Chapter 6:

Urban Design and Visual Resources

A. INTRODUCTION

This chapter considers the potential of the proposed project to impact urban design and visual resources. As defined in the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. A visual resource can include views of public parks, landmark structures or districts, or otherwise distinct buildings, natural resources, and the waterfront. Based on the *CEQR Technical Manual*, a preliminary assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. Although zoning does not apply to the project site, the proposed project requires approval from the New York City Department of Parks and Recreation (NYC Parks) and would be visually prominent.

As described in Chapter 1, "Project Description," the proposed project would result in a new building, the Richard Gilder Center for Science, Education, and Innovation (the Gilder Center), in an approximately 105-foot-tall (five stories above grade; taking into account mechanical and elevator bulkheads, a portion of the rooftop would reach 115 feet), approximately 203,000 gross square foot (gsf) addition to the American Museum of Natural History (AMNH or the Museum). The site for the proposed project is on the west side of the Museum complex facing Columbus Avenue, within Theodore Roosevelt Park. The proposed project would also include renovations to existing Museum space and a redesign of approximately 75,000 square feet of the western portion of Theodore Roosevelt Park.

B. PRINCIPAL CONCLUSIONS

The proposed project would not have adverse effects on the urban design of the project site or study area. The proposed Gilder Center would be compatible with the height, massing, and proportions of the other buildings composing the Museum complex and with buildings in the study area. The design of the Gilder Center would be in keeping with the Museum's architectural history of constructing buildings in the style of their time, while simultaneously relating to the historic context in form, scale, massing, and materiality. The lighting plan would be in keeping with the surrounding area and consistent with other sides of the Museum complex. Although the proposed project would occupy a small section of Theodore Roosevelt Park, it would also widen the park entrance on Columbus Avenue making it more accessible, reconfigure the path network in front of the Museum, add benches, plant new trees, and include landscape improvements at other nearby locations. All of these improvements would enhance the visual quality and function of this section of the park. Further, by creating a more visible and accessible entrance to the Museum, the proposed project would improve the experience of Museum and park users in this area of Theodore Roosevelt Park resulting in beneficial effects on the streetscape and on pedestrians and park users.

The proposed Gilder Center would not obstruct any view corridors in the study area nor would it obstruct views of any visual resources. It would also not result in adverse visual effects to the Museum or Theodore Roosevelt Park, both of which are visual resources in the study area. As described more fully in Chapter 5, "Historic and Cultural Resources," the proposed Gilder Center would not obscure significant Museum façades or Museum façades that have not previously been obscured or partially obscured from view. The Gilder Center would obscure a portion of the newly-restored west façade of Building 1; however this building is mostly blocked from public view. The Gilder Center would include a two-story gallery adjacent to Building 1, which would leave the newly-restored west façade of Building 1 exposed in this location and visible to Museum visitors circulating through the gallery.

C. METHODOLOGY

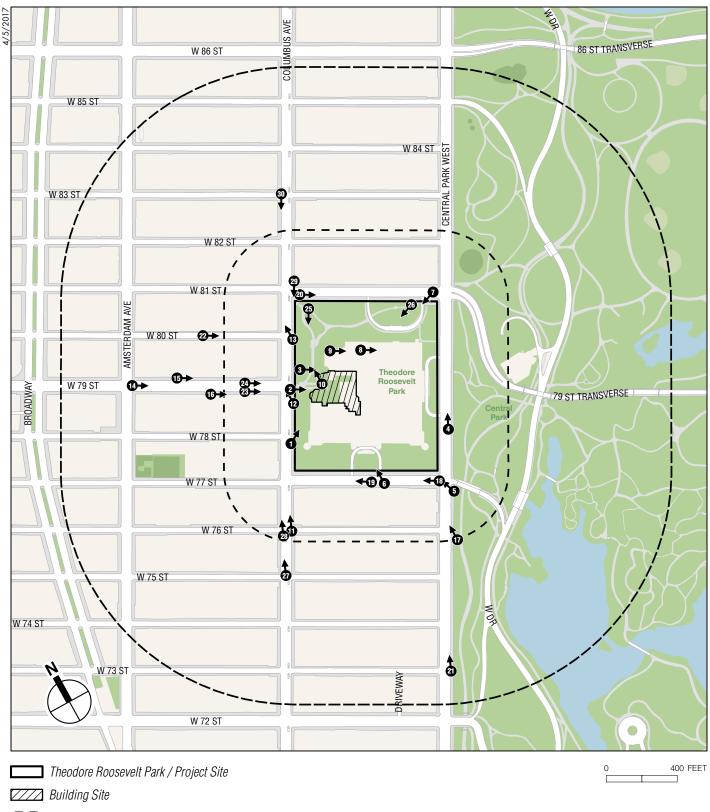
This analysis considers a ¹/₄-mile study area around Theodore Roosevelt Park, which, following *CEQR Technical Manual* guidance, is the area where the proposed project would be most likely to influence land use patterns and the built environment (see **Figure 6-1**). This analysis addresses the urban design and visual resources of the study area for existing conditions, the future without the proposed project (the No Action condition), and the future with the proposed project (With Action condition) for the 2021 analysis year.

This preliminary analysis considers the effects of the proposed project on the experience of a pedestrian in the study area. The assessment focuses on those project elements that have the potential to alter the built environment, or urban design, of the project area, which is collectively formed by the following components:

- Natural Features—natural features include vegetation, and geologic and aquatic features that are natural to the area.
- Street Pattern and Streetscape—the arrangement and orientation of streets define location, flow of activity, street views, and create blocks on which buildings and open spaces are arranged. Other elements including sidewalks, plantings, street lights, curb cuts, and street furniture also contribute to an area's streetscape.
- Buildings—a building's size, shape, setbacks, pedestrian and vehicular entrances, lot coverage and orientation to the street are important urban design components that define the appearance of the built environment.
- Open Space—open space includes public and private areas that do not include structures including parks and other landscaped areas, cemeteries, and parking lots.
- Visual Resources—visual resources include significant natural or built features, including important views corridors, public parks, landmarks structures or districts, or otherwise distinct buildings.

Wind conditions also affect the pedestrian experience of a given area. As the proposed Gilder Center would be an approximately 105-foot-tall (5 stories above grade; taking into account mechanical and elevator bulkheads, a portion of the rooftop would reach 115 feet) addition to the existing Museum and is not located on the waterfront, it would not contribute to high-wind conditions. Therefore, a pedestrian wind analysis is not warranted.

Sunlight conditions also affect the pedestrian experience of a given area. The presence of Central Park and Theodore Roosevelt Park and the variation in building heights and street widths found in the study area generally allow sunlight to reach much of the study area throughout the day,



I I 400-ft boundary

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- **[____]** 1/4-mile boundary
 - Photo View Direction and reference number

and this condition would not be significantly altered with the proposed project. Further discussion of the proposed project's potential to cast new incremental shadows is discussed in Chapter 4, "Shadows;" that chapter concludes that the proposed project's additional shadows would not significantly alter the usability of Theodore Roosevelt Park and would, therefore, not cause significant adverse shadow impacts.

D. EXISTING CONDITIONS

PROJECT SITE

The Museum and Theodore Roosevelt Park occupy an approximately 17.58-acre superblock bounded by Columbus Avenue, West 81st Street, Central Park West, and West 77th Street. The Museum consists of numerous interconnected buildings with an approximately 7.7-acre footprint. It was built in stages between 1874 and 2000, and each of its four frontages has a different architectural character indicative of the phased construction.

