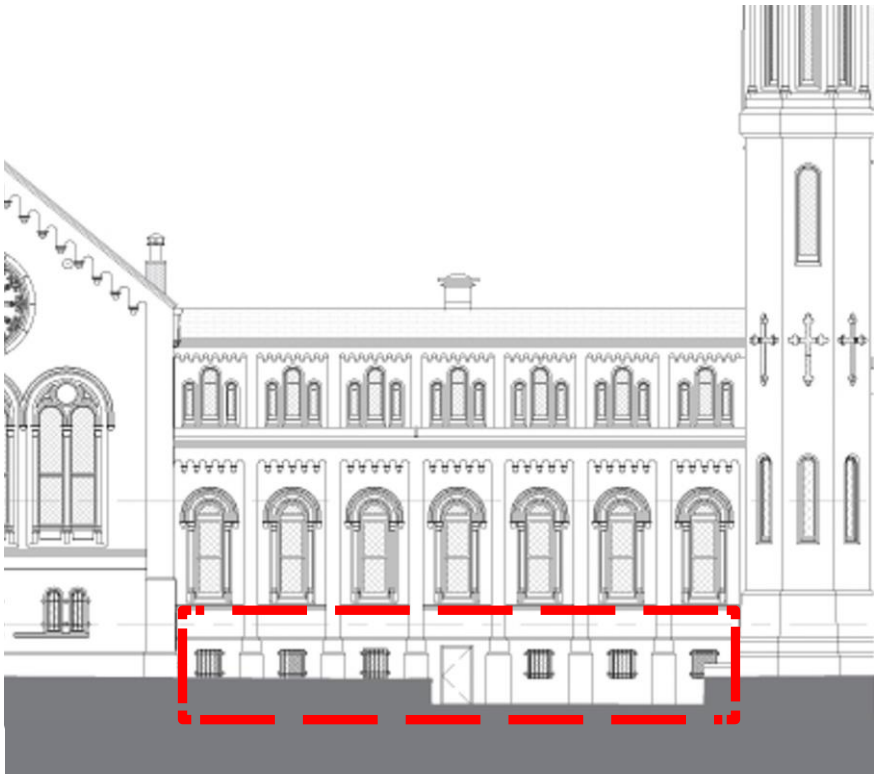
Existing windows.



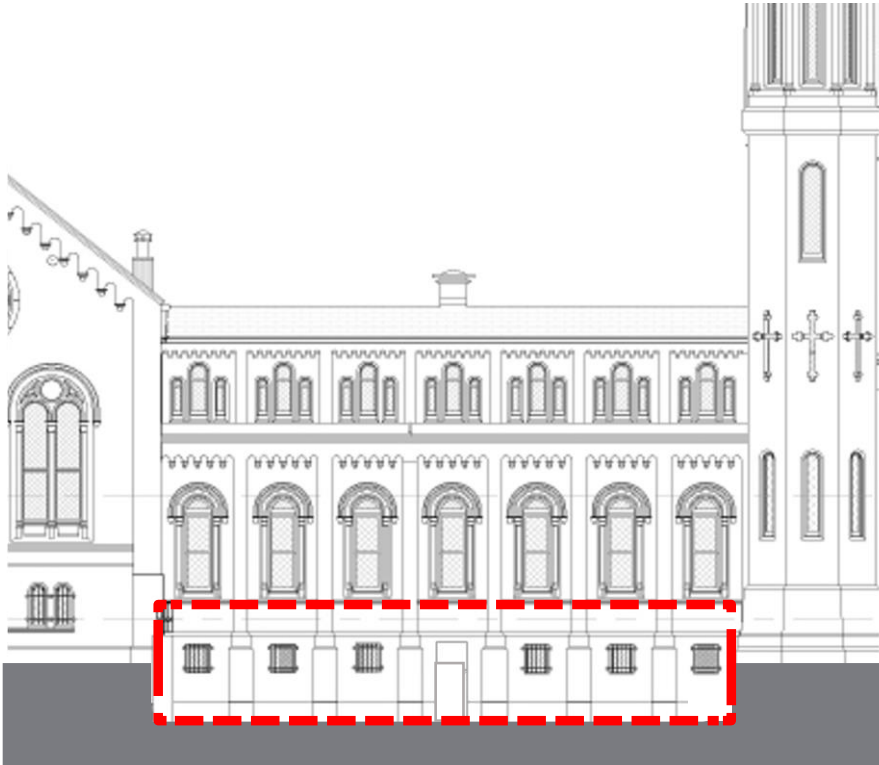
New egress door at proposed areaway.

# SMITHSONIAN INSTITUTION BUILDING (SIB)

## AREAWAYS –SOUTH ELEVATION AT WEST RANGE



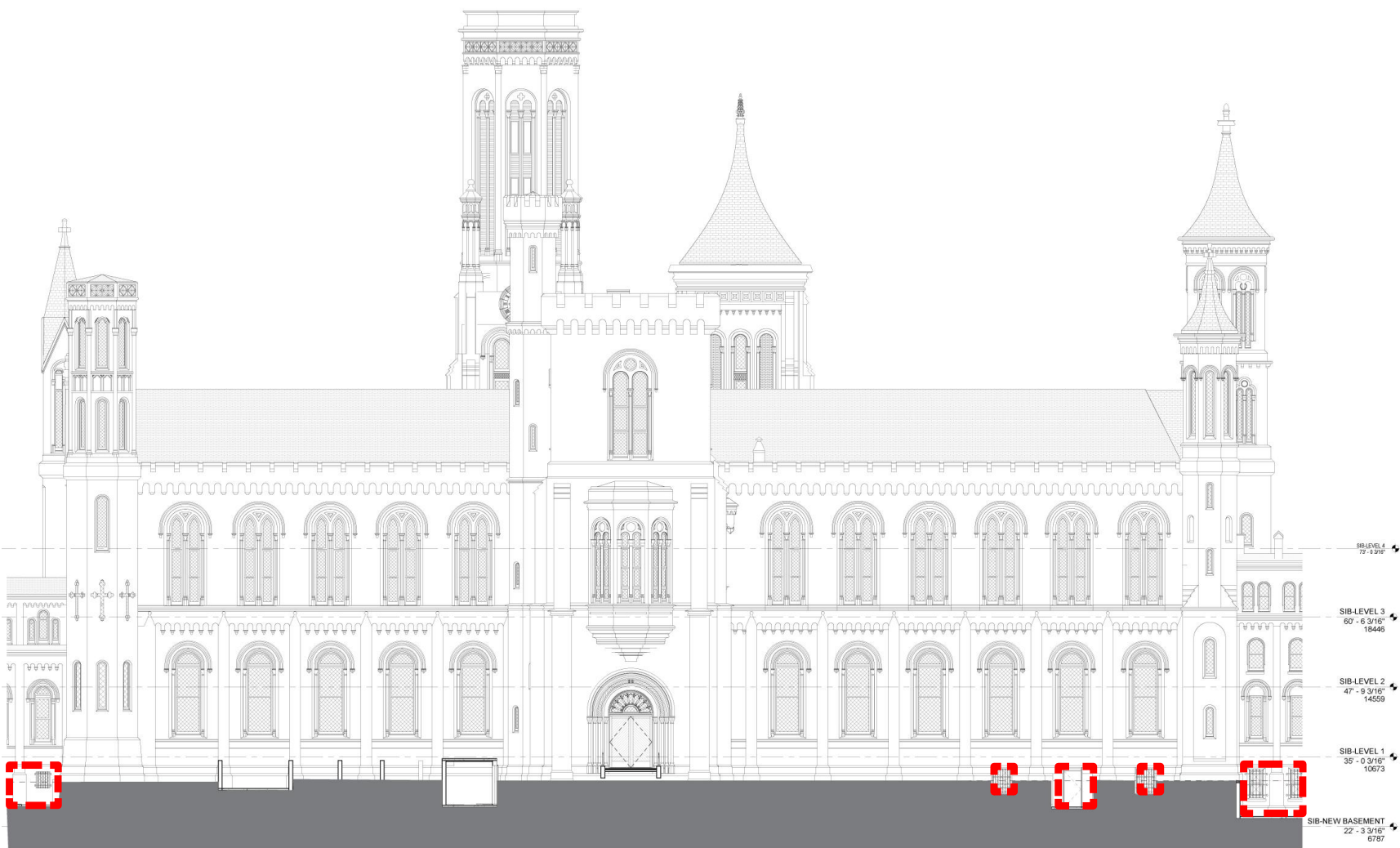
Existing windows and areaway door.



New door at existing door opening - opening has been modified (lowered) to match level of proposed areaway.

# SMITHSONIAN INSTITUTION BUILDING (SIB)

## AREAWAYS – EXISTING



South elevation of Great Hall showing existing areaways.



South elevation of East Range from Haupt Garden.



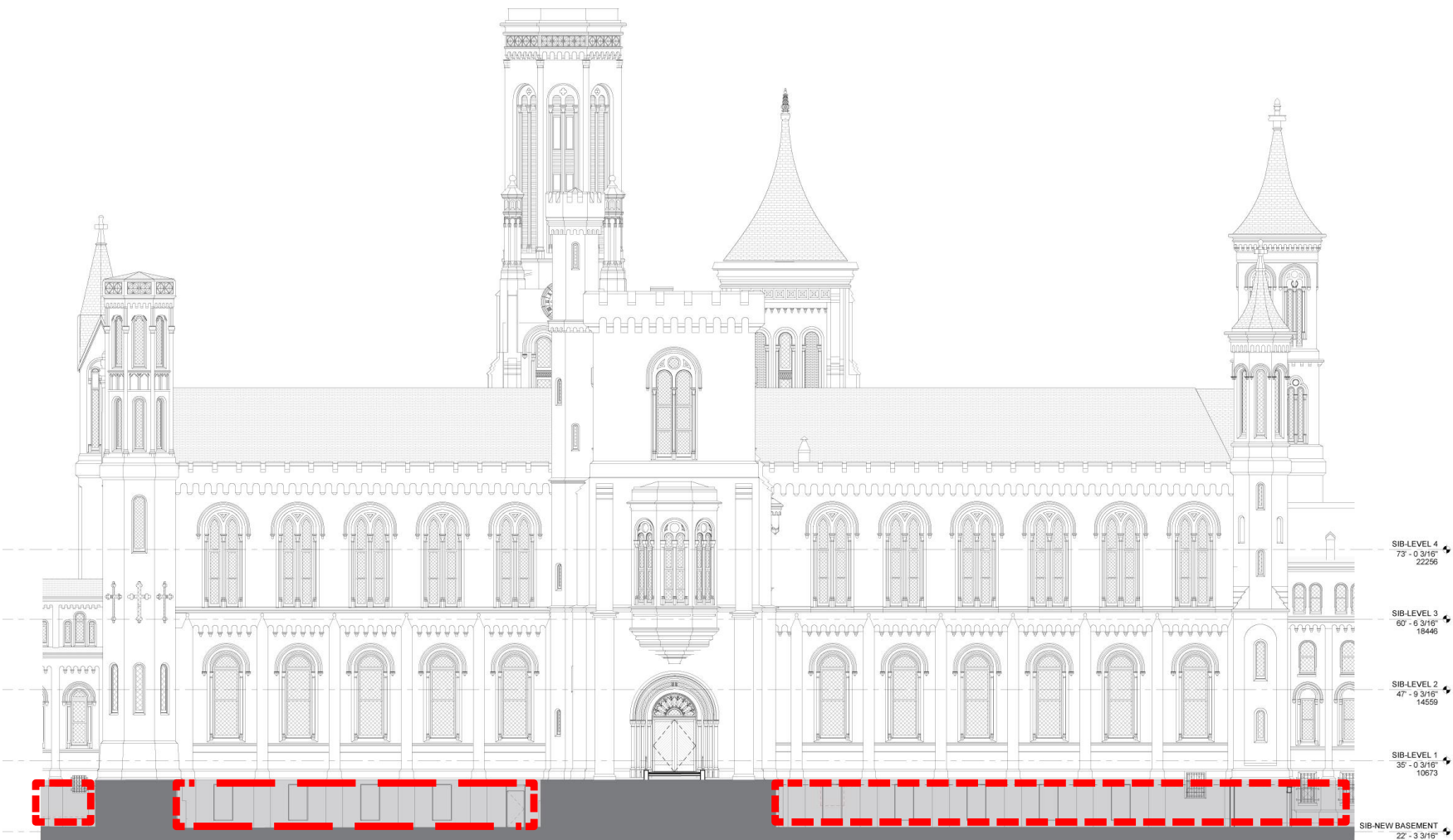
South elevation of SIB from Haupt Garden.

# SMITHSONIAN INSTITUTION BUILDING (SIB)

## AREAWAYS - PROPOSED

### Project Scope

- Multiple smaller areaways combined to regularize the existing areaways along the south side of the building.



South elevation of Great Hall showing proposed areaways.

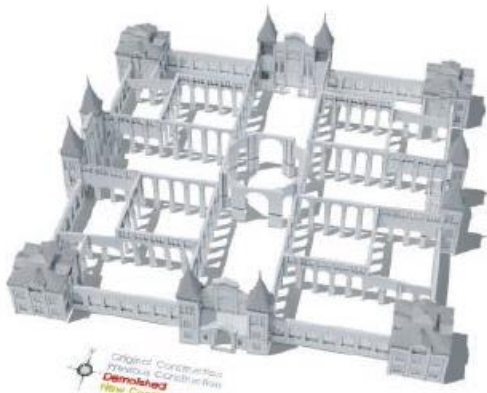


Landscape at West Range screening existing areaways.

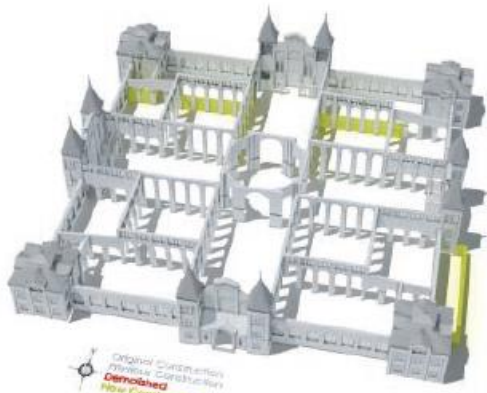
# ARTS AND INDUSTRIES BUILDING



# ARTS & INDUSTRIES BUILDING (AIB)



1881 Ground Floor Plan



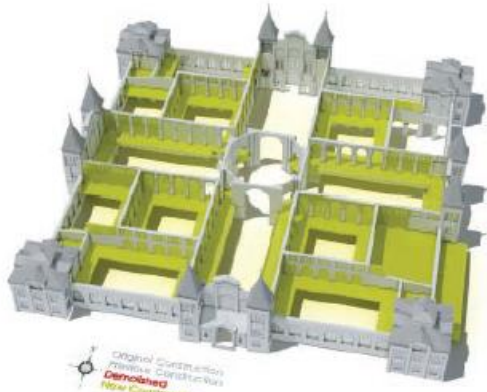
1902 Ground Floor Plan



1976 Ground Floor Plan



1881 Second Floor Plan



1902 Second Floor Plan & Galleries

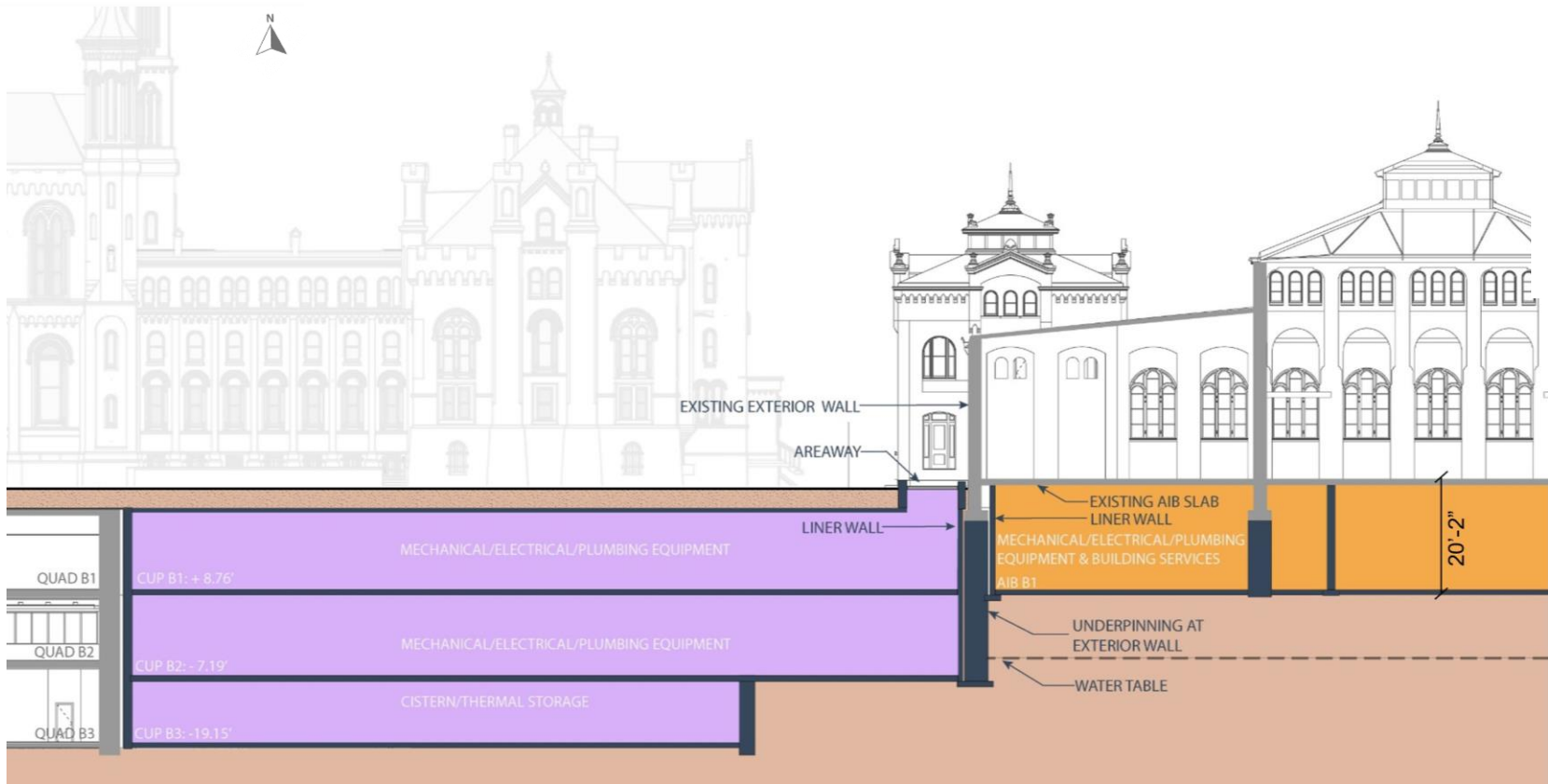
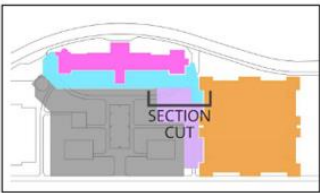


1976 Second Floor Plan & Galleries

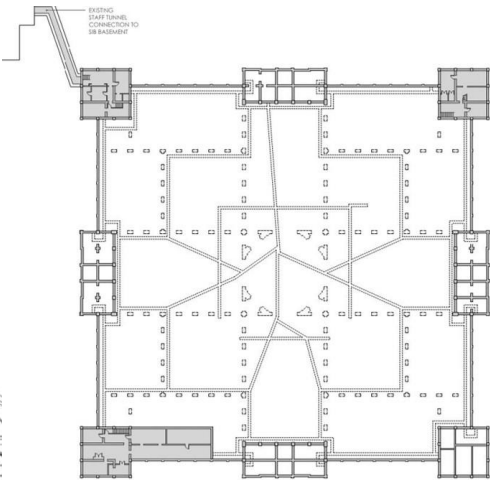
As originally envisioned the Arts and Industries Building (AIB) had an open plan, allowing a visitor to create their own path through the building. The galleries were added to provide critically needed exhibit space. In the later 20<sup>th</sup> century modifications were focused on creating office space, resulting in the loss of many of the grand, open spaces.

# ARTS & INDUSTRIES BUILDING (AIB)

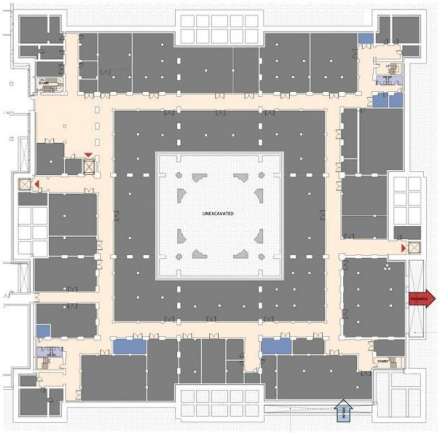
## BASEMENT



Below-grade section - Quad, CUP, and AIB connection.



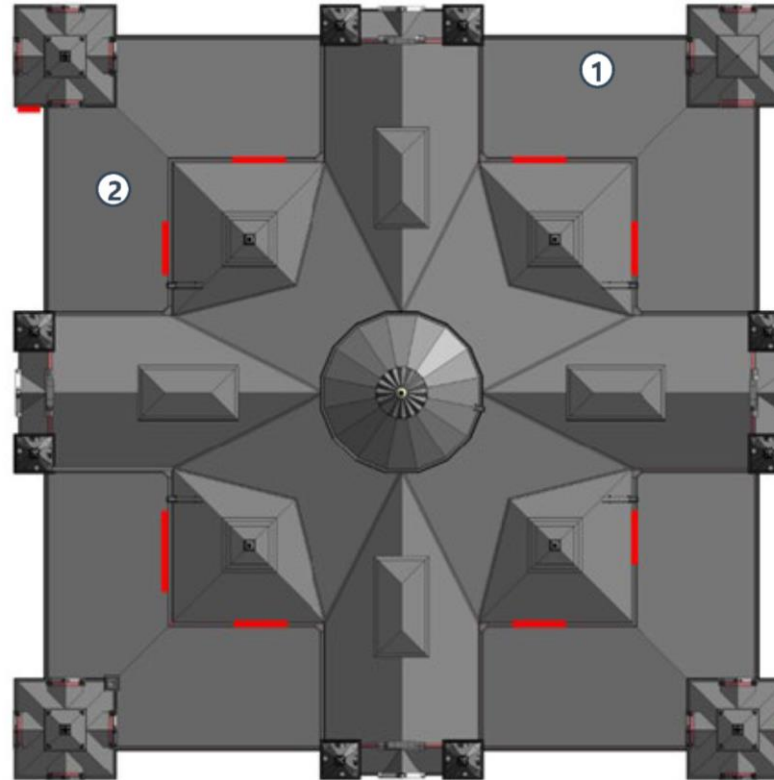
Existing basement plan.



Proposed basement plan.

# ARTS & INDUSTRIES BUILDING (AIB)

## MECHANICAL SYSTEMS – LOUVERS EXISTING CONDITIONS

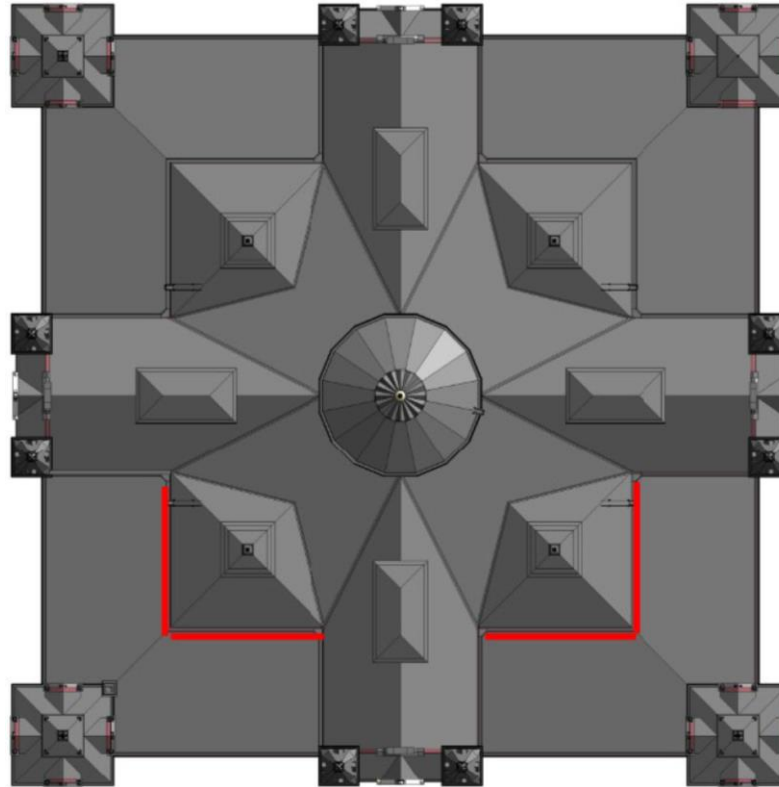


### Project Scope

- The building has louvers in historic window openings for air intake/exhaust (indicated in red).

