GOVERNMENT OF THE DISTRICT OF COLUMBIA
HISTORIC PRESERVATION OFFICE

# HISTORIC PRESERVATION REVIEW BOARD
# APPLICATION FOR HISTORIC LANDMARK OR HISTORIC DISTRICT DESIGNATION

New Designation __X__ for: Historic Landmark __X__ Historic District ____
Amendment of a previous designation _____
Please summarize any amendment(s) _____

Property name National Museum of Natural History
*If any part of the **interior** is being nominated, it must be specifically identified and described in the narrative statements.*

Address 10th Street and Constitution Avenue NW, Washington, D.C. 20560

Square and lot number(s) U.S. Reservation no. 3 (Smithsonian Grounds)

Affected Advisory Neighborhood Commission 2C

Date of construction 1911 Date of major alteration(s) 1963, 1965, 1977, 1995

Architect(s) Hornblower & Marshall Architectural style(s) Classical Revival

Original use Museum Present use Museum

Property owner Smithsonian Facilities

Legal address of property owner P.O. Box 37012, MRC 511, Washington, DC 20013

NAME OF APPLICANT(S) Smithsonian Facilities

***If the applicant is an organization**, it must submit evidence that among its purposes is the promotion of historic preservation in the District of Columbia. A copy of its charter, articles of incorporation, or by-laws, setting forth such purpose, will satisfy this requirement.*

Address/Telephone of applicant(s) P.O. Box 37012, MRC 511, Washington, DC 20013

(202) 633-6230

Name and title of authorized representative Derek Ross, Director, Office of Planning, Design & Construction

Signature of representative _____ Date 8/23/2022

Name and telephone of author of application Robinson & Associates, Inc., (202) 234-2333

Date received _____
H.P.O. staff _____

**United States Department of the Interior**
National Park Service

# National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

## 1. Name of Property

Historic name: National Museum of Natural History
Other names/site number: U.S. National Museum, Natural History Building
Name of related multiple property listing: N/A
(Enter "N/A" if property is not part of a multiple property listing

## 2. Location

Street & number: 10th Street and Constitution Avenue NW
City or town: Washington State: D.C. County: _____
Not For Publication: ☐ Vicinity: ☐

## 3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this ___ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property ___ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

**_X_ national ___ statewide ___ local**

Applicable National Register Criteria:

**___A ___B ___C ___D**

Sharon C. Park August 22, 2022

**Signature of certifying official/Title:** **Date**

**_Smithsonian Federal Historic Preservation Officer_**

**State or Federal agency/bureau or Tribal Government**

National Museum of Natural History – FINAL | Washington, D.C.
Name of Property | County and State

In my opinion, the property X meets does not meet the National Register criteria.

Sharon C. Park

**Signature of commenting official:** **Date** 8/22/2022

**Title:** Smithsonian Federal Historic Preservation Officer **State or Federal agency/bureau or Tribal Government**

**4. National Park Service Certification**

I hereby certify that this property is:

___ entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:) _____

Signature of the Keeper Date of Action

**5. Classification**

**Ownership of Property**

(Check as many boxes as apply.)

Private: ☐

Public – Local ☐

Public – State ☐

Public – Federal ☒

**Category of Property**

(Check only **one** box.)

Building(s) ☒

District ☐

Site ☐

Structure ☐

Object ☐

**Number of Resources within Property**
(Do not include previously listed resources in the count)

| Contributing | Noncontributing | |
|---|---|---|
| 1 | | buildings |
| 1 | | sites |
| | 5 | structures |
| | | objects |
| 2 | 5 | Total |

Number of contributing resources previously listed in the National Register 1

**6. Function or Use**
**Historic Functions**
(Enter categories from instructions.)
RECREATION AND CULTURE: museum
EDUCATION: research facility

**Current Functions**
(Enter categories from instructions.)
RECREATION AND CULTURE: museum
EDUCATION: research facility

## 7. Description

**Architectural Classification**
(Enter categories from instructions.)
Neoclassical

**Materials:** (enter categories from instructions.)
Principal exterior materials of the property: FOUNDATION: concrete; WALLS: granite, brick, steel; ROOF: slate, copper, glass; OTHER: zinc

**Narrative Description**
(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

**Summary Paragraphs**

The National Museum of Natural History is located in the northwest quadrant of Washington, D.C., and occupies a prominent site on the National Mall on axis with 10th Street, NW, and with the Smithsonian Institution Building, which lies directly to the south. Originally called the United States National Museum, it was built to provide research, exhibition, and storage space for the Smithsonian's expanding natural history, history, art, and culture collections, which had outgrown the resources of the Smithsonian's facilities at the time. The museum was designed by Hornblower & Marshall, an established Washington, D.C., architecture firm, with contributions from Charles Follen McKim and Daniel H. Burnham, two members of the Senate Park (McMillan) Commission. Its design represented the latest ideas in the arrangement, care, and safety of museum collections. Construction began in 1904 and lasted through 1911, with the interior completed in 1912. As the first building constructed on the Mall to reflect the City Beautiful movement ideals of the 1901-02 McMillan Plan, the museum became the prototype for new construction within the city's monumental core. It was deemed to contribute to the significance of the National Mall Historic District in 2016 (NRIS #16000805, Boundary Increase/Additional Documentation, November 29, 2016).

The museum grounds occupy a roughly 13-acre site bound by Constitution Avenue on the north, the 9th Street Expressway on the east, Madison Drive on the south, and the 12th Street Expressway on the west. The museum building is located in the center of the grounds and, with a 5.5-acre footprint, occupies nearly half of the site.[1] The primary entrance to the museum faces south toward Madison Drive and the Mall greensward and features monumental granite stairs flanked by a symmetrical pair of barrier-free ramps. To either side of this entrance, along the Madison Drive sidewalk, are narrow beds planted with small trees and shrubbery. A second public entrance to the museum is located along Constitution Avenue, and the landscape surrounding this entrance has a more parklike feel, planted with grass and shade trees. Along the eastern edge of the museum grounds is a Pollinator Garden, and an Urban Bird Habitat wraps around the south, west, and north sides of the site. The landscape is enhanced with outdoor sculpture that reflects the mission of the museum and the design of the habitat gardens. The grounds immediately adjacent to and level with the ground floor of the museum building on the east, south, and west are paved for surface parking and loading docks. These hardscape areas are accessed via vehicular drives that enter the grounds from Constitution Avenue. Given the sloped topography of the site, which ascends from north to south, these service areas are not highly visible from the Madison Drive sidewalk or points along the Mall.

The National Museum of Natural History represents a significant contribution to the design heritage of the national capital. The museum as it exists today is the result of four major building campaigns that include the original construction (1904-11), the addition of the east and west wings (1961-65), the west court infill (1974-77), and the east court infill (1995-98).[2] The original building is a masterpiece of Neoclassical design that established a lasting precedent for future development on the Mall during the first half of the twentieth century. It is four stories high plus an attic with a symmetrical, dual courtyard plan. The building is composed of a south pavilion, generous in size and enclosing a rotunda; three secondary pavilions that extend east, west, and north from the south pavilion; and two L-shaped ranges that connect the outer ends of the pavilions and, by this arrangement, enclose two courtyards. (See Figure 1 for an illustration of the building components.) While the secondary pavilions have low, hipped roofs punctuated with skylights, the ranges feature mansard roofs. The building is steel-frame construction infilled with brick and faced with granite. The primary elevation, and also the longest, faces south toward the

[1] HSMM and EDAW, "National Museum of Natural History (NMNH), Cultural Landscape Report," prepared for the Smithsonian Institution, April 2006, 3-4.
[2] Construction of the east wing started in January 1961, and it was finished in fiscal year 1962-63. The contract for the west wing was signed in August 1963, and it was completed over a two-year period. Ground was broken on the west court infill building in 1974-75, and it was completed in fiscal year 1976-77. The east court infill was started in 1995-96 and completed in 1998. See HSMM and Commonwealth Architects, "National Museum of Natural History (NMNH), Historic Structures Report," prepared for the Smithsonian Institution, August 2006, 215-216, 219, 277-278, 280, 282.


Figure 1: Plan of the National Museum of Natural History labeled with the terms used in the nomination to identify the building's primary components.

Mall and toward the Smithsonian Institution Building. It features a projecting entrance block composed of a portico supported by eight Corinthian columns. An extended pediment filled with a large semicircular clerestory window rises above the entablature of the portico, and above this is a dome clad with green Vermont slate laid in a fish-scale pattern. The two symmetrical pavilions flanking the entrance block are eleven bays long. Segmental-arched openings at the ground-floor level hold fixed, divided-light wood windows. Tall, two-story, metal sash windows set between pilasters fenestrate the first and second floors. Ornamental zinc panels at the midpoint of these openings articulate the floor line. The third floor has two double-hung sash windows in each bay. The north elevation has a similar composition to the south, but without the portico. It features a projecting entrance block flanked by the north legs of the east and west ranges, which are nine bays long. The north façade has similar windows to those on the south, with the exception of the third-floor windows of the ranges, which are located in pedimented dormers in the mansard roof.

The east wing (1961-63) and the west wing (1963-65) were designed by the Washington, D.C., firm Mills, Petticord and Mills to provide space for the storage of collections and additional laboratories and workrooms for the museum's scientific staff. The additions are stepped back from the north and south facades of the original building, and their design closely follows that of the original, while remaining distinct. The wings are the same height as the 1911 building but

have twice as many floors due to lower floor-to-floor heights. Mechanical penthouses, constructed in 1991, add additional height, but are still lower than the drum of the dome. The attic levels of the wings, along with the penthouses, are stepped back from the facades. Along with the additions of the east and west wings, other significant changes to the original museum include the construction of the courtyard infill buildings. The four-story west court infill building was constructed in 1974-77 and has been renovated several times, most recently in 2019.[3] An atrium with a glass roof stands between the west court infill and the courtyard wall of the 1911 building, leaving much of the original construction exposed. The east court infill building dates to 1995-98. It is a freestanding building with seven floors above ground level. The interstitial space between the original building and the east court building is covered with a glass roof that encloses the courtyard.

On the interior, the principal public space of the National Museum of Natural History and the one with the most elaborate architectural treatment is the rotunda. The walls of the rotunda consist of massive masonry piers faced with Indiana limestone and, between the piers, tiered screens composed of marble columns supporting limestone entablatures. The rotunda has a marble floor and a domed ceiling featuring Guastavino tile set in a herringbone pattern. The museum's main exhibition halls on the first and second floors extend west, north, and east from the ambulatory around the rotunda. Additional gallery space is located in rooms surrounding the west, north, and east halls and in the ranges of the original building on the first and second floors. Spaces at the ground-floor level of the original building include the Constitution Avenue entrance lobby, museum shops, workshops, research areas, operations and support spaces, and the Baird Auditorium. On the third floor of the original building (pavilions and ranges) are museum offices. Within the east and west wings, which are six stories above ground level plus basement and penthouse, are offices, collections storage, and libraries. The west court infill building has two cafeterias, a conference room, and storage, and the east court building supports a wide variety of museum functions, including a daycare center, a library, a mail room, offices, and research areas.

## Narrative Description

### Site

The National Museum of Natural History and the other museums along the National Mall are located on land appropriated for public use by the federal government in 1792. Designated as Original Appropriation No. 2, this land was envisioned by Pierre (Peter) Charles L'Enfant in his 1791 plan for the City of Washington as a "Grand Avenue" that physically and visually connected the grounds of the U.S. Capitol with the site of a proposed statue of George

[3] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 288, 621.

Washington and formed part of the plan's major cross-axes linking the executive and legislative seats of government. L'Enfant's plans for this element, which came to be called the Mall, were never realized, and the area remained largely undeveloped until the construction of the Smithsonian Institution Building (1847-55) and improvements to its grounds. These improvements followed the Picturesque approach of designer, horticulturalist, and author Andrew Jackson Downing, who had been commissioned to develop a plan for the Mall, as well as the Washington Monument Grounds and President's Park. In the 1930s, the Mall was rebuilt and replanted according to a plan by landscape architect Frederick Law Olmsted, Jr., that followed the recommendations of the McMillan Plan. As a result, the winding drives, curved paths, and naturalistic plantings that characterized the late nineteenth-century design of the site were removed with the exception of a small stand of Bald Cypress trees, which today remain within the Mall lawn panel directly across Madison Drive from the south entrance of the National Museum of Natural History.[4]

Today, the **National Museum of Natural History grounds (contributing site)** occupy a roughly 13-acre site encompassing the block formed by Constitution Avenue on the north, the 9th Street Expressway on the east, Madison Drive on the south, and the 12th Street Expressway access road on the west. The site is composed of large expanses of surface paving screened by a perimeter landscape that integrates the museum grounds into the larger setting of the National Mall, creates a park-like setting for the museum along Constitution Avenue, provides educational opportunities for visitors, and supports wildlife habitats.

The perimeter landscape along the south edge of the site features a monumental stair and a symmetrical pair of barrier-free ramps that lead to the museum's portico entrance. Narrow planted beds extend from the stair pedestals to the sidewalks at the ends of the block. The monumental stair is original to the 1911 building. It is constructed of granite and presents a broad expanse of stone that harmonizes with the entrance portico. The lower run of the steps is flanked by massive pedestals that are used to display a boulder of banded ironstone (on the west) and two pieces of petrified wood (on the east). The lower landing is framed on the east and west by curved granite benches. The accessible ramps, which were completed in 2021, are constructed with granite walls and feature a "grass panel"-style railing of white bronze. They terminate at the upper stair landing, which is at the same level as the portico floor. The planted beds (added circa 1960-63) in front of the ramp entrances are roughly 8 feet deep. Each extends to a set of granite steps (circa 1960-63) that lead down into a parking area. Beyond these stairs, the planted beds that comprise the south perimeter landscape are deeper and slope down from the Mall level. Stepped, granite retaining walls (circa 1960-63) form the northern edge of the beds and separate the south perimeter landscape from the parking lot immediately to the north. As part of the museum's Urban Bird Habitat, which opened in 2012, the beds contain a variety of native plants

[4] HSMM and EDAW, "NMNH, Cultural Landscape Report," 2-18, 2-19.

that best meet the needs of wild birds and also serve to screen a cable fence, which is part of a perimeter security system implemented in phases and completed in 2011. In the bed east of the monumental stair, about midway between the granite steps leading to the parking area and the end of the block is a bronze cast created from a *Triceratops* skull in the museum's collection. The cast is mounted on three steel poles and was installed in 2001. A public sidewalk fills the space between the south perimeter landscape and the street curb along Madison Drive. It is paved with concrete and shaded by a row of American Elms.

The landscape on the north side of the museum site features low ground cover planted with specimen and shade trees, including a row of American Elms. The ground cover and mature elms are original features of the museum grounds. At the center of this parklike landscape is a semicircular drive, which was constructed in 1910 for car and carriage access but is now limited to pedestrian use.[5] The drive is bisected by a pedestrian path (created in 1996, widened and repaved circa 2008) that is on axis with 10th Street. Both the drive and path are paved with granite. These features, as well as symmetrically placed ramps along the north façade of the building (added in 1980), provide access to the museum's Constitution Avenue entrance. Two quarter-round beds in front of the entrance, formed by the intersection of the drive and the path, are planted with small trees and shrubs. East and west of the semicircular drive, the north perimeter landscape consists of low ground cover edged with granite coping and, for most of the length of the Constitution Avenue sidewalk, a low granite wall. The elm at the northeast corner of the site is known as the "Smithsonian Witness Elm" and was planted around 1850. In addition to the elms, there are several specimen trees planted closer to the building façade, including American Hollies, a Southern Magnolia, a Weeping Sequoia, and a Cedar of Lebanon, which was planted in 2004 to commemorate the one-hundredth anniversary of the 1904 groundbreaking of the museum. In the open space west of the entrance is *Colossal Head No. 4*. The monument, installed in 2001, is a replica by Mexican artist Ignacio Perez Solano of a 6-ton carved basalt head created by the Olmec civilization of ancient Mexico. Other circulation features of the north landscape include linear concrete paths that lead from the sidewalk to the east and west entrances of the wings and two curved service drives. Although the paths and service drives were constructed during the period of significance, they are utilitarian in nature and do not contribute to the significance of the museum grounds.

[5] The 1910 construction of the drive resulted in the removal of two sandstone piers that were part of a group of at least sixteen gateposts that were relocated to the north side of the Mall around 1874. Today known as the Bulfinch Gateposts, the piers were originally constructed circa 1825 to support iron fencing around the perimeter of the U.S. Capitol grounds. Their design is attributed to architect Charles Bulfinch. The two gateposts that were placed at 10th Street were removed in 1910 for the construction of the semicircular drive at the Constitution Avenue entrance to the National Museum. For more information about the Bulfinch Gateposts and Gatehouses, see Sharon Park, "Finding Mr. Bulfinch's 'Features': The Mystery of the Classical Gateposts and Gatehouses along the National Mall," *Washington History* 33: 1 (Spring 2021), 50-61.

As noted above, the grounds are defined on the north in part by a granite wall, which has breaks along its length that are spanned by segments of railing. This wall is part of a perimeter security system constructed in 2011 that also includes bollards at the sidewalk entrances to the paths and service drives; an arc of fifteen large boulders at the northeast corner of the site around the Witness Elm; and two **guard booths (noncontributing structures)** at each of the service drive entrances. The space between the east service drive and the north façade of the east wing is used as an outdoor play area for the museum's daycare center. The landscape at the northwest corner of the site forms part of the museum's Urban Bird Habitat. It features exhibit signage, nests, stone bird baths, a flagstone path, and a bronze sculpture of a passenger pigeon created by sculptor Todd McGrain. A public sidewalk fills the space between the north perimeter landscape and the street curb. It is paved with concrete and shaded by a row of American Elms.

The Pollinator Garden, which occupies the east perimeter landscape, was designed by the Smithsonian Gardens horticultural team, and the interpretative materials within it were a joint project of Smithsonian Gardens and the National Museum of Natural History.[6] It opened in 1995 as the Butterfly Habitat Garden and was rededicated as the Pollinator Garden in 2016. Elements include a curvilinear concrete footpath with granite coping, a concrete sidewalk, a small seating area with a horseshoe-shaped granite bench, boulders, exhibit signage, and trees, shrubs, and herbaceous plants representing four habitats. At the northern end of the Pollinator Garden is an eighteenth-century marble wellhead from northern Italy that is part of the Smithsonian's Horticultural Artifacts Collection.[7]

The west perimeter landscape is simply designed and features a narrow planted bed that slopes down from the 12th Street sidewalk to a low granite retaining wall on the south, where the slope is steeper, and to a concrete sidewalk on the north. This landscape forms part of the Urban Bird Habitat (2012) and is planted with deciduous and evergreen trees, shrubs, grasses, and various types of groundcover. This vegetation also serves to screen the cable-fence system within this section of the perimeter landscape. A public sidewalk fills the space between the west perimeter landscape and the 12th Street access road. It is paved with concrete and shaded by a row of sweetgum trees.

The grounds immediately adjacent to and level with the museum building on the east, south, and west are paved for surface parking and incorporate loading ramps that access the basement level of the east and west wings. The limits of the asphalt paving are edged with concrete curbs and sidewalks. As with the service drives on the north, these surface parking lots, loading ramps, and

[6] Smithsonian Gardens is a public garden and museum within the Smithsonian Institution that is responsible for the development and stewardship of the Smithsonian's gardens, landscapes, and horticulture-related exhibits and collections adjacent to the National Mall.
[7] Smithsonian Institution Catalog Data available at https://collections.si.edu/search/detail/edanmdm:hac_1976.007.a__b?q=1976.007&record=1&hlterm=1976.007, accessed July 24, 2022

sidewalks are associated with the circulation system implemented with the construction of the east and west wings. Although they were constructed during the period of significance, they do not contribute to the site's significance. At the southeast and southwest entrances to the original building stand two small **guard booths (noncontributing structures)**, and in the southeast corner of the parking area is the aboveground portion of the **chiller plant (noncontributing structure)**, constructed in 1994. This one-story structure has granite walls and arched openings along the west elevation that hold decorative grills.

Small-scale features of the National Museum of Natural History site include benches, museum signage, municipal signage, traffic signs and lights, trash and recycling receptacles, bicycle racks, parking meters, streetlights, fire hydrants, bollards, fencing, and low masonry walls. Many of these small-scale features are not site specific; rather, they are associated with municipal services or public amenities typical of the museum's urban setting. None of these features contribute to the historic character of the site. The benches include two styles of wood-slat and cast-iron seats. The larger type, which features an arm placed midway along the bench, is used along the Constitution Avenue and Madison Drive sidewalks. The smaller type can be found along the path through the Pollinator Garden. Neither style of bench is part of the museum or Smithsonian Gardens collection. Three types of streetlights can be found within the perimeter landscape – Washington Globe style fixtures along the 9th Street Expressway sidewalk, Twin-Twenty fixtures along the Constitution Avenue and 12th Street Expressway sidewalks, and Olmsted Mall fixtures along Madison Drive – and there are numerous Washington Globe fixtures within the interior landscape. As noted earlier, a museum perimeter security system was implemented in phases and completed in 2011. Associated features include masonry walls, bollards, and cable-fencing.

Exterior

In 1901, the Smithsonian Institution asked the firm of Hornblower & Marshall to prepare a design for its new National Museum, which would be the first building completed as part of the McMillan Plan and would become a model for the future development of the Mall.[8] While the fundamental plan of the museum was fixed early on, the character of the exterior fluctuated greatly over the course of its development. Hornblower & Marshall's initial design was highly eclectic and generated immediate opposition from Charles Follen McKim and Daniel H. Burnham, two former members of the McMillan Commission. In particular, the dome, which Hornblower & Marshall argued should be an ornate French-influenced design, was an element of

[8] The National Museum of Natural History was known as the "National Museum" until 1957, when it became the "Museum of Natural History." It was officially renamed the National Museum of Natural History in 1969 to reflect its focus on the Smithsonian's anthropology and natural history collections. See HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 216, 218; and Smithsonian Institution, "A Brief History of NMNH," available at https://naturalhistory.si.edu/about/brief-history-nmnh.

great importance and debate. Although construction was already underway on the National Museum, McKim and Burnham intervened in its development, revising the design using a more sober architectural language that adhered to the design principles of the McMillan Plan. Under direction from the Smithsonian, Hornblower & Marshall accepted the McKim and Burnham revisions and agreed to further collaboration. The Roman-inspired dome that we see today was the work of McKim, while the portico design was developed from Burnham's suggestions. Other exterior features of the Hornblower & Marshall design were replaced by more restrained Neoclassical elements following McKim's direction. Initial construction took place between 1904 and 1911, and the interior was completed in 1912.

The original **National Museum of Natural History (contributing building)** is four-stories tall plus an attic. Its construction utilizes a steel-frame structural system reinforced with masonry piers and resting on concrete foundation walls and footings. The exterior walls are granite from quarries in Milford, New Hampshire; Bethel, Vermont; and Mount Airy, North Carolina.[9] The south façade is organized around a central domed south pavilion with a projecting portico supported by eight Corinthian columns (six outer and two inner) that are two stories tall. Above the portico entablature is an extended pediment with a large semicircular clerestory window, also called a Diocletian window. This window is divided into three sections by two granite mullions, and each section holds a copper lattice of triangular lights. The pediment and clerestory window are repeated on the east, north, and west walls of the south pavilion where it extends above the adjacent rooflines. The entablature on the intermediary walls between the pediments has a frieze ornamented with a Greek fret. The circular drum that supports the dome is 75 feet in diameter.[10] The wall of the drum features a Doric frieze and a denticulated cornice below a capped parapet. The dome is covered with green Vermont slate laid in a fish-scale pattern.

