



City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT FULL FORM
 Please fill out, print and submit to the appropriate agency (see instructions)

PART I: GENERAL INFORMATION			
PROJECT NAME			
1. Reference Numbers			
CEQR REFERENCE NUMBER (To Be Assigned by Lead Agency) 13DCP083M		BSA REFERENCE NUMBER (If Applicable)	
ULURP REFERENCE NUMBER (If Applicable)		OTHER REFERENCE NUMBER(S) (If Applicable) (e.g., Legislative Intro, CAPA, etc.)	
2a. Lead Agency Information		2b. Applicant Information	
NAME OF LEAD AGENCY NYC Department of City Planning		NAME OF APPLICANT NYC Department of Cultural Affairs	
NAME OF LEAD AGENCY CONTACT PERSON Frank Ruchala, Manhattan Office		NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Kate D. Levin, Commissioner	
ADDRESS 22 Reade Street		ADDRESS 31 Chambers Street	
CITY New York	STATE NY	CITY New York	STATE NY
ZIP 10007		ZIP 10007	
TELEPHONE 212-720-3436	FAX 212-720-3488	TELEPHONE 212-513-9300	FAX
EMAIL ADDRESS fruchal@planning.nyc.gov		EMAIL ADDRESS	
3. Action Classification and Type			
SEQRA Classification			
<input checked="" type="checkbox"/> UNLISTED <input type="checkbox"/> TYPE I; SPECIFY CATEGORY (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended):			
Action Type (refer to Chapter 2, "Establishing the Analysis Framework" for guidance)			
<input type="checkbox"/> LOCALIZED ACTION, SITE SPECIFIC <input checked="" type="checkbox"/> LOCALIZED ACTION, SMALL AREA <input type="checkbox"/> GENERIC ACTION			
4. Project Description:			
The proposed action would result in the development of the Culture Shed, a cultural facility to be developed at the southwestern end of the Eastern Rail Yard site. The Culture Shed would offer exhibits, events, expositions, presentations, festivals and fairs related to visual arts, performing arts, culinary arts, literature, journalism, broadcasting, crafts, technology, fashion and design. The Culture Shed would be located within a fixed building (the "Culture Shed Building") of approximately 179,141 gsf, with a retractable shed (the "Shed Portion") that would be deployed within the plaza to the east of the Culture Shed Building (the "Culture Facility Plaza") to provide approximately 19,054 gsf of additional space for exhibitions and other activities, for a total of 198,195 gsf (See page 1a). ¹			
4a. Project Location: Single Site (for a project at a single site, complete all the information below)			
ADDRESS N/A		NEIGHBORHOOD NAME Hudson Yards	
TAX BLOCK AND LOT Block 702, Lot 1 and Lot 50; and Block 704, Lots 1, 5, and 6		BOROUGH Manhattan	COMMUNITY DISTRICT 4
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Southwest quadrant of the superblock bounded by West 30th and West 33rd Streets and Tenth and Eleventh Avenues.			
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY C6-4/HY ZONING SECTIONAL MAP NO: 8b			
4b. Project Location: Multiple Sites (Provide a description of the size of the project area in both City Blocks and Lots. If the project would apply to the entire city or to areas that are so extensive that a site-specific description is not appropriate or practicable, describe the area of the project, including bounding streets, etc.)			
5. REQUIRED ACTIONS OR APPROVALS (check all that apply)			
City Planning Commission:		Board of Standards and Appeals:	
<input type="checkbox"/> CITY MAP AMENDMENT	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/> SPECIAL PERMIT	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
<input type="checkbox"/> ZONING MAP AMENDMENT	<input type="checkbox"/> ZONING CERTIFICATION	EXPIRATION DATE MONTH DAY YEAR	
<input checked="" type="checkbox"/> ZONING TEXT AMENDMENT	<input type="checkbox"/> ZONING AUTHORIZATION	<input type="checkbox"/> VARIANCE (USE)	
<input type="checkbox"/> UNIFORM LAND USE REVIEW PROCEDURE (ULURP)	<input type="checkbox"/> HOUSING PLAN & PROJECT	<input type="checkbox"/> VARIANCE (BULK)	
<input type="checkbox"/> CONCESSION	<input type="checkbox"/> SITE SELECTION—PUBLIC FACILITY	SPECIFY AFFECTED SECTION(S) OF THE ZONING RESOLUTION	
<input type="checkbox"/> UDAAP	<input type="checkbox"/> FRANCHISE		
<input type="checkbox"/> REVOCABLE CONSENT	<input type="checkbox"/> DISPOSITION—REAL PROPERTY		
ZONING SPECIAL PERMIT, SPECIFY TYPE			
<input type="checkbox"/> MODIFICATION OF			
<input type="checkbox"/> RENEWAL OF			
<input type="checkbox"/> OTHER			
Department of Environmental Protection: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			

¹ As described below, the Culture Facility Plaza would be slightly smaller (17,758 gsf) than the gsf of the deployed Shed portion (19,054 gsf), due to the space that would be occupied by the eastern façade assembly (including structure and sliding doors) when the Shed portion is not deployed.

4. PROJECT DESCRIPTION

INTRODUCTION

The applicant proposes the development of a cultural facility (the “Culture Shed” or the “proposed project”) at the southwestern end of the Eastern Rail Yards, between West 30th and West 31st Streets, and between Tenth and Eleventh Avenues (Block 702 Lots 1 and 50 and Block 704, Lots 1, 5, and 6). The Culture Shed would offer exhibits, events, expositions, presentations, festivals and fairs related to visual arts, performing arts, culinary arts, literature, journalism, broadcasting, crafts, technology, fashion and design. The Culture Shed would be located within a fixed building (the “Culture Shed Building”), with a retractable shed (the “Shed Portion”) that would be deployed within a plaza to the east of the Culture Shed Building to provide additional space for exhibitions and other activities. The plaza, with a lot area of approximately 17,758 gross square feet (gsf) (the “Culture Facility Plaza”) would be developed to the east of the Culture Shed Building (See **Figure 8**, below). When the Shed Portion is not deployed, the Culture Facility Plaza would be used for passive recreation, as well as a variety of activities related to the Culture Shed that would be open to the public.

BACKGROUND AND PLANNING CONTEXT

The 2004 Hudson Yards Rezoning Final Generic Environmental Impact Statement (FGEIS) included a development plan for the Eastern Rail Yard Section of the Long Island Rail Road’s (LIRR) John D. Caemmerer West Side Yard. The rezoning allowed for the ERY to be developed with approximately 6.6 million gsf of mixed-use development, including office, residential, hotel, retail, cultural and parking facilities, and public open space. This original plan included a 100,000-gsf Cultural Facility on the Eastern Rail Yards site. This development plan was later modified, and the 2009 FEIS prepared for the amendment to Hudson Yards allowing for development of the Western Rail Yard anticipated a cultural facility of up to 200,000 gsf on the southwestern portion of the ERY site (See **Figure 9**, below).

Metropolitan Transportation Authority (MTA), along with the Triborough Bridge and Tunnel Authority and the Long Island Rail Road Company, and the City of New York are parties to the 2006 Rail Yards Agreement, which was supplemented by a 2007 Memorandum Of Understanding (MOU) and a 2010 amended MOU regarding the ERY site. The 2007 MOU designated 200,000 sf of zoning floor area on the ERY site for a Cultural Facility. As explained above, this amount was analyzed in the 2009 FEIS as 200,000 sf of gross floor area. The 2010 MOU provided that 100,000 zoning square feet (zsf) on a footprint of approximately 21,625 sf be reserved on the ERY site for the Cultural Facility. As explained below, for the purposes of the EAS, a 125,000-gsf Cultural Facility (based on the 100,000-zsf Cultural Facility described in the 2010 MOU, plus mechanical space) is assumed to be the No Action condition.

In order to develop the Culture Shed according to the proposed site plan and including the proposed design features (a moveable roof that allows for additional enclosed space), zoning actions are required (collectively, the “Proposed Action”), which are the basis for environmental assessment in this EAS.

DESCRIPTION OF THE PROPOSED PROJECT

As described above, The Culture Shed would be located within a fixed building (the “Culture Shed Building”), with a retractable shed (the “Shed Portion”) that would be deployed within a plaza to the east of the Culture Shed Building to provide additional space for exhibitions and other activities. Tower D, an approximately 814-foot tall residential building, will be developed immediately west of and abutting the proposed Culture Shed Building by the developer of the balance of the Eastern Rail Yard. Tower D would contain back office and similar space for the proposed Culture Shed, and would share mechanical space with the proposed project. The Culture Shed Building will contain approximately 179,141 gsf (80,587 sf of zoning floor area), and the Shed portion, when deployed, would add 19,054 gsf (0 sf of zoning floor area),

for a total of 198,195 gsf.¹ Certain spaces within the Culture Shed facility, i.e., the space below the plaza level, the Culture Facility Plaza itself under the deployed shed, and the space within Tower D, would be exempted from the Zoning Resolution definition of floor area. These exempted spaces would be similar to floor space that is exempt from the definition of floor area under the Zoning Resolution: space entirely below the plaza level would be similar to cellar space below grade; the occasional covering by the deployed shed would not be a permanent use; and space in Tower D would be support space that is similar to the function of space that is exempted from floor area under the Zoning Resolution. The Culture Shed Building is expected to be 107 feet tall, and the Shed Portion, when deployed would be 125 feet tall (both heights relative to the plaza level at elevation of 40 feet) (See **Figures 8, 10, and 11**, below).

A Culture Facility Plaza with a lot area of approximately 17,758 gsf would be developed to the east of the Culture Shed Building. When the Shed Portion is not deployed, the Culture Facility Plaza would be used for a variety of activities that would be open to the public. East of the Culture Facility Plaza would be the connection to the High Line, a required public access area with a minimum width of 60 feet.

The facility itself is core to the purpose of the Culture Shed: it is a flexible structure that can expand and contract as necessary to create a multi-purpose venue that embodies and celebrates innovation, collaboration, and cross-pollination in the creative sector. Community programming, including events such as film screenings and concerts, is also an essential part of the Applicant's mission. Culture Shed will produce and present a full calendar of events in its architecturally dynamic spaces that include galleries designed to museum standards, as well as flexible spaces to accommodate a range of performance disciplines and iconic New York City events such as Fashion Week (See **Figure 11**, below).

FUTURE WITHOUT THE PROPOSED ACTION

It is assumed for purposes of this EAS that, absent the proposed action, the City would facilitate the development of the ERY site according to the program analyzed in the 2009 Western Rail Yard FEIS, with changes to the Cultural Facility site described in the 2010 MOU. Thus, in the No Action condition, it is assumed that the ERY site would include the same as-of-right residential and commercial development, and would include a 125,000-gsf (100,000-zsf, plus mechanical space), 190-foot tall artistic facility and cultural center dedicated to the development and presentation of the visual and performing arts (the "No Action Cultural Facility").² The No Action Cultural Facility would not be contiguous to Tower D, but instead would be located on a footprint between ERY Tower D to the west and Tower C to the east, with public open space corridors between the No Action Cultural Facility and both Tower D and Tower C. The open space corridor between the No Action Cultural Facility and Tower C—the connection to the High Line—would be in the same location as in the With Action condition, but would have a minimum width of 80 feet. The No Action Cultural Facility would conform to current provisions of the Zoning Resolution.

DESCRIPTION OF THE PROPOSED ACTION

The proposed project would require a text amendment of Article IX, Chapter 3 of the Zoning Resolution (Special Hudson Yards District) to permit the construction of the Culture Shed within Eastern Rail Yard Subarea A1. The proposed Culture Shed would be a unique facility that combines various traditional arts and culture uses—such as exhibitions of visual arts and crafts and performances of performing arts—with non traditional ones, such as exhibitions, presentations and events

¹ The Culture Facility Plaza would be slightly smaller (17,758 gsf) than the gsf of the deployed Shed portion (19,054 gsf), due to the space that would be occupied by the eastern façade assembly (including structure and sliding doors) when the Shed portion is not deployed.

² The gross square footage of the No Action Cultural Facility was calculated by assuming a 25 percent zoning floor area to gross floor area conversion factor, based on similar projects, including the planned new building for the Whitney Museum of American Art, at Washington Street and Gansevoort Street. The height of the No Action Cultural Facility was assumed to be the height of the ERY Cultural Facility analyzed in the 2009 Western Rail Yard FEIS. The No Action Cultural Facility, while taller than the proposed Culture Shed, has less gross floor area based on allocation of space and use. In addition, the proposed Culture Shed adds usable space below the plaza level and below the High Line along West 30th Street.

related to technology and fashion, which are at the intersection of arts, design and commerce. As the Zoning Resolution does not currently recognize a use of this type, it is necessary to create a definition in the proposed zoning text. The proposed text amendment would allow the Culture Shed to be treated as a community facility use, for the purposes of most provisions of the Zoning Resolution, with the exception of certain provisions related to floor area and accessory signage. All of the proposed modifications are described below:

- Modify ZR Section 93-01 and ZR Section 93-101 to establish a definition for the ERY Culture Festival and Exhibition Facility that would allow all of the activities proposed by Culture Shed and permit them to be treated as community facility uses.
- Modify ZR Section 93-17(a) to allow signs on three sides of the Culture Shed, increase the maximum amount of permitted signage, and allow the use of banners, similar to other community facility uses.
- Modify ZR Section 93-21(b)(1) to allow certain portions of the Culture Shed project to be exempted from the definition of floor area.
- Modify ZR Section 93-514(a) with respect to the location of the cultural facility.
- Modify ZR Section 93-71 to designate a new open space, the Culture Facility Plaza, that would be considered open space and open to the sky for purposes of meeting the minimum required open space standards in Subarea A1, including at such times when the shed is deployed.
- Modify ZR Section 93-71(f) to reduce the minimum width of the defined “Connection to High Line” (ZR Section 93-71(e)) from 80 feet to a minimum of 60 feet, while maintaining a clear height for the connection to the High Line of at least 60 feet. Cantilevering of the Culture Shed over the connection to the High Line at a height above 60 feet would be restricted, and limited to no more than a limiting plane 14 degrees east of the vertical extension of the western boundary of the connection to the High Line, measured from the intersection of such vertical extension with the 60 foot clear height at the western boundary of the connection to the High Line.
- Modify ZR Section 93-70 to require the Culture Facility Plaza to be constructed prior to issuance of a TCO for the Culture Shed Building.

Other City Approvals: YES NO

<input type="checkbox"/> LEGISLATION	<input type="checkbox"/> RULEMAKING
<input type="checkbox"/> FUNDING OF CONSTRUCTION; SPECIFY	<input type="checkbox"/> CONSTRUCTION OF PUBLIC FACILITIES
<input type="checkbox"/> POLICY OR PLAN; SPECIFY	<input type="checkbox"/> FUNDING OR PROGRAMS; SPECIFY
<input type="checkbox"/> LANDMARKS PRESERVATION COMMISSION APPROVAL (not subject to CEQR)	<input type="checkbox"/> PERMITS; SPECIFY
<input type="checkbox"/> 384(B)(4) APPROVAL	<input type="checkbox"/> OTHER; EXPLAIN
<input type="checkbox"/> PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMD) (not subject to CEQR)	

6. State or Federal Actions/Approvals/Funding: YES NO IF "YES," IDENTIFY

7. Site Description: Except where otherwise indicated, provide the following information with regard to the directly affected area. The directly affected area consists of the project site and the area subject to any change in regulatory controls.

GRAPHICS The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas, and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11x17 inches in size and must be folded to 8.5x11 inches for submission. **See Figures 1 through 7.**

<input checked="" type="checkbox"/> Site location map	<input checked="" type="checkbox"/> Zoning map	<input checked="" type="checkbox"/> Photographs of the project site taken within 6 months of EAS submission and keyed to the site location map
<input checked="" type="checkbox"/> Sanborn or other land use map	<input checked="" type="checkbox"/> Tax map	<input type="checkbox"/> For large areas or multiple sites, a GIS shape file that defines the project sites

PHYSICAL SETTING (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 38,280 (Culture Shed site only)	Type of waterbody and surface area (sq. ft.): N/A	Roads, building and other paved surfaces (sq. ft.): 38,280 (Culture Shed site only)
Other, describe (sq. ft.):		

8. Physical Dimensions and Scale of Project (if the project affects multiple sites, provide the total development below facilitated by the action)

Size of project to be developed: **198,195** (gross sq. ft.)

Does the proposed project involve changes in zoning on one or more sites? YES NO

If "Yes," identify the total square feet owned or controlled by the applicant: _____ Total square feet of non-applicant owned development: _____

Does the proposed project involve in-ground excavation or subsurface disturbance, including but not limited to foundation work, pilings, utility lines, or grading? YES NO

If "Yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known):

Area: _____ sq. ft. (width x length) Volume: _____ cubic feet (width x length x depth)

Does the proposed project increase the population of residents and/or on-site workers? YES NO Number of additional residents? _____ Number of additional workers? **331 FTE**

Provide a brief explanation of how these numbers were determined:
Employment estimate provided by the applicant; FTE calculated based on 54 full time employees plus 1,845 contract/seasonal workers and vendors who are assumed to work 15 percent of the year. (Source: Culture Shed Inc.)

Does the project create new open space? YES NO If Yes: _____ (sq. ft.)

Using Table 14-1, estimate the project's projected operation solid waste generation, if applicable: **4,303¹** (pounds per week)

Using energy modeling or Table 15-1, estimate the project's projected energy use: **42.87 billion²** (annual BTUs)

9. Analysis Year CEQR Technical Manual, Chapter 2

ANTICIPATED BUILD YEAR (DATE THE PROJECT WOULD BE COMPLETED AND OPERATIONAL): 2017	ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 27-36
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IF MULTIPLE PHASES, HOW MANY PHASES:
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:	

10. What is the Predominant Land Use in Vicinity of Project? (Check all that apply)

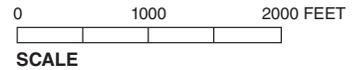
<input checked="" type="checkbox"/> RESIDENTIAL	<input checked="" type="checkbox"/> MANUFACTURING	<input checked="" type="checkbox"/> COMMERCIAL	<input checked="" type="checkbox"/> PARK/FOREST/OPEN SPACE	<input checked="" type="checkbox"/> OTHER, Describe: Parking, institutional, transportation/utility
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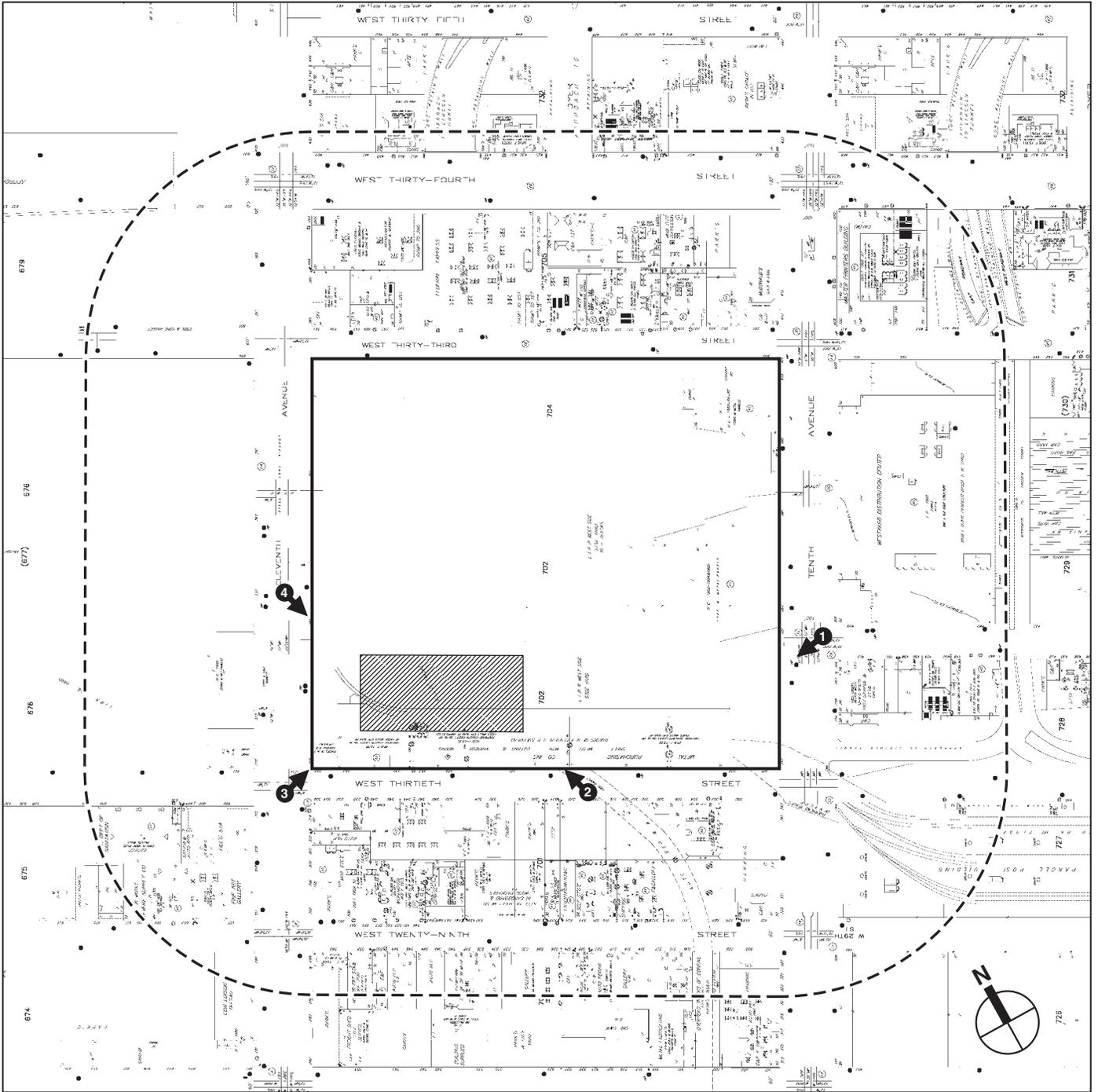
¹ Estimated solid waste generation calculated using the rate for commercial office buildings and the employee estimate for commercial office buildings (13 pounds per week per employee X 331 employees).

² Estimated energy use calculated using the rate for commercial buildings (216.3 annual MBtu/sf X 198,195 gsf).



-  Culture Shed Site
-  Eastern Rail Yard

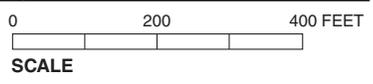




-  Culture Shed Site
-  Eastern Rail Yard

 Study Area Boundary (400-Foot Perimeter)

 Photograph View Direction and Reference Number
(See Figures 3 and 4 for Photographs)





View looking west from West 31st Street and Tenth Avenue 1



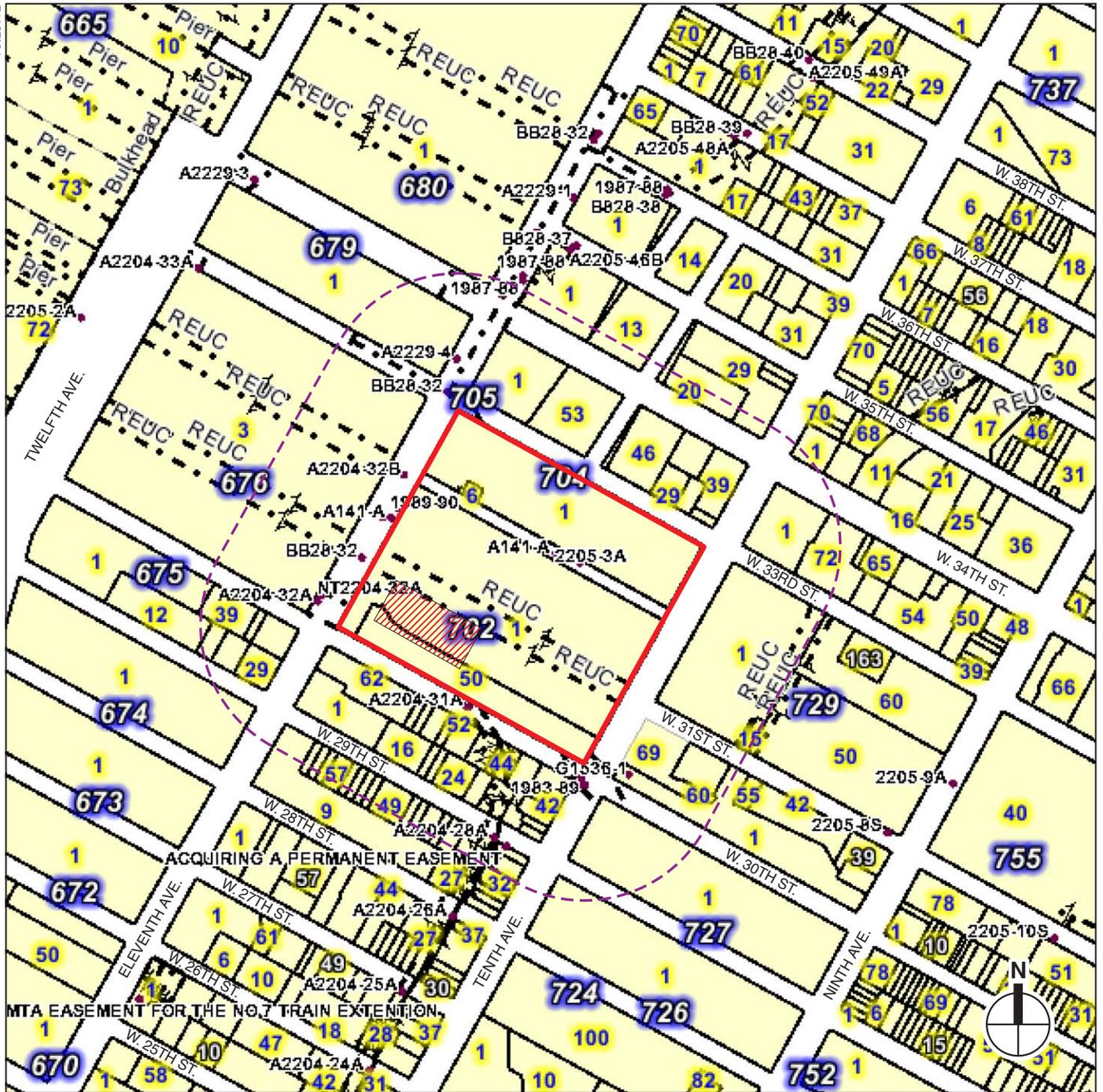
View looking northwest from the terminus of the High Line at West 30th Street 2



View looking northeast from West 30th Street and Eleventh Avenue 3

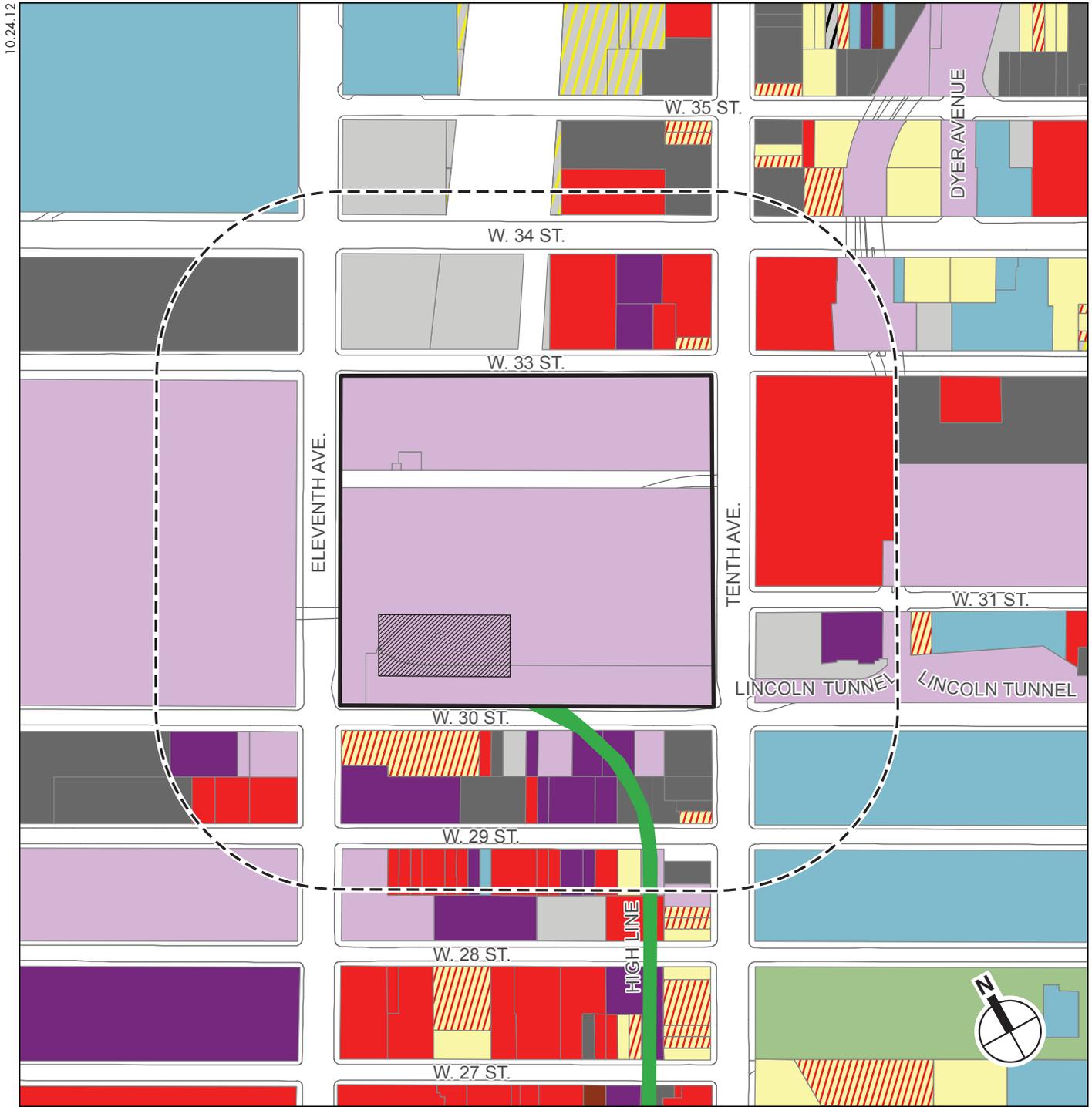


View looking southeast from Eleventh Avenue between West 30th and West 33rd Streets 4