# ARTS & INDUSTRIES BUILDING (AIB)

## MECHANICAL SYSTEMS – LOUVERS PROPOSED OUTSIDE AIR INTAKE/EXHAUST



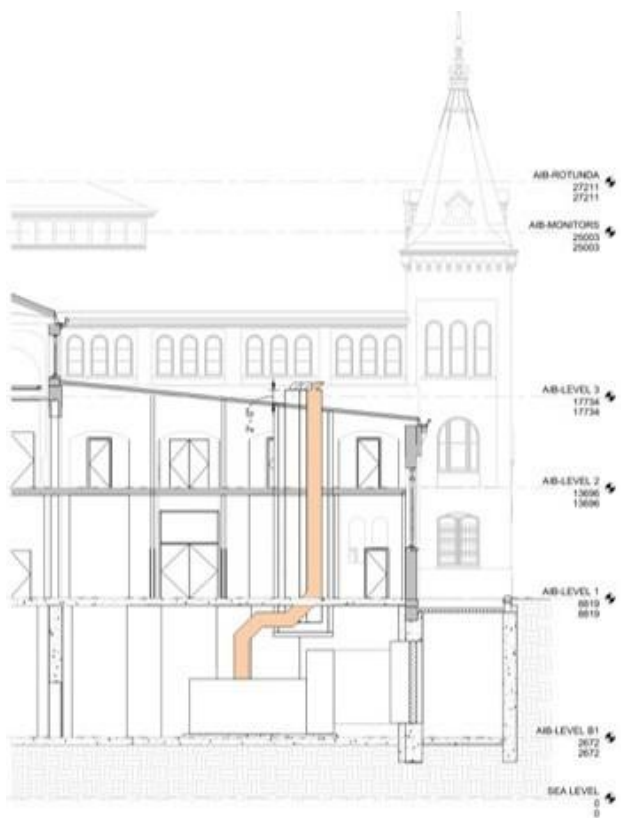
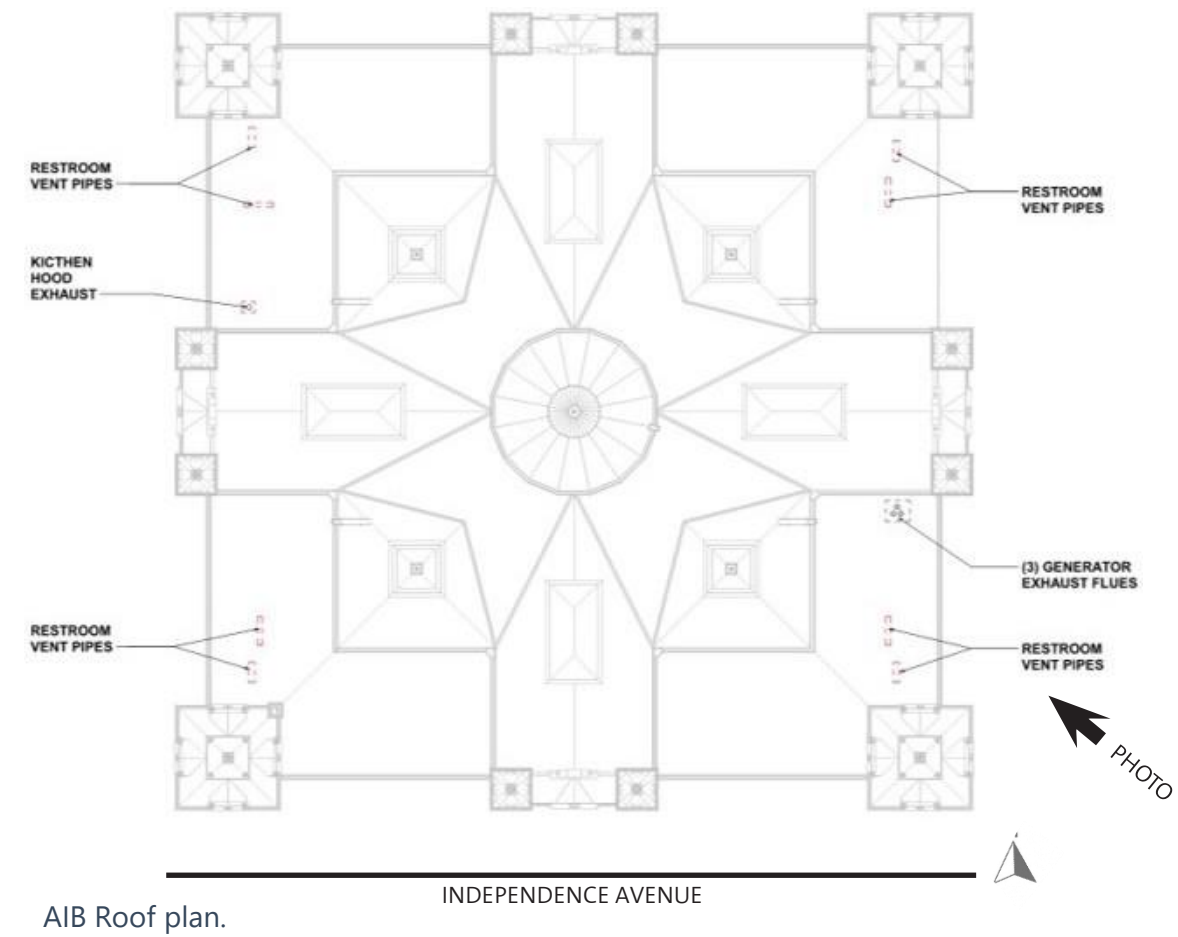
### Project Scope

- We will be using the same strategy, but the louvers will be grouped in the SE and SW Courts (indicated in red).

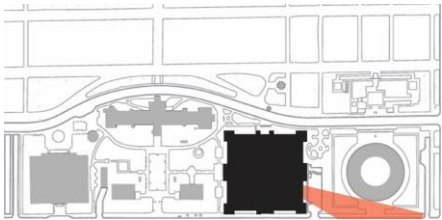


# ARTS & INDUSTRIES BUILDING (AIB)

## MECHANICAL SYSTEMS



Section at AIB South-East Range-Emergency generator exhaust.



View looking at the roof of the AIB South-East Range from Independence Avenue.

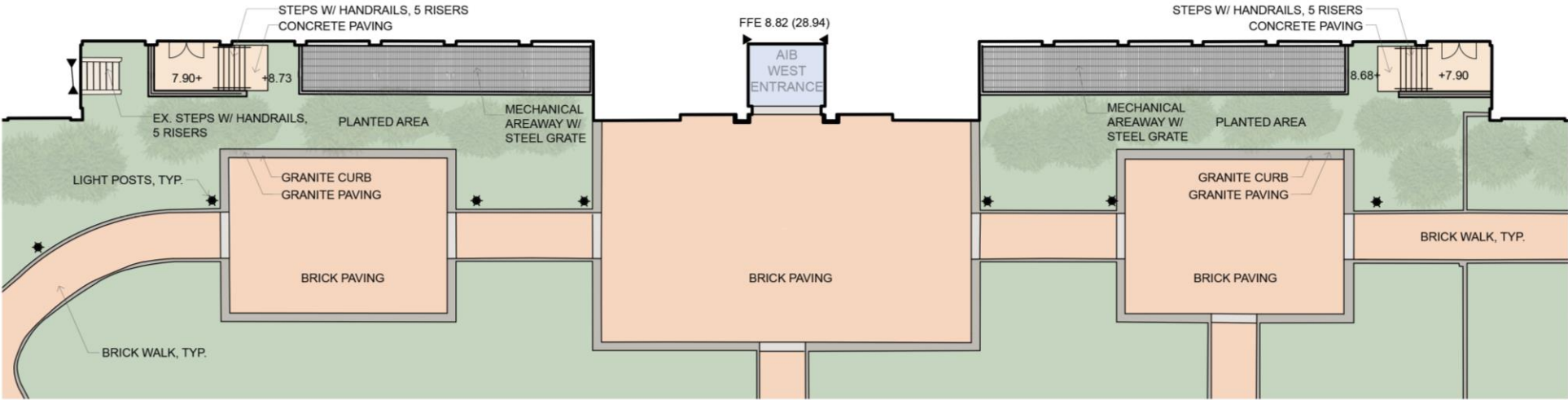
# ARTS & INDUSTRIES BUILDING (AIB)

## MECHANICAL SYSTEMS – AREAWAYS

## PROPOSED OUTSIDE AIR INTAKE/EXHAUST



ELEVATION LOOKING EAST



PLAN

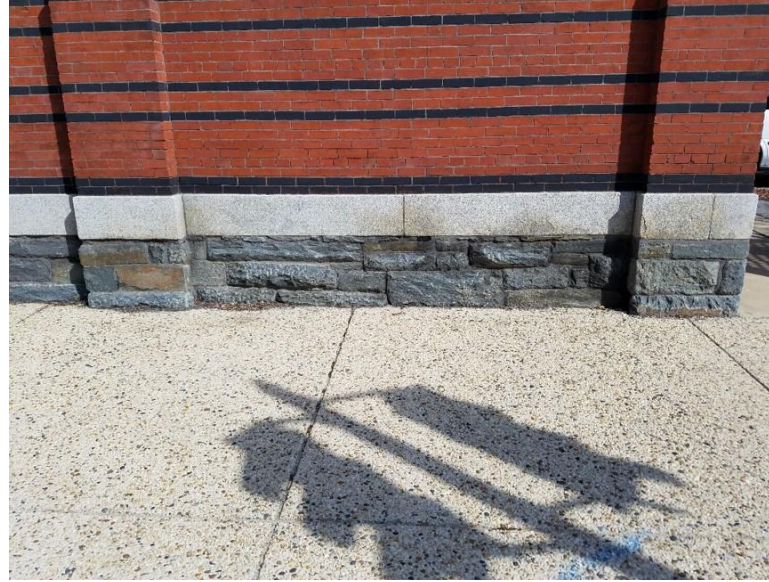


# ARTS & INDUSTRIES BUILDING (AIB)

## EXISTING FOUNDATION CONDITIONS AT GRADE



Exposed AIB gneiss foundation - east elevation at South corner.



Exposed AIB gneiss foundation - South elevation (Independence Ave.) at East corner.



Apron along perimeter wall of the AIB South Ranges (Independence Ave), varies in width to accommodate brick pilasters.

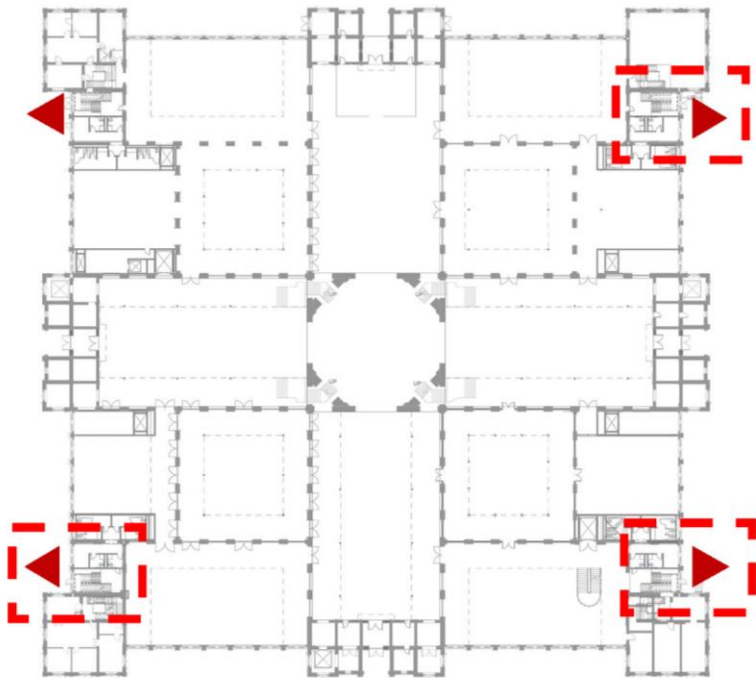


# ARTS & INDUSTRIES BUILDING (AIB)

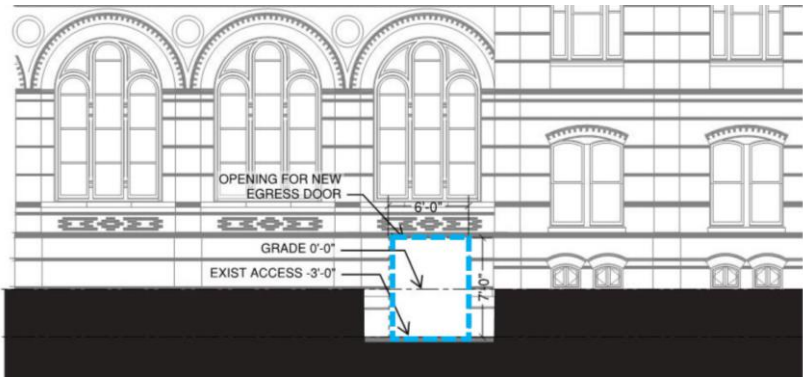
## NEW EGRESS DOORS AT SOUTHWEST AND EAST FACADES



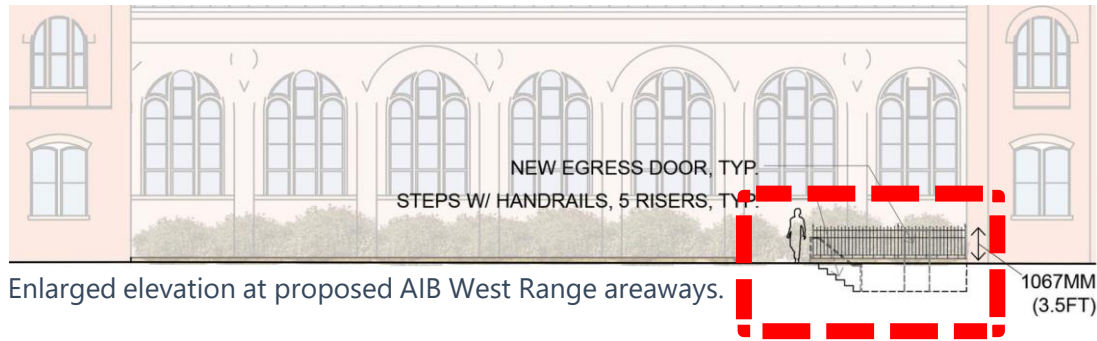
Existing condition.



Key plan of new egress door.



Partial exterior elevation at Southwest Annex.



Enlarged elevation at proposed AIB West Range areaways.

### Project Scope

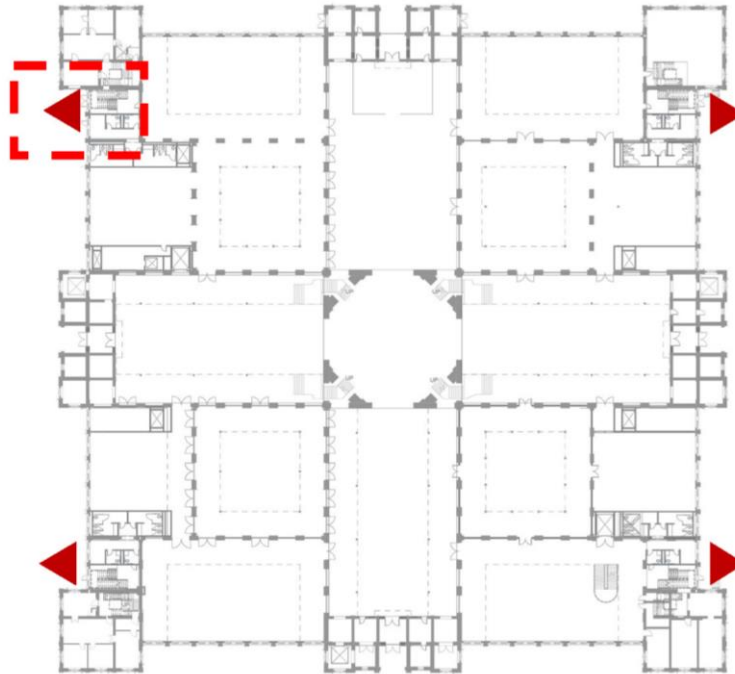
- Create code compliant egress with new stairs and exterior doors adjacent to the four Pavilions.
- Create the door openings below the decorative banding.

# ARTS & INDUSTRIES BUILDING (AIB)

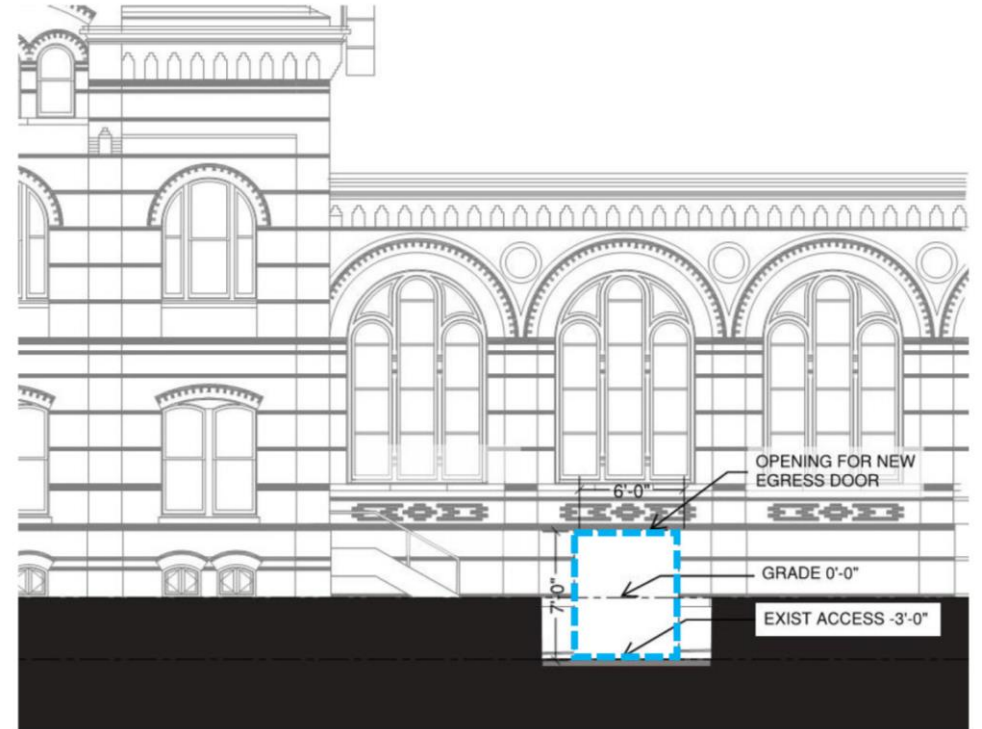
## NEW EGRESS DOOR AT NORTHWEST ANNEX



Existing door, NW Pavilion.



Key plan of new egress door.



Partial exterior elevation at Northwest Annex.

### Project Scope

- Create code compliant egress with new stairs and exterior doors adjacent to the four Pavilions.
- Create the door openings below the decorative banding.

# UNDERGROUND CONSTRUCTION



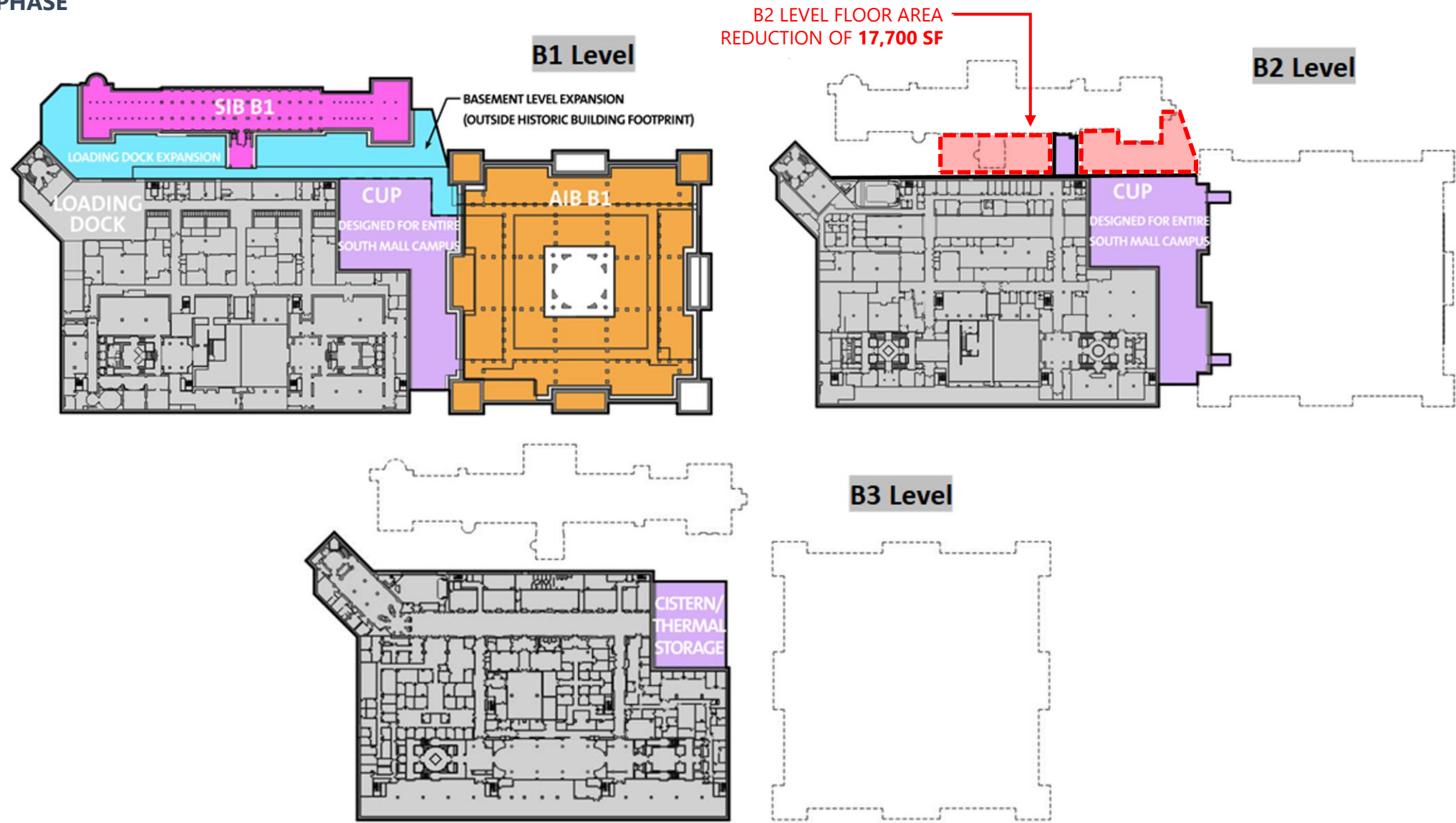
# UNDERGROUND CONSTRUCTION

## PREVIOUS CONCEPT DESIGN



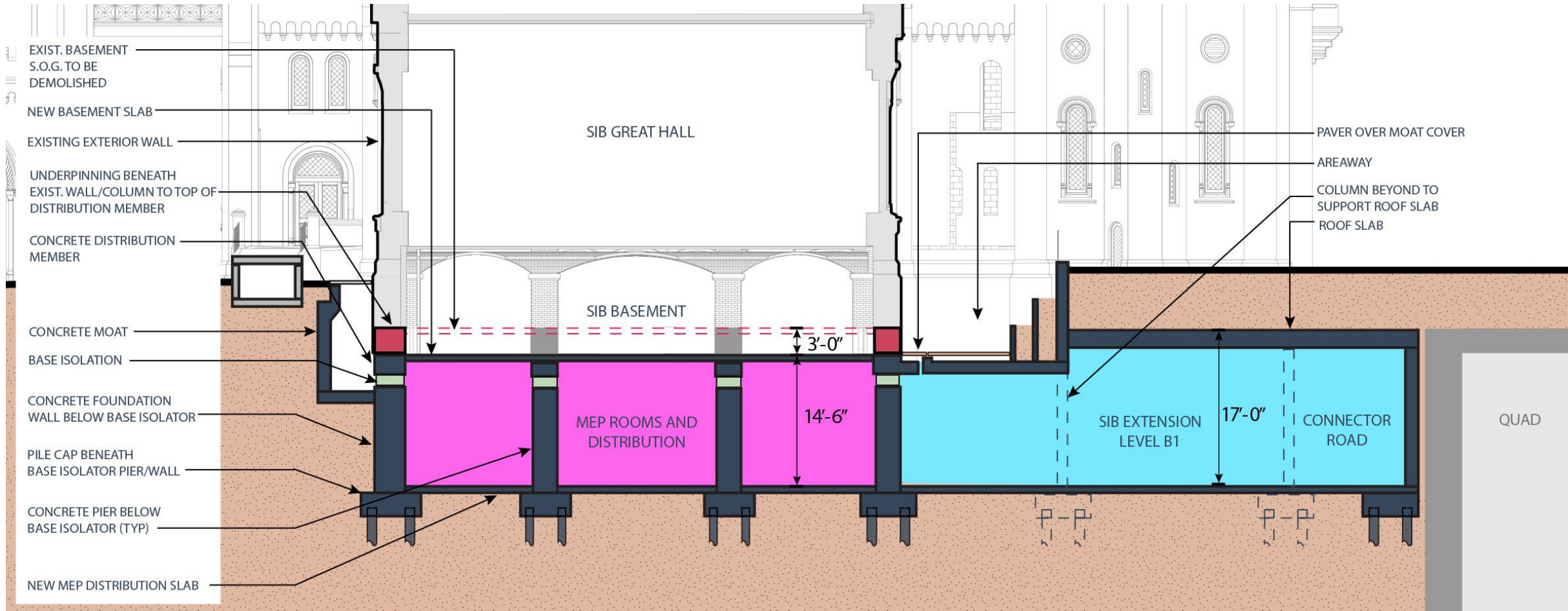
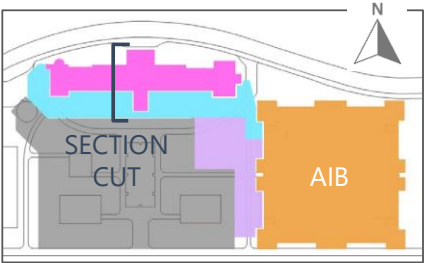
# UNDERGROUND CONSTRUCTION

## SCHEMATIC PHASE



# UNDERGROUND CONSTRUCTION

## SECTION THROUGH SIB B0, B1 AND EXTENSION/CONNECTOR ROAD



# COOLING TOWERS

# COOLING TOWERS



NMNH site showing potential cooling tower location.

## Design Objectives

- Building cooling towers across the National Mall at Southwest corner of National Museum of Natural History site.
- Location resolves difficult site constraints on South Campus.
- Reduces visual and noise negative impacts to Haupt Garden, Ripley Garden, and the historic buildings.
- Design of the new cooling tower enclosure would mimic the existing enclosure at the southeast corner of the site.



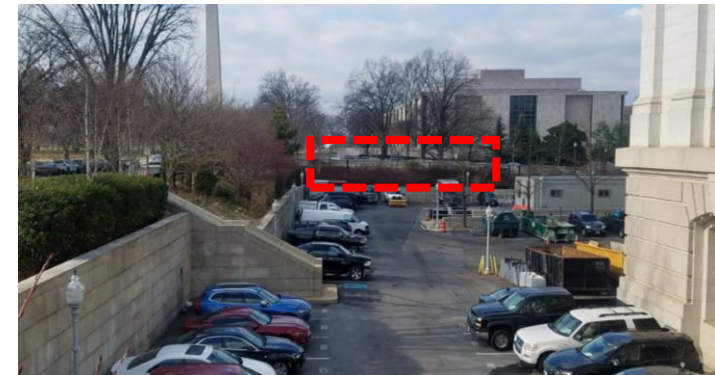
SW corner of NMNH – looking East.



Existing custom NMNH cooling tower.



South NMNH entrance – looking East.



SW corner of NMNH – looking West.