The center part of the wall under the portico is recessed roughly 13 feet, and within this space is the main entrance vestibule, which has a large plate-glass window with bronze mullions above. Both the vestibule, which holds two double doors, and window are set within a masonry opening nearly 26 feet high.[11] The original cast-iron night gates at this entrance were restored in 2019.[12] The two doors to either side of the main entrance were added in the 1980s. The floor of the portico, which forms the upper landing of the monumental stairs, is constructed of Milford granite with inlays of pink New Jersey granite.

[9] Richard Rathbun, *A Descriptive Account of the Building Recently Erected for the Departments of Natural History of the United States National Museum*, Smithsonian Institution, United States National Museum, Bulletin 80 (Washington, D.C.: Government Printing Office, 1913), 24, 28.
[10] Ibid., 24.
[11] Ibid., 25.
[12] Carly Bond, "Restoring a Cast-Iron Secret at the National Museum of Natural History in Washington, D.C.," *APT Bulletin: The Journal of Preservation Technology* 51: 2-3 (2020), 7.

On either side of the south pavilion are the east and west pavilions of the 1911 building, each eleven bays wide and five bays deep. These pavilions have hipped roofs clad with slate and pierced by double-pitched skylights. The roofline of the pavilions matches the height of the entrance portico. The ground-floor level below the water table is rusticated, whereas the rest of the granite façade has a smooth finish. The ground-floor openings of the pavilions have low, segmental arched heads with projecting keystones that have a picked surface. These openings hold windows on the south façade and windows and service doors on the east and west facades. The ground-level windows are fixed and constructed with wood muntins and mullions. They have a three-part organization with three vertical lights in the center and two side panels, each with three lights. The lowest lights in the side panels have operable sash. Above the water table, the stonework of the first and second stories consists of a two-story pier and a pediment with a base and plinth block between each window. Above the pediments is a Tuscan-style entablature. The first- and second-story windows have metal frames and a three-part organization that is similar, but not identical to, the ground-floor windows. Below each first-floor window is a stone sill and sub-sill; the sub-sill has a raised panel with brackets to either side. Below each second-floor window is an ornamental zinc panel. The third-floor stonework features short piers and pilasters, a cornice, and a parapet. Openings at this level hold one-over-one, double-hung sash windows. These windows are arranged in pairs, with two windows per bay.

The most significant alteration to the original museum building was an expansion project carried out between 1961 and 1965 that added symmetrical wings designed by the Washington, D.C., firm Mills, Petticord and Mills. These additions were designed to respond to the Neoclassical style of original building using the same materials. The south façade of the west wing is linked to the west elevation of the original building by a recessed connection. This connection has one small window opening at the attic level and a ground-floor service door. The ground-floor windows of the west wing are set in trabeated openings and have a three-part configuration, with the center panel divided into nine lights and the side panels holding three stacked lights. Below the ground-floor windows is a water table that is at the same height as that of the main building, creating a strong horizontal line that continues around all four sides of the building. Above the water table there are three, stacked windows set between simple piers. These windows have metal frames, a three-part configuration, and each is shorter than the one below. While the stonework below the bottom window is unadorned, there is a decorative zinc panel below the middle window that is identical to those of the original building and an unadorned zinc panel below the top window. The south façade of the west wing terminates at its top with a simple cornice and parapet. The attic of the west wing is set back from the main façade and features tripartite windows, one in each bay. The penthouse, which is also stepped back, is a later addition constructed in 1991. Around 2010, a ventilation system was installed on the penthouse of the west wing. It was designed to be minimally visible from public spaces surrounding the building. The design of the east wing on the opposite side of the original building replicates that of the

west. Thus, as it exists today, with eighteen bays to either side of an elaborate, domed pavilion, the museum presents a monumental and imposing presence on the National Mall.

The north elevation of the original building has a similar composition to the south, with the exception of the center block, which has no portico and no dome. Due to the topography of the site, the Constitution Avenue entrance is at the ground level of the building, in contrast to the entrance on the south, which stands at the first-floor level. The center block of the north façade is five-bays wide and projects forward of the walls of the ranges flanking it. The ground-floor stonework of the center block is rusticated, and the ground-floor openings – windows in the outer bays and doors in the center bays – are all trabeated.[13] Above the water table, the granite has a smooth finish. In the center bays of the first- and second-floor levels, the stonework consists of a two-story pier with an engaged column, base, and plinth block. Between the columns are the first- and second-story windows. These windows are identical to those in the secondary pavilions of the south façade. There are stone balustrades in front of the first-story windows. Above the columns is an entablature that extends across to the outer bays, which have small, fixed windows at the first- and second-floor levels. The third-floor stonework features short pilasters; window surrounds that frame pairs of one-over-one, double-hung sash windows; and a simple cornice and parapet that continue to the outer bays. At the third-floor level, the outer bays each have a single opening with a stone surround that holds a double-hung sash window. The north arms of the ranges extend east and west from the center block, and from the ground floor to the cornice line, these elements mirror the south facades of the secondary pavilions. Above the cornice line, however, the ranges have a mansard roof clad with slate. The windows at this level – one double-hung sash in each bay – are set in pedimented dormers, and the pediments alternate between the triangular style and the segmental. Between the dormers there are paneled parapets that are roughly half as tall as the window openings. The north facades of the east and west wings are nearly identical to those on the south. On this elevation, however, the recessed connections that link the wings with the 1911 building have a pedestrian entrance at the ground-floor level and typical, multilight windows above.

The east and west elevations are similar to each other and consist of the nine-bay-wide wings, which overlap the ranges to leave two of the original nine bays visible on the north. The one bay projection of the north entrance block is also visible from the east and west, as is the projection of the portico on the south. The east façade of the east wing has a pedestrian entrance in the fourth bay from the north. On the west, the pedestrian entrance is in the third bay from the north. Otherwise, the architectural vocabulary and arrangement of features of the east and west facades

[13] Originally, the Constitution Avenue entrance included hinged, cast-iron night gates with a transom that featured a bison head ornament. The north gates were removed in the 1960s and have since been lost. See Bond, "Restoring a Cast-Iron Secret at the National Museum of Natural History in Washington, D.C.," 7.

of the wings, ranges, and pavilions is similar to that previously described for the north and south elevations.

Although the east and west courts have been filled with modern additions, these infill buildings were designed to expose large expanses of the original exterior walls of the 1911 courtyards. These courtyard walls are faced with gray-white semi-vitreous brick and gray Woodstock granite from a quarry in Maryland.[14] While the wall surfaces are less ornate than the exterior facades, the first- and second-floor windows are identical to the exterior windows of the 1911 building. At the third floor, there is a tripartite window in each bay, each with three one-over-one, double-hung sash.

Interior

The National Museum of Natural History is a 1.3 million-square-foot building that encompasses exhibition halls, public gathering spaces and circulation corridors, cafeterias, classrooms, an auditorium, gift shops, offices and conference rooms, research laboratories, libraries, storage rooms, a daycare center, and staff kitchens, as well as other public and private spaces. While this nomination does not designate interior spaces as contributing, it provides descriptions of the primary public spaces, typical exhibition halls and galleries, and typical office corridors in the original 1911 building and general descriptions of the wings and court infill buildings. Interior elements identified as original in the 1911 building reflect the design character and construction techniques that embody the museum's architectural significance.

The museum's evolution from its original construction to its current form encompasses several major expansion campaigns that have resulted in separate, yet interconnected, floor levels that do not align across the horizontal plane of the museum. For example, the second floor of the original building is at the same level as the fourth floor of the wings. This is due to two conditions – the basement level of the original building is at the first-floor level of the wings and the floor-to-floor heights of the original building are twice as tall as the floor-to-floor heights of the wings. Further complicating the arrangement of the floors and their relationship across the different components of the building is the insertion of mezzanine levels in portions of the original building.[15] To provide clarity for readers, the narrative descriptions provided below will utilize the floor levels of the building section in which they are located.[16] The photo log included

[14] Rathbun, 32.
[15] Infill mezzanines have been inserted into portions of the pavilions and ranges of the original 1911 building. The dates of all the mezzanine additions have not been determined, although it is known that mezzanines were constructed during fiscal years 1930, 1931, and 1946. These mezzanines are utilitarian construction added to create office and storage space within two-story spaces intended for exhibition halls, and, although they may date to the period of significance, they do not contribute to the historic character of the museum building.
[16] It should be noted that earlier studies of the building, including a 2006 Historic Structure Report and subsequent Comprehensive Facility Development Plan, utilize a floor naming convention in which the levels of the building are

with this nomination, however, is keyed to floor plans that correspond to the primary floors of the original building. Thus, when there is an image of a space in the wings or infill construction on a floor level numbered differently than the original 1911 building, additional information is provided in the photo description, as needed, for clarification.

*1911 Building, Ground Floor*

The primary public spaces of the ground floor of the original 1911 building are arranged along the north-south axis of the museum and include the Constitution Avenue entrance lobby, the north hall, the Baird Auditorium, and the ambulatory around the auditorium.

The Constitution Avenue entrance lobby is a formal and highly detailed space, rectangular in plan and one-story tall. Most features and finishes are original. The room has a pink Tennessee marble tile floor, baseboards, and plinths; plaster and white Vermont marble walls; and a beamed plaster ceiling supported by Vermont marble piers, pilasters, and columns. The lobby walls have a deep, molded, plaster cornice that extends across the vertical faces of the beams. The intersections of the beams create a series of coffers from which contemporary pendant lights are hung. At the northeast corner of the room is an original stairwell with marble steps and an ornamental iron railing; at the northwest corner is a bank of elevators. The paneled bronze elevator doors are not original. Three sets of molded bronze and clear glass double doors set within bronze and glass screens (original) on the north wall separate the lobby from the north vestibule, where three additional sets of bronze and clear glass doors provide access to the exterior. Original polished bronze and ground glass double doors, also set within bronze and glass screens, provide access to the east and west ranges. Other door openings in the walls feature original Vermont marble surrounds with various degrees of ornamentation.[17] Alterations to the entrance lobby include the installation of security screening stations. These are located in the center bay directly inside the entrance from the north vestibule. Associated features include metal detectors and moveable metal stanchions. Rooms off the lobby include a nursing station, a security office, and restrooms.

The north hall stands south of the entrance lobby. This space originally functioned as an exhibit hall, but today it serves multiple functions and has been highly modified. The original design consisted of a central space with two rows of massive piers that created a center and side aisles. A series of rooms along the side aisles were used for offices, temporary exhibitions, and restrooms.[18] Today, the rooms along the side aisles have been replaced with gift shops, built in

assigned a letter "A" through "J" with Level D, for example, encompassing the first floor of the original building, the first floor of the west court infill building, the second floor of the wings, and the second floor of the east court infill building.

[17] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 313-314; and Rathbun, 55-56.

[18] Rathbun, 104-105.

the mid-1990s, which feature windows set in metal storefront systems and modern wood floors.[19] The space between the gift shops serves as a circulation corridor. It retains its original terrazzo floor and marble baseboards and plinths. While some sections of the corridor ceiling are the original plaster, other parts have been altered with a dropped ceiling. The corridor features a visitor services desk, escalators to the first-floor level (installed in 1975), and various exhibit displays and cases.

The Baird Auditorium, named for Spencer F. Baird, the second secretary of the Smithsonian Institution, is located in the south pavilion directly below the rotunda. While this space has been upgraded with modern stage lighting, acoustical enhancements, and new seating, it retains much of its original fabric. The auditorium is circular in plan, with four alcoves on the north, south, west, and east. The arches that form these alcoves are embellished with original decorative terracotta tiles. The stage, which is in the south alcove, is not original and has a wood floor. Stage lights affixed to the ceiling conceal much of the original terracotta tile arch of this alcove. A small room behind the stage has a stage elevator, a double door with an arched head (original) on the south wall, and a single panel door (original) on the east wall. These doors lead to the south section of the ambulatory (see text below). The projection booth (not original, date unknown) is located in the north alcove. Acoustical panels were inserted in the east and west alcoves in the late 1970s, obscuring the original walls and glazed terracotta tile arches of these spaces. The floor of the auditorium slopes up from south to north, allowing for successively higher rows of seats; the existing tiered seating dates to around 1960.[20] While today the floor of the auditorium is carpeted, the original terracotta flooring remains intact below. The space has a low, domed ceiling (original) constructed with Guastavino tiles that have a glazed, ribbed surface and are laid in a herringbone pattern. The dome, which springs from four concrete piers, has a ring of glazed, ornamental terracotta tile at its center that measures roughly 26 feet in diameter. This terracotta ring forms a ledge behind which light bulbs are installed. The center of the ring is also Guastavino tile. The walls of the auditorium are the original plaster and have a painted finish. The entrances to the auditorium are set within niches on the northwest and northeast. The wood doors in these entrances are original and open to the ambulatory lobby (see below). Niches at the southeast and southwest have acoustical panel inserts.

The ground-floor ambulatory forms a corridor around the auditorium and is divided into segments based on function and design character. The north segment of the ambulatory, which serves as a lobby for the auditorium, retains many original features and finishes, including terrazzo floors with marble inserts and banding, tall marble baseboards, plaster walls, vaulted Guastavino tile ceilings, and marble benches. Contemporary pendant lights illuminate the space. Along the north wall of the ambulatory is a segmental arched opening that leads to the north hall

[19] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 285-286.
[20] Ibid., 303-304.

(see text above), and trabeated openings to either side of this lead to wide stairwells that access the rotunda and first-floor exhibition halls. The west stairwell is a partial reconstruction implemented in association with a late 1990s renovation of the west court infill building.[21] Arches along the wall of the ambulatory delineate the transition from the auditorium lobby to the east and west segments of the corridor. These spaces have terrazzo floors and baseboards, plaster walls, and a dropped ceiling of acoustical tiles with track lighting that conceals the original vaulted Guastavino tile ceiling above. Along these sections of the corridor are historic wood and glass display cases, modern metal double doors to adjacent service areas in the east and west pavilions, and modern metal double doors to the south segment of the ambulatory. Portions of the east and west segments of the ambulatory serve as elevator lobbies. The southern section of the ambulatory wraps around the backstage room of the auditorium. It also has a terrazzo floor and baseboards and a dropped, acoustical tile ceiling that conceals the original vaulted ceiling. An arched opening (partially concealed by the dropped ceiling) at the south end of this space leads to an exit corridor.

The remainder of the ground floor of the 1911 building is used for a wide arrange of functions, including offices, a fossil laboratory, and library support spaces in the east range[22]; conference rooms, mechanical rooms, server rooms, and storage rooms in the east pavilion; exhibit shops, offices, and loading dock areas in the west pavilion; and zoology offices and Q?rius, an interactive education center (currently closed), in the west range.

*1911 Building, First Floor*

The first floor of the original building is entirely open to the public and encompasses the rotunda and ambulatory in the south pavilion; the David H. Koch Hall of Fossils in the east pavilion and part of the east range, which was recently renovated and reopened in 2019; the museum's largest exhibit, the Sant Ocean Hall, which opened in 2008 in the north pavilion; the Kenneth E. Behring Family Hall of Mammals, completed in 2003 and located in the west pavilion; and museum gallery spaces in the east and west ranges.

The principal public space of the National Museum of Natural History and the one with the most elaborate architectural treatment is the rotunda, which is located in the center of the south

[21] When the west court infill building was first constructed (1974-77), the west stair between the ground and first floors was demolished with the exception of a portion of the elaborate newel post at the ground-floor terminus, which was reused at the rotunda level. After the stair was removed, a hallway was created in its place to connect the ambulatory around the auditorium with the west court. When the original stair (ground to first floor) was reconstructed in the late 1990s, all new materials were used except for the portion of the newel post that had been salvaged, which was reinstalled at its original location. For the reconstruction, the cast iron railings were molded from original railing sections temporarily removed from both the east and west stairs. The west stair from the first floor to the fourth is, by and large, all original fabric. See author correspondence with Jerry Conlon, National Museum of Natural History, June 8, 2022, and HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 304.

[22] The National Museum of Natural History main library is located on the first floor of the east court infill building.

pavilion and rises four stories to a domed tile ceiling. Four walls of the rotunda, which is octagonal in plan, serve as massive masonry piers. The piers are faced with light gray Bedford, Indiana, limestone with a fine rubbed surface and are capped with 9-foot-high entablatures. The piers have openings at first- and second-floor levels. The lower openings have console-decorated heads supporting balconies with stone balustrades. The second-floor openings also have console-decorated heads, but these support triangular pediments. Semicircular masonry arches with coffered soffits spring from the piers and support the drum of the dome. The interior face of the drum is embellished with a plaster entablature composed of an architrave, a frieze decorated with triglyphs and shields, and a dentiled cornice. Glazed Guastavino tiles set in a herringbone pattern line the inner surface of the dome, which has a glazed oculus measuring 18 feet in diameter. This opening together with four semicircular clerestory windows set within vaults behind the arches flood the rotunda with natural light. Tiered screens span the distance between the piers and are composed of unfluted columns of Italian Breccia Stazzema marble supporting limestone entablatures. The columns at the first-floor level are Doric, while the columns above are Ionic. Each screen is topped at the second- and third-floor levels with an ornamental cast-iron railing. Limestone balustrades are substituted for the railings at the fourth floor. The rotunda floor, which is supported by the domed ceiling of the auditorium below, has a roseal Tennessee marble field with borders and inserts of green serpentine and cipollino marble. The center of the floor is decorated with an inlaid compass.[23]

The rotunda has a high degree of architectural integrity, having been only modestly altered since its original construction. The hide of an 11-ton African elephant has been exhibited on the rotunda floor since 1959. In 2015, its platform was redesigned to include an information booth and exhibition panels.[24] Other changes have included the installation of museum signage that hangs from the entablatures of the screens and the addition of security screening desks near the south entrance.

The first-floor ambulatory is located in the south pavilion and forms a corridor behind the piers and screens of the rotunda. With a few exceptions, it retains its original design and finish materials. The flooring in the ambulatory uses the same materials as the rotunda and consists of a Tennessee marble field with inserts of green serpentine.[25] Tennessee marble is also used for the baseboards and the plinths of the door surrounds. The walls of the ambulatory are original plaster, and they are arranged into bays by pilasters. The original ceiling, also plaster, is divided into panels by beams, which feature a sunken fret design along the soffit. Modern pendant lights hang from the ceiling panels. The south end of the ambulatory, which serves as a lobby, has three openings. The central opening, which is original, holds two bronze double doors (replacements)

[23] Rathbun, 44-54; and HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 349-350.
[24] Smithsonian Institution, "Meet Henry," available at https://naturalhistory.si.edu/exhibits/african-bush-elephant, accessed March 23, 2022.
[25] Rathbun, 45, 48.

with clear glass panels and transoms above. These doors are set within a vestibule (original) that projects into the ambulatory and supports a clock face. There is a laylight in the wall above the vestibule. The side openings, which date to the 1980s, also hold bronze doors with clear glass panels and transoms. Other alterations to this section of the ambulatory include the installation of security screening stations and metal detectors. Additional openings around the outer walls of the ambulatory lead to exhibition halls and stairwells. These openings have paneled heads and jambs. There is a coatroom off the ambulatory west of the south entrance, and a breakroom to the east.

The Mammals Hall occupies the first floor of the west pavilion as well as portions of the upper floors due to the multistory height of its main exhibition room. Most recently renovated in 2003, this space is a good example of how a modern educational exhibit can be inserted compatibly into a historic museum space.[26] The new construction inserts contemporary wall structures in front of and independent of the original plaster walls and does not subdivide the original volume of the space. The hall's main exhibition room, which measures roughly 49 by 167 feet, is located in the center of the west pavilion and is lit by a generous laylight.[27] Piers at the first floor support the walls above, which have a cornice along the lower edge (corresponding to the second-floor level) and an entablature along the top edge. The wall surfaces in between feature molded panels and balcony openings that extend to the floor and are fitted with railings of wrought and cast iron. There are three openings along the north and south walls and one along the east and west, although today all but the east opening are closed. Above the entablature is a cove that is divided into a series of panels by molded bands and terminates at a plaster beam that frames the laylight. The floor of the main exhibition room is modern terrazzo, and the central portion of the floor is raised. Original terrazzo remains intact below the modern flooring. The aisles and exhibition spaces that are arranged around the main exhibition room of the Mammals Hall have original terrazzo floors, stone baseboards, plaster or plasterboard walls, and modern dropped plasterboard or acoustical tile ceilings. In certain locations, the exterior windows are visible; however, they are covered with screens to control the amount of natural light admitted. At the southeast corner of the west pavilion is a museum store (renovated in 2003 and all original surfaces concealed) and at the far west end is the Evolution Theater, which is carpeted with the original terrazzo intact below.

While the main exhibition rooms in the Ocean Hall in the north pavilion and the Fossils Hall in the east pavilion share the same original architectural details (terrazzo floors, plaster walls with ornamental trim, balconies, laylights) and multistory volume of that of the Mammals Hall, the

[26] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 355.
[27] Rathbun, 57-58. The laylights were designed to admit natural light into the exhibition halls that entered through skylights in the roof. Today, the skylights are a modern replacement of the historic skylights, and fluorescent lights are mounted along the bottom edges of the skylights to provide supplemental artificial light. See HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 287, 460.

current exhibit designs differentiate the spaces. For more than 100 years, John Elliott's 1908 painting *Diana of the Tides* also differentiated the Fossils Hall from the other first-floor exhibition spaces. Twenty-five feet long by eleven feet high, the mural was donated to the Smithsonian by Mr. and Mrs. Larz Anderson and first housed in the north pavilion as part of the National Gallery of Art collection in March 1910. It was moved to the east pavilion by the end of the year, where it remained until 2012, when it was removed and destroyed because its condition was such that it could not be restored.[28]

The north corridor of the east range currently holds the museum's African Voices Hall (Hall 7). This gallery space was renovated in 1996 and features gypsum board walls, carpet and vinyl flooring, and a plaster ceiling retrofitted with a suspended lighting system. All but one original window is concealed behind exhibition panels. This space typifies the character of most of the museum galleries located in the east and west ranges (including Halls 6, 11, and 12 on the first floor and Halls 22, 26, and 27 on the second floor) in that the modern architectural elements of the gallery are reversible to reveal historic fabric, which includes plaster walls, piers, plaster ceilings and beams, terrazzo flooring, marble baseboards, and large, multilight windows.[29]

*1911 Building, Second Floor*

The organization and function of the second floor is similar to the first with the exception of the east hall of the east range (Hall 21), which currently holds unoccupied office space and an unoccupied hall, rather than a public gallery. The east pavilion has the Hall of Geology, Gems, and Minerals; the west pavilion features the Butterfly Pavilion, Bone Hall, Insect Zoo, and Eternal Life in Ancient Egypt exhibits; and the north pavilion has a museum store, the Unforgettable Behavior and Outbreak exhibits, and the Garden Lounge. The west range holds the Genome: Unlocking Life's Code (Hall 27) and Objects of Wonder (Hall 26) exhibits, and the public area of the east range (Hall 22) is occupied by the exhibit Critical Distance, which is currently closed.

The rotunda extends to the second-floor level and is surrounded by the second-floor gallery. Aside from the location, size, and design of certain doors, this space is almost identical in treatment to the space below. The floor is pink Tennessee marble with an inlay of Sienna marble, and the walls are original plaster with marble baseboards and plaster crown molding. The ceiling is plaster, and the beam soffits at this level have a sunken fret design. Modern pendant lights hang from the ceilings. There are several modern display cases within the second-floor gallery space, but these are not permanent fixtures.