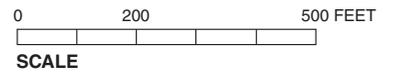


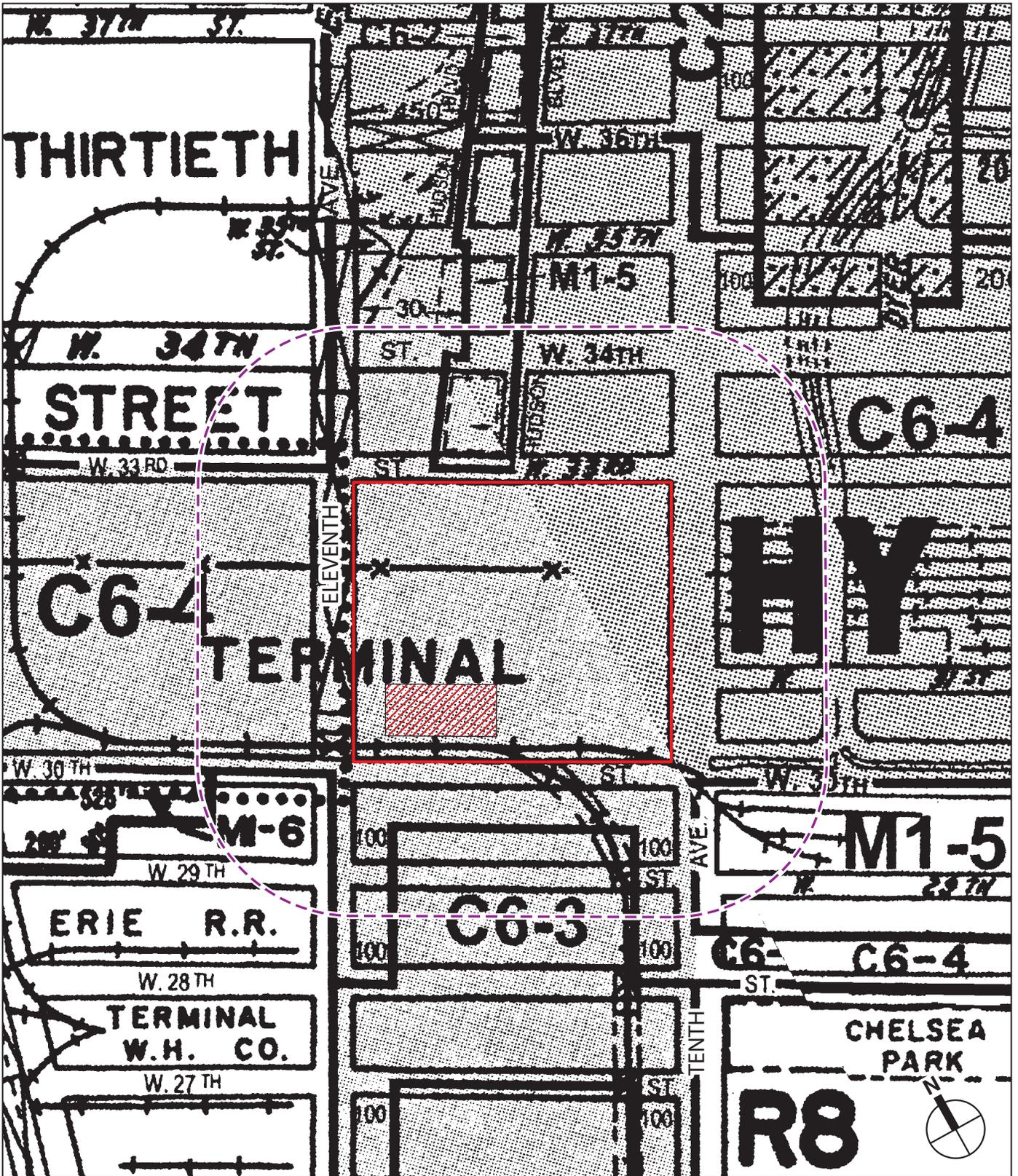
-  Culture Shed Site
-  Eastern Rail Yard
-  Study Area Boundary (400-Foot Perimeter)
- 704** Block Number
- 1** Lot Number





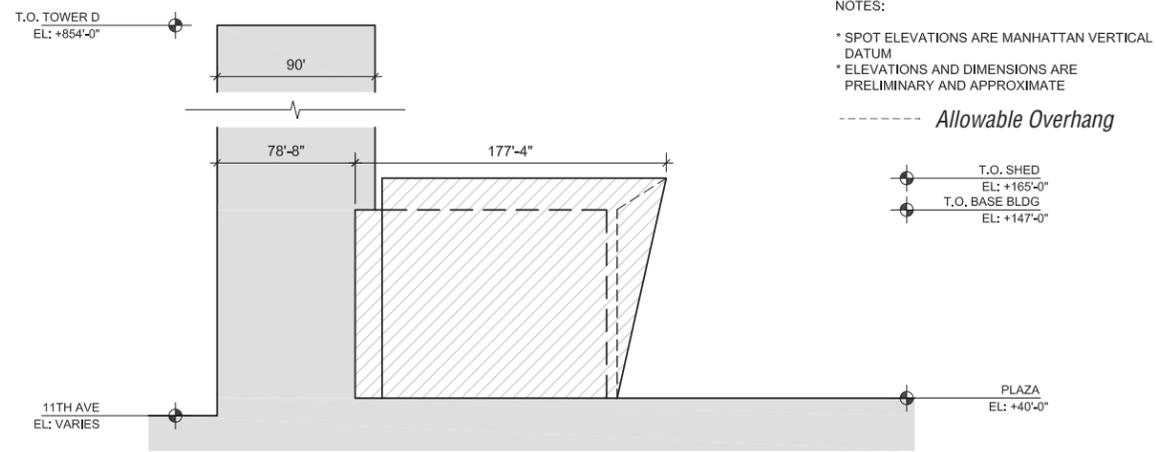
- | | |
|--|--|
|  Culture Shed Site |  Public Facilities and Institutions |
|  Eastern Rail Yard |  Industrial and Manufacturing |
|  Study Area Boundary (400-Foot Perimeter) |  Open Space and Outdoor Recreation |
|  Residential |  Parking Facilities |
|  Residential with Commercial Below |  Transportation and Utility |
|  Commercial and Office Buildings |  Vacant Land |
|  Hotels |  Vacant Building |
| |  Under Construction |



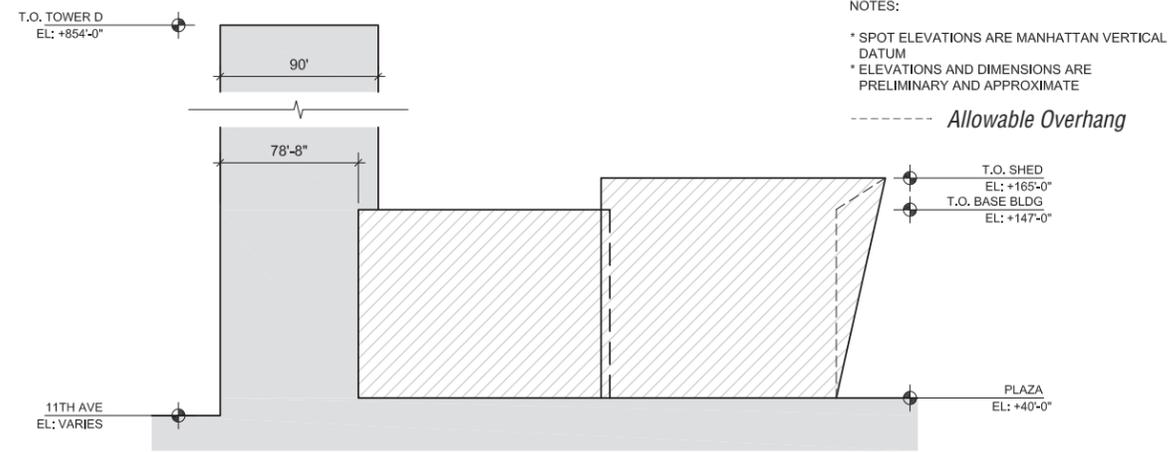


-  Culture Shed Site
-  Eastern Rail Yard
-  Study Area Boundary (400-Foot Perimeter)
-  Zoning District Boundary
-  C2-5 Overlay
-  Special-Purpose District

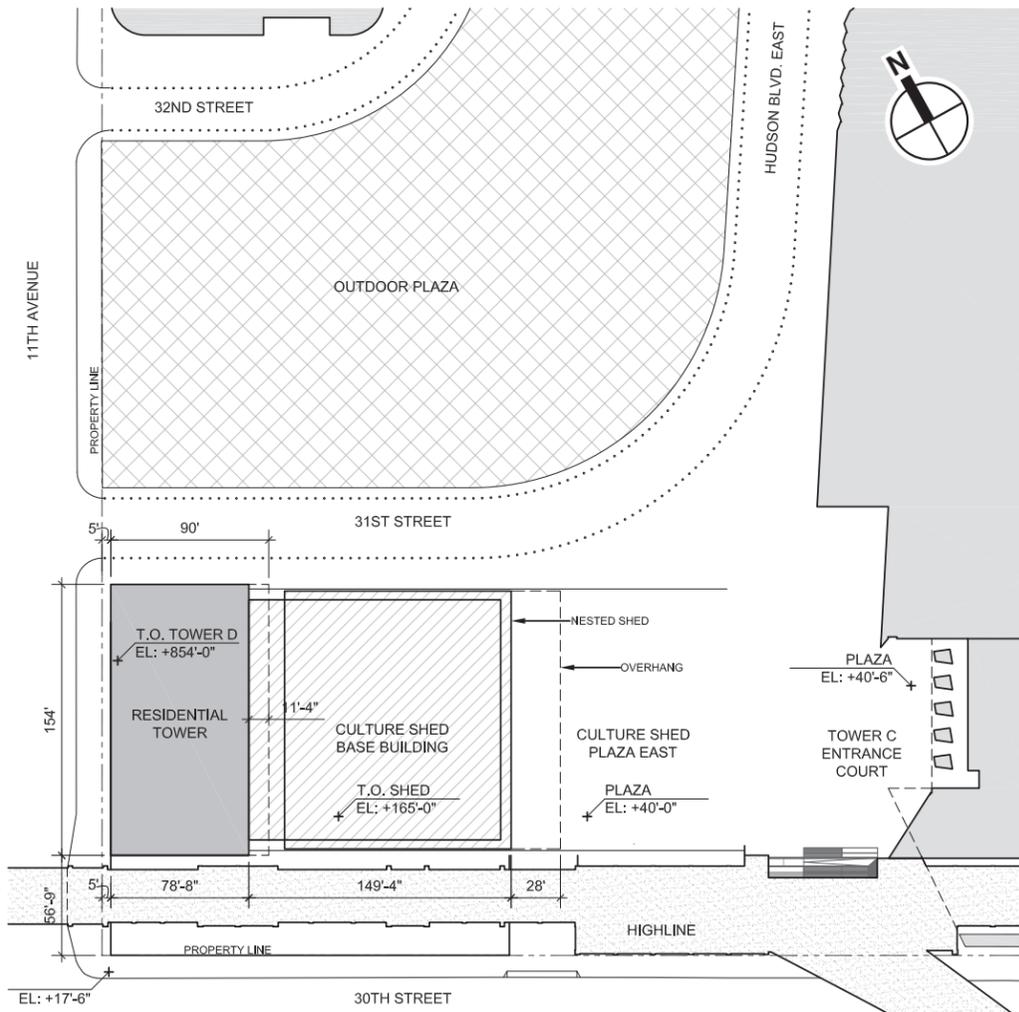
0 200 500 FEET
SCALE



SITE SECTION

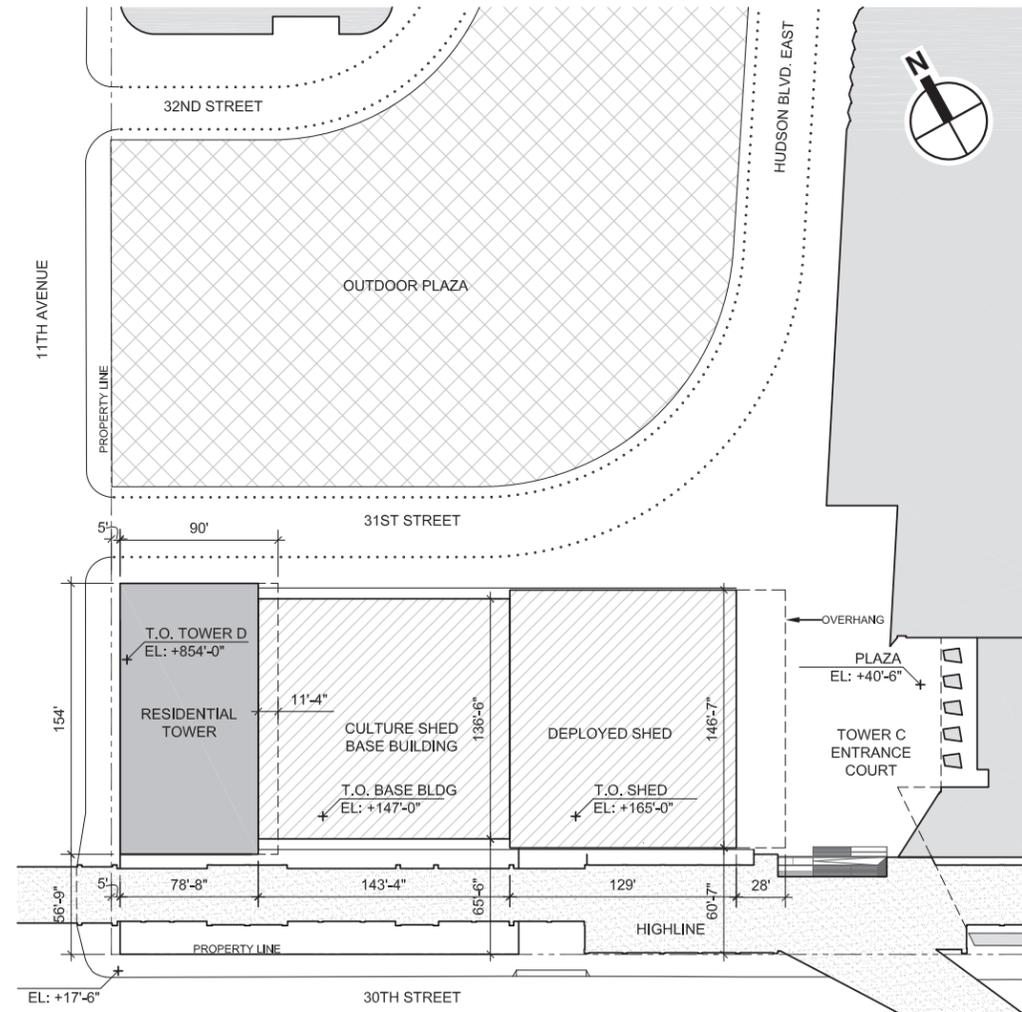
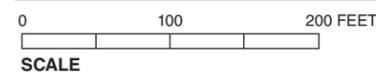


SITE SECTION



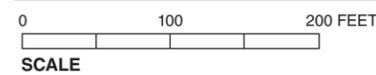
SITE PLAN

NESTED STATE



SITE PLAN

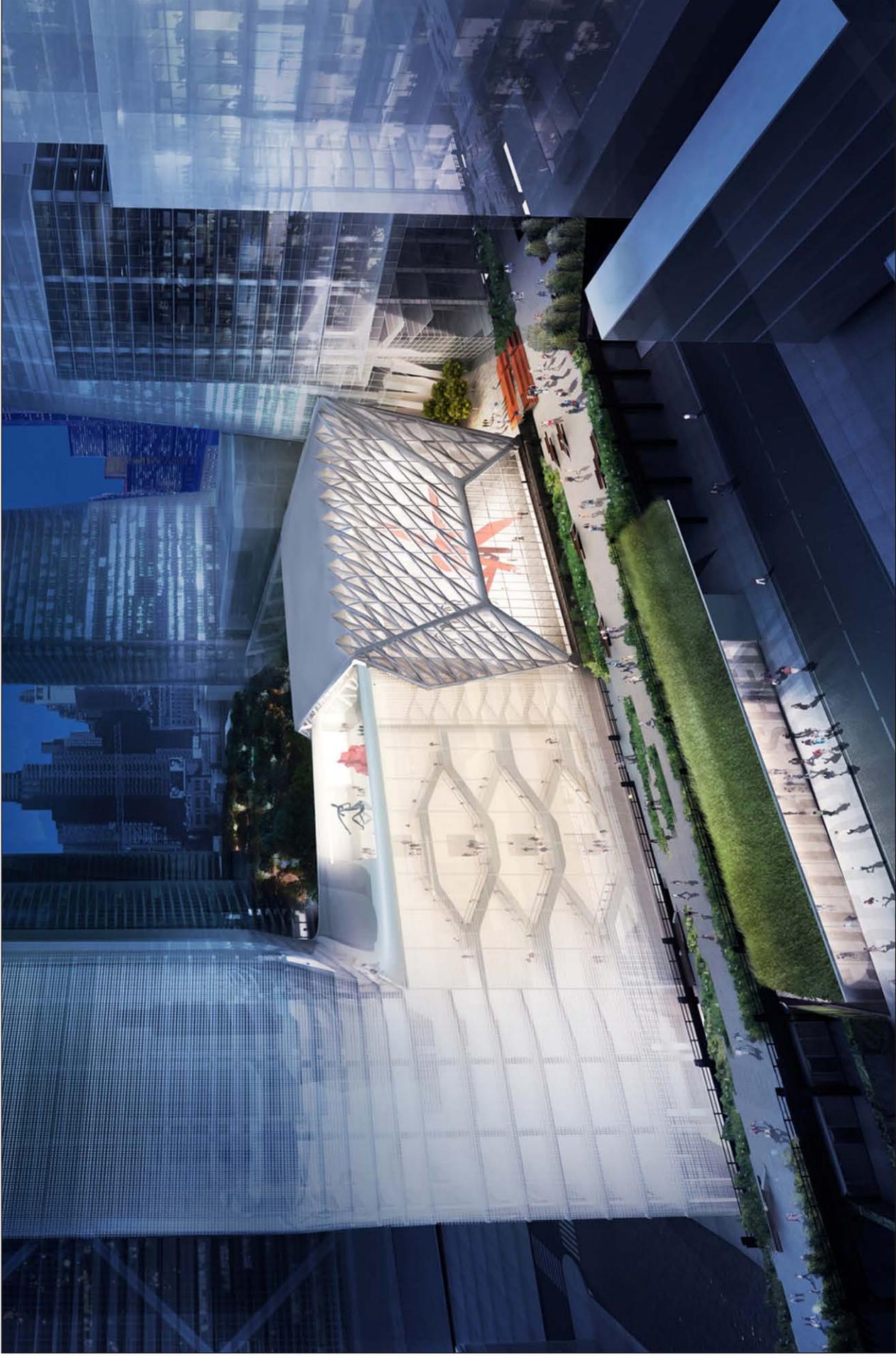
DEPLOYED STATE





For Illustrative Purposes Only





Illustrative Rendering of Proposed Building Aerial View Looking Northeast
Figure 11

DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

The information requested in this table applies to the directly affected area. The directly affected area consists of the project site and the area subject to any change in regulatory control. The increment is the difference between the No-Action and the With-Action conditions.

	EXISTING CONDITION	NO-ACTION CONDITION ¹	WITH-ACTION CONDITION ¹	INCREMENT
Land Use				
Residential	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, specify the following:				
No. of dwelling units				
No. of low- to moderate-income units				
No. of stories				
Gross Floor Area (sq. ft.)				
Describe Type of Residential Structures				
Commercial	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, specify the following:				
Describe type (retail, office, other)				
No. of bldgs				
GFA of each bldg (sq. ft.)				
Manufacturing/Industrial	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, specify the following:				
Type of use				
No. of bldgs				
GFA of each bldg (sq. ft.)				
No. of stories of each bldg.				
Height of each bldg				
Open storage area (sq. ft.)				
If any unenclosed activities, specify				
Community Facility	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
If yes, specify the following:				
Type		Gallery/exhibition facility	Gallery/exhibition facility	
No. of bldgs		One	One	
GFA of each bldg (sq. ft.)		125,000²	198,195	+73,195
No. of stories of each bldg		5	5	
Height of each bldg		190' (relative to Manhattan datum)	165' relative to Manhattan datum (125' relative to plaza level, at elevation 40')	-25'
Vacant Land	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, describe				
Publicly Accessible Open Space	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
If yes, specify type (mapped City, State, or Federal Parkland, wetland—mapped or otherwise known, other)		17,758-gsf plaza open to the sky	17,758-gsf-plaza space, not open to the sky³	
Other Land Use	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, describe	Transportation – rail yard			
Parking				
Garages	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, specify the following:				
No. of public spaces				
No. of accessory spaces				
Operating hours				

¹ No Action and With-Action Conditions refer to the Culture Shed Site only. While the proposed actions would apply to the whole Eastern Rail Yard subarea of the Special Hudson Yards District, they would only affect development on the Culture Shed Site. The remainder of the ERY site would be developed pursuant to existing plans in the No Action and With-Action Conditions (See Figure 9).

² The 2007 Memorandum of Understanding Concerning Development of Sites at John D. Caemmerer West Side Yard designated 200,000 zoning square feet (zsf) for the Cultural Facility. The 2010 amended MOU designated 100,000 zsf for the Cultural Facility. In order to convert this zoning floor area to gross square footage for the purposes of analysis in the EAS, a 25 percent zoning floor area to gross square footage conversion factor was assumed, based on similar projects, including the planned new building for the Whitney Museum of American Art, at Washington Street and Gansevoort Street. The height of the No Action Cultural Facility was assumed to be the height of the ERY Cultural Facility analyzed in the 2009 Western Rail Yard FEIS. The No Action Cultural Facility, while taller than the proposed Culture Shed, has less gross floor area based on allocation of space and use. In addition, the proposed Culture Shed adds usable space below the plaza level and below the High Line along West 30th Street.

³ This plaza area will be covered, at times, by the retractable shed.

Attended or non-attended			
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	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Parking (continued)				
Lots	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, specify the following:				
No. of public spaces				
No. of accessory spaces				
Operating hours				
Other (includes street parking)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes, describe				
Storage Tanks				
Storage Tanks	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, specify the following:				
Gas/Service stations:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Oil storage facility:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Other; identify:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes to any of the above, describe:				
Number of tanks				
Size of tanks				
Location of tanks				
Depth of tanks				
Most recent FDNY inspection date				
Population				
Residents	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If any, specify number				
Briefly explain how the number of residents was calculated				
Businesses	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
If any, specify the following:				
No. and type		One gallery/exhibition facility	One gallery/exhibition facility	
No. and type of workers by business		±208	±331	+123
No. and type of non-residents who are not workers				
Briefly explain how the number of businesses was calculated	Employment estimate provided by the applicant; FTE calculated based on 54 full time employees plus 1,845 contract/seasonal workers and vendors who are assumed to work 15 percent of the year. (Source: Culture Shed Inc.)			
Zoning*				
Zoning classification	C6-4/HY	C6-4/HY	C6-4/HY	
Maximum amount of floor area that can be developed (in terms of bulk)	125,000 gsf (for Culture Shed site)¹	125,000 gsf (for Culture Shed site)¹	198,195 gsf (for Culture Shed site)	
Predominant land use and zoning classification within a 0.25-radius of proposed project	Land Use: Transportation/Utility, Commercial, Residential, Parking, Institutional, Open Space Zoning: C6-3, C6-4, M1-5, M2-3, Special Hudson Yards District (HY), Special West Chelsea District (WCH)			
Attach any additional information as may be needed to describe the project.				
If your project involves changes in regulatory controls that affect one or more sites not associated with a specific development, it is generally appropriate to include the total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

*This section should be completed for all projects, except for such projects that would apply to the entire city or to areas that are so extensive that site-specific zoning information is not appropriate or practicable.

¹ The 2007 Memorandum of Understanding Concerning Development of Sites at John D. Caemmerer West Side Yard designated 200,000 zoning square feet (zsf) for the Cultural Facility. The 2010 amended MOU designated 100,000 zsf for the Cultural Facility. In order to convert this zoning floor area to gross square footage for the purposes of analysis in the EAS, a 25 percent zoning floor area to gross square footage conversion factor was assumed, based on similar projects, including the planned new building for the Whitney Museum of American Art, at Washington Street and Gansevoort Street.

PART II: TECHNICAL ANALYSES

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the *CEQR Technical Manual*. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the 'NO' box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the 'YES' box.
- For each 'Yes' response, answer the subsequent questions for that technical area and consult the relevant chapter of the *CEQR Technical Manual* for guidance on providing additional analyses (and attach supporting information, if needed) to determine whether the potential for significant impacts exists. Please note that a 'Yes' answer does not mean that EIS must be prepared—it often only means that more information is required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to either provide additional information to support the Full EAS Form. For example, if a question is answered 'No,' an agency may request a short explanation for this response.

YES	NO
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1. LAND USE, ZONING AND PUBLIC POLICY: *CEQR Technical Manual, Chapter 4*

(a)	Would the proposed project result in a change in land use or zoning that is different from surrounding land uses and/or zoning? Is there the potential to affect an applicable public policy? If 'Yes,' complete a preliminary assessment and attach.		✓
(b)	Is the project a large, publicly sponsored project? If 'Yes,' complete a PlaNYC assessment and attach.		✓
(c)	Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries? If 'Yes,' complete the Consistency Assessment Form.		✓

2. SOCIOECONOMIC CONDITIONS: *CEQR Technical Manual, Chapter 5*

(a)	Would the proposed project:		
	• Generate a net increase of 200 or more residential units?		✓
	• Generate a net increase of 200,000 or more square feet of commercial space?		✓
	• Directly displace more than 500 residents?		✓
	• Directly displace more than 100 employees?		✓
	• Affect conditions in a specific industry?		✓
(b)	If 'Yes' to any of the above, attach supporting information to answer the following questions, as appropriate. If 'No' was checked for each category above, the remaining questions in this technical area do not need to be answered.		

(1) Direct Residential Displacement

If more than 500 residents would be displaced, would these displaced represent more than 5% of the primary study area population?			
If 'Yes,' is the average income of the directly displaced population markedly lower than the average income of the rest of the study area population?			

(2) Indirect Residential Displacement

Would the expected average incomes of the new population exceed the average incomes of the study area populations?			
If 'Yes,' would the population increase represent more than 5% of the primary study area population or otherwise potentially affect real estate market conditions?			
If 'Yes,' would the study area have a significant number of unprotected rental units?			
Would more than 10 percent of all the housing units be renter-occupied and unprotected?			
Or, would more than 5 percent of all the housing units be renter-occupied and unprotected where no readily observable trend toward increasing rents and new market rate development exists within the study area?			

		YES	NO
(3) Direct Business Displacement			
Do any of the displaced businesses provide goods or service that otherwise could not be found within the trade area, either under existing conditions or in the future with the proposed project?			
Do any of the displaced businesses provide goods or services that otherwise could not be found within the trade area, either under existing conditions or in the future with the proposed project?			
Or is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it?			
(4) Indirect Business Displacement			
Would the project potentially introduce trends that make it difficult for businesses to remain in the area?			
Would the project capture the retail sales in a particular category of goods to the extent that the market for such goods would become saturated as a result, potential resulting in vacancies and disinvestment on neighborhood commercial streets?			
(5) Effects on Industry			
Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?			
Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?			
3. COMMUNITY FACILITIES: CEQR Technical Manual, Chapter 6			
(a) Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?			✓
(b) Would the project exceed any of the thresholds outlines in Table 6-1 in Chapter 6?			✓
(c) If 'No' was checked above, the remaining questions in this technical area do not need to be answered. If 'Yes' was checked, attach supporting information to answer the following, if applicable.			
(1) Child Care Centers			
Would the project result in a collected utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent?			
If 'Yes,' would the project increase the collective utilization rate by 5 percent from the No-Action scenario?			
(2) Libraries			
Would the project increase the study area population by 5 percent from the No-Action levels?			
If 'Yes,' would the additional population impair the delivery of library services in the study area?			
(3) Public Schools			
Would the project result in a collective utilization rate of the elementary and/or intermediate schools in the study area that is equal to or greater than 105 percent?			
If 'Yes,' would the project increase this collective utilization rate by 5 percent from the No-Action scenario?			
(4) Health Care Facilities			
Would the project affect the operation of health care facilities in the area?			
(5) Fire and Police Protection			
Would the project affect the operation of fire or police protection in the area?			
4. OPEN SPACE: CEQR Technical Manual, Chapter 7 See Attachment A.			
(a) Would the project change or eliminate existing open space? [The proposed project would occupy, at times, 17,758 gsf of open space that would be created in the No Build condition.]		✓	
(b) Is the project located within an underserved area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?			✓
(c) If 'Yes,' would the proposed project generate more than 50 additional residents or 125 additional employees?			
(d) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?			✓
(e) If 'Yes,' would the project generate more than 350 additional residents or 750 additional employees?			
(f) If the project is not located within an underserved or well-served area, would it generate more than 200 additional residents or 500 additional employees?			✓
(g) If 'Yes' to any of the above questions, attach supporting information to answer the following:			✓
• Does the project result in a decrease in the open space ratio of more than 5%?			
• If the project site is within an underserved area, is the decrease in open space between 1% and 5%?			
• If 'Yes,' are there qualitative considerations, such as the quality of open space, that need to be considered?			

	YES	NO
5. SHADOWS: <u>CEQR Technical Manual, Chapter 8.</u> See Attachment B.		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	✓	
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	✓	
(c) If 'Yes' to either of the above questions, attach supporting information explaining whether the project's shadow reach any sunlight-sensitive resource at any time of the year.		
6. HISTORIC AND CULTURAL RESOURCES: <u>CEQR Technical Manual, Chapter 9</u> See Additional Responses, p. 1a.		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for, or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; is listed or eligible for listing on the New York State or National Register of Historic Places; or is within a designated or eligible New York City, New York State, or National Register Historic District? If "Yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.	✓	
7. URBAN DESIGN AND VISUAL RESOURCES: <u>CEQR Technical Manual, Chapter 10</u> See Attachment C.		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	✓	
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources that is not currently allowed by existing zoning?		✓
(c) If "Yes" to either of the questions above, please provide the information requested in Chapter 10.		
8. NATURAL RESOURCES: <u>CEQR Technical Manual, Chapter 11</u>		
(a) Is any part of the directly affected area within the Jamaica Bay Watershed? If "Yes," complete the Jamaica Bay Watershed Form.		✓
(b) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11? If "Yes," list the resources: Attach supporting information on whether the proposed project would affect any of these resources.		✓
9. HAZARDOUS MATERIALS: <u>CEQR Technical Manual, Chapter 12</u>		
(a) Would the proposed project allow commercial or residential use in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?		✓
(b) Does the proposed project site have existing institutional controls (e.g., (E) designations or a Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?		✓
(c) Does the project require soil disturbance in a manufacturing zone or any development on or near a manufacturing zone or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?		✓
(d) Does the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material or unknown origin?		✓
(e) Does the project result in development where underground and/or aboveground storage tanks (e.g., gas stations) are or were on or near the site?		✓
(f) Does the project result in renovation of interior existing space on a site with potential compromised air quality, vapor intrusion from on-site or off-site sources, asbestos, PCBs or lead-based paint?		✓
(g) Does the project result in development on or near a government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, municipal incinerators, coal gasification or gas storage sites, or railroad tracks and rights-of-way?		✓
(h) If 'Yes,' were RECs identified? Briefly identify: The proposed project would be implemented according to the comprehensive Hazardous Materials assessment conducted for the 2004 FGEIS.	✓	
(i) Based on a Phase I Assessment, is a Phase II Assessment needed?		✓
10. WATER AND SEWER INFRASTRUCTURE: <u>CEQR Technical Manual, Chapter 13</u>		
(a) Would the project result in water demand of more than one million gallons per day?		✓
(b) Is the proposed project located in a combined sewer area and result in at least 1,000 residential units or 250,000 sq. ft. or more of commercial space in Manhattan or at least 400 residential units or 150,000 sq. ft. or more of commercial space in the Bronx, Brooklyn, Staten Island or Queens?		✓
(c) Is the proposed project located in a separately sewered area and result in the same or greater development than that listed in Table 13-1 in Chapter 13?		✓
(d) Does the proposed project involve development on a site five acres or larger where the amount of impervious surface would increase?		✓
(e) Would the proposed project involve development on a site one acre or larger where the amount of impervious surface would increase and is located within the Jamaica Bay Watershed or in certain specific drainage areas including: Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek?		✓
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?		✓
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a WWTP and/or generate contaminated stormwater in a separate storm sewer system?		✓
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?		✓
(i) If "Yes" to any of the above, conduct the appropriate preliminary analyses and attached supporting documentation.		

