



## National Air and Space Museum (NASM) – Mall Building Revitalize Building Envelope and Infrastructure



Nov 2021: Looking Northeast – Terrace/Planter Work On-going

### Mission/Scope:

NASM on the National Mall in Washington, D.C., opened in 1976. This 69,480 gross sq. meters (747,877 gross sq. feet) facility includes approximately 14,971 sq. meters (161,145 sq. feet) of exhibit galleries and holds the world’s largest collection of historic air and spacecraft.

The mechanical and plumbing systems, original to the 1976 building, have exceeded their useful life spans and are unable to maintain desired environmental conditions. Extensive analysis of the cupping/cracking of portions of the existing “Tennessee Pink marble” exterior has concluded that the entire façade (13,000 stone panels) must be replaced.

This LEED-Gold candidate project will revitalize the building envelope and terraces, improve energy efficiency, upgrade the structure’s blast and seismic resistance, modernize the building MEP systems, and improve functionality of spaces affected by the systems renewal. The museum plans to renew the exhibits with privately raised funds.

### Budget (current working estimate)

|                          |        |
|--------------------------|--------|
| Federal Capital          | \$729M |
| Trust Funding (exhibits) | \$250M |

### Funding (federal capital)

|  |          |
|--|----------|
| FYs13 – FY17 (planning/design/pre-constr.) | \$52.0M  |
| FYs18 – FY21 (major revitalization)        | \$598.0M |
| FY22 (major revitalization)                | \$56.0M  |
| FY23 (major revitalization)                | \$23.0M  |

| Schedule        | % Complete | Timeframe   |
|-----------------|------------|-------------|
| Planning/Design | 100%       | FY13 – FY18 |
| Construction    | 57%        | FY18 – FY24 |

### Upcoming Milestone(s)

|                            |         |
|----------------------------|---------|
| Phase-2 Construction Start | FY22 Q3 |
|----------------------------|---------|



Oct 2021: Zone-1 South – Gallery 205 “Planets” Exhibit Fabrication



# Smithsonian Facilities

## Suitland Collections Center MSC Construct Pod 6



Location at MSC adjacent to Pod 4

### Mission/Scope:

The 2014 Collection Space Framework Plan (CSFP) identified increasing collection storage capacity as a primary goal for the Institution. Constructing the collection storage Pod 6, the last phase of the Museum Support Center (MSC) building project, will be a cost-effective first step in meeting this goal. A feasibility study completed in FY16 envisioned a 10,200 gsm addition on the west side of MSC. The programming will include space for collections from NMAH, NMNH, NPM, HMSG, and the National Gallery of Art (NGA). Sustainability features include a ballasted roof PV system and geothermal grid energy. Design will be completed in Dec 2021 with construction scheduled to begin in July 2022.

## Office of Planning, Design and Construction November 2021

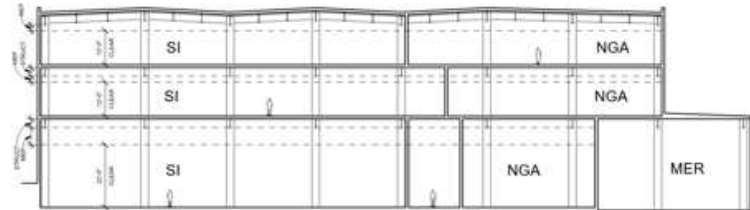
|                          |                  |
|--------------------------|------------------|
| <b>Budget*</b>           | <b>\$160.12M</b> |
| FY 13-16 Federal Funding | \$1.66M          |
| FY 17-18 Federal Funding | \$0.29M          |
| FY 20-25 Federal Funding | \$158.17M        |

\* Smithsonian \$94.27M; National Gallery of Art \$65.85M

| <b>Schedule</b> | <b>% Complete</b> | <b>Timeframe</b> |
|-----------------|-------------------|------------------|
| Design          | 100%              | 2016 –2021       |
| Construction    |                   | 2022 –2025       |