[28] Amy Ballard, "Diana of the Tides: A Sensation of Her Time," Smithsonian History, Smithsonian Institution Archives website, https://siarchives.si.edu/blog/diana-tides-sensation-her-time, accessed July 21, 2022; Carly Bond, Historic Preservation Specialist, Smithsonian Institution, communication with the authors, August 11, 2022.
[29] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 369-370.

The Garden Lounge, which opened in 2017, is located at the north end of the north pavilion. While primarily an area for visitors to rest, educational content is botany themed, and the space was jointly developed by the National Museum of Natural History in collaboration with Smithsonian Gardens. Features original to the 1911 building include the terrazzo floor, marble baseboards, plaster walls, and compound piers with beaded corners. While the original ceiling beams are exposed, the plaster panels between them are largely concealed behind modern dropped ceilings. Three large windows along the north wall illuminate the space and provide natural light for its botanical specimens.

*1911 Building, Third Floor*

In contrast with the lower levels of the original building, the third floor is primarily used as office and storage space, and this reflects its historic use. The third-floor gallery and two typical office corridors are described below.

The third-floor gallery around the rotunda features a pink Tennessee marble floor with an inlay of Sienna marble, and the walls are original plaster with marble baseboards and plaster crown molding. The ceiling is plaster, and the beam soffits at this level have a rosette design. Modern pendant lights hang from the ceilings.

The east pavilion has a single-loaded corridor plan, with offices along the outer walls. As originally designed, the inner walls of the corridors had glazed openings that brought in borrowed light from the skylight over the main exhibition halls. Today, the corridor features terrazzo floors and baseboards (which replaced the original wood flooring and baseboards), original plaster walls with picture rails, original plaster ceilings (with exposed pipes and conduit mounted to the ceilings), and modern lighting.

Room 310 is a large office located in the southeast corner of the east pavilion. It is a typical office in that it retains some original features, yet others have been replaced or concealed with modern materials. Features include a modern vinyl tile floor, rubber baseboards (covering original plaster), original plaster walls with picture rails, and an original metal door with a wireglass transom above. The original door assemblies were designed to be fire resistant. There are two double-hung sash, wood windows (original) on the east wall and two on the south, which provide outstanding views to the U.S. Capitol and the Smithsonian Institution Building. The windows have wood sills.

The east range of the third floor has a double-loaded corridor plan. It retains a significant amount of historic features and finishes despite some modern additions. In the corridors, finishes include terrazzo floors and baseboards (which replaced the original wood flooring and baseboards), original plaster walls with picture rails, plaster ceilings (with exposed pipes and conduit mounted to the ceilings), and modern lighting. The original metal office doors are paneled and glazed with

a transom and a wire mesh ventilation panel stacked above. The glazing in the doors and transoms illuminates the corridor with borrowed light. A number of transoms and ventilation panels have been infilled. Original steel-covered wood storage cabinets line the hall.

Room 351 is located on the south side of the north corridor of the east range. It features plaster walls with a picture rail (original), a plaster ceiling (original), dropped fluorescent lights, a modern vinyl tile floor, and rubber baseboards (covering original plaster). The south wall of the office has a tripartite window (original) with three one-over-one, double-hung, wood sash.

*East and West Wings*

The east and west wings were constructed between 1961 and 1965. They contain six floors plus a basement, ground floor, and penthouse. The first through sixth floors of each wing have the same floor plan – an open interior space for collections storage with offices and special purpose rooms around the perimeter. In some instances, masonry walls, constructed to the ceiling, define the central storage area. Another variation is the use of gypsum board partition walls or masonry walls to subdivide the central space. The fourth floor of the west wing represents a typical example of these museum spaces. The majority of its floor area is used for collections storage and features rows of tall metal cabinets, in this case of modern construction. The floor is covered with vinyl tile, and the walls are masonry with rubber baseboards. Exposed pipes and conduit are mounted to concrete ceilings. Office doors are metal with a ventilation grill in the bottom half. The Department of Botany Library is located along the north wall of the fourth floor. This space features carpet tile flooring and suspended ceiling panels with inset lights. The window openings have nonoperable, metal sash and stone sills.

*West Court Infill Building*

Originally, the west court of the original 1911 building, which measures 128 feet square, was open to the sky and landscaped with turf panels and gravel walks.[30] In the early 1950s, a steel Butler building was installed in the courtyard to provide overflow working space for the exhibits staff and production facilities.[31] In 1974-77, the west court was permanently filled with the construction of a three-story building that added roughly 45,000 square feet of space. Its design incorporates a four-story atrium that allows for large expanses of the original courtyard walls to remain visible. Within the atrium, open, two-story bridges link the infill construction and the north pavilion. The north bridge incorporates an elevator. While this addition post-dates the museum's period of significance and is not a contributing element of the building, a brief interior description is provided below.

[30] Rathbun, 103.
[31] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 268, 276, 281.

As originally constructed, the top levels of the west court infill building held a public cafeteria and a museum shop; on the middle floor were restrooms and a "Naturalist's Center;" and on the bottom floor were employee dining areas and a school tour staging area that included a conference room and four classrooms.[32] In 1999-2002, the west court infill building was renovated to accommodate the Atrium Café on the ground floor, an IMAX theater, and a hands-on science center called the Discovery Center.[33] In 2017, the IMAX theater was closed and removed. Today, the west infill building consists of the Atrium Café on the ground floor and the Ocean Terrace Café (opened in 2019) on the first floor. These public cafeteria spaces incorporate kitchens and serving stations. The former theater space (currently unoccupied) is above the Ocean Terrace Café, and at the top of the west court infill building is a conference room, which has a glass wall that looks out into the atrium.

*East Court Infill Building*

When the museum was originally built, the east court was also open and landscaped with turf panels and gravel walks.[34] Over the years, various temporary support structures were erected in the space.[35] In 1995-98, a permanent, freestanding office building was constructed in the center of the court.[36] Its exterior walls consist of an external insulation and finishing system (EIFS stucco), which is scored to resemble masonry coursing, with a granite base and detailing.[37] The windows of the infill building are fixed metal sash, and the doors are metal. The floor of the perimeter courtyard is stone. Metal gates placed at points along the courtyard are used to restrict access to nonpublic spaces. A glass roof spans the space between the original building and the new construction. While the east court infill post-dates the museum's period of significance and is not a contributing element of the museum building, a brief interior description is provided below.

The east court infill building has three underground floors (basement, ground, and first) and six floors above grade (second through seventh). The basement contains offices and spaces used by physical plant personnel, and there are a library (renovated in 2010-11), daycare center (Smithsonian Early Enrichment Center), and classrooms on the ground-floor level. The first-floor plan consists of a double-loaded corridor with special purpose rooms on the interior and offices around the perimeter. Finishes include suspended panel ceilings, gypsum board walls, wood office doors, vinyl tile floors in the corridors and elevator lobbies, and carpeted floors in the offices. The double-loaded corridor plan, features, and finishes of the first floor are repeated

[32] Ibid., 281.
[33] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 287; and "Revamped Natural History Rockets Ahead in Visitors," *Washington Post*, May 25, 2000.
[34] Rathbun, 103.
[35] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 286.
[36] Ibid., 217, 219, 286.
[37] Ibid., 380.

on the second, third, and fourth. The second floor, however, which is at the same level as the perimeter courtyard between the infill building and the original, has large public restroom facilities in the southwest corner of the floor plan which interrupt the double-loaded corridor plan. The fifth, sixth, and seventh floors are open in the center for collections storage, with offices around the perimeter.

## 8. Statement of Significance

**Applicable National Register Criteria**
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- [X] A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [ ] B. Property is associated with the lives of persons significant in our past.
- [X] C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- [ ] D. Property has yielded, or is likely to yield, information important in prehistory or history.

**Criteria Considerations**
(Mark "x" in all the boxes that apply.)

- [ ] A. Owned by a religious institution or used for religious purposes
- [ ] B. Removed from its original location
- [ ] C. A birthplace or grave
- [ ] D. A cemetery
- [ ] E. A reconstructed building, object, or structure
- [ ] F. A commemorative property
- [ ] G. Less than 50 years old or achieving significance within the past 50 years

**Areas of Significance**
(Enter categories from instructions.)
Architecture
Community Planning and Development
Education
Entertainment/Recreation

**Period of Significance**
1911-1965

**Significant Dates**
1911
1963
1965

**Significant Person**
(Complete only if Criterion B is marked above.)

**Cultural Affiliation**

**Architect/Builder**
Hornblower & Marshall
Burnham, Daniel H.
McKim, Charles Follen
Green, Bernard R.
Mills, Petticord, and Mills

**Statement of Significance Summary Paragraph** (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Smithsonian National Museum of Natural History is currently listed as a contributing building in the National Mall Historic District National Register nomination (NRIS #16000805, Boundary Increase/Additional Documentation, November 29, 2016). The museum also satisfies standards for listing in the National Register of Historic Places as an individual building at the national level under Criterion A in the areas of education and entertainment/recreation and under Criterion C in the areas of architecture and community planning and development. Completed in 1911 as the Smithsonian's new "National Museum," its long history of developing and disseminating information about natural, cultural, ethnological, and world history, as well as the fine arts, to the American public through changing exhibits, research collections, publications, and public programs has made it an important resource in the education of American citizens, thereby demonstrating significance under Criterion A in that area.[38] The National Museum of Natural History is also important as a manifestation of entertainment and recreation in the form of museum and memorial visitation, which began to be encouraged in the United States in the middle of the nineteenth century as part of a movement aimed at advancing the physical and mental well-being of the American people. Like the memorials and other Smithsonian museums on the National Mall, the National Museum of Natural History has served that purpose since its opening and has now welcomed more than 200 million people into its exhibit halls. Here, through display and interpretation of specimens, fossils, and artifacts from the museum's world-class collections, they are able to discover information ranging across the entire scope of natural history, from the structure and development of the earth and other bodies in the universe to the origin, evolution, and diversity of life on earth to the beginnings and development of humankind and human cultures.

Under Criterion C, the National Museum of Natural History is also nationally significant in the area of architecture as an outstanding and precedent-setting example of Neoclassical architecture of the kind that the Senate Park Commission, also known as the McMillan Commission, envisioned for the National Mall in its 1902 plans for Washington's park system. The design was the product of a collaboration between the architects selected by the Smithsonian for the job, Hornblower & Marshall, and two members of the Senate Park Commission, architects Charles Follen McKim of McKim, Mead & White and Daniel H. Burnham. The design set a standard for subsequent buildings on the Mall. In addition, the museum is nationally significant in the area of community planning and development for its association with the McMillan Commission's

[38] While the broad range of fields that constitute natural history has occupied the bulk of the museum's research efforts and exhibition space since it opened, the museum only became known as "the Natural History Building" in 1957 and received its current designation as the Smithsonian museum entirely dedicated to those fields in 1969.

vision for the National Mall. Along with the U.S. Department of Agriculture, the siting of the National Museum of Natural History helped establish the commission's proposed building setbacks from the Mall's center line, providing for the long greensward between the Capitol and the Washington Monument that was the central element of its nationally significant City Beautiful plan. The elements of the museum's sober Neoclassical architecture influenced building design on the Mall until after World War II.

The period of significance for the museum has been determined to begin in 1911, when the exterior and most of the interior were finished, and end in 1965, when the addition of wings on the east and west, planned as early as 1930, was completed. Built in a streamlined version of the original building's Neoclassical style, the wings contain no exhibit space, but their offices, storage areas, workshops, and laboratories enable the museum to maintain its primary mission of educating and entertaining the American public with exhibits devoted to natural history.

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**Narrative Statement of Significance** (Provide at least **one** paragraph for each area of significance.)

Criterion A *(Properties associated with events that have made a significant contribution to the broad patterns of our history)*

*Education:* Formed through the bequest of British scientist James Smithson, the Smithsonian Institution was chartered by Congress in 1846 to promote, in Smithson's words, "the increase and diffusion of knowledge," a goal it has pursued in the support of research centers and the development of national collections in the realms of science, history, and art and through wide-ranging publications and public programs. The Smithsonian has developed into the nation's premier collection of museums and one of the most influential educational institutions in the United States. From its inception as the United States National Museum, the first federally sponsored collection of artifacts of natural history and anthropology in the United States, the National Museum of Natural History has played a leading role in the national and international museum community. The museum enabled the Smithsonian Institution to vastly expand its collections storage, exhibition, and research capabilities, thereby also expanding its ability to disseminate knowledge of the natural world and the development of human cultures to the citizens of the United States and to the international community. Well over 200 million people have visited the museum since its opening. Additions and improvements to the museum have enabled the National Museum of Natural History to continue to increase its collections, adapt to advances in scientific knowledge, and use the latest exhibition technology to educate visitors in the vast range of fields included in its purview.

*Entertainment/Recreation:* The National Museum of Natural History is nationally significant as an example of recreation in the form of museum and memorial visitation, which began to be

encouraged in the United States in the middle of the nineteenth century as part of a movement aimed at advancing the physical and mental well-being of American citizens. The Senate Park Commission plan for Washington's park system, also known as the McMillan Plan and promulgated in 1902, was the most complete and influential application of City Beautiful planning principles, which, among many other ideas, emphasized the creation of monuments, museums, and other buildings, linked with carriage drives and pedestrian paths, that provided public diversion and enlightenment, as well as opportunities to experience the outdoors. In a rapidly urbanizing country, these recreational opportunities were seen as significant means to maintain the physical and mental health of the nation's citizens. The U.S. National Museum, as one of the early benchmarks that established the McMillan Plan, became essential to this undertaking. Based on the pioneering work of Director G. Brown Goode in the 1880s, the National Museum of Natural History followed a scientific approach for disseminating information about the natural and human worlds that featured outstanding examples from its collections of fossils, animals and plants, minerals, and products of human activity, arranged and interpreted to provide an entertaining and informative understanding of the individual artifact in its larger context. This approach offered museumgoers unusual and compelling artifacts and objects that possessed intellectual as well as sensual appeal, enhancing the "rational recreation" experiences of visitors to the National Mall.

Criterion C *(Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction)*

*Architecture:* In 1901, the Smithsonian Institution asked the Washington architectural firm Hornblower & Marshall to prepare a design for its new National Museum. Although the fundamental plan for the museum was fixed early on, the character of the exterior and amount of detail fluctuated greatly throughout its design development, with Hornblower & Marshall displaying a tendency toward the proliferation of sculptural architectural details. After a series of exchanges with the Smithsonian staff and the Senate Park Commission, the architects simplified the building's design, which initially contradicted the Neoclassical preferences of the Smithsonian and the commissioners. The dome was the final element to be resolved, with Hornblower & Marshall arguing for an ornate, French-influenced design. As a compromise, Charles McKim, of the renowned New York architecture firm McKim, Mead & White and a member of the Senate Park Commission, produced the design of the existing Roman-inspired dome. Daniel H. Burnham, another commission member, was responsible for the concept of the museum's south portico. Initial construction took place between 1904 and 1911. (The building partially opened in 1910, and the interior was completed in 1912.) As one of the first buildings constructed on the National Mall after the Senate Park Commission Plan was made public in

1902, the design of the National Museum helped set the precedent for the type and scale of monumental Neoclassical architecture the Senate Park Commissioner considered appropriate for the Mall.[39] The next significant alterations were made in 1961-65 with the construction of the east and west wings by the firm of Mills, Petticord, and Mills. The wings, planned as early as 1930, followed the same Neoclassical principles as the original building, although in a more austere manner.

*Community Planning and Development:* The National Mall embodies two influential American planning philosophies. Peter (Pierre) Charles L'Enfant's 1791 plan for Washington, D.C., was the most comprehensive example of a Baroque city plan in the country, reconciling symbolic and practical considerations in its system of radial avenues and orthogonal streets, the great cross axis of the public space of the Mall, the reservation of park land, and the location of major buildings. At the start of the twentieth century, the members of the Senate Park Commission reimagined L'Enfant's plan to incorporate the order, hierarchy, and formality of the American City Beautiful movement. The subsequent adaptation and implementation of the McMillan Plan created the best-preserved example of City Beautiful planning in the country. The siting and design of the National Museum of Natural History, one of the first buildings to be constructed on the Mall after the McMillan Plan was promulgated, was crucial to the establishment of the Senate Park Commission's ideas on the ground, especially building setbacks that allowed the plan's central feature – the greensward between the Capitol and the Washington Monument – to be implemented. The commissioners, primarily Charles McKim and Daniel Burnham, worked tirelessly to see that its principles were implemented on the Mall, including personally intervening in the design of the new National Museum. Their success with the museum helped ensure that the McMillan Plan would guide the future development of the Mall.

Integrity

As initially constructed, the National Museum of Natural History featured a four-story rotunda, two-story exhibition halls, smaller galleries, an auditorium, offices, laboratories, workshops, and collections storage areas. All those kinds of spaces remain today, as does the museum's plan and public circulation, organized as they are toward both the National Mall and Constitution Avenue, with the exhibition halls opening off the central rotunda and the upper levels reached by elevators and stairs located there. Also remaining on the exterior and in many of the public spaces are original architectural details and materials. As the museum collections changed and expanded, and as new technology for research, collection, and exhibition of artifacts emerged, the building was adapted. Space was increased through the insertion of mezzanine levels, wings, and construction in the courtyards. Changes in the type of, and utilities for, exhibits have resulted

[39] The Department of Agriculture Building, now known as the Jamie L. Whitten Building, was the first building to be considered under the Senate Park Commission Plan, in 1904. It established the building setback on the south side of the Mall, while National Museum fixed the north building line.

in self-contained spaces inserted within the original walls of the museum, rather than display cases arranged in rows, as generally prevailed before the 1960s. Issues of National Register integrity for the building therefore mostly stem from additions to, rather than removal of, original fabric. Where those changes have affected the primary public spaces, it has been to interfere with or conceal extant original features and materials, rather than remove them.

The museum's foundational purpose as a center for research, storage, and exhibition of the artifacts in the collections of the Smithsonian Institution remains the same as it was when the building was completed in 1911 and when the wings were added in 1963 and 1965. The National Museum of Natural History remains in its original **location** among the museums and galleries of the National Mall, maintaining its **feeling** and **association** with its primary educational purpose, with its role as a recreational resource for United States citizens and international visitors, and with its relevance to the implementation of the McMillan Plan. These categories therefore maintain a high degree of National Register integrity.

The Neoclassical principles by which the National Museum of Natural History was conceived remain evident on the exterior and in the main public spaces of the interior. They continue to effectively communicate the original design. Few changes have been made to the exterior since the end of the period of significance, with the exception of setback penthouses on the roof and replacements of some windows (which match the original profile although not necessarily the original materials). Character-defining features such as the museum's south portico, low Roman dome with Diocletian windows, north entrance, proportions, and the horizontal divisions of its elevations remain in their original form. On the interior, significant aspects of the original design that remain little changed include its plan (pavilions radiating from the central rotunda and linked by ranges) and circulation (organized by the rotunda and its ambulatories, stairs, and elevators, with open exhibition halls inviting visitors to wander among their displays). Smithsonian-fabricated display cases are mostly gone; however, the original floors, walls, ceilings, and decorative details of the primary exhibition areas and circulation spaces of the 1911 building remain in place in most cases, although there are instances in which original materials are concealed – for instance, floors covered by carpets or windows by light-regulating shades – or screened from view by exhibits. The most obvious change to the interior has been the insertion of noncontributing mezzanine levels and the division of larger rooms to create dedicated office space. This work is reversible, and some display space has already been reclaimed. Original features of the third-floor offices and corridors remain, including windows, wall trim, and doors, but the office areas have seen greater changes than the public spaces. Overall, the National Museum of Natural History therefore retains a high degree of integrity in its **design**, **materials**, and **workmanship,** and original interior and exterior elements of the design of the 1911 building contribute to its significance. Although the east and west wings were constructed during the period of significance and their exteriors contribute to the museum's significance, their interior

elements, with the exception of the interior faces of original windows and the reinforced concrete structure, are not considered architecturally important. They are utilitarian in nature, and the wings were designed to be reconfigured as the need arose. Such changes have already taken place on some floors.

The museum's immediate **setting** also retains integrity, although it has changed, with asphalt drives and parking areas established on the east, west, and south sides of the building when the wings were built, removing original green space. These areas, however, are secondary to more significant aspects of the setting, which include its relationship to both the National Mall on the south (especially its relationship to the Mall's center line and to the other buildings on the Mall) and Constitution Avenue on the north. The addition of other public buildings on the Mall since 1911 has altered the setting in a way anticipated by the Senate Park Commission's plan for the area. The landscape on the north side of the site, consisting of areas of low ground cover punctuated by a line of elm trees, remains consistent with the museum's original setting. The primary entrances, on the north and south, are located in areas of the setting that are least changed. The integrity of the National Museum of Natural History in the National Register categories of location, feeling, association, design, materials, workmanship, and feeling therefore remains strong.

**Developmental History and Historic Context**

Museum-Going as Recreation and Education

The Smithsonian Institution was founded in 1846 through the bequest of James Smithson, who called for the creation in the United States of an institution dedicated to the "increase and diffusion of knowledge among men." The collections upon which the Smithsonian was founded had been assembled as part of the worldwide United States Exploring Expedition, which took place from 1838 to 1842. The Smithsonian's "Fundamental Act," dated August 10, 1846, established the legal and bureaucratic framework for housing these collections. It created a Board of Regents which "shall cause to be erected a suitable building, of plain and durable materials and structure, without unnecessary ornament, and of sufficient size, and with suitable rooms or halls, for the reception and arrangement, upon a liberal scale, of objects of natural history, including a geological and mineralogical cabinet; also a chemical laboratory, a library, a gallery of art, and the necessary lecture rooms."[40] The Institution's first building, designed by James Renwick, Jr., and now called the "Castle," was built on the south side of what is now known as the National Mall and completed in 1855.

The impending construction of the Smithsonian Institution building, along that of the Washington Monument, which began in 1848, impelled Commissioner of Public Buildings

[40] Quoted in Rathbun, 7.

Ignatius Mudd to seek improvements to the Mall, which was then mainly unkempt and poorly drained land south of the City Canal. In October 1850, a contingent of city leaders – including Joseph Henry, secretary of the Smithsonian Institution – approached President Millard Fillmore with the same idea as the commissioner. At the suggestion of the civic leaders and with the president's approval, Mudd subsequently invited Andrew Jackson Downing, the pre-eminent theoretician of landscape design in the United States in the first half of the nineteenth century, to inspect the public grounds and produce a plan for their improvement. [41]

Dated February 1851, the plan Downing produced consisted of a series of six "scenes," as Downing described them, different in their details but guided by the principles of Picturesque landscape composition. Circulation paths and planting lines leaped across the boundaries of the individual park scenes to knit the entire composition into a whole. For the "Smithsonian Pleasure Grounds," stretching the width of the Mall between 7th and 12th streets, Downing laid out winding carriage drives and envisioned varied densities and types of vegetation, mainly deciduous and evergreen trees. [42] The Smithsonian Regents adopted Downing's plan, and, on April 12, 1851, President Fillmore approved construction of the plan west of 7th Street NW, which included the area between the Smithsonian Castle and the current site of the National Museum of Natural History. Downing himself supervised the improvement of the Smithsonian grounds in regular visits to the capital before his death in a steamboat accident on July 28, 1852.[43]

Downing's landscape plan, as well as the museum function of the Smithsonian Institution and the commemorative and tourism value of the Washington Monument, constituted elements typical of a movement in the middle of the nineteenth century that emphasized recreation and leisure as methods of producing mental, physical, and spiritual health in the American citizenry. The movement responded to the Industrial Revolution's impact on the American workplace and on cities, especially the long, inflexible hours and crowded urban areas that critics considered responsible for increased crime, disorder, and unhealthy living conditions. Parks provided clean air and open land, recalling rural values that were seen as antidotes to urban crowding. Downing's winding paths and informal plantings, influenced by nineteenth-century Romantic conceptions of landscape design, followed this call for echoes of the countryside within the city. In addition to the passive recreation of strolling through beautiful scenery, the movement advocated "rational recreation," which included structured playing fields, libraries, museums, and other sites designed to exercise the mind and the spirit as well as the body. Central Park in

[41] Therese O'Malley, " 'A Public Museum of Trees': Mid-Nineteenth Century Plans for the Mall," *The Mall in Washington, 1791-1991*, Richard Longstreth, ed. (Washington, D.C.: National Gallery of Art, 1991), 64-65; U.S. Commissioner of Public Buildings, *Report of the Commissioner of Public Buildings*, 1850, 9.
[42] O'Malley, 66-71.
[43] David Schuyler, *Apostle of Taste: Andrew Jackson Downing, 1815-1852* (Amherst, Massachusetts: Library of American Landscape History, 2015), 196-202.