	YES	NO
11. SOLID WASTE AND SANITATION: <u>CEQR Technical Manual, Chapter 14</u>		
(a) Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?		✓
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?		✓
12. ENERGY: <u>CEQR Technical Manual, Chapter 15</u>		
(a) Would the proposed project affect the transmission or generation of energy?		✓
13. TRANSPORTATION: <u>CEQR Technical Manual, Chapter 16</u> See Attachment D.		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?		✓
(b) If "Yes," conduct the screening analyses, attach appropriate back up data as needed for each stage, and answer the following questions:		
(1) Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour? If "Yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? **It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 in Chapter 16 for more information.		
(2) Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour? If "Yes," would the proposed project result per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?		
(3) Would the proposed project result in more than 200 pedestrian trips per project peak hour? If "Yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?		
14. AIR QUALITY: <u>CEQR Technical Manual, Chapter 17</u> See Attachment D.		
(a) <i>Mobile Sources:</i> Would the proposed project result in the conditions outlined in Section 210 in Chapter 17? <i>Stationary Sources:</i> Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?		✓
(b) If "Yes," would the proposed project exceed the thresholds in the Figure 17-3, Stationary Source Screen Graph? (attach graph as needed)		✓
(c) Does the proposed project involve multiple buildings on the project site?		✓
(d) Does the proposed project require Federal approvals, support, licensing, or permits subject to conformity requirements?		✓
(e) Does the proposed project site have existing institutional controls (e.g., (E) designations or a Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?		✓
(f) If "Yes," conduct the appropriate analyses and attach any supporting documentation.		
15. GREENHOUSE GAS EMISSIONS: <u>CEQR Technical Manual, Chapter 18</u>		
(a) Is the proposed project a city capital project, a power plant, or would fundamentally change the City's solid waste management system?		✓
(b) If "Yes," would the proposed project require a GHG emissions assessment based on the guidance in Chapter 18?		
(c) If "Yes," attach supporting documentation to answer the following: Would the project be consistent with the City's GHG reduction goal?		
16. NOISE: <u>CEQR Technical Manual, Chapter 19</u> See Attachment D.		
(a) Would the proposed project generate or reroute the vehicular traffic?		✓
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of sight to that rail line?		✓
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?		✓
(d) Does the proposed project site have existing institutional controls (e.g., E-designations or a Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?		✓
(e) If "Yes," conduct the appropriate analyses and attach any supporting documentation.		
17. PUBLIC HEALTH: <u>CEQR Technical Manual, Chapter 20</u>		
(a) Would the proposed project warrant a public health assessment based upon the guidance in Chapter 20?		✓
18. NEIGHBORHOOD CHARACTER: <u>CEQR Technical Manual, Chapter 21</u>		
(a) Based upon the analyses conducted for the following technical areas, check 'Yes' if any of the following technical areas required a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise.		✓
(b) If "Yes," explain here why or why not an assessment of neighborhood character is warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary.		

YES	NO
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19. CONSTRUCTION IMPACTS: *CEQR Technical Manual, Chapter 22*

Would the project's construction activities involve (check all that apply):

• Construction activities lasting longer than two years;		✓
• Construction activities within a Central Business District or along an arterial or major thoroughfare;		✓
• Require closing, narrowing, or otherwise impeding traffic, transit or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc);		✓
• Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out;		✓
• The operation of several pieces of diesel equipment in a single location at peak construction;		✓
• Closure of community facilities or disruption in its service;		✓
• Activities within 400 feet of a historic or cultural resource; or	✓	
• Disturbance of a site containing natural resources.		✓

If any boxes are checked, explain why or why not a preliminary construction assessment is warranted based on the guidance of in Chapter 22, "Construction." It should be noted that the nature and extent or any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.

The proposed project would be a small portion of the approximately 6 million-gsf Eastern Rail Yard development program, which is already approved and for which some construction activities are underway. The entire construction plan has been analyzed and approved in the 2004 Hudson Yards Rezoning Final Generic Environmental Impact Statement (FGEIS) and re-analyzed in the 2009 FEIS prepared for the amendment to Hudson Yards allowing for development of the Western Rail Yard. In addition, a construction protection plan has been established for the High Line as part of its conversion to a public park.

20. APPLICANT'S CERTIFICATION

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of pertinent books and records and/or after inquiry of persons who have personal knowledge or such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the

of

APPLICANT/SPONSOR

NAME OF THE ENTITY OR OWNER

the entity which seeks the permits, approvals, funding or other governmental action described in this EAS.

Check if prepared by: APPLICANT/REPRESENTATIVE or LEAD AGENCY REPRESENTATIVE (FOR CITY-SPONSORED PROJECTS)

APPLICANT/SPONSOR NAME:

LEAD AGENCY REPRESENTATIVE NAME:

SIGNATURE:

DATE:

PLEASE NOTE THAT APPLICANT MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

PART II TECHNICAL ANALYSES—ADDITIONAL RESPONSES

QUESTION 6: HISTORIC AND CULTURAL RESOURCES

The project site abuts the S/NR-eligible High Line on its West 30th Street frontage. The High Line is a former railroad viaduct completed in 1934 that extended between Clarkson Street and West 34th Street. It was built to carry freight on the New York Central Lines and passed through several buildings where loading platforms allowed for the transfer of goods. The viaduct ceased operation in the 1980s and the southern section between Gansevoort and Clarkson Streets was demolished. The High Line has been converted into an elevated public open space operated by the New York City Department of Parks and Recreation.

The development of the Eastern Rail Yard site as a whole would include the adaptive reuse of 0.7 acres of the High Line and connection to High Line Park, including the portion that directly abuts the Culture Shed site. The impact and resulting mitigation requirements of changes to the High Line along its frontage with the Eastern Rail Yard were analyzed in the 2004 Hudson Yards FGEIS and incorporated into agreements with the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). The proposed action would not have any additional effects on this historic resource, and therefore no additional analysis is warranted.

PART III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)

INSTRUCTIONS:

In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY §6-06 (Executive Order 91 of 1977, as amended) which contain the State and City criteria for determining significance.

<p>1. For each of the impact categories listed below, consider whether the project may have a significant effect on the environment. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude</p>	Potential Significant Adverse Impact	
	YES	NO
IMPACT CATEGORY		
Land Use, Zoning, and Public Policy		
Socioeconomic Conditions		
Community Facilities and Services		
Open Space		
Shadows		
Historic and Cultural Resources		
Urban Design/Visual Resources		
Natural Resources		
Hazardous Materials		
Water and Sewer Infrastructure		
Solid Waste and Sanitation Services		
Energy		
Transportation		
Air Quality		
Greenhouse Gas Emissions		
Noise		
Public Health		
Neighborhood Character		
Construction Impacts		
<p>2. Are there any aspects of the project relevant to the determination whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? If there are such impacts, explain them and state where, as a result of them, the project may have a significant impact on the environment.</p>		

3. LEAD AGENCY'S CERTIFICATION

_____ TITLE

_____ LEAD AGENCY

_____ NAME

_____ SIGNATURE

- Check this box if the lead agency has identified one or more potentially significant adverse impacts that MAY occur.**
- Issue *Conditional Negative Declaration***
 A ***Conditional Negative Declaration*** (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements in 6 NYCRR Part 617.
- Issue *Positive Declaration* and proceed to a draft scope of work for the Environmental Impact Statement.**
 If the lead agency has determined that the project may have a significant impact on the environment, and if a conditional negative declaration is not appropriate, then the lead agency issues a Positive Declaration.

NEGATIVE DECLARATION (To Be Completed By Lead Agency)

Statement of No Significant Effect

Pursuant to Executive Order 91 of 1977, as amended, and the Rules of Procedure for City Environmental Quality Review, found at Title 62, Chapter 5 of the Rules of the City of New York and 6NYCRR, Part 617, State Environmental Quality Review, the [] assumed the role of lead agency for the environmental review of the proposed project. Based on a review of information about the project contained in this environmental assessment statement and any attachments hereto, which are incorporated by reference herein, the [] has determined that the proposed project would not have a significant adverse impact on the environment.

Reasons Supporting this Determination

The above determination is based on information contained in this EAS that finds, because the proposed project:

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA).

_____ TITLE

_____ LEAD AGENCY

_____ NAME

_____ SIGNATURE

A. INTRODUCTION

This attachment assesses the potential impacts of the proposed project on open space resources. Open space is defined by the 2012 *City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly or privately owned land that operates or is available for leisure, play, or sport, or serves to protect or enhance the natural environment. According to the *CEQR Technical Manual*, an open space assessment should be conducted if a project would have a direct effect on open space, such as eliminating or altering a public open space, or an indirect effect, such as when a new population overburdens available open space.

The regulations related to the provision of open space on the project site were approved in the 2004 Hudson Yards Final Generic Environmental Impact Statement (FGEIS), which also found no significant adverse impacts on open space resources based on a comprehensive area-wide assessment of the entire rezoning area. The Zoning Resolution requires that certain public access areas be provided in Subarea A1 of the Eastern Rail Yard (ERY) in an amount equal to not less than 55 percent of the lot area of the ERY, with at least 40 percent of the lot area publicly accessible and open to the sky. This would result in 228,000 square feet (sf) of publicly accessible, open to the sky open space. Minimum standards are established for these public access areas, which are defined in Section 93-71, and include an outdoor plaza, a public plaza, a through block connection, a connection to public plaza, a connection to the High Line, the Tenth Avenue Bridge, the ERY High Line and the Tenth Avenue Spur. Under the No Action condition, the connection to the High Line, with a minimum width of 80 feet, would be located east of the No Action Cultural Facility. An additional open space corridor would be developed between the No Action Cultural Facility and ERY Tower D.

The 2012 Eastern Rail Yards Zoning Text Amendment incorporated several changes to the Zoning Resolution with respect to the Eastern Rail Yard, including requiring the portion of the High Line crossing the Eastern Rail Yard to be part of the required publicly accessible open space and allowing additional portions of the High Line to count as public access area. While the 2012 text amendment altered the parameters of what would count as public access area in the ERY, and ensured that this portion of the High Line would be developed as public open space, it did not change the amount of public access area required (i.e. 55 percent of total lot area, of which 40 percent must be open to the sky). Therefore, this 2012 amendment did not affect open space ratio calculations use in this analysis.

In the With Action condition, the proposed Culture Shed would be located immediately east of and abutting ERY Tower D. The connection to the High Line would remain a required public access area, although its minimum width would be 60 feet. The proposed Culture Facility Plaza would be located between the modified connection to the High Line and the Culture Shed Building. The proposed Culture Facility Plaza would be an “open to the sky” plaza area when not covered by the Shed Portion.

Hudson Yards Culture Shed

Nonetheless, the proposed project would result in the reduction of “open to the sky” open space on the project site by approximately 17,758 gross square feet (gsf) when the Shed Portion is deployed. This potential change is relatively small considering the overall development plan for Hudson Yards; however, manifold changes have altered the original analyses since implementation of the 2004 rezoning, primarily in terms of projects that have not occurred (i.e., the Multi-use Stadium and the Javits Convention Center Expansion) as well as modifications and new projects (such as the Western Rail Yard development proposal approved in 2009). Together, such changes have shifted both the demand for, and anticipated supply of, open space resources originally considered in the 2004 FGEIS and in the 2009 Western Rail Yard FEIS. Thus, while the 17,758 square feet itself is a marginal change in the overall open space supply now and in the future, the underlying basis for determining the open space ratio has changed substantially from 2004. Therefore, an open space assessment was conducted to determine whether the proposed project would result in any significant adverse impacts to open space resources. Compared to a future No Action condition, for the 2017 anticipated year of completion for the Culture Shed, the proposed project would not result in a significant decrease in open space ratios in the study area, and the proposed project would not result in significant adverse impacts to open space. In addition, while not required under CEQR, an analysis was conducted comparing open space conditions as of 2025 (the Hudson Yards build year) with and without the proposed project; that analysis also demonstrates that the proposed project would not result in significant adverse impacts to open space in relation to 2025, the build year of Hudson Yards (See **Table A-1**).

**Table A-1
Open Space Ratios Summary**

Ratio	City Guideline	Open Space Ratios (acres per 1,000 people)			Percent Change Without Project to With Project Condition
		Existing Conditions	Without Project Condition	With Project Condition	
2017 Project Build Year					
Non-Residential (¼-Mile) Study Area					
Passive/Workers	0.15	0.092	0.112	0.111	-1.38%
Residential (½-Mile) Study Area					
Passive/Residents	0.50	0.431	0.469	0.465	-0.85%
2025 Hudson Yards Build Year					
Non-Residential (¼-Mile) Study Area					
Passive/Workers	0.15	0.092	0.115	0.113	-0.95%
Residential (½-Mile) Study Area					
Passive/Residents	0.50	0.431	0.463	0.460	-0.66%

B. METHODOLOGY

As described in the *CEQR Technical Manual*, open space can be indirectly affected if a proposed project would add enough population, either residents or non-residents, to noticeably diminish the capacity of open space in an area to serve the future population. The *CEQR Technical Manual* sets forth thresholds necessitating an analysis of open space impacts. As described above, the proposed project is located on the Eastern Rail Yard, a portion of a large, previously approved development plan for the Hudson Yards area. As described below, in order to assess the potential of the proposed project to result in significant adverse open space impacts,

the analysis first assesses the likely effects of the Culture Shed on open space resources in 2017, the anticipated year of completion for the facility. For informational purposes, the analysis also rebuilds the existing and future 2025 build-out baselines for the Hudson Yards study area to account for the many changes since completion of the 2004 FGEIS and then compares open space ratios for the full build out of the Hudson Yards District (adjusted for changes that have occurred since the publication of the 2004 FGEIS), with and without out the proposed project.

According to the *CEQR Technical Manual*, a project can result in an adverse impact on passive and active open space resources if it either directly affects an existing resource or indirectly affects a resource by increasing the demand on open space without a corresponding increase in the amount of open space. Indirect effects are measured by calculating the ratio of open space acreage per 1,000 users (Open Space Ratio) and comparing these ratios in the existing condition, and the future with and without the proposed project. As the proposed project would not directly affect any existing open spaces, only indirect effects are considered in this analysis. As the ERY development program examined in the 2004 FGEIS included only passive open space, and the change in open space on the Eastern Rail Yard resulting from the proposed project would affect only passive open space, this analysis is limited to the assessment of passive open space in the study area. As described below, the analysis considers passive open space ratios for both workers and residents.

STUDY AREAS

Because this assessment considers the potential impact of the proposed projects on the determination of no open space impact from the 2004 FGEIS for the Hudson Yards Rezoning, the assessment considers a study area based on the entire rezoning area, not just the ERY site.

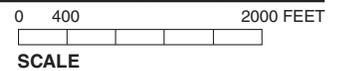
The study areas for an open space assessment are based on the distance that the respective users—residents and workers—are likely to walk to an open space. According to *CEQR Technical Manual* guidelines, the analysis of passive open space to workers focuses on a ¼-mile study area—the distance that workers would be expected to travel to reach local open space. As previously mentioned, the ¼-mile perimeter was based on the Hudson Yards rezoning area from the 2004 FGEIS. The boundary was then adjusted to include all census tracts with at least 50 percent of their area within the study area. The resulting study area includes Census Tracts 91, 93, 95, 97, 99, 101, 103, 109, 111, 113, 115, 117, 119, 121, 127, and 129.¹ As shown in **Figure A-1**, the ¼-mile study area is generally bounded by West 54th Street in the north, Park Avenue in the east, West 18th Street in the south, and FDR Drive to the west. The analysis of passive open space to residents focuses on a ½-mile study area, which reflects the 20-minute walk that residents are expected to travel to use open space resources. This study area includes the census tracts in the ¼-mile study area, as well as tracts 58, 74, 76, 84, 87, 89, 96, 125, and 133 (See Figure A-1).

¹ It should be noted that the study area for this analysis includes area along the waterfront that was part of Census 2000 Tract 317.02, which was not included in the original non-residential (¼-mile) study area used in the 2004 FGEIS. However, it is expected that the inclusion of this study area would not significantly change the amount of residents or workers. According to Census data, there were 3 residents in Census Tract 317.02 in 2000. In addition, the boundary between Census 2000 tracts 99 and 117 were adjusted for the 2010 Census, but no new area was included.



-  Culture Shed Site
-  Eastern Rail Yard
-  Census Tract

-  Non-Residential Open Space Study Area Boundary
-  Residential Open Space Study Area Boundary



FRAMEWORK FOR ANALYSIS AND STUDY AREA POPULATIONS

EXISTING CONDITIONS

The residential population in the ½-mile residential study area was updated using 2010 Census data and the worker population was estimated for the ¼-mile study area using data from ESRI Business Analyst, a commercial data provider. To calibrate the existing conditions baseline to current 2012 analysis year, the worker and residential populations were adjusted by adding an estimate of residents and employees introduced by known developments completed in the study areas between 2010 and the end of 2011.¹ It is assumed that worker and resident populations estimated for the 2012 existing baseline are inclusive of those Hudson Yards and No Build projects originally identified in the 2004 FGEIS that have been completed.

NO ACTION CONDITION

As noted in the Project Description portion of the EAS, the No Action condition is defined as the 125,000-gsf No Action Cultural Facility, which is assumed to be in place by 2017.

In addition, this analysis examines for informational purposes a 2025 analysis year that assesses the No Action Cultural Facility and the Proposed Culture Shed in the context of a full build out of Hudson Yards. While the 2004 FGEIS considered several scenarios, this analysis considers the RWCDS for the 2025 build year without the relocation of Madison Square Garden (MSG), and with the creation of the High Line (which was considered a potential development in the 2004 FGEIS). The RWCDS included Projected Development Sites (or “Projected Sites”), which were identified as sites most likely to experience redevelopment as a result of the Hudson Yards Rezoning. The new inventory of No Action projects includes a refinement of prior RWCDS Projected Development Sites, the addition of newly identified planned projects, and the removal of Projected Development Site projects that are no longer anticipated (most notably the originally proposed Multi-Use Facility and the expanded Javits Convention Center). Because most of the Projected Sites consisted of multiple lots, some sites have experienced partial development or are partially planned for development. The program for each Projected Site was adjusted to account for development that has occurred since the FGEIS, as well as current development plans. The four scenarios described below determined how the program for each project site was adjusted. In some cases, Projected Sites were classified by a combination of these scenarios. The calibration of what has been built to date and the addition or elimination of RWCDS components as well as other No Build projects was developed in coordination with the Hudson Yards Development Corporation. The calculations for the No Action condition (including the Hudson Yards development sites and other planned developments in the non-residential and residential study areas) are shown in Appendix A-1.

Scenario One: A Projected Site that has been partially developed, but includes remaining development potential. In these cases, the developed square footage was subtracted from the original RWCDS projection, and the remaining available square footage was distributed among uses based on the proportions of the original RWCDS.

¹ The number of residents added to the study area was estimated using the average household size for Community Districts 4 and 5 (1.69). Employees added to the study area were estimated using the standard employment density ratios.

Scenario Two: A Projected Site where a portion of the site is planned for development, but the plans vary from the original RWCDS assumptions. In cases where a current development plan for a portion of a Projected Site is larger than the original Hudson Yards RWCDS projection for the whole site, the current development program has been assumed for the whole site. If the current development program is now smaller than the original RWCDS projection, the current program plus the remaining available square footage from the original RWCDS projection has been assumed for the analysis. (This is similar to Scenario One, but no development has yet occurred.)

Scenario Three: An entire Projected Site is planned for development. For these sites, the current development program has been assumed, even if it varied from the RWCDS projection.

Scenario Four: A Projected Site remains unchanged from the FGEIS. For these sites, the RWCDS projections from the 2004 FGEIS were assumed.

The resulting No Action development program was used to estimate residents and workers that would be introduced to the study areas by 2017 and 2025 with or without the proposed project.¹

THE FUTURE WITH THE PROPOSED PROJECT

The Future with the Proposed Project is defined as the 198,195 gsf Culture Shed. When the Shed portion is deployed, the proposed project would reduce the overall future inventory of passive open space resources on the ERY site by 17,758 gsf.

INVENTORY OF OPEN SPACE RESOURCES

The *CEQR Technical Manual* defines public open space as open space that is publicly or privately owned and is accessible to the public on a regular basis, either constantly or for designated daily periods of time. Open spaces that are only available for limited users or are not available to the public on a regular or constant basis are not considered public open space, but are considered in a qualitative assessment of open space impacts.

In order to create a new baseline for existing conditions, the inventory of existing open space resources from the 2004 FGEIS was reviewed through field surveys conducted by AKRF in February 2012. Additional data were obtained from the New York City Department of Parks and Recreation (DPR) and published environmental impact statements for projects in or near the study area. For each of the open space resources in the study area, information was gathered about the types of facilities, levels of utilization, accessibility, condition, and amount of active and passive space. Active open space facilities are characterized by activities such as jogging, field sports, and children's active play. Such open space features might include basketball courts, baseball fields, or play equipment. Passive open space facilities are characterized by activities such as strolling, reading, sunbathing, and people-watching. Some spaces, such as lawns and public esplanades, can be both active and passive recreation areas. New open space that would be created in the No Action condition and also exist in the With Action condition was also accounted for in the analysis.

¹ The number of residents added to the study area was estimated using the average household size for Community Districts 4 and 5 (1.69). Employees added to the study area were estimated using standard employment density ratios.

ADEQUACY OF OPEN SPACE RESOURCES

COMPARISON TO DCP GUIDELINES

The adequacy of open space in the study area was quantitatively assessed for existing conditions, the future No Action condition, and the With Action condition. According to CEQR guidelines, the quantitative assessment is based on ratios of usable open space acreage to the study area populations (the “open space ratios”). These ratios were then compared with the city’s open space guideline of 0.15 acres of passive open space per 1,000 non-residents and 0.50 acres of passive open space per 1,000 residents. Because these ratios may not be attainable for all areas of the city, they are considered benchmarks for comparison rather than policy or thresholds for determining impacts.

IMPACT ASSESSMENT

Impacts are based on how a project would change the open space ratios in the study area. According to the *CEQR Technical Manual*, a project may result in significant adverse impacts to open space if there would be direct displacement or alteration of an open space that would significantly impact the existing users; or, if the project would reduce open space ratios by more than five percent in an area that is currently below the city’s median open space ratio. In areas that are extremely lacking in open space, a reduction as small as one percent may be considered significant, depending on the area of the city. Furthermore, in areas that are well-served by open space, a greater change in the open space ratio may be tolerated.

The *CEQR Technical Manual* recommends that the quantitative open space analysis described above be supplemented by an examination of qualitative factors, as the significance of any changes to open space depends on the context of the proposed project, including the location, quality and quantity of open space in the With Action condition. These qualitative considerations include the availability of nearby destination resources, the connectivity of open space, the effects of new open space provided by the project, and the comparison of projected open space ratios with established city guidelines. It is recognized that the open space ratios of the city guidelines described above are not feasible for many areas of the city, and they are not considered impact thresholds on their own. Rather, they are benchmarks that indicate how well an area is served by open space.

C. EXISTING CONDITIONS

STUDY AREA POPULATION

Based on 2012 employment data obtained from ESRI, Inc., and estimates of workers added by projects completed since 2010, the non-residential study area has a worker population of 259,306 (See **Table A-2**).

Table A-2

2012 Worker Population in the 1/4-Mile Study Area

Census Tract	Worker Population
91	11,847
93	1,649
95	22,991
97	832
99	13,079
101	41,488
103	15,757
109	47,584
111	16,702
113	41,737
115	10,267
117	594
119	15,132
121	5,657
127	7,747
129	6,243
Population Added by Projects Built Since 2010 ¹	714
Total Worker Population, Non-residential Study Area	260,020
<p>Notes: 1. To calibrate the existing conditions baseline to current 2012 analysis year, the worker population was adjusted by adding an estimate of employees introduced by known developments completed in the study areas between 2010 and the end of 2011. Employees added to the study area were estimated using the standard employment density ratios. It is assumed that worker populations estimated for the 2012 existing baseline are inclusive of those Hudson Yards and No Build projects originally identified in the 2004 FGEIS that have been completed.</p>	
<p>Sources: ESRI Business Analyst Online, Hudson Yards Development Corporation, AKRF, Inc.</p>	

Based on 2010 Census data and estimates of residents added by projects completed since 2010, the ½-mile residential study area has a residential population of 96,314 (See **Table A-3**).

Table A-3
2012 Residential Population in the 1/2-Mile Study Area

Census Tract	Residential Population
91	6,304
93	8,780
95	3,040
97	5,224
99	1,945
101	1,116
103	2,058
109	183
111	3,512
113	117
115	2,303
117	3,364
119	1,120
121	8,554
127	6,928
129	6,038
58	3,512
74	4,319
76	2,277
84	1,595
87	6,338
89	5,708
96	155
125	2,719
133	6,208
Population Added by Projects Built Since 2010 ¹	2,897
Total Residential Population, Residential Study Area	96,314
Notes:	1. To calibrate the existing conditions baseline to current 2012 analysis year, the residential population was adjusted by adding an estimate of employees introduced by known developments completed in the study areas between 2010 and the end of 2011. Residents added to the study area were estimated using the average household size for Community Districts 4 and 5 (1.69). It is assumed that resident populations estimated for the 2012 existing baseline are inclusive of those Hudson Yards and No Build projects originally identified in the 2004 FGEIS that have been completed.
Sources:	Census 2010, Hudson Yards Development Corporation, AKRF, Inc.

STUDY AREA OPEN SPACES

The study area contains 63 publicly accessible open spaces. These open space resources are inventoried in **Table A-4** and their locations are shown in **Figure A-2**. There are approximately 39.23 acres of open space in the non-residential study area, 23.80 of which are passive open space, and 15.43 acres of which are active. The residential study area contains another 18.88



-  Culture Shed Site
-  Eastern Rail Yard
-  Open Space

-  Non-Residential Open Space Study Area Boundary
-  Residential Open Space Study Area Boundary

0 400 2000 FEET
SCALE

acres of open space, for a total of 58.10 acres, including 16.56 active acres and 41.54 passive acres.

NON-RESIDENTIAL STUDY AREA

Forty-one publicly accessible open spaces are located within the non-residential study area. These include publicly-owned open spaces as well as privately-owned spaces that are publicly accessible. The non-residential study area contains a total of 15.43 acres of active open space and 23.80 acres of passive open space, for a total of 39.23 acres.

The non-residential study area includes nine mapped city parks and one city recreational space. Chelsea Park, which occupies the block between Ninth and Tenth Avenues and West 28th and 27th Streets, is the largest city park in the non-residential study area. Chelsea Park contains both active and passive uses, including play equipment, basketball courts, ball fields, as well as trees and walkways.

Southeast of Chelsea Park, there are several open spaces associated with housing developments. The Penn Station South Houses playground is located on West 25th Street between Eighth and Ninth Avenues, and includes primarily active recreation amenities such as play equipment and basketball courts. Elliott Houses, located on West 26th Street between Ninth and Tenth Avenues, and Chelsea Houses, located on West 25th Street just south of Elliot Houses, are both NYCHA housing developments that include public open space. Chelsea Houses includes primarily active play equipment with some seating and tables and Elliott Houses contains a mix of active and passive open space amenities. The Penn Station South Houses, located between West 23rd and West 28th Street and Eighth and Ninth Avenues, includes active and passive space with basketball courts, play equipment, and seating.

West of these open spaces is High Line Park, of which 2.74 acres are included in the study area, stretching from West 17th Street to its terminus at West 30th Street, just south of the project site. The park was reconstructed from an elevated former freight line that extends south beyond the study area to Gansevoort Street. The first section of the High Line from Gansevoort Street to West 20th Street opened to the public in June 2009. The second section opened two years later in June 2011, doubling the park's length to one mile by extending it to West 30th Street. The park includes passive open space with landscaped grasses, shrubs, and trees along concrete pathways.

West of the High Line is Chelsea Waterside Park, located between Eleventh and Twelfth Avenues and West 22nd and West 24th Streets. This 2.5-acre park is equipped with a wide variety of active and passive amenities, including basketball courts, soccer fields, a dog run, paved walkways, picnic tables, and benches.

Hudson Yards Culture Shed

**Table A-4
Existing Open Space Inventory**

Map No.	Name / Address	Owner / Agency	Features	Total Acres	Active Acres	Passive Acres	Condition/ Utilization
Non-residential (1/4-Mile) Study Area							
1	2 Penn Plaza W. 31st to 33rd Sts, Seventh to Eighth Aves.	Vornado Two Penn Plaza LLC, Madison Square Garden LP	Planters, lighting	0.42	0.00	0.42	Good/Moderate
2	Bob's Park 456 W. 35th St.	Clinton Housing West 40th Partners LP	Playground, seating, landscaping	0.05	0.01	0.04	Excellent/Low
3	Jacob Javits Convention Center Plaza 418 Eleventh Avenue	National Railroad ETA	Seating, Platforms, Sculptural Seating and Other Sculptural Elements. Escalator/Stairway to Access Lower Level is Currently	0.76	0.00	0.76	Excellent/Low
4	640 West 42nd St Plaza W. 42nd St. between Eleventh and Twelfth Aves.	River Place I LLC	Play equipment, trees, landscaped hills, seating, paved paths, lighting	0.74	0.00	0.74	Excellent/Low
5	Gregory JM Portley Plaza 576 Tenth Ave.	Manhattan Plaza Apt.	Paved walkways, benches, trees, planters, lighting	0.33	0.00	0.33	Good/Moderate
6	McCaffrey Playground W. 43rd St. between Eighth and Ninth Aves.	DPR	Swingset, basketball court, benches, spray shower, play equipment, landscaping, trees, seating	0.44	0.35	0.09	Good/Heavy
7	May Matthews Playground W. 46th St. between Ninth and Tenth Aves.	DPR	Play equipment, swingset, slides, basketball and handball courts, seating, lighting	0.48	0.37	0.11	Good/Heavy
8	Hell's Kitchen Park Tenth Ave. between W. 47th and 48th Sts.	DPR	Play equipment, basketball courts, handball courts, seating, paved walkways, lighting, trees	0.58	0.29	0.29	Good/Heavy
9	Clinton Community Garden W. 48th St. between Ninth and Tenth Aves.	NYCDPR, Green Thumb	Gardens, seating, paths	0.35	0.00	0.35	Good/Low
10	Ramon Aponte Park 351 W. 47th St	DPR	Play equipment, basketball courts, handball courts, seating, paved walkways, trees	0.17	0.09	0.09	Good/Moderate
11	Marion S. Heishel Garden W. 48th St. between Eighth and Ninth Aves.	DPR	Gardens, seating, paths	0.15	0.00	0.15	Good/Low
12	Golda Meir Square Broadway between W. 39th and 40th Sts	1412 Trizec Hahn-Swig LLC	Seating, trees, memorial statue	0.38	0.00	0.38	Good/Moderate
13	Herald Square W. 34th to 36th Sts between Broadway and Sixth Ave.	DPR	Tables, seating, trees, statue, food kiosks	0.21	0.00	0.21	Excellent/Heavy
16	230 West 27th St Plaza 230 W. 27th St	Fashion Institute of Technology (FIT)	Trees, planters, seating	0.07	0.00	0.07	Excellent/Moderate
17	FIT Plaza W. 27th St. and Seventh Ave.	FIT	Paved area, sculpture	0.05	0.00	0.05	Good/Low
18	Chelsea Park W. 28th St. between Ninth and Tenth Aves.	DPR	Swingset, slides, basketball courts, handball courts, baseball/softball fields, paved walkways, seating, play equipment, trees, planters, lighting, track	3.91	2.93	0.98	Good/Moderate
19	Elliott Houses Open Space W. 26th St. between Ninth and Tenth Aves.	NYCHA	Slides, seating, play equipment, trees, planters, lighting, basketball courts	0.60	0.30	0.30	Good/Moderate
20	Chelsea Houses Open Space W. 25th St. between Ninth and Tenth Aves.	NYCHA	Play equipment, seating, tables, lighting, trees	0.34	0.31	0.03	Good/Moderate