The Museum's frontage on Columbus Avenue, which is the site of the proposed project, consists of a mix of building façades, some of which are utilitarian or secondary façades. The 5-story building at the southwest corner, Building 8, continues the Romanesque Revival style of the Museum's south frontage (see view 1 of Figure 6-2). It has turrets and dormers and a roughfaced granite façade. The building is set back from the street behind a narrow lawn and a service drive that descends from street-level to provide basement access. To the north of this building, the Museum is set back from the street behind Theodore Roosevelt Park. A paved promenade connects Columbus Avenue to the Weston Pavilion, which includes a small, glass cube entrance pavilion for the Museum (see view 2 of Figure 6-2). The promenade has benches, trees, fenced planting beds, and two paths that converge into one straight path north into Theodore Roosevelt Park, and it ends at a small terrace in front of the Weston Pavilion entrance. There is a fence with granite columns at the Columbus Avenue entrance to the promenade. On the south side of the promenade, the brick and stone, Gothic and Romanesque Revival façades of Buildings 1, 7, and 11 overlook the park. The 3-story non-descript and mostly windowless Building 15, which is faced in stucco, fronts on the east side of the plaza at the Weston Pavilion (see view 2 of Figure 6-2). Behind this building, the brick façades-both utilitarian and Gothic and Romanesque Revival—of 3- and 6-story buildings face the park. Between the Weston Pavilion and the staircase to Ross Terrace is the 5-story brick Building 17 (a former power house) with a utilitarian design (see view 3 of Figure 6-3). At its base is a 1-story extension with arched windows and a sloped roof with skylights. The former power house is set farther back within the park than the Museum building at the southwest corner of the complex (Building 8).

The 6-story main entrance of the museum on Central Park West features a massive, granite triumphal arch with Ionic columns and four statues at the entablature (see view 4 of **Figure 6-3**). The triumphal arch entrance is raised above, and set back from, the street and an elevated stone plaza. The plaza, reached by wide flights of steps on each side of the equestrian statue, features benches, ornamental flagpoles, statuary, and a wall carved with wreathes and animals that forms the plinth of the triumphal arch. A paved driveway off of Central Park West runs behind the elevated plaza and underneath the main, raised building entrance, providing a covered entrance to the Museum that is closer to street level. There is a guard booth at the entrance of the paved driveway. On the north and south sides of the arch, the Museum is set back from the street behind narrow lawns with trees enclosed by metal fences. The Museum façades in this area are



AMNH. View north on Columbus Avenue



AMNH. View from Columbus Avenue to Weston Pavilion 2



AMNH. Former power house. View northeast **3**



AMNH Main Entrance. View northwest on Central Park West 4

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clad in granite and designed in a Classical style. A subway entrance is located to the south of the elevated plaza.

On West 77th Street, the Museum is set far back from the street behind a large lawn with numerous mature trees. Metal fences enclose the lawn. The Museum's 5- and 6-story southern frontage is clad in rough-faced granite and designed in the Romanesque Revival style with arched windows, turrets, and dormers (see view 5 of **Figure 6-4**). Round towers with peaked roofs form the complex's corners at Central Park West and Columbus Avenue, and a massive, castellated bay with rounded towers and turrets is located in the middle of the block (see view 6 of **Figure 6-4**). At street-level, a rusticated arch forms an entrance to this bay, and curved staircases to a second-story entrance are located on each side of the arch. A paved plaza with benches and a raised flower bed is located in front of the castellated bay. Bollards border the plaza along the sidewalk and the driveway has retractable bollards.

The north frontage of the Museum consists of the Rose Center for Earth and Space and an elevated, publicly accessible open space (Ross Terrace) (see view 7 of **Figure 6-5**). These Museum components are set far back from West 81st Street within Theodore Roosevelt Park, and they are at a lower grade than West 81st Street. The Rose Center is a large, transparent glass cube, within which are a giant sphere enclosing the Hayden Planetarium and surrounding suspended spheres representing planets. The Rose Center provides a public entrance to the Museum; this entrance is accessed from West 81st Street by a U-shaped driveway with sidewalks. This driveway also provides access to a parking garage beneath the Ross Terrace. Adjacent to the west of the Rose Center, Ross Terrace consists of paved plazas and lawns on two levels (see view 8 of **Figure 6-5**). Access to the terrace is from a staircase at the western end (see view 9 of **Figure 6-6**). Façades of multiple Museum buildings overlook Ross Terrace; some are utilitarian, secondary façades.

Theodore Roosevelt Park, in which the Museum is located, contains bench-lined walking paths, fenced lawns and planting beds, numerous trees, and a dog run (see view 10 of **Figure 6-6**). Metal fences enclose the park along the four street frontages, and all of the planted portions of the park are fenced. Entrances are located along West 81st Street and on Columbus Avenue at the corner of West 81st Street and at the promenade that leads to the Weston Pavilion. Only the northern and western portions of the park have paths and benches. The south portion of the park consists of enclosed lawns in front of the Museum. Located in front of the Weston Pavilion, *The New York Times Capsule* is a stainless steel, curving abstract sculpture on a granite base that contains cultural artifacts from circa 2000-2001. The Nobel Monument is located in a small, square plaza at the intersection of four paths in front of the stairs to Ross Terrace. This monument is a granite pillar with a bronze portrait medallion of Alfred Nobel and engraved names of American Nobel laureates.

The building site contains both Museum area and open space outside the Museum, and is approximately 43,691 square feet at grade. Approximately 11,600 square feet of the at-grade footprint is within existing open space. The portion of the building site within the existing Museum footprint contains the Weston Pavilion and adjacent corridors, Buildings 15 and 15A and adjacent corridors, and the Museum's service yard. The portion of the building site within Theodore Roosevelt Park contains the terrace adjacent to the Weston Pavilion, a portion of the promenade between Columbus Avenue and the Weston Pavilion, *The New York Times Capsule*, fenced planted areas, and paved areas.



AMNH. View west on West 77th STreet from Central Park West 5



AMNH West 77th Street entrance 6



AMNH. Rose Center and Ross Terrace. View southwest from West 81st Street



AMNH. View east on Ross Terrace 8



AMNH. Stairs to Ross Terrace from Theodore Roosevelt Park 9



Theodore Roosevelt Park. View northwest from Weston Pavilion terrace 10

STUDY AREA

URBAN DESIGN

The portion of the Upper West Side within the project study area is a vibrant, densely developed neighborhood of row houses, apartment buildings, museums, schools, and religious institutions with bustling avenues of sidewalk cafes and shops. Central Park is a defining feature of the area.

Topography and Natural Features

The topography is relatively flat throughout the study area, although there is a hill centered around West 79th Street between Columbus and Amsterdam Avenues. The hill is most pronounced on West 79th Street, with the peak closer to Columbus Avenue so that Amsterdam Avenue is at a lower elevation. The hill is less pronounced on West 80th Street, and and there is not much topographical change on West 77th Street. Although Central Park is man-made, it provides a verdant landscape of hills, rock outcroppings, a lake, and a mature tree canopy in the study area. Large rock outcroppings are located at the park's border with Central Park West at West 82nd Street.

Street Pattern and Streetscape

The study area streets are laid out in a grid and, with the exception of the project site superblock, blocks are rectangular. The grid ends at Central Park West and Central Park. Most of the study area streets are narrow (60-foot-wide), east-west streets with traffic running in one direction. However, West 81st Street between Central Park West and Columbus Avenue is a two-way street with four traffic lanes that intersects with the 79th Street Transverse through Central Park. West 77th Street is also a two-way street between Central Park West and Columbus Avenue. Central Park West, Columbus Avenue, and Amsterdam Avenue are the north-south streets in the study area. Central Park West is a wide two-way street, Columbus Avenue is a wide southbound street, and Amsterdam Avenue is a wide north-bound street. There are numerous bike lanes through the study area. A protected bike lane runs along the east side of Columbus Avenue adjacent to Theodore Roosevelt Park; a parking lane buffers the bike lane from the traffic lanes. and the crosswalks have raised concrete medians with street trees. There are east- and westbound bike lanes on West 77th Street between Central Park West and Columbus Avenue, with a single west-bound bike lane continuing west of the avenue. An east-bound bike lane is located on West 78th Street, and a north-bound bike lane is located on Central Park West. A newly constructed north-bound protected bike lane is located on Amsterdam Avenue.