New York, initially opened in 1857 and then altered by Frederick Law Olmsted, Sr., and Calvert Vaux, was the first completed, comprehensive example of such a park in the United States.[44]

The concept of the museum itself also began to change in the second half of the nineteenth century, allowing such institutions to play a greater role in "rational recreation" for the masses. Prior to the eighteenth century, access to art, artifacts of ancient cultures, and scientific specimens and instruments had generally been the province of the wealthy. The Louvre, which has been considered the first public museum, consisted of the collections of the French kings and became available to the general public only after the French Revolution ended the monarchy in France. It opened on August 10, 1793. In the United States, families of means followed precedents set in Europe by establishing what were known as "cabinets of curiosities" in their homes – rooms which held items of interest to the collector and shared with privileged guests. Local historical societies also established their own collections in athenæums for their members to visit and admire. Both the private and historical society collections might include Indian relics, mineral specimens, animal skins, fossils, and copies of paintings and sculpture from Europe.[45] American painter Charles Willson Peale (1741-1827) bridged the gap between private and public collections, opening Peale's Museum in his home in Philadelphia in 1786 for the display of artifacts of natural and technological history to paying customers. His expanding collections were later lodged in Independence Hall in association with the American Philosophical Society. The Peabody Museum in Salem, Massachusetts, which opened in 1799, displayed artifacts brought back by the area's sailors – articles from the Pacific islands and Japan, maritime instruments, and ship models – as well as geological, botanical, and zoological specimens from the Salem area.[46]

In addition to a relatively limited audience, the cabinet of curiosities and the historical society athenæums in the United States shared a subjective approach to collecting and a lack of clear interpretation. The interests of the individual collector or the local society guided the assemblage of artifacts, rather than any systematic scientific or philosophical program, and interpretation depended on the presence of the collector or society member. In the last half of the nineteenth century, with the establishment of larger public museums, including the American Museum of

[44] U.S. Department of the Interior, National Park Service. "A History of Recreation in East and West Potomac Parks" (revised draft), April 2008, 6-7.
[45] Kipi Rawlins, "Educational Metamorphosis of the American Museum," *Studies in Art Education* 20:1 (1978), 4-5, https://www.jstor.org/stable/1320132; David Jenkins, "Object Lessons and Ethnographic Displays: Museum Exhibitions and the Making of American Anthropology," *Comparative Studies in Society and History* 36:2 (April 1994), 242-243, https://www.jstor.org/stable/179259; Miriam R. Levin, "Museums and the Democratic Order," *The Wilson Quarterly* 26:1 (Winter 2002), 52-55, https://www.jstor.org/stable/40260571, accessed May 19, 2022.
[46] Sally Gregory Kohlstedt, "Museums: Museums of Science and Technology," *Oxford Companion to the History of the United States*, Paul S. Boyer, editor in chief (New York: Oxford University Press, 2001), 525-526; "Charles Willson Peale," *Encyclopedia Britannica*, https://www.britannica.com/biography/Charles-Willson-Peale, accessed May 19, 2022.

Natural History in New York (1869) and the Columbian Museum of Chicago (1893, renamed the Field Museum in 1905), that approach to collecting changed. Leaders of what historian of science Sally Gregory Kohlstedt has called the "new museum" movement believed they could develop museums that could handle a variety of subjects but do so in a rational, scientific, and comprehensive manner. "Fundamental in the 'new museum' formulation," Kohlstedt writes, "was an understanding that the large, architecturally distinctive, and publicly supported museums should pursue the tripartite goal of preservation, research, and education."[47] These new public museums broke away from the eclectic and subjective inclinations of earlier museums to use advances in the various research fields to achieve a coherence and an authority not attempted in earlier collections of objects and artifacts.[48]

The Smithsonian, with its federal funding and numerous government agencies to provide scientific expertise, was positioned to greatly influence the direction that public museums took toward collection and exhibition policy. Kohlstedt cites George Brown Goode (1851-1896), who rose through the ranks to become the assistant secretary of the Institution and director of the National Museum as "both chronicler and international spokesman for the 'new museum' movement."[49] Goode graduated from Wesleyan University in Middletown, Connecticut, in 1870, and was immediately invited to organize the university's natural history collections upon his graduation. Before beginning this work he studied with noted natural historian Louis Agassiz at the Museum of Comparative Zoology at Harvard. An arranged meeting between Goode and Spencer F. Baird, the Smithsonian's first curator and second secretary, led to Goode's affiliation with the U.S. Fish Commission and then the Smithsonian. Both men were ichthyologists by training. In 1875, Baird asked Goode to organize the Smithsonian's display at the Centennial Exposition in Philadelphia, beginning a long association with the development of exhibits for the Smithsonian Institution at expositions across the United States (Louisville, New Orleans, Cincinnati, and the World's Columbian Exposition in Chicago), as well as in Europe. He became the director of the U.S. National Museum in 1885.[50]

Curating exhibits required Goode to conceptualize the development of displays along the same lines as the classification systems of the sciences themselves, and in his first report to the secretary of the Smithsonian on the National Museum, he included a detailed plan for operating the museum and a system for classifying its collections. "From that point on," Kohlstedt writes, "Goode became a pre-eminent theorist on museum practice, developing a point of view and

[47] Sally Gregory Kohlstedt, "'Thoughts in Things': Modernity, History, and North American Museums," *Isis* 96:4 (December 2005), https://www.jstor.org/stable/10.1086/498595, 586-587.
[48] Ibid., 590.
[49] Kohlstedt, "'Thoughts in Things,'" 586; Kohlstedt, "Museums of Science and Technology," 526.
[50] Sally Gregory Kohlstedt, "History in a Natural History Museum: George Brown Goode and the Smithsonian Institution," *The Public Historian* 10:2 (Spring 1988), 11-12; https://www.jstor.org/stable/3378666, accessed May 19, 2022.

concrete recommendations which informed not only natural history collections and display but eventually those in 'arts and industries' as well."[51] As Goode's approach to museum collection and display remained standard practice for nearly a century, it is important to remember that such a comprehensive system did not exist until the late nineteenth century, as Goode himself noted in his influential treatise *The Principles of Museum Administration*, published in 1895. The aim of the work, he wrote, was "to begin the codification of the accepted principles of Museum administration" and "to set forth the aims and ambitions of modern Museum practice."[52] Brown laid out the definition and purposes of museums in *Principles*, as well as their different types, ideas on management and economy, building types, the uses of collections and the preservation of specimens, exhibit installation, and catalogs. As Goode equated the educational aspect of museums with their purpose as research and preservation institutions, he even expounded upon the purpose and the most effective ways of writing labels for museum exhibits. In *Principles*, his speech to the American Historical Association in 1888, and numerous other works, "Goode introduced methods that administrator-curators who succeeded him adhered to well into the 1960s. . . . Following Goode, the Smithsonian and its administrators became leaders in establishing the authority of science – and of technology as applied science – in American museums, and that influence has only grown over the years."[53]

The Drive toward a New National Museum

The Smithsonian's Fundamental Act ordered that "all objects of art and of foreign and curious research, and all objects of natural history, plants and geological and mineralogical specimens" in the custody of the Smithsonian's Board of Regents in Washington should be classified and arranged in the building provided for so that they might be examined and studied. The Regents, using the plenary powers granted to them, soon added ethnology, antiquities, inventions, and the arts and manufactures to the original subjects of study.[54] Early secretaries of the Smithsonian Institution, however, interpreted Smithson's instructions as a mandate to research and publish, rather than to exhibit its collections.[55] Its public presence, the National Museum, was added as a result of legislation that provided funding for the Smithsonian's participation in the Centennial Exhibition of 1876 in Philadelphia in return for constructing a building in Washington in which to display the Institution's collections.[56]

[51] Kohlstedt, "History in a Natural History Museum," 13.
[52] G. Brown Goode, *The Principles of Museum Administration*, (York, England: Coultas & Volans, 1895), 3.
[53] Levin, 62.
[54] Rathbun., 7-8.
[55] Cynthia R. Field and Jeffrey T. Tilman, "Creating a Model for the National Mall: The Design of the National Museum of Natural History," *Journal of the Society of Architectural Historians* 63:1 (2004), 55.
[56] See George Brown Goode, ed., *The Smithsonian Institution, 1846-1896, The History of Its First Half Century* (Washington, D.C., 1897); Geoffrey T. Hellman, *The Smithsonian: Octopus on the Mall* (1967, rev. ed., Philadelphia, 1978); William John Rhees, ed,, *The Smithsonian Institution: Documents Relative to Its Origins and*

The result of that deal, the Smithsonian's first purpose-built museum building, was Adolf Cluss's United States National Museum (the present day Arts and Industries Building). Completed in 1881, it was designed to house the Smithsonian departments of biology, botany, mineralogy, paleontology, and zoology, and the Institution's anthropological and ethnographical exhibits. It became the locus for the manifestation of Goode's ideas on how specimens from the Smithsonian's collections should be arranged and interpreted. These collections expanded rapidly in these early years; from 192,000 objects in 1882, the collection swelled to 2,864,244 objects in 1889, crowding the facility and provoking curatorial cries of insufficient storage that would soon become a leitmotif in the history of the National Museum.[57] This history was clearly and forthrightly recapitulated in the 1917 Smithsonian annual report, which noted the overtaxed storage capacities of all the buildings tasked with holding the national collections of the United States, which had included the Patent Office, the Castle, and the National Museum. After completion of the National Museum in 1881, the report states, "Then followed nearly three decades during which about as much material was assembled in outside storage as found lodgment within the two structures," referring to the Castle and the National Museum.[58]

In 1889, Smithsonian officials publicly pushed for more generous quarters. In that year, the new Secretary, Samuel Pierpont Langley, proposed a second building for additional display of museum items. The proposed building, drawn by W. Bruce Gray (a young architect who had recently designed exhibition cases for the museum), was sited to the west of Renwick's Castle. The design was sympathetic to the Renwick- and Cluss-designed buildings in terms of the grouping of its arches, its blocky massing, and its medievalized detail. It was inspired by Cluss's National Museum, with almost the same square footprint. Legislation was introduced regularly over the next decade to fund this new building, but Congress did not approve an appropriation.[59]

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*History, 1835-1899* (Washington, D.C., 1901); Webster P. True, *The First Hundred Years of the Smithsonian Institution, 1946-1946* (Washington, D.C., 1946); Wilcomb E. Washburn, "Joseph Henry's Conception of the Purpose of the Smithsonian Institution," in Whitfield J. Bell, Jr., et. al., *A Cabinet of Curiosities: Five Episodes in the Evolution of American Museums* (Charlottesville: University Press of Virginia, 1967); and Cynthia R. Field, Richard E. Stamm, and Heather P. Ewing, *The Castle: an illustrated history of the Smithsonian Building* (Washington, D.C.: Smithsonian Institution Press, 1993).

[57] *Annual Report of the Board of Regents of the Smithsonian Institution Showing the Operations, Expenditures, and Condition of the Institution for the Year Ending June 30, 1899* (Washington, D.C.: Government Printing Office, 1899), 5.

[58] *Annual Report of the Board of Regents of the Smithsonian Institution Showing the Operations, Expenditures, and Condition of the Institution for the Year Ending June 30, 1916* (Washington, D.C.: Government Printing Office, 1917), 35. On the Castle, see Cynthia R. Field, Richard E. Stamm, and Heather P. Ewing, *The Castle: An Illustrated History of the Smithsonian Building* (Washington, D.C.: Smithsonian Institution Press, 1993); on the Arts and Industries building, see Alan Lessoff, and Christof Mauch, eds., *Adolf Cluss, Architect: from Germany to America* (Washington, D.C.: Historical Society of Washington, D.C., 2005).

[59] Field and Tilman, 55.

Realizing that Congress did not intend to appropriate funds for a new building, Secretary Langley turned to the next best option. He decided to renovate and add space within the existing National Museum building to better meet the needs of the expanding programs and collections. Between 1896 and 1902, the National Museum was extensively renovated, most notably through the addition of balconies throughout the open halls and courts to provide additional exhibition space. The firm of Hornblower & Marshall carried out this work.[60]

Joseph C. Hornblower studied at Yale's Sheffield Scientific School and furthered his architectural studies in Paris from 1875 to 1876, in the atelier of Jean Louis Pascal. James Rush Marshall graduated from Rutgers College Scientific School and traveled in Europe before he was hired by the office of the Supervising Architect of the Treasury in 1872. Hornblower & Marshall was established in Washington, D.C., in 1883. After a decade of practice, the partnership was recognized as one of the most prominent firms in the city. Both partners were active members of the Cosmos Club, where fellow members included Smithsonian officials Langley and Richard Rathbun, the assistant secretary for the National Museum, with whom their professional lives would soon be entwined. Hornblower & Marshall embarked upon their first project for the Smithsonian Institution in 1891. Over the next decade the firm conducted a series of projects of varying budgets and scales, including renovating existing Smithsonian structures (such as the National Museum) and designing new animal houses at the National Zoological Park. Given this decade-long connection, it was logical that Langley would turn to Hornblower & Marshall to sketch plans for a new museum building.

Head curators at the Smithsonian began meeting as early as 1901 to discuss their ideas for a new museum. William Henry Holmes, a scientific illustrator and curator of prehistoric anthropology (and later first Director of the National Gallery of Art) produced sketches that year. These sketches demonstrate that the general building plan settled upon very early in the process of procuring a new building and would remain so throughout the design process: the museum would consist of a rectangular structure with two courts, housing the departments of anthropology, biology, and geology, as well as administrative, research, display, and storage spaces. Hornblower & Marshall produced an enlarged plan on August 28, 1901, largely following Holmes' sketch. The museum staff later decided that an auditorium was essential; this was sketched by Holmes and passed on to Hornblower & Marshall, and it emerged as a proposal for an auditorium in 1909.[61]

To ensure that the project would be well managed, Congress inserted into the bill funding construction of the new museum a requirement that Bernard Green would become superintendent of construction. Green had extensive experience with large-scale federal building projects, particularly as superintendent of buildings at the Library of Congress, and had earned the trust of

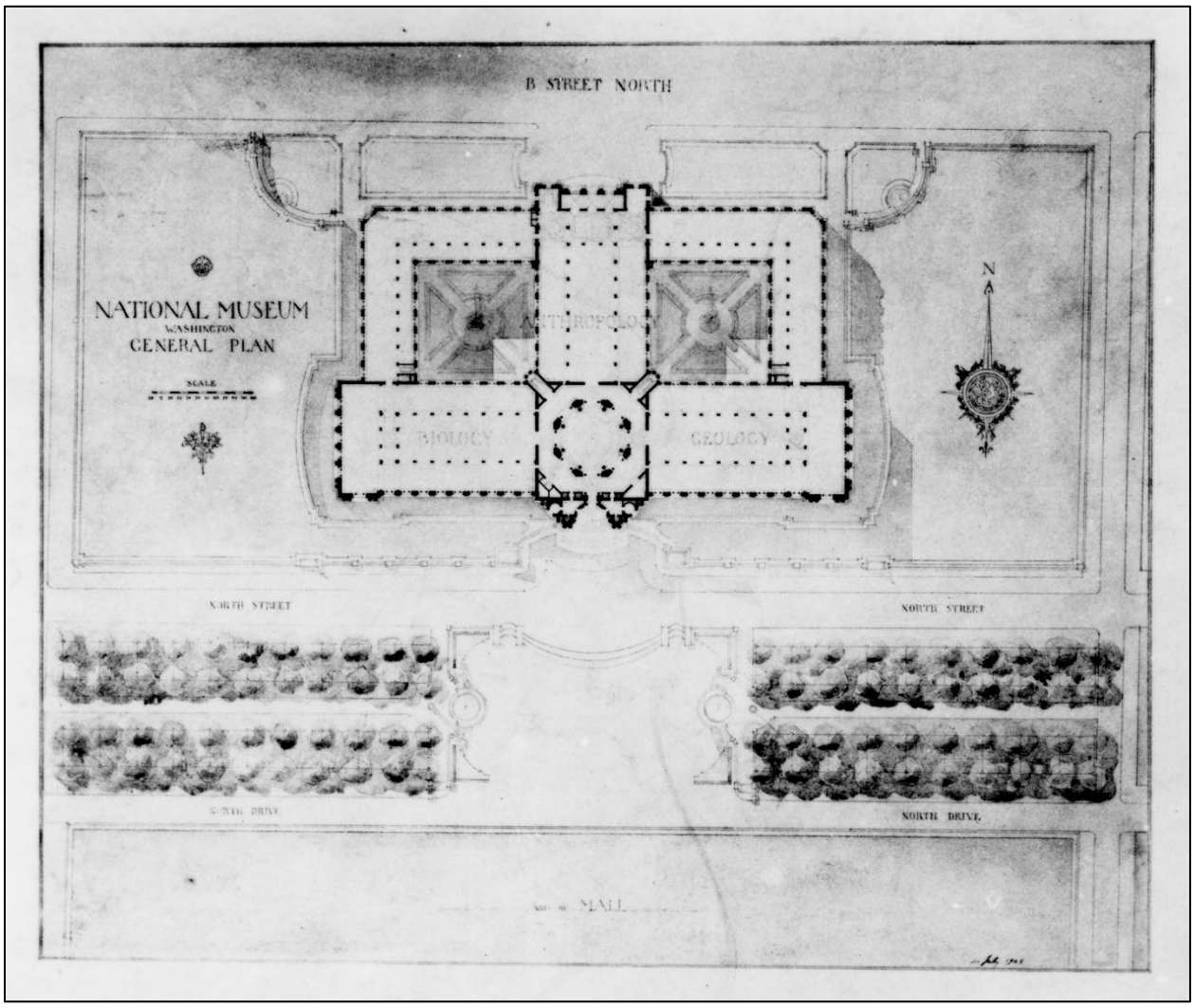
[60] Ibid.
[61] Ibid., 56-57.

Congress for his efforts. He was also well known to Smithsonian officials, being on good terms with Rathbun and librarian Cyrus Adler, as well as having an established relationship with Hornblower and Charles Follen McKim and Daniel H. Burnham of the Senate Park Commission, which had been formed at about the same time as the new museum plans were drafted. The commission's charge was to address the park system of the District of Columbia, including what is now the National Mall.[62] Although Langley was in charge of the National Museum project on the Smithsonian side, Green was given a powerful managerial voice in the endeavor as superintendent of construction. Most importantly, it was a voice that key members of Congress had come to trust.

Meanwhile, Smithsonian staff gathered information about museums around the world, requesting photographs, floor plans, guidebooks, and drawings to learn as much as possible about external and internal plans, space allotments, display cases, and windows.[63] While Smithsonian staff were gathering information by post, Marshall visited many European museums in person during the spring of 1902, including those in Budapest, Paris, Vienna, Germany, and Italy. Hornblower made a similar trip in August of 1902. All told, the itineraries of the architects included the Natural History Museum and the Art History Museum in Vienna; the Louvre, the Jardin des Plantes, the Cluny Museum, the Ethnographical Museum, the Comparative Sculpture Museum, the Guimet Museum, the Galliera Museum, the Luxembourg Palace, and the Conservatory of Arts and Trades in Paris; the Natural History Museum, the Victoria and Albert Museum, the National Gallery, and the National Portrait Gallery in London; as well as museums in Berlin, Dresden, and Munich. During the fall of 1902 and the first half of 1903, the information gathered was consolidated, but the architectural character and general plan of the museum underwent little change.[64]

Early in 1903, the architects submitted their scheme to Congress for authorization. The plan called for 400,000 square feet of floor space with two courts, one on each side of a main hall. Dated January 17, 1903, this incarnation, like the earlier designs, featured low hip roofs punctuated with skylights. Until the fall of 1903, the architects stayed with a design using a flat skylight over a square central hall. Late in 1903, however, Hornblower & Marshall began to elaborate on the central pavilion, a move not approved of by Langley. It was not until January 23, 1904, that Green was able to submit a finalized set of plans to Langley, which he approved four days later. (Historical Figure 1) All parties agreed that the elevations required further refinement and another proposal was made on March 9, 1904. That summer, Marshall, this time

[62] Ibid., 56.
[63] Ibid., 57.
[64] Ibid., 58.

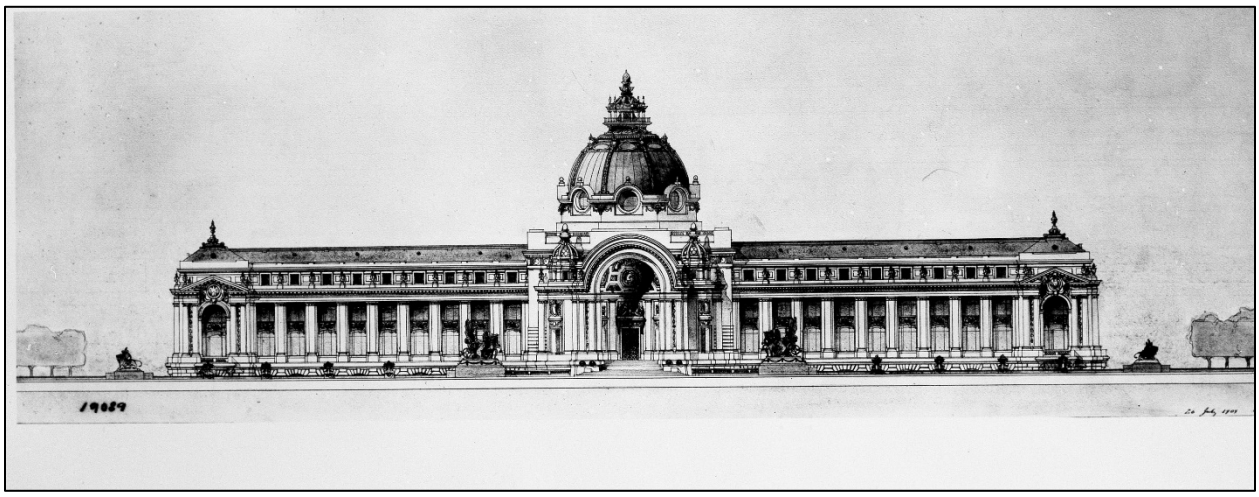



Historical Figure 1 – 1904 plan for the new National Museum. (Smithsonian Institution Archives, SIA-SIA2009-2067)

with Holmes, traveled to fifty- three museums to collect information about furnishings and lighting. This search would continue by post and Smithsonian contacts through 1905 and 1906.[65]

Hornblower & Marshall presented an exterior scheme, dated July 20, 1904, prepared by a young architect at the firm, Arthur Brown Jr., who had studied at the École des Beaux-Arts in the atelier of Victor Laloux. The scheme evoked current Parisian trends and featured architectural sculpture and ironwork. (Historical Figure 2) The elaborate ornament of the design set off an eighteen-month delay during which Hornblower & Marshall came into conflict with the members of the

[65] Ibid., 59-60.