Table A-4 (Cont'd)
Existing Open Space Inventory

Map No. ¹	Name / Address	Owner / Agency	Features	Total Acres	Active Acres	Passive Acres	Condition/ Utilization
21	Penn Station South Houses Open Space W. 23 to 28th Sts, between Eighth and Ninth Aves.	Mutual Redevelopment Houses, Inc.	Basketball courts, seating, trees, planters, play equipment, lighting	1.42	0.37	1.05	Excellent/Moderate
22	Penn Station South Houses Playground W, 26th St. between Eighth and Ninth Aves.	DPR	Play equipment	0.60	0.54	0.06	Excellent/Moderate
23	1 Penn Plaza W. 33rd to 34th Sts. Between Seventh and Eighth Aves.	One Penn Plaza LLC	Trees, planters, seating, lighting	1.15	0.00	1.15	Good/Heavy
24	Chelsea Waterside Park W. 23rd to 24th Sts between Eleventh and Twelfth Aves.	HRPT	Sports field, basketball court, dog run, children's playground with water features	2.50	1.87	0.63	Excellent/Heavy
25	14th Street Park	HRPT	Grass lawn, tables, benches, and chairs, trees, and flowers	0.60	0.00	0.60	Excellent/Moderate
26	High Line Park	DPR	Paths, landscaping, seating	2.74	0.00	2.74	Excellent/Heavy
33	1095 Sixth Ave Plaza 1095 Sixth Ave. at 42nd St.	NYNEX Long Distance/Verizon	Seating, trees, planters	0.39	0.00	0.39	Excellent/Moderate
35	1155 Avenue of the Americas Plaza 1155 Avenue of the Americas at W. 44th St.	White & Case, LLP	Trees, landscaping, seating, lighting	0.22	0.00	0.22	Excellent/Moderate
36	DeShaw & Co. Plaza 120 W. 45th St.	DeShaw & Co.	Seating, tables, planters	0.07	0.00	0.07	Excellent/Moderate
37	1177 Avenue of the Americas Plaza 1177 Avenue of the Americas at NW corner of W. 45th St.	Price Waterhouse Coopers	Trees, seating	0.08	0.00	0.08	Excellent/Moderate
45	High School of Graphic Communication/Guttenberg Playground W. 49th St. between Ninth and Tenth Aves.	DPR	Basketball courts, handball courts, seating	0.55	0.55	0.00	Good/Moderate
46	Worldwide Plaza W. 49th to 50th Sts between Eighth and Ninth Aves.	EOP-Worldwide Plaza LLC	Seating, trees, tables, landscaping, sculpture, restaurants and food kiosks	0.84	0.00	0.84	Excellent/Heavy
50	Pier 62	HRPT	Skate Park, carousel, garden, seating	2.11	1.06	1.06	Excellent/Heavy
51	Pier 63	HRPT	Esplanade, seating, grass lawn, garden	3.12	1.56	1.56	Excellent/Heavy
52	Pier 64	HRPT	Grass lawn, seating	1.76	0.88	0.88	Excellent/Heavy
53	Pier 66	HRPT	Boathouse and docks	0.30	0.15	0.15	Excellent/Heavy
54	Pier 84	HRPT	Fountain, lawn, trees, fishing, dog run, play area with water features	2.25	0.00	2.25	Excellent/Heavy
55	Pier 86	HRPT	Seating, planters, museum exhibits (free), concessions	2.00	0.00	2.00	Excellent/Heavy
56	Hudson River Park upland (from W. 24th St. to W. 29th St.)	HRPT	Esplanade, seating, grass lawns	2.51	0.21	2.30	Excellent/High
57	Route 9A Bikeway	NYSDOT	Greenway (bike and pedestrian path)	3.21	3.21	0.00	Excellent/High
58	Chelsea Recreation Center W. 25th St. between Ninth and Tenth Aves	DPR	Cardio and strength training equipment, gymnasium, indoor pool, dance studio	0.39	0.39	0.00	Excellent/Heavy

Hudson Yards Culture Shed

**Table A-4 (Cont'd)
Existing Open Space Inventory**

Map No.	Name / Address	Owner / Agency	Features	Total Acres	Active Acres	Passive Acres	Condition/ Utilization
59	Farley building steps Eighth Ave. between W. 31st and 32nd Sts.	Empire State Development Corporation	Seating	0.33	0.00	0.33	Excellent/High
60	1133 Avenue of the Americas Plaza 1133 Sixth Ave.	The Durst Organization, Inc.	Seating, water feature	0.05	0.00	0.05	Good/Moderate
Total Open Space, Non-residential Study Area				39.23	15.43	23.80	
Residential (1/2-Mile Study Area)							
14	Greely Square W. 32nd to 34th Sts between Sixth Ave. and Broadway	34th Street Partnership	Tables, seating, trees, statue	0.37	0.00	0.37	Excellent/Heavy
15	1250 Broadway Plaza 1250 Broadway	Carlyle/SL Green 1250 Broadway LLC	Planters, seating	0.22	0.00	0.22	Good/Moderate
27	Clemente Clark Moore Park W. 22nd St. between Ninth and Tenth Aves.	DPR	Swings, play equipment, sprinkler, seating, picnic tables, trees	0.49	0.39	0.10	Good/Heavy
28	Fulton Houses Playground W. 19th St. between Ninth and Tenth Aves.	NYCHA	Children's playground, benches	0.07	0.04	0.03	Moderate/Low
29	Fulton Houses Open Space W. 19th St. between Ninth and Tenth Aves.	NYCHA	Basketball courts, benches, playground	1.57	0.20	1.37	Moderate/Low
30	P.S. 11/William J. Harris School playground W. 21st St. between Eighth and Ninth Aves.	NYC Department of Education (DOE)	Play equipment, basketball courts, trees, seating, garden	0.39	0.37	0.02	Excellent/Heavy
31	10 East 29th Street Plaza East 29th St. between Madison and Fifth Aves.	Rose 29 LLC	Seating, tables, lighting	0.29	0.00	0.29	Excellent/Low
32	Bryant Park W. 40th to 42nd Sts. Between Fifth and Sixth Aves.	DPR	Lawn/ice skating rink, trees, tables, seating, monuments, planters, fountain, food kiosks, restaurant	9.60	0.00	9.60	Excellent/Heavy
34	Grace Plaza SE corner of W. 43rd St. and Sixth Ave.	Trizec Hahn Office Properties	Trees, planters, seating, tables, food kiosks, School of the International Center of Photography	0.52	0.00	0.52	Excellent/Moderate
38	1166 Avenue of the Americas Plaza 1166 Avenue of the Americas between W. 45th and 46th Sts.	Marsh and McLennan/Edward Minskoff	Seating, tables, trees, landscaping	0.63	0.00	0.63	Excellent/Heavy
39	1185 Avenue of the Americas (Westpoint Stevens Tower) 1185 Avenue of the Americas at W. 46th St.	Fleet Boston Financial	Seating, trees	0.37	0.00	0.37	Good/Low
40	Father Duffy Square Between Broadway and Seventh Aves., W. 46th and 47th Sts.	DPR	Public viewing grandstand, seating, statues	0.08	0.00	0.08	Good/Heavy
41	1211 Avenue of the Americas Plaza 1211 Avenue of the Americas between W. 47th and 48th Sts.	Fox News Corporation	Seating, planters, trees	0.63	0.00	0.63	Good/Moderate
42	Rockefeller Center Fifth Ave. at W. 48th St.	RCPI Landmark Properties	Ice skating rink, benches, trees, planters, seating, lighting	0.65	0.13	0.52	Excellent/Heavy

Table A-4 (Cont'd)
Existing Open Space Inventory

Map No. ¹	Name / Address	Owner / Agency	Features	Total Acres	Active Acres	Passive Acres	Condition/ Utilization
43	1221 Avenue of the Americas Plaza Avenue of the Americas between W. 48th and 49th Sts.	Fox News Corporation	Seating, planters, trees, bike racks	0.86	0.00	0.86	Good/Moderate
44	235 W. 48th Street Plaza W. 48th St. between Broadway and Eighth Ave.	CS Ritz Holdings, LP	Seating, trees, landscaping, firefighters memorial	0.17	0.00	0.17	Good/Moderate
47	945 Seventh Ave Plaza 945 Seventh Ave. between W 49th and 50th Sts.	Rock-Forty-Ninth LLC	Seating, tables, trees, landscaping	0.29	0.00	0.29	Good/Moderate
48	1251 Avenue of the Americas Plaza Avenue of the Americas between W. 49th and 50th Sts.	Rockefeller Management Corp.	Water feature, seating, trees	0.46	0.00	0.46	Good/Moderate
49	1633 Broadway/Paramount Plaza Broadway between W 50th and 51st Sts.	Broadway Pl. Associates. Ltd Pr	Seating, trees, planters	0.88	0.00	0.88	Good/Moderate
61	420 Fifth Avenue Plaza	HVB Capital Markets	Seating, trees, tables, planters	0.09	0.00	0.09	Excellent/Moderate
62	Capitol at Chelsea Plaza 55 W. 26th St.	Chelsea N.Y. Realty Co., LLC	Seating, tables, lighting, landscaping	0.25	0.00	0.25	Excellent/Moderate
Total Open Space, Residential Study Area				58.10	16.56	41.54	
Notes:	1. Open space locations given on Figure A-2. 2. Because the exact acreage of the NYC DOT Broadway Pedestrian Plazas has not been determined, it was not included in the calculations of existing open space. If these spaces were included in the calculations (in both the non-residential and residential study areas), they would improve the open space ratios for both the No Action and With Action conditions, and therefore they would have little effect on the incremental change resulting from the proposed project.						
Sources:	New York City Department of Parks and Recreation (DPR); 2004 FGEIS for the No. 7 Subway Extension and Hudson Yards Rezoning and Development Program; 2009 Western Rail Yard FEIS; field visits conducted by AKRF, Inc. in February 2012.						

Across Route 9A from Chelsea Waterside Park is Hudson River Park, which stretches from Battery Park at the south to West 59th Street to the north. Hudson River Park is divided into distinct components including piers and upland areas, connected by the Hudson River Greenway esplanade and the adjacent Route 9A bikeway. The non-residential study area includes 1.89 miles of the Route 9A bikeway as well as six of the Hudson River Park renovated piers and adjacent upland areas. Piers 62, 63, 64, and 66 contain various active open space features, as well as a network of paths and seating areas. Piers 84 and 86 are also located within the non-residential study area, and include a total of 4.25 acres of passive open space. The largest of the public piers in Hudson River Park, Pier 84 contains amenities such as a dog run, a play area with water features, a sunbathing area, and lawns. Pier 86 abuts the Intrepid Sea, Air, and Space Museum. Regular access to the public open space on Pier 86 is provided through the entrance to the museum. 14th Street Park is separated from the Greenway and piers by Route 9A but is part of Hudson River Park and serves to connect the waterfront to the surrounding commercial and residential uses. The park is entirely comprised of passive open space in the form of a grass oval surrounded by seating.

In the northern portion of the study area are several city parks, the largest of which is Hell's Kitchen Park. Located on Tenth Avenue between West 47th and 48th Street, Hell's Kitchen Park includes 0.58 acres of passive and active amenities. Handball courts, basketball courts, and play equipment provide the opportunity for active usage, while benches and walkways allow for

Hudson Yards Culture Shed

passive enjoyment of the space. Clinton Community Garden, operated by Green Thumb and DPR, is located on the same block as Hell's Kitchen Park and includes trees, flowers, grass and other plants, as well as paths and benches. Although membership is required to use the facility, membership is open to anyone living in the area.

Also in the northern portion of the study area are McCaffrey Playground, May Matthews Playground, Ramon Aponte Park, and Marion S. Heishel Garden, all operated by DPR. McCaffrey Playground, located on West 43rd Street between Eighth and Ninth Avenues, includes amenities such as basketball courts, a spray shower, jungle gym, and swings, as well as benches and landscaping for passive use. May Matthews Playground is located on West 46th Street between Ninth and Tenth Avenues and includes active play equipment, basketball and handball courts, as well as benches. Ramon Aponte Park is located east of the Clinton Community Garden, between Eighth and Ninth Avenues on West 47th Street, and includes a mix of active amenities like handball and basketball courts, as well as passive walkways and benches.

Herald Square, located between West 34th and 35th Streets and Broadway and Sixth Avenue, is another open space in the non-residential study area operated by DPR. This passive space contains seating, food kiosks, plantings, and statues.

The non-residential study area also contains various public plazas, arcades, and open spaces associated with residential and commercial buildings. These plazas vary considerably in terms of size, amenities, and condition, but are all accessible to the public. Many plazas are suited to the needs of workers seeking passive open space for outdoor lunches or breaks and contain amenities such as benches, trees, planters, and water features. Plazas in the non-residential study area include Two Penn Plaza and Jacob Javits Convention Center Plaza, located east and west of the project site, respectively, and One Penn Plaza, located directly north of Two Penn Plaza.

RESIDENTIAL STUDY AREA

In addition to the 41 open spaces identified within the non-residential study area, the residential study area includes 22 open spaces. Including all open spaces listed in the non-residential study area, the residential study area contains a total of 58.10 acres of public open space, 16.56 of which are active and 41.54 of which are for passive use (See Figure A-2 and Table A-4).

In addition to the open spaces identified within the non-residential study area, the residential study area includes three New York City Parks. The largest of these, Bryant Park, contains 9.60 acres of passive open space on a superblock shared with the New York Public Library at 42nd Street and Fifth Avenue. Amenities at Bryant Park include a large lawn, trees, monuments, food kiosks and restaurants, tables and chairs, benches, and a fountain.

Clement Clarke Moore Park is another City park located in Chelsea on West 22nd Street between Ninth and Tenth Avenues. This park includes active play equipment as well as benches and walkways for passive use. Father Duffy Square is another City park in the residential study area, located between Broadway and Seventh Avenue between West 46th and West 47th Streets. Amenities include statues, fountains, and landscaping, providing 0.08 acres of passive open space in the northern corner of Times Square.

The Robert S. Fulton Houses, located on West 19th Street between Ninth and Tenth Avenues, are owned and operated by NYCHA, and include a total of 1.64 acres of open space. These open spaces include a children's playground with benches as well as a separate area with a playground and basketball courts.

There are various privately owned, publicly accessible open space resources within the residential study area, mostly in the northeastern portion of the study area, along Sixth Avenue. These spaces are associated with adjacent residential and office building and provide primarily passive open space for residents, employees, and other pedestrians passing through the area.

ADEQUACY OF OPEN SPACES

As described above, this assessment is limited to the assessment of passive open space, and considers the ratio of passive open space to workers in the non-residential (¼-mile) study area and to residents in the residential (1/2-mile) study area.

Table A-5 compares the existing ratio of acres of passive open space per 1,000 workers in the non-residential study area with the city’s guideline ratio of 0.15. The passive open space ratio for the non-residential study area is 0.092, which is below the city’s guideline. The residential study area has a passive open space ratio of 0.431 acres per 1,000 residents, which is below the city’s guideline.

Table A-5
Existing Conditions: Adequacy of Open Space Resources in the Study Areas

Population		Open Space Acreage	Open Space Ratios (acres per 1,000 people)	DCP Open Space Guideline
Non-residential Study Area				
Workers	260,020	23.80	0.092	0.15
Residential Study Area				
Residents	96,314	41.54	0.431	0.50

D. THE FUTURE WITHOUT THE PROPOSED PROJECT

Absent the proposed project, it is assumed that the ERY site would be developed according to the program analyzed in the 2009 Western Rail Yard FEIS, as modified by changes to the Cultural Facility site as set forth in the 2010 MOU, resulting in the development of a 125,000-gsf (100,000-zsf, plus mechanical space) cultural facility on the Culture Shed site. The No Action Cultural Facility would be located on a footprint between ERY Tower D to the west and Tower C to the east. This would create public open space corridors between the No Action Cultural Facility and both Tower D and Tower C. The open space corridor between the No Action Cultural Facility and Tower C—the connection to the High Line—would have a minimum width of 80 feet.

2017 ANALYSIS YEAR

STUDY AREA POPULATION

For purposes of analysis, it is assumed that by the 2017 analysis year without the proposed Culture Shed, the No Action Cultural Facility will be completed, adding 208 new workers to the site. It is also expected that by 2017 there were would be continuing development of Hudson Yards development sites.¹ Of the anticipated development used to estimate future worker and

¹ See Appendix A-1 for full calculations of 2017 No Action condition and 2025 conditions.

Hudson Yards Culture Shed

residential demand for open space as noted below and detailed in Appendix A-1, a small portion could be expected to be completed by 2017, including Tower C and Tower D. In addition, planned projects that would be completed by 2017 would add workers and residents to the study areas. Altogether, these developments will result in an estimated total of 11,356 new workers in the non-residential study area, for a total of 271,376 workers in that area. These planned developments will generate a total of 6,623 residents in the residential study area, for a total residential population of 102,937.

STUDY AREA OPEN SPACES

By 2017, several new open spaces will be created as a part of the Hudson Yards development plan (including Phase I of the Hudson Park and Boulevard System and a portion of the open spaces on the ERY), Section 3 of the High Line, and other new open spaces that will be added to the study area as part of other development projects (i.e., the open space component of Pier 57, a commercial, educational and cultural development in Hudson River Park that will add 2.5 acres of passive open space to the non-residential study area). These spaces will add a total of 6.69 acres of open space to the non-residential study area, all of which will be for passive use.

ADEQUACY OF OPEN SPACES

By 2017, the increase in demand for open spaces will be offset by the increase in available open space resources. As shown in **Table A-6**, the ratio of passive open space per 1,000 workers in the non-residential study area will increase to 0.112, and the ratio of passive open space per 1,000 residents in the residential study area will increase to 0.469. Both of these ratios will remain below the city guidelines.

Table A-6

2017 No Action Condition: Adequacy of Open Space Resources in the Study Areas

Total Population		Open Space Acreage	Open Space Ratios (acres per 1,000 people)	DCP Open Space Guideline
Non-residential Study Area				
Workers	271,376	30.48	0.112	0.15
Residential Study Area				
Residents	102,937	48.23	0.469	0.50

2025 HUDSON YARDS ANALYSIS YEAR

STUDY AREA POPULATION

As described above, the No Action Cultural Facility would introduce 208 new workers to the site by 2017. By 2025, numerous planned developments will add 5,948 workers to the non-residential study area and 8,696 residents to the residential study area. In addition, by 2025 the Hudson Yards area will be developed according to planned projects based on the 2004 FGEIS, some of which have been changed or modified since its publication. Altogether, these planned developments will result in an estimated total of 125,817 new workers in the non-residential study area, for a total of 385,837 workers in that area. The planned developments will generate a total of 37,549 new residents in the study area, for a total residential population of 133,863.

STUDY AREA OPEN SPACES

By 2025, the ERY site will be developed with several open spaces mentioned above, including plazas and spaces connecting the plazas, a connection to the High Line, the Tenth Avenue Bridge, and the ERY High Line and Tenth Avenue Spur. This is inclusive of the 17,758 gsf of plaza space that would be used by the proposed Culture Shed. The 2025 condition would also include the full build out of the Hudson Yards open spaces outside of the ERY site, including the remainder of the third section of the High Line, open space on the Western Rail Yard, Manhattan West, and Hudson Mews sites, and both phases of the Hudson Park and Boulevard System. In addition to the open spaces that would be developed in the Hudson Yards area, several open spaces would be completed in the study area in 2025. A City park would be added at 10th Avenue between West 48th and West 49th Street, adding active and passive open space to the non-residential study area. These spaces would add a total of 17.18 acres of open space to the non-residential study area, the majority of which (16.95 acres) would be for passive use.

ADEQUACY OF OPEN SPACES

As shown in **Table A-7**, as of 2025, the non-residential study area will have a passive open space ratio of 0.115 acres per 1,000 workers. This represents an increase over the existing condition, but still falls below the city guideline. The residential study area will have a passive open space ratio of 0.463 acres per 1,000 residents, which also represents an increase over the existing condition, but falls below the city guideline.

Table A-7
2025 Condition: Adequacy of Open Space Resources in the Study Areas

Total Population		Open Space Acreage	Open Space Ratios (acres per 1,000 people)	DCP Open Space Guideline
Non-residential Study Area				
Workers	385,837	44.19	0.115	0.15
Residential Study Area				
Residents	133,863	61.94	0.463	0.50

E. PROBABLE IMPACTS OF THE PROPOSED PROJECT

The proposed project would result in the development of an approximately 198,195-gsf cultural facility that would consist of a fixed building (the “Culture Shed Building”), with a retractable shed (the “Shed Portion”) that would be deployed within the plaza to the east of the Culture Shed Building to provide additional space for exhibitions and other activities. A plaza, with a lot area of approximately 17,758 gross square feet (gsf) (the “Culture Facility Plaza”) would be developed to the east of the Culture Shed Building. When the Shed Portion is not deployed, the Culture Facility Plaza would be used for a variety of activities that would be open to the public. When the Shed Portion is deployed, the proposed project would result in the temporary loss of 0.41 acres of “open to the sky” plaza area.

Hudson Yards Culture Shed

2017 ANALYSIS YEAR

STUDY AREA POPULATION

In 2017, the proposed Culture Shed would introduce 331 workers to the site, an increase of 123 workers as compared to the No Action condition.

STUDY AREA OPEN SPACES

As described above, by 2017, the proposed project would result in the development of an approximately 17,758 gsf Culture Facility Plaza to the east of the Culture Shed Building. When the Shed Portion is not deployed, the Culture Facility Plaza would be used for a variety of activities that would be open to the public. When the Shed Portion is deployed, the proposed project would result in the temporary loss of 0.41 acres of “open to the sky” plaza area.

ADEQUACY OF OPEN SPACES

Due to the amount of open spaces being developed in the study area by 2017, the small incremental demand added by the proposed project the open space reduction created by the deployed Culture Shed would not result in any significant adverse impacts on open space in the study area. As shown in **Table A-8**, both the ratio of passive open space per 1,000 workers in the non-residential study area and the ratio of passive open space per 1,000 residents in the residential study area would decrease slightly, to 0.111 and 0.465, respectively.

Table A-8
2017 With Action Condition: Adequacy of Open Space Resources in the Study Areas

Total Population		Open Space Acreage	Open Space Ratios (acres per 1,000 workers)	DCP Open Space Guideline
Non-residential Study Area				
Workers	271,499	30.07	0.111	0.15
Residential Study Area				
Residents	102,937	47.82	0.465	0.50

2025 HUDSON YARDS ANALYSIS YEAR

STUDY AREA POPULATION

The proposed project would not introduce any new residents or workers to the study area by the 2025 analysis year. Planned projects that would be completed by 2025 would result in a total population of 385,960 workers in the non-residential study area and 133,863 residents in the residential study area.

STUDY AREA OPEN SPACES

As compared to the 2017 analysis year, the proposed project would not change the amount of open space resources in the study areas by 2025. However, as described above, several new open spaces would be added to the study areas by this time. Therefore, in the future with the proposed project, by 2025 the non-residential study area would have a total of 43.79 acres of passive open

space compared to 44.19 acres in the condition without the project. The residential study area would have a total of 61.53 acres of passive open space in the future with the proposed project, compared to 61.94 acres in the condition without the project.

ADEQUACY OF OPEN SPACES

As shown in **Table A-9**, under the 2025 condition with the proposed project, the non-residential study area would have a passive open space ratio of 0.113 acres per 1,000 workers. The residential study area would have a passive open space ratio of 0.460 acres per 1,000 residents. Both of these ratios would remain below the respective city guidelines for open space.

Table A-9
2025 With Project Condition: Adequacy of Open Space Resources in the Study Areas

Total Population		Open Space Acreage	Open Space Ratios (acres per 1,000 workers)	DCP Open Space Guideline
Non-residential Study Area				
Workers	385,960	43.79	0.113	0.15
Residential Study Area				
Residents	133,863	61.53	0.460	0.50

IMPACT SIGNIFICANCE

Quantitative Assessment

As shown in **Table A-10**, compared to the condition without the project in 2017, the 2025 condition with the proposed project would decrease the ratio of passive open space to residents and workers in the ¼-mile study area by 0.95 percent from 0.115 to 0.113. The proposed project would decrease the ratio of passive open space to residents in the ½-mile study area by 0.66 percent from 0.463 to 0.460.

Table A-10
Open Space Ratios Summary

Ratio	City Guideline	Open Space Ratios (acres per 1,000 people)			Percent Change Without Project to With Project Condition
		Existing Conditions	Without Project Condition	With Project Condition	
2017 Project Build Year					
Non-Residential (¼-Mile) Study Area					
Passive/Workers	0.15	0.092	0.112	0.111	-1.38%
Residential (½-Mile) Study Area					
Passive/Residents	0.50	0.431	0.469	0.465	-0.85%
2025 Hudson Yards Build Year					
Non-Residential (¼-Mile) Study Area					
Passive/Workers	0.15	0.092	0.115	0.113	-0.95%
Residential (½-Mile) Study Area					
Passive/Residents	0.50	0.431	0.463	0.460	-0.66%

Hudson Yards Culture Shed

According to the *CEQR Technical Manual*, a proposed project may result in a significant adverse open space impact if it would directly displace or alter an existing open space within the study area that has a significant adverse effect on existing users, or the project would reduce the open space ratio by more than five percent in areas that are currently below the city's median community district open space ratio of 1.5 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction as small as one percent may be considered significant, depending on the area of the city.

The proposed project would not directly affect any existing open space resources in the study area. Though the proposed project would decrease the passive open space ratios in the study area in the 2017 build year, the decrease would fall well below the five percent CEQR threshold. The result is the same under a 2025 analysis. While the study area is currently below the city's median of 1.5 acres of open space per 1,000 residents, it is not defined as extremely lacking in open space. Overall, after accounting for the many changes to open space and user populations in the study area, the proposed project would not significantly affect the 2004 finding of no open space impacts, both for the project's 2017 build year and in 2025, the build year of Hudson Yards.

Qualitative Assessment

In the With Action condition, the Culture Shed site would be developed with a gallery and exhibition space with a 17,758-gsf plaza. When the movable shed is retracted (nested), this plaza would function as part of the open space network, and any events on the plaza would be open and accessible to the general public free of admission charge. At times, this plaza would be covered by deploying the movable shed and converted to cultural facility space for certain events. The proposed Culture Facility Plaza would be part of a larger network of open space created in the Special Hudson Yards District, including the third section of the High Line, open space on the Western Rail Yard, Manhattan West, and Hudson Mews sites, and the Hudson Park and Boulevard System. These spaces would add a total of 17.18 acres of open space to the non-residential study area, the majority of which (16.95 acres) would be for passive use. The proposed project would represent an insubstantial decrease in publicly accessible open space in the study area, which will contain a comprehensive network of open spaces with or without the proposed project. *

A. INTRODUCTION

Sunlight and shadows affect people and their use of open space all day long and throughout the year, although the effects vary by season. Sunlight supports vegetation and enhances architectural features, such as stained glass windows and carved detail on historic structures. Conversely, shadows can affect plant growth and sustainability of landscape features, and the visibility and architectural significance of building features.

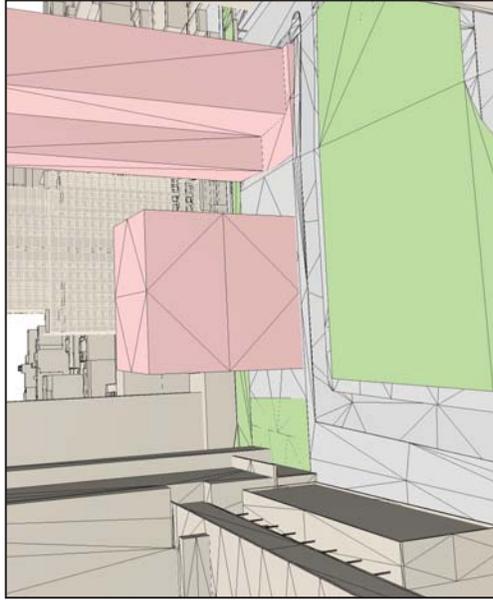
According to the 2012 *City Environmental Quality Review (CEQR) Technical Manual*, a shadows assessment is required if a proposed project would result in structures (or additions to existing structures) of 50 feet or more, or be located adjacent to, or across the street from, a sunlight-sensitive resource.

This chapter analyzes shadows under two scenarios: the proposed Culture Shed in its retracted position and the proposed Culture Shed in its deployed condition, and compares them to the No Action condition, which is defined as the previously-approved building at that location (see **Figure B-1**). The retracted Culture Shed would have a maximum elevation of 165' above Manhattan datum¹. When deployed, this portion of the shed would shift to the east, and the remaining base building would be at 147' elevation in height.

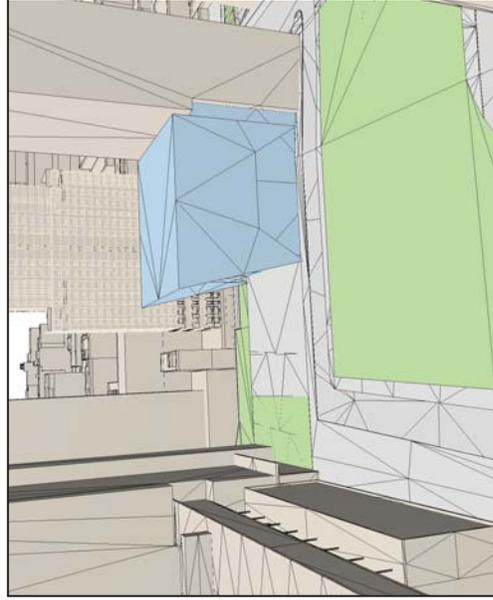
It is assumed for purposes of this EAS that, absent the proposed action, the City would facilitate the development of the ERY site according to the program analyzed in the 2009 Western Rail Yard FEIS, with changes to the Cultural Facility site designated in the 2010 MOU (See page 1a, "Project Description"). Thus, in the No Action condition, it is assumed that the ERY site would include the same as-of-right residential and commercial development as in the 2009 FEIS, and would include a 125,000-gsf, 190-foot tall cultural facility (the No Action Cultural Facility).² The No Action Cultural Facility would be located on a footprint between ERY Tower D to the west and Tower C to the east. This would create public open space corridors between the No Action Cultural Facility and both Tower D and Tower C. The open space corridor between the No Action Cultural Facility and Tower C—the connection to the High Line—would have a

¹ All elevations are approximate.

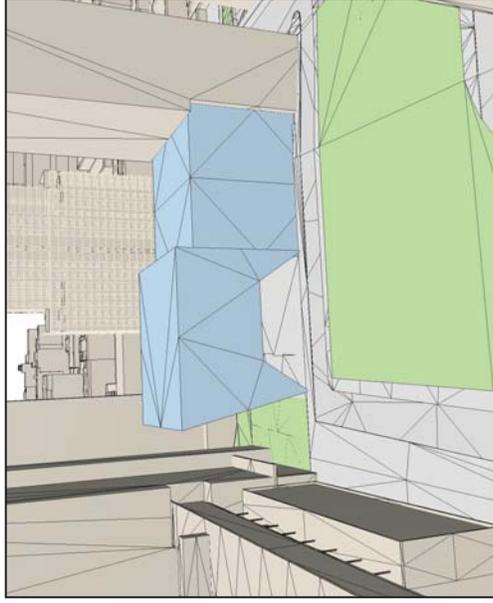
² The gross square footage of the No Action Cultural Facility was calculated by assuming a 25 percent zoning floor area to gross floor area conversion factor, based on similar projects, including the planned new building for the Whitney Museum of American Art, at Washington Street and Gansevoort Street. The height of the No Action Cultural Facility was assumed to be the height of the ERY Cultural Facility analyzed in the 2009 Western Rail Yard FEIS. The No Action Cultural Facility, while taller than the proposed Culture Shed, has less gross floor area based on allocation of space and use. In addition, the proposed Culture Shed adds usable space below the plaza level and below the High Line along West 30th Street.



Previously-approved



Culture shed - retracted



Culture shed - deployed

Publicly-Accessible Open Space



Hudson Yards Culture Shed

minimum width of 80 feet. In addition, in the No Action condition, Tower D would be narrower in the east-west dimension and taller than in the previously-approved scenario.

In the With Action condition, the proposed 165-foot tall Culture Shed would be developed immediately east of and abutting ERY Tower D. A Culture Facility Plaza with a lot area of approximately 17,758 gsf would be developed to the east of the Culture Shed Building. In the With Action condition, the connection to the High Line would be in the same location as in the No Action condition, but would have a minimum width of 60 feet.

The proposed Culture Shed, when deployed, would extend eastward into the Culture Facility Plaza, where, in the No Action condition, no structure would exist. In addition, the Culture Shed would be located near several sunlight-sensitive resources including: the large proposed outdoor plaza to the north across West 31st Street, proposed the open spaces further north, the proposed Tower C entrance court between the proposed Culture Shed and the proposed Tower C, and the High Line to the south. Consequently, a shadows assessment is required.

B. METHODOLOGY

The direction and length of shadows vary throughout the course of the day and also differ depending on the season. In order to determine whether project generated shadow could fall on a sunlight-sensitive resource, three-dimensional (3D) computer mapping software¹ was used to calculate and display the baseline and proposed project's shadows on individual representative days of the year. A 3D model was developed representing the topography, open spaces and buildings in the study area.

REPRESENTATIVE DAYS FOR ANALYSIS

Shadows on the summer solstice (June 21), winter solstice (December 21) and spring and fall equinoxes (March 21 and September 21, which are approximately the same in terms of shadow patterns) are modeled, to represent the range of shadows over the course of the year. An additional representative day during the growing season is also modeled, generally the day halfway between the summer solstice and the equinoxes, i.e. May 6 or August 6, which have approximately the same shadow patterns.