Sidewalk widths in the study area vary; they are narrow (generally 10 to 15 feet wide) on the east-west streets except for on the north side of West 77th Street and the south side of West 81st Street between Central Park West and Columbus Avenue, where there are wide sidewalks (approximately 31-feet wide) along the Theodore Roosevelt Park frontage. Columbus and Amsterdam Avenues have wide sidewalks, while the west side of Central Park West has narrow sidewalks. The sidewalk along the east side of Central Park West bordering Central Park is lined with benches and paved with hexagonal stones, with an adjacent area of paving blocks, and a stone wall forms the edge of the park. The streets in the study area have a busy character due to the presence of the Museum, the New-York Historical Society, Central Park, and the commercial corridors along Columbus and Amsterdam Avenues. Entrances to the 81 Street-Museum of Natural History subway station (B and C lines) are located on Central Park West on the south side of the main Museum entrance and at the northwest and southwest corners of the intersection with West 81st Street. For a portion of the morning and early-afternoon, tour and

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school buses frequently park along Central Park West and other blocks in the vicinity of the Museum.

Most buildings in the study area maintain consistent streetwalls. Occasional buildings are set back, and there are examples of service allevs that break the streetwall. Stoops are common along the side streets. On West 79th Street between Columbus and Amsterdam Avenues, the apartment buildings tend to have basement entrances at partial street level with stairs cut into the sidewalk, because of the hill in this location. Many of the larger apartment buildings on West 77th Street, West 79th Street, West 81st Street, and Columbus Avenue have entrance awnings that extend over the sidewalk to the curbline. Other examples of street furniture in the study area include bike racks, decorative and standard street lighting, parking regulation signs, bus stop signs and shelters, fire hydrants, garbage cans, low protective fences or curbs around street trees, garden strips in front of apartment buildings, mailboxes, and newspaper boxes. Statues are located in front of the New-York Historical Society and at the West 77th Street entrance into Central Park. Street trees are plentiful. Sidewalk cafes are found along Columbus and Amsterdam Avenues, and there are food carts along Central Park West, Columbus Avenue, and West 77th Street in the vicinity of the Museum. Most streets in the study area have parallel parked vehicles, including cars and trucks. There are New York City Transit bus stops on all streets surrounding Theodore Roosevelt Park except West 77th Street.

Buildings

The portion of the Upper West Side within the study area is a predominantly residential neighborhood of row houses, tenements, and apartment buildings. The study area also includes schools, synagogues, churches, and museums. Building heights range from 1 to 28 stories, with mid- and high-rise apartment buildings located along the avenues and Central Park West, the sections of West 81st and West 77th Streets fronting the project site (between Central Park West and Columbus Avenue), and West 79th Street between Columbus and Amsterdam Avenues. The side streets tend to be characterized by row houses. Brick is the predominant façade material on both older and newer buildings. As mentioned above, buildings tend to maintain consistent streetwalls, although some of the taller apartment buildings employ upper floor setbacks. Along the avenues, most buildings contain ground-floor retail.

Columbus Avenue in the study area comprises a mix of tenements, two low-rise schools with paved outdoor recreation areas, large apartment buildings, and low-rise commercial buildings. These buildings present a variety of building heights, materials, and design styles. Many buildings have had ornament removed. The tenements frequently have fire escapes on their avenue façades, and almost all buildings have retail uses at ground level. The blocks on the west side of the avenue facing the project site exhibit a mix of buildings representative of Columbus Avenue between West 72nd and West 86th Streets (the southern and northern boundaries of the study area). Directly across from the project site at the northwest corner of West 79th Street is a 28-story modern, brick apartment building (101 West 79th Street) that is visible for long distances north and south along the avenue (see view 11 of Figure 6-7). This building is massed with a 16-story tower set back above a 12-story base, and there are setbacks and balconies on the uppermost floors. Across West 79th Street, there is a 5-story tenement building at the southwest corner, which has had most of its ornament removed, and an adjacent 18-story modern apartment building at 386 Columbus Avenue. That narrow, brick apartment building rises for its full height without setbacks. At the southwest and northwest corners of West 80th Street, there are similarly designed 10-story apartment buildings (see view 12 of Figure 6-7). Both brick and stone buildings are designed in the Beaux Arts style with rusticated bases and heavy,



View north on Columbus Avenue from West 76th Street 11



View north on Columbus Avenue from West 79th Street 12

overhanging stone ornament, balconies, and cornices. At 424 and 426 Columbus (between West 80th and West 81st Streets) are two 2-story commercial buildings: one is designed in a Classical style with columns and an entablature while the other has a stepped parapet in the Dutch Revival style (see view 13 of **Figure 6-8**).

West 79th Street between Columbus and Amsterdam Avenues is lined by tall apartment buildings with wide street frontages and a few row houses and low-rise apartment buildings (see view 14 of **Figure 6-8 and Figure 6-9**). The 28-story apartment building at 101 West 79th Street (described above) has a frontage of approximately 118 feet on the street, and the western end of this stretch of West 79th Street is anchored at Amsterdam Avenue by a 16-story apartment building at the north corner and a 19-story apartment building at the south corner. In between the avenues, the apartment buildings range in height from 12 to 17 stories. They are all clad in brick and stone and massed without setbacks. The older apartment buildings are decorated in stone or terra cotta ornament in historical revival styles. Multiple apartment buildings have projecting metal or stone balconies, while the building at 130 West 79th Street has recessed balconies. Many of the apartment buildings have entrance awnings that extend over the sidewalk to the curbline, as described above. The row houses and tenements are all set back from the streetwalls created by the apartment buildings. The brick and stone row houses are also designed in historical revival styles.

Apartment buildings and the New-York Historical Society line the block of West 77th Street across from the Museum. The New-York Historical Society is a four-story building designed in a Classical style, clad in granite, and capped by a hipped copper roof. The primary Central Park West façade (which spans the full blockfront between West 76th and West 77th Streets) features a central, narrow pedimented entry raised above the street and reached by a flight of stairs (see view 17 of Figure 6-10). West of the New-York Historical Society, the roof line of the apartment buildings varies. The five larger apartment buildings are 12, 14, 15, 15, and 16 stories tall, a 6-story building is located mid-block, and a 7-story building is located at the corner of Columbus Avenue (see view 18 of Figure 6-10 and view 19 of Figure 6-11). In addition, the 14-story building at 44 West 77th Street has a corner tower with a tall Mansard Roof. The apartment buildings are all clad in brick and stone, and styles range from Neo-Gothic and Neo-Tudor to Neo-Renaissance. The tall apartment buildings have wide street frontages, and all buildings are built to the streetwall. Most buildings have narrow gardens at their base, while the buildings at 44 and 50 West 77th Street have basement areaways enclosed by fences. The one break in the streetwall is from a service alley between 22 and 40 West 77th Street. The primary entrance of each of the apartment buildings, with the exception of the one at Amsterdam Avenue (66 West 77th Street), has an awning that extends over the sidewalk to the curb line. Restaurants are located on the ground floors of the two westernmost buildings at 50 and 66 West 77th Street. The New-York Historical Society also houses a restaurant on West 77th Street.