## COOLING TOWERS

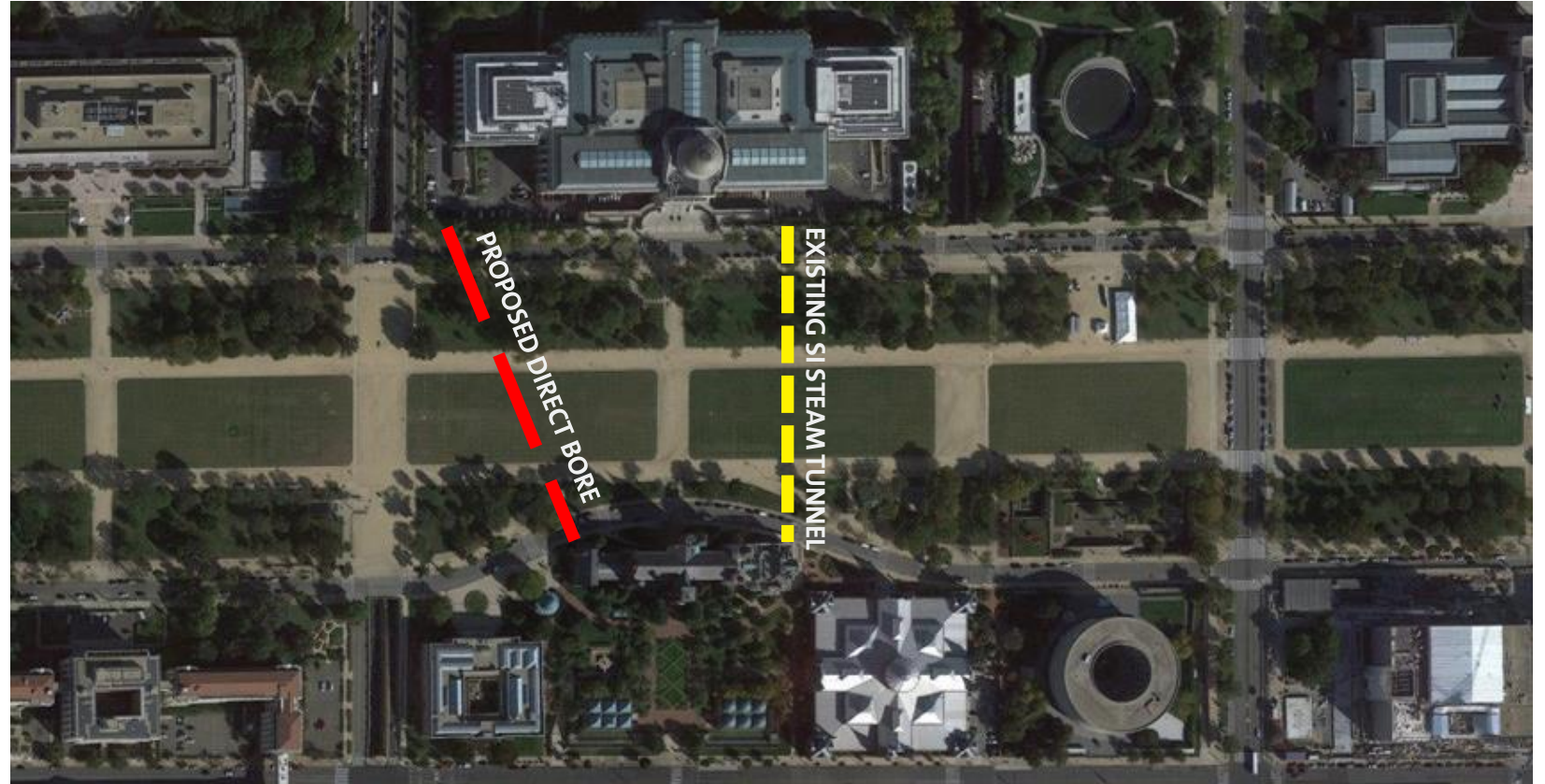
## CONNECTION OPTIONS

## DIRECT BORE AND EXISTING TUNNEL

1. New cooling tower plant to serve South Campus
2. Direct bore for condenser water routing from Cooling Towers to SIB
3. Existing steam tunnel. Potential route for condenser water piping - Cooling Towers to SIB

## Design Objectives

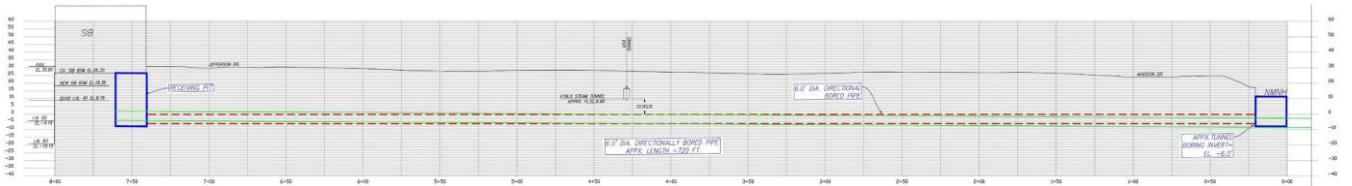
- Connect to the South Campus CUP under the National Mall. This can be done in an existing steam tunnel or with a new direct bore.



Aerial photograph showing existing steam tunnel and proposed directional boring route.



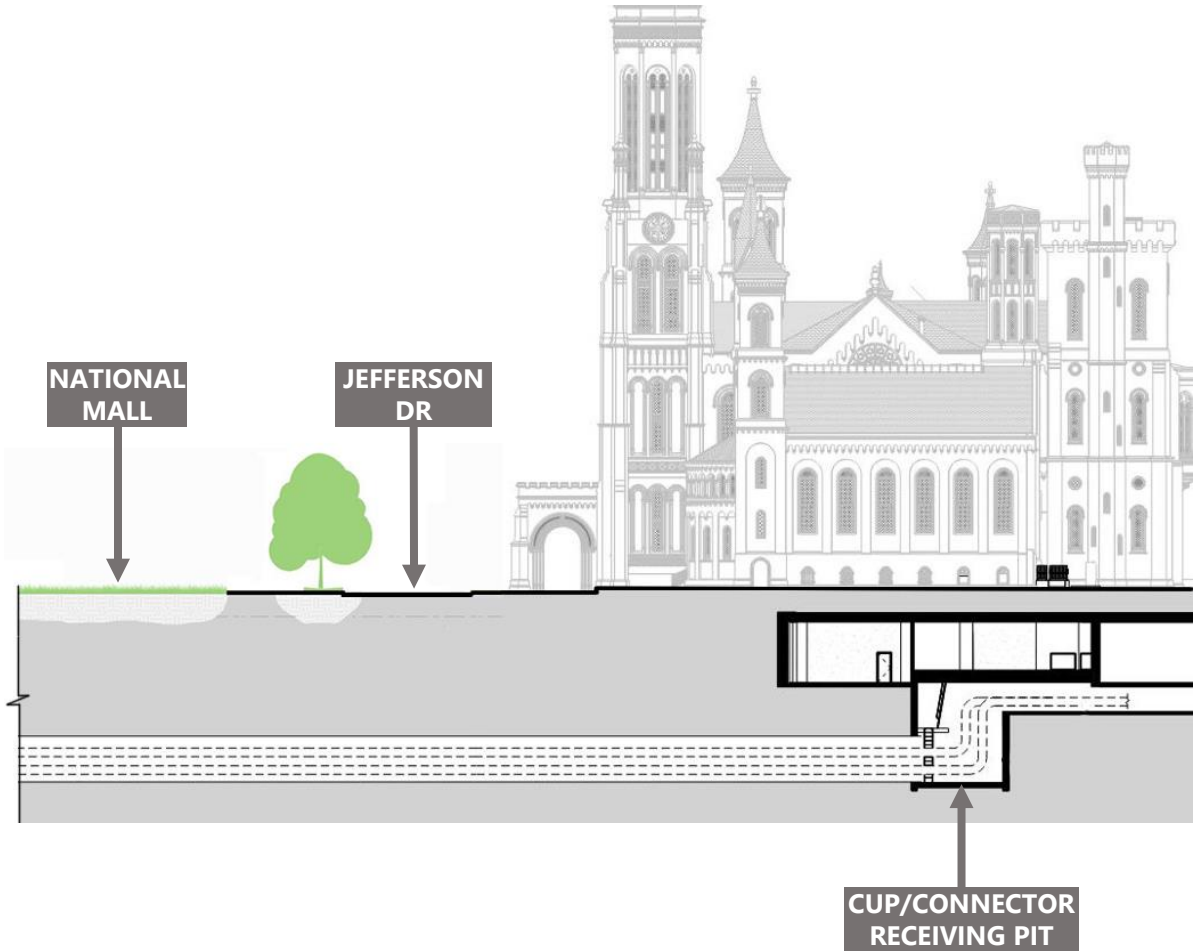
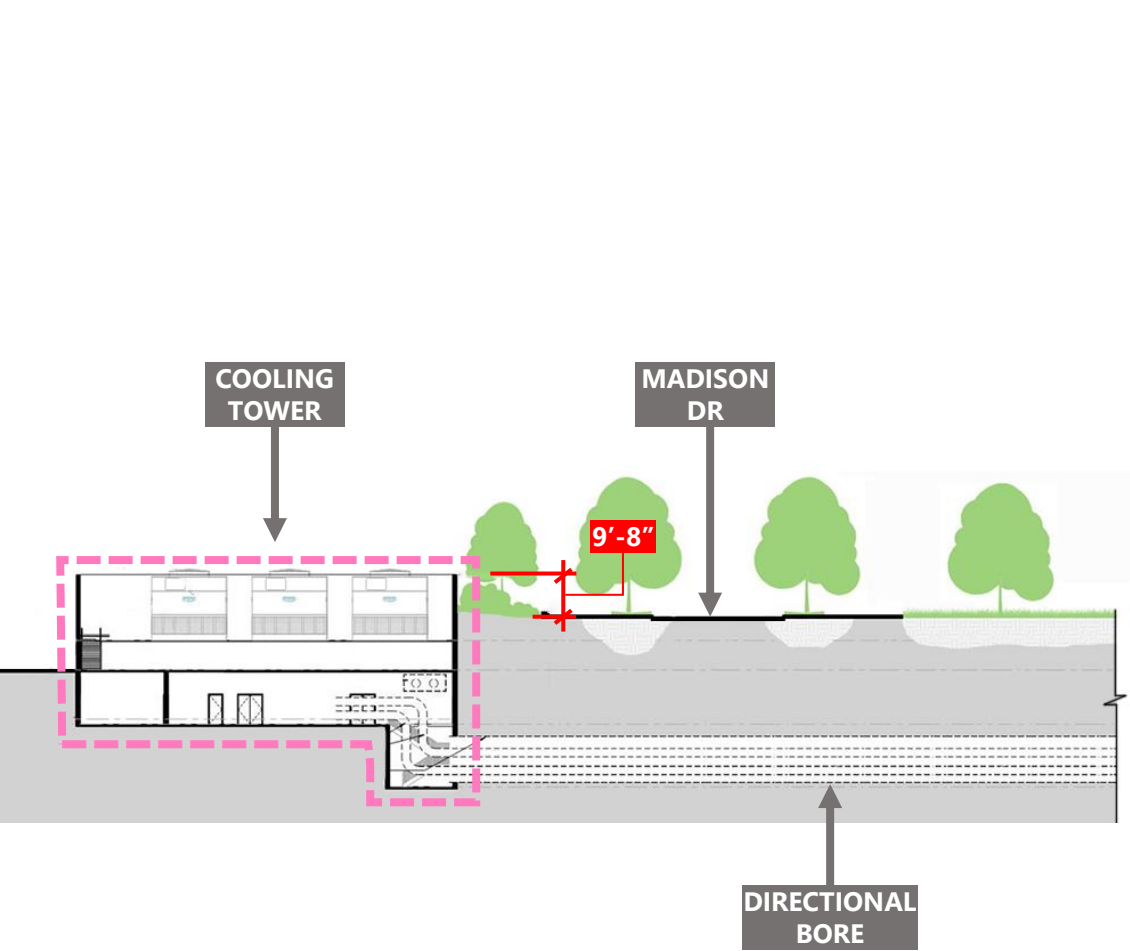
Vicinity.



Cross section through proposed direct bore – In relationship to existing utilities along route.

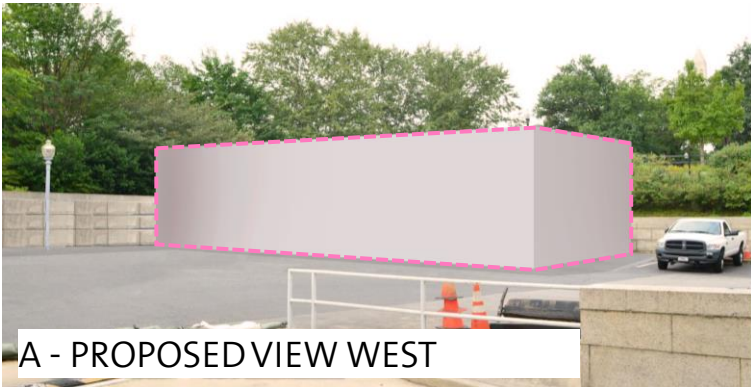
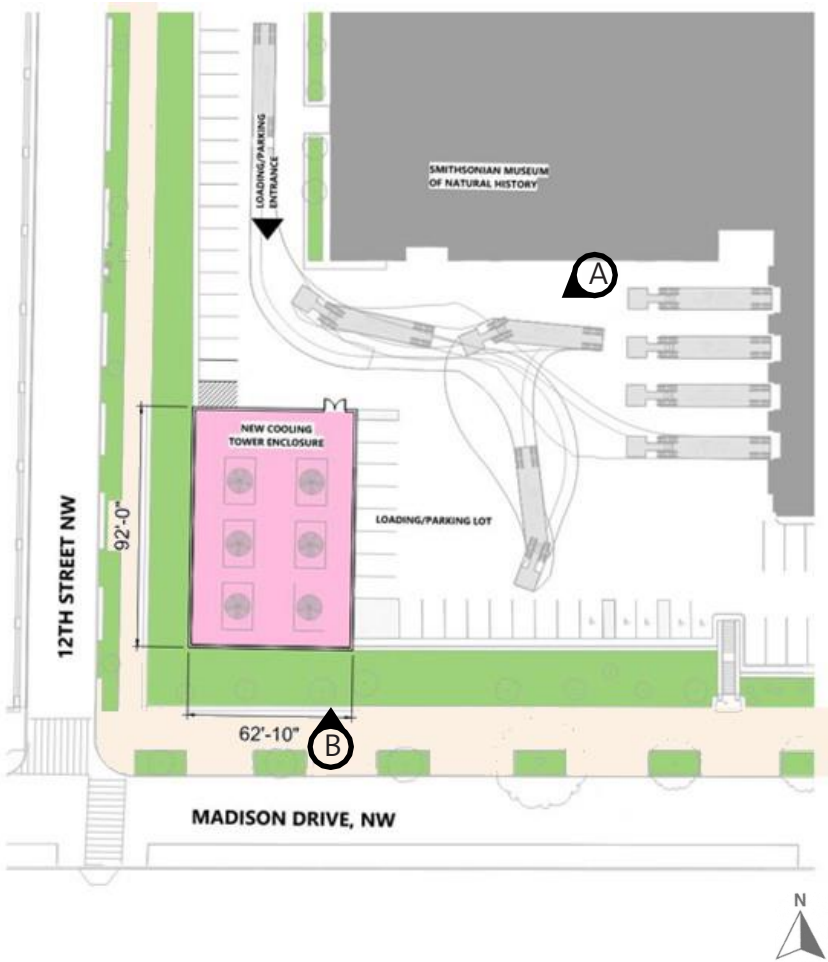
# COOLING TOWERS

## PROPOSED DIRECTIONAL BORE



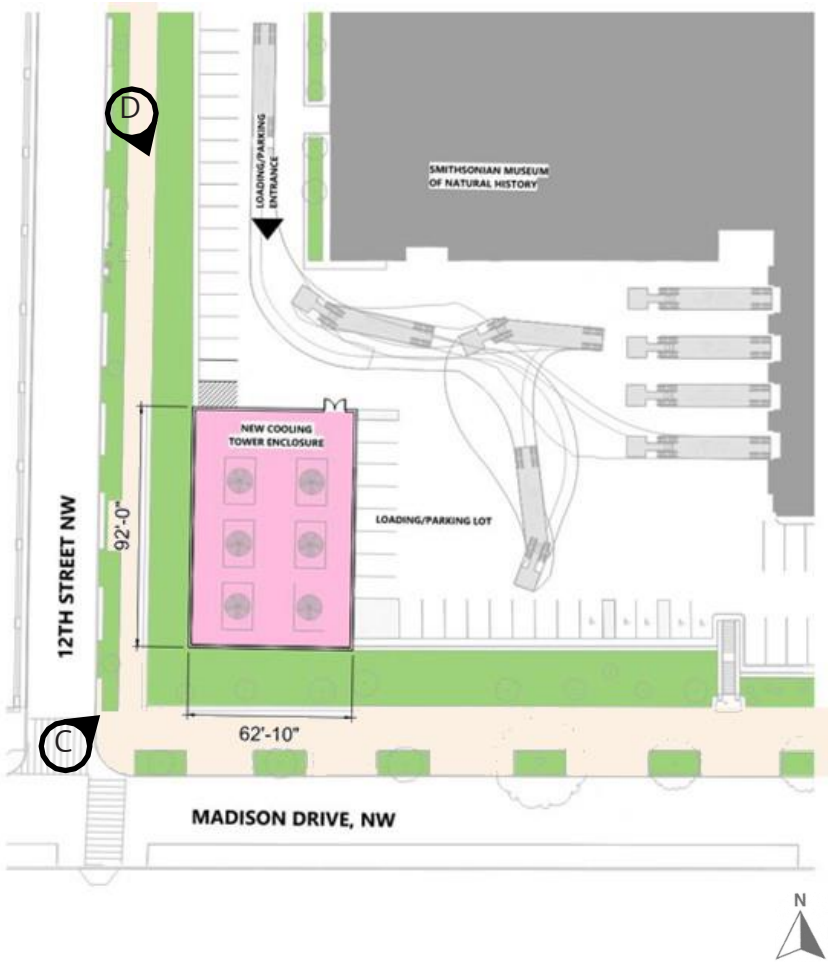
# COOLING TOWERS

## PROPOSED COOLING TOWERS



# COOLING TOWERS

## PROPOSED COOLING TOWERS



# COOLING TOWERS

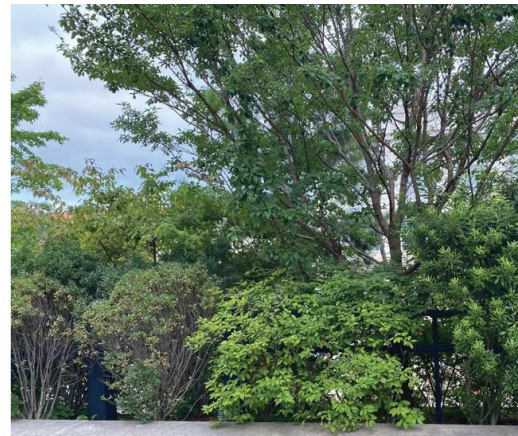
## EXISTING COOLING TOWER PLANTING



1. Clethra alnifolia, Prunus caroliniana 'Cherry Ruffles'



2. Prunus caroliniana 'Cherry Ruffles', Callicarpa americana, Ilex glabra



3. Ilex glabra, Callicarpa americana, Morella cerifera



4. Ilex opaca 'Maryland Dwarf', Viburnum opulus var americanum, Ilex glabra



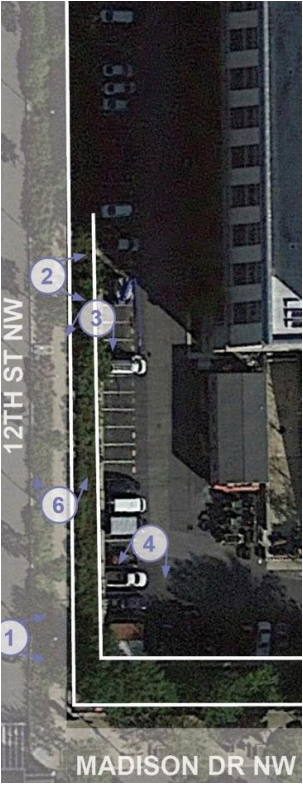
5. Perennials



6. Ilex cornuta 'Rotunda'

# COOLING TOWERS

## EXISTING COOLING TOWER PLANTING



VIEW FROM 12TH ST NW



2. VIEW INTO PARKING LOT FROM 12TH ST NW



3. CONCRETE SWALE & PLANTING FROM PARKING LOT



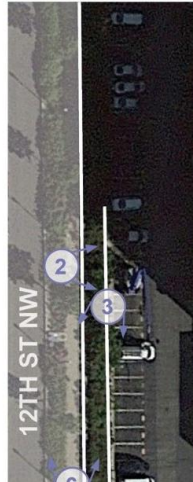
VIEW SW TOWARDS 12TH ST NW FROM PARKING LOT



5. VIEW SE FROM 12TH ST NW




6. VIEW NORTH ON 12TH ST NW




# COOLING TOWERS

## PROPOSED COOLING TOWER PLANTING


**LEGEND**




LARGE DECIDUOUS TREE  
25-35' HT




MEDIUM TO SMALL  
UNDERSTORY TREES  
DECIDUOUS & EVERGREEN  
12-20' HT




SHRUBS  
4-10' HT




GROUNDCOVER 1-4' HT



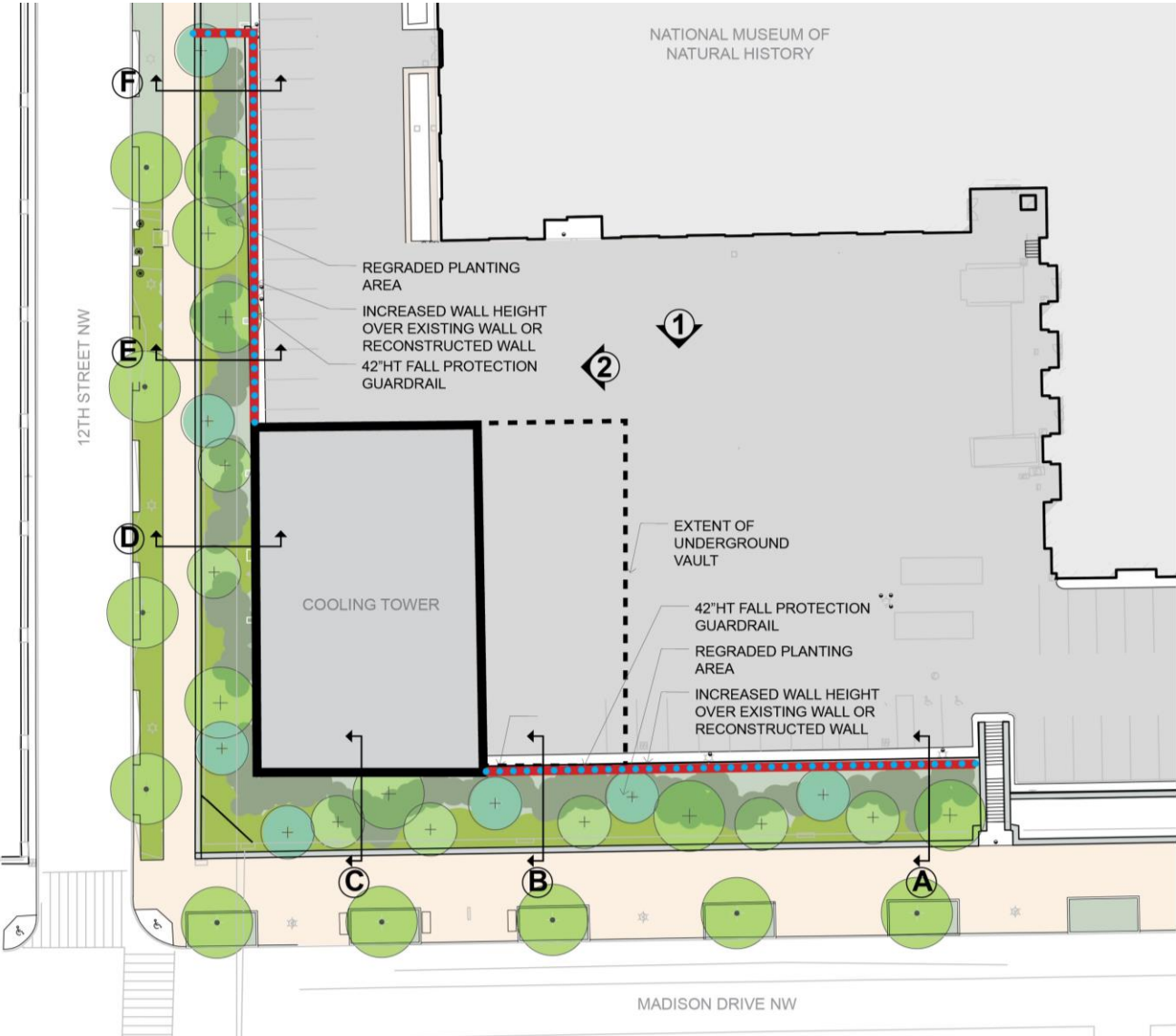
RETAINING WAL



42"HT GUARDRAIL  
(FALL PROTECTION)

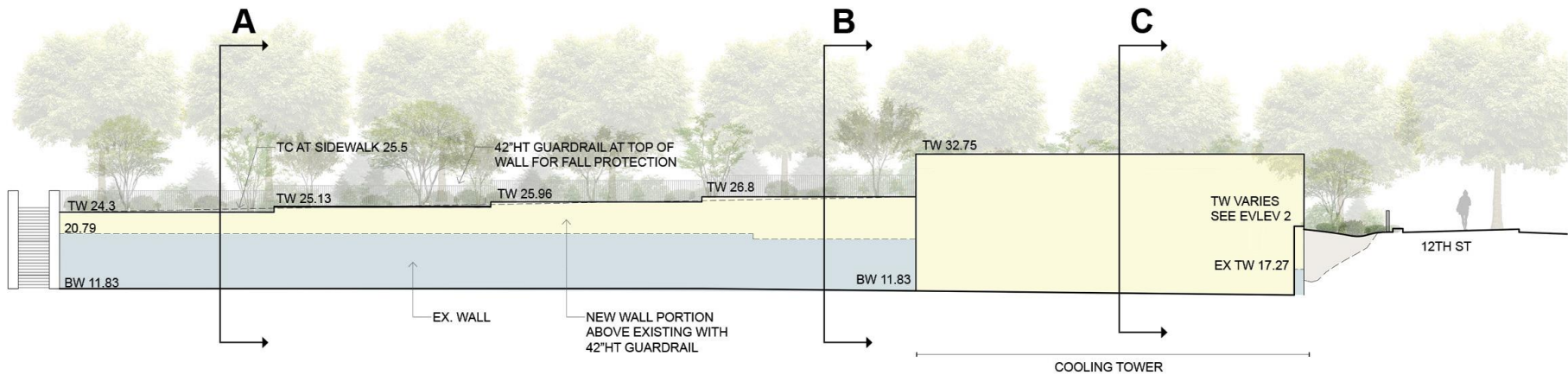
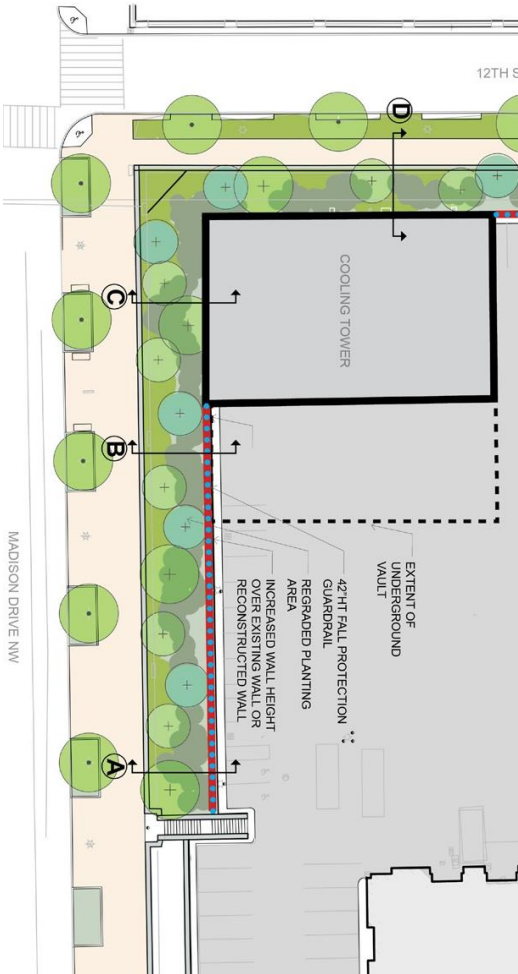