### **Upcoming Milestones**

|                               |          |
|-------------------------------|----------|
| Final CD Design Submittal     | Dec 2021 |
| Solicitation for Construction | Jan 2021 |



Pod 6 Section (top) and Rendering (bot.) 3 levels - Level 1 is High Bay



Smithsonian Facilities

## National Zoological Park Repair GSB Column Capitals



Plan view GSB Building

### Mission/Scope

The General Services Building (GSB) at the National Zoological Park (NZN) was constructed in 1975 and provides Zoo offices for various operations and maintenance staff. In addition, the roof also is an auto parking deck for 264 vehicles. The project rectifies inadequate structural support at each column and improves connectivity to the parking deck. The repair also addresses ongoing leaks with new decking, water proofing, insulation, and paving systems to achieve a watertight, durable roof and parking assembly. Demolition of trailers, grading, and landscaping the areas around a gravel lot are required for project and parking staging with some associated swing space. The project is sequenced to allow for limited parking to be always available.

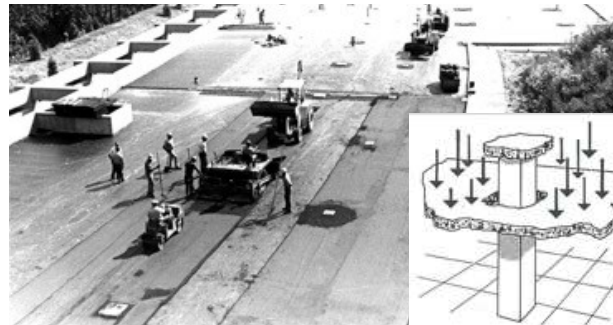
## Office of Planning, Design and Construction November 2021

|               |  |                 |
|---------------|--|-----------------|
| <b>Budget</b> |  | <b>\$6.17 M</b> |
| Design        |  | \$.40 M         |
| Construction  |  | \$5.77 M        |

| Schedule     | % Complete | Timeframe   |
|--------------|------------|-------------|
| Design       | 100%       | 2019 - 2021 |
| Construction | 20%        | 2021 - 2022 |

### Upcoming Milestones

|                      |  |          |
|----------------------|--|----------|
| Substantial Complete |  | Jun 2022 |
|----------------------|--|----------|



Original Construction GSB

Punching Shear Diagram

SF Project Number 1933101



# Smithsonian Facilities

## Hirshhorn Museum and Sculpture Garden Revitalize Sculpture Garden



*View of upper sculpture alley over revised inner partition wall*

### Scope

The Hirshhorn Museum and Sculpture Garden infrastructure will be revitalized, and design modifications will be made to suit the current programmatic needs for sculpture display, performances, and public events. Improvements to the landscape planting, major repair or replacement of the deteriorated garden walls, and replacement of waterproofing at the tunnel are required. The tunnel will be re-opened to connect to the plaza. This project will be jointly funded with Federal and Museum funding. The federal contribution to this project is capped at \$20M, per the Decision Memorandum signed in December 2019.

### Office of Planning, Design and Construction November 2021

|   |                 |
|---|-----------------|
| <b>Budget</b>                             | <b>\$64.69M</b> |
| Design                                    |                 |
| Federal                                   | \$2.34M         |
| Trust                                     | \$5.33M         |
| Construction                              |                 |
| Federal                                   | \$17.66M        |
| Trust (\$4.37M cash and pledges received) | \$39.36M        |

| <b>Schedule</b> | <b>% Complete</b> | <b>Timeframe</b> |
|-----------------|-------------------|------------------|
| Design          | 65%               | 2022             |
| Construction    | 0%                | 2022-24          |

### Upcoming Milestones:

|                   |               |
|-------------------|---------------|
| NCPC Final Review | December 2021 |
|-------------------|---------------|



*View of inner partition wall in exposed aggregate concrete from central garden space.*