Facing the project site across West 81st Street is an almost solid row of 11 to 20 story apartment buildings clad in brick and stone (see view 20 of **Figure 6-11**). The one anomaly is the 5-story row house at 33 West 81st Street. The apartment buildings have a decorative style typical of early 20th century apartment buildings like those found on the buildings along West 77th Street facing the project site. Many of the buildings on West 81st Street are of similar Renaissance-inspired design, although one has Moorish motifs. These apartment buildings have wide street frontages and are built to the streetwall. Most buildings have narrow gardens at their base, while the building at 11 West 81st Street has a basement areaway enclosed by fences. The only breaks in the streetwall are from a service alley between 7 and 11 West 81st Street, a service alley between 45 and 51 West 81st Street, and the row house, which is set back from the streetwall



View north on Columbus Avenue from West 80th Street 13



View east on West 79th Street from Amsterdam Avenue 14



View east on West 79th Street from mid-block 15



View east on West 79th Street from mid-block 16



View north on Central Park West from West 76th Street 17



View west on West 77th Street from Central Park West 18



View west on West 77th Street to Columbus Avenue from mid-block 19



View east on West 81st Street from Columbus Avenue 20

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created by the adjacent apartment buildings. Most notable among the apartment buildings is the 20-story Beresford on the corner of Central Park West at 1-7 West 81st Street. With its set back upper floors and three highly visible octagonal towers, it is among the most prominent elements of Central Park West's distinctive skyline. It can be seen from far away to the south on Central Park West over the project site.

Central Park West is notable for the grandly designed, large-scale apartment houses that line its west side (such as the Beresford), as well as Central Park to its east, which gives the street an open, light-filled character (see view 21 of Figure 6-12). The apartment buildings range in height from 12 to 27 stories, and they are designed in styles like Renaissance Revival, Beaux Arts, and Art Deco. Heavy, projecting stone ornament proliferates. At their bases, many of these apartment buildings have garden strips while some have moats or basement areaways. In addition to the Beresford described above, one of the most notable of the apartment buildings is the 27-story San Remo at 145 Central Park West; it spans the full blockfront between West 74th and West 75th Streets and stands out in the skyline with its two cupola-crowned towers. Set amongst the grand apartment buildings is the Universalist Church of New York City, located across West 76th Street from the New-York Historical Society. This Neo-Gothic-style stone church has a prominent pinnacled tower. At the northern end of the study area on Central Park West, there is a 6-story apartment building with a rounded corner at West 83rd Street and a 5story former mansion at West 85th Street. The latter building is set back and above the street behind a stone wall, and it is ornamented with oriel windows, a corner tower, gables, and dormers.

On all the other side streets in the study area not described above, there are hundreds of row houses designed in varied architectural styles interspersed with some tenements and mid-rise apartment buildings (see view 22 of **Figure 6-12**).

Open Space

Theodore Roosevelt Park (described above) and Central Park provide the study area with a large amount of open space. Central Park consists of more than 840 acres in the heart of Manhattan, and it is a setting of meadows, lakes, and forests, in spite of modern intrusions—including the numerous automobiles and buses on the 79th Street transverse. Central Park occupies slightly less than half of the ¼-mile study area, and it creates a wall of trees along the east side of Central Park West. Within the study area, major park features include the northern portion of the Lake and part of the Ramble, the Shakespeare Garden and Swedish Cottage, Belvedere Castle, and the Delacorte Theater. Two playgrounds are located at the park's western edge between West 81st and West 86th Streets—Diana Ross Playground and Mariner's Playground.

Lighting

The project site has exterior and Park lighting, as well as interior lighting within the Weston Pavilion visible from the exterior. From within the Park, evening views of the Weston Pavilion show a bright glow through the glass façade. When the Weston Pavilion is not in use during late hours, non-essential lighting is turned off. After-hour lighting on other areas of the AMNH campus is shown on **Figures 6-13 through 6-16**. As illustrated in **Figure 6-17** and shown in **Table 6-1** below, a survey of existing lighting conditions in the Park was performed around the project site, including measuring illuminance (FC) and color temperature (K) readings at 15 different locations.



View north on Central Park West from West 72nd Street 21



View east on West 80th Street from Columbus Avenue 22



Early Dusk View of Central Park West Museum Entrance



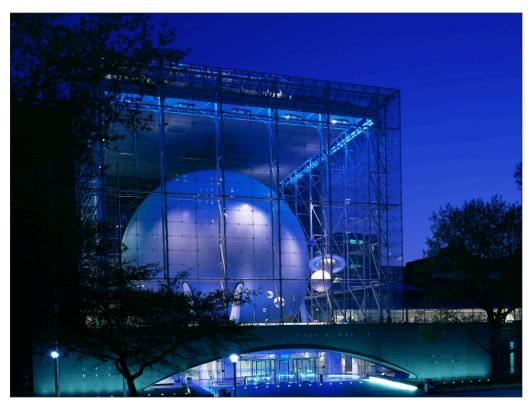
Evening View of West 77th Street Entrance



Night View of West 77th Street Entrance Plaza



Evening View of Rose Center Entrance



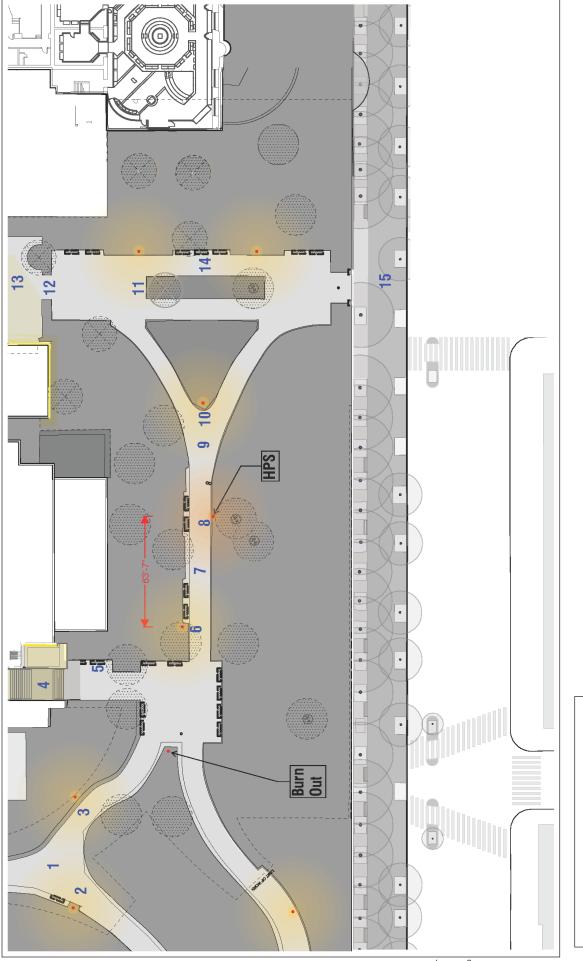
Evening View of Rose Center and portion of Ross Terrace



Evening View of Weston Pavilion







Source: Renfro Design Group

			Existing Lighting Conditions	
Location No.	Description	Meter Direction	Illuminance (FC)	Color Temp. (K)
1	At center of path between two poles	Horizontal	0.3	3253
2	At side of pole	Horizontal	1.6	3686
3	At side of pole	Horizontal	1	3680
4	At stair landing	Horizontal	3.3	3470
5	At bench	Horizontal	0.1	3562
6	At side of pole	Horizontal	0.8	3667
7	At center of path between two poles	Horizontal	0.3	*
8	At side of pole (HPS)	Horizontal	1.5	*
9	At center of path between two poles	Horizontal	0.2	2400
10	At side of pole	Horizontal	0.4	3418
11	At path	Horizontal	0.4	3537
12	At path	Horizontal	0.2	3374
13	At Sculpture	Vertical	0.4	3215
14	At center of path between two poles	Horizontal	0.2	3448
15	At sidewalk	Horizontal	1.5	*

Table 6-1 Existing Lighting Conditions

Notes:

*Color temperature was below meter capability (2,300 K).