TIMEFRAME WINDOW OF ANALYSIS

The shadow assessment considers shadows occurring between one and a half hours after sunrise and one and a half hours before sunset. At times earlier or later than this timeframe window of analysis, the sun is down near the horizon and the sun's rays reach the Earth at very tangential angles, diminishing the amount of solar energy and producing shadows that are very long, move fast, and generally blend with other shadows until the sun reaches the horizon and sets. Consequently, shadows occurring outside the timeframe window of analysis are not considered significant under *CEQR*, and their assessment is not required.

¹ MicroStation V8i

C. PROBABLE IMPACTS OF THE PROPOSED PROJECT

HIGH LINE

The analysis showed that shadows from the proposed Culture Shed would not cast incremental shadows, in comparison to the No Action scenario, on the High Line at any time of year. Its shadows would not fall far enough to the south on the March 21/September 21 or December 21 analysis days, and in the early mornings of the May 6/August 6 and June 21 analysis days, when its shadow could (briefly) reach a portion of the High Line, existing shadows from the Tower C and Tower D buildings would already fall there.

ERY OUTDOOR PLAZA

Some variation of how shadows would fall on the ERY Outdoor Plaza areas to the north of the proposed Culture Shed would occur during midday hours resulting in northward casting shadows (morning and evening shadows would not result in incremental based on the presence of taller surrounding structures). For these midday hours, **Figures B-2 through B-7** show shadow patterns on the four representative analysis days, at times when these incremental differences between the different scenarios would occur. Any additional shadows from the proposed Culture Shed, compared to the No Action condition, are highlighted in red. Areas of reduced shadow—i.e. that would be in shadow in the No Action condition but in sun with the shorter proposed Culture Shed—are highlighted in yellow.

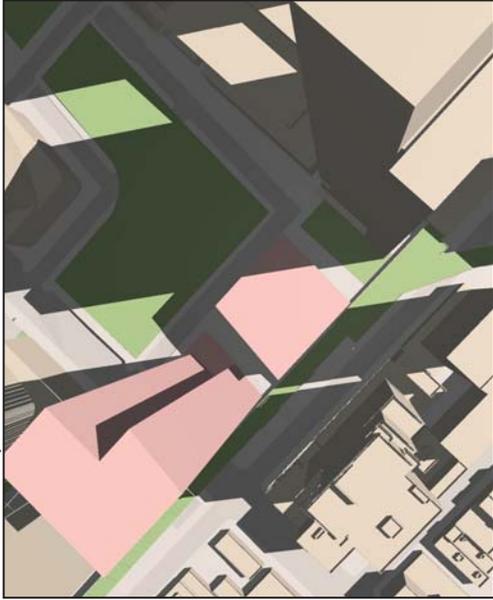
Generally, throughout the year, shadows on the proposed outdoor plaza to the north would be similar, or would be slightly reduced, with the proposed Culture Shed in either its retracted or deployed position compared with the No Action condition. The reductions would result from the shorter height of the Culture Shed buildings overall, and the more westerly location of the building in a retracted configuration.

According to CEQR criteria, such small incremental variation both in area and time duration would not be considered an adverse impact.

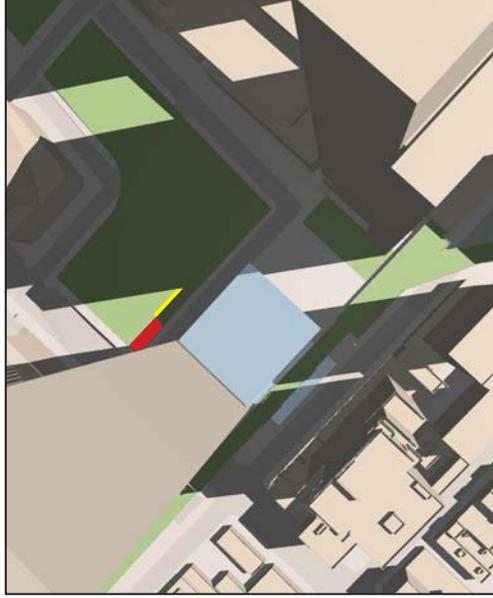
CONNECTION TO THE HIGH LINE

Throughout the year, there would generally be equivalent or less shadow on the proposed Tower C entrance plaza with the Culture Shed in its retracted state than in the No Action condition. However, in the mid-afternoon there would be more shadow with the Culture Shed in its deployed position because its sloped roof would hang over the westernmost portion of the connection to the High Line (see Figure 3, March/September at 2 PM, Figure 4, May/August at 2PM, and Figure 5, June 21). Given that the primary purpose of the connection to the High Line will be pedestrian movement, and the small incremental changes in shadows would not affect the primary use of this open space, the proposed project would not result in any significant adverse shadows impacts. *

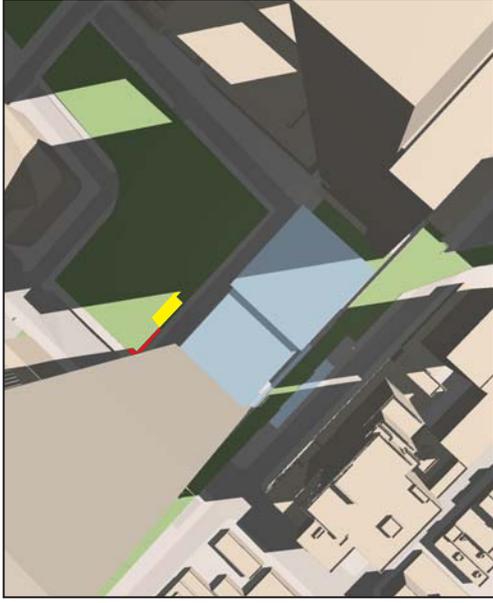
March 21 / September 21 - 11:00 AM EST



Previously-approved

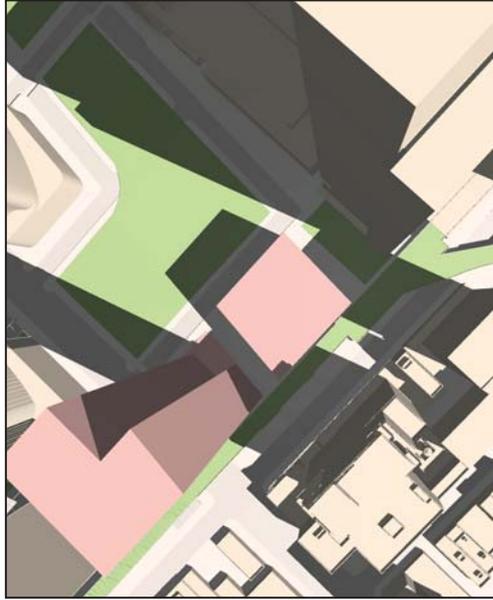


Culture shed - retracted



Culture shed - deployed

March 21 / September 21 - 12:30 PM EST



Previously-approved



Culture shed - retracted



Culture shed - deployed

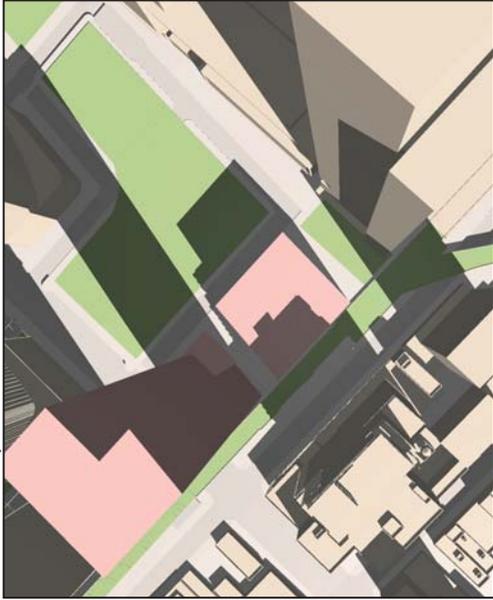
-  Publicly-Accessible Open Space
-  Additional Shadow
-  Reduced Shadow

HUDSON YARDS
CULTURE SHED

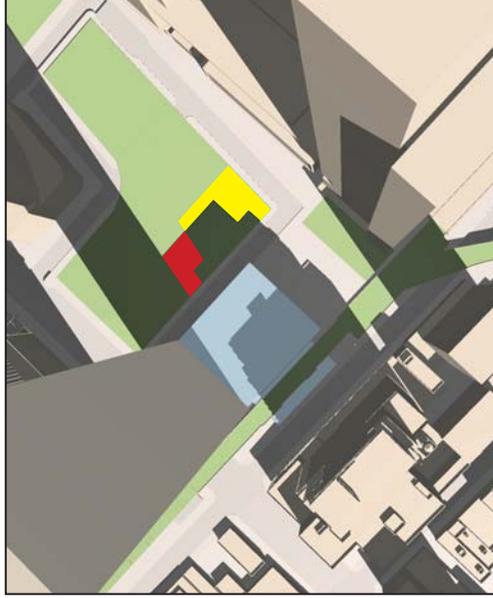
Note: Daylight Saving Time not used.

March 21/September 21
Figure B-2

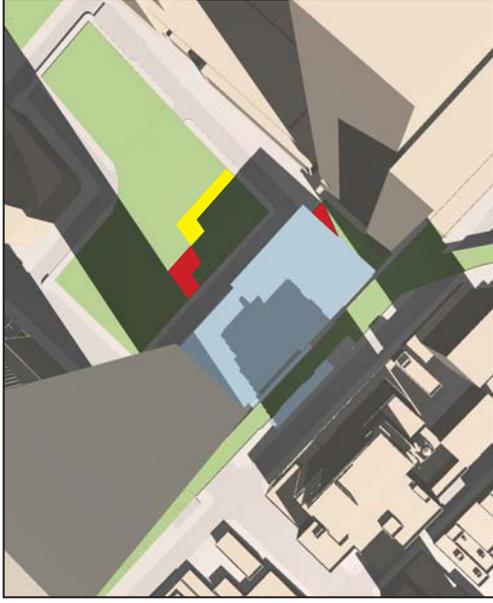
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Previously-approved

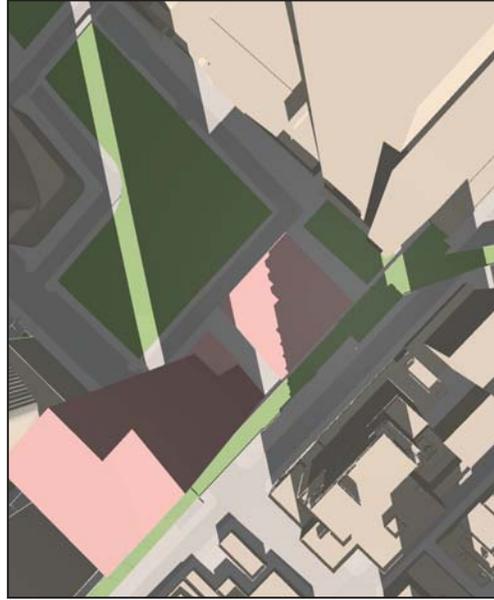


Culture shed - retracted

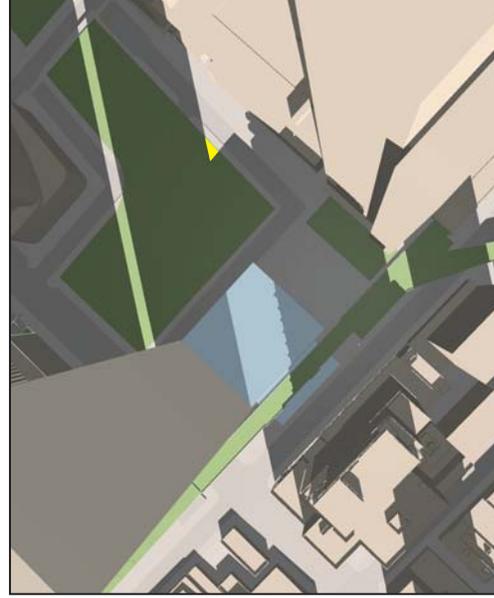


Culture shed - deployed

March 21 / September 21 - 3:30 PM EST



Previously-approved



Culture shed - retracted



Culture shed - deployed

Publicly-Accessible Open Space

Additional Shadow

Reduced Shadow

HUDSON YARDS
CULTURE SHED

Note: Daylight Saving Time not used.

March 21/September 21
Figure B-3

May 6 / August 6 - 12:30 PM EST

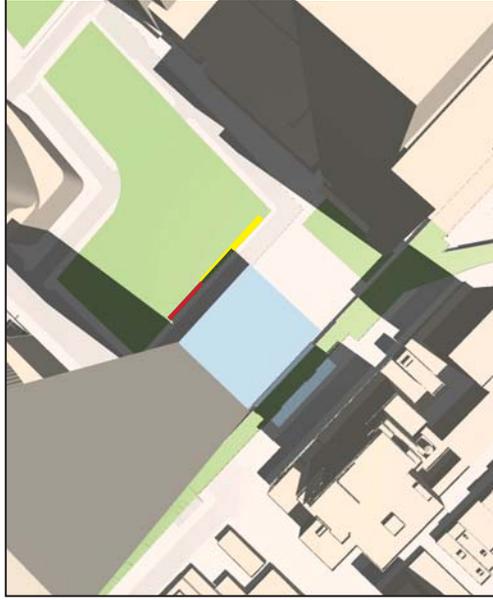


Previously-approved

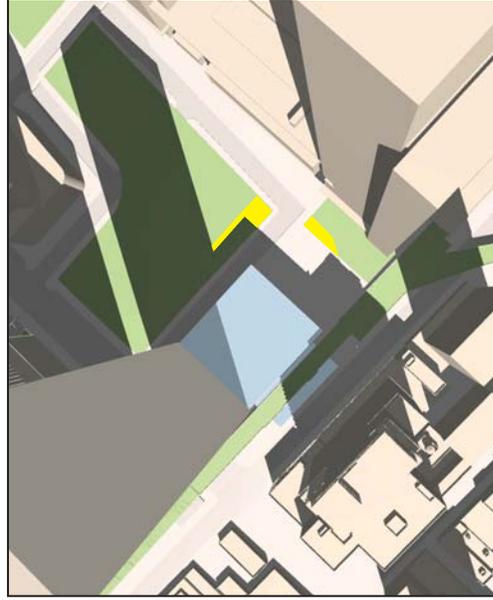
May 6 / August 6 - 2:00 PM EST



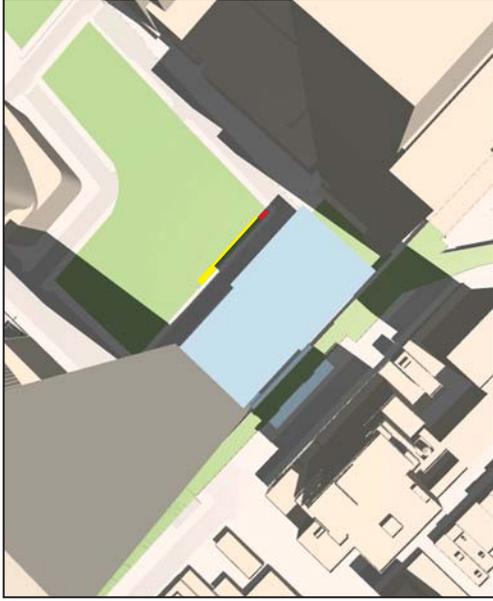
Previously-approved



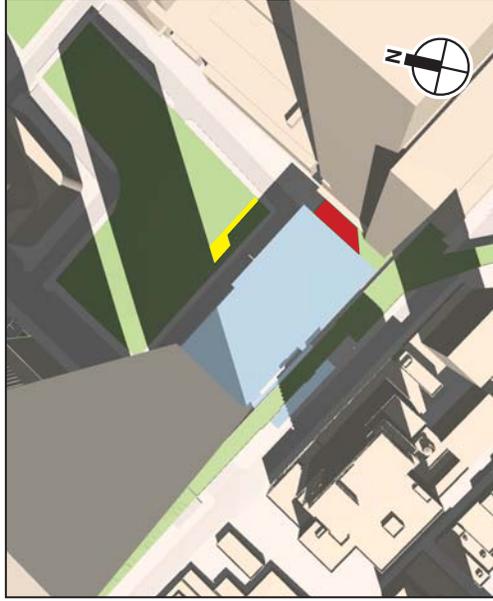
Culture shed - retracted



Culture shed - retracted



Culture shed - deployed



Culture shed - deployed

- Publicly-Accessible Open Space
- Additional Shadow
- Reduced Shadow

HUDSON YARDS
CULTURE SHED

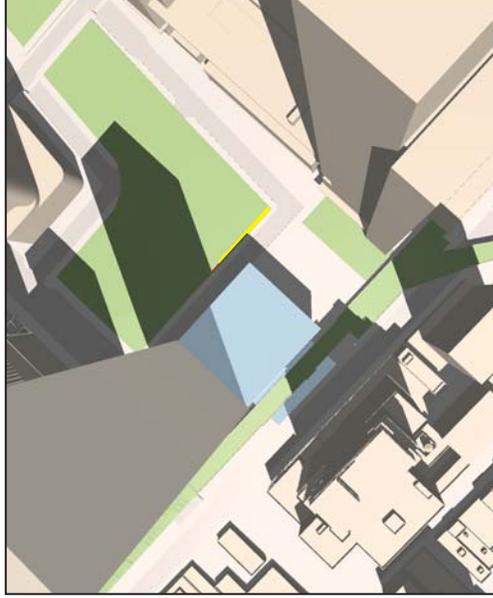
Note: Daylight Saving Time not used.

May 6 / August 6
Figure B-4

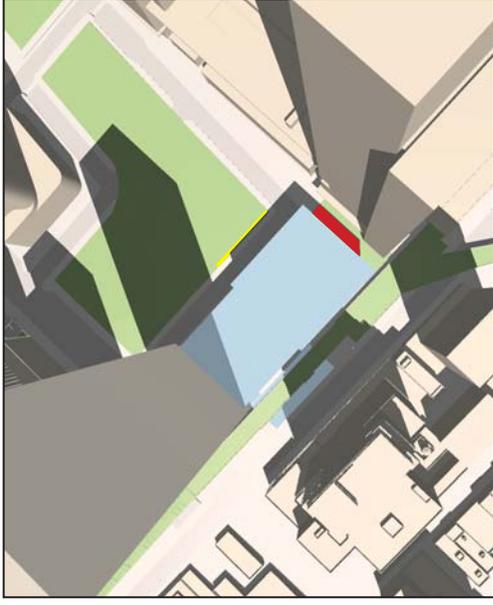
June 21 - 1:30 PM EST



Previously-approved



Culture shed - retracted

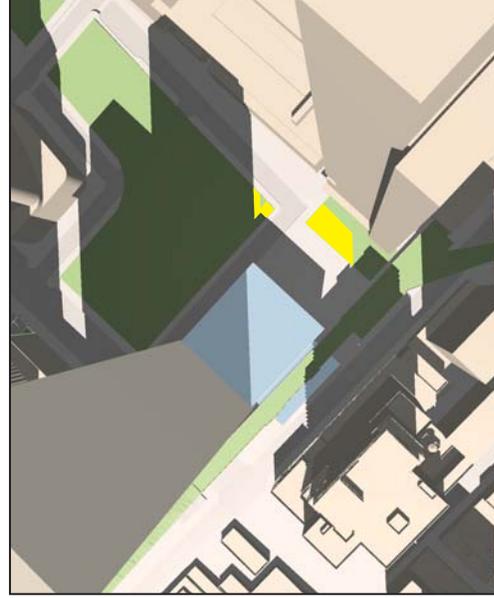


Culture shed - deployed

June 21 - 2:30 PM EST



Previously-approved



Culture shed - retracted



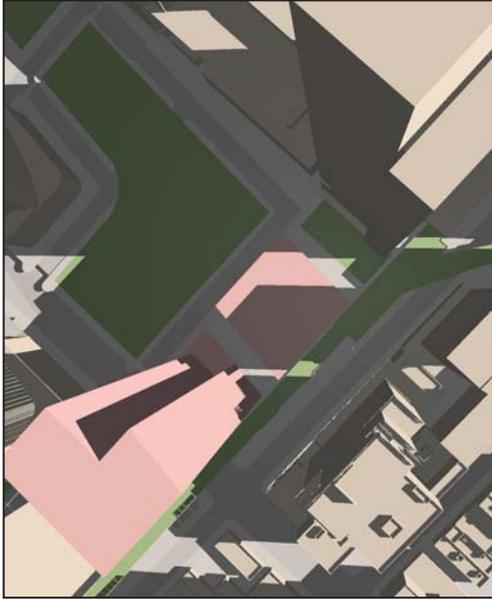
Culture shed - deployed

- Publicly-Accessible Open Space
- Additional Shadow
- Reduced Shadow

HUDSON YARDS
CULTURE SHED

Note: Daylight Saving Time not used.

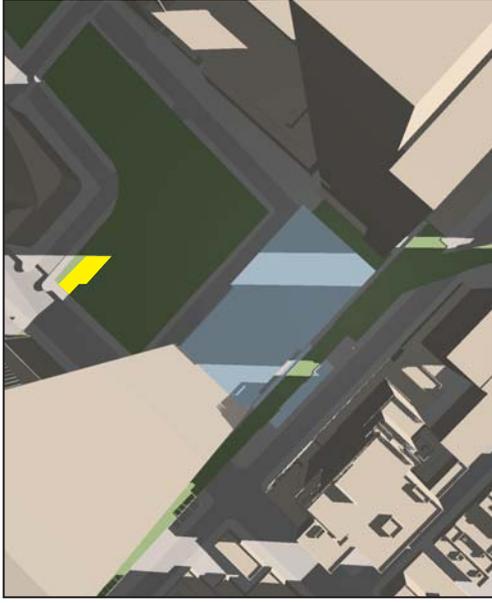
December 21 - 11:00 AM EST



Previously-approved

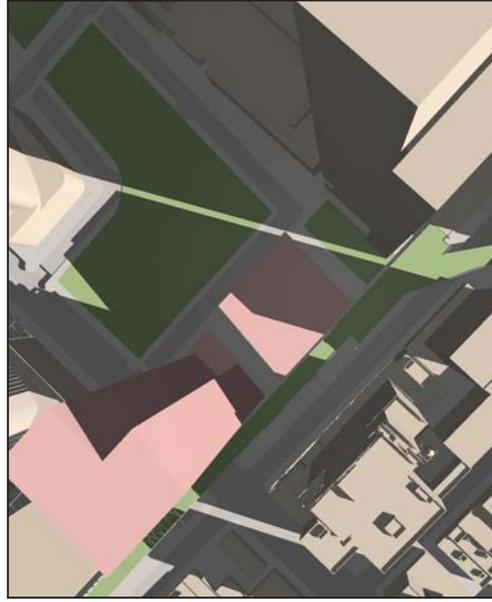


Culture shed - retracted



Culture shed - deployed

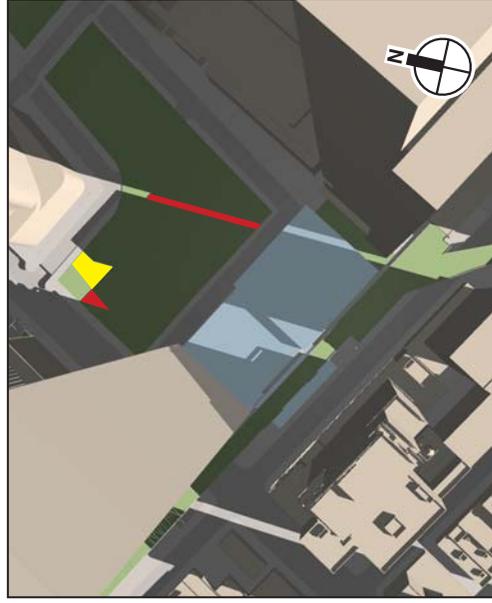
December 21 - 12:00 PM EST



Previously-approved



Culture shed - retracted



Culture shed - deployed

- Publicly-Accessible Open Space
- Additional Shadow
- Reduced Shadow

HUDSON YARDS
CULTURE SHED

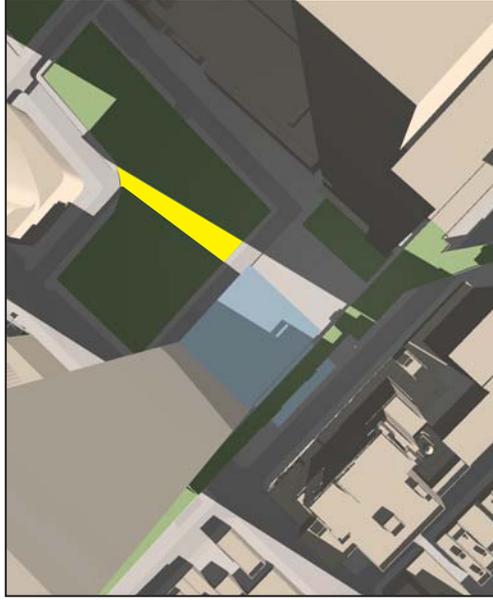
Note: Daylight Saving Time not used.

December 21
Figure B-6

December 21 - 1:00 PM EST



Previously-approved

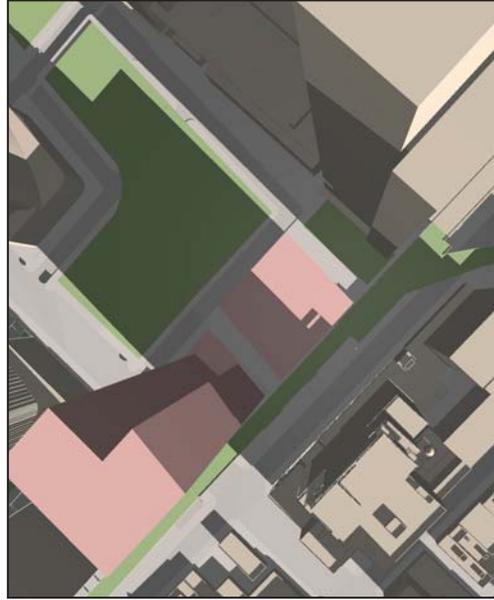


Culture shed - retracted

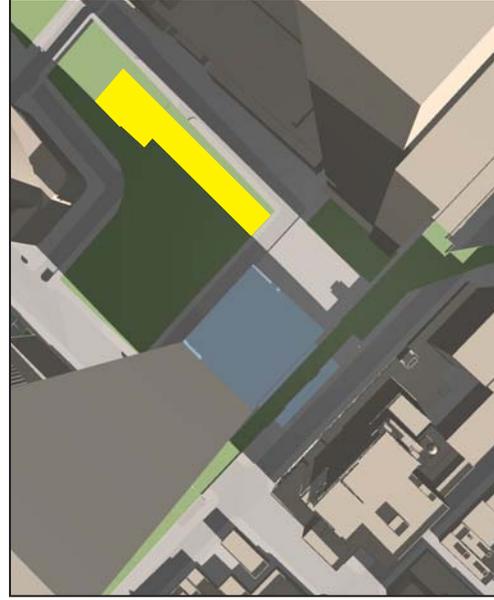


Culture shed - deployed

December 21 - 2:00 PM EST



Previously-approved



Culture shed - retracted



Culture shed - deployed

- Publicly-Accessible Open Space
- Additional Shadow
- Reduced Shadow

HUDSON YARDS
CULTURE SHED

Note: Daylight Saving Time not used.

December 21
Figure B-7

A. INTRODUCTION

This section considers the potential of the proposed Culture Shed to affect urban design and visual resources. The Culture Shed would be located within a new building (the “Culture Shed Building”), immediately east of and abutting ERY Tower D. The Culture Shed Building would have a retractable shed (the “Shed Portion”) that would be deployed within a new plaza to the east of the Culture Shed Building, to provide additional space for exhibitions and other activities.

Under the 2012 *City Environmental Quality Review (CEQR) Technical Manual*, urban design is defined as the totality of components that may affect a pedestrian’s experience of public space. These components include streets, buildings, visual resources, open spaces, natural resources, and wind. An urban design assessment under CEQR must consider whether and how a project may change the experience of a pedestrian in a project area. The *CEQR Technical Manual* guidelines recommend the preparation of a preliminary assessment of urban design and visual resources, followed by a detailed analysis, if warranted based on the conclusions of the preliminary assessment. The analysis provided below addresses urban design characteristics and visual resources for existing conditions and the future without and with the proposed action.

It is assumed for purposes of this analysis that, absent the proposed action, the City would facilitate the development of the ERY site according to the program analyzed in the 2009 Western Rail Yard FEIS, with changes to the Cultural Facility site designated in the 2010 MOU (See page EAS 1a, “Project Description”). Thus, in the No Action condition, it is assumed that the ERY site would include the same as-of-right residential and commercial development as analyzed in the 2009 FEIS, and would include a 125,000-gsf, 190-foot tall cultural facility (the No Action Cultural Facility). The No Action Cultural Facility would be located on a footprint between ERY Tower D to the west and Tower C to the east.

This supplemental analysis compares the proposed Culture Shed with the No Action scenario, focusing on the proposed changes to building type, arrangement, and streetscape elements. As described below, the proposed project would not result in any significant adverse changes to these elements and would not obstruct or significantly affect any existing view corridors or views to visual resources.

B. METHODOLOGY

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. Examples include projects that permit the modification of yard, height, and setback requirements, and projects that result in an increase in built floor area beyond what would be allowed ‘as-of-right’ or in the future without the proposed project.

Hudson Yards Culture Shed

The proposed project would require a number of modifications to the Zoning Resolution, including: to increase the maximum amount of permitted signage, and to allow the use of banners; and to reduce the minimum width of the defined “Connection to High Line” from 80 feet to a minimum of 60 feet. These modifications would result in a physical alteration of the project site observable by pedestrians that is not allowed by existing zoning. Therefore, the proposed action meets the threshold for a preliminary assessment of potential impacts to urban design and visual resources.

According to the *CEQR Technical Manual*, the study area for urban design is the area where the project may influence land use patterns and the built environment, and is generally consistent with that used for the land use analysis. For visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. The land use study area may serve as the initial basis for analysis; however, in cases where significant visual resources exist, it may be appropriate to look beyond the land use study area to encompass views outside of this area, as is often the case with waterfront sites or sites within or near historic districts.

The project site is not on the waterfront, and is not within or near an historic district. Therefore, the study area for the urban design and visual resources analysis has been defined as a 400-foot radius around the proposed Culture Shed site (see **Figure C-1**).