0 15 30 60  
SCALE IN FEET  
0 3 6 9 12 15  
SCALE IN METERS

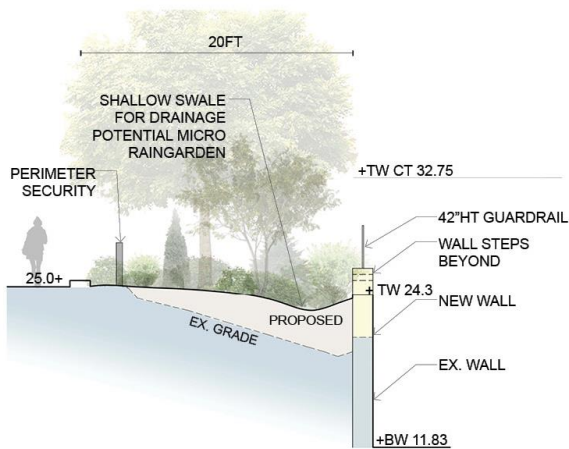


# COOLING TOWERS

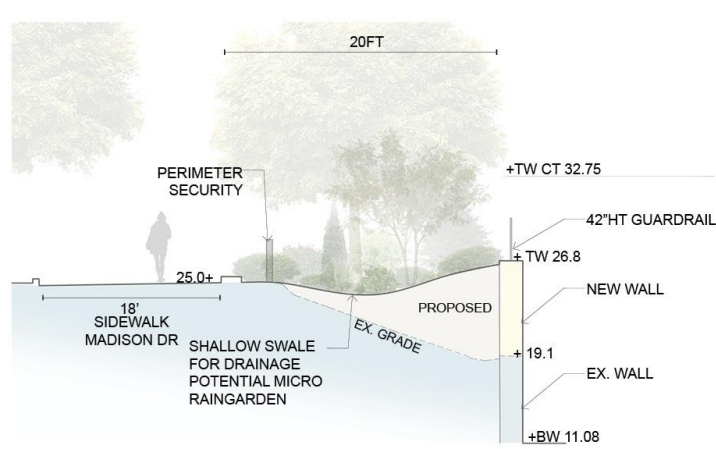
## PROPOSED COOLING TOWER GRADING, WALL HEIGHT AND PLANTING CHARACTER



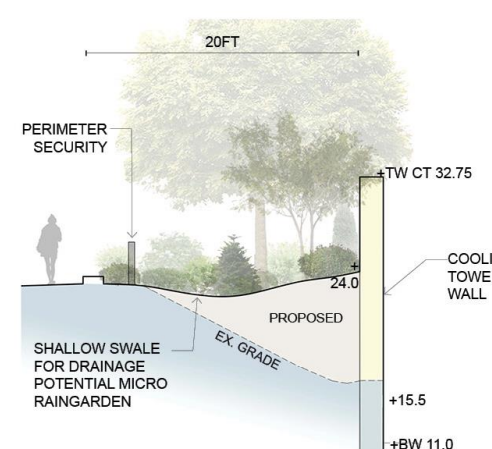
1 ELEVATION LOOKING SOUTH TOWARD MADISON DRIVE  
NOT TO SCALE



A SECTION A (SOUTH WALL)  
NOT TO SCALE



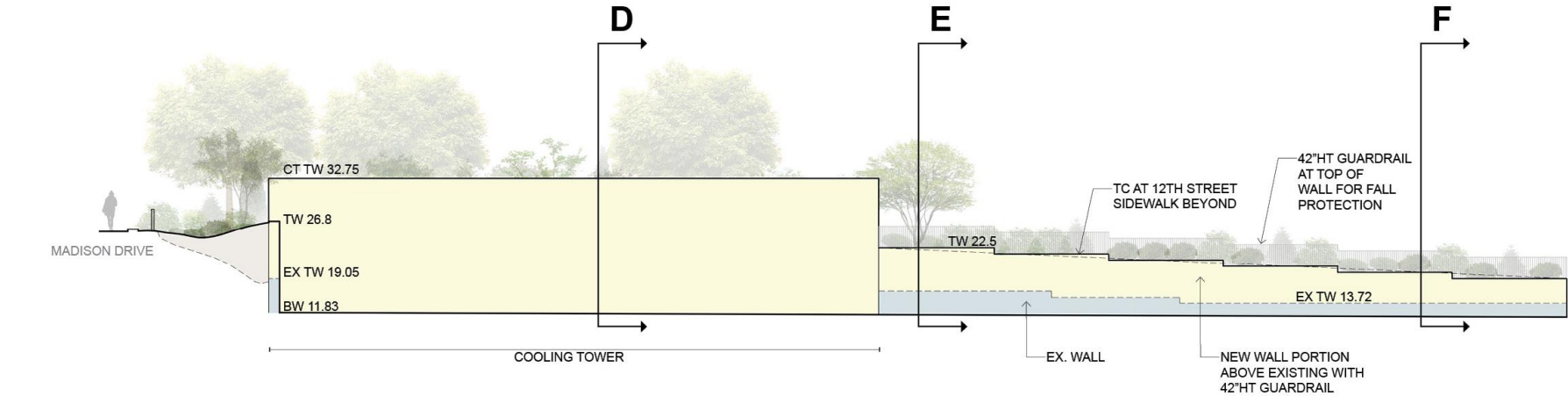
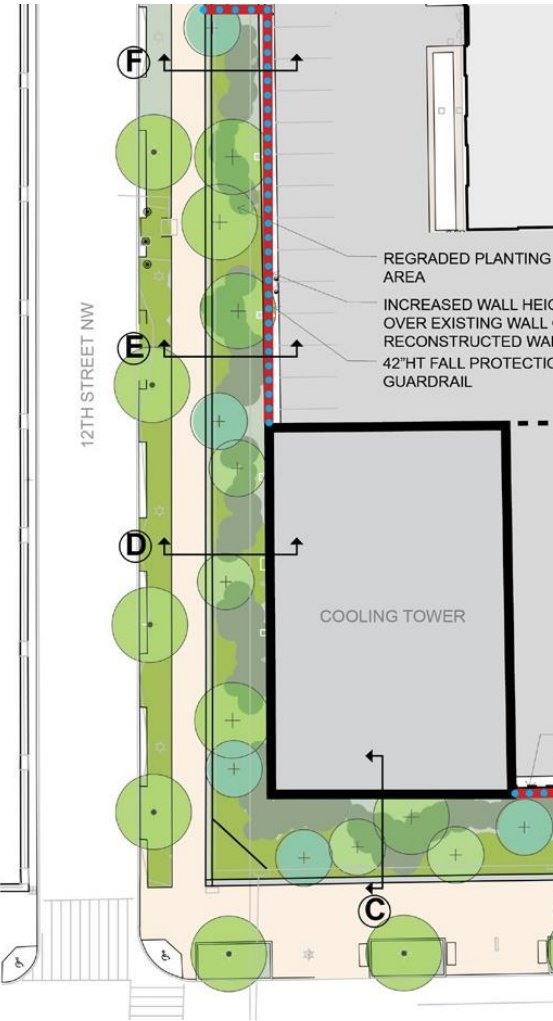
B SECTION B (SOUTH WALL)  
NOT TO SCALE



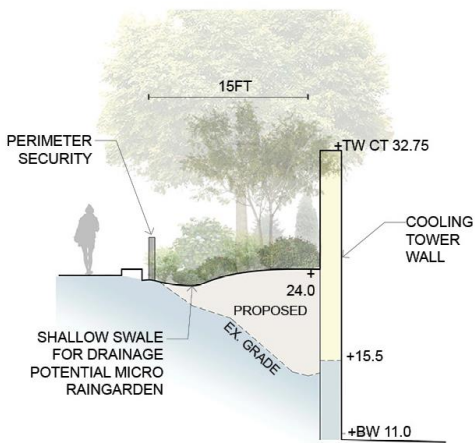
C SECTION C (SOUTH WALL)  
NOT TO SCALE

# COOLING TOWERS

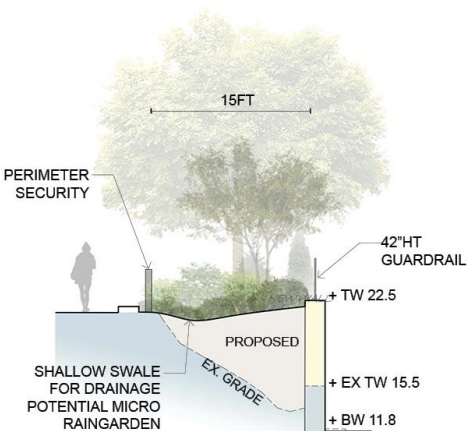
## PROPOSED COOLING TOWER GRADING, WALL HEIGHT AND PLANTING CHARACTER



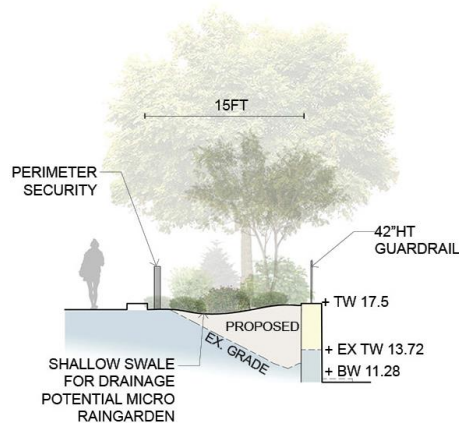
2 ELEVATION LOOKING WEST TOWARDS 12TH STREET  
NOT TO SCALE



D SECTION D (WEST WALL)  
NOT TO SCALE



E SECTION E (WEST WALL)  
NOT TO SCALE

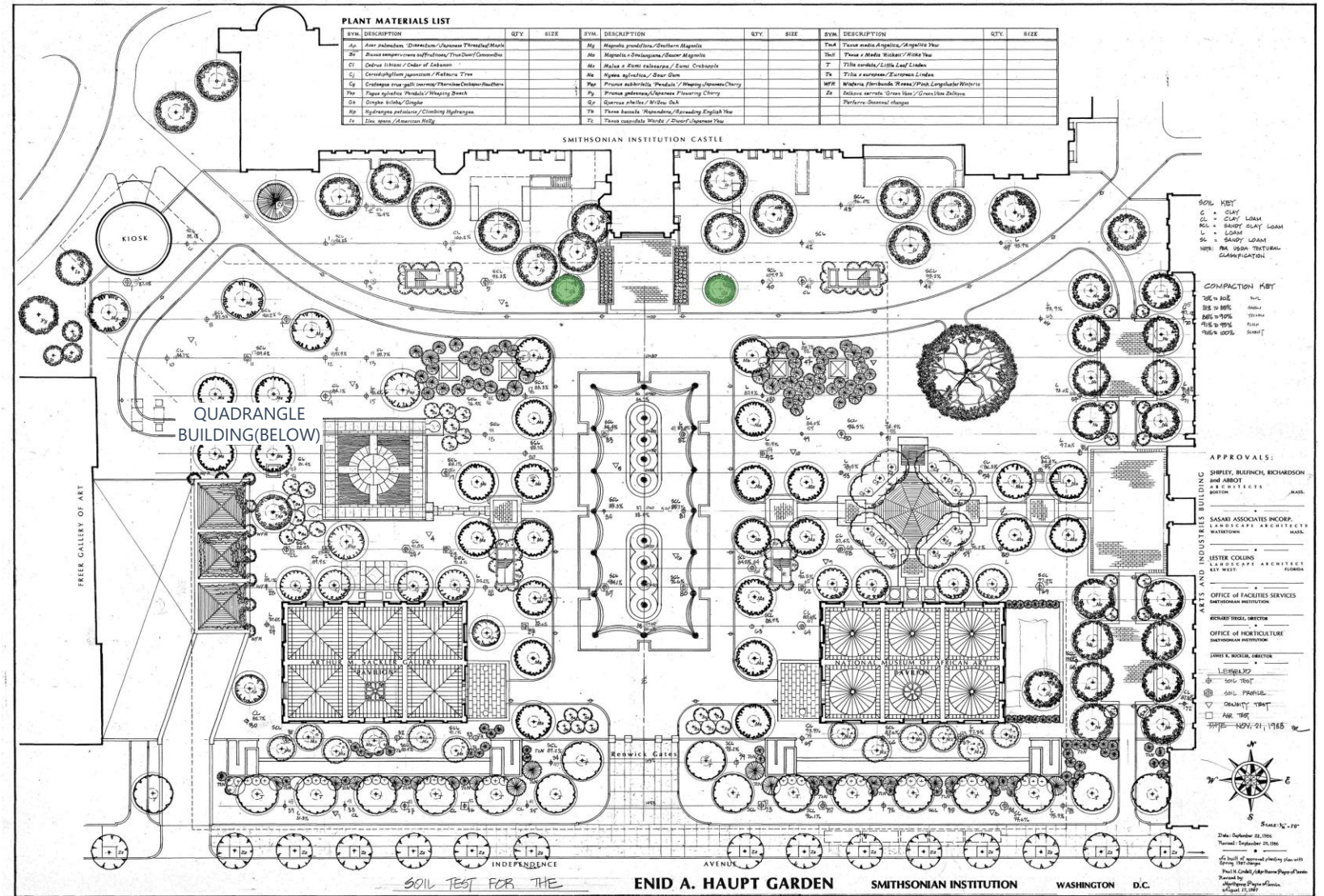


F SECTION F (WEST WALL)  
NOT TO SCALE

# GARDENS AND GROUNDS

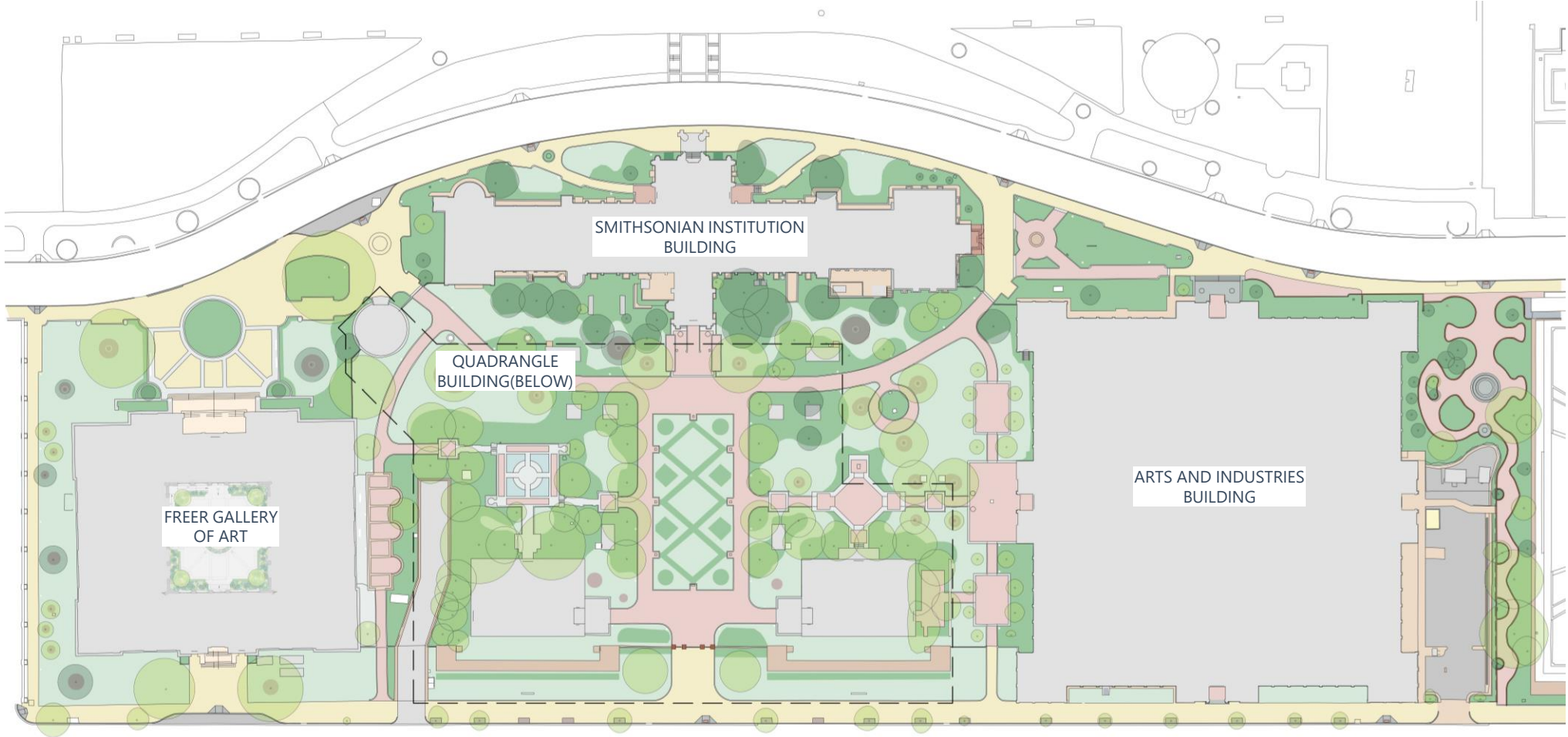


## AS-BUILT SASAKI / LESTER COLLINS PLANTING PLAN(1987)



# GARDENS AND GROUNDS

## EXISTING PLANTING PLAN



## GARDENS AND GROUNDS



Castle and Haupt Garden, facing Northeast.



AIB and Ripley Garden, facing Southwest.



Downing Urn in the Haupt Garden, facing South.



Haupt Garden and AIB, facing Southeast.

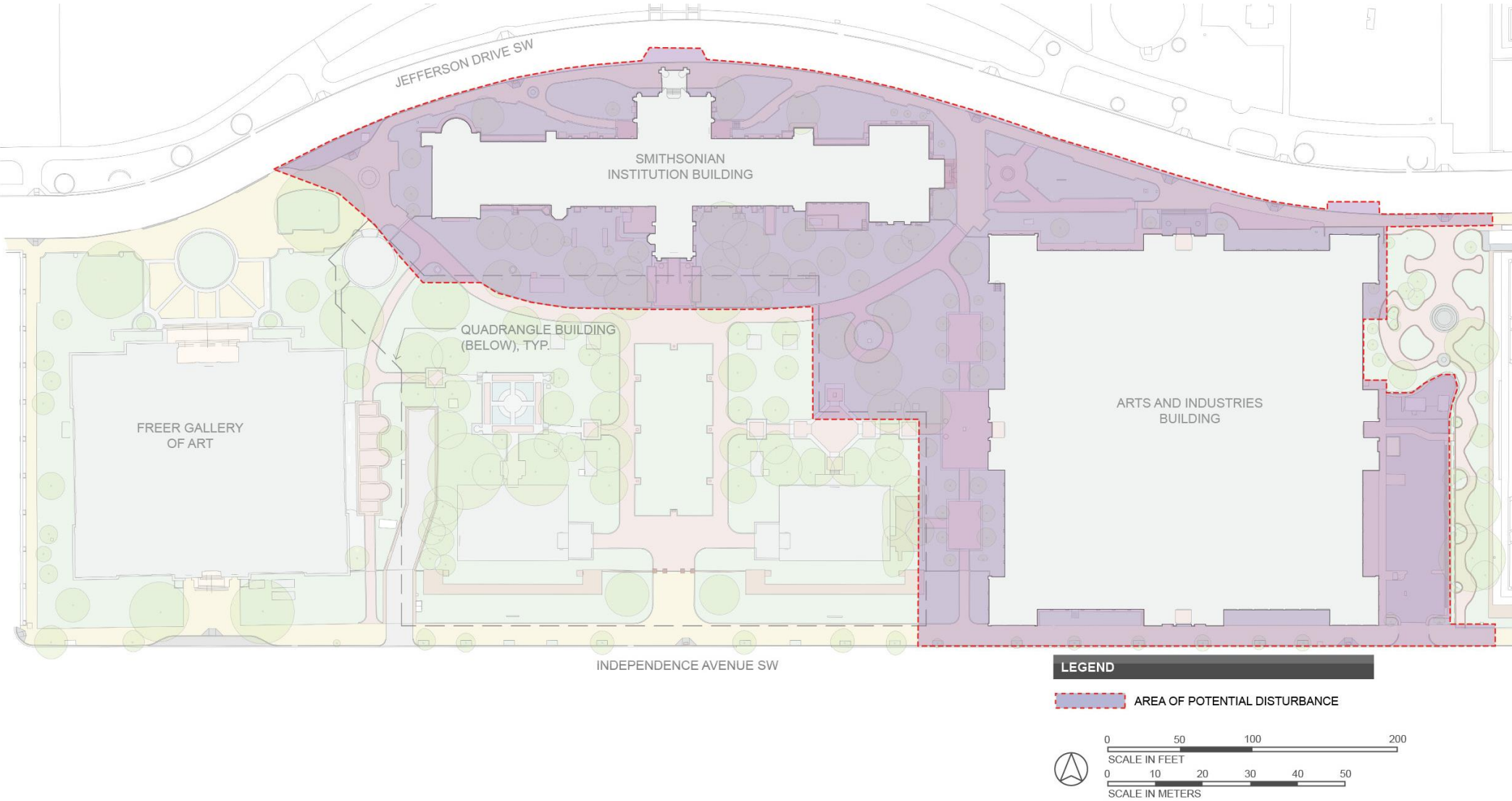


Smithsonian Castle, facing West.



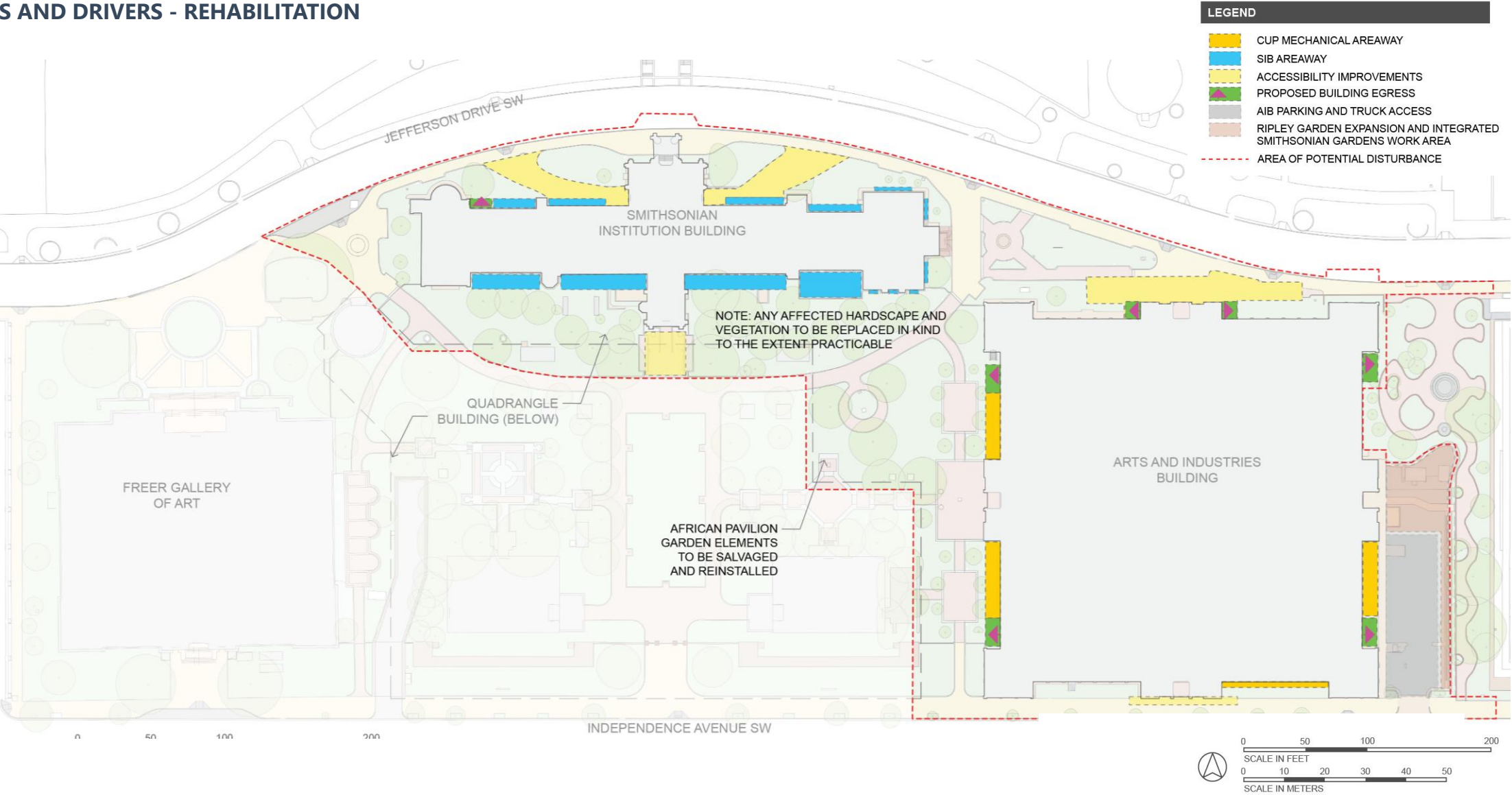
# GARDENS AND GROUNDS

## AREA OF POTENTIAL DISTURBANCE



# GARDENS AND GROUNDS

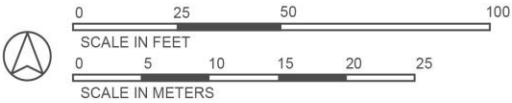
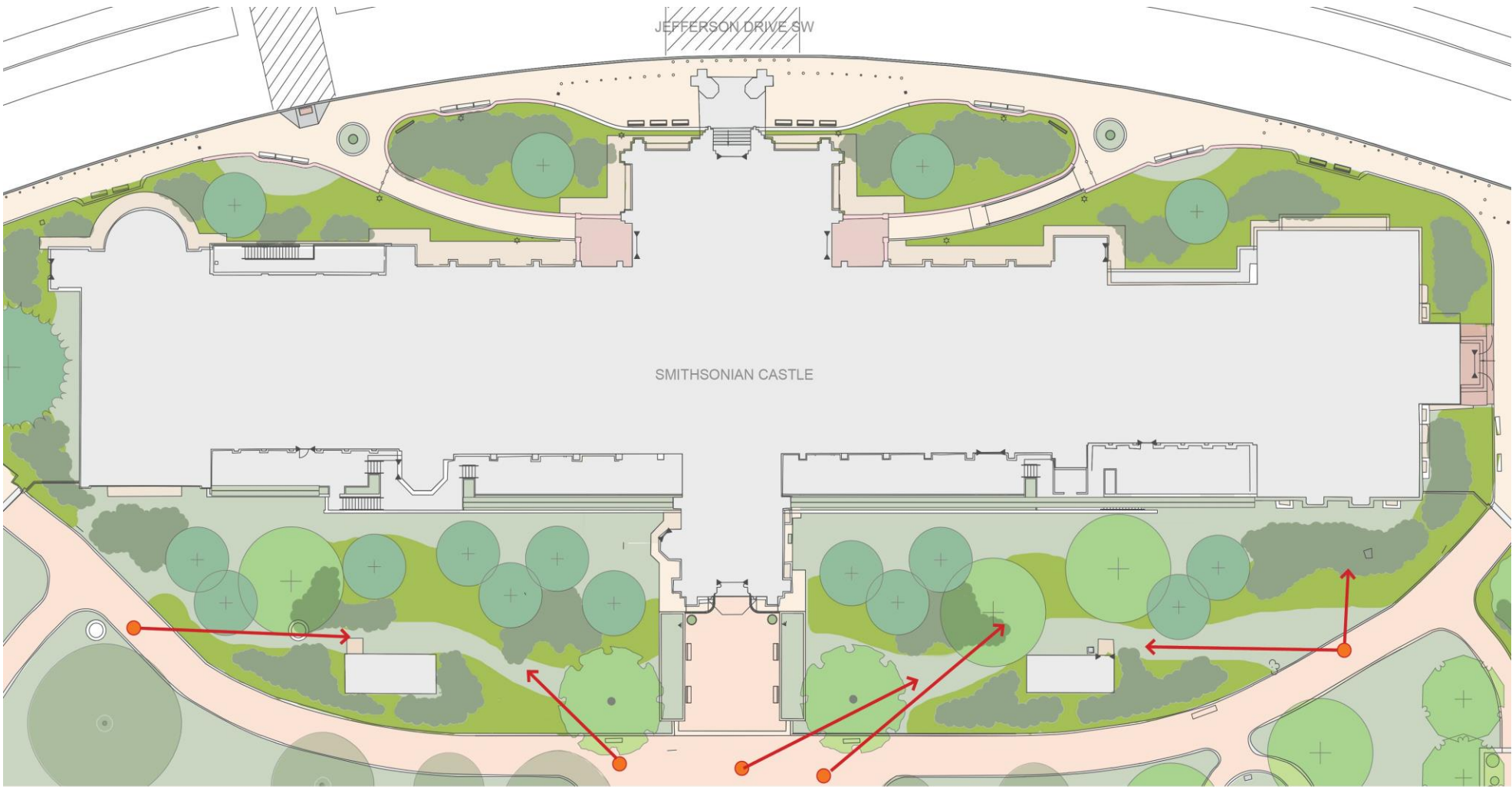
## GOALS AND DRIVERS - REHABILITATION