One pole is High Pressure Sodium or HPS (emit orange light) while the rest in the area are Metal Halide (emit blue light). Readings taken in January 2017. Conditions were slightly overcast with no rain or snow on the ground. The points along the path that were recorded were not obstructed by any trees. **Source:** Renfro Design Group

The following descriptions of floodlighting or other night time exterior lighting use the terms "illuminance" and "color temperature," which are defined as follows:

- Illuminance describes the measurement of the amount of light falling onto (illuminating) and spreading over a given surface area.
- Color temperature is a way to describe the light appearance provided by a light bulb. It is measured in degrees of Kelvin (K) on a scale from 1,000 to 10,000. At the lower end of the scale from 2000K to 3000K, the light produced is called "warm white" and ranges from orange to yellow-white in appearance. Color temperatures between 3100K and 4500K are referred to as "cool white" or "bright white." Light bulbs within this range will emit a more neutral white light and may even have a slightly blue tint. Above 4500K, the color temperature of light is characterized as "daylight."

Most of the readings of color temperature indicated "cool white" or "bright white" lighting.

VISUAL RESOURCES

In general, views of the project site are short and limited to the immediately surrounding area on Columbus Avenue and West 79th Street. Although West 79th Street aligns with the building site, clear views to the site on the street are short, because the crest of the hill in this area obscures eastward views along most of the street from west of Columbus Avenue (see view 14 of **Figure 6-8**). Further, trees partially obscure views of the building site on West 79th Street. Even in winter without their leaves, sidewalk trees on West 79th Street and Columbus Avenue and trees in Theodore Roosevelt Park along the Columbus Avenue frontage limit views of the

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project site to glimpses among limbs and branches. In addition, many of the apartment buildings on West 79th Street have entrance awnings that extend across the sidewalk to the curbline, furthering obscuring views to the building site (see **Figures 6-9 and 6-18**). West 80th and West 78th Streets do not provide view corridors to the building site, as it does not extend far enough to the north and south. Within Theodore Roosevelt Park, views of the building site are primarily limited to the area along the Columbus Avenue frontage (see view 25 of **Figure 6-19**). From the north side of the park and from West 81st Street, there are some limited views over the Ross Terrace of the upper floors of some of the existing buildings on and surrounding the building site (see view 26 of **Figure 6-19**).

From the south on Columbus Avenue, most views of the project site are blocked by the 5-story Museum building (Building 8) at the southwest corner, as most of the building site is set back from that adjacent building. Glimpses of the site only become available around West 78th Street. In addition, the numerous mature trees within Theodore Roosevelt Park and the street trees on the avenue screen northward views of the building site, even in winter when they do not have leaves (see view 7 of **Figure 6-5**). From the north on Columbus Avenue, views to the building site are more open, because the building site extends beyond the façade of the adjacent Museum building to the north (Building 17). These views from the north are primarily of the Weston Pavilion and adjacent terrace area. However, numerous mature trees in the foreground also screen these views (see **Figures 6-20 and 6-21**). From farther away to the north, intervening buildings lining Columbus Avenue block views to the building site.

Visual resources in the study area include Theodore Roosevelt Park and the Museum, Central Park, views along Central Park West, including of notable buildings such as the Beresford at West 81st Street, and the New-York Historical Society.¹ Theodore Roosevelt Park and the Museum are visible in the view corridors along Central Park West and Columbus Avenue, from the adjacent stretches of West 77th and West 81 Streets, and in eastward views on West 78th, West 79th, and West 80th Streets. On Central Park West and Columbus Avenue, there are long views of Theodore Roosevelt Park, and these views are of trees within the park. On Columbus Avenue, views of the Museum are limited to the immediately surrounding area, because it is set back from the avenue and out of the Columbus Avenue view corridor. At West 76th Street, the southwest corner tower of the Museum becomes visible behind the intervening 7-story building at the southeast corner of West 77th Street and Columbus Avenue (66 West 77th Street). Views of the Museum on Central Park West are available for a longer distance, because the main entrance extends close to the street. In addition, around West 75th Street, the southeast corner tower starts to become visible over the intervening the New-York Historic Society. The Museum dominates views on West 77th Street between Central Park West and Columbus Avenue, although the large number of trees between the Museum façade and the street screen views to some extent. On West 81st Street between Central Park West and Columbus Avenue, views of the Museum are partially screened by trees located within the large expanse of Theodore Roosevelt Park between the Museum and the street. On this stretch of West 81st Street, the Rose Center is the most visually prominent Museum building, although there are views of Ross Terrace, the north facades of buildings behind Ross Terrace (including on the building site, as described above), and the 5-story Building 17 at the northwest corner of the Museum.

¹ As discussed in Chapter 5, "Historic and Cultural Resources," most of the study area is located within the Upper West Side/Central Park West Historic District. In addition, the Museum, New-York Historical Society, Beresford Apartments, and Central Park are New York City Landmarks. Central Park West between West 61st and West 96 Streets is also a Historic District.



View east on West 79th Street close to Columbus Avenue 23



View east on West 79th Street close to Columbus Avenue 24



View to building site from northwest corner of Theodore Roosevelt Park 25



View to Ross Terrace and building site from northeast corner of Theodore Roosevelt Park 26



View northeast on Columbus Avenue from West 75th Street 27



View northeast on Columbus Avenue from West 76th Street 28



View south on Columbus Avenue from West 81st Street 29



View south on Columbus Avenue from West 83rd Street **30**

Central Park is a visual resource within the study area and beyond. Central Park West provides unobstructed views of the dense, mature tree canopy covering Central Park, as well as views into the park. On many of the side streets within the study area, eastward views terminate at Central Park. These views diminish farther west, due to distance and the narrowness of most side streets. Views along Central Park West are also a visual resource; Central Park frames these views on the east, and the wall of grand, apartment buildings along the avenue frames these views on the west. Notable individual visual resources along Central Park West include the New-York Historical Society and the Beresford. Views south continue for long distances to Columbus Circle and beyond.

E. THE FUTURE WITHOUT THE PROPOSED PROJECT

PROJECT SITE

In the No Action condition, the project site is assumed to remain substantially the same as in existing conditions. The Gilder Center would not be constructed, and the Weston Pavilion and the portion of Theodore Roosevelt Park in front of the Weston Pavilion would retain its current design and use.

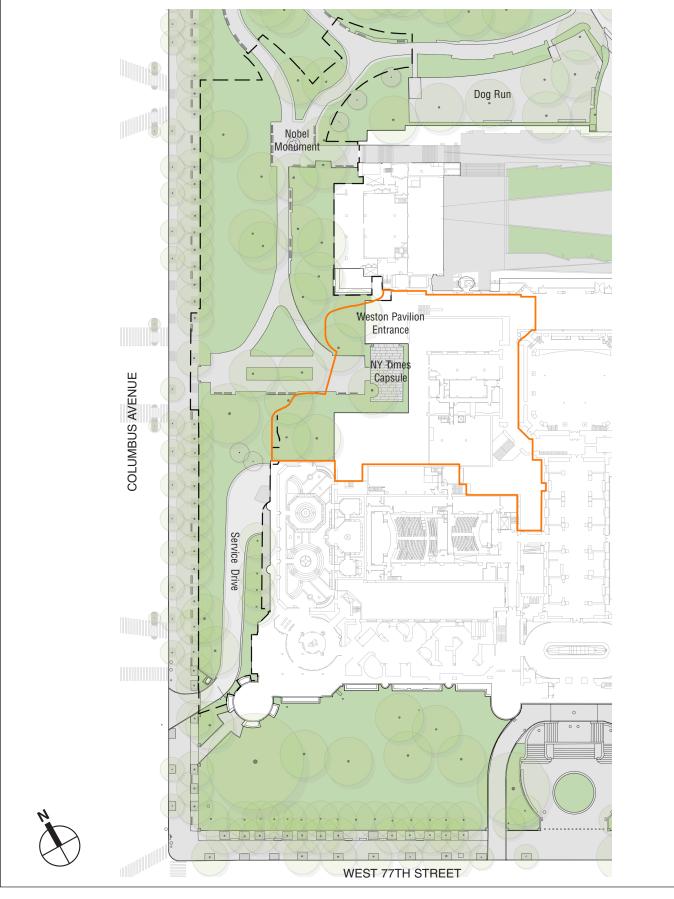
STUDY AREA

There are six projects in the urban design and visual resources study area that are expected to be completed by 2021. (These projects are described in Chapter 2, "Land Use, Zoning, and Public Policy" and shown on Figure 2-3.) None are located on blocks facing the project site; four are located west of Amsterdam Avenue. These six residential projects will range in height from 6 to 19 stories and will be consistent with uses and the range of building heights in the study area. Overall, the six residential buildings are expected to be compatible with the study area's urban design, and none would affect the area's view corridors or visual resources.