C. EXISTING CONDITIONS

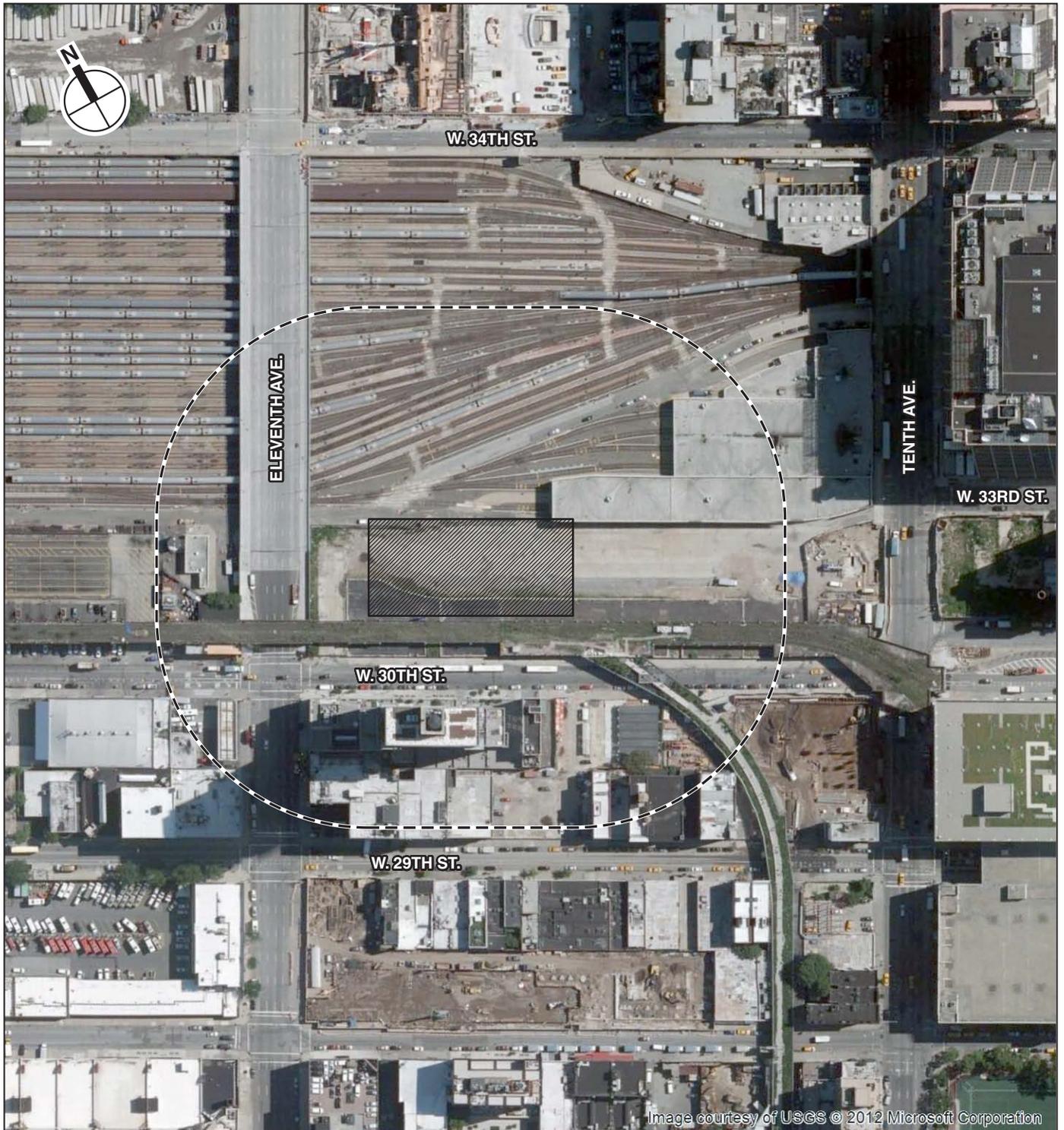
URBAN DESIGN

PROJECT SITE

The project site is the southwest quadrant of the ERY superblock bounded by West 30th and 33rd Streets and Tenth and Eleventh Avenues, the eastern half of the Long Island Rail Road’s (LIRR) John D. Caemmerer West Side Yard. The project site is located below the grade of the surrounding streets, other than West 30th Street, and is relatively flat (see **Figure C-2**). The project site is open and currently utilized as a storage and maintenance yard by the Long Island Rail Road (LIRR); it does not contain any natural features or significant topographic features (see **EAS Figures 3 and 4**). The project site is zoned C6-4 within the Special Hudson Yards District (see **EAS Figure 7**). The 2010 amended Memorandum of Understanding Concerning Development of Sites at John D. Caemmerer West Side Yard (2010 MOU) designated 100,000 square feet of zoning floor area for a Cultural Facility. Currently, the underlying C6-4 zoning governs signs, except that flashing signs are not allowed within 100 feet of the proposed Hudson Boulevard, its northerly prolongation to West 39th Street and its southerly prolongation to West 33rd Street, or facing the outdoor plaza, and there are additional restrictions on signs facing the High Line. The maximum height for signs in C6-4 districts is 40 feet, except that signs within 50 feet of and facing the High Line have a maximum height of 20 feet above the High Line. C6-4 districts permit the total surface area of signs to be five times the street frontage of the zoning lot (or establishment), but may not exceed 500 sf for any frontage on a corner lot portion, interior lot portion, or frontage of a through lot portion.

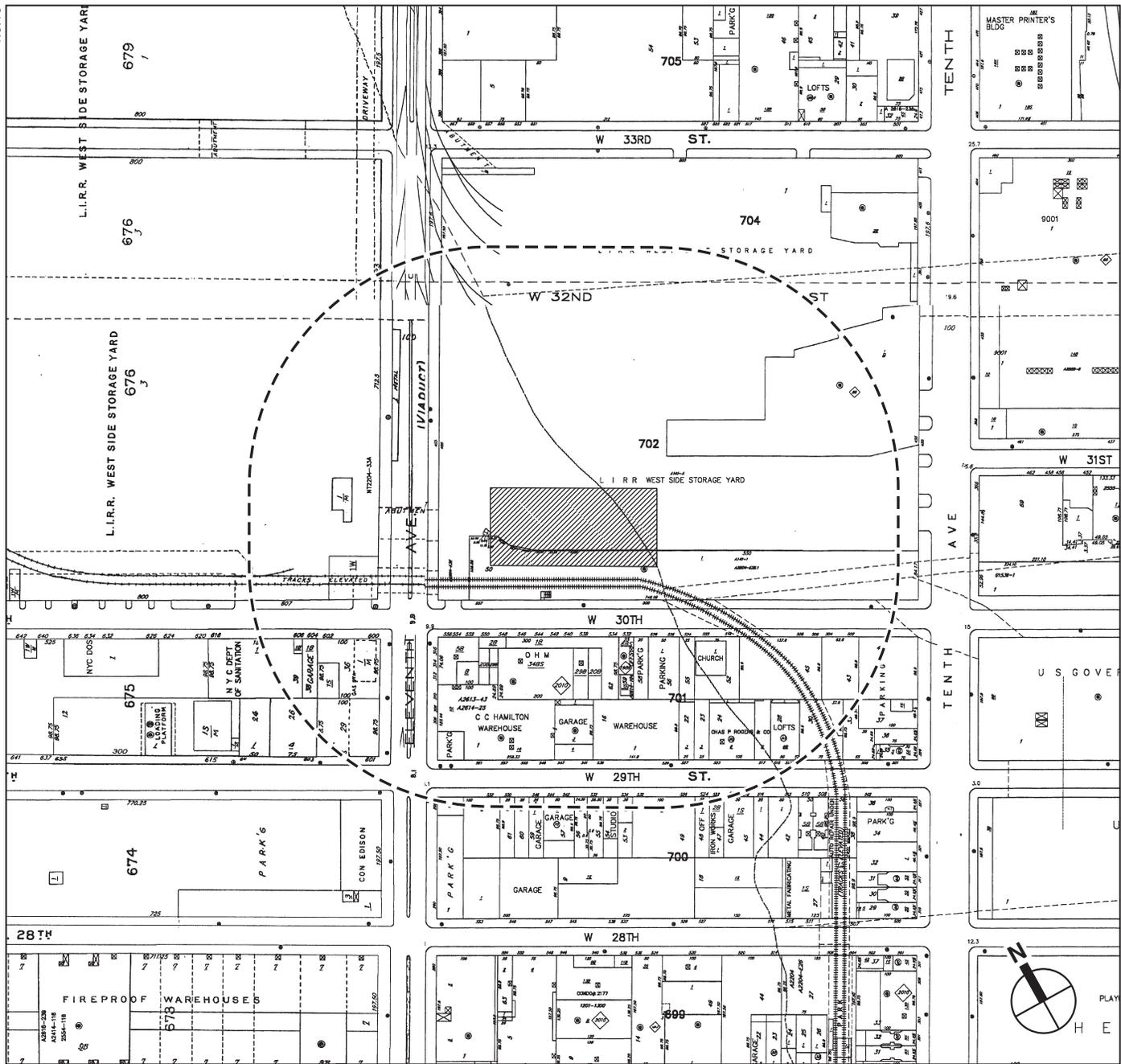
STUDY AREA

The 400-foot study area surrounding the Culture Shed site primarily comprises the remainder of the ERY to the north and east and the Western Rail Yard to the west. This portion of the study area is within the Special Hudson Yards District and is zoned C6-4. As described above, the 2010 MOU provides design guidelines and specifies the inclusion of certain uses within this

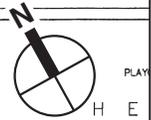
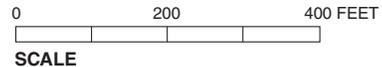


-  Culture Shed Site
-  Study Area Boundary (400-Foot Perimeter)

0 500 FEET
SCALE



-  Culture Shed Site
-  Study Area Boundary (400-Foot Perimeter)



Urban Design and Visual Resources
 Study Area and Sanborn Map
 Figure C-2

portion of the study area. The ERY (including the Culture Shed site) is approximately 13.1 acres in size and is relatively flat and located below the grade of the surrounding streets, other than West 30th Street. The ERY does not contain any natural features or significant topographic features. The portion of the ERY outside of the current project site is mainly open and utilized as a train storage and maintenance yard by the LIRR. Chain link fencing separates the ERY from West 30th Street and Eleventh Avenue; concrete retaining walls also enclose the ERY along Tenth and Eleventh Avenues and West 33rd Street, creating a physical and visual barrier between this superblock and surrounding streets. At present, the concrete wall along West 33rd Street prevents views through the project site, except where this wall is interrupted by a truck entrance enclosed with chain link fencing.

The High Line, a former train viaduct that is being converted to a public open space, travels along the southern boundary line of the ERY in an east-west direction, from Tenth Avenue to Route 9A. At the southeastern corner of the ERY, close to the intersection of West 30th Street and Tenth Avenue, the completed portion of the High Line public park curves southward, extending to its southern terminus at Gansevoort Street. Directly south of the Culture Shed site, along the south side of West 30th Street between Tenth and Eleventh Avenues, is the northernmost access point for the completed portion of the High Line Park. Along West 30th Street, both the loop track and spur of the High Line have a concrete parapet simply ornamented with recessed panels and a tubular steel railing broken up with square concrete posts. The completed portion of the High Line has decorative metal railings, landscaped areas, and seating.

Directly across Eleventh Avenue from the project site is the western half of the John D. Caemmerer West Side Yard, which is occupied by trains and rail tracks and is used for train storage and maintenance, with a small support building located along West 30th Street. Like the ERY, this superblock is surrounded by concrete walls and chain link fencing.

The block southwest of the project site, bounded by West 29th and 30th Streets and Eleventh and Twelfth Avenues is occupied mostly by a bus and storage yard, with several one- to four-story nondescript brick and concrete manufacturing and auto-related buildings and a gas station occupying the remainder of the block. The bus and storage yard is surrounded with chain link fencing along the majority of its West 29th and 30th Streets façades. This portion of the study area lies outside of the Special Hudson Yards District and is zoned M2-3, which allows development of up to 2.0 FAR.

The block directly south of the Culture Shed site includes low- to mid-rise warehouse, automotive, manufacturing, commercial loft buildings; a new 34-story residential building on the northwest corner of the block (312 Eleventh Avenue), directly opposite the Culture Shed site; and a new 32-story residential building currently under construction on the east end of the block, facing Tenth Avenue. The historic W & J Sloane Warehouse and Garage is located on the northeast corner of Eleventh Avenue and West 29th Street. The W&J Sloane Warehouse and Garage occupies three buildings: two 10-story structures and one four-story garage, which feature Renaissance Revival elements, such as arched loading docks with stone keystones on the ground floor of the building's West 29th Street façade. The building is currently occupied by a storage company. The High Line passes through the middle of this block. The residential development facing Tenth Avenue, currently under construction, has been designed to comply with the area's zoning, which requires that portions of adjacent new buildings be set back from the High Line to ensure that light and air reach the open space and that views to the east of Chelsea and Midtown are preserved. This portion of the study area is within the Special West Chelsea District and is zoned C6-4 and C6-3.

Hudson Yards Culture Shed

The streetscape of the study area is urban and industrial in character, with concrete sidewalks lining paved streets. As noted above, concrete walls and chain link fences enclose several of the blocks in the study area. Street furniture in the study area is composed of standard metal streetlamps, traffic lights, fire hydrants, newspaper dispensers, bicycle parking ramps, mailboxes, and bus stop and parking signs. There are a few planters along Tenth Avenue and West 30th Street. There are few pedestrians and little street activity, except for truck loading and unloading. There is also little to no street furniture, except standard traffic signs, fire hydrants, and street lamps and almost no street trees.

VISUAL RESOURCES

PROJECT SITE

The project site does not contain any visual resources. Visual resources that can be seen from the project site are the High Line and the spire of the Empire State Building.

STUDY AREA

Visual resources that can be seen from the study area include the Hudson River and the New Jersey skyline to the west, and the various components of the High Line structure along West 30th Street and above Eleventh Avenue. The High Line can also be seen above West 29th Street and in small segments as it passes through the midblocks between Tenth and Eleventh Avenues. To the east, the spire of the Empire State Building can be seen above other buildings in the foreground. Views north and south along Tenth and Eleventh Avenues are long where not interrupted by the crossing of the High Line and include the Silver Towers and Westyard Distribution Building (to the north) and the Starrett-Lehigh Building (to the south). These buildings can also be seen from the High Line itself, which provides an elevated viewing location for pedestrians.

D. FUTURE WITHOUT THE PROPOSED PROJECT

The study area is expected to change dramatically in the future without the proposed project. It is assumed that the ERY site would include the same as-of-right residential and commercial development as analyzed in the 2009 FEIS and the 2012 EAS, and would include a 125,000-gsf, 190-foot tall cultural facility (the No Action Cultural Facility) on the project site. The No Action Cultural Facility would be located on a footprint between ERY Tower D to the west and Tower C to the east. This would create public open space corridors between the No Action Cultural Facility and each of Tower D and Tower C. The open space corridor between the No Action Cultural Facility and Tower C—the connection to the High Line—would have a minimum width of 80 feet.

The No Action development would transform the urban design character of the Culture Shed site and the remainder of the ERY by removing the opaque and other barriers surrounding the site, building a platform over the rail yards, and introducing high-density mixed-use development as well as significant publicly-accessible open space. The development of the ERY would create a strong street wall presence along Tenth Avenue, West 33rd Street, and along Eleventh Avenue near West 33rd Street. Due to the presence of the High Line, changes to the street wall along West 30th Street would be less visible, but additional at-grade uses would help to enliven the street beyond the existing conditions. By building a platform over the open railyard, the No Action development would reduce the disruption to the streetscape caused by the grade-separated transportation infrastructure, and inconsistencies of building form and development patterns. The No Action Cultural Facility would create a focal point for southern views along the

newly-created Hudson Boulevard, which would extend in a north-south direction through the ERY superblock.

The No Action development would enhance the vitality of the surrounding streets by introducing residential, worker, and visitor populations to the project site. The No Action development's tall buildings would contribute to the City skyline, which would be compatible with the scale of expected development in the surrounding area. In addition, the building heights on the ERY and of the No Action Cultural Facility on the Culture Shed site would be within the range of heights expected to occur within the Hudson Yards area, and would therefore complement the overall urban design goals for the Special Hudson Yards District. Overall, the No Action condition would represent an improvement in the urban design character of the area over existing conditions.

In the No Action condition, it is assumed that the portion of the High Line traversing the ERY would be redeveloped as a publicly accessible open space.

The development of the Western Rail Yard will also greatly change the streetscape and increase the density of the study area. The site would be developed with up to eight new mixed-use towers containing residential, commercial, public school, public open space, and accessory parking uses. All development proposed for this site will be constructed on top of a platform over the existing rail yard, and the building heights for the planned development are expected to range in height from 350 to 950 feet.

In the remainder of the area surrounding the project site, it can be anticipated that current land use trends and general development patterns would continue. These trends and patterns are characterized by a continued demand for commercial space and housing as contemplated by the Hudson Yards rezoning.

Existing view corridors on east-west streets would be maintained. Some views to the Empire State Building's spire are anticipated to be affected by the buildout of the ERY and WRY; however, the 2009 FEIS anticipated that the development of the ERY and WRY would compensate for the elimination of such views through the creation of a new urban landscape of public open space and building arrangements, some of which would provide new or different views of these resources, and which could become visual resources in their own right.

E. PROBABLE IMPACTS OF THE PROPOSED PROJECT

CULTURE SHED

The proposed action would result in the development of a new, approximately 198,195-gsf Culture Shed Building, located immediately east of and abutting ERY Tower D. The Culture Shed Building would have a retractable shed that would be deployed within a new plaza to the east of the fixed portion of the Culture Shed Building, to provide additional space for exhibitions and other activities (see **EAS Figures 8-11**). When in the nested state, the Culture Shed Building is expected to have a maximum elevation of 165 feet above Manhattan datum¹. When deployed, the shed would shift to the east, and the fixed building is expected to be at 147 feet elevation in height, with the Shed Portion at a height of 165 feet. The new Culture Facility Plaza, with an area of approximately 17,758 gsf, would be developed to the east of the fixed portion of the Culture Shed Building. The proposed connection to the High Line would be in the same location

¹ All elevations are approximate.

Hudson Yards Culture Shed

as in the No Action condition, but would have a minimum width of 60 feet, rather than 80 feet. In comparison to the No Action Cultural Facility, the Culture Shed Building would be approximately 25 to 43 feet shorter (165 feet to the top of the Shed Portion and 147 feet to the top of the fixed building only versus 190 feet) and approximately 73,195 gsf larger in overall size (198,195 gsf versus 125,000 gsf).

SIGNAGE

The proposed zoning text amendment would modify ZR Section 93-17(a) to increase the maximum amount of permitted signage, and allow the use of banners, similar to other community facility uses. The proposed action would allow an increase in the surface area of all permitted signs to 2,700 sf for the Cultural Facility. This total would include a maximum of 200 sf of surface area for signs facing the outdoor plaza north of the Cultural Facility;¹ a maximum of 200 sf of surface area for signs facing the connection to the High Line; a maximum of 1,700 sf of surface area for signs facing West 30th Street; and a maximum of 600 sf of surface area for banners facing or within the Outdoor Plaza. The proposed action would limit signs at the platform level to a height of 30 feet above the Culture Facility Plaza, and signs facing west 30th Street would not be allowed above the High Line. The proposed action would limit the banners located in the outdoor plaza north of the Cultural Facility to poles located at least 13 feet from the Cultural Facility, and would require them to be at least 10 feet above the bottom of the pole. The proposed action would require that signs larger than 300 sf be non-illuminated or indirectly illuminated.

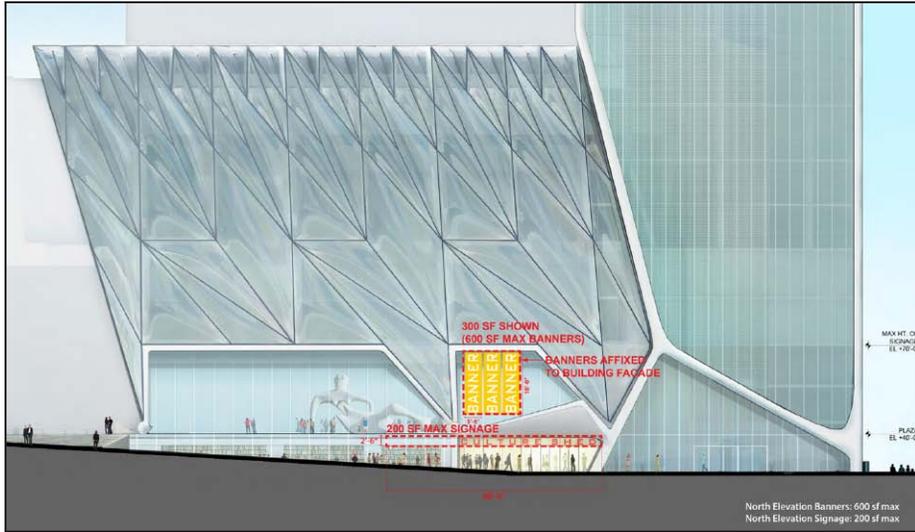
As illustrated in **Figures C-3 and C-4**, the proposed signage is intended to ensure that the two public entries for the Culture Shed at West 30th and 31st Streets would be well-marked and visible to the public, while at the same time limiting signage facing the High Line. The south elevation signage would include translucent text on clear glass. This signage would be indirectly illuminated by indoor lighting or by an indirect source. It would be translucent, allowing views of the lobby and gallery space, and would activate street life by highlighting the south entry to the Culture Shed for passing pedestrians. The banners would be similar to those permitted for certain community facilities, such as museums and other civic buildings.

PRELIMINARY ASSESSMENT

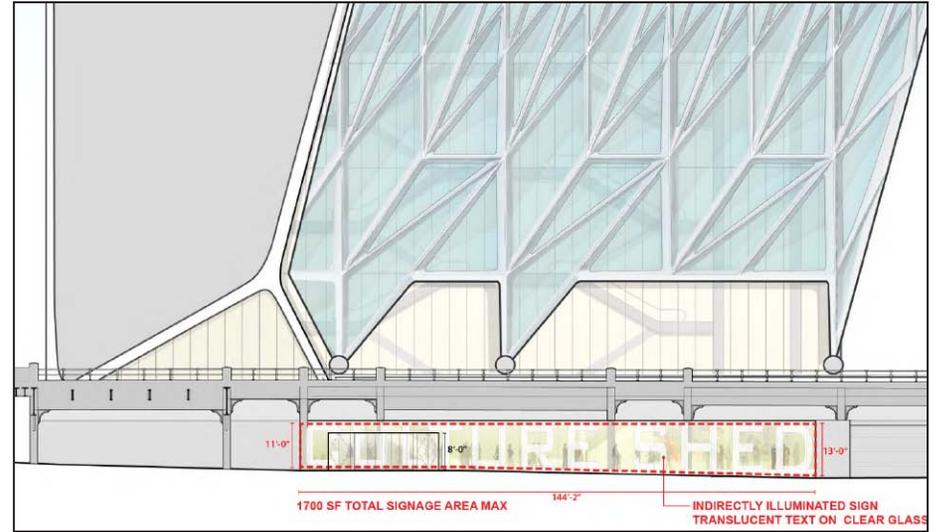
ILLUSTRATIVE PERSPECTIVES

Figures C-5 through C-7 illustrate what the project site and study area could look like in the future with the proposed Culture Shed Building in comparison to the future with the No Action Cultural Facility. (The figures include an updated configuration for Tower D.) While the analysis presented below is based on *CEQR Technical Manual* guidance for creating figures comparing the future without and with the proposed action, which requires a three-dimensional representation of the streetscape, it is noted that based on the dramatic change that will occur on the ERY from existing conditions in the future with or without the proposed action, the figures are based on three dimensional models of the ERY and future surrounding buildings, rather than on existing conditions photographs. An existing conditions photograph is shown to set the context, but the model is not an exact overlay of the base photograph.

¹ Consistent with zoning requirements, an outdoor plaza will be developed north of the Cultural Facility across 31st Street by the developer of the balance of the Eastern Rail Yard.



View of North Elevation Signage at 31st Street Public Entry **A**

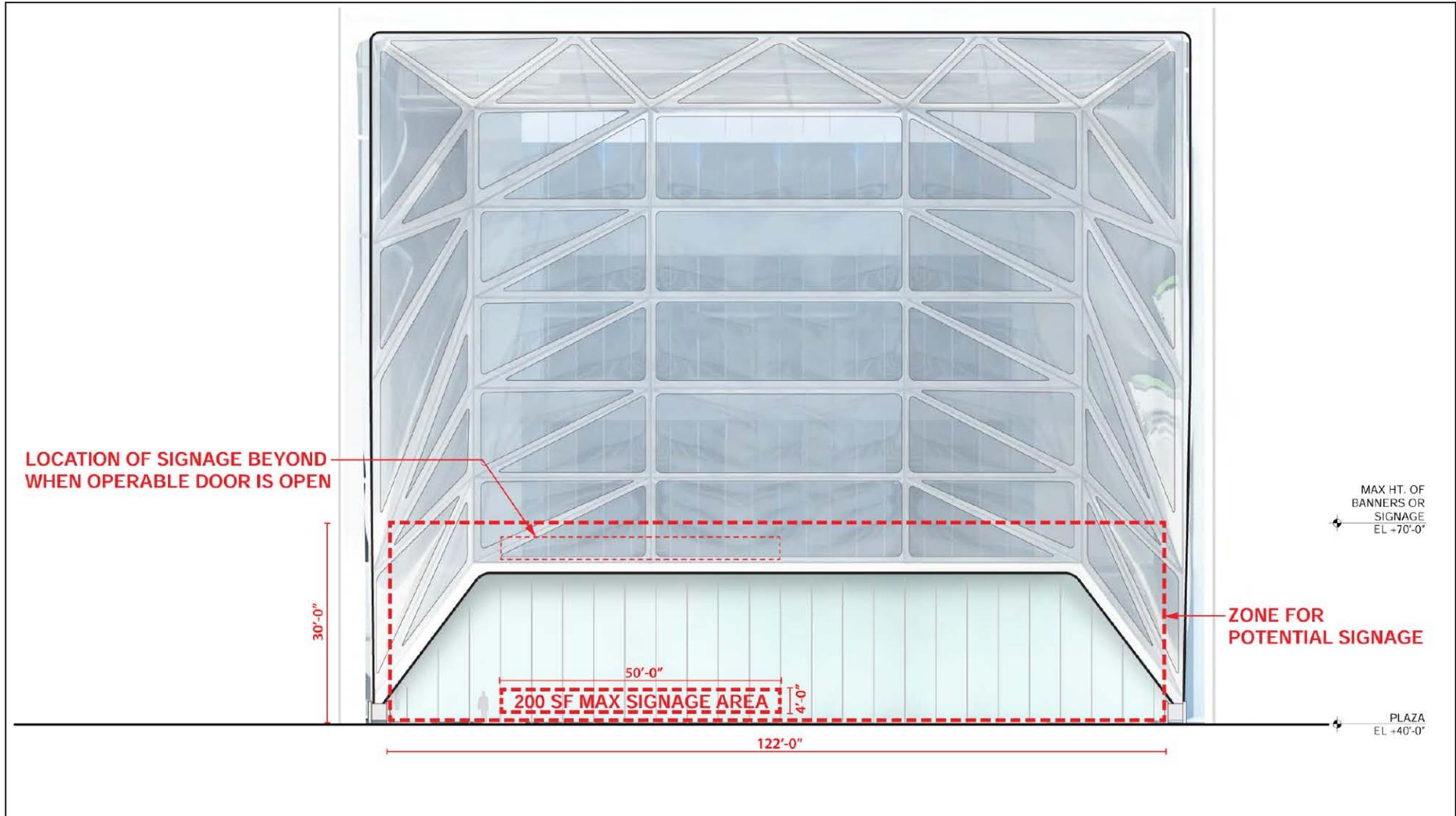


View of South Elevation Signage at 31st Street Public Entry **B**



South Entry Signage **C**

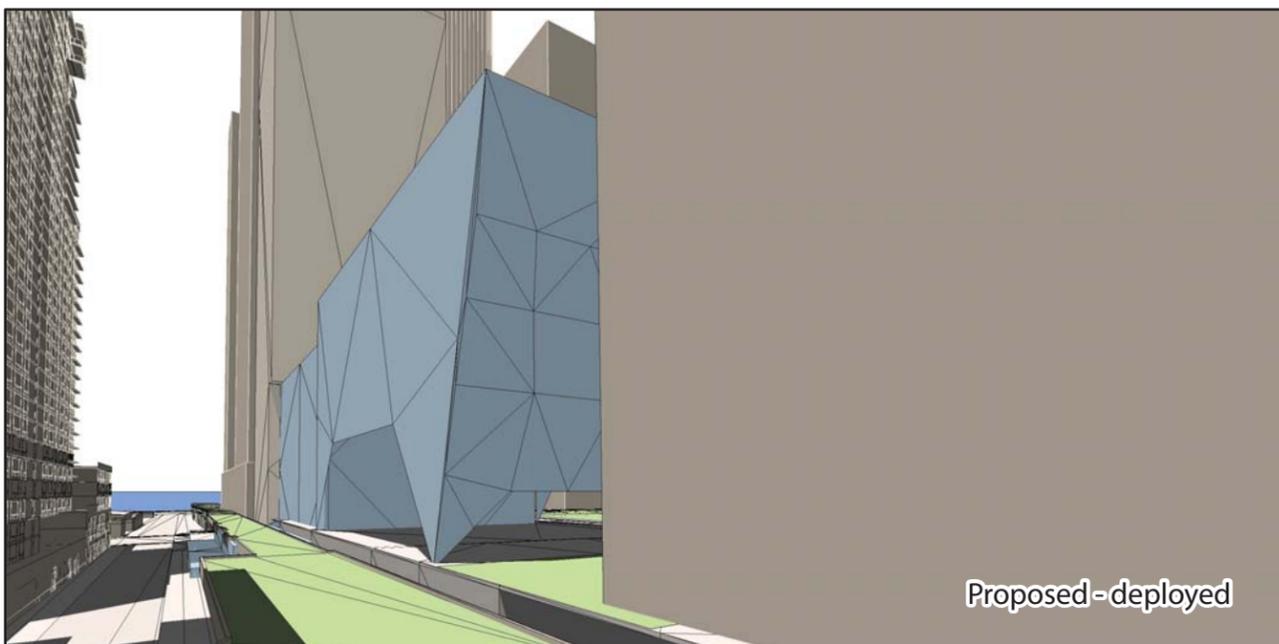
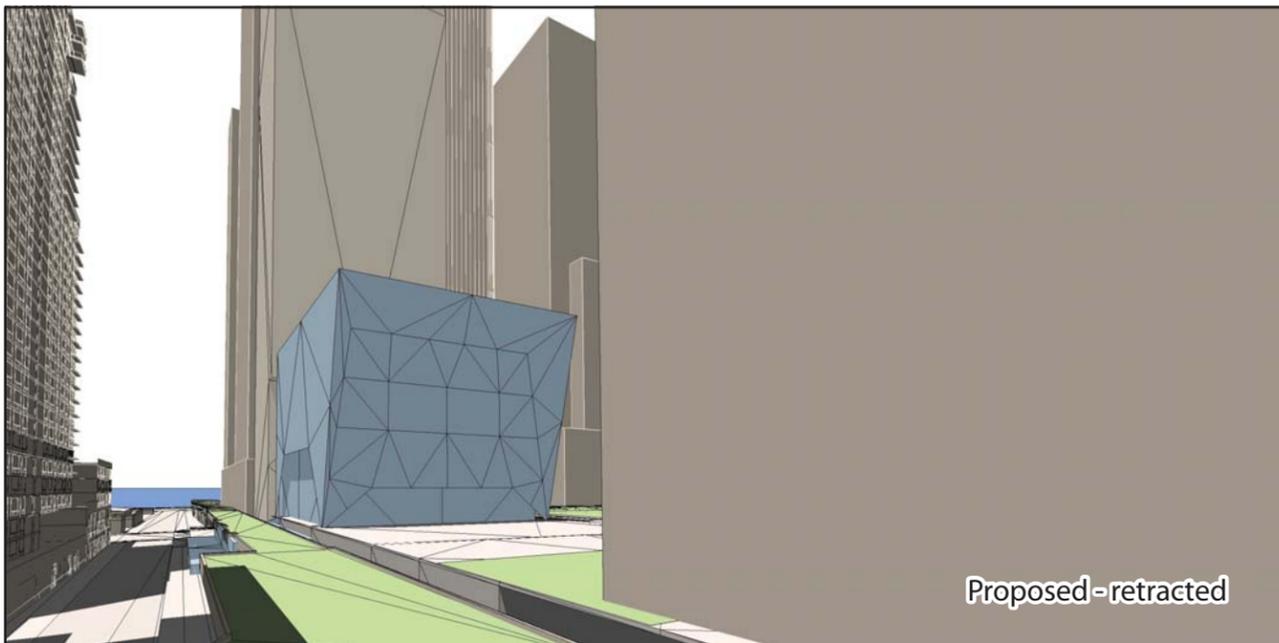
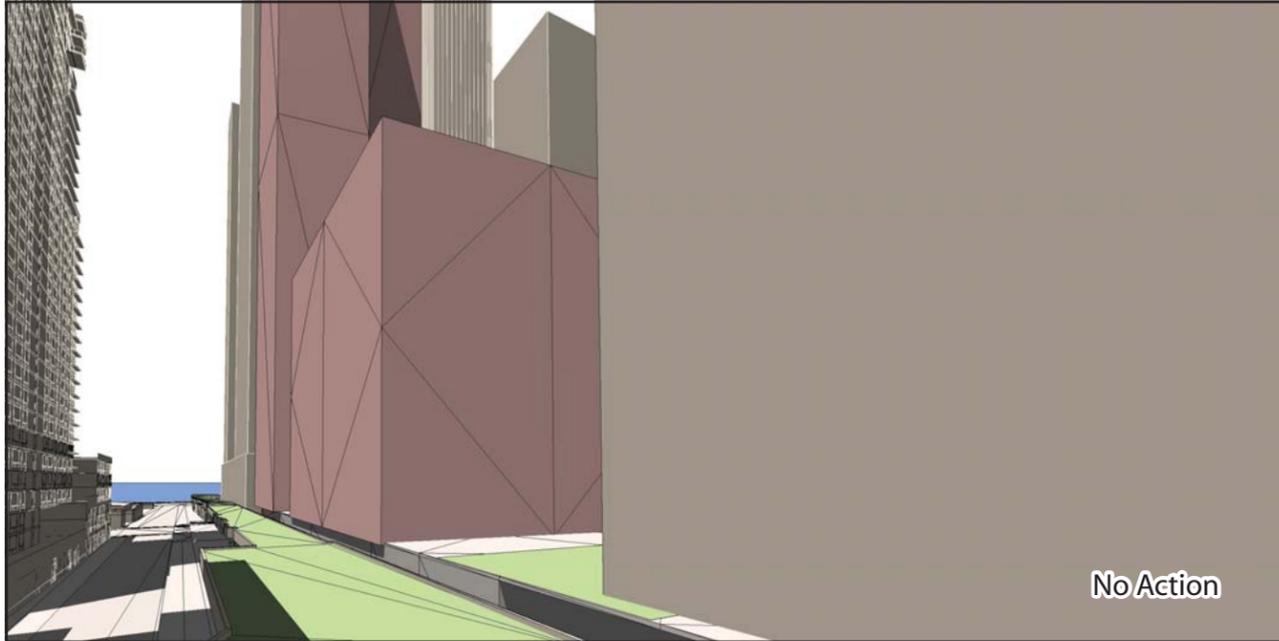
NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