# GARDENS AND GROUNDS

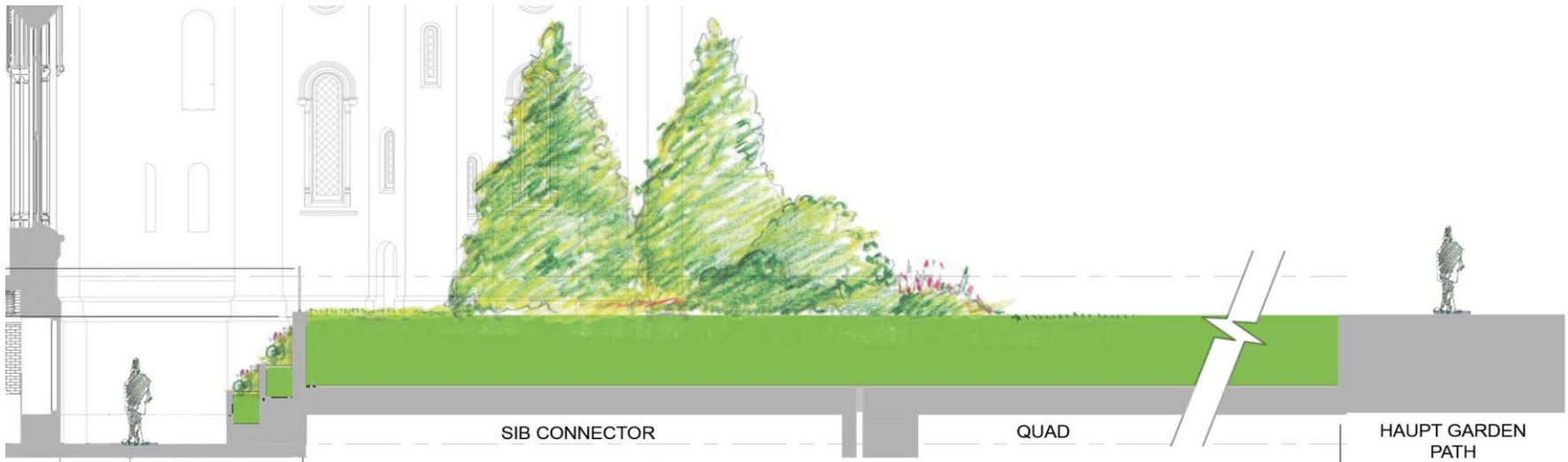
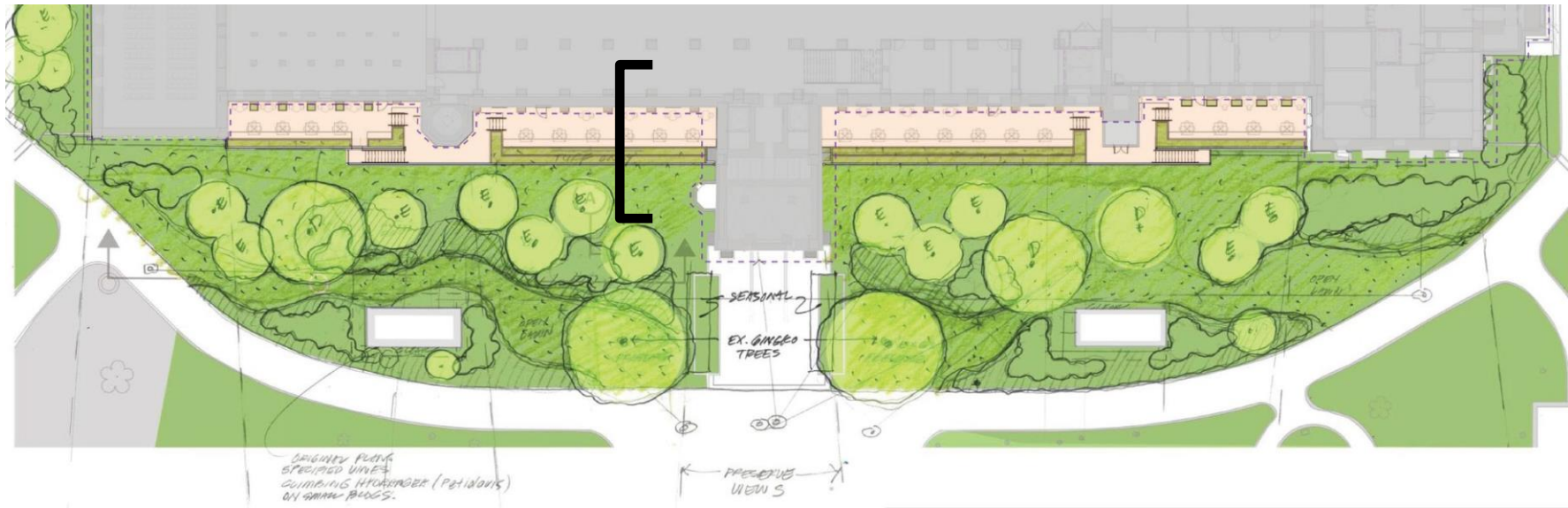
## PLANTING STRATEGY – SIB GARDENS

- DECIDUOUS TREE
- EVERGREEN TREE
- EXISTING GINKGO TO REMAIN
- SHRUBS (4-10' HT)
- GROUNDCOVER (1-3' HT)
- LAWN / STEPABLES (<1' HT)
- PROPOSED VIEWS THROUGH VEGETATION



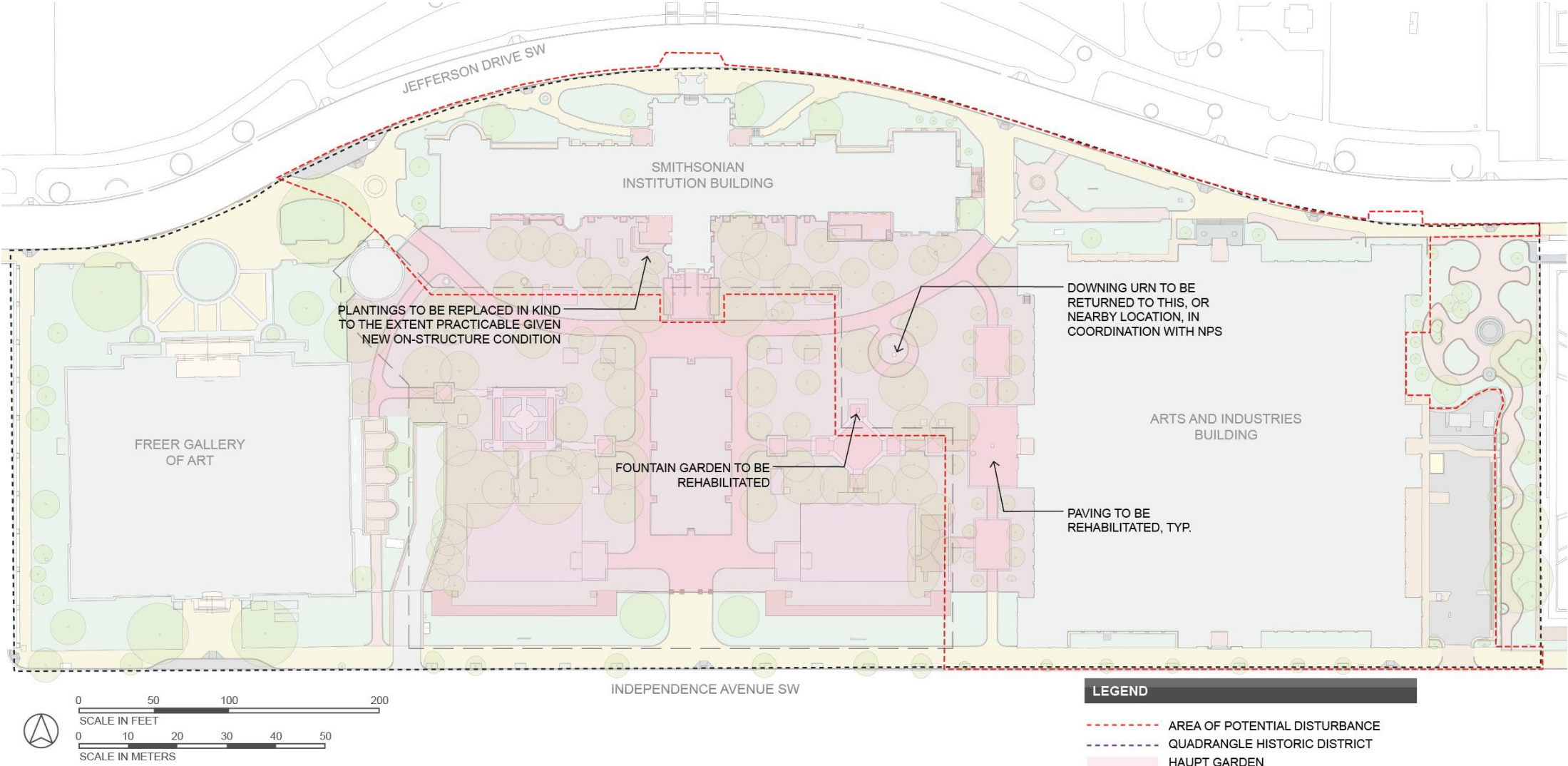
# GARDENS AND GROUNDS

## PLANTING STRATEGY – SIB AREAWAYS



# GARDENS AND GROUNDS

## HAUPT GARDEN - REHABILITATION OF CHARACTER DEFINING FEATURES



# GARDENS AND GROUNDS

## HAUPT GARDEN – EXISTING VEGETATION

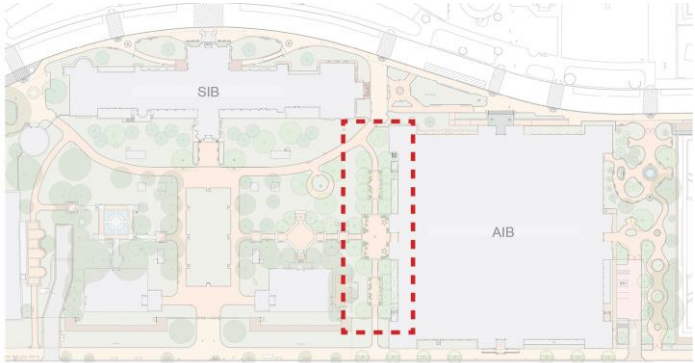
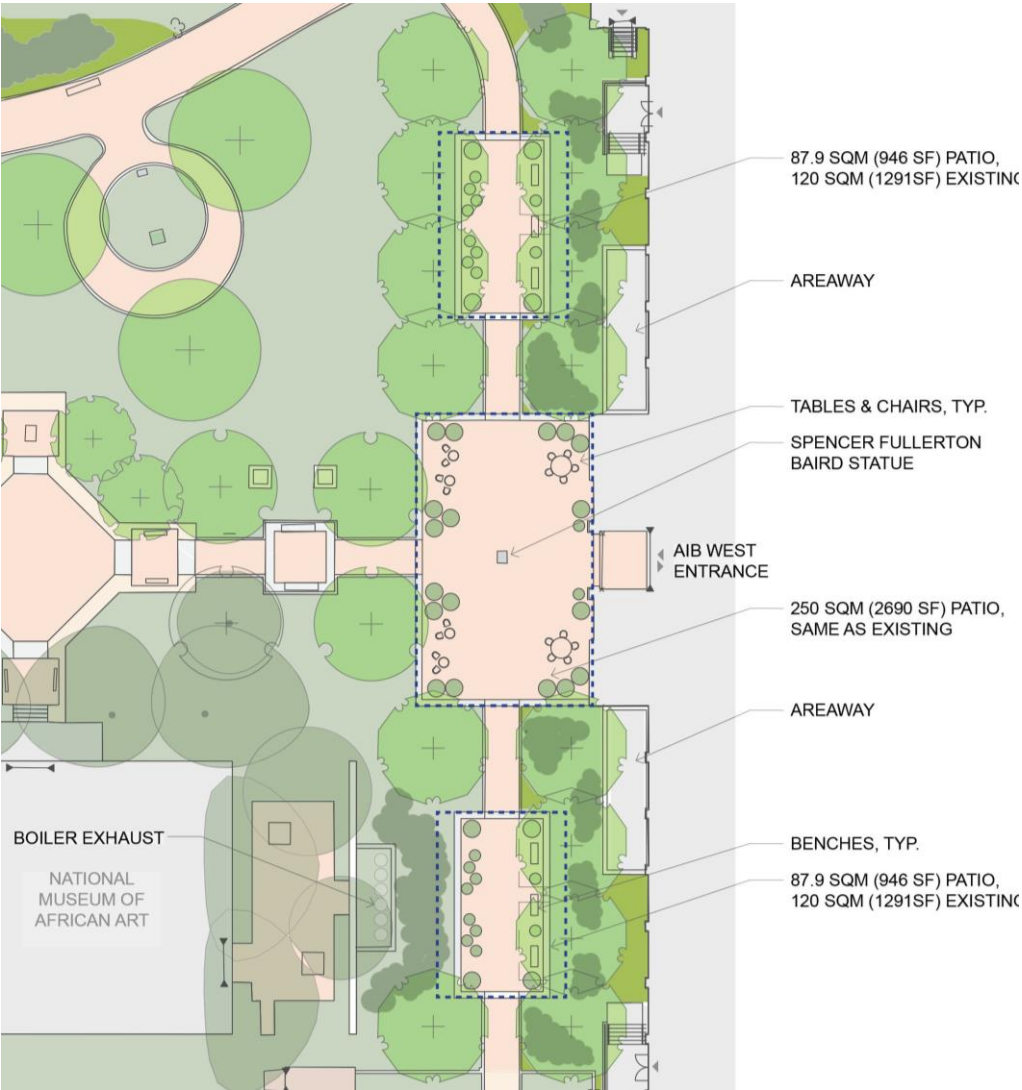
### Design Objectives

- Replace existing vegetation in the spirit of the existing character while accommodating new below-grade improvements
- Coordinate tree plantings adjacent to the Castle for improved façade maintenance.
- Coordinate with NPS on the eventual siting of the Downing Urn



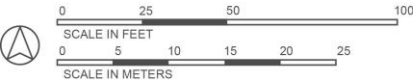
# GARDENS AND GROUNDS

## HAUPT GARDEN – PLANTING STRATEGY



### LEGEND

- EXTENT OF EXISTING PATIOS
- DECIDUOUS TREE
- EVERGREEN TREE
- EXISTING TREE
- SHRUBS (1.2-3M / 4-10'HT)
- GROUNDCOVER (0.3-0.91M / 1-3' HT)
- LAWN / STEPPABLES (<0.3M / 1' HT)
- PLANTERS



Freestanding granite clad wall in the Haupt Garden.

# GARDENS AND GROUNDS

## RIPLEY GARDEN – EXISTING CONDITIONS



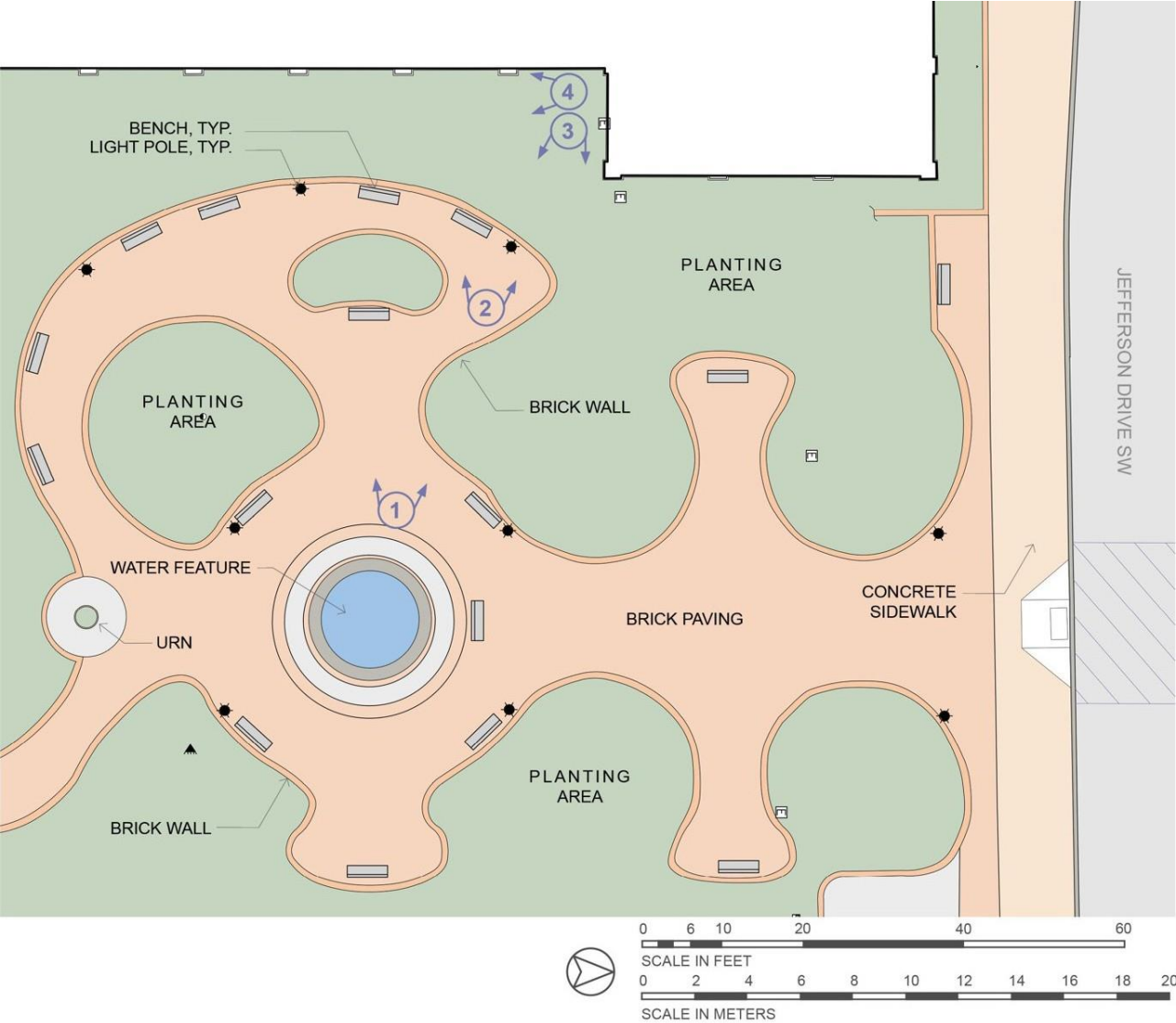
# GARDENS AND GROUNDS

## RIPLEY GARDEN - PROPOSED



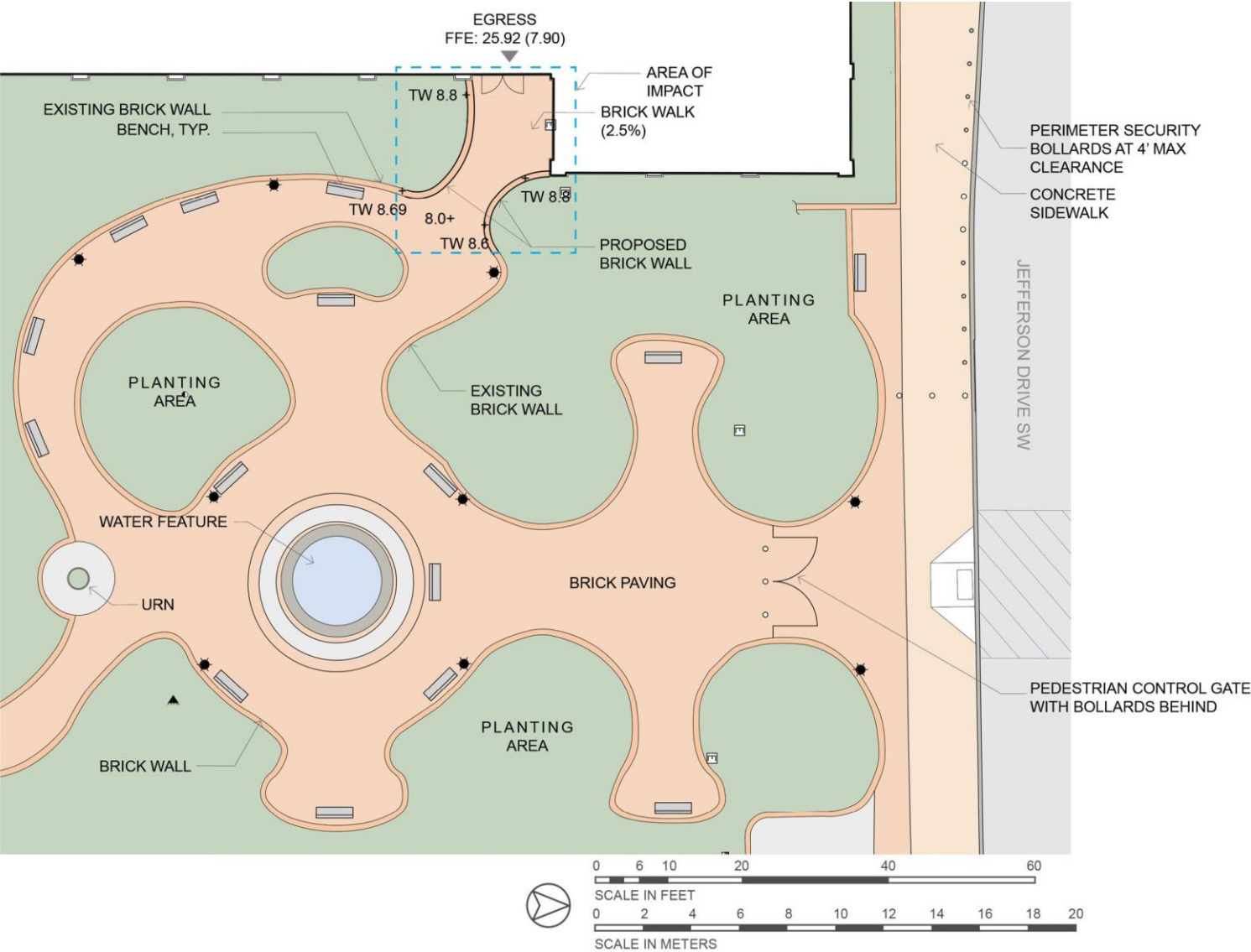
# GARDENS AND GROUNDS

## RIPLEY GARDEN – EXISTING CONDITIONS



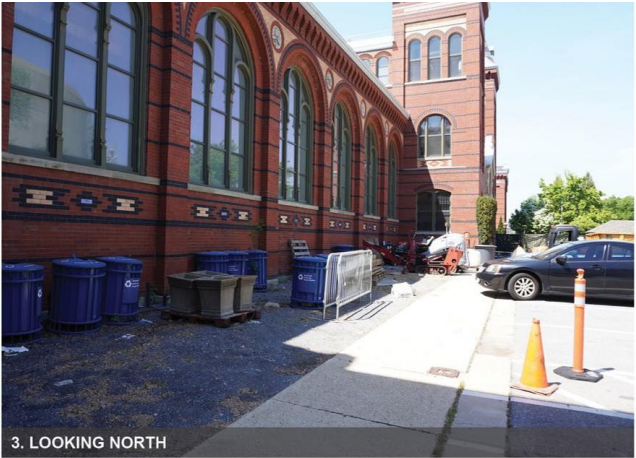
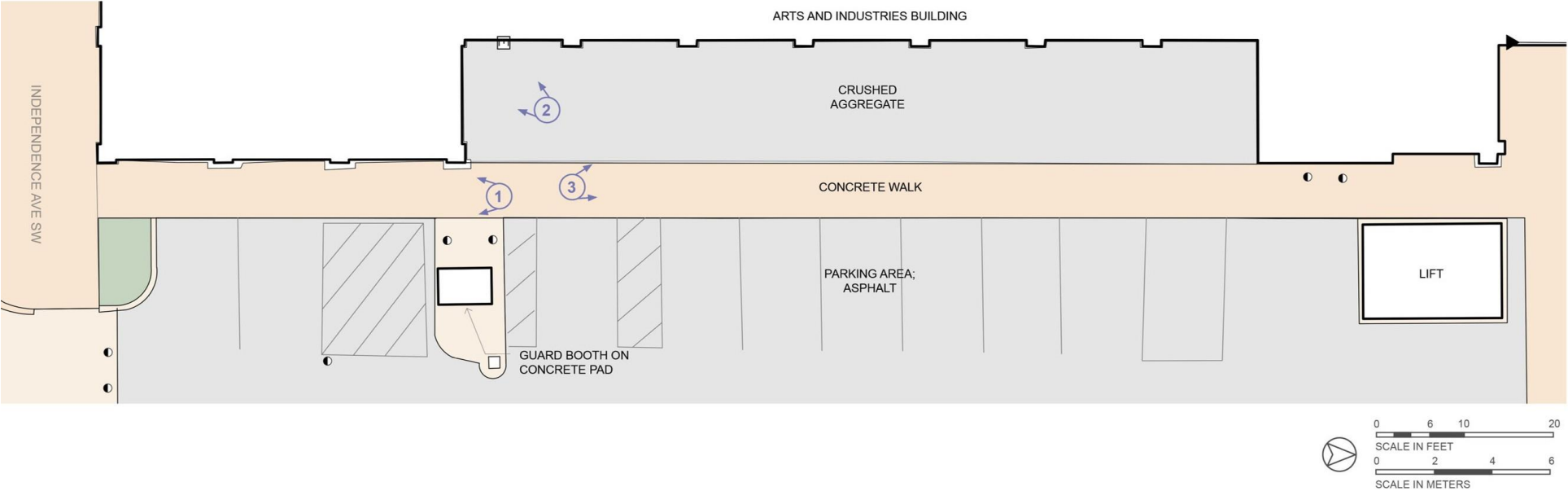
# GARDENS AND GROUNDS