F. PROBABLE IMPACTS OF THE PROJECT

PROJECT SITE

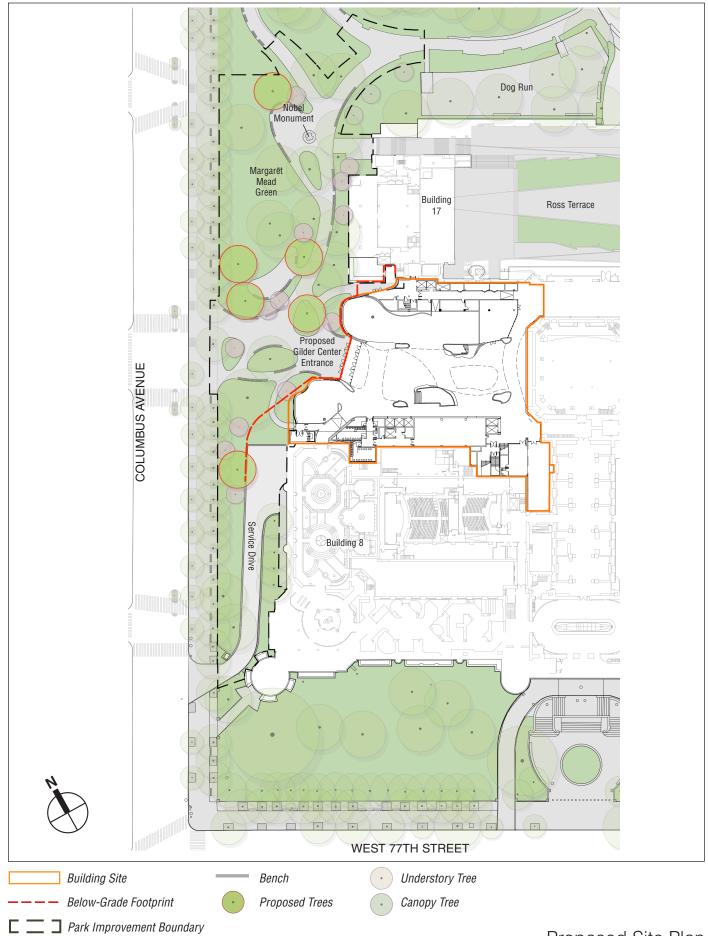
The proposed project would result in a new building, the Gilder Center, on the building site with a more visible and accessible entrance off Columbus Avenue. (See Figure 6-22 for an existing site plan and Figure 6-23 for a proposed site plan.) The Gilder Center would be an approximately 105-foot-tall (5 stories above grade; taking into account mechanical and elevator bulkheads, a portion of the rooftop would reach 115 feet), approximately 203,000-gross-squarefoot addition to the Museum. From Columbus Avenue, visitors would access the building through the Park at grade and enter a central exhibition hall that would link the west side of the Museum to all other parts of the complex. To construct the Gilder Center, three existing buildings within the Museum complex-the Weston Pavilion, Building 15, and Building 15Awould be removed, and a portion of Theodore Roosevelt Park, which includes the terrace in front of the Weston Pavilion and adjacent planted and paved areas, would be occupied by the Gilder Center. The proposed project would result in the loss of approximately 11,600 square feet of open space, but as described above most of the new building footprint lies within the existing footprint of the Museum. In addition, the proposed project would include landscape improvements to an approximately 75,000-square-foot portion of Theodore Roosevelt Park outside of the building site.



Building Site

Park Improvement Boundary

Existing Site Plan Figure 6-22



AMNH Gilder Center for Science, Education, and Innovation

Proposed Site Plan Figure 6-23 The design of the Gilder Center would be in keeping with the Museum's architectural history of constructing buildings in the style of their time, while simultaneously relating to the historic context in form, scale, massing, and materiality. The Gilder Center would be located between buildings of similar height, including Building 8, the Romanesque Revival-style Museum building at the southwest corner of the complex, and Building 17, the 5-story former power house at the northwest corner (see Figure 6-24). The roofline of the Gilder Center would be slightly shorter than Building 8, adjacent to the south, and slightly taller than Building 17, adjacent to the north. As described above, the two buildings flanking the building site are not set equally back from the street, and the Gilder Center would create a transition between their park frontages with an irregular, curving footprint and facade that step back to the northeast. At the southwest corner, the Gilder Center would align with the facade line of Building 8 to the south and would then undulate back to the northeast to align with the frontage of Building 17. A glazed central entry would be flanked by two curving wings, and these curvilinear forms would recall the castellated façade on West 77th Street. The primary, west façade of the Gilder Center would include a mix of glass (with a range of opacity) and granite. The granite is expected to either be Milford pink granite, the granite used for the Theodore Roosevelt Memorial main entry on Central Park West, or granite of a similar type and coloration to Milford pink. The design intent is to unify the Museum's west frontage, relate to the height, scale, and materials of the existing Museum buildings, and feature a curvilinear expression that appears throughout the Museum, while creating a contemporary response to the Museum's diverse architectural styles, massings, and proportions. The secondary north and west facades, which would be visible behind Ross Terrace, would be faced in textured plaster and copper, less formal in design, and more rectilinear. A large window would be located in the east facade.

The Gilder Center would obscure a portion of the newly-restored west façade of Building 1; however this building is mostly blocked from public view from the west by Building 15A, Building 11B, and a modern exterior stair that provides access to the Museum's service yard. However, the proposed Gilder Center design would contain a two-story gallery at its rear southeast corner, adjacent to Building 1. The gallery design would leave the newly-restored west façade of Building 1 exposed in this location and visible to museum visitors circulating through the gallery, which would provide connections to a café in the Gilder Center and other Museum buildings.