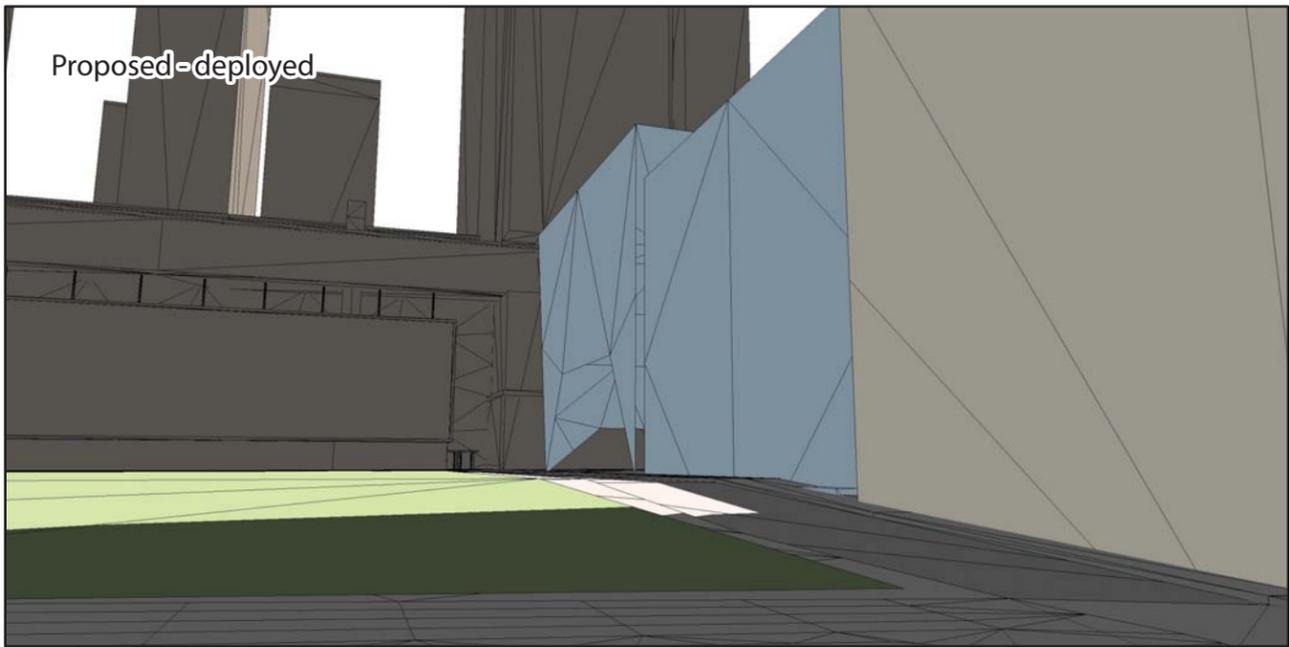
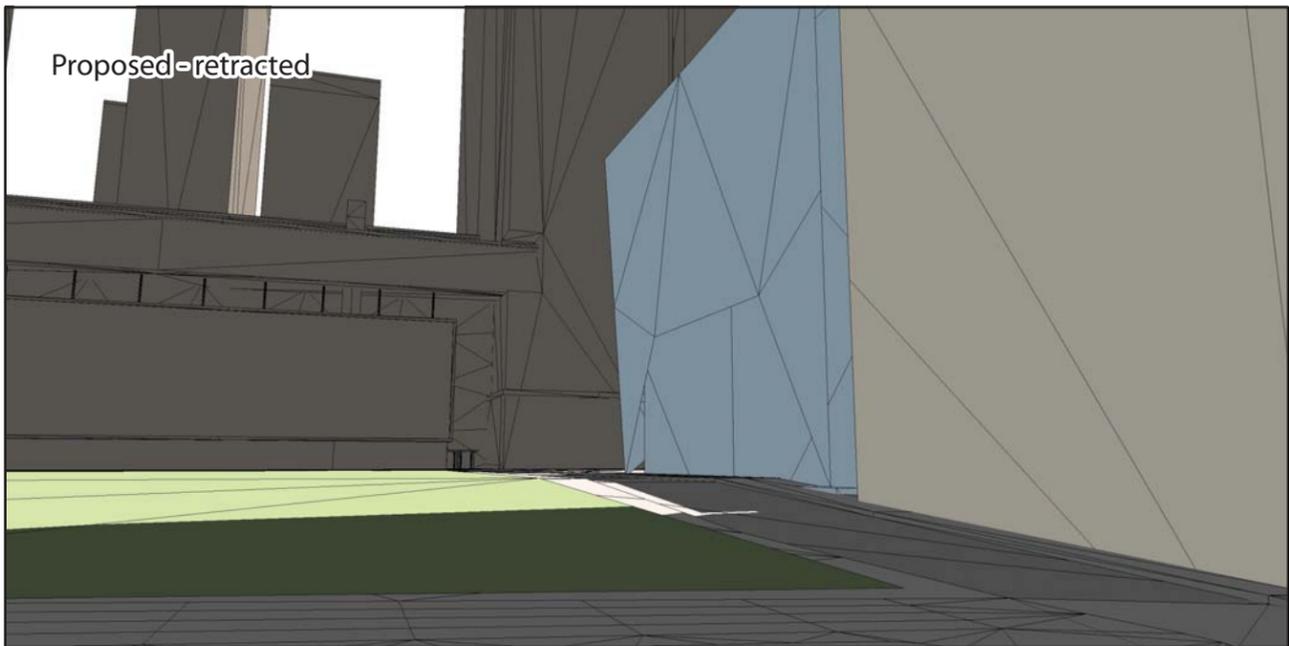
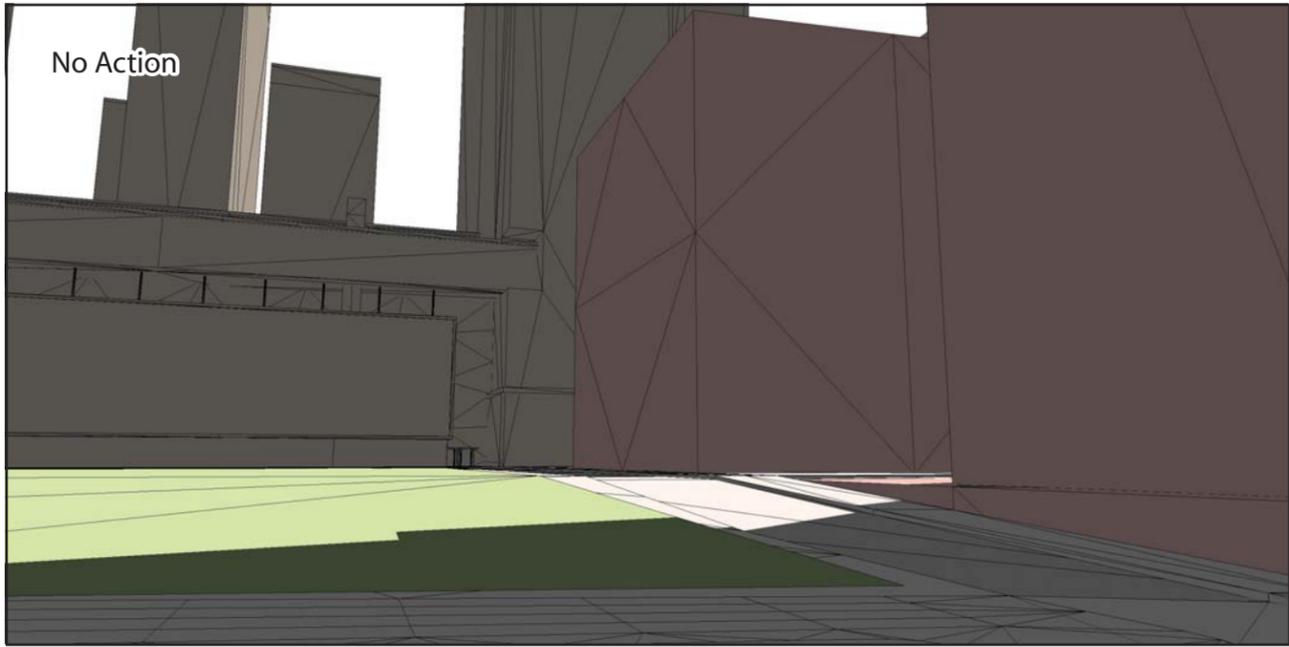
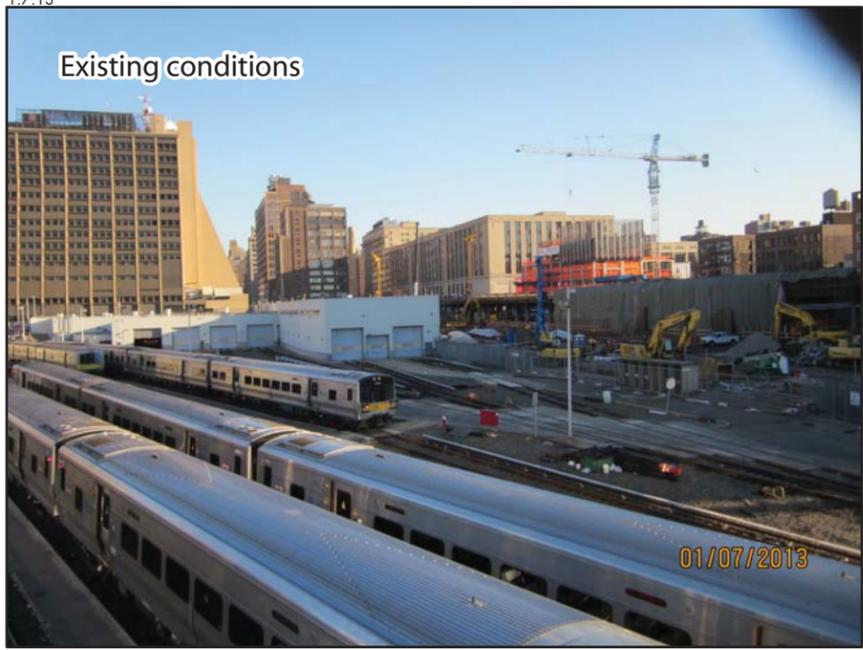


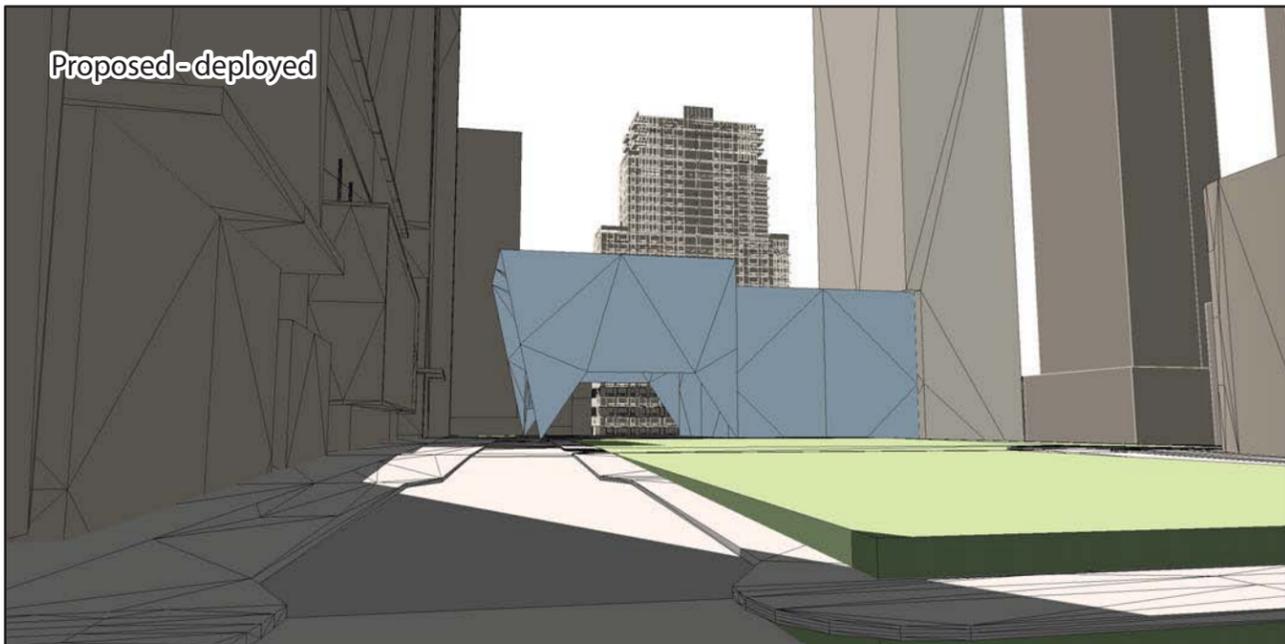
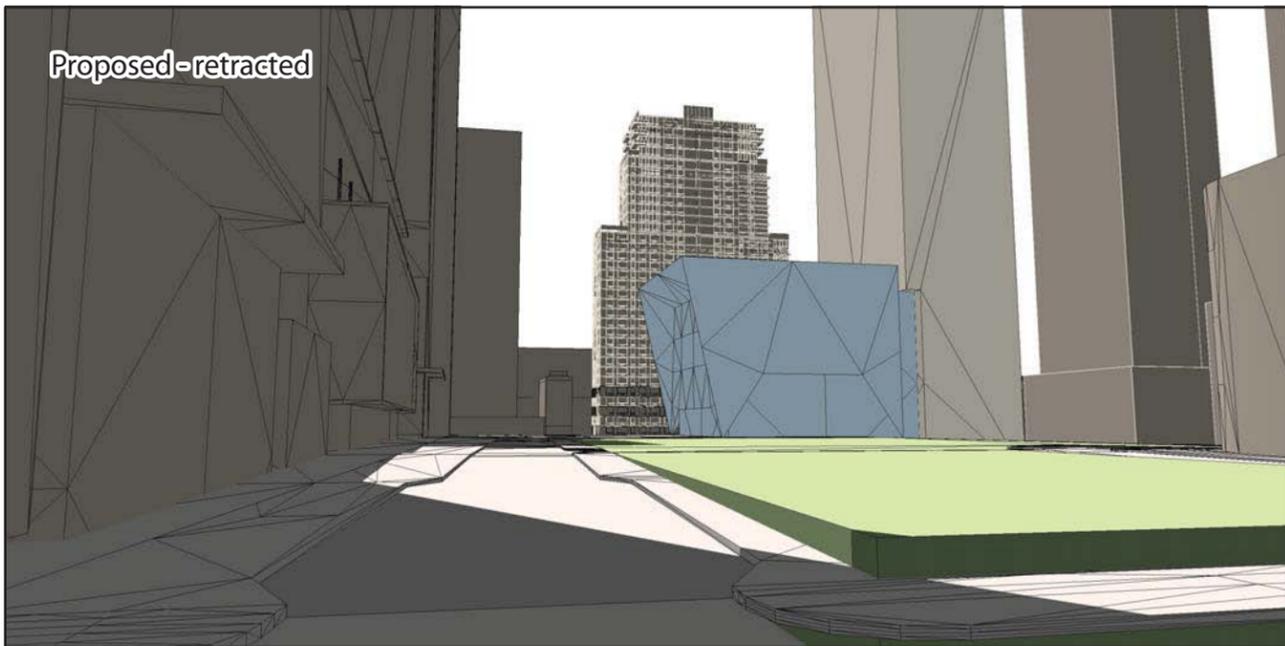
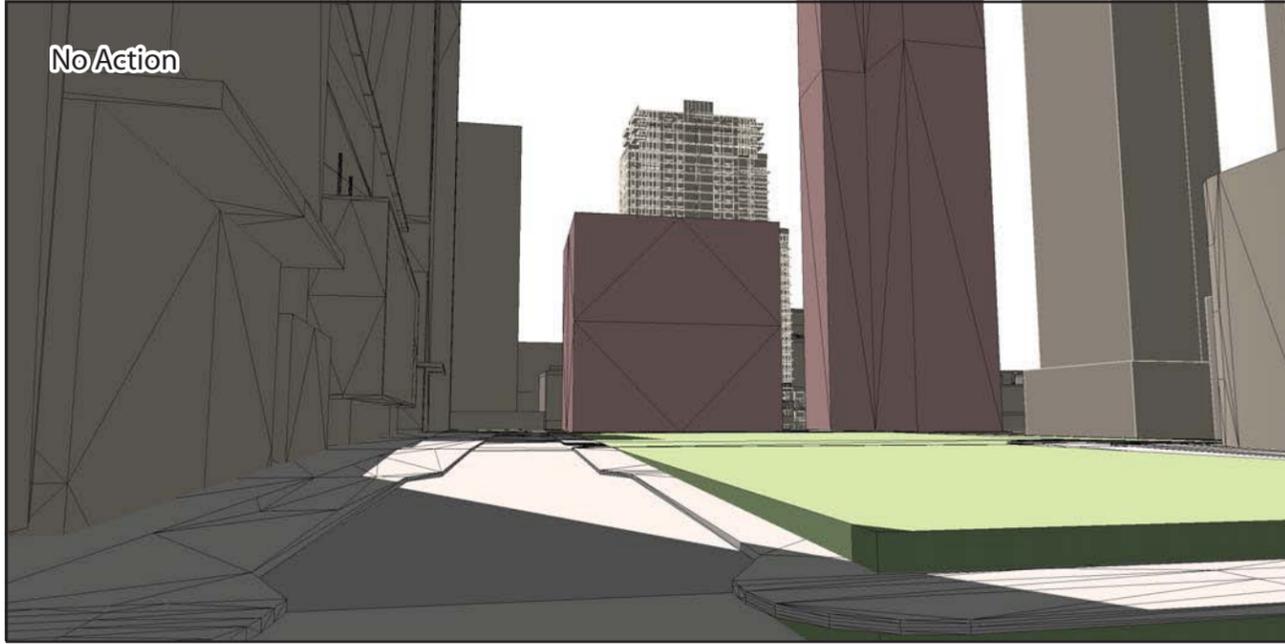
NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

View of East Elevation Signage from Culture Facility Plaza **D**

Existing conditions







View to the North and West

Figure C-5 presents an illustrative, pedestrian-level perspective from the current terminus of the High Line as it curves to the west over West 30th Street. In the No Action condition, the view from this location would be greatly transformed by the development of the ERY and Western Rail Yards (WRY), including Tower C to the foreground as well as Tower D to the west of either the No Action Cultural Facility or the Culture Shed Building and the towers of the WRY visible to the north and west. In the No Action condition, there would be a narrow gap between the No Action Cultural Facility and Tower D, while with the proposed project, the Culture Shed Building and Tower D would be contiguous. In both the nested and deployed states, the proposed Culture Shed would maintain a visual connection to the High Line.

View to the East

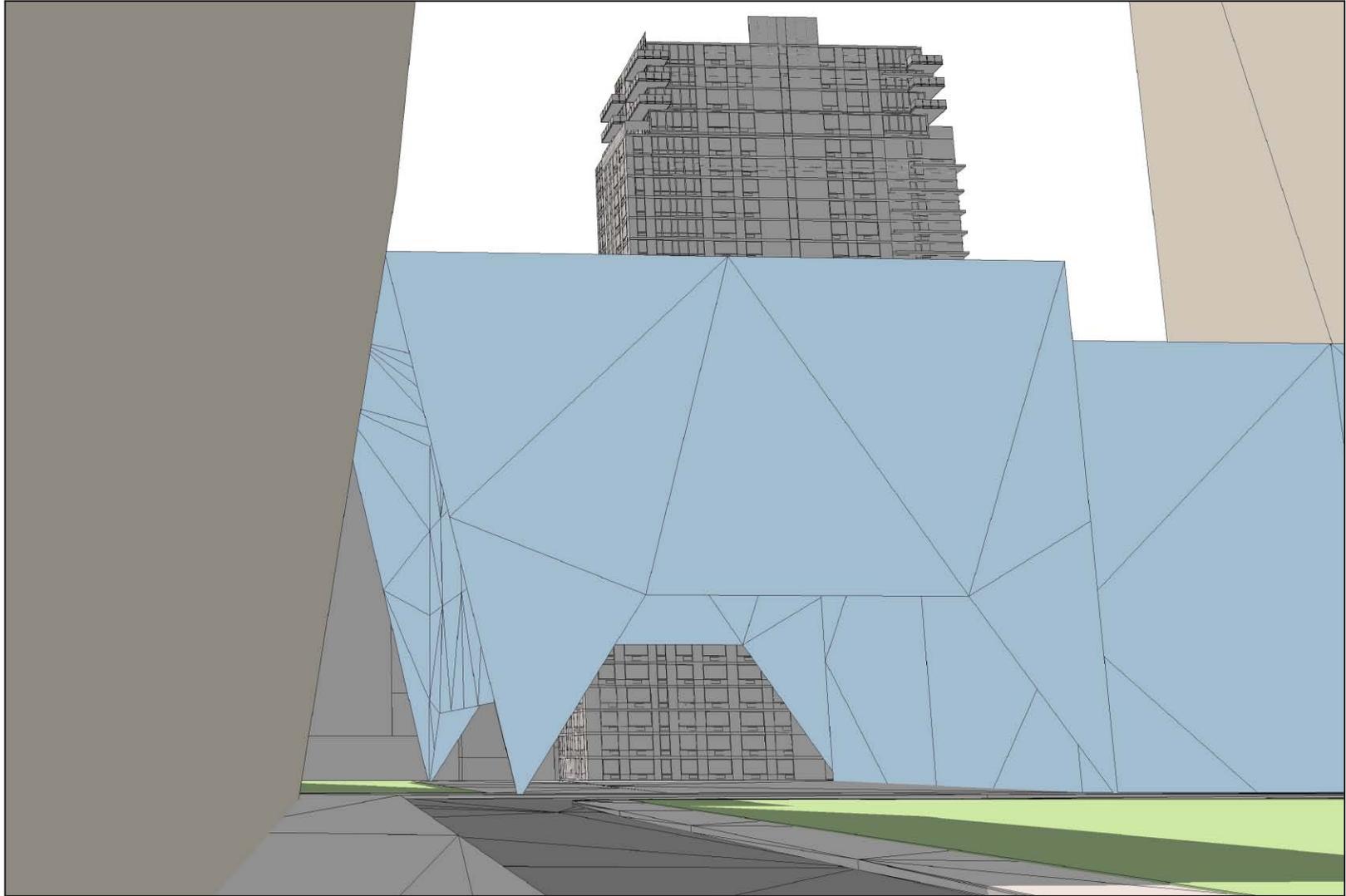
Figure C-6 presents an illustrative, pedestrian-level perspective from Eleventh Avenue looking eastward into the ERY along the future extension of West 31st Street. The immediate foreground is occupied by Tower D. The No Action Cultural Facility will dominate the central frontage along West 31st Street, though the westernmost passageway between the No Action Cultural Facility and Tower D will be visible. Based on the distance and the position of the No Action Cultural Facility, the easternmost passageway would be less visible. With the proposed Culture Shed nested, views from this location to the Cultural Facility Plaza would be similarly be blocked by the building, though there would be more of a visual gap between the end of the building and Tower C than with the No Action Cultural Facility. The deployed shed, with its somewhat transparent base would allow a view through to the connecting passageway between the Culture Shed and Tower C, though the area of the Cultural Facility Plaza would be covered.

View to the South

Figure C-7 presents an illustrative, pedestrian-level perspective looking south into the ERY site from West 33rd Street, along the alignment of the future Hudson Boulevard. In the No Action condition, this view is dominated by the open space and plaza area of the ERY to the west of the boulevard. The retail pavilion leading into Tower C is a dominant view to the east of the Boulevard. Tower D and buildings on the WRY would be visible to the west and southwest. The No Action Cultural Facility sits relatively centered along the south side of the future extension of West 31st Street, and the two open areas to the High Line can be seen between it and Towers C and D. The view along Hudson Boulevard ends at West 30th Street, where new, tall buildings are being developed on the block directly south of the project site.

In the With Action condition, when the proposed Culture Shed is nested, the building would be more compact in its direct connection to Tower D compared with the No Action Cultural Facility. This would enhance the view of the Cultural Facility Plaza between the Culture Shed and Tower C with a direct visual connection to the High Line. With the Culture Shed deployed, the Cultural Facility Plaza would be covered (but with some visual connectivity along the base of the deployed shed), but the visual connection to the High Line would be maintained between the deployed shed and Tower C.

There is a potential scenario in which the retail pavilion along the eastern edge of the future Hudson Boulevard would overhang the boulevard. As shown in the illustrative rendering provided in **Figure C-8**, in views south along the future Hudson Boulevard, the westernmost overhang of the retail pavilion could be perceived as overlapping the easternmost overhang of the Culture Shed, even though these two building facades are offset in plan and not directly



NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Hudson Yards Culture Shed

facing each other.¹ While the required width and clear height of the connection to the High Line would be preserved (see **Figure C-9**), this perception of an overlap could limit full ground-to-sky views looking south from Hudson Boulevard towards the High Line. However, as noted above, this would not be a prominent view corridor in the future without or with the proposed action, as in either condition the view to the south would end with the new, tall buildings on the south side of West 30th Street. Moreover, the area within which the overlap perception could occur is very limited. For pedestrians standing along the eastern edge of the future Hudson Boulevard between West 33rd Street and the extension of West 31st Street, the immediate and dominant foreground above eye level would be the retail pavilion overhang, such that the retail overhang would somewhat reduce views of portions of the Culture Shed's deployed roof, but the pedestrian's eye-level view would still continue unimpeded directly south to the High Line connection. As soon as a pedestrian's perspective is shifted to the west (i.e., in the outdoor plaza), the area between the retail pavilion (starting north of West 31st Street) and the deployed Culture Shed (starting south of West 31st Street) would become evident and would open the view into the connection to the High Line passageway.

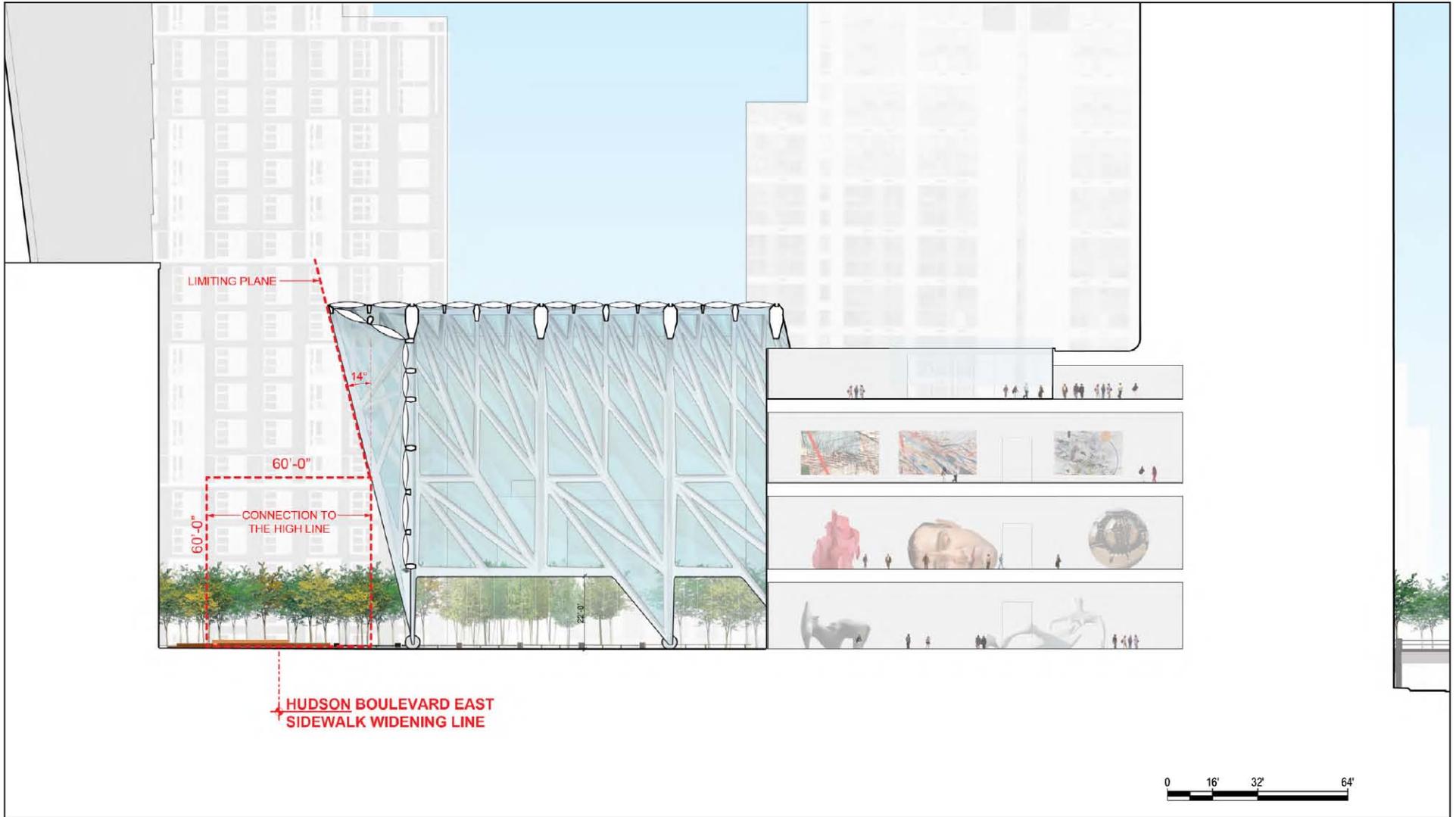
CONCLUSIONS

The *CEQR Technical Manual* guidelines state that if the preliminary assessment shows that changes to the pedestrian environment are sufficiently significant to require greater explanation and further study, then a detailed analysis is appropriate. Examples include projects that would potentially obstruct view corridors, compete with icons in the skyline, or make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings.

As with the No Action condition, the With Action Culture Shed would transform the urban design and visual character of the Culture Shed site by building a platform over the rail yard, developing new active uses, and creating significant publicly-accessible open space. Both the No Action Cultural Facility and the proposed Culture Shed would create a focal point for southern views along the newly-created Hudson Boulevard and improve the site's street wall presence along West 30th Street. In addition, both the No Action condition and the proposed action would enhance the vitality of the surrounding streets by introducing worker and visitor populations to the project site. The building heights of both the No Action Cultural Facility and the proposed Culture Shed would be within the range of heights expected to occur within the Hudson Yards area, and would complement the overall urban design goals for the Special Hudson Yards District. The proposed signage changes would limit signs facing the High Line while highlighting the entries to the Culture Shed, and the proposed banners would be similar to those permitted for museums and other civic buildings. Thus, the proposed action would represent a change from the signage that would be allowed in the No Action condition, but this change would not be significant or adverse. Overall, both the No Action condition and the proposed action would represent an improvement in the urban design character of the area over existing conditions, and would maintain the visual connection to the High Line.