## RIPLEY GARDEN – PROPOSED EGRESS



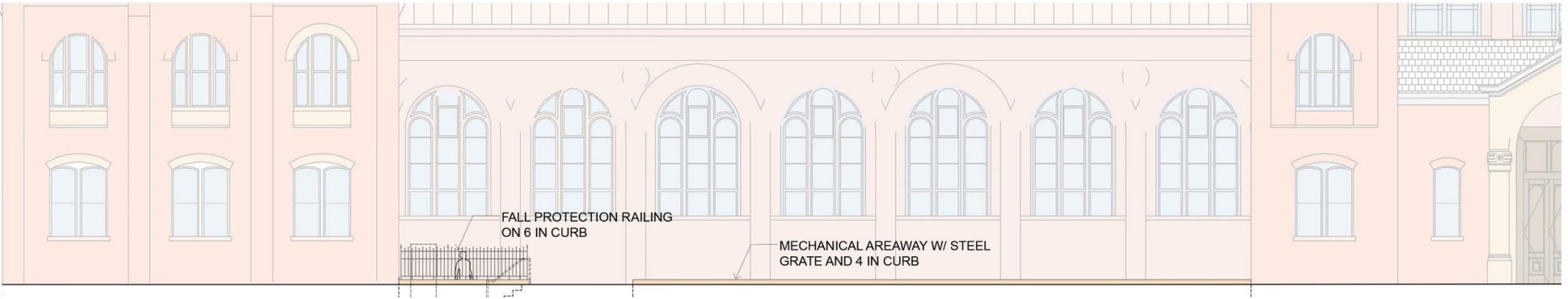
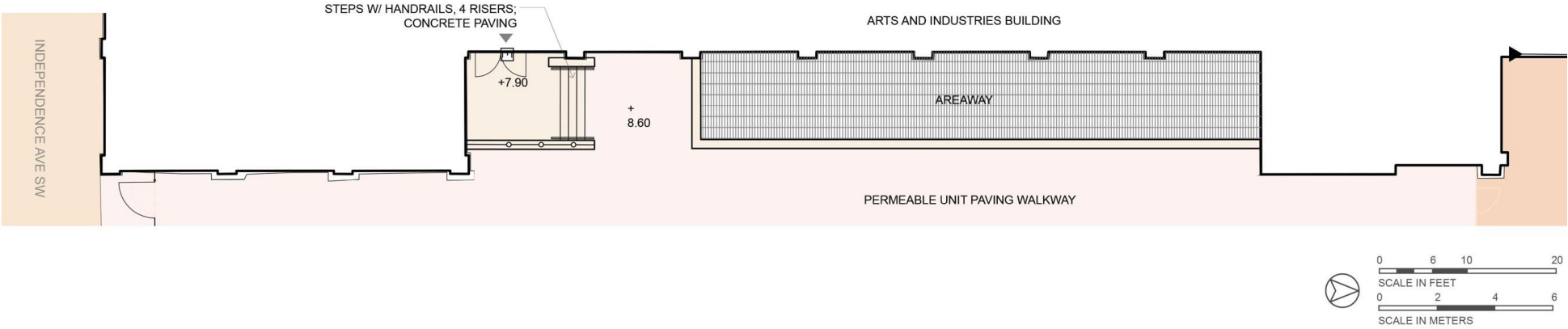
# GARDENS AND GROUNDS

## AIB EAST PARKING LOT – EXISTING CONDITIONS




# GARDENS AND GROUNDS


## AIB EAST PARKING LOT – PROPOSED




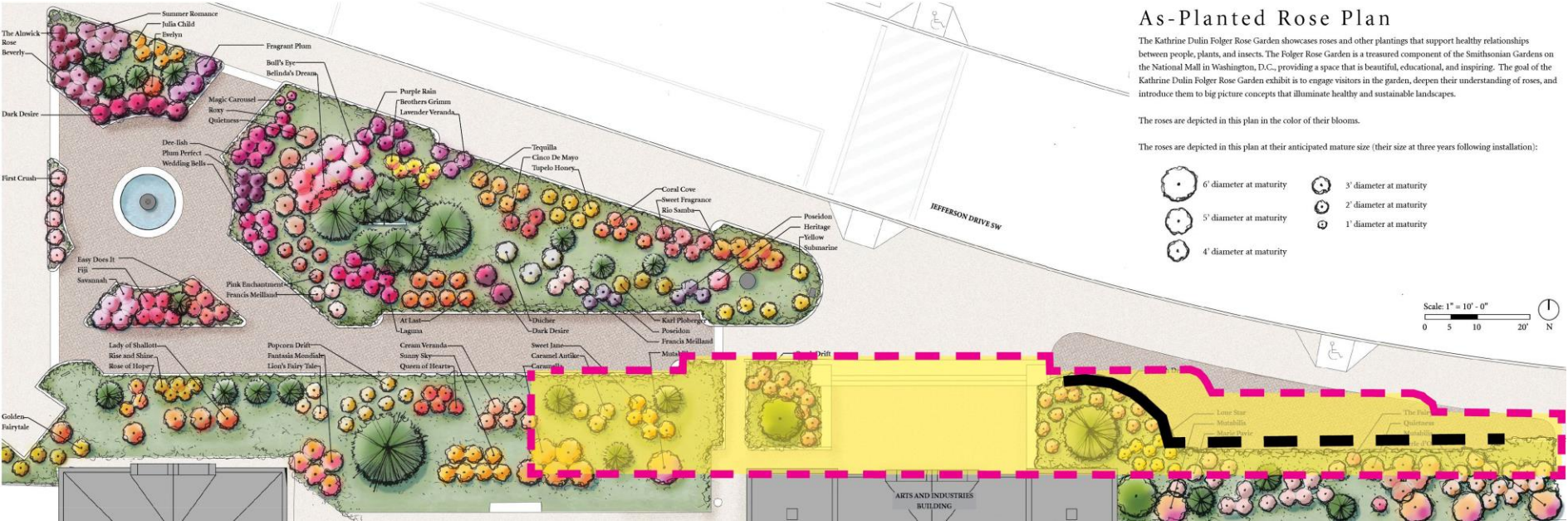
# GARDENS AND GROUNDS

## FOLGER ROSE GARDEN

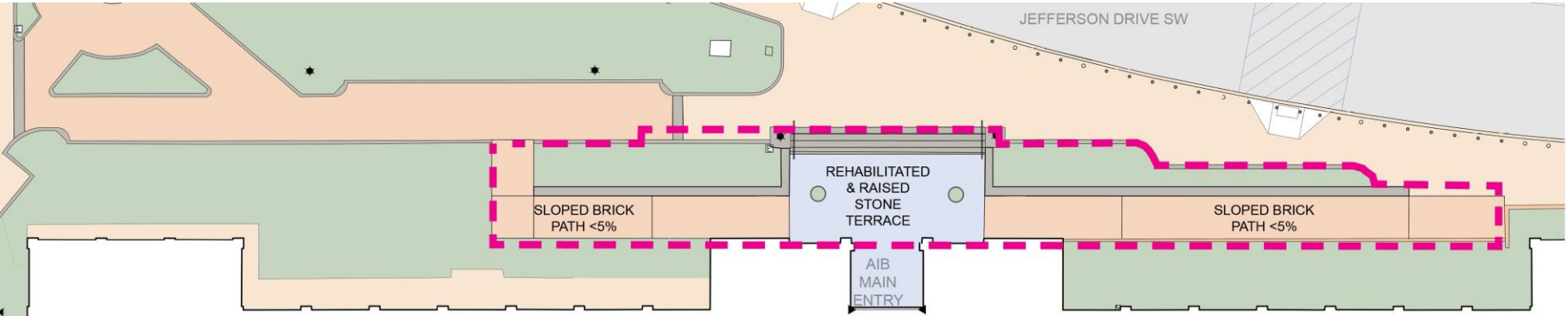
 ALTERATION OF EXISTING VEGETATION AND HARDSCAPE FOR ACCESSIBILITY

 EXTENT OF PROPOSED ALTERATIONS FOR ACCESSIBILITY

 LOSS OF, HUGH NEWELL JACOBSEN FENCE



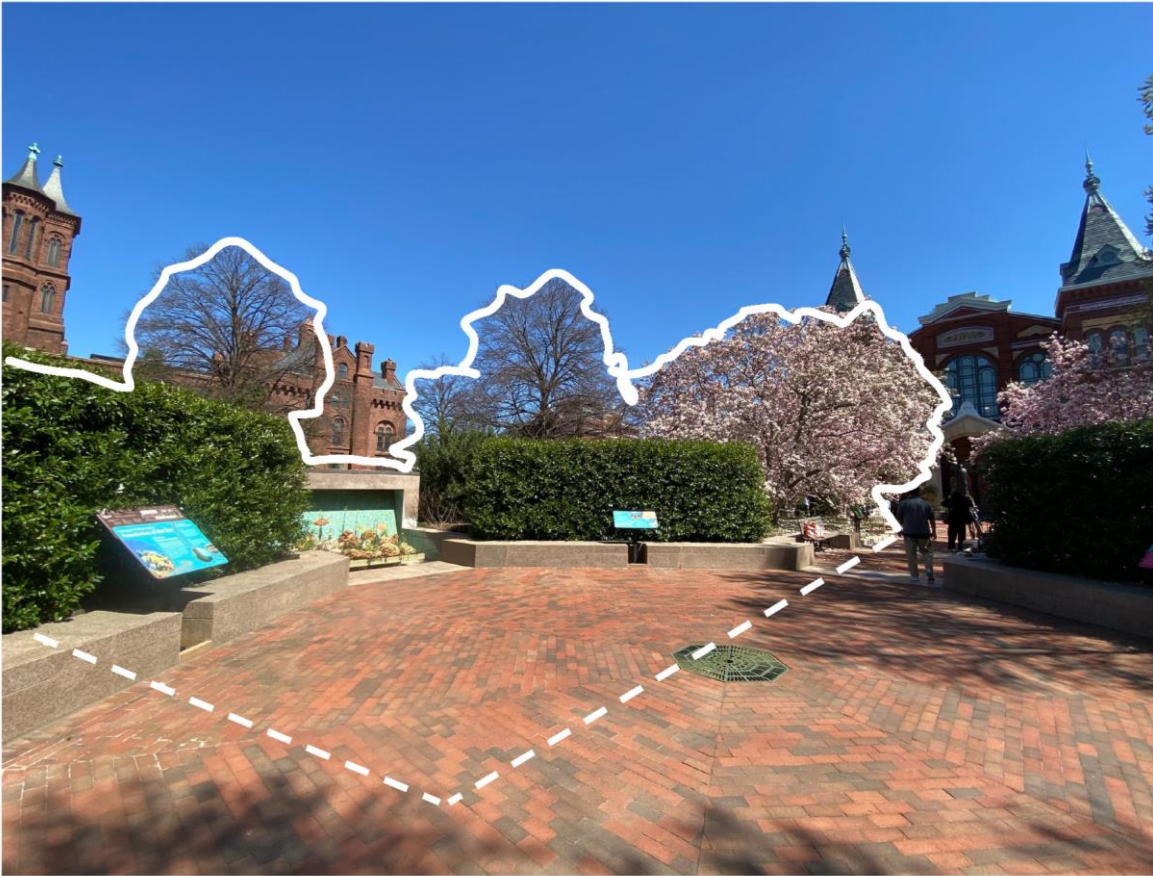
Existing Folger Rose Garden plan.



Proposed Folger Rose Garden plan.

# GARDENS AND GROUNDS

## AFRICAN ART MUSEUM PAVILION FOUNTAIN GARDEN



### Design Objectives

- Carefully document Fountain Garden hardscape and water features; salvage and rehabilitate after insertion of CUP
- Replace existing vegetation in the spirit of the existing character while accommodating new below-grade improvements



# GARDENS AND GROUNDS

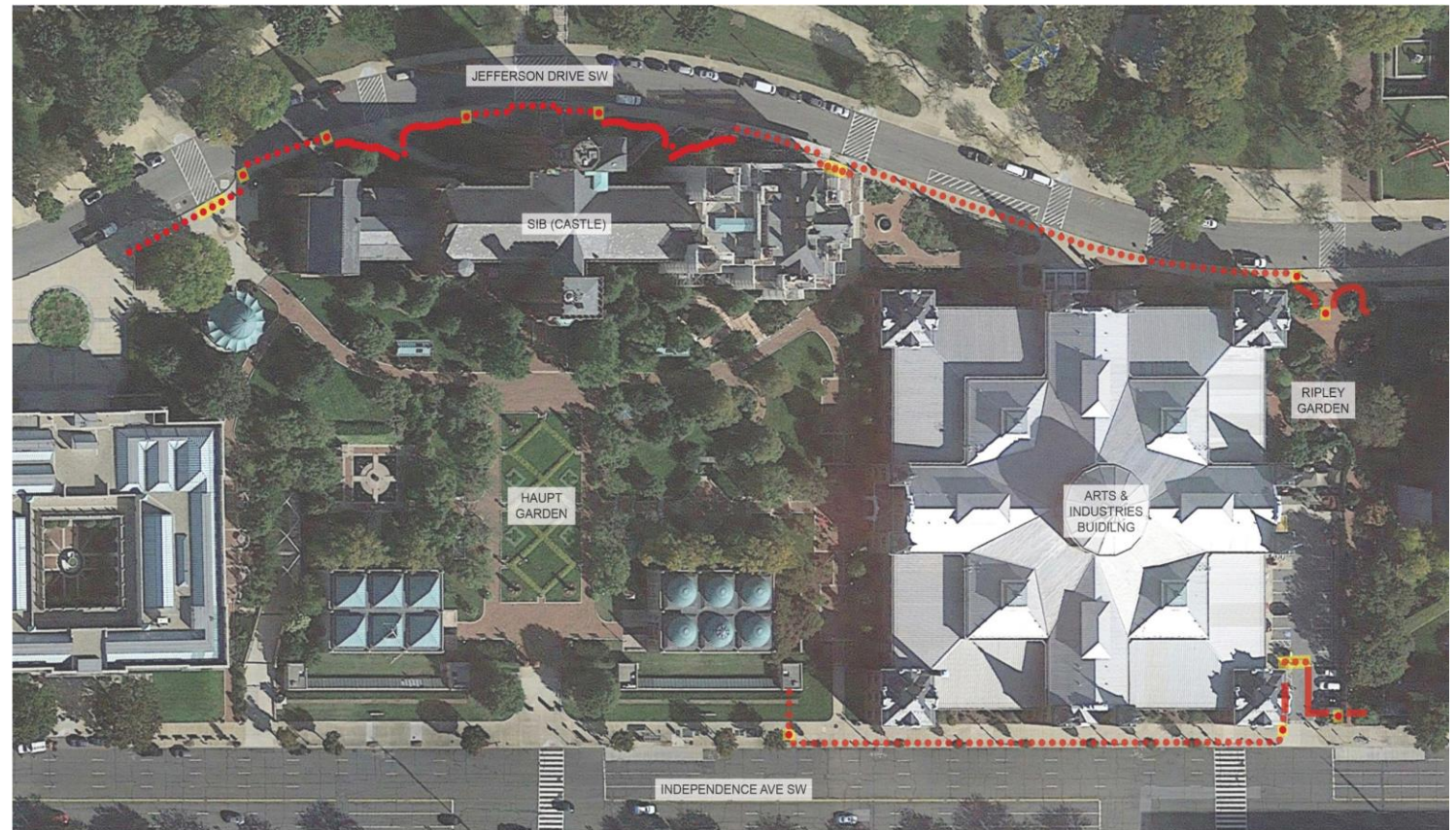
## PERIMETER SECURITY

### Background

- 2004 Mall-Wide Perimeter Security Concept Design developed by Beyer Blinder Belle.
- 2018 South Mall Campus Master Plan recommended following guidance from 2004.
- Smithsonian Institution and A/E Team collaborating to establish requirements and scope of perimeter security for the RoHC project.

### Design Objectives

- Enhance Perimeter Security along Jefferson Drive and Independence Ave within RoHC project area.
- Follow Contextual and Unified Approach as recommended by the 2004 Mall-Wide Perimeter Security Concept Design.
- Integrate and conceal perimeter security measures within the site's existing features and landscape to the extent possible.
- Envision design approach as an extension applied Mall-Wide.



LEGEND  
• BOLLARDS    • RETRACTABLE BOLLARDS    — SECURITY WALL

RoHC perimeter security concept.



# GARDENS AND GROUNDS

## HISTORICAL ARCHITECTURAL DETAILS INFORM PERIMETER SECURITY FEATURES



Fence at Rose Garden.



Fence at Haupt Garden.



Cast stone lighting base.



Entryway arch at AIB.



Black metal settee.



Metal arbor at Rose Garden.



Typical granite curb.

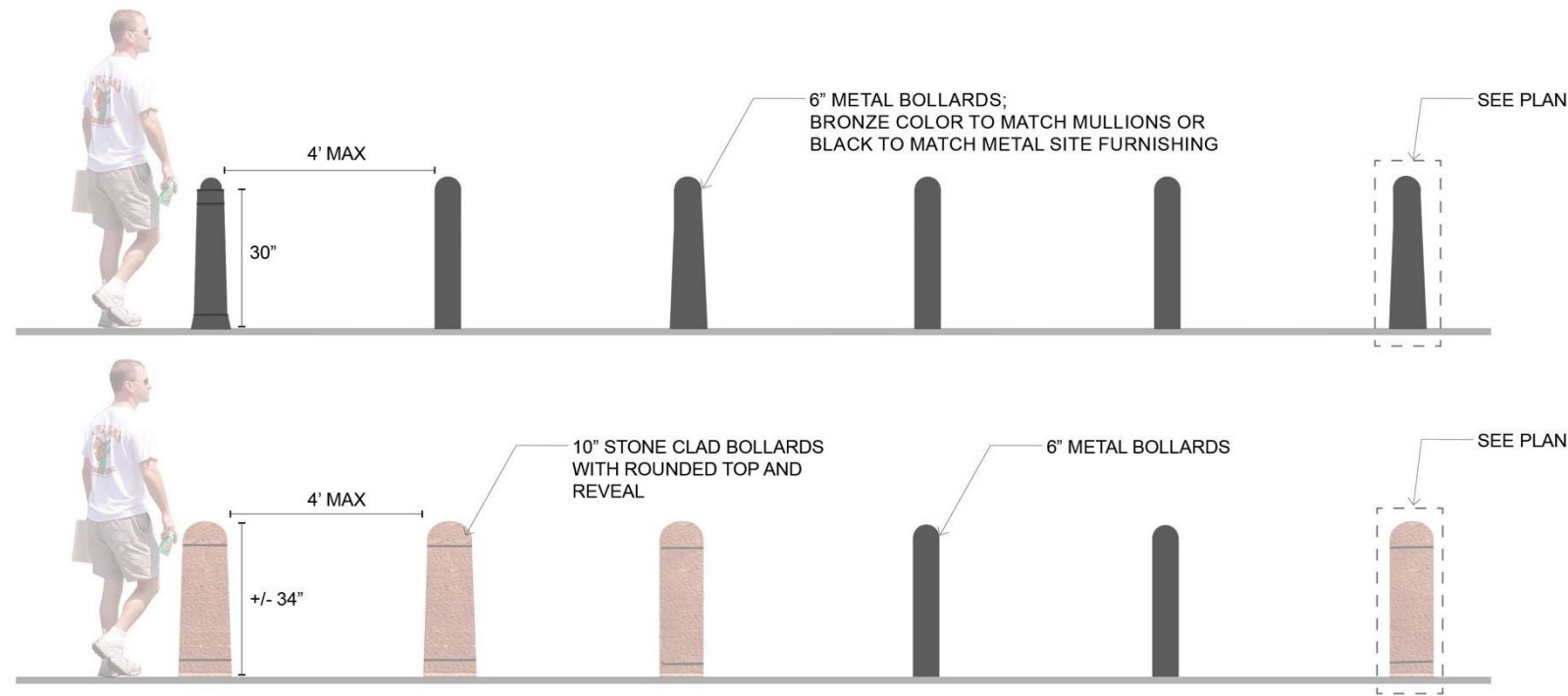


Granite-clad site wall at NMAFA.

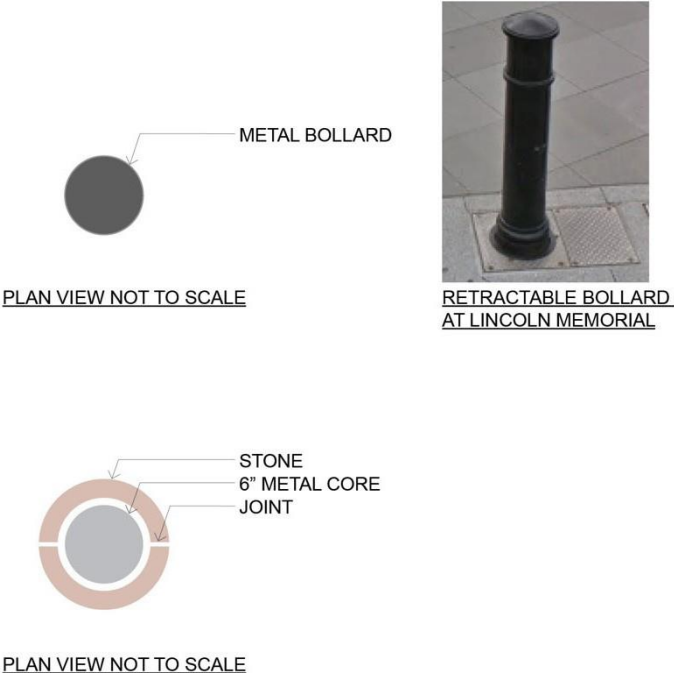


# GARDENS AND GROUNDS

## MATERIALS AND FORMS

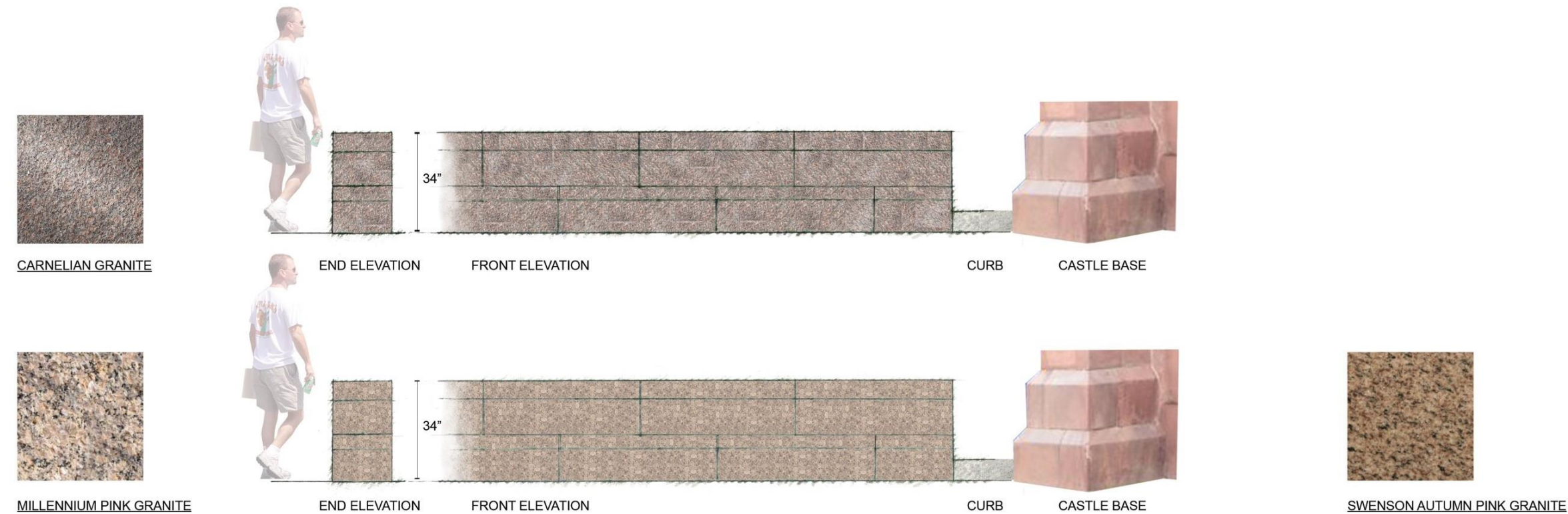


Site bollard concept diagram.



# GARDENS AND GROUNDS

## MATERIALS AND FORMS

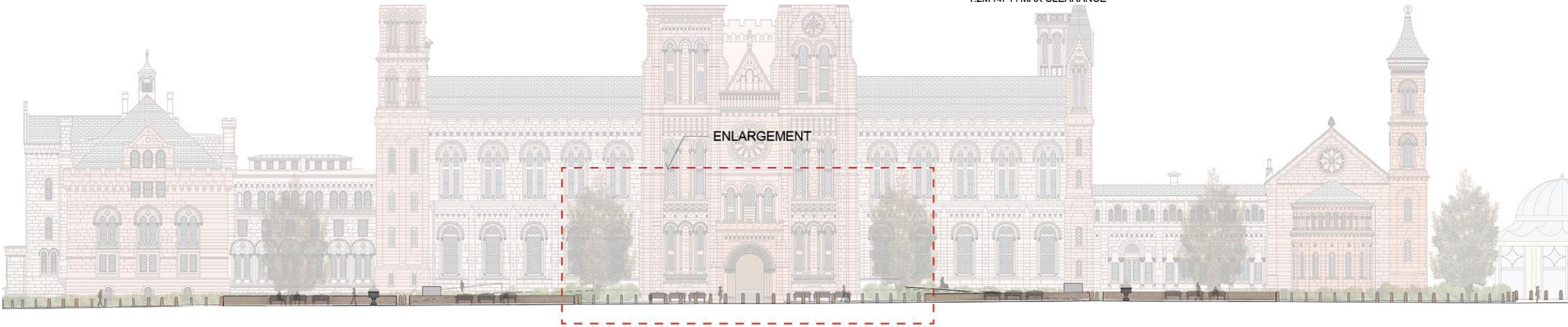
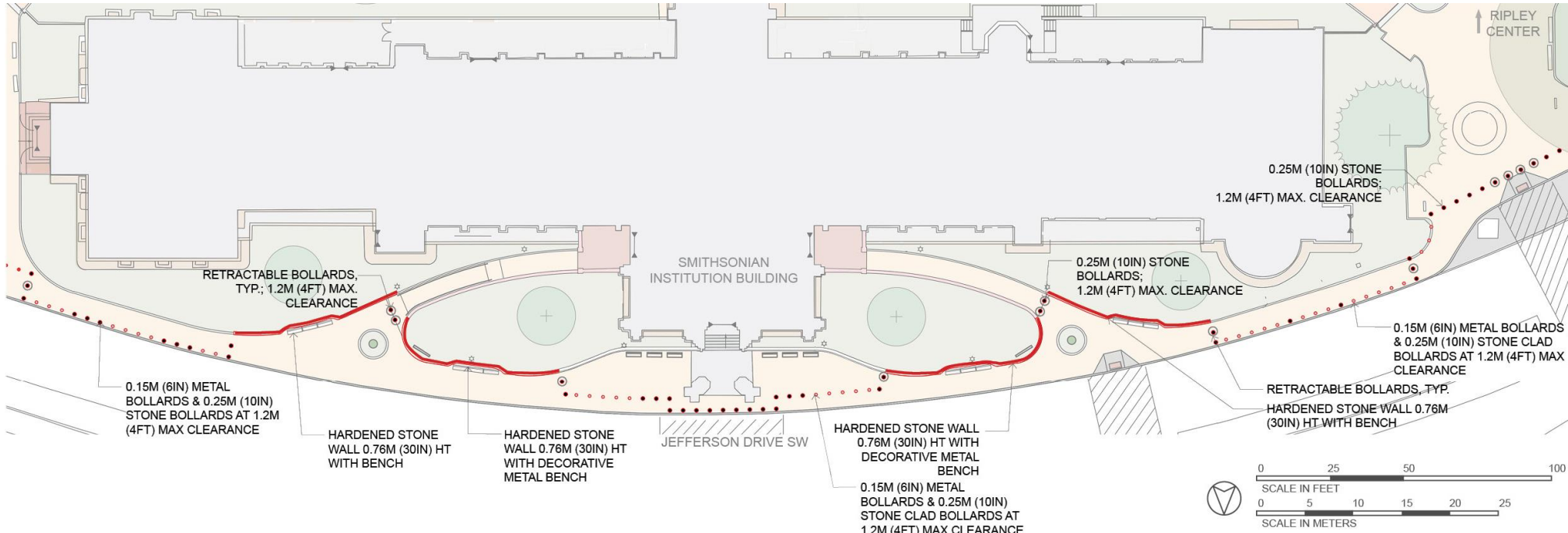


Site wall concept diagram.