As noted above, the proposed project would result in the loss of 11,600 square feet of open space, replacing the existing terrace in front of the Museum, the eastern end of the promenade between the Museum and Columbus Avenue, and some adjacent planted areas (see Figure 6-25 for a rendering of the proposed landscape). To improve the pedestrian entry into the park and the Museum and make it more open and welcoming to the street, the proposed project includes widening the Park entrance and removing the existing fence at that location, reconfiguring the path network in front of the Museum, implementing planting and hardscape improvements, and providing additional benches and trees (see Figure 6-26 for a plan of the proposed landscape with an overlay of the existing landscape plan). Taking into account the improvements associated with the proposed project, the character of the park along Columbus Avenue is expected to be similar to that of the existing paths and landscaped areas, as it would be primarily designed for walking and quiet activities and Museum entry. Given increased attendance, it would be more heavily utilized by Museum visitors and would, therefore, at times be more populated and active. The number of benches would be increased by 15, and the paths and Museum entrance would be designed to be accessible to children, strollers and the mobilityimpaired. In concert with widening the Park entrance at Columbus Avenue and removing the



Elevation View of Proposed Project Figure 6-24





Source: Park Working Group



I

Proposed Landscape with Overlay of Existing Conditions Figure 6-26



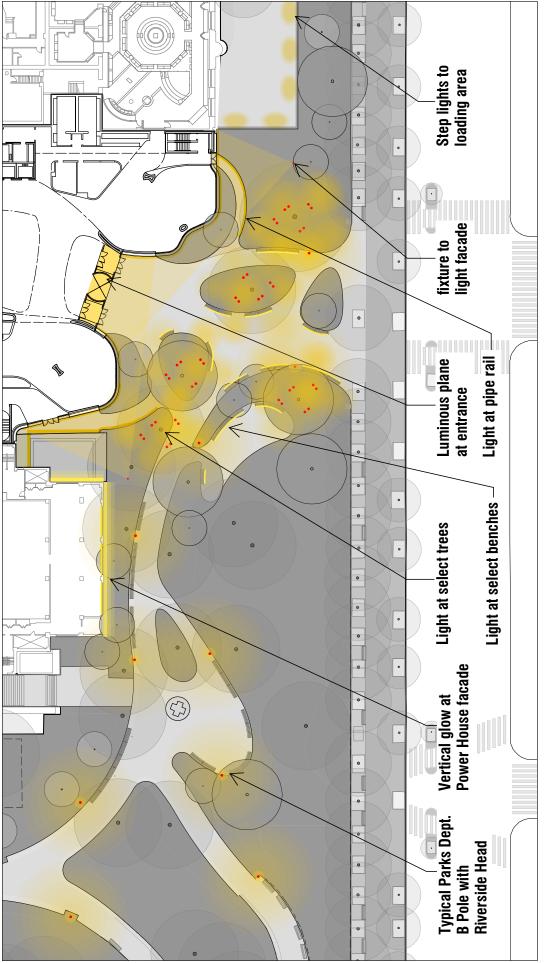
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fence, the promenade would be widened and given softer, curved edges, and the path to the Nobel monument would be realigned in a curve. In addition, the site of the Nobel monument would be transformed from a small, square plaza with multiple intersecting paths into an oblong paved space with benches and a teardrop shaped garden set off from the path system. These path adjustments by the Nobel Monument area are intended to create a gathering space off of the path network with increased seating. The adjacent Margaret Mead Green would be enlarged with a hardscape gathering area with seating that would be away from the path network and the street. It is currently expected that the proposed project would directly affect seven canopy trees in Theodore Roosevelt Park that would be removed and one understory tree that would be relocated. AMNH is developing plans to protect and conserve two trees, a Pin oak and an English elm. Construction would be performed in compliance with an approved tree protection plan and NYC Parks tree protection protocols. Any trees that are removed and cannot be transplanted would be replaced, consistent with NYC Parks rules and regulations, which would include six new canopy trees and thirteen new understory trees that would be planted postconstruction as part of the landscape plan for the western portion of the Park. As part of the proposed project, The New York Times Capsule would be relocated to the entry terrace in front of the Rose Center.

The proposed project would include exterior and park lighting, as well as interior lighting visible from the exterior, consistent with other sides of the Museum complex. The proposed lighting plan has been developed to relate to the Park setting and provide sufficient light for walking. During occupied hours, the windows along the Columbus Avenue façade of the Gilder Center would provide views to the activities happening within, with interior fixtures concealed and shielded from exterior view. After hours, dimmable light sources would allow the Museum to selectively light the interior. The after-hour lighting would be similar to after-hour lighting on other areas of the AMNH campus (see Figures 6-13 through 6-16 for illustrative photographs). Also similar to lighting operations in other AMNH buildings, when the building is not in use during late hours, non-essential lighting would be turned off. From the Ross Terrace, evening views would show a soft glow from the east window of the Gilder Center. Concealed exterior step lights would add a layer of low lighting in certain locations. Views from adjacent buildings could also include a soft glow from the new skylight during evening open hours. In the Park, paths would be illuminated with the same typical park poles already used throughout, but lamped with shielded energy-efficient LED lighting for a uniform neutral color temperature along paths. Additional illumination would be affixed to Building 17 to provide a soft layer of vertical light adjacent to the park path. Lighting on plantings would be kept to a minimum to better define the nighttime outdoor space. All exterior fixtures would be shielded to prevent direct views of the light source, instead allowing visibility through the foreground to the softly glowing building behind. Along the paths from West 79th Street approaching the Gilder Center entrance, additional lighting may be incorporated to provide soft lighting on the ground, including lights on the underside of benches, shielded downlights concealed within trees (focused down, not into the tree itself), and low-level path lighting on secondary side paths. Shielded supplemental lighting would be incorporated into adjacent planting to provide a subtle front light on the façade. See Figure 6-27 for a preliminary landscape lighting plan for the area of Theodore Roosevelt Park that would be improved and re-landscaped. The proposed project is not expected to result in adverse urban design effects to the project site. The Gilder Center would have beneficial urban design effects because it would create a more visible and accessible entrance to the Museum from Columbus Avenue and would fill a gap in the Museum's west frontage by replacing a mix of buildings, several of which have utilitarian or secondary facades, with a contemporary building that matches the roofline and at-grade setbacks of the flanking



Preliminary Landscape Lighting Plan Figure 6-27



gurce: Rentro Design Group

AMNH Gilder Center

Museum buildings. While the proposed Gilder Center would occupy a portion of Theodore Roosevelt Park, the landscaping improvements, described above, would enhance the visual quality and function of this area. The lighting plan would provide lighting for Museum and Park uses in keeping with the surrounding area. Overall, while the proposed project would add a new building to the project site and reduce the amount of park space, it would improve the experience of Museum and park users in this area of Theodore Roosevelt Park.

STUDY AREA

The proposed project would not result in any significant adverse impacts to the urban design or visual resources of the study area, as described more fully below.

URBAN DESIGN

Due to intervening buildings, distance, and the contextual height of the proposed Gilder Center (approximately 105 feet tall; 5 stories above grade; taking into account mechanical and elevator bulkheads a portion of the rooftop would reach 115 feet), the proposed project would only affect the pedestrian experience of the study area along Columbus Avenue and a section of West 79th Street in the vicinity of the project site. It would not affect the pedestrian experience of the areas along the Museum's north, east, and south frontages, or portions of the ¹/₄-mile study area more removed than the vicinity of Columbus Avenue at West 79th Street. While the proposed Gilder Center would be visible behind the Ross Terrace from 81st Street, it would not affect the pedestrian experience along that street. From the north, the Gilder Center would appear as a background Museum building. As the proposed project would fill a gap in the Museum's western frontage on Columbus Avenue, provide a more visible and accessible Museum entrance, and improve the entrance and surrounding landscaping in Theodore Roosevelt Park in front of the Museum, it is expected that the proposed project would have beneficial effects to the urban design and pedestrian experience along Columbus Avenue and within the park at this location, as described above. Overall, the design changes in the park would create a more open and welcoming entrance to the park on Columbus Avenue.

The proposed Gilder Center would be consistent with the height of the flanking buildings, as well as other buildings in the Museum complex like the building that fronts on West 77th Street and the entrance on Central Park West. In addition, the height of the proposed building would be consistent with heights in the study area that range from 2 to 28 stories. As described above, Columbus Avenue directly across from the project site contains several tall apartment buildings (ranging in height from 10 to 28 stories), and West 79th Street between Columbus and Amsterdam Avenues is lined mostly by tall apartment buildings. The proposed building would be set back from Columbus Avenue within Theodore Roosevelt Park at a distance that matches the setback from the street of the flanking buildings. Therefore, the proposed Gilder Center would not adversely affect the built environment's arrangement, appearance, or functionality, and the proposed building would be in keeping with the urban design character of the surrounding portion of the Upper West Side and would not adversely affect a pedestrian's experience of the urban design characteristics of the project site.