Historical Figure 2 – Hornblower & Marshall's 1904 French-inspired south elevation for the National Museum. (Smithsonian Institution Archives, SIA_AI-19089)

Senate Park Commission. The dispute was resolved only when commission members – particularly McKim and Burnham – involved themselves in the design process directly.[66]

The Senate Park Commission Plan of 1902 and the New National Museum

The Senate Park Commission (later, and more commonly, known as the McMillan Commission) consisted of Burnham, McKim, landscape Frederick Law Olmsted, Jr., and sculptor Augustus Saint-Gaudens, who acted as advisors to the chairman of the commission, Senator James McMillan of Michigan. Expanding their initial charge to create a park system for the District of Columbia, the group embarked on a tour of great European cities, Italian gardens, and, closer to home, Annapolis and Williamsburg, which had been designed along European principles. Their report called for nothing less than the restoration of L'Enfant's plan 1791 for Washington, but transforming his proposed central avenue into a great greensward, opening a prospect from the Capitol to the Washington Monument and serving as the axis around which the federal presence would be oriented. The greensward would be lined with museums and cultural institutions, all designed in a cohesive chaste, classical style. (The two existing Smithsonian buildings, James Renwick's Smithsonian Institution Building and Adolf Cluss's Arts and Industries Building were to be replaced with more appropriate, classical edifices.[67]

[66] Ibid., 61. On the life and career of Arthur Brown Jr., see the study by Jeffrey T. Tilman, *Arthur Brown Jr.: Progressive Classicist*. (New York: Norton, 2006).
[67] Both buildings were omitted from the Senate Park Commission's presentation materials. Their 1902 model of the Mall prepared under McKim's direction does not include either building. The Smithsonian Institution Building is replaced by a Greek-cross building covered by a low Roman dome, and the site of the New National Museum is occupied by a building composed of a low dome, portico, and substantial lateral wings. Field and Tilman, 55.

The Senate Park Commission's ideas derived from City Beautiful planning principles – not surprising given that two of the commission's members, McKim and Burnham participated in the design of the World's Columbian Exposition in Chicago, perhaps the most completely realized, although temporary, example of City Beautiful planning. The City Beautiful movement constituted a progressive attempt by American architects, landscape architects, civic organizations, and municipal administrators in the late nineteenth century to address burgeoning cities at a time when urban planning as a discipline did not exist. By that time, real estate pressures and transportation interests had the greatest influence on city development; municipalities themselves concentrated on responding to the rapid expansion then taking place by providing water, sanitation, streets, schools, and parks where they were needed, rather than developing an overall growth strategy. Using principles of composition taught at the École des Beaux-Arts in Paris, with their largely Baroque emphasis on movement through space and hierarchical groupings of buildings, the City Beautiful movement attempted to address the ugliness perceived in the unplanned and unruly growth of American cities, as well as practical matters such as recreation, transportation, and sanitation.[68] Following the success of the 1893 World's Columbian Exposition, which was the product of some of the most influential architectural minds in the country and was witnessed by thousands of visitors, City Beautiful planning principles became more widely understood and attracted many adherents. Washington, with its original city plan based largely on Baroque precedents, provided a perfect opportunity to plan a large and permanent urban center according to the principles developed for the exposition.

Once it had been published in 1902, the members of the Senate Park Commission pushed the plan not only in Congress, but also in the press. A national publicity campaign resulted in positive press in such widely read publications as *House Beautiful* and *National Geographic*.[69] Beginning in 1904, Burnham and McKim unofficially advised President Theodore Roosevelt on Washington design matters and would continue to do so through the end of his second term in 1909.[70] While Congress never officially adopted the Senate Park Commission's plan, it became an influential guiding force in the development of the District of Columbia.[71]

[68] Thomas S. Hines, "The Imperial Mall: The City Beautiful Movement and the Washington Plan of 1901-02," *The Mall in Washington, 1791-1991*, Richard Longstreth, editor (Washington, D.C.: National Gallery of Art, 1991), 79-84.
[69]Glenn Brown, "The Twentieth Century Washington," *House and Garden* 11 (Feb. 1902), 39-56; "The Work of the Parks Commission at Washington," *Architectural Review* 9 (Feb. 1902); "The Embellishment of Washington," *Municipal Affairs* (Winter 1901-02), 909-916; "The Improvement of Washington," *Scientific American* 86 (15 Feb. 1902), 108; "The Fair White City: The Beauty of the Nation's Capital," *Current Literature* 32 (March 1902), 276-277; Frederick Law Olmsted, Jr., "Beautiful Washington," *Architect's and Builder's Journal* 3 (May 1902), 7; Charles Moore, "The Improvement of Washington," *American Architect and Building News* 77 (27 Dec. 1902), 101-102; and Bernard R. Green, "For a Beautiful Washington," *Charette* 15 (3 March 1906), 824-826.
[70] Field and Tilman, 54.
[71] Hines, "The Imperial Mall: The City Beautiful Movement and the Washington Plan of 1901-1902," 92-93.

Numerous new building projects for the Mall, West Potomac Park, and President's Park had either been proposed or approved by the time the commission's report was published, and several of these acted as benchmarks in the establishment of the McMillan Plan as the guideline for development of Washington's central public space. This was essential to the plan's usefulness, given that the resolution authorizing the Senate Park Commission provided no authority for its implementation. A new building for the Department of Agriculture and the new National Museum for the Smithsonian became the plan's first tests. At issue were the building setbacks from the center of the Mall proposed by the McMillan Plan and, thus, the width of the open space along the vista between the Capitol and the Washington Monument. On March 12, 1904, the Senate Committee on the District of Columbia held a hearing on a bill introduced by Senator Francis Newlands of Nevada that would have lent statutory authority to Mall setbacks. All of the Park Commission members, representatives of the Department of Agriculture and the Smithsonian, the architects of each of the proposed buildings, and several other nationally known architects attended the hearing to express their opinions on the subject.

A letter submitted to the committee by Secretary of Agriculture James Wilson outlined his department's position, and B.T. Galloway, chief of the Bureau of Plant Industry, represented Agriculture at the hearing. The letter stated the secretary's concern that the McMillan Plan's angling of the Mall and its flanking roadways to accommodate the off-axis location of the Washington Monument would so limit the department's building site on the south side of the Mall that a satisfactory headquarters could not be constructed. The department had considered locating its headquarters on the north side of the Mall and even approved preliminary plans for that site, but, under the influence of the House of Representatives' Committee on Agriculture, determined to build on the same line as the existing 1867 headquarters. The Agriculture building stood approximately 300 feet from the Mall center line and along the same setback as the Smithsonian Castle. President Theodore Roosevelt had agreed to the 300-foot setback in a meeting with members of the House Agriculture committee in February 1904.[72]

In their testimony, all the members of the McMillan Commission responded to Agriculture's preferred location by restating the logic and study that justified the 445-foot setback they proposed. Members of the architectural community in attendance, including George B. Post (who designed a building at the World's Columbian Exposition) and William S. Eames (then president of the American Institute of Architects), agreed with their colleagues. The Mall, they reasoned, needed spacing proportional to the size and scale of the buildings that framed it. The McMillan Plan proposed a space of 890 feet between building faces on the Mall, a dimension

[72] U.S. Senate Committee on the District of Columbia, *The Mall Parkway: hearing on the bill (S. 4845) regulating the erection of buildings on the Mall, in the District of Columbia* (Washington, D.C.: Government Printing Office, 1904), 5-7; Dana G. Dalrymple, "Agriculture, Architects, and the Mall, 1901-1905: The Plan Is Tested," *Designing the Nation's Capital: The 1901 Plan for Washington, D.C.* (Washington, D.C.: U.S. Commission of Fine Arts, 2006), 222-225.

slightly greater than the north-south dimension of the Capitol and appropriate to the height of the building's dome (287 feet above ground level, approximately 350 feet above the elevation of the Mall) and the height of the Washington Monument (555 feet). McKim went so far as to say that violating the building line for the Agriculture department "would be an incalculably fatal step destructive of a great composition. It is a matter of national and not local importance."[73]

Given its national significance, it is perhaps appropriate that the issue was ultimately settled – almost exactly a year after the Senate District Committee hearing – at the White House, where Secretary of War William Howard Taft arranged a meeting between McKim, Agriculture Secretary Wilson, and President Roosevelt. Wilson ultimately agreed, at Roosevelt's urging, to the McMillan setback for his department's building.[74]

The new National Museum established the McMillan Plan building line on the north side of the Mall. Neither the Smithsonian regents nor the architects took issue with the McMillan Plan spacing and considered the 445-foot setback appropriate for the façade, which stretched for most of two city blocks. Hornblower & Marshall made allowances, however, for Burnham's portico to extend beyond this line, an approach that was to be repeated in future Mall construction. With a benchmark building following its guiding principles on both sides of the Mall, and with the backing of President Roosevelt, the McMillan Plan had become by the middle of the first decade of the twentieth century the guiding document for the development of the central public greenspace of the Nation's Capital.[75] The status of the McMillan Plan can be seen twenty years later when Congress authorized fundraising for a building to house the National Gallery of Art on the north side of the Mall: the 1923 enabling legislation required that the new building's south façade was to be constructed "on a line with the south front of the said Natural History Building."[76]

[73] U.S. Senate Committee on the District of Columbia, *The Mall Parkway*, 14-31.
[74] Charles Moore, ed., *The Improvement of the Park System of the District of Columbia*, Report of the Senate Park (McMillan) Commission, 57th Congress, 1st Session, Senate Report No. 166, 1902, 44; John W. Reps, *Monumental Washington: The Planning and Development of the Capital Center* (Princeton, New Jersey: Princeton University Press, 1967), 144-149; Dalrymple, 226-236; Pamela Scott and Antoinette J. Lee, *Buildings of the District of Columbia* (New York: Oxford University Press, 1993), 99-100; U.S. Department of the Interior, National Park Service, National Register Nomination Form: U.S. Department of Agriculture Administration Building (Boundary Increase and Additional Documentation), December 1, 2015, 8:35-8:37.
[75] Scott, "'A City Designed as a Work of Art,'" 100; Sue Kohler, "The Commission of Fine Arts: Implementing the Senate Park Commission's Vision," 251. Both are contained in *Designing the Nation's Capital: The 1901 Plan for Washington, D.C.*, Sue Kohler and Pamela Scott, editors. (Washington, DC: U.S. Commission of Fine Arts, 2006).
[76] HSMM and Commonwealth Architects, Historic Structures Report: National Museum of Natural History. Part I: Introduction and History, prepared for the Smithsonian Institution, August 2006, 256.

Conflict and Resolution in the Design of the New National Museum

While Hornblower & Marshall had no issues with the McMillan Plan guidance regarding the siting of the new National Museum, the commission's architects and those of the Smithsonian did disagree over the architectural treatment of the building. Burnham and McKim exerted significant pressure behind the scenes to divert the modern (for the time) French expression of the building advanced by Hornblower & Marshall, as seen in the 1904 elevation of Arthur Brown, Jr., toward a more conservative Roman revival design, in keeping with the vision of the Senate Park Commission. To that end, Burnham and McKim enlisted the assistance of Secretary Langley and Superintendent of Construction Green.[77] During this time, Hornblower & Marshall were, in consultation with Smithsonian curatorial staff, busily refining the design of the museum; they generally did not know the extent of the Burnham-McKim involvement. Secret meetings, private notes, and behind-the-scenes consultations hardened positions in a way the architects seemed either not to be aware of or understand. Their design ran into resistance of a depth they little comprehended.

On July 11 and 12, 1904, Hornblower met with Burnham, Pierce Anderson (an architect in Burnham's office), landscape architect Olmsted, and Eames of the American Institute of Architects to present the Brown drawings. Hornblower was seeking the advice of McKim (who was not able to attend) and Burnham on technical details such as the height of the main floor above sea level. Instead, the audience was much more concerned with the architectural character of the building. In contrast to the modern French design presented by Hornblower & Marshall, Burnham (like the absent McKim) preferred a more conservative, austere, and sober Neoclassicism.[78] As Burnham wrote to McKim later that summer: "We want the very best; more this time than hereafter, because this precedent will rule in the future, and to do so with an iron hand. Don't let us have any self-assertion. Old George's serene spirit should rule throughout; let's have no jig-step in his minuet."[79] Burnham and McKim realized the stakes were very high, and this building would serve as a model for those to follow. In fact, the resulting building did serve as a model for the Mall until after World War II, when Modernist design principles began to find acceptance.

Despite Burnham's opposition, Hornblower & Marshall pursued the French design; this continued through 1905, as the designs became even more French in character. Recognizing the opposition, the architects yet persisted in the same mode, explaining that the high arched entrance and dome would signal to the public that they were welcome in the building. Secretary Langley rejected these features from their first appearance in 1904 and remained unmoved. Rathbun, likewise, rejected the French-influenced arched entrance and dome. Despite this, the

[77] Field and Tilman, 52-73.
[78] Ibid., 61-62.
[79] Charles H. Moore, *Daniel H. Burnham: Architect, Planner of Cities* (Boston, 1921), Vol. 12, 231-232.

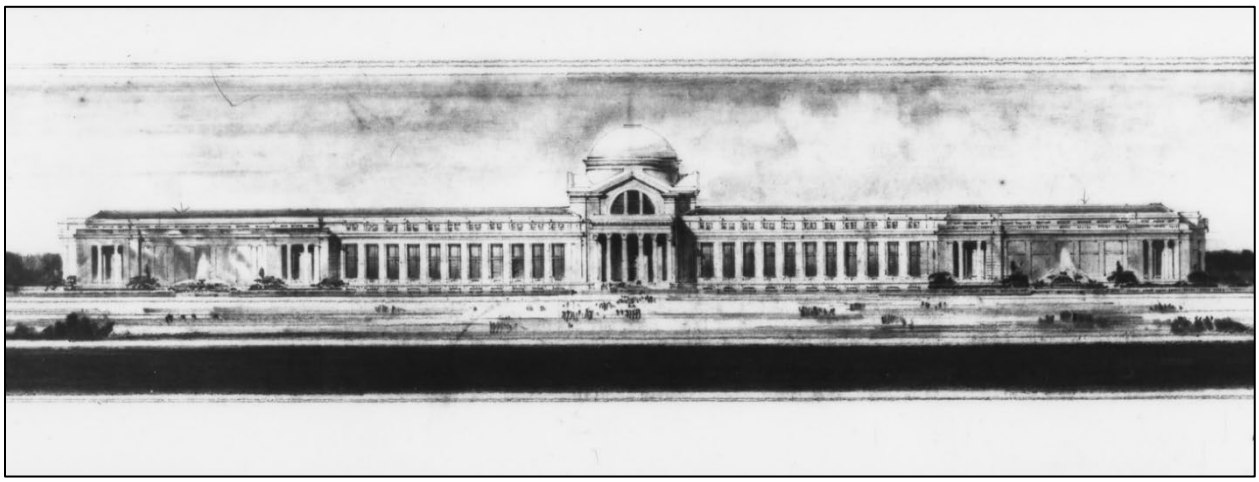
contractor had already dug the foundations and was constructing the wings, when Green warned the architects that his support, too, was gone: "As to the dome and entrance, I have not been able to look favorably upon any of the plans so far proposed. I do not consider them as entirely appropriate for this building, though I appreciate that action regarding the subject should not be delayed. I shall probably have to call upon someone else to decide and shall take the matter up at once."[80] While trying to support the architects and keep the project on schedule, he was also working to restore the authority of the Senate Park Commission, which was reconstituted as the Consultative Park Commission for Public Buildings by an executive order on March 15, 1905. All members of the former commission were re-appointed, and Green became chairman.

Green, McKim, and Burnham consulted privately on the issue of the new National Museum. Burnham believed that the understated aesthetic unity of the plan was essential: "Every part of the Mall should be considered part of the whole design and it is not permissible to introduce a style foreign to the dominating one. Standing on the Capitol terrace and looking westward, the masses extending on each side of the Avenue to the monument should not present any picturesque appearance, and therefore, should not have any self-asserting features. On the contrary, each building should be quiet and dignified in effect and obviously related to the others …. Quietude and repose are essential for the buildings on the sides of the grand vista, and as I said before, there can properly be no departure from the style to be generally employed in all the buildings.[81]"

McKim's response was far more concise and pointed. Replying to Burnham's letter to Green, McKim described Hornblower & Marshall's central pavilion as "undignified and radically wrong."[82] McKim extended his criticism of the design in a private letter to St. Gaudens: "There is no doubt that Hornblower & Marshall should never have had charge of this important work. They have neither the experience nor the initiative, and have relied on a French draftsman just out of school for their façade."[83]

After Hornblower & Marshall continued to support the French mode, members of the commission launched a more effective offensive against it. Green traveled to Chicago in the fall of 1905 where he met with Burnham and McKim. The two architects produced a drawing of their own, which was sent to Hornblower & Marshall. Upon receipt, Hornblower & Marshall finally acquiesced, substituted Burnham and McKim's Roman design for their French elevation,

[80] Bernard R. Green to Hornblower & Marshall, 17 July 1905, SI Archives, RU 79, Box 1.
[81] Daniel Burnham to Green, 10 August 1905, microfilm reel 7, vol. 15, Burnham Papers, Ryerson and Burnham Libraries, Art Institute of Chicago, quoted in Field and Tilman, 64.
[82] Charles Follen McKim to Burnham, 15 August 1905, microfilm reel 7, vol. 15, Burnham Papers, quoted in Field and Tilman, 64.
[83] McKim to Augustus St. Gaudens, 11 August 1905, microfilm reel 7, Charles Follen McKim papers, Columbia University, quoted in Field and Tilman, 64.



Historical Figure 3 – 1905 south elevation with its Roman-inspired dome. (Smithsonian Institution Archives, SIA-SIA20009-2366)

and pronounced "satisfaction in that a definite decision in this matter has been reached."[84] Asdirected by Burnham and McKim, the elevation was dominated by a low Roman dome, which required further changes in the rest of the elevation to match the character of the dome. (Historical Figure 3) Green submitted this set of drawings to the Consultative Park Commission for Public Buildings in November of 1905. The board approved, but added a series of refinements of its own, in order to further simplify the design.

In March 1906, a meeting was held in McKim's New York office so that Green and a representative from Hornblower & Marshall could further discuss additional refinements suggested by Burnham and McKim. As a result, Hornblower & Marshall produced a new, more Roman design, dated April 17, 1906.[85] The new design was more reserved than any of its predecessors, and, despite the fact that the building was already under construction, it was altered accordingly.

The central pavilion with its south-facing portico was a collaborative effort. The dome profile and Greek cross base were the work of McKim, while the portico was developed from Burnham's suggestions. The terminating pavilions at the east and west ends designed by Hornblower & Marshall were altered by McKim and replaced by his designs; as a result, the whole façade was lengthened by five to six feet to achieve the proportional relationship he desired. The remainder of the building was constructed according to plans drawn up between 1903 and 1905. The resulting design produced a building in which the French design of Hornblower & Marshall and the severe Roman design of McKim coexist. The occasionally awkward union of the two can be seen in the cramped cornice and in the meeting of the rotunda

[84] Hornblower & Marshall to Green, 14 November 1905, SI Archives, RU 81, Box 5.
[85] Field and Tilman, 66.

with the stairways. Despite the problems they created, McKim kept Hornblower & Marshall's stairways in the corners of the south pavilion unchanged because construction of the adjacent light courts had already begun.[86]

Construction on the building progressed over the next four years, but was delayed at times due to difficulties in the delivery of the vast quantities of granite required for the museum, which covered the largest area of any federal building then in existence, with the exception of the Capitol. The Smithsonian departments began to move in even before construction was completed, and exhibits in the north hall and adjacent ranges opened on March 17, 1910. The 1910 exhibits displayed fine arts in the collection of the National Gallery of Art (which has become today's Smithsonian American Art Museum and National Portrait Gallery). The collection became part of the Smithsonian Institution during the fiscal year that ended on June 30, 1906. Artifacts from the ethnology collections were also exhibited beginning on March 17. Work on the building shell was completed on June 20, 1911, but parts of the interior remained under construction into the following year. Moving the Smithsonian departments into the building, including their collections, and building the exhibits continued through 1917. When it was completed, the new U.S. National Museum contained 465,000 square feet of space, with just less than half of that area given over to public functions. (Historical Figures 4 and 5) Exhibition space on the first and second floors of the three wings and the connecting ranges totaled 186,000 square feet. The ground and third floors were dedicated to offices, laboratories, workshops, and collection storage. The rotunda beneath the dome on the south side of the building linked all the floors and provided a monumental entrance for visitors to gather and orient themselves. An auditorium with a low domed ceiling was constructed on the ground floor directly beneath the rotunda.[87] The museum's design and construction was guided by requirements for a fireproof building, the distribution of natural light, and flexible "shell" spaces for the display of collections.

As the exterior of the building approached completion, work was undertaken on the museum grounds. At the time, much of the landscape of the National Mall, including the Smithsonian grounds, continued in the Picturesque mode planned by Andrew Jackson Downing in the middle of the nineteenth century. After the Civil War, responsibility for maintaining the grounds fell to the Office of Public Buildings and Grounds in the U.S. Army Corps of Engineers, which followed the spirit, if not the letter of Jackson's 1851 plan. The Senate Park Commission's plans for the Mall landscape, developed by Frederick Law Olmsted, Jr., would have erased the curving drives and irregular groupings of vegetation characteristic of Picturesque landscape design in favor of straight lines of buildings, drives, and rows of elm trees, intended to reinforce its planned vistas. Since that work had not yet been accomplished, and would not until the early

[86] Ibid., 66-67.
[87] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 234-248.

Historical Figure 4 – The south façade as built, 1917 (Smithsonian Institution Archives)

Historical Figure 5 – The north façade, circa 1912. (Smithsonian Institution Archives)

1930s, the grounds of the National Museum retained much of its late-nineteenth-century character. The density of trees on the site was reduced, however, and the curve of the drive on the south was flattened to come closer to the museum entrance. Curving granolithic walks crossed the grassy areas on the east and west, and straight drives led from what was then B Street NW (now Constitution Avenue) to loading areas on either side of the building. Work on the museum grounds was undertaken by Officer in Charge of Public Buildings and Grounds, rather than by the Smithsonian.[88]

Plans for the museum had included a retaining wall where the earth had been dug out on the south side of the building, the elevation of which was higher than on the north, to create a full ground floor. A stone balustrade extending east and west from the monumental stair at the base of the south portico was intended to surmount the retaining wall, but neither the retaining wall nor the balustrade were built. Instead, the embankment on the south was graded and sodded, and a drive established between the embankment and the south façade of the museum. On the north, a semicircular drive was built to serve the ground floor entrance from B Street. The construction of the drive resulted in the removal of two sandstone piers that were part of a group of at least sixteen gateposts that were relocated to the north side of the Mall around 1874. Attributed to architect Charles Bulfinch and known as the Bulfinch Gateposts, the piers were originally constructed circa 1825 to support iron fencing around the perimeter of the U.S. Capitol grounds. A row of elm trees, possibly dating from the implementation of the Downing plan or from the early Corps of Engineers days, extended across the north side of the grounds parallel to the street. This line of elms remains in place, with three specimens dating from the nineteenth century and the remainder later replantings.[89]

The First Generation of Exhibits in the New National Museum

The Smithsonian Institution had displayed its varied collections in the Castle, the first National Museum (the Arts and Industries Building), and a temporary brick building west of the Castle constructed in 1875 to house exhibits for the United States Centennial celebration the following year.[90] The new National Museum, however, gave Smithsonian curators the opportunity to build their displays from scratch to suit a space much more capacious than any they had previously

[88] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 242-248; U.S. Department of the Interior, National Park Service, National Register Nomination Form: The National Mall Historic District (Boundary Increase/Additional Information), November 29, 2016, prepared by Robinson & Associates, Inc., 113; HSMM and EDAW, National Museum of Natural History Cultural Landscape Report, prepared for the Smithsonian Institution, April 2006, 2-17.
[89] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 242; HSMM and EDAW, "NMNH, Cultural Landscape Report," 2-8, 2-13; Sharon Park, "Finding Mr. Bulfinch's 'Features': The Mystery of the Classical Gateposts and Gatehouses along the National Mall," *Washington History* 33: 1 (Spring 2021), 50-61.
[90] Ellis L. Yochelson, *75 Years in the Natural History Building* (Washington, D.C.: Smithsonian Institution, 1985), 15.