# GARDENS AND GROUNDS

## PERIMETER SECURITY – JEFFERSON DRIVE AT THE CASTLE(SIB)

### PREFERRED OPTION



# GARDENS AND GROUNDS

PERIMETER SECURITY –  
JEFFERSON DRIVE AT THE  
CASTLE(SIB)

PREFERRED OPTION



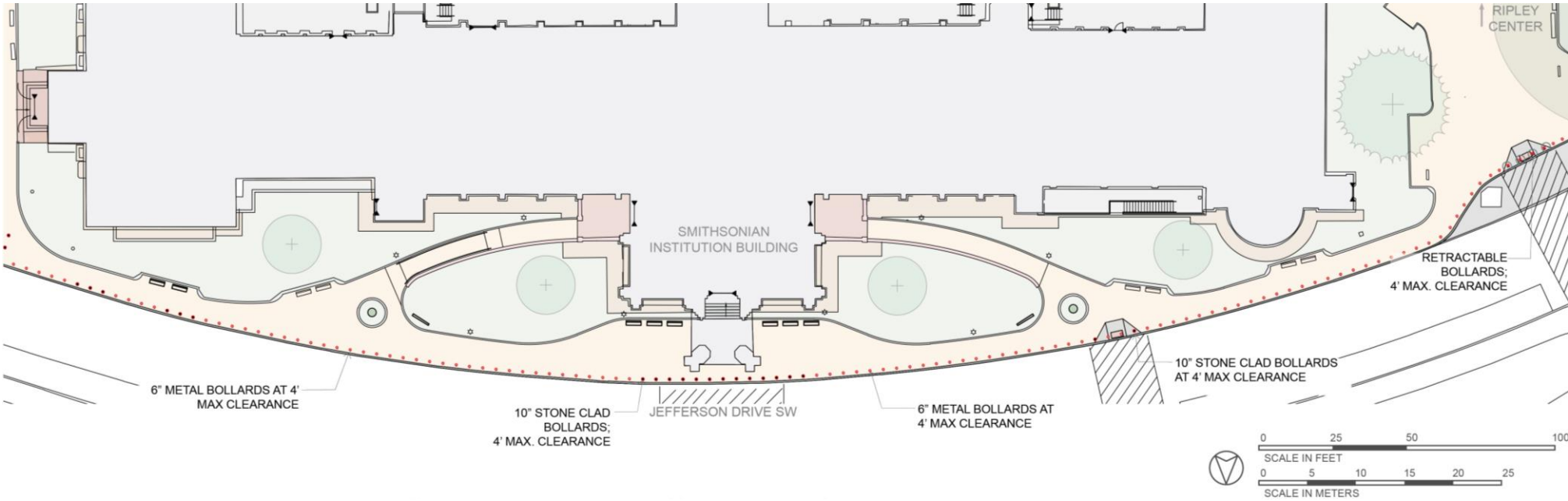
Proposed Castle north entrance visualization.



# GARDENS AND GROUNDS

PERIMETER SECURITY –  
JEFFERSON DRIVE AT THE  
CASTLE(SIB)

BOLLARDS AT CURB



# GARDENS AND GROUNDS

PERIMETER SECURITY –  
JEFFERSON DRIVE AT THE  
CASTLE(SIB)

BOLLARDS AT CURB



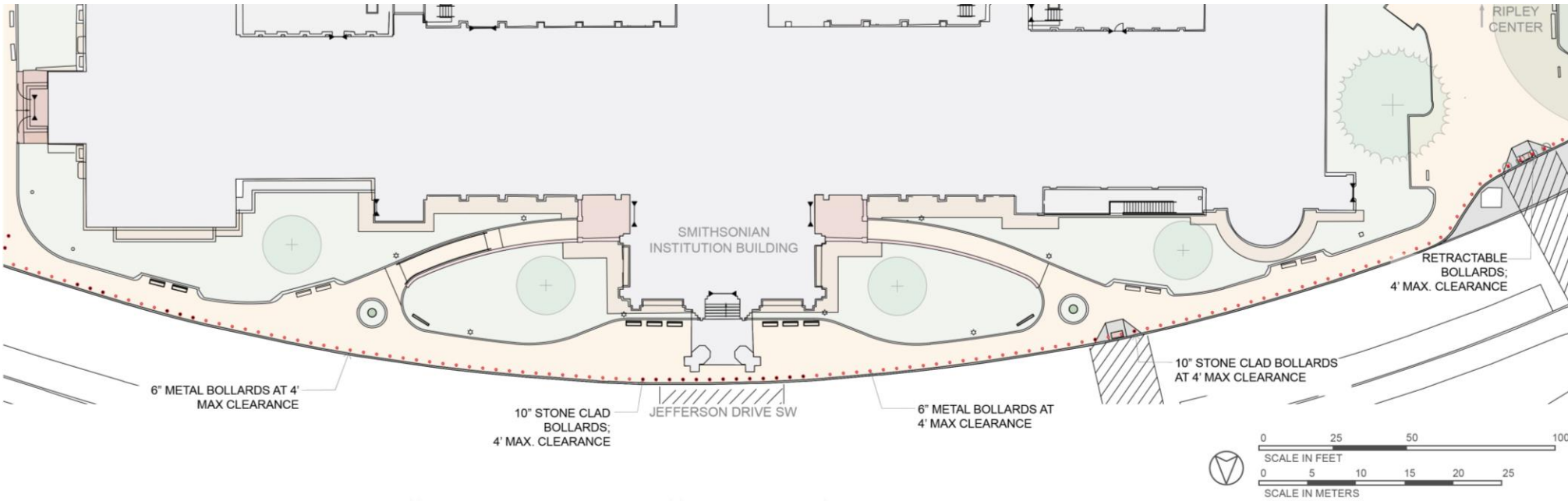
Proposed Castle north entrance visualization – bollards at curb.



# GARDENS AND GROUNDS

PERIMETER SECURITY –  
JEFFERSON DRIVE AT THE  
CASTLE(SIB)

ADDITIONAL PLANTING



# GARDENS AND GROUNDS

PERIMETER SECURITY –  
JEFFERSON DRIVE AT THE  
CASTLE(SIB)

ADDITIONAL PLANTING

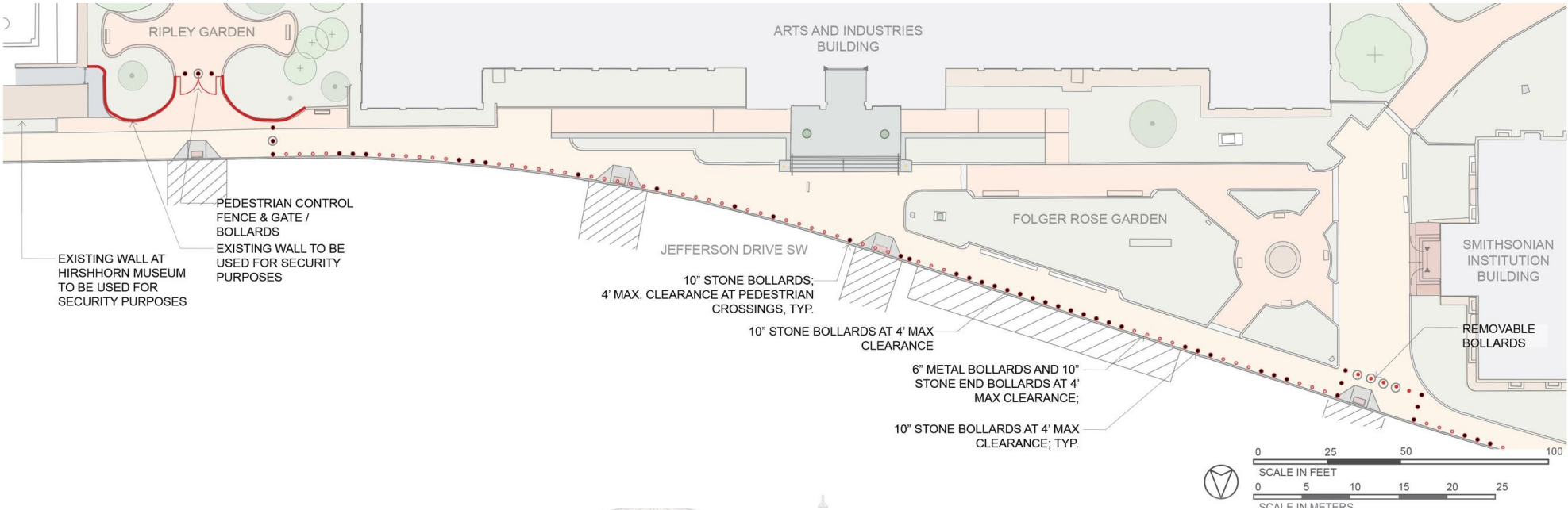


Proposed Castle north entrance visualization – additional planting.



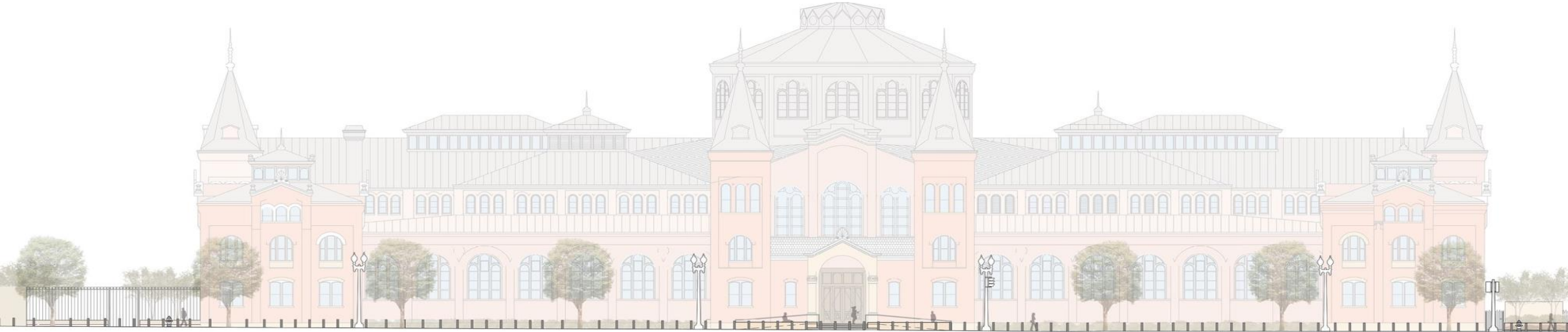
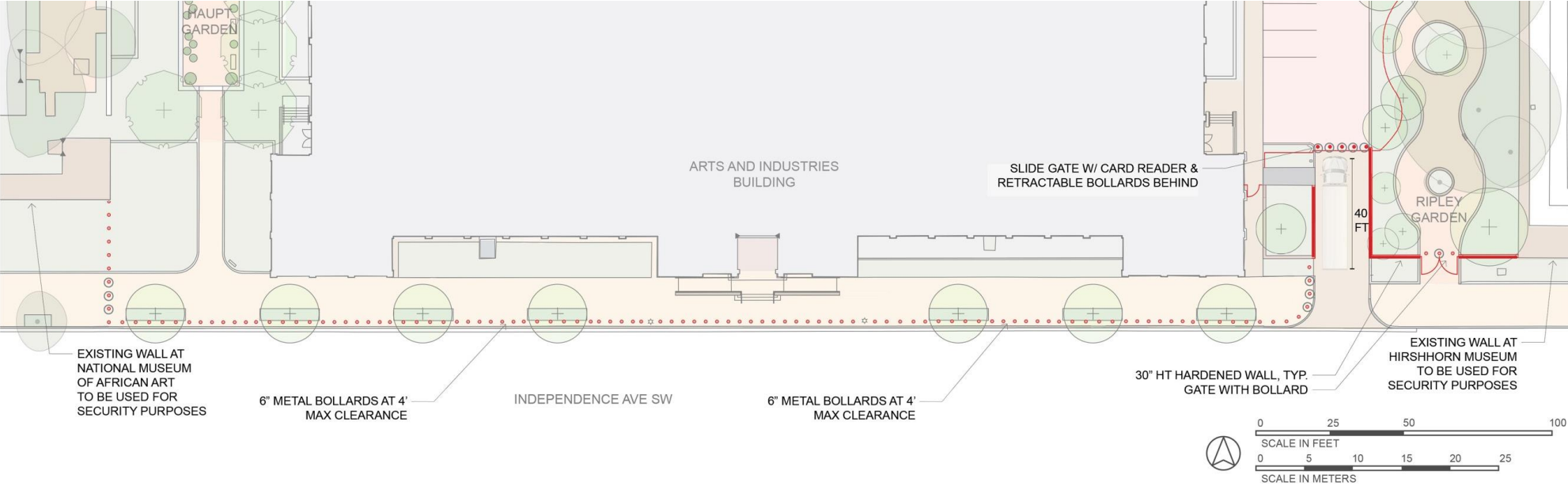
# GARDENS AND GROUNDS

## PERIMETER SECURITY – JEFFERSON DRIVE AT AIB



# GARDENS AND GROUNDS

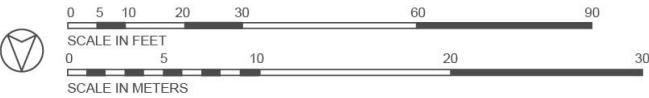
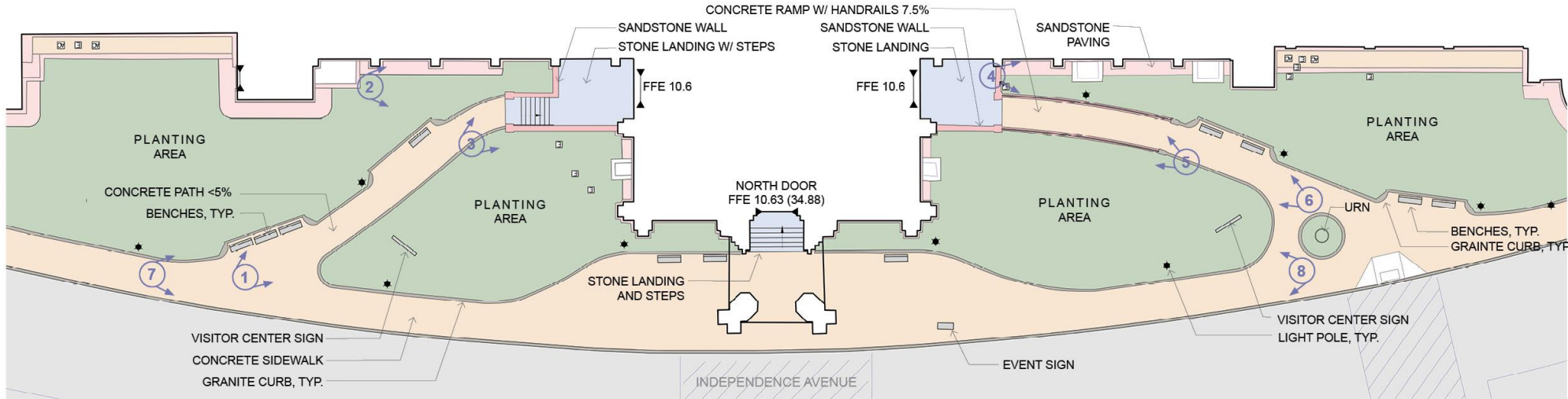
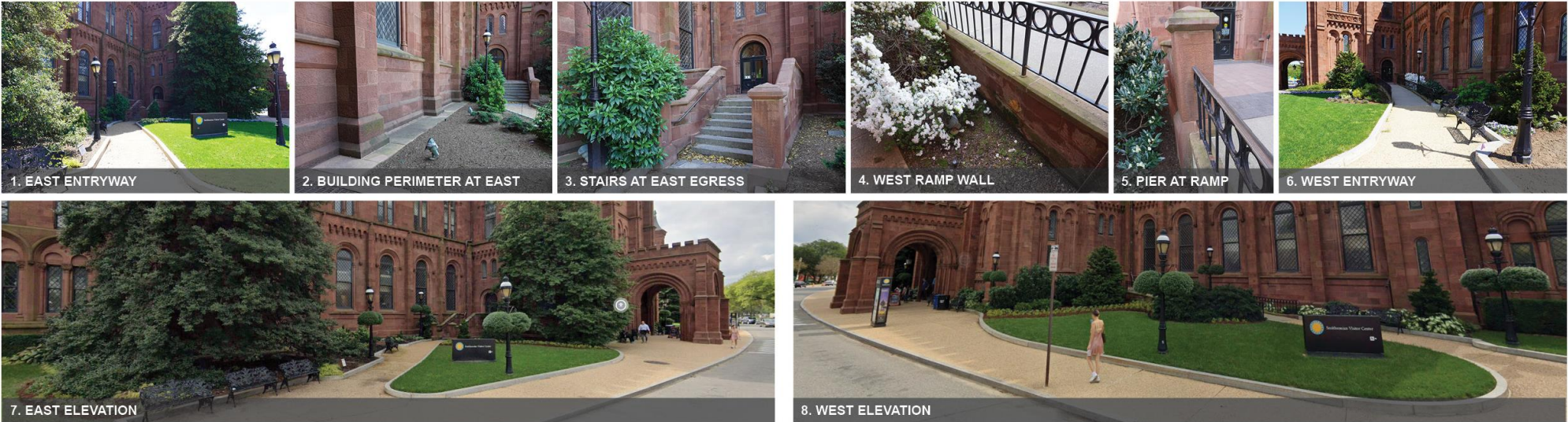
## PERIMETER SECURITY – INDEPENDENCE AVENUE



# GARDENS AND GROUNDS

ACCESSIBILITY  
IMPROVEMENTS –  
SIB NORTH ENTRANCE

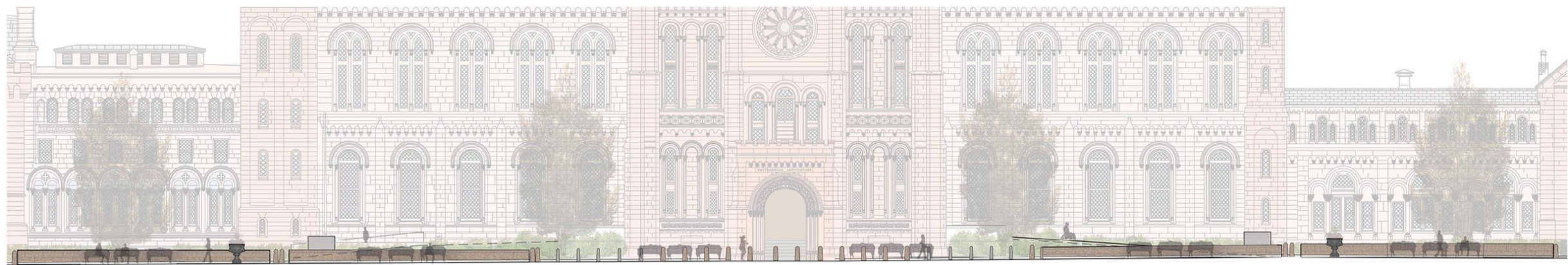
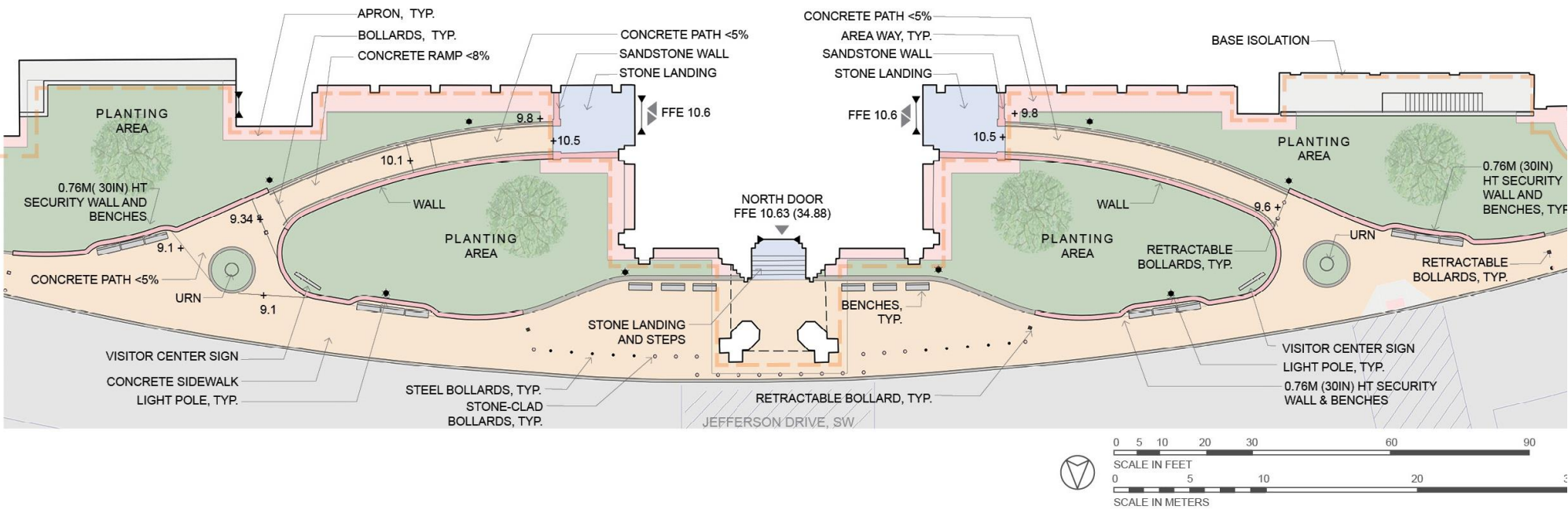
EXISTING CONDITIONS



# GARDENS AND GROUNDS

## ACCESSIBILITY IMPROVEMENTS – SIB NORTH ENTRANCE

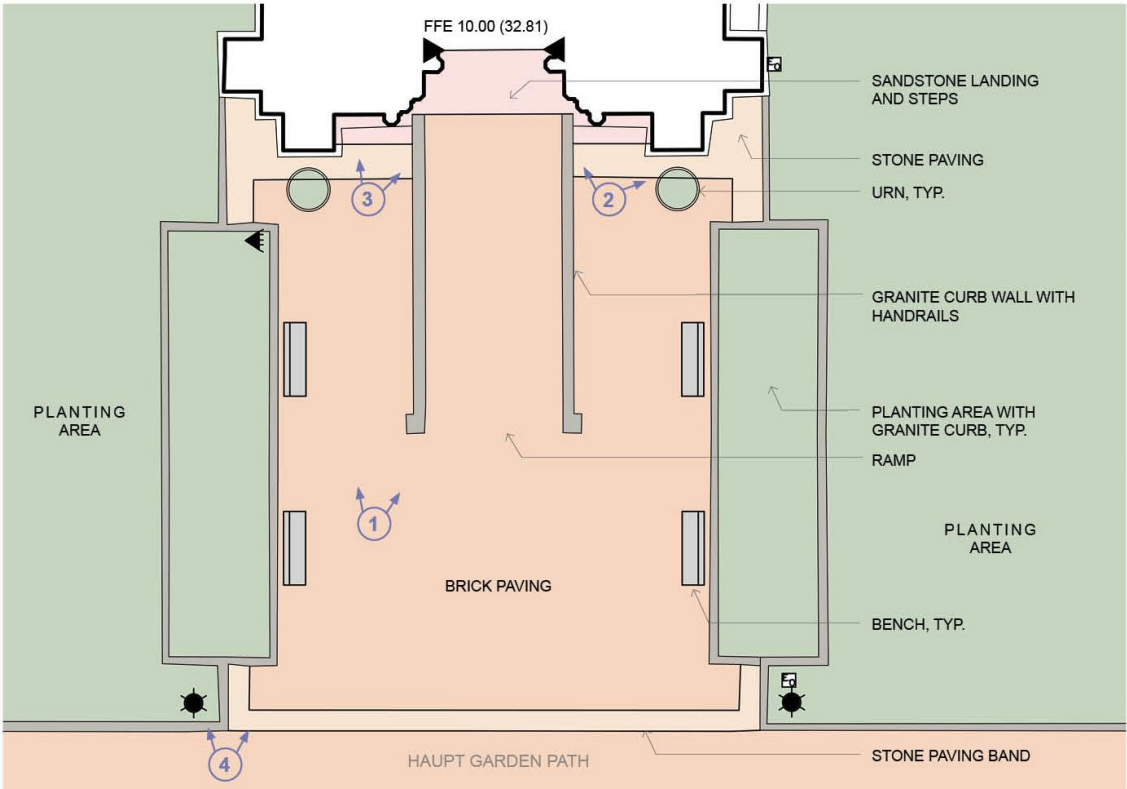
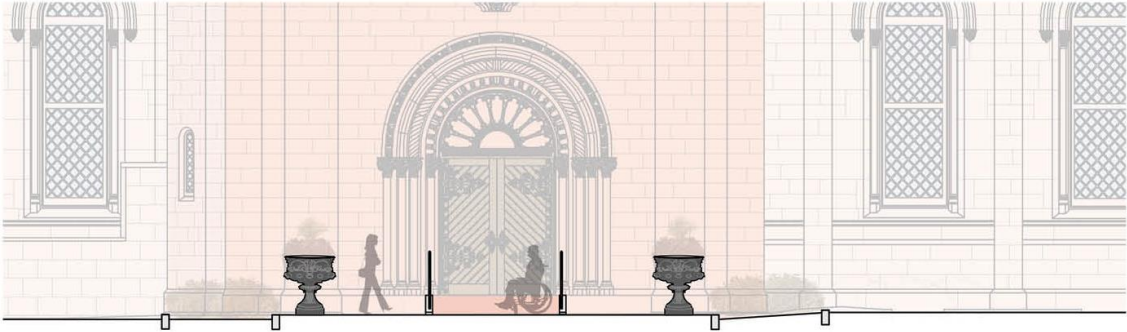
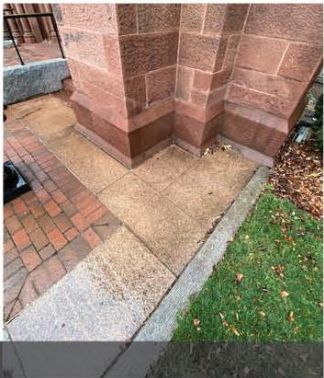
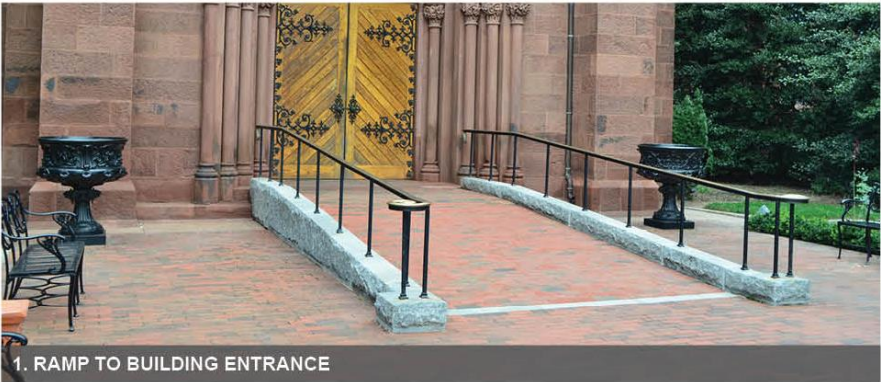
### PROPOSED CONCEPT