VISUAL RESOURCES

The proposed Gilder Center would not obstruct any view corridors in the study area nor would it obstruct views of any visual resources. The proposed building would only be seen in the Columbus Avenue and West 79th Street view corridors. It would not be visible along Central

Park West, nor would it be visible from most locations within the study area due to intervening buildings. As the Gilder Center would align with the at-grade setback of the adjacent building to the south (Building 8) and would undulate back from that point to the facade line of Building 17, it would have limited visibility in views northward on Columbus Avenue. From the north on Columbus Avenue and from within the northwest corner of Theodore Roosevelt Park, the Gilder Center would be visible, as it would extend beyond the façade of the adjacent former power house (Building 17). However, in these views it would be set back within the park and aligned with the at-grade setback of Building 8 and the Building 17 setback farther east, and it would be seen as one component of the Museum complex. Further, trees within Theodore Roosevelt Park would partially screen these views of the Gilder Center. Eastward views on West 79th Street would terminate at the Gilder Center and the improved park entrance, like the existing views terminate at the existing park entrance and buildings on the project site. The improved entrance to the park and the associated landscaping improvements have been designed so that views on West 79th Street would be primarily of the park and not of the new building. These views would include two trees, a pin oak, and an English elm, that the Museum modified the design of the project with the goal of protecting and conserving. In any case, the views on West 79th Street to the new park entrance and Gilder Center would be short due to the topography of the street. In all views on Columbus Avenue and West 79th Street, street trees and trees within Theodore Roosevelt Park would buffer views of the Gilder Center, as trees currently buffer views of the building site (see Figures 6-28 and 6-29 for illustrative renderings of the Gilder Center in summer and winter). Further, existing sidewalk awnings would obstruct views on West 79th Street. There would be an additional view of the Gilder Center within the study area-from West 81st Street and the north side of Theodore Roosevelt Park over Ross Terrace. As existing buildings on the building site are visible from within the park over the elevated open space, the new building would also be visible. However, in these views, the Gilder Center would be seen as a background building and part of the larger Museum complex.

As described above, the visual resources in the study area include Theodore Roosevelt Park and the Museum, Central Park, views along Central Park West, including of notable buildings such as the Beresford at West 81st Street, and the New-York Historical Society. The proposed project would have no visual relationship with Central Park, the views along Central Park West, or the New-York Historical Society and would, therefore, have no effect on these visual resources. For a complete discussion of potential visual impacts from the proposed project on surrounding architectural resources, see Chapter 5, "Historic and Cultural Resources;" however, that chapter concludes that the proposed project would not be anticipated to have any significant adverse visual impacts on architectural resources in the study area. LPC issued its Binding Report on November 2, 2016, approving the proposed design of the Gilder Center and modifications to the existing Museum complex and site, subject to LPC's further review and approval of final Department of Buildings (DOB) filing drawings (see **Appendix A-3**). LPC's Binding Report is summarized in Chapter 5, "Historic and Cultural Resources."

As discussed above, and as more fully described in Chapter 5, "Historic and Cultural Resources," the proposed project would not have any adverse impacts on the characteristics of the Museum or Theodore Roosevelt Park that make them visual resources. The proposed Gilder Center would have no visual relationship with the Museum frontages on Central Park West and West 77th Street, and views of those frontages would remain as in existing conditions. As seen from Columbus Avenue and West 81st Street, the proposed Gilder Center would not obscure significant Museum façades or façades that have not previously been obscured or partially obscured from view, as described more fully in Chapter 5, "Historic and Cultural Resources."

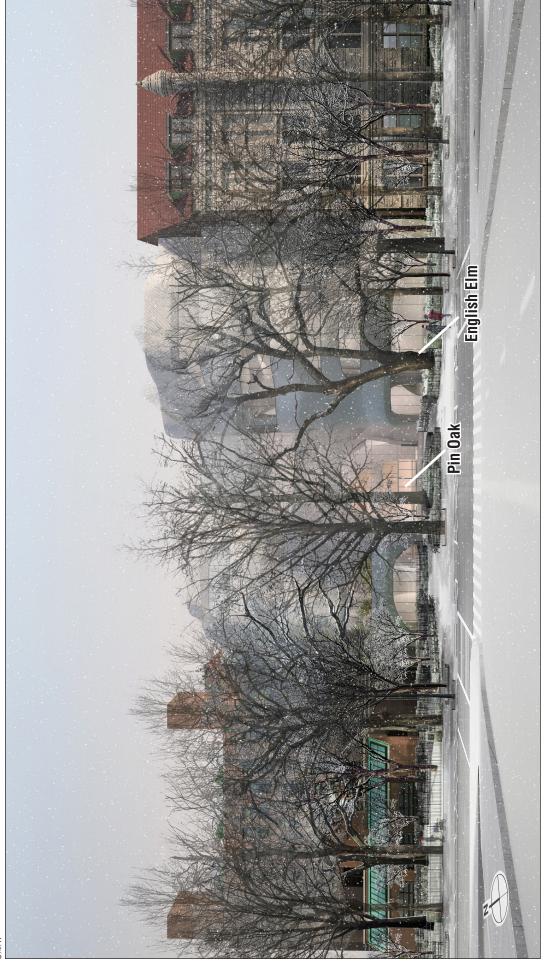


Note: Subsequent to initial design effort, below-grade service area and service drive modified with goal of preserving Pin Oak and English Elm labeled above.



Illustrative Rendering of Proposed Project (Winter) Figure 6-29

Note: Subsequent to initial design effort, below-grade service area and service drive modified with goal of preserving Pin Oak and English Elm labeled above.



On Columbus Avenue, the proposed building would replace a gap in the Museum's western frontage, and it has been designed to maintain the height, scale, massing, and at-grade setbacks of the adjacent buildings. The secondary north and east facades would also be in keeping with the form, material, scale, and massing of the adjacent internal Museum buildings. Using setbacks, the secondary facades would transition between the heights of the adjacent buildings, and the less formal design of these façades would be in keeping with the utilitarian façades of the internal buildings that can been seen over Ross Terrace. The proposed Gilder Center would have a contemporary design, but the Museum does not have a cohesive design across all frontages, and the contemporary design of the Rose Center has become an iconic component of the Museum since its construction in 2000. Further, the curvilinear forms of the Gilder Center would reference the use of curvilinear forms throughout the Museum, such as the towers on West 77th Street and the spheres at the Rose Center. In addition, the new building would provide a more visible western entrance to the Museum, accompanied with landscape improvements. The proposed lighting plan has been developed to relate to the Park setting and provide sufficient light for walking. The plan would be in keeping with the surrounding area and consistent with other sides of the Museum complex. As discussed in Chapter 5, "Historic and Cultural Resource," the demolition of Building 15 would result in a significant adverse architectural resources impact, but since Building 15 presents a non-descript, stucco-faced façade to Theodore Roosevelt Park, demolition of the building would not result in a significant adverse impact to the Museum as a visual resource. Therefore, the proposed project would not result in adverse visual impacts to the Museum.

While the proposed project would alter Theodore Roosevelt Park along Columbus Avenue, it would not change the park's overall character or affect the large section of the park on the north side of the Museum. The affected section of the park would remain an entrance to the Museum and an area for walking and quiet activities. As described above, the entrance into the park and the area in front of the Museum would be widened to improve accessibility, the existing fence would be removed, path improvements would be made, gathering spaces would be created, the number of benches would be increased, and trees would be replanted to replace those that would be removed to accommodate the proposed project. The setting of the Nobel monument would be expanded and softened with a curved footprint and a new benches and a garden. While *The New York Times Capsule* would be removed, it would be relocated within the park in front of the entrance to the Rose Center. Overall, the proposed project would not result in adverse visual impacts to Theodore Roosevelt Park.