Historical Figure 6 – The first generation of Natural History Museum exhibit employed display cases, but offered little interpretive information. (Smithsonian Institution Archives, SIA-MNH-33835C)

possessed. (Historical Figure 6) The Institution reaffirmed its commitment to its public educational mission in its annual report for the fiscal year ending June 30, 1905, just as plans for the new National Museum were beginning to be refined. "[B]y exhibiting these [collections], and by labels, publications, and lectures," the annual report stated, the Smithsonian "will still further endeavor to impart definite instruction along definite lines to all who care to learn." Exhibits in the new museum would enable the Smithsonian to fulfill its mission to be "an active instrument for the diffusion of knowledge among men."[91]

Some of the materials and artifacts displayed in the new museum had been on exhibit in the Institution's other venues, physically separated from each other. In the new building, each of the three departments of the Smithsonian were allotted one of the new museum's wings – geology in

[91] Quoted in HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 235.

the east wing, biology in the west, anthropology in the north – and the departments were connected both horizontally and vertically within a single building. The ranges that linked the wings were scheduled to handle materials that couldn't be fitted into the main exhibition halls on the first and second floors. The addition of the National Gallery of Art to the Smithsonian's collections in 1906 resulted in a decrease in the anthropology department's space, as selections from its holdings were also displayed in the north wing. There, screen walls were erected to create smaller exhibit spaces for the artwork.[92] The arrangement and display of the collections in the museum required the design and procurement or construction of new display cases to suit the new building. Most of the exhibits were placed in dark mahogany and clear glass cases constructed to Smithsonian specifications. The Institution's carpenters and cabinetmakers fabricated many of the cases themselves in the museum's ground floor workshops, and museums across the country ultimately used Smithsonian specifications for their own display furniture.[93]

An important early contributor to the first generation of exhibits in the new National Museum was William Henry Holmes. The Smithsonian hired Holmes, who had studied painting and drawing in Washington, as a technical illustrator in 1871, and he accompanied several scientific expeditions to locations throughout the American west in the 1870s. With this exposure and later experience he gained expert knowledge in many fields, including geology, archaeology, anthropology, and ethnology. After helping to prepare the Smithsonian's exhibits at the World's Columbian Exposition in Chicago, he worked for the Columbian Museum in that city (later renamed the Field Museum), then became the curator of anthropology at the Smithsonian in 1897. Beginning in 1906, he was also director of the National Gallery of Art and installed the works exhibited in the north hall of the National Museum for its 1910 opening. Despite the load of scientific and museum work, Holmes also turned out exceptional paintings of the places he visited.[94] And, as mentioned previously, Holmes also sketched the first plan of the new National Museum in 1901, which Hornblower & Marshall then turned into a finished work, and made a sketch for an auditorium for the museum that was later incorporated into the design.[95]

According to Ellis L. Yochelson, a paleontologist and geologist who worked out of the National Museum for the U.S. Geological Survey, Holmes also developed an approach to ethnological exhibits that subsequently became the standard for museums around the world. The approach, still common today, consisted of creating a tableau of a family group of the people being

[92] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 242.
[93] Yochelson, 57.
[94] Clifford M. Nelson, "William Henry Holmes: Beginning a Career in Art and Science," *Records of the Columbia Historical Society* 50 (1980), 252-278; "William Henry Holmes (1846-1933): Renaissance Man, Smithsonian Institution Archives website, siarchives.si.edu/artists/william-henry-holmes, accessed March 31, 2022; "William Henry Holmes," Smithsonian American Art Museum website://americanart.si/edu/artist/william-henry-holmes-2279, accessed March 31, 2022.
[95] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 21.

Historical Figure 7 – An exhibit of Hopi snake dancers, one of Willliam Henry Holmes' tableau displays, circa 1920. (Yochelson, *75 Years in the Natural History Building*, 59)

portrayed. Using life-size mannequins, the family members were depicted going about typical activities, clad in authentic clothing, and using tools and other implements fabricated based on archaeological discoveries. By the end of fiscal year 1912, twelve of a planned sixteen such groups were installed in the anthropology wing of the National Museum. Like most of the other exhibits, Holmes's family tableaux were displayed in wood and glass cases. (Historical Figure 7) With its large exhibition halls, the museum was able to accommodate the displays Holmes designed to capture the experience of these family groups.[96]

Bureau of War Risk, Dome Stability, and a Call for More Space

The United States' entry into World War I in April 1917 required a major reassessment of federal priorities, especially in Washington, D.C. As had happened during the Civil War and would happen again in World War II, the war effort required additional federal personnel and

[96] Yochelson, 59-60.


Historical Figure 8 – Clerks from the Bureau of War Risks in a National Museum exhibit hall during World War I. (Smithsonian Institution Archives, SIA-MAH-23905)

brought contingents of the military to the capital; additional workspace was therefore required. Temporary buildings were eventually constructed on the National Mall for this purpose, but the need for space exceeded this expedient. The Bureau of War Risk moved into the National Museum before 1917 was over. Some of the exhibit halls housed the bureau's personnel, and the reading rooms in museum libraries were equipped with tables and writing materials for servicemen to use to correspond with those at home. Three thousand of the bureau's clerks occupied more than 69,000 square feet of space in the museum (Historical Figure 8), and a temporary building, made of concrete and equipped with heating apparatus, went up in the east court. As a result, the division of mammals and the biological survey moved from the ground-floor foyer and the west ranges to the second-floor ranges while the museum remained open. It closed to the public completely on July 16, 1918, and did not reopen again until April of the following year. The agreement between the War Department and the Smithsonian for the use of the museum space included a pledge to repair any damage that may have been caused in altering

or using the space. Lack of funds prevented the department from making good on this pledge, and the museum reopened in the spring of 1919 without the repairs being made.[97]

As often happened after an important event in U.S. history, the Smithsonian's collections grew in a new area after World War I, with the Institution endeavoring to document the first war waged across the entire world. The seeds of today's National Air and Space Museum date to this period, when two French aircraft were acquired, as well as a Curtis training plane and the first battle plane produced by the Dayton-Wright Airplane Company in 1917. The National Museum also collected a trove of uniforms, weapons, medical instruments, and other material left behind after the war, which became known as the War Collection. It was housed in the new National Museum for more than a decade. An exhibit of naval equipment was installed in the rotunda during the second half of 1919. Partly as a result of the War Collection, a department of history was added to the Smithsonian in 1921 and eventually housed in the Arts and Industries Building.[98]

The Smithsonian addressed the perpetual problem of expanding collections in its annual report for fiscal year 1928. It called for the expansion of the museum with wings constructed on the east and west, "as originally planned by the architect," according to the annual report. Congress authorized the wings on June 19, 1930, at a cost of $6.5 million. The bill required that the wings be built in the Neoclassical style of the extant building and that the plans be approved by the U.S. Commission of Fine Arts. The legislation appropriated $10,000 for planning the project, but none for construction. Due to the Great Depression, the Smithsonian decided not to request construction funding in subsequent years, although plans were developed by Nathan Wyeth of Allied Architects Incorporated of Washington, D.C. With the Depression followed by World War II, the project languished for almost thirty years. To create extra space within the existing building, the Smithsonian authorized the construction of "galleries" – mezzanine levels inserted in the space of existing floors to take advantage of the museum's tall ceilings – for collection storage. The annual reports indicate that such galleries were built in fiscal years 1930, 1931, and 1946. The 1946 work involved more extensive remodeling, including the erection of partition walls, likely to create offices within existing larger spaces.[99]

A disturbing discovery made and resolved during this period involved a crack in the dome, along with splits in the joints under the dome arches at the end of the balustrades along the ambulatories and along the piers on the fourth story. The damage was attributed to shifting of the piers. The situation was stabilized in fiscal year 1922 through the use of bracing consisting of steel beams anchored to the walls. Eighty thousand dollars was authorized to permanently repair

[97] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 249-254; Yochelson, 65-66.
[98] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 252; Yochelson, 66-67.
[99] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 258-266. The 1928 annual report quotation can be found on page 258.

the damage in fiscal year 1929, and the work began on September 12, 1928. It consisted of using steel bands, steel columns, and jack screws to maneuver the piers back into place. The work was completed on May 14, 1929.[100]

World War II and the Post-War Years: New Exhibits, New Wings, New Museums, New Name

The National Museum, by this time also called the Natural History Building, referring to its intended purpose among the other Smithsonian museum buildings, remained open to the public during World War II. The Institution successfully argued for continuing its operations, making the case "that the educational and entertainment value of the Museum, for people assigned to war work in the city, far outweighed any minor savings in fuel or labor," according to Ellis Yochelson. Some specimen collections were moved to Luray, Virginia, during the war for safekeeping, and other collections were moved from the upper floors of the Natural History Building to lower floors, due to concerns over incendiary bombs. Removal of the specimen cases created more open space that would allow employees a better chance to escape in case of attack. Other wartime Civil Defense measures include air-raid drills and practice in the use of chemical fire extinguisher and portable fire pumps. Wood boxes filled with sand were placed in the attics to help put out fires in case on incendiary attacks.[101] The fiscal year 1942-1943 annual report for the National Museum reported that the museum had established "complete black-out facilities where necessary."[102]

The museum also played an important educational role during the war, answering questions from and conducting training for the military regarding Asia and the Pacific region. The U.S. Army and Navy had little detailed understanding of the plant and animal life of the region, and the Smithsonian's scientists in the museum handled a large number of requests for information. These requests centered on aspects of survival, such as water resources, edible plants and animals, and disease-causing insects and the animals that bore them. They also made personnel recommendations and created bibliographies of books and articles the military might wish to compile. The Smithsonian contributed to publications during the war, such as the Navy's *Survival on Land and Sea* booklet, and published its own series of books, *War Background Studies*, for the war effort.[103]

After the war, twin concerns motivated much of what the Smithsonian sought to accomplish in the Natural History Building: an aging collection of exhibits and a lack of space. The museum had greatly expanded its collections since its completion in 1911 and continued to do so with the end of the war. Very few changes had been made to the existing exhibits, and the changes that

[100] Ibid., 254, 260.
[101] Yochelson, 79-82.
[102] Smithsonian Institution, *Annual Report of the Board of Regents of the Smithsonian Institution for the Year ended 1943*, (Washington, D.C.: Government Printing Office, 1944), 13.
[103] Yochelson, 66-67, 79-82.

had been made constituted additions, rather than new means of exhibiting and interpreting collections. The buffalo specimens that William T. Hornaday, a taxidermist and one of the founders of the Smithsonian's National Zoological Park in Washington, had prepared in 1888 remained on display six decades later. Leonard Carmichael, a distinguished scientist and educator who became Secretary of the Smithsonian on January 2, 1953, backed the program of modernization that the Institution's curators proposed, and a number of new hires brought contemporary ideas to the display and interpretation of scientific and cultural artifacts. Some were employed expressly to update the exhibits in their field of expertise.[104] Clifford Evans, hired in 1951, and his wife Betty Meggers established the first Smithsonian exhibit addressing the then-new idea of early contact between Latin America and Japan. Their "Highlights of Latin American Archaeology," which opened on April 14, 1954, incorporated, according to the Smithsonian annual report for that year, "many departures for us in modern museum techniques, in lighting, and in the use of color."[105] The "Everyday Life in Colonial America" exhibit included "advances in modern lighting and electronics, used by the Institution for the first time," according to a newspaper account. The advanced electronics included a recording interpreting the exhibit that began automatically when a visitor approached. Another innovation for the Natural History building included freeing exhibits from their wood and glass display cases, as happened with some of William Henry Holmes' tableaux of family groups.[106]

This work represented the first complete overhaul of the museum's exhibits since it had opened. The process continued into the 1960s in what the Smithsonian called "a continuous modernization program."[107] The goal of the modernization was better education. "The curators of the National Museum have [a] twofold objective in planning their halls and exhibits," the Smithsonian annual report stated, "– to give the Museum visitor the experience of viewing an object of significant historical or scientific interest and rarity; and to show these objects in exhibits so effectively explanatory that they increase the visitor's knowledge, not only of the object, but also of the history, science, technology, or art to which the object relates."[108] Significant exhibits forming the basis of existing National Museum of Natural History displays dating from this period include the Hall of Gems and Minerals, which opened in 1958 (and to which was added the Hope Diamond a year later) and the Hall of Ocean Life, which opened in 1963. Another legacy of this period is the mounted elephant in the Rotunda, which was unveiled in March 1959. Other exhibits had been installed in the Rotunda previously – cases of large mammals, a single giraffe below the dome, a giant blue vase – but by the 1950s, the space

[104] Ibid., 86-88.
[105] Ibid., 88.
[106] Ibid., 90-91.
[107] Ibid., 94.
[108] Ibid., 91.

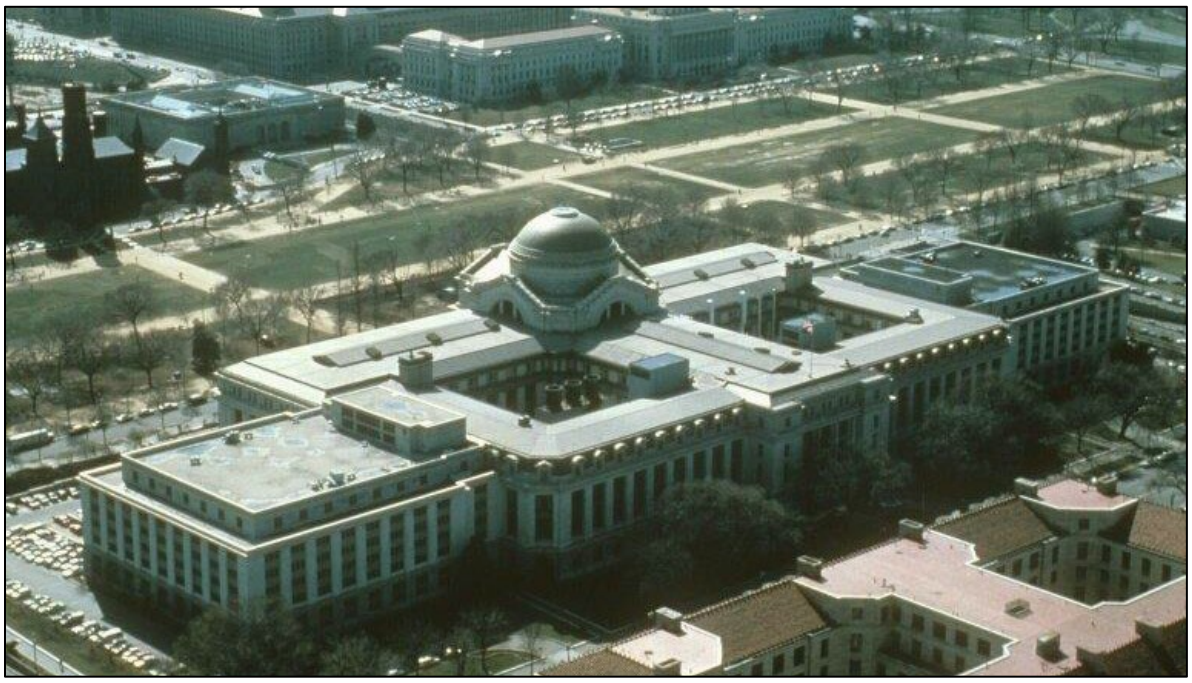
contained only a guard's desk. The installation of the 11-ton, 13-foot-high elephant took sixteen months to complete.[109]

Two other developments during this period helped relieve the lack of space for personnel, collections, and exhibits in the museum: the establishment of the Museum of History and Technology (now the National Museum of American History) and the long-delayed funding of wings for the Natural History Building. Planning for the two wings began during fiscal year 1957, although funding had not yet been appropriated by Congress. That funding materialized the following year, and the Washington, D.C., architecture firm Mills, Petticord and Mills prepared plans. The firm was involved in numerous institutional buildings in the city, including the law library at George Washington University, and acted as local architects to Helmuth, Obata + Kassebaum (HOK) for the Smithsonian's National Air and Space Museum. Congress appropriated funding for construction of the East Wing during fiscal year 1960, with the U.S. General Services Administration to supervise construction by the George Hyman Construction Company. Building began on January 6, 1961, and was completed in 1963. The Department of Geology and the divisions of mollusks and birds moved into the wing that same year. The same participants completed the laboratories, work rooms, offices, and storage areas in the West Wing two years later.[110] (Historical Figure 9)

The Commission of Fine Arts, which held oversight of the design, required the wings to be set back from the south façade of the museum and the top floor of each wing to be set back from the wing facades to maintain the 1911 building's primacy on the Mall and on Constitution Avenue. The design of the wings simplified some of the Neoclassical elements of the original building – deleting rustication on the ground floor, for instance – but maintained the granite facing, window patterns, and exterior proportions. On the interior, the wings contained six aboveground floors, plus a basement. The wings thus nearly doubled the building's laboratory and storage space. The reinforced concrete construction provided open floor plans that could be configured and reconfigured as needed.[111]

The East Wing initially included a garage at the basement level (since converted to workshops and offices). To reach the garage and the loading dock in the West Wing, two asphalt drives

[109] Ibid., 99-101.
[110] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 273-278; Pamela Scott and Antoinette Lee, "George Washington University," *Buildings of the District of Columbia* (New York: Oxford University Press, 1993), 214-215 SAH-Archipedia website, https://sah-archipedia.org/buildings/DC-01-FB17, accessed April 9, 2022; Bill Marzella, Kimberly De Muro, Kendra Parzen, and John Gentry, EHT Traceries, Determination of Eligibility Form: National Air and Space Museum, DC State Historic Preservation office, 2021, 24.
[111] Yochelson, 104-107.



Historical Figure 9 – The National Museum of Natural History after the addition of its wings, circa 1965. (Smithsonian Institution Archives)

were constructed from Constitution Avenue around the new wings to the south side of the museum. A retaining wall was also constructed where the original earth embankment had stood, and asphalt parking areas were established on the east, west, southeast, and southwest parts of the museum site. The paving replaced the trees and previous curvilinear walks and straight drives in these areas, with narrow planting beds located on the perimeter of the parking areas.[112]

Under the leadership of Secretary Carmichael, the Museum of History and Technology was approved by Congress on the north side of the Mall across 12th Street NW from the Natural History Building. Construction took place at the same time that that building's wings were built. Designed by McKim, Mead & White and its successor firm, Steinman, Cain & and White, the Museum of History and Technology (now the National Museum of American History) opened on January 22, 1964. The move of collections and exhibits freed up space in the Natural History Building, enabling it to further concentrate on the areas for which it was intended – an especially important consideration given that natural history specimens increased from 34 million to 57 million during Carmichael's decade-long tenure as secretary. Moreover, the opening of the Museum of History and Technology began a new era in the organization of the Smithsonian's

[112] HSMM and EDAW, "NMNH, Cultural Landscape Report," 2-21. Although they were constructed during the period of significance, the drives, parking areas, and retaining wall are utilitarian in nature and are not associated with any of the areas of significance determined to apply to the National Museum of Natural History. The circulation elements associated with the wings therefore do not contribute to the museum's significance.

museums. Until this time, the Smithsonian had been responsible for "the U.S. National Museum" – one national entity the collections of which were spread over several buildings. With the designation of its new museum as dedicated to history and technology, the Smithsonian's museums began to be understood as separate entities, each dedicated to its own subject, and that understanding would take hold during the 1960s. The Smithsonian's National Gallery of Art collection (later renamed the National Collection of Fine Art to distinguish it from the National Gallery of Art endowed by Andrew Mellon, remained housed in the Natural History Building until it was moved to the Old Patent Office Building on F Street NW and renamed the National Museum of American Art and the National Portrait Gallery in 1969. Finally devoted entirely to the subjects that had always formed the bulk of its collections, the Natural History Building was officially renamed the National Museum of Natural History the same year.[113]

Filling in the Courts and Other Alterations, 1976 to 2000

Despite the new museums that allowed the National Museum of Natural History to offload some of its collections, storage space continued to be a primary concern of Smithsonian leaders, recognized even as the National Museum of History and Technology and National Museum of American Art/National Portrait Gallery opened in the 1960s. Early in the next decade, several studies were undertaken to define research, curatorial, and conservation needs for all Smithsonian museums in order to project the number and size of new facilities that would be required in the future. These studies concluded that, due to the limited availability of buildable land on the National Mall, existing museums there would be reserved principally for public display of the Institution's collections. As a result, such new facilities as would be needed for collections storage, conservation, and preservation would located elsewhere. In 1976, S. Dillon Ripley, the eighth secretary of the Smithsonian (1964-1984), appointed a committee to undertake a collections and management study that would enumerate the specific needs of each of the Smithsonian's museums and to suggest means of satisfying those needs.[114]

The National Museum of Natural History differed in many ways from the Smithsonian's other museums, with the possible exception of the National Museum of History and Technology, due to the vast number of fields under its umbrella. Collections policy at the Museum of Natural History generally followed Joseph Henry's dictum of allowing Smithsonian scientists to follow their own special areas of scientific interest in selecting specimens to collect. Following this unwritten but traditional policy, the Natural History Museum scientists had assembled nearly comprehensive collections in the large number of disciplines under the museum's purview. The "Report on the Management of Collections of the Museums of the Smithsonian Institution,"

[113] Yochelson, 45, 88, 94, 117.
[114] "A Report on the Management of Collections in the Museums of the Smithsonian Institution," Smithsonian Institution, Washington, D.C. September 26, 1977, 1-2, https://library.si.edu/digital-library/book/reportonmanagem00smit, accessed May 19, 2022.

released on September 26, 1977, however, provided written guidelines on ways all Smithsonian museums could maintain control of the growth of their collections, while recognizing that growth would continue. Its three methods of making collections increase manageable included 1) increasing management involvement in acquisitions, instead of relying almost entirely on the Smithsonian's scientists; 2) increasing the length of planning intervals so that space needs could not outrun availability; and 3) securing additional storage space. The first guideline marked the first time that the Smithsonian placed any kind of administrative oversight on scientific collections. [115]

The report was released at about the same time that the National Museum of Natural History completed construction of an infill building in the museum's west courtyard. Both courtyards had been turfed over and supplied with walks after the museum's initial construction, but had not housed any permanent functions. Instead, mechanical buildings, workshops, a taxidermy shop, a greenhouse, and other temporary structures had been located there. The west court infill building contained offices, dining facilities for staff and Smithsonian Associates, meeting rooms, classrooms, restrooms, workshops, and the Naturalist Center (for use of amateur naturalists) on its four floors. Between 1999 and 2002, an IMAX theater was inserted into the west court infill, and the Atrium Café was installed on the first floor. The space was renovated again in 2019 after the IMAX theater was removed. A glass roof covers the open space between the west court infill building and the courtyard wall of the 1911 building, leaving much of the original construction exposed.[116]