# GARDENS AND GROUNDS

## ACCESSIBILITY IMPROVEMENTS – SIB SOUTH ENTRANCE

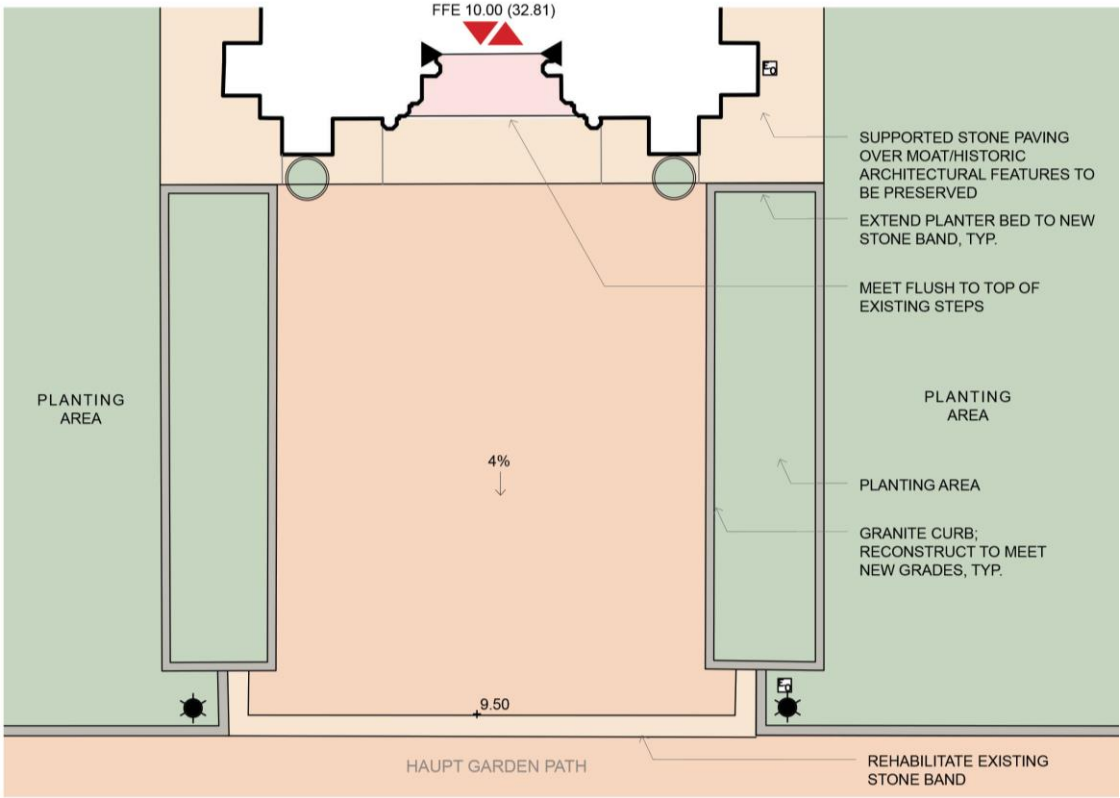
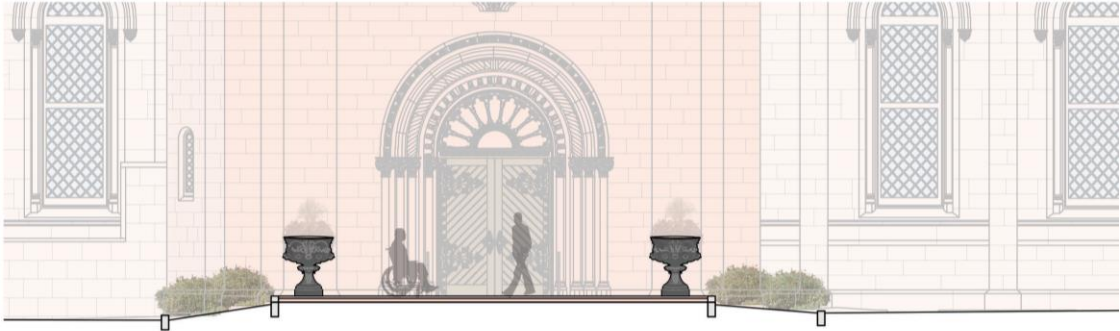
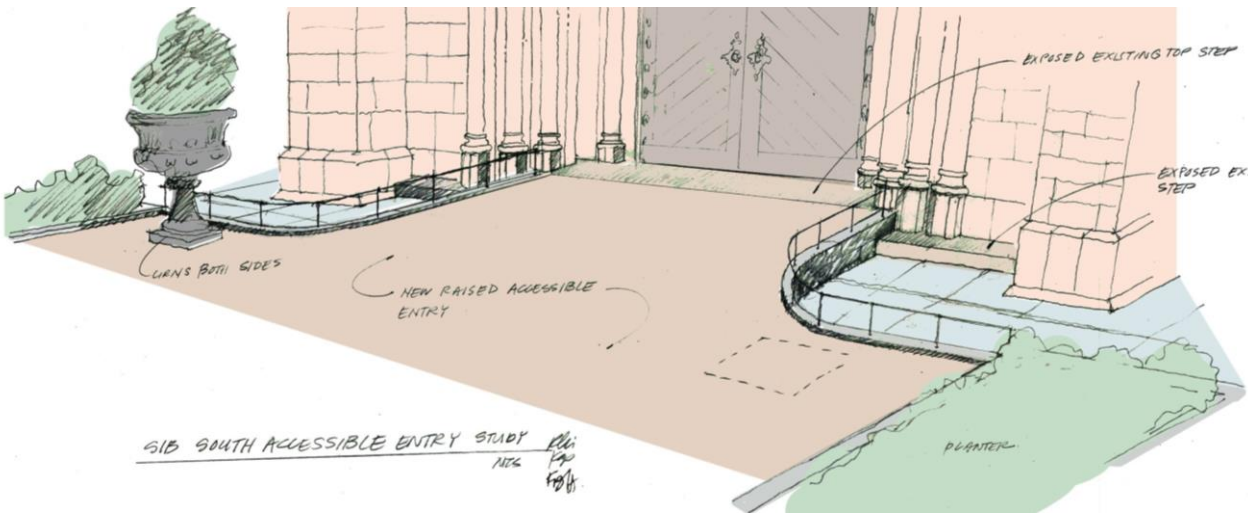
### EXISTING CONDITIONS



# GARDENS AND GROUNDS

## ACCESSIBILITY IMPROVEMENTS – SIB SOUTH ENTRANCE

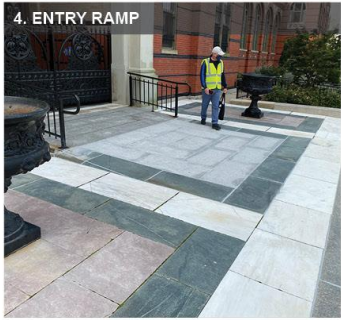
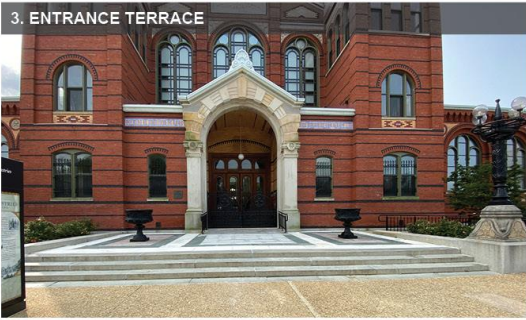
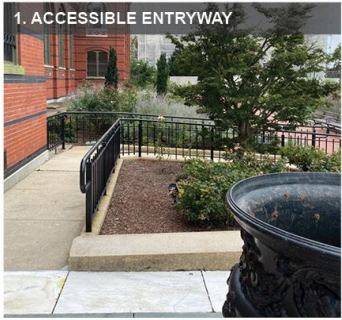
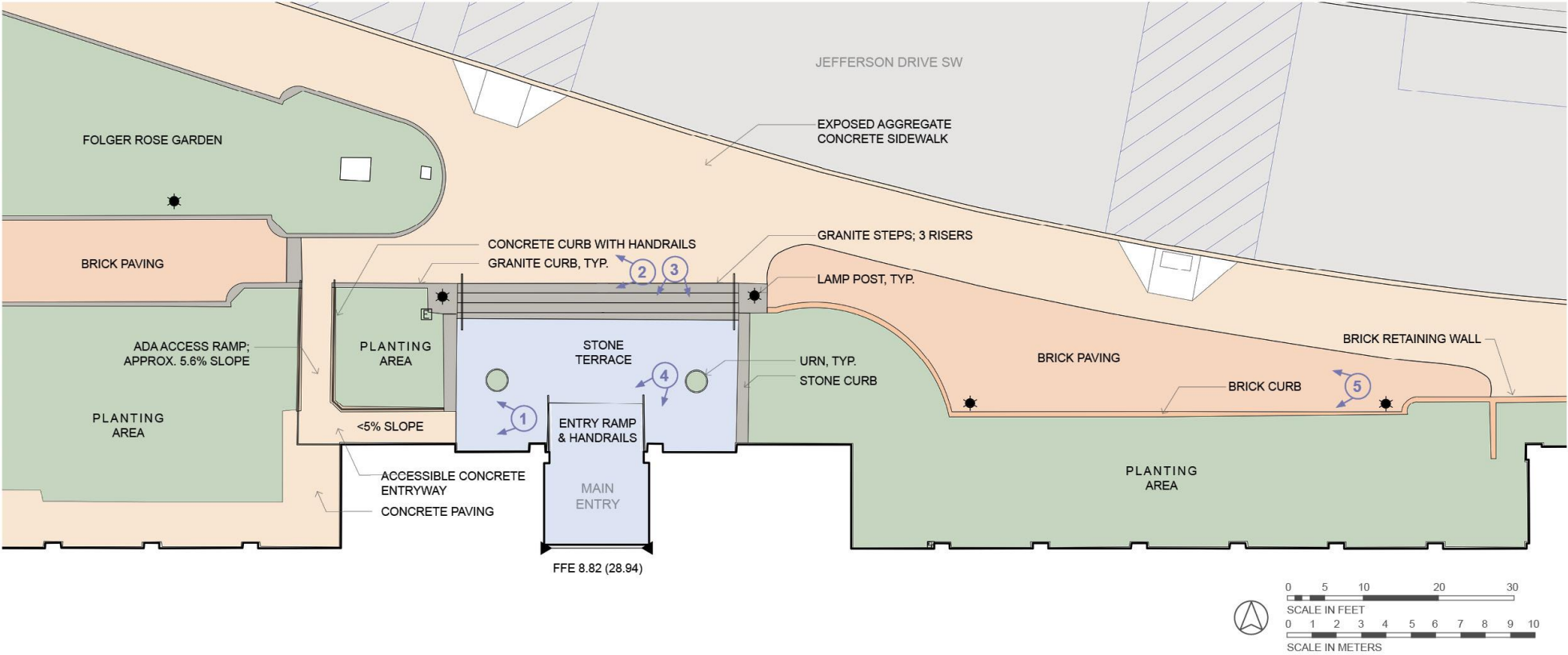
### PROPOSED CONCEPT



# GARDENS AND GROUNDS

## ACCESSIBILITY IMPROVEMENTS - AIB NORTH ENTRANCE

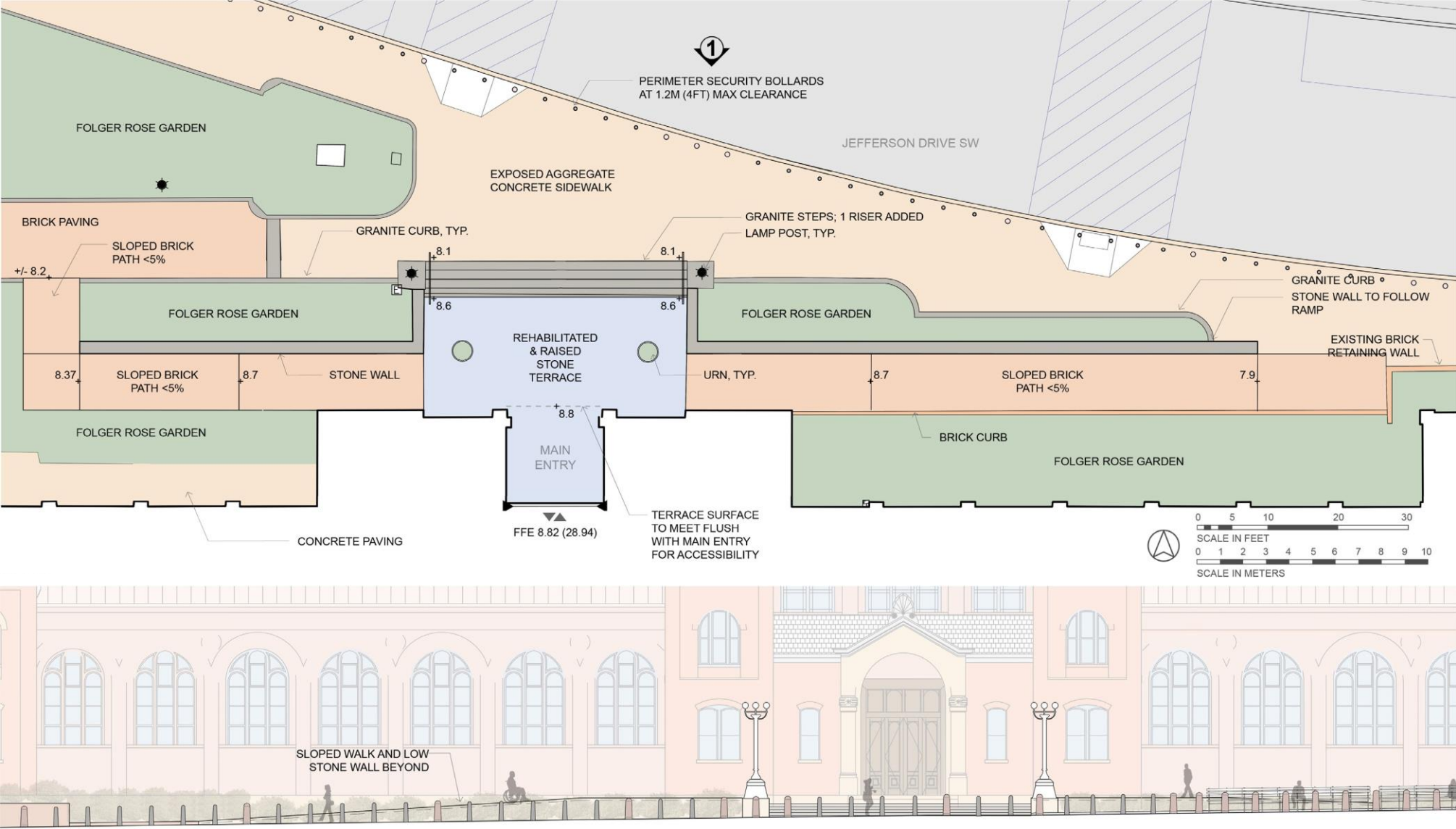
### EXISTING CONDITIONS



# GARDENS AND GROUNDS

## ACCESSIBILITY IMPROVEMENTS – AIB NORTH ENTRANCE

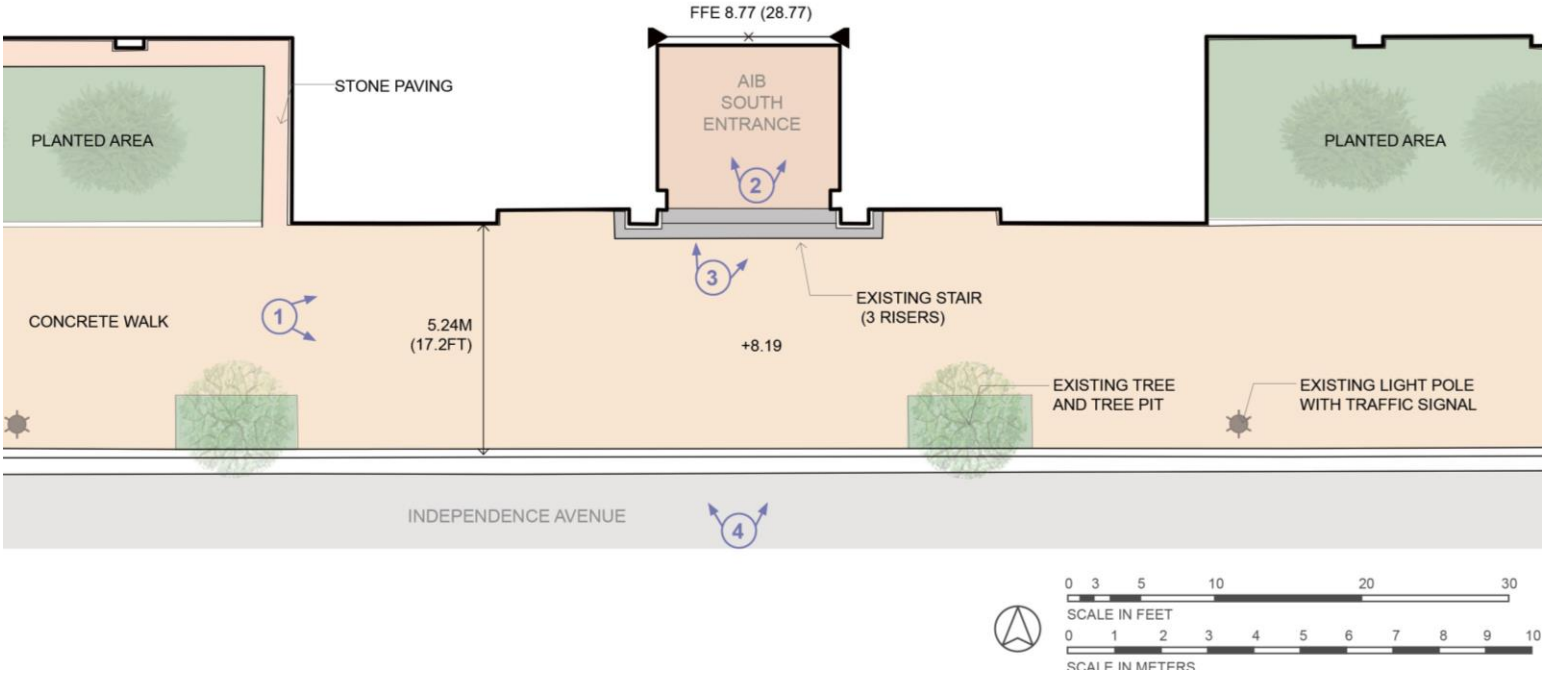
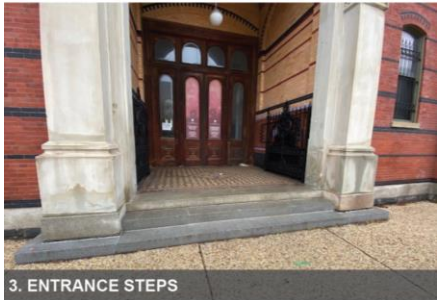
### PROPOSED CONCEPT



# GARDENS AND GROUNDS

## ACCESSIBILITY IMPROVEMENTS - AIB SOUTH ENTRANCE

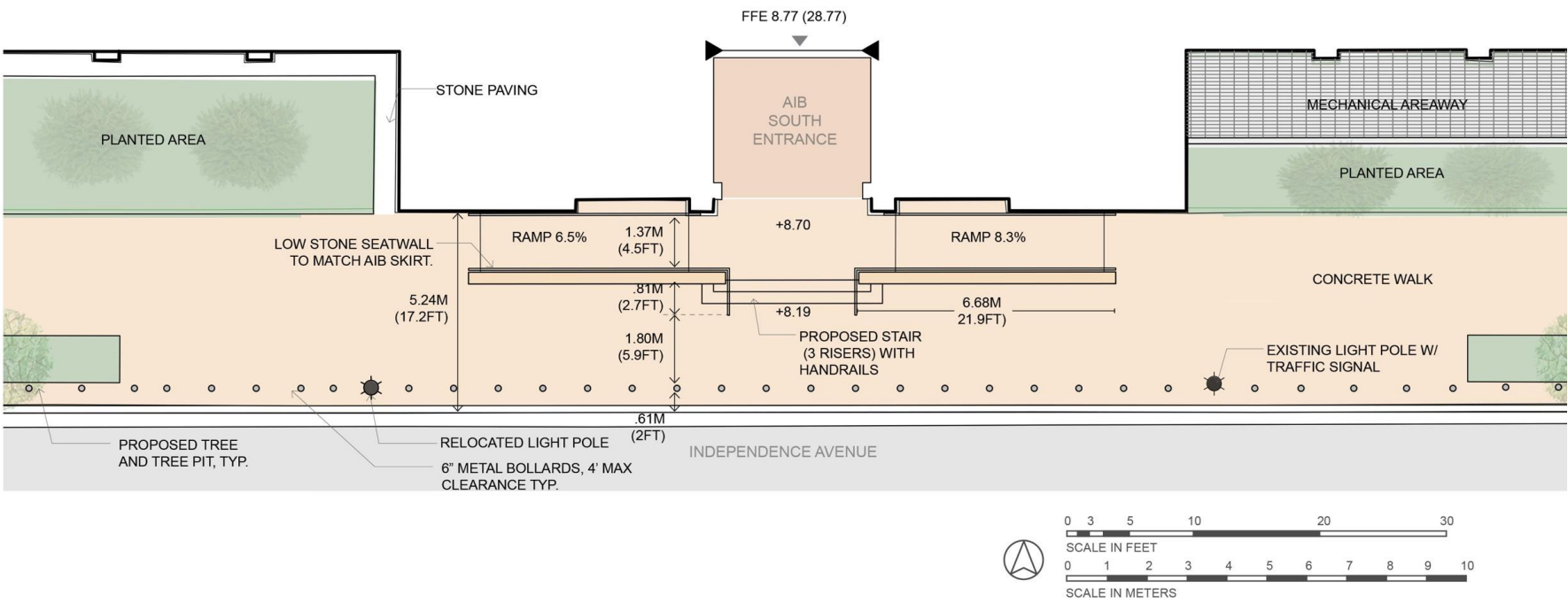
### EXISTING CONDITIONS



# GARDENS AND GROUNDS

## ACCESSIBILITY IMPROVEMENTS – AIB SOUTH ENTRANCE

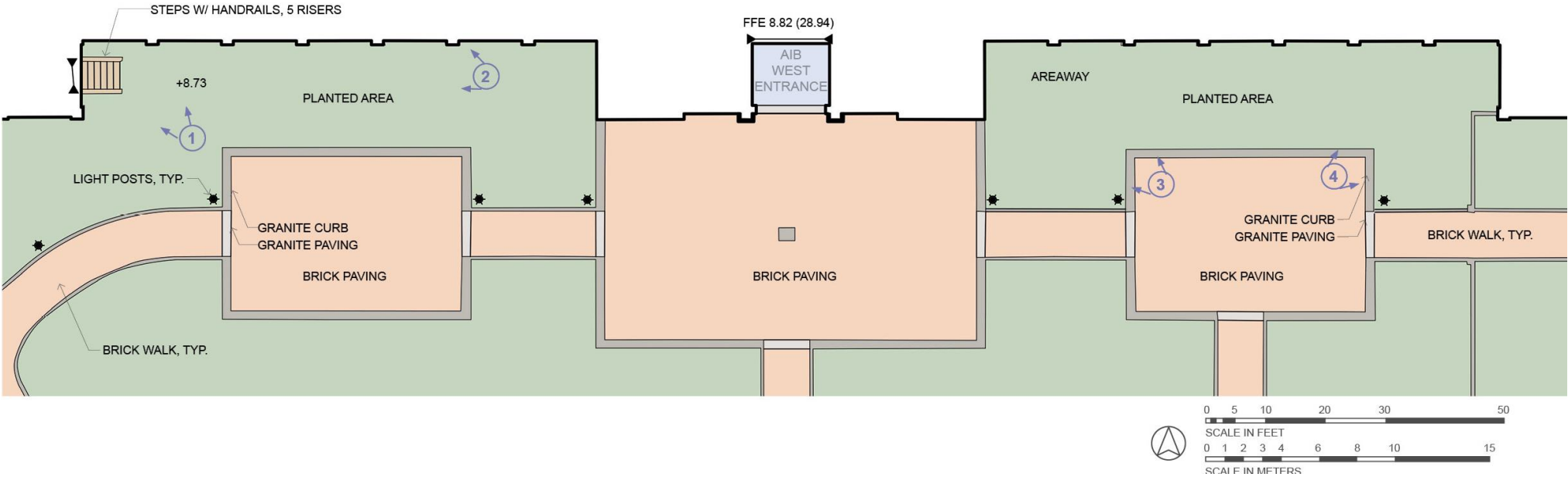
### PROPOSED CONCEPT



# GARDENS AND GROUNDS

## NEW EGRESS – AIB WEST

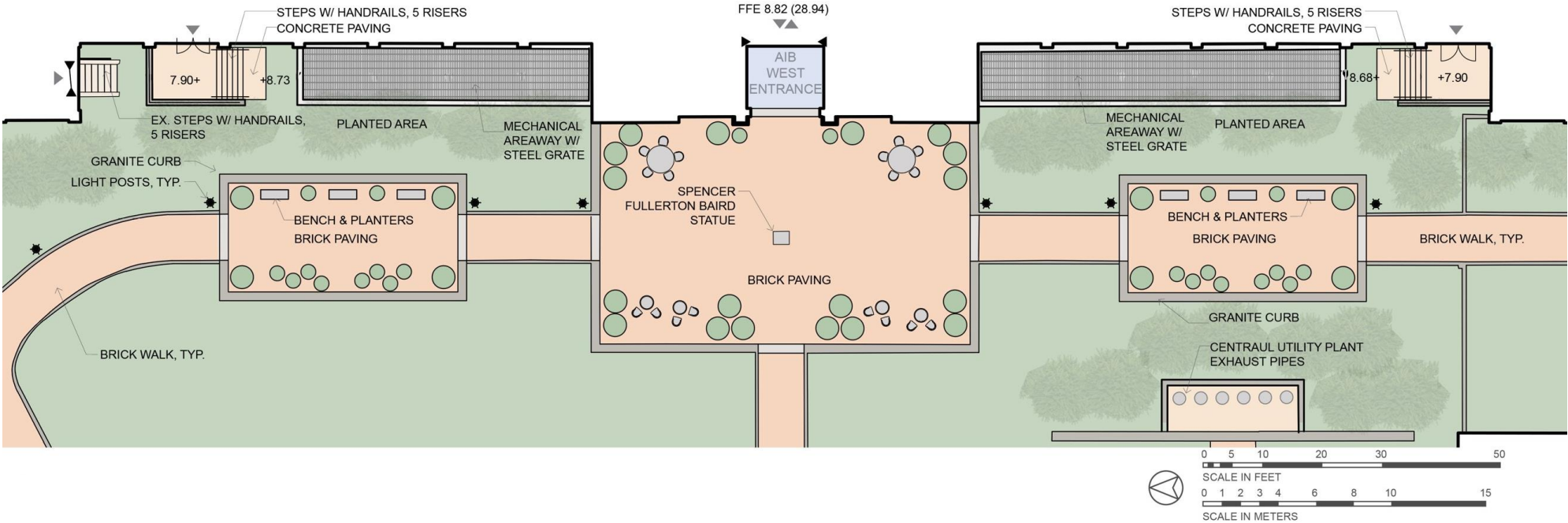
### EXISTING CONDITIONS



# GARDENS AND GROUNDS

NEW EGRESS –  
AIB WEST

PROPOSED CONCEPT





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