Ultimately, the Smithsonian determined that additional space was needed to relieve the collections requirements of the National Museum of Natural History. At a construction cost of approximately $50 million, the Museum Support Center (MSC) in Suitland, Maryland, was dedicated on May 16, 1983, primarily to handle storage, conservation, and preservation of about half of the Natural History Museum's collections. Other Smithsonian museums also make use of the more than 4 ½ acres of storage space in the facility, including the Freer Gallery of Art, the Arthur M. Sackler Gallery, the National Museum of African Art, and the Hirshhorn Museum and Sculpture Garden. The MSC initially consisted of four two-story, rectangular, climate-controlled "pods." A fifth pod was added in 2007.[117]

In addition to seeking solutions to space needs, the National Museum of Natural History also maintained a constant effort to keep the museum's climate-control and HVAC capabilities up to the task of providing appropriate conditions for its collections and exhibits, as well as keeping their staff and visitors comfortable. Between 1991 and 1994, the museum built a new chiller

[115] "A Report on the Management of Collections in the Museums of the Smithsonian Institution," 27-31.
[116] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 282, 287-288.
[117] Yochelson, 205; "Museum Support Center Media Fact Sheet," August 1, 2018, Smithsonian Institution website, https://www.si.edu/newsdesk/factsheets/museum-support-center, accessed May 26, 2022.

plant. While most of the construction was underground, a one-story, rectangular building was constructed in the southeast corner of the site within the asphalt parking area added when the east wing was built. The structure has granite walls and arched openings along the west elevation that resemble the ground-floor openings of the museum building. Mechanical penthouses were added to the wings as part of the chiller plant project. Their facades were set back on all sides to disguise the added height when viewed from ground level.[118]

The National Museum of Natural History completed the build-out of its National Mall site between 1995 and 1998, when a freestanding building consisting of three underground floors and six above grade was constructed to fill the east court. A glass roof was built over the opening between the infill construction and the 1911 building, providing a light-filled interior space with views of the original yellow brick and granite courtyard facades. Bridges on the east façade of the infill building at the fifth-floor level link it to the east range of the 1911 building.[119]

The Twenty-First Century: Adapting to New Conditions and Requirements

In his 1985 history of the National Museum of Natural History, Ellis Yochelson noted that the building had been "the site of almost continuous modification" in the first three-quarters of a century of its existence.[120] Despite the build-out of the site in the 1990s, continuous modification has continued in the twenty-first century as the museum facilities have been preserved, restored, upgraded, or adapted to face new conditions and requirements. In some cases, such work has resulted in in-kind replacement; in others, restoration of original features has accompanied upgrades or the development of new exhibits. In 2008, for instance, the pair of elevators in the north pavilion near the Constitution Avenue entrance and the two pairs of elevators on the south side of the rotunda were replaced. In the north elevator, the existing cabs were refurbished, while replicas replaced the existing the bronze doors. In the rotunda, both the cabs and the doors were replaced with new models.[121] Until the twenty-first century, the window assemblies of the original 1911 building generally remained intact, although some replacement of broken window glass had taken place and UV film added in some locations. Beginning soon after the September 11, 2001, attacks on the World Trade Center and the Pentagon, the Smithsonian began to investigate means of making its building envelope resistant to explosives. In the second decade of the century, blast resistant windows have replaced existing windows in some spaces when they were rehabilitated. The nature of the replacement windows varies, depending on the type of window involved. In some cases, original wood or steel window frames were replaced with aluminum or steel frames matching the original profile. In others the original frame was retained

[118] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 285.
[119] Ibid., 286.
[120] Yochelson, 126.
[121] Beyer Blinder Belle, "National Museum of Natural History Renovate Elevators Package #2," OFEO Project no. 0500120, Construction Documents, December 18, 2007, Smithsonian Facilities.

and only the window panes were replaced. The original profile of the windows did not change, and the surrounding masonry was protected and retained.[122]

Exhibit design had also sometimes resulted in original windows being covered on the interior; later projects, however, have sought to reopen windows and restore them. When Hall 30, on the second floor of the west pavilion, was renovated in 2003, gypsum board wall assemblies over the windows were removed and broken or discolored glass was replaced.[123] In a project planned in 2006 and to be completed in phases, Halls 27-30 (all on the second floor of the west pavilion) were scheduled to be renovated, including removal of a mezzanine in Hall 27, restoration and upgrade of windows, restoration of the ceiling in Hall 29, and refinishing of marble, terrazzo, and plaster surfaces in all four halls. The halls have been returned to exhibit use.[124]

In addition to the blast-resistant windows, other upgrades to security have been accomplished since potential terrorist attacks became an issue in the 1990s. Unspecified security upgrades were instituted as early as fiscal year 1995, [125] but greater changes have been made since the September 11, 2001, attacks. These have included screening equipment at the north and south entrances to the museum (date installed unknown), as well as changes to the grounds. In 2002, planters and gates were added along Constitution Avenue to prevent unauthorized vehicles from driving into the grounds.[126] The Smithsonian undertook a more comprehensive approach to perimeter security at the National Museum of Natural History beginning in 2006; it was completed around 2011. The project consisted of a combination of granite walls and steel fencing along Constitution Avenue and the northern portion of 12th Street. The remainder of 12th Street was protected by a more transparent cable-fencing system partially screened by plantings. Steel bollards that could be raised and lowered and guard booths prevented unwanted access from Constitution Avenue via the east and west drives to the parking and loading areas of the museum. Bollards also secured the semicircular drive that led directly to the museum's north entrance and the paved path that had been cut across the grassy area within the drive in 1996. The layout of that drive and its granite curbs remain from the museum's original construction. Also included in the security apparatus was a layout of boulders in the northeast corner of the grounds, providing more transparent views of the museum from that direction and a more

[122] HSMM, "National Museum of Natural History: Blast Window Study," June 2004, 2.1-2.2; HSMM, National Museum of Natural History: Revitalize Windows, Skylights and Entrances – Concept Report, April 13, 2006, 1.1, 4.1-4.20, AECOM, "National Museum of Natural History: Revitalize Windows Skylights and Entrances – 100% Submission," August 10, 2012, December 12, 2012, and June 24, 2013 (three drawing sets), Smithsonian Facilities.
[123] HSMM, "National Museum of Natural History: Butterfly House Preliminary Design Report: Final Report," OFEO Project No.: 0400119, April 19, 2005, 2.1, Smithsonian Facilities.
[124] HSMM, "National Museum of Natural History: Concept/Schematic Design Scope of Construction/Renovation Work," OFEO Project no. 0500119, Major Capital Renewal FY07, HVAC Renovation Halls 27-30, February 28, 2006, 1, Smithsonian Facilities.
[125] HSMM and Commonwealth Architects, "NMNH, Historic Structures Report," 285.
[126] HSMM and EDAW, "NMNH, Cultural Landscape Report," 2-24.

naturalistic security solution around the Witness Elm. On the south side of the museum, bollards were employed at the base of the stairs, with cable fencing screened by plantings to the east and west.[127]

The design package for the perimeter security enhancements included additional alterations on the north side of the site. The alterations included new paving in the semicircular drive and the paved path across the grass (widened at this time), handrails associated with the existing curved steps at the north entrance, and improvements to the accessible ramps along the building facade. The ramps were first constructed around 1984. As part of the security upgrade, granite pavers and new illuminated, bronze handrails were added.[128] Accessible ramps were added to the south side of the Natural History Museum in 2021. The construction consisted of a pair of broad, gently sloped, granite-faced ramps flanking the original south stairs of the museum, maintaining the classical symmetry of the building. The ramps include granite aggregate paving, granite benches on the landings, and bronze guard- and handrails. The construction maintained the existing vault structure below the stairs (used for parking), facing it on the north with gray granite and installing columns and beams covered with stainless steel.[129]

With the exception of the semicircular drive and grass panels on the north side of the museum, landscaping of the site began to change in the mid-1990s, and these changes have continued into the twenty-first century. The first phase of what was initially known as the Butterfly Habitat Garden (now the Pollinator Garden) was implemented on the east border of the site in 1995. Perennials, shrubs, and trees attractive to butterflies were installed. In 2000, the area was enhanced with winding paved walks and an outdoor classroom. Signage to identify the plants and explain the importance of pollinators like butterflies to the environment is also a part of the garden. A "Bird Garden" was planned for the museum grounds in 1998, but was not installed until 2011. Occupying the northwest corner and the west and south perimeter areas of the museum grounds, the Urban Bird Habitat is a joint project of the National Museum of Natural History and Smithsonian Gardens. It provides plantings and hardscape elements that offer food, water, and shelter to birds.[130]

[127] Beyer Blinder Belle, "National Museum of Natural History: Improve Mall Wide Perimeter Security," OFEO Project no. 0269910B, as-builts, August 22, 2006, Smithsonian Facilities. Due to the presence of the 9th Street tunnel, no perimeter security enhancements were needed on the east side of the museum.
[128] Yochelson, 196; HSMM and EDAW, "NMNH, Cultural Landscape Report," 2-24; "Improve Mall Wide Perimeter Security," drawing A-113.
[129] Smithsonian Facilities Office of Planning, Design & Construction, "National Museum of Natural History Renovate South Entrance – Accessible Approach," final submission to the National Capital Planning Commission Final Submission, March 3, 2017, Smithsonian Facilities.
[130] HSMM and EDAW, "NMNH, Cultural Landscape Report," 2-24; "Urban Bird Habitat at the National Museum of Natural History," Smithsonian Gardens website, https://gardens.si.edu/gardens/urban-bird-habitat, accessed May 25, 2022.

The Pollinator and Urban Bird habitats, with their emphasis on explaining the interdependence of the plant, animal, and human worlds, represent a continuation of the original function of the National Museum of Natural History – pushed beyond the museum walls to the boundaries of its site. Rooted in James Smithson's call for an institution dedicated to "the increase and diffusion of knowledge," the National Museum of Natural History has pursued this goal through publications, specimen collections, public programs, and museum exhibits. In the ten years between 2011 and 2020, 50 million visitors came to the museum to view forty-eight new exhibits along with continuing displays. Scientists associated with the Natural History Museum discovered and named more than 2,600 new species and published 8,185 new books and scientific papers. Eighteen million objects and specimens were added to its collections to be studied by Smithsonian and visiting scientists and students and displayed to the public for their entertainment and edification, testifying to the continuity of purpose of the museum since its opening in 1911.[131]

[131] "Our World, Our Future: Strategic Plan 2021-2025," National Museum of Natural History, Smithsonian Institution, May 2021, 3.

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---

**Previous documentation on file (NPS):**

____ preliminary determination of individual listing (36 CFR 67) has been requested
__X_ previously listed in the National Register (National Mall Historic District NR)
_____previously determined eligible by the National Register
_____designated a National Historic Landmark
____ recorded by Historic American Buildings Survey #_____
_____recorded by Historic American Engineering Record # _____
____ recorded by Historic American Landscape Survey # _____

**Primary location of additional data:**

____ State Historic Preservation Office
____ Other State agency
__X_ Federal agency (Smithsonian Institution)
____ Local government
____ University
____ Other
Name of repository: _____

**Historic Resources Survey Number (if assigned): _____**

---

**10. Geographical Data**

**Acreage of Property** _approximately 13 acres_____

Use either the UTM system or latitude/longitude coordinates

**Latitude/Longitude Coordinates**
Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

A. Latitude: 38.890674 Longitude: -77.024099

B. Latitude: 38.890662 Longitude: -77.027768

C. Latitude: 38.891919 Longitude: -77.027780

D. Latitude: 38.891919 Longitude: -77.024128

**Or**
**UTM References**
Datum (indicated on USGS map):

☐ NAD 1927 or ☐ NAD 1983

| | | |
|---|---|---|
| 1. Zone: | Easting: | Northing: |
| 2. Zone: | Easting: | Northing: |
| 3. Zone: | Easting: | Northing: |
| 4. Zone: | Easting : | Northing: |

**Verbal Boundary Description** (Describe the boundaries of the property.)

The National Museum of Natural History is located on a portion of U.S. Reservation no. 3, the Smithsonian Grounds, which is part of the National Mall. The museum site is bordered on the north by Constitution Avenue NW, on the east by 9th Street NW, on the south by Madison Drive NW, and on the west by 12th Street NW.

**Boundary Justification** (Explain why the boundaries were selected.)

The north, east, and west boundary streets of the site of the National Museum of American History have remained unchanged since the building's construction. The south boundary was established when Madison Drive NW replaced the original drive south of the museum in 1930s. The boundaries of the site have remained unchanged since that time.

---

**11. Form Prepared By**

name/title: Daria Gasparini & Tim Kerr, Robinson & Associates, Inc., Lane Burritt, Aeon Preservation Services (2022); Bryan C. Green & Susan Reed, Commonwealth Architects (2006)
organization:
street & number: 4005 Wisconsin Avenue NW
city or town: Washington state: DC zip code: 20016
e-mail admin@robinson-inc.com
telephone: (202) 234-2333
date: August 22, 2022

## Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.

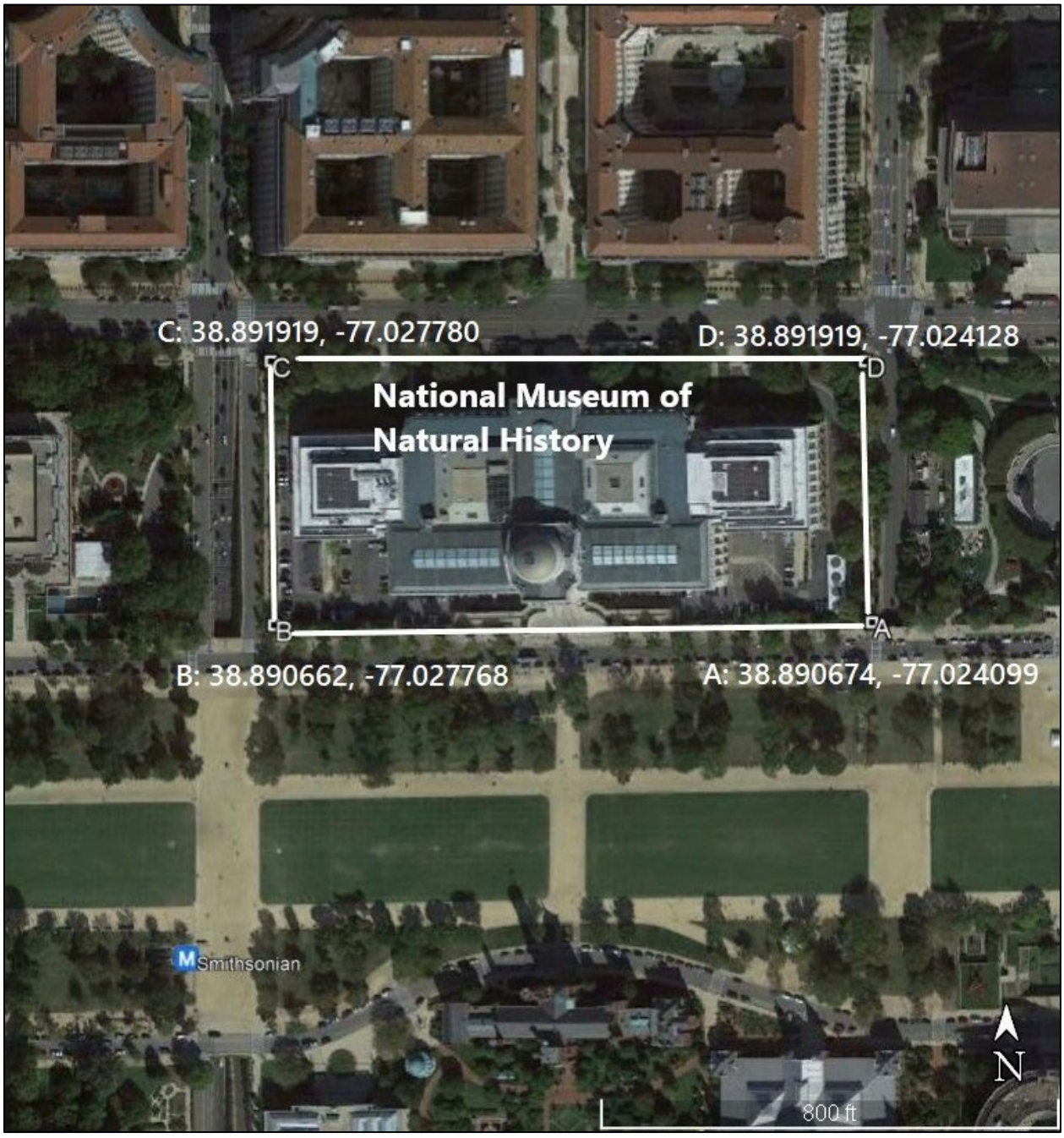
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.

- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

**Location Map** (source: District of Columbia Government, Atlas Plus, Esri Street Map)

Overview of the location of the National Museum of Natural History (indicated by the black box) in the context of the National Mall.

**Geographic Map** (source: Google Earth)



## Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

## Photo Log

Note: Since the different parts of the National Museum of Natural History (original building, wings, and infill construction) number their floors differently, the photo log is keyed to sketch maps that correspond to the primary floors of the original building. Thus, when there is an image of a space in the wings or infill construction on a floor level numbered differently than the original 1911 building, additional information is provided in the photo description, as needed, for clarification.

| | |
|---|---|
| Name of Property: | National Museum of Natural History |
| City or Vicinity: | Washington, D.C. |
| Name of Photographer: | Robinson & Associates, Inc. (0001-0024, 0026-0036) |
| | Aeon Preservation Services LLC (0025) |
| Date of Photographs: | March 2022 |
| Location of Original Digital Files: | Smithsonian Institution |
| Number of Photographs: | 36 |

Photo #1 (DC_Washington_National Museum of Natural History_0001
South elevation, looking northeast

Photo #2 (DC_Washington_National Museum of Natural History_0002
South elevation, original building, looking northwest

Photo #3 (DC_Washington_National Museum of Natural History_0003
South elevation, east wing, looking north

Photo #4 (DC_Washington_National Museum of Natural History_0004
South elevation, west wing, looking north

Photo #5 (DC_Washington_National Museum of Natural History_0005
West elevation, original building, looking east

Photo #6 (DC_Washington_National Museum of Natural History_0006
West elevation, west wing, looking southeast

Photo #7 (DC_Washington_National Museum of Natural History_0007
North elevation, west wing, looking southwest

Photo #8 (DC_Washington_National Museum of Natural History_0008
North elevation, original building, frontispiece and west range, looking southwest

Photo #9 (DC_Washington_National Museum of Natural History_0009
North elevation, east wing, looking southwest

Photo #10 (DC_Washington_National Museum of Natural History_0010
East elevation, east wing, looking southwest

Photo #11 (DC_Washington_National Museum of Natural History_0011
East elevation, original building, looking west

Photo #12 (DC_Washington_National Museum of Natural History_0012
Site, south side walk and plantings, looking west

Photo #13 (DC_Washington_National Museum of Natural History_0013
Site, southwest entrance ramp, looking northeast

Photo #14 (DC_Washington_National Museum of Natural History_0014
Site, southwest parking area, looking east

Photo #15 (DC_Washington_National Museum of Natural History_0015
Site, 12th Street landscape, looking north

Photo #16 (DC_Washington_National Museum of Natural History_0016
Site, west access drive, looking south

Photo #17 (DC_Washington_National Museum of Natural History_0017
Site, northwest corner, looking east

Photo #18 (DC_Washington_National Museum of Natural History_0018
Site, northwest grounds, looking southwest

Photo #19 (DC_Washington_National Museum of Natural History_0019
Site, north entrance and sidewalk, looking west

Photo #20 (DC_Washington_National Museum of Natural History_0020

Site, northeast grounds and guard booth, looking southwest
Photo #21 (DC_Washington_National Museum of Natural History_0021
Site, north grounds, childcare playground, looking easts

Photo #22 (DC_Washington_National Museum of Natural History_0022
Site, southeast corner, pollinator garden, looking northwest

Photo #23 (DC_Washington_National Museum of Natural History_0023
Site, east access drive and parking, looking north

Photo #24 (DC_Washington_National Museum of Natural History_0024
Ground floor plan, Main Building, north foyer, looking south

Photo #25 (DC_Washington_National Museum of Natural History_0025
Ground floor plan, Main Building, Baird Auditorium, looking northwest

Photo #26 (DC_Washington_National Museum of Natural History_0026
Ground floor plan, Main Building, East Range, room 205, looking southwest

Photo #27 (DC_Washington_National Museum of Natural History_0027
First floor plan, Main Building, Rotunda, looking southeast

Photo #28 (DC_Washington_National Museum of Natural History_0028
First floor plan, Main Building, northwest stair, looking northwest

Photo #29 (DC_Washington_National Museum of Natural History_0029
First floor plan, Main Building, North Hall, looking south

Photo #30 (DC_Washington_National Museum of Natural History_0030
Second floor plan, Main Building, Ambulatory, looking north

Photo #31 (DC_Washington_National Museum of Natural History_0031
Third floor plan, Main Building, East Range, looking east

Photo #32 (DC_Washington_National Museum of Natural History_0032
Attic floor plan, Main Building, North Hall, looking north

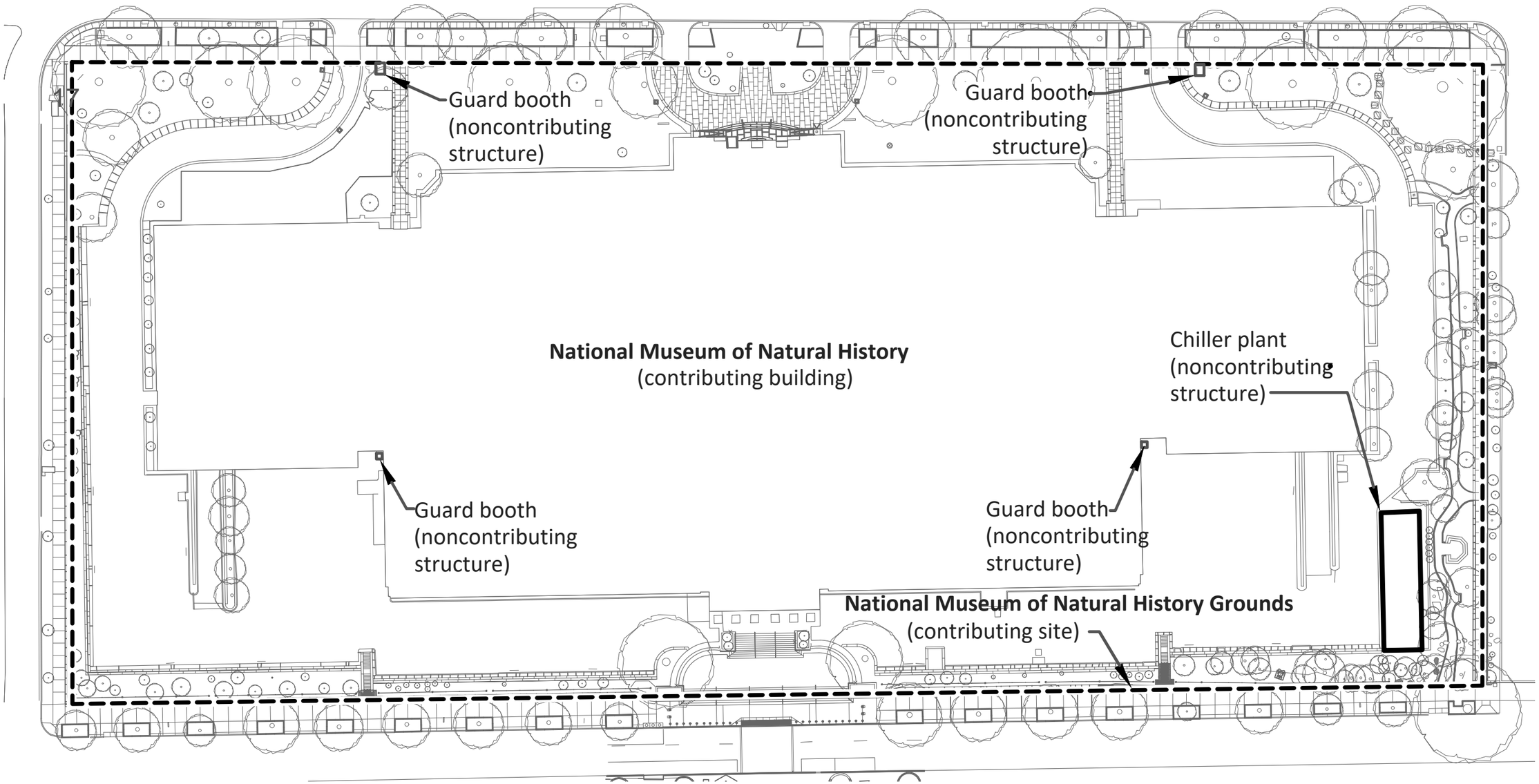
Photo #33 (DC_Washington_National Museum of Natural History_0033
First floor plan, West Court, Oceans Café, looking north

Photo #34 (DC_Washington_National Museum of Natural History_0034
Attic floor plan, West Court, fourth floor conference room, looking southwest

Photo #35 (DC_Washington_National Museum of Natural History_0035
First floor plan, East Court, south exterior corridor, looking west

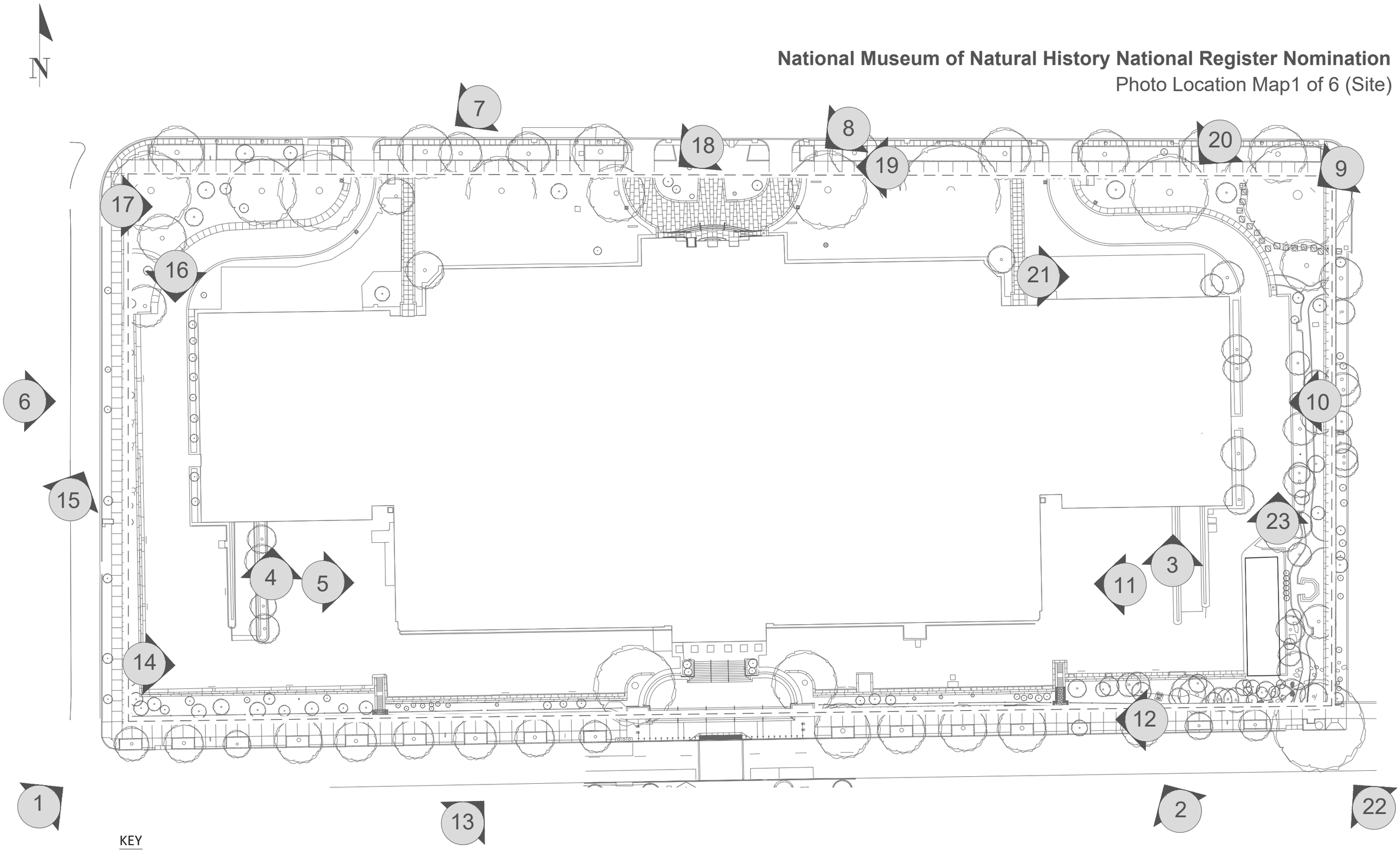
Photo #36 (DC_Washington_National Museum of Natural History_0036
First floor plan, West Wing, second floor, east corridor, looking north

**National Museum of Natural History National Register Nomination**
Contributing and Noncontributing Features



**National Museum of Natural History National Register Nomination**

Photo Location Map1 of 6 (Site)

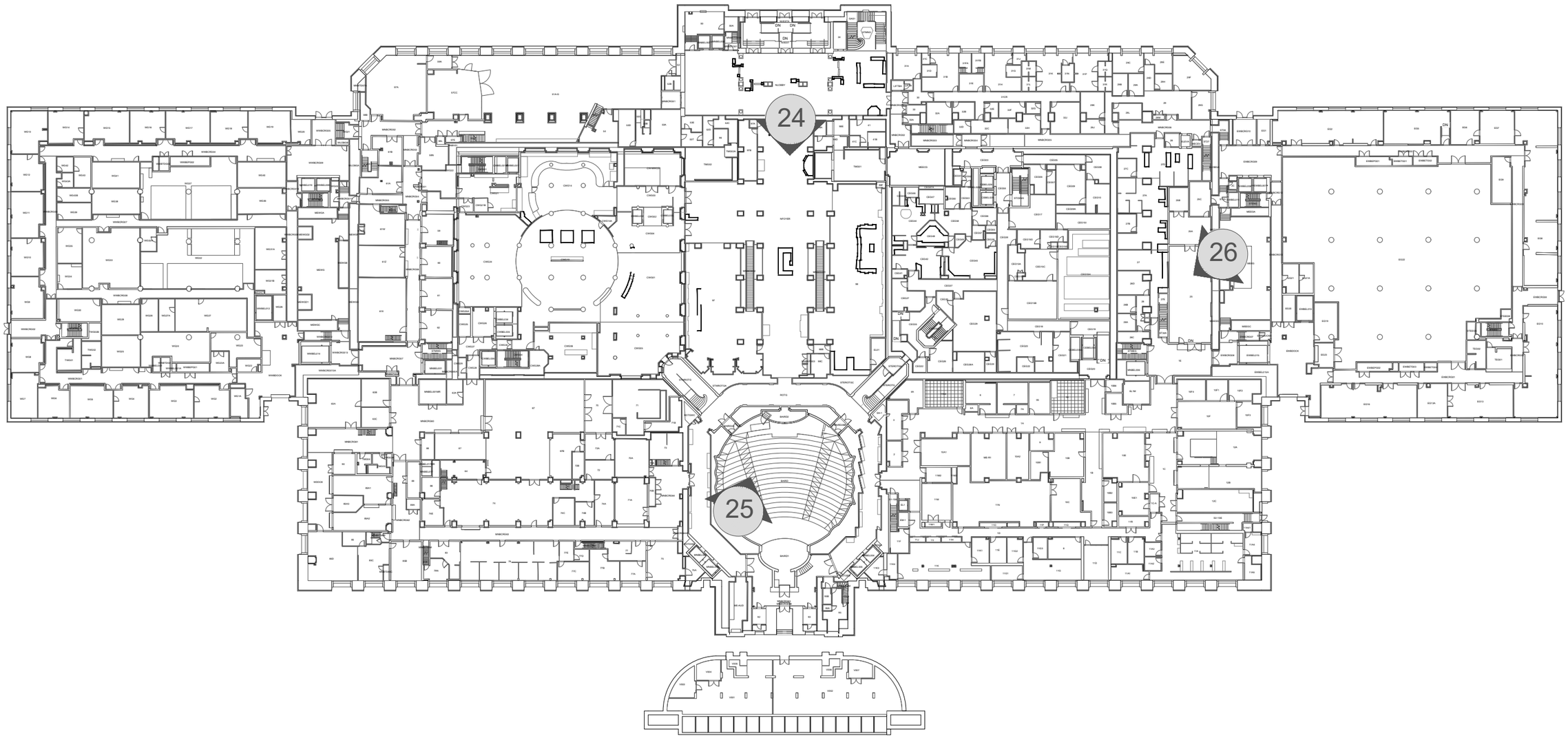



KEY

## Numbers correspond to the National Register Nomination Photo Log.

**National Museum of Natural History National Register Nomination**

Photo Location Map 2 of 6 (Ground Floor Plan)

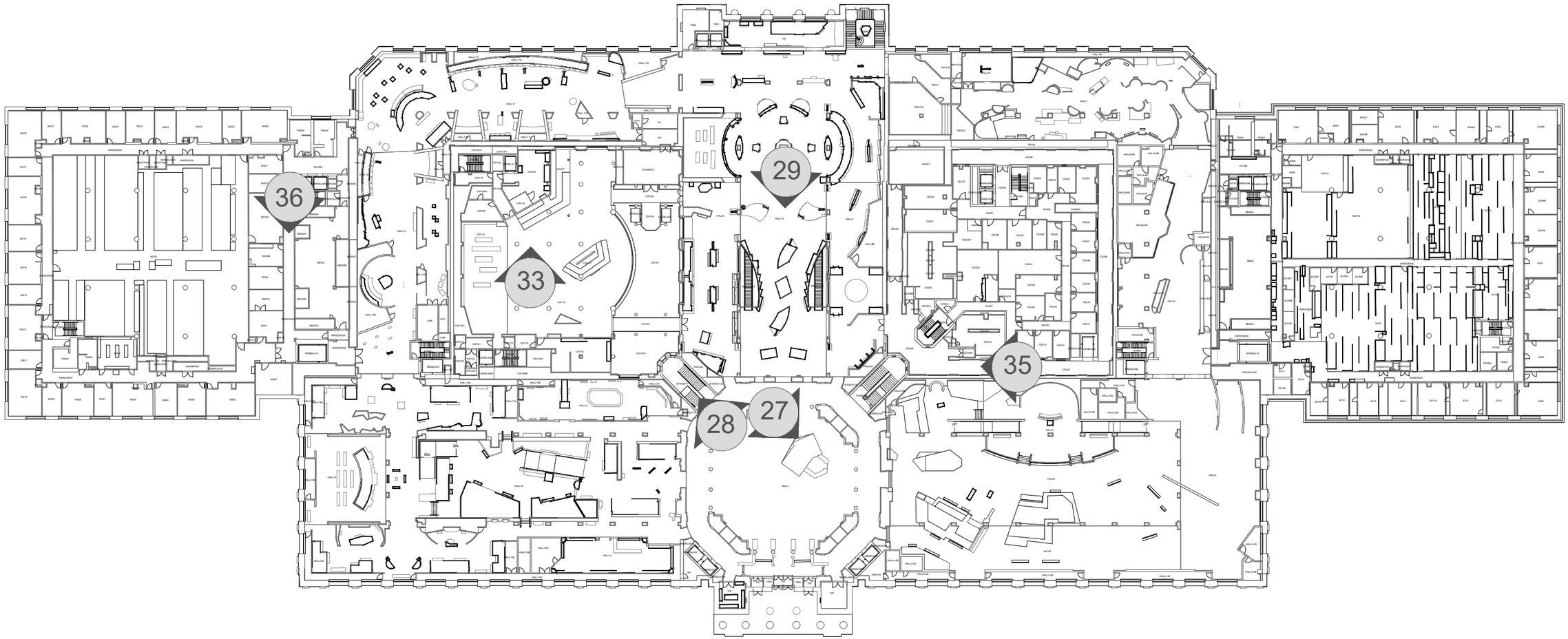



KEY

## Numbers correspond to the National Register Nomination Photo Log.

**National Museum of Natural History National Register Nomination**

Photo Location Map 3 of 6 (First Floor Plan)

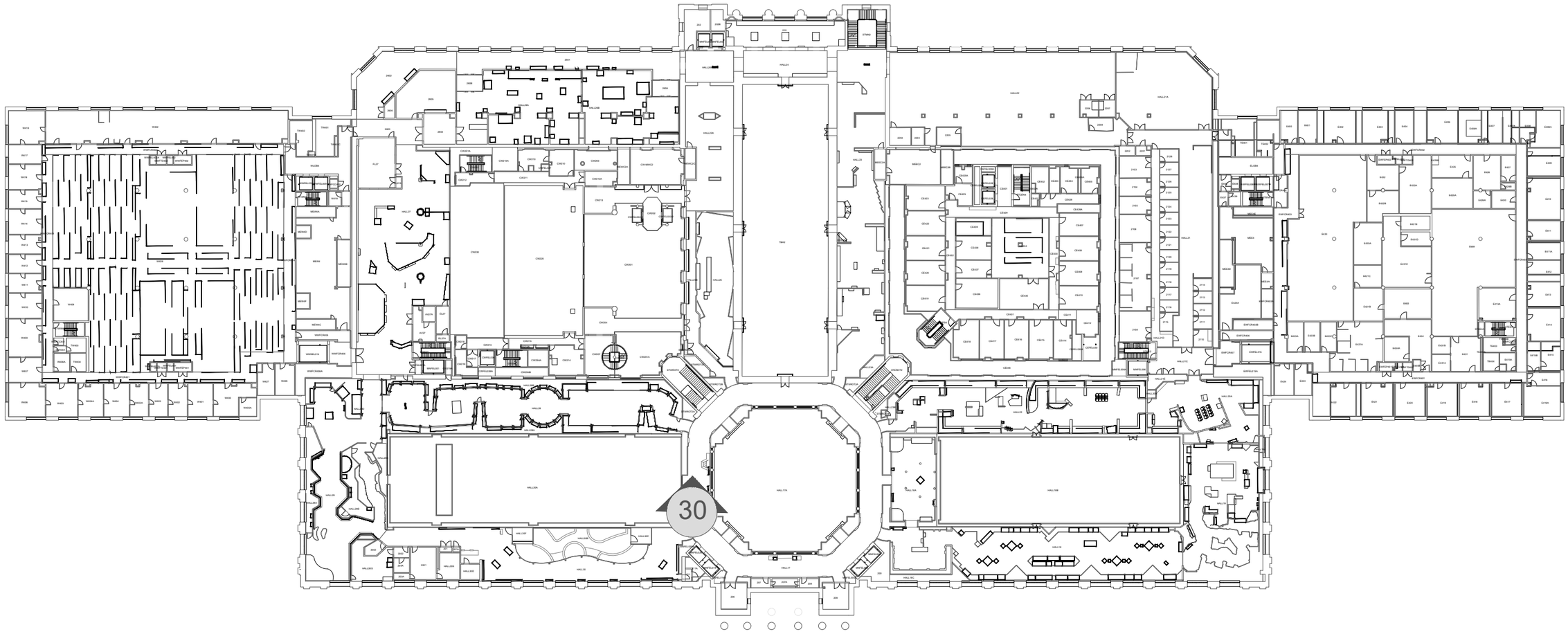



KEY

## Numbers correspond to the National Register Nomination Photo Log.

# National Museum of Natural History National Register Nomination

Photo Location Map 4 of 6 (Second Floor Plan)

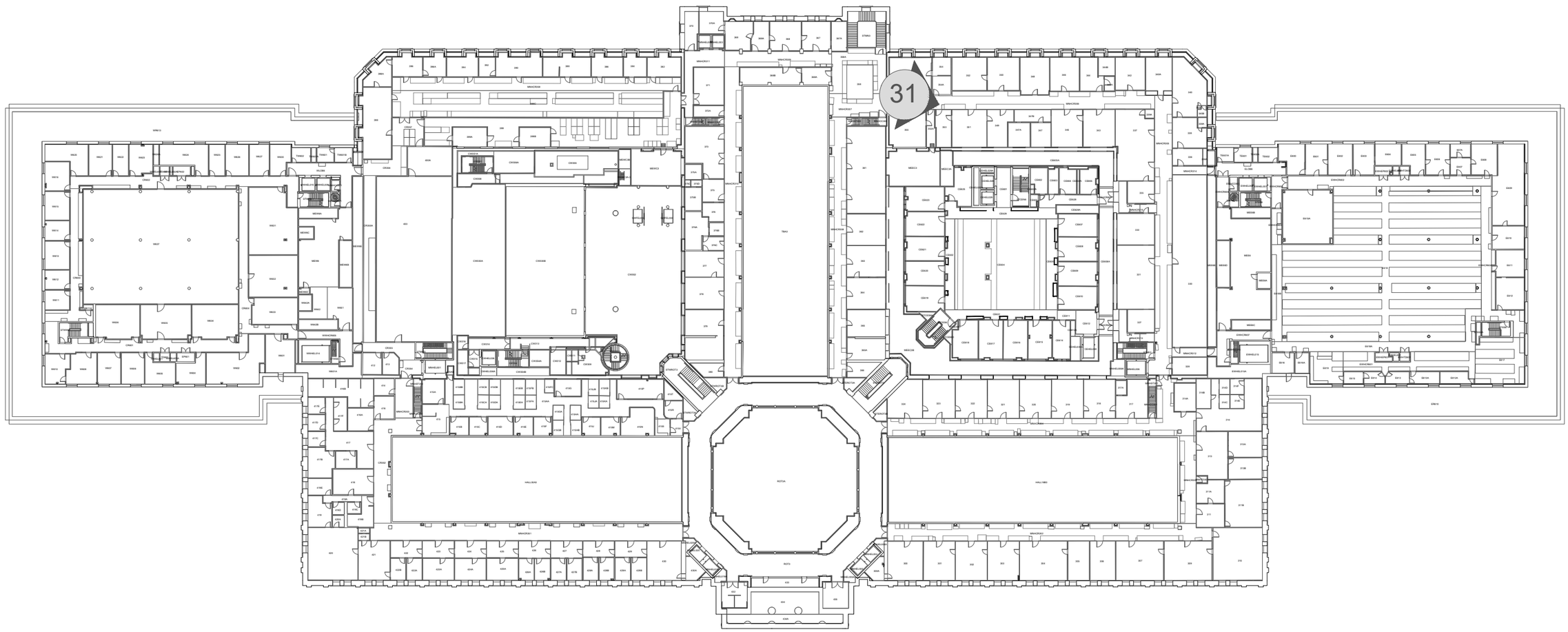



KEY

## Numbers correspond to the National Register Nomination Photo Log.

# National Museum of Natural History National Register Nomination

Photo Location Map 5 of 6 (Third Floor Plan)

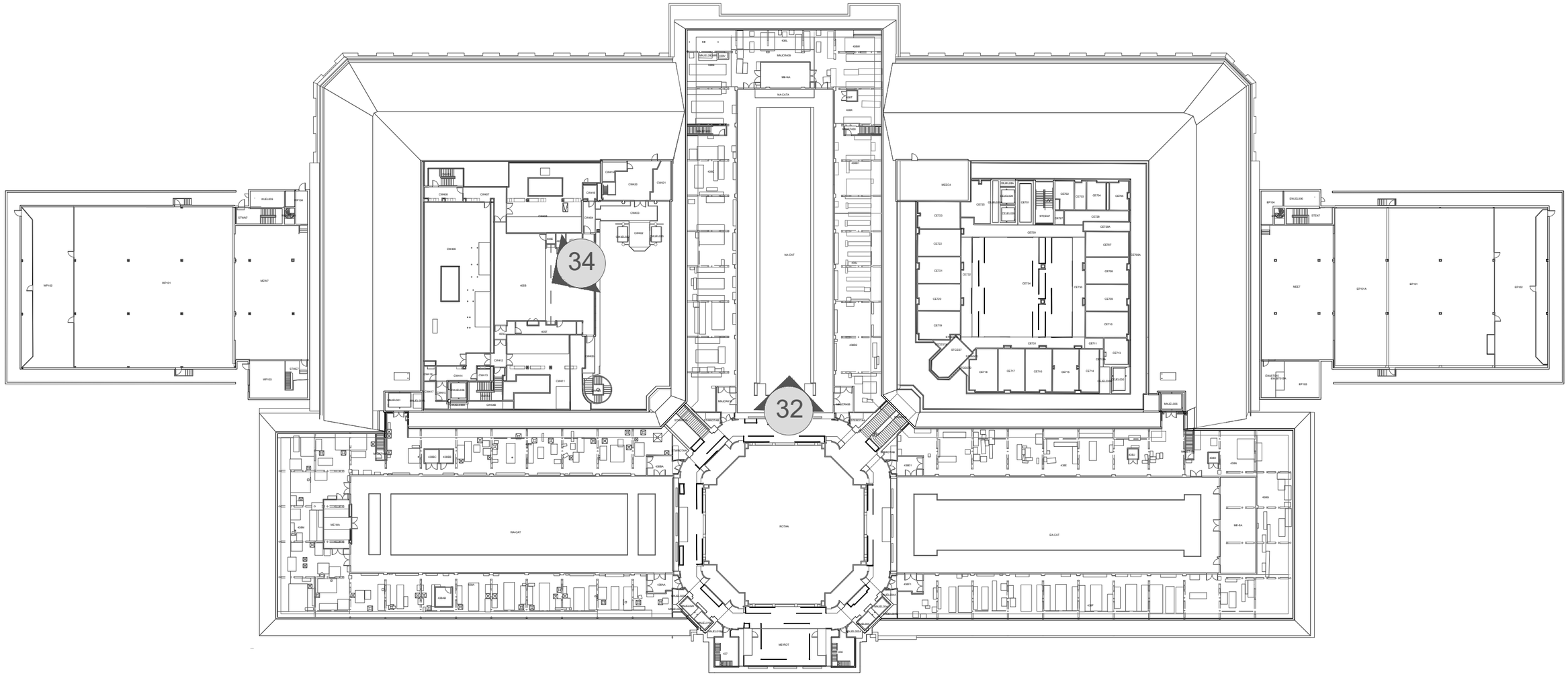



KEY

## Numbers correspond to the National Register Nomination Photo Log.

# National Museum of Natural History National Register Nomination

Photo Location Map 6 of 6 (Attic Floor Plan)




KEY

## Numbers correspond to the National Register Nomination Photo Log.