In comparison to the No Action scenario, the Culture Shed would not noticeably change the scale of buildings; would not involve an area-wide rezoning that includes an increase in permitted floor area or changes in height or setback requirements; would not involve a general large-scale development; would not result in substantial changes to the built environment of a

¹ There is no stated intention to build the retail pavilion as shown in **Figure C-8** but it is allowable under existing ERY zoning.



NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

historic district or components of a historic building that contribute to the resource's historic significance; and would not obstruct any visual corridors. Therefore, the proposed action would not be anticipated to significantly affect any urban design features of the project site or study area, or the general urban design character of the neighborhood.

According to the guidance of the *CEQR Technical Manual*, additional visual resources analysis is required if: a project would partially or totally block a view corridor or a natural or built resource or a natural or built visual resource, and that resource is rare in the area or considered a defining feature of the neighborhood; or, a project would change urban design features so that the context of a natural or built visual resource is altered (for example, if a project alters the street grid so that the approach to the resource changes; if a project changes the scale of surrounding buildings so that the context changes; or if a project removes lawns or other open areas that serve as a setting for the resource). While the proposed action would change the context of the High Line as well as surrounding views, this change would not be significant or adverse in comparison to the future with the No Action Cultural Facility. Thus, the proposed action it does not appear to meet this threshold, and would not be anticipated to affect study area visual resources. Therefore, the proposed action does not merit further analysis of urban design and visual resources, and would not be anticipated to result in significant adverse effects to urban design and visual resources. *

A. TRANSPORTATION

TRIP GENERATION

The ERY development program is established and approved under existing zoning as well as development agreements entered into between the City, MTA, and the designated developer, consistent with zoning requirements. A cultural facility has always been included in the programming and transportation analyses of the ERY as originally set forth in the Hudson Yards Rezoning FGEIS in 2004 and more recently in the Western Rail Yards FEIS in 2009 which analyzed 200,000 gsf of programmed area for a cultural facility. More recently, the 2010 MOU provided that 100,000 zsf be reserved on the ERY site for the Cultural Facility. For the purposes of the EAS, a 125,000-gsf Cultural Facility (100,000-zsf designated in the 2010 MOU, plus mechanical space) is assumed to be the No Action condition.

Trip generation rates for the proposed Culture Shed are based on the rates established in the Hudson Yards FGEIS and utilized in the WRY FEIS (see Appendix D-1 for trip generation summary memo). The rate is primarily based on precedent EISs for cultural facilities and museums, most notably the Museum of Modern Art Expansion FEIS completed in 2000 (MoMA FEIS 2000). **Table D-1** compares trips generated by the proposed Culture Shed with trips generated by the 125,000-gsf (100,000-zsf, plus mechanical space) No Action Cultural Facility. As shown in Table D-1, the proposed Culture Shed which is approximately 198,195 gsf would generate additional person and pedestrian trips as compared to the No Action Cultural Facility. However, these additional trips are well below thresholds identified in the 2012 CEQR Technical Manual for which additional traffic analyses are required (i.e., 50 vehicles trips at any single intersection or more than 200 new transit trips in any peak hour). Therefore, no additional analysis is warranted.

Table D-1
Trip Comparison: Proposed Culture Shed and MOU No Action
(198,195 gsf Culture Shed and 125,000 gsf Cultural Facility)

	Person Trips			Vehicle Trips			Transit Trips		
	MOU	C SHED	NET	MOU	C SHED	NET	MOU	C SHED	NET
AM	0	0	0	1	1	0	0	0	0
MD	247	391	144	27	42	15	89	141	52
PM	493	782	289	51	81	30	178	281	104
Daily Trips	3425	5431	2006	366	582	216	1233	1955	722
Notes: Vehicle Trips include auto, taxi, trucks (trucks x 2.0 pce factor).									
Sources: Hudson Yards FGEIS/WRY FEIS Trip Generation Assumptions (See Appendix D-1)									

SPECIAL EVENTS

Like many cultural facilities and museums in New York City, the proposed Culture Shed is expected to host periodic special events as well events that occur outside the normal operations of the gallery and exhibition facility. Since such events do not occur on a regular basis and may occur outside of normal hours of operation, no estimate of such an event was incorporated into the prior Hudson Yards FGEIS or Western Rail Yards FEIS (or the precedent EISs that were used to based trip generation, such as the 200 MoMA FEIS). Like any special event that could result in temporary requirements such as lane closures or special security details, the event sponsor would coordinate with the relevant City resources, as necessary, potentially including the Mayor’s Community Affairs Unit, New York City Department of Transportation, and New York City Police Department. Special events have been treated similarly in other FEIS’s. For example, in the 2001 Shea Stadium FEIS, analysis of a dual event scenario—with both a Mets game and USTA session which was estimated to happen up to eight times a year—was not considered appropriate because analysis of these infrequent events would not represent a “reasonable worst-case” scenario. The Shea Stadium FEIS described how temporary measures are utilized, including: portable variable message signs (VMS), and a circulation/operation plan controlled by the police. These and other measures would be available for the Culture Shed to utilize in coordinating traffic management with the appropriate City agencies as any given event is implemented.

B. AIR QUALITY

Based on limited net increase of vehicular trips in comparison with the slightly smaller cultural facility, there is no potential for significant mobile source air quality impacts as a result of the proposed project. The proposed Culture Shed’s heating and ventilation systems would be operated with a combined emissions stack on the roof of Eastern Rail Yard Tower D with a height of approximately 814 feet. The cumulative emissions from the ERY and for both the ERY and WRY passed air quality screening assessments both in the 2004 Hudson Yards FGEIS and the 2009 Western Rail Yards FEIS, respectively. Based on the no net increase in overall development potential as examined in the 2004 and 2009 assessments, the relatively small size of the combined buildings and their potential combined emissions, as well as the height and location of Tower D relative to other buildings in the existing and No Action conditions, there is no change in the results of the screening analysis and the project would result in no significant adverse air quality impacts.

C. NOISE

Based on the no net increase of vehicular trips in comparison with the slightly larger cultural facility examined in the Western Rail Yards FEIS and as set forth in the approved development program for the ERY, there is no potential for incremental noise impacts as a result of the proposed project. With similar building size and massing, no other stationary source noise impacts are anticipated. Building interior noise attenuation requirements would be the same for the proposed Culture Shed as with the prior building as examined in the Hudson Yards FGEIS.*

Appendix A-1

Hudson Yards Build Out (based on 2012 conditions) and Other Planned Developments

NON-RESIDENTIAL STUDY AREA

Site # (1)	Location / Block and Lot	Analysis Year	Build Year/Status	Res. Units	Res. SF	Retail SF	Office SF	Hotel Rooms	Hotel SF	CF SF	Industrial SF	Trans/Utility Sf	Parking Spaces
Eastern and Western Rail Yards													
1*	Eastern Rail Yard 702; 1, 50 and 704; 1,5, 6	2004			570,000	171,000	4,266,751		500,000	100,000	-	-	
		2012	TBD	1,904	1,618,400	966,000	3,553,500	295	367,500	100,000	-	-	1,000
		Net		1,904	1,618,400	966,000	3,553,500	295	367,500	125,000			1,000
	Western Rail Yards 676	2004				50,000							
		2012	2019	4,936	4,109,825	238,050	2,215,000	-	-	120,000	-	-	-
Subtotal from Eastern and Western Rail Yards				6,840	5,728,225	1,204,050	5,768,500	295	367,500	245,000	-	-	1,000
Projected Open Space													
OS 5/10	Midblock Park and Boulevard System	2004											
		2012											
OS 6	Eastern Caemmerer Yard												
OS 7	Full-Block Open Space (Block 679, Lot 1)	2004											
		2012											
OS 8	Block 675	2004						1,000	1,000,000				
OS 9/11	Convention Center Roof	2004											
		2012											
Subtotal from Open Spaces				-	-	-	-	1,000	1,000,000	-	-	-	-

* Indicates a project that would be partially or completely developed by the 2017 analysis year.

Hudson Yards Build Out (based on 2012 conditions) and Other Planned Developments

NON-RESIDENTIAL STUDY AREA

Site # (1)	Location / Block and Lot	Analysis Year	Build Year/Status	Res. Units	Res. SF	Retail SF	Office SF	Hotel Rooms	Hotel SF	CF SF	Industrial SF	Trans/Utility Sf	Parking Spaces
1. Projected Sites - Partially Built													
16	1070; 49, 50, 54	2004	2009	261	222,000	18,500	21,275			18,500			
		2012		9	14,096								
		Net		252	207,904	18,500	21,275			18,500			
36	763; 31, 32, 34, 38, 42, 43, 44	2004	2007	26	21,751	8,891	578,590						
		2012					79	30,000					
		Net		24	20,680	8,453	550,099						
41	761; 10, 13, 20, 43	2004	2009	573	581,115	16,281					53,844		
		2012											
		Net				13,641				45,111			
Subtotal from Partially Built Projects				276	228,584	40,594	571,374	-	-	18,500	45,111	-	-
2. Projected Sites - Partially Planned													
3	705; 29, 30, 32, 39, 41, 42, 45, 46, 53	2004	TBD			21,510	2,864,415						
		2012					501	500,808					
		Net				17,777	2,367,340	501	500,808				
8	708; 62, 65, part of 1	2004	TBD		243,200	18,240	1,377,424						
		2012					133	133,000					
		Net		186	158,338	11,875	896,787	133	133,000				
12	710; 1, 6, 11, 58	2004	TBD	343	291,600	21,870	1,651,550						
		2012					1,200	1,100,000					
		Net				21,870		1,200	1,100,000				
13	710; 20, 22, 27, 29, 42	2004	TBD	734	624,000	52,000	59,800			52,000			
		2012			148,116								
		Net		734	624,000	52,000	59,800			52,000			
27	733; 1, 67, 68, 70	2004	TBD		237,000	19,750							
		2012											
		Net		200	235,000	19,750							
30	731; 39, 40, 41, 43, 44, 48	2004	TBD		213,300	17,775							
		2012		14	11,900								
		Net		251	213,300	17,775							
39*	762; 13, 14, 16, 17, 60	2004	2013		267,213	7,410	10,992				3,119		
		2012		200	206,735			29,625					
		Net		300	255,394	1,533	2,182	30	29,625				
Subtotal from Partially Planned Projects				1,673	1,488,032	142,580	3,326,109	1,864	1,763,433	52,000	-	-	-

* Indicates a project that would be partially or completely developed by the 2017 analysis year.

NON-RESIDENTIAL STUDY AREA

Site # (1)	Location / Block and Lot	Analysis Year	Build Year/Status	Res. Units	Res. SF	Retail SF	Office SF	Hotel Rooms	Hotel SF	CF SF	Industrial SF	Trans/Utility Sf	Parking Spaces
3. Projected Sites - Completely Planned													
2	(380 Eleventh Ave.) 705; 1, 5, 54, 68	2004	TBD			12,450	1,287,579						
		2012				15,083	1,559,847						
		Net				15,083	1,559,847						
4	706; 1, 10, 55	2004	TBD		194,000	14,550	1,743,575						
		2012											
		Net		212	179,983	13,499	1,617,598						
5	706; 17, 20, 29, 35, 36	2004	TBD		270,000	20,250	2,116,125						
		2012											
		Net					2,561,620						
18	1090; 20, 23, 29,36, 42	2004	TBD	1,073	911,664	23,376							
		2012		1,095	1,012,960								
		Net		1,095	1,012,960								
22*	736; 30-40	2004	Under Construction	146	124,094	8,300							
		2012		87	48,376		92	74,974					
		Net		87	48,376		92	74,974					
24/26	735; 22, 30; 16, 18, 52, 55	2004	TBD	809	691,495	30,123							
		2012		809	667,307	7,999			6,495		101		
		Net		809	667,307	7,999			6,495		101		
32/33	729; 50, 60, 163	2004	TBD	865	735,250	62,569	3,548,127						
		2012		865	735,250	49,828	3,499,162						
		Net		865	735,250	49,828	3,499,162						
Subtotal from Completely Planned Projects				3,068	2,643,876	86,409	9,238,228	92	74,974	6,495	-	-	101
4. Projected Sites - Program from EIS													
6	707; 1, 13, 56			286	243,200	18,240	1,377,424						
7	707; 20, 26, 31, 39, 41, 45, 51			300	255,200	19,140	1,445,389						
9	708; 20, 22, 24, 37, 41, 42, 43, 46			607	516,000	43,000	49,450			43,000			
10	709; 1, 2, 3, 7, 13,14, 15, 60, 61, 63, 66, 67, 68, 70,71			316	268,400	20,130	1,520,151						
14	1069; 24, 29, 34, 136			627	533,328	44,444	51,111			93,266			
15	1070; 1			312	265,200	22,100	25,415			22,100			
20	1050; 1, 6, 61, 158					17,640	1,196,874						
21	736; 1, 73											450,000	
25	734; 1,5, 66			275	233,388	19,449							
28	733; 25, 28, 30, 31			241	204,943	10,368							
29	732; 1, 73			180	153,036	12,753							
31	729; 1			974	827,840		1,776,972						
37	762; 6			340	288,838	7,406							
38	762; 61			68	58,078	4,937							

* Indicates a project that would be partially or completely developed by the 2017 analysis year.

Hudson Yards Build Out (based on 2012 conditions) and Other Planned Developments

NON-RESIDENTIAL STUDY AREA

Site # (1)	Location / Block and Lot	Analysis Year	Build Year/Status	Res. Units	Res. SF	Retail SF	Office SF	Hotel Rooms	Hotel SF	CF SF	Industrial SF	Trans/Utility Sf	Parking Spaces	
4. Projected Sites - Program from EIS (cont'd)														
40	761; 62			99	83,946	4,938								
42	760; 7			89	75,967	5,760								
43	758; 1, 5, 7, 14			362	307,980	13,308				11,400				
44	754; 44			81	69,238	8,666								
46	1069; 1					25,500	1,925,675							
Subtotal from EIS Projected Developments				5,157	4,384,582	297,779	9,368,461			169,766		450,000		
Subtotal - Hudson Yards Sites				17,014	14,473,299	1,771,412	28,272,672	3,251	3,205,907	491,761		45,111	450,000	1,101

Other Planned Developments in the Non-Residential Study Area													
	Hersha Group 440 W. 41st St. (Dyer) (Block 1050, Lot 49)		TBD	-	-	-	-	115	74,260	-	-	-	-
	PLC Partners 325 W. 33rd St. (8th/9th) (Block 757, Lot 17)		TBD	-	-	-	-	239	250,000	-	-	-	-
	McSam Hotels 585 Eighth Ave.		Under Construction	-	-	-	-	169	82,906	-	-	-	-
	Richard Born 515 W. 41st St. (Block 1070, Lot 20)		TBD	333	293,000	-	-	-	-	-	-	-	-
	Avalon West Chelsea 282-298 Eleventh Ave./517-545 W. 28th St. (Block 700, Lot 1) (W.Chelsea)		Under Construction	700	700,000	44,047	-	-	-	-	-	-	-
*	Related Companies Tenth Ave. and 30th St. (Block 701, Lots 42, 43)		Under Construction	382	354,700	-	-	-	-	-	-	-	-
	Related Companies 30th St. btw Tenth/Eleventh Aves (Block 701, Lots 55, 56)		TBD	368	337,800	-	-	-	-	-	-	-	-
	522 Ninth Ave (39th St.) (Block 762, Lot 70)		TBD	153	130,000	-	-	-	-	-	-	-	-
	Marriott Courtyard 307-311 West 37th St.		Under Construction	-	-	-	-	224	NA	-	-	-	-
	136 W. 42nd St. (Block 994, Lot 47)		2013			15,473		282	-	-	-	-	-

* Indicates a project that would be partially or completely developed by the 2017 analysis year.

Hudson Yards Build Out (based on 2012 conditions) and Other Planned Developments

NON-RESIDENTIAL STUDY AREA

Site # (1)	Location / Block and Lot	Analysis Year	Build Year/Status	Res. Units	Res. SF	Retail SF	Office SF	Hotel Rooms	Hotel SF	CF SF	Industrial SF	Trans/Utility Sf	Parking Spaces
	855 Sixth Ave (west side btw W. 30th and W. 31st Sts)		TBD	350		90,000	-	250	NA	-	-	-	-
	415 Eighth Ave		TBD	88		10,000	-	-	-	-	-	-	-
	552 West 24th St (W.Chelsea)		TBD	15	NA	-	-	-	-	-	-	-	-
*	Gotham West 592-608 Eleventh Ave (Block 1073)		2013	1,350	1,119,177	17,500	-	-	-	97,850	-	-	204
	High Line Tower Tenth Ave between W 28th and 29th Sts (507 W. 28th Street) (W.Chelsea)		TBD	321	NA	16,231	-	-	-	-	-	-	17
	Related Companies 30th St. between Tenth and Eleventh Aves (Block 701, Lots 55, 56)		TBD	368		-	-	-	-	-	-	-	-
*	705 Tenth Ave (City Water Tunnel) No. 3 Shaft Site 25B)		2013	-	-	-	-	-	-	-	-	-	-
*	532 West 48th St. (Block 1076, Lot 51)		Under Construction	-	-	-	-	186	NA	-	-	-	-
*	548 West 48th St. (Block 1076, Lot 57)		Under Construction	-	-	-	-	89	NA	-	-	-	-
*	653 Tenth Ave/501 W. 46th St. (Block 1075, Lot 29)		Under Construction	20	NA	1,843	-	-	-	-	-	-	-
*	785 Eighth Ave. Moynihan Station		TBD 2015	120	NA	-	-	-	-	-	-	-	-
*	537 West 20th St. (Block 692, Lot 11)		Under Construction	-	-	4,858	19,431	-	-	-	-	-	-
*	312 West 37th St. (Block 760, Lot 51) Pier 57		TBD 2015	-	-	-	-	300	NA	-	-	-	-
	539 W. 29th St. (Block 701, Lot 16)		TBD	126	102,912	2,005	-	-	-	-	-	-	-
*	330 W. 39th St. (Block 762, Lot 60) (Glenwood)		Under Construction	6	NA	-	-	-	-	-	-	-	-
*	260 W. 26th St. (Block 775, Lot 4)		2014	204	162,256	15,645	-	-	-	613	-	-	41

* Indicates a project that would be partially or completely developed by the 2017 analysis year.

NON-RESIDENTIAL STUDY AREA

Site # (1)	Location / Block and Lot	Analysis Year	Build Year/Status	Res. Units	Res. SF	Retail SF	Office SF	Hotel Rooms	Hotel SF	CF SF	Industrial SF	Trans/Utility Sf	Parking Spaces
	508 W. 24th St. (Block 695, Lot 44)		TBD	15	51,257	4,999	-	-	-	515	-	-	-
*	1045 Sixth Ave. (Block 815, Lot 36)		2014	-	-	-	450,000	-	-	-	-	-	-
*	135 W. 45th St. (Block 998, Lot 16)		2013	-	-	-	-	487	NA	-	-	-	-
	Marriott Courtyard 135 W. 30th St. (Block 806, Lot 13)		TBD	-	-	-	-	266	NA	-	-	-	-
*	Knickerbocker Hotel SE corner of 42nd St and Broadway (Block 994, Lot 54)		2013	-	-	-	-	330	NA	-	-	-	-
	120 W. 41st St. (Block 993, Lot 43)		TBD	-	-	-	-	125	NA	-	-	-	-
	218 W. 35th St/223 W.34th St (Block 784, Lots 54, 28)		TBD	-	-	60,000	-	-	-	-	-	-	-
Subtotal for Other Planned Developments				4,919	3,251,102	1,062,601	469,431	3,187	532,166	142,678	-	-	412
Total, Non-Residential Study Area				21,933	17,724,401	2,834,013	28,742,103	6,438	3,738,073	634,439	45,111	450,000	1,513

* Indicates a project that would be partially or completely developed by the 2017 analysis year.

Hudson Yards Build Out (based on 2012 conditions) and Other Planned Developments

RESIDENTIAL STUDY AREA

	Project Name/Location	Build Year/Status	Res. Units	Res. SF	Retail SF	Office SF	Hotel Rooms	Hotel SF	CF SF	Industrial SF	Trans/Utility SF	Parking spaces
	International GEM Tower (Extell) 44 W. 47th St.	TBD	-	-	60,000	750,000	-	-	-	-	-	90
	439 W. 53rd St. (Block 1063, Lot 11)	TBD	10	NA	-	-	-	-	-	-	-	-
	153 W. 21st St. (Block 797, Lot 12)	TBD	51	NA	-	-	-	-	-	-	-	-
*	Hotel 38, 45 W. 38th St. (Block 840, Lot 16)	2013	-	-	5,822	-	180	NA	-	-	-	-
*	309 Fifth Ave. (Block 861, Lot 4)	2013	165	111,600	10,400	-	-	-	-	-	-	-
	253 W. 47th St. (Block 1019, Lot 10)	TBD	-	-	15,587	-	-	-	-	-	-	-
*	Hyatt Place 54 W. 36th St. (Block 837, Lot 74)	2012	-	-	-	-	185	NA	-	-	-	-

RESIDENTIAL STUDY AREA

	Project Name/Location	Build Year/Status	Res. Units	Res. SF	Retail SF	Office SF	Hotel Rooms	Hotel SF	CF SF	Industrial SF	Trans/Utility SF	Parking spaces
	30 W. 46th St. (Extell) (Block 1261, Lot 54)	TBD	-	-	-	-	196	NA	-	-	-	-
	45 E. 33rd St. (Block 863, Lot 35)	TBD	-	-	-	-	208	NA	-	-	-	-
Total, Residential Study Area			22,159	17,836,001	2,925,822	29,492,103	7,207	3,738,073	634,439	45,111	450,000	1,603

Notes: 1. Site numbers listed are from the 2004 FGEIS, 2025 Projected Development Sites Without MSG Relocation.

2. No Action Condition does not include planned open space, which is described in Attachment A.

* Indicates a project that would be partially or completely developed by the 2017 analysis year.

Sources: 2004 Hudson Yards FGEIS; 2009 Western Rail Yard FEIS; Hudson Yards Development Corporation; AKRF, Inc.

* Indicates a project that would be partially or completely developed by the 2017 analysis year.

Appendix D-1



PB Team

NYCT – Number 7 Extension Project
2 Broadway-5th Floor, Mailbox 519
New York, NY 10004
Fax: 646-252-2063

FINAL

MEMORANDUM

TO: G. Price, NYC Department of City Planning
M. Amjadi, NYC Department of City Planning

FROM: E. Metzger

DATE: August 25, 2003

RE: CM-1189R/C-26501– Preparation of a Draft and Final Environmental Impact Statement and Provision of Transit Engineering Services for the Proposed No. 7 Subway Extension-Far West Midtown Manhattan Rezoning

SUBJECT: Museum Trip Generation Transportation Planning Assumptions

CIN: MTA-NYC Transit/CM 1189R-C26501-00-C-1.00-DCP-03F-1310

This technical memorandum provides a summary of the transportation planning assumptions proposed to be utilized for the development of museum trip generation rates for the traffic, parking, transit, and pedestrian analyses of the DGEIS. These rates are presented in Table 1 and their selection process is discussed below in further detail.

Daily Trip Generation Rates

For weekdays, a daily trip generation rate of 27.4 person trips per 1,000 gross square feet (gsf) has been selected, which was developed from the *Museum of Modern Art Expansion FEIS* (2000)¹. A Sunday daily trip generation rate of 20.6 person trips per 1,000 gsf was selected, based on the Saturday data contained within the *Museum of Modern Art Expansion FEIS*. It is important to note that many museums in New York City are open for the same hours on both Saturdays and Sundays; therefore travel patterns on both days are assumed to be fairly similar.

Temporal Distributions and In/Out Splits

Weekday temporal distributions and in/out splits were based on the existing distribution of weekday person trips in the *Museum of Modern Art Expansion FEIS* and were adjusted to equalize the total daily in and out trips. Table 2 summarizes temporal distributions and in/out splits for an expanded 24-hour weekday period. Similarly, Sunday temporal distributions and in/out splits were based on the existing distribution of Saturday person trips in the *Museum of Modern Art Expansion FEIS* and were adjusted to equalize the total daily in and out trips. Table 3 summarizes temporal distributions and in/out splits for an expanded 24-hour Sunday period.

Modal Splits

The projected museum site would be located in close proximity to the proposed 34th Street station on the No. 7 subway extension. Therefore, weekday modal splits were assumed to be similar to the weekday modal splits contained within the *Museum of Modern Art Expansion FEIS* (the Museum of Modern Art is located on West 53rd Street in Midtown Manhattan and also has

¹ This rate is also consistent with the daily trip generation rate of 26.6 persons per 1,000 gsf that was used for a cultural center in the *Hudson River Park FEIS* (1998).

**Table 1: Museum Land Use
Transportation Planning Assumptions**

Trip Generation:	(1)	(1,2)
	Weekday	Sunday
Daily Person Trips	27.4	20.6
	per 1,000 gsf	
Temporal Distribution:	(2,3)	
AM (8-9)	0.0%	
MD (12-1)	7.2%	
PM (5-6)	14.4%	
EVE (7-8)	12.4%	
EVE (8-9)	6.7%	
SUN (4-5)	16.8%	
In/Out Splits:	(2,3)	
	In	Out
AM (8-9)	50%	50%
MD (12-1)	63%	37%
PM (5-6)	52%	48%
EVE (7-8)	34%	66%
EVE (8-9)	9%	91%
SUN (4-5)	36%	64%
Modal Splits:	(1,2)	
	Weekday	Sunday
Auto	12%	14%
Taxi	10%	10%
Bus	7%	7%
Subway	29%	29%
Walk	39%	37%
Other	3%	3%
	100%	100%
Vehicle Occupancy:	(1)	
Auto	2.34	
Taxi	1.90	
Truck Trip Generation:	(1)	(4)
	Weekday	Sunday
	0.05	0.00
	per 1,000 gsf	
	(5,6)	
AM (8-9)	9.6%	
MD (12-1)	11.0%	
PM (5-6)	1.0%	
EVE (7-8)	0.0%	
EVE (8-9)	0.0%	
SUN (4-5)	1.0%	
	In	Out
	50%	50%

Sources:

1. Museum of Modern Art Expansion FEIS, 2000, Table 12-6.
2. Sunday travel characteristics assumed to be similar to Saturday patterns.
3. Museum of Modern Art Expansion FEIS, 2000, Table 12-5.
4. Assumes 5% of weekday trip generation rates.
5. Federal Highway Administration, "Curbside Pickup and Delivery and Arterial Traffic Impacts," 1981, Figure 15.
6. Sunday temporal distributions and in/out splits assumed to be similar to weekday patterns.

Table 2: Expanded Weekday 24-Hour Temporal Distributions and Modal Splits for Museum Land Use

Time Period	Temporal Distribution	In	Out	Modal Splits					
				Auto	Taxi	Bus	Subway	Walk	Other
12:00 AM - 1:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
1:00 AM - 2:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
2:00 AM - 3:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
3:00 AM - 4:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
4:00 AM - 5:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
5:00 AM - 6:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
6:00 AM - 7:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
7:00 AM - 8:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
8:00 AM - 9:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
9:00 AM - 10:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
10:00 AM - 11:00 AM	2.9%	94%	6%	12%	10%	7%	29%	39%	3%
11:00 AM - 12:00 PM	5.8%	80%	20%	12%	10%	7%	29%	39%	3%
12:00 PM - 1:00 PM	7.2%	63%	37%	12%	10%	7%	29%	39%	3%
1:00 PM - 2:00 PM	9.4%	53%	47%	12%	10%	7%	29%	39%	3%
2:00 PM - 3:00 PM	8.2%	50%	50%	12%	10%	7%	29%	39%	3%
3:00 PM - 4:00 PM	8.8%	45%	55%	12%	10%	7%	29%	39%	3%
4:00 PM - 5:00 PM	10.6%	51%	49%	12%	10%	7%	29%	39%	3%
5:00 PM - 6:00 PM	14.4%	52%	48%	12%	10%	7%	29%	39%	3%
6:00 PM - 7:00 PM	13.6%	54%	46%	12%	10%	7%	29%	39%	3%
7:00 PM - 8:00 PM	12.4%	34%	66%	12%	10%	7%	29%	39%	3%
8:00 PM - 9:00 PM	6.7%	9%	91%	12%	10%	7%	29%	39%	3%
9:00 PM - 10:00 PM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
10:00 PM - 11:00 PM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%
11:00 PM - 12:00 AM	0.0%	50%	50%	12%	10%	7%	29%	39%	3%

Notes:

1. Temporal distributions and in/out splits based on Museum of Modern Art Expansion FEIS, 2000, Table 12-5.
2. Modal splits based on Museum of Modern Art Expansion FEIS, 2000, Table 12-6

Table 3: Expanded Sunday 24-Hour Temporal Distributions and Modal Splits for Museum Land Use

Time Period	Temporal Distribution	In	Out	Modal Splits					
				Auto	Taxi	Bus	Subway	Walk	Other
12:00 AM - 1:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
1:00 AM - 2:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
2:00 AM - 3:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
3:00 AM - 4:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
4:00 AM - 5:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
5:00 AM - 6:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
6:00 AM - 7:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
7:00 AM - 8:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
8:00 AM - 9:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
9:00 AM - 10:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
10:00 AM - 11:00 AM	4.1%	97%	3%	14%	10%	7%	29%	37%	3%
11:00 AM - 12:00 PM	11.1%	78%	22%	14%	10%	7%	29%	37%	3%
12:00 PM - 1:00 PM	12.4%	53%	47%	14%	10%	7%	29%	37%	3%
1:00 PM - 2:00 PM	14.0%	55%	45%	14%	10%	7%	29%	37%	3%
2:00 PM - 3:00 PM	14.5%	57%	43%	14%	10%	7%	29%	37%	3%
3:00 PM - 4:00 PM	15.2%	50%	50%	14%	10%	7%	29%	37%	3%
4:00 PM - 5:00 PM	16.8%	36%	64%	14%	10%	7%	29%	37%	3%
5:00 PM - 6:00 PM	11.9%	10%	90%	14%	10%	7%	29%	37%	3%
6:00 PM - 7:00 PM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
7:00 PM - 8:00 PM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
8:00 PM - 9:00 PM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
9:00 PM - 10:00 PM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
10:00 PM - 11:00 PM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%
11:00 PM - 12:00 AM	0.0%	50%	50%	14%	10%	7%	29%	37%	3%

Notes:

1. Temporal distributions and in/out splits based on Museum of Modern Art Expansion FEIS, 2000, Table 12-5
2. Modal splits based on Museum of Modern Art Expansion FEIS, 2000, Table 12-6



PB Team

NYCT – Number 7 Extension Project
2 Broadway-5th Floor, Mailbox 519
New York, NY 10004
Fax: 646-252-2063

good subway access). Sunday modal splits were assumed to be similar to the Saturday modal splits contained within the *Museum of Modern Art Expansion FEIS*.

Vehicle Occupancy

Vehicle occupancy rates of 2.34 for autos and 1.90 for taxis have been selected, which are with the same as those used in the *Museum of Modern Art Expansion FEIS*.

Truck Trip Generation

The weekday truck trip generation rate of 0.05 truck trips per 1,000 gsf was based on the *Museum of Modern Art Expansion FEIS*; Sunday truck trip generation rates were conservatively assumed to be 5% of weekday rates². The Federal Highway Administration's *Curbside Pickup and Delivery Operations and Arterial Traffic Impacts* (1981) data for office land uses was used in the selection of temporal distributions (shown in Table 1). No truck trips were assumed to occur during the weekday 7-8 pm and 8-9 pm peak hours because as mentioned in *Curbside Pickup and Delivery Operations and Arterial Traffic Impacts*, the temporal distribution of truck trips in downtown areas is typically restricted to the 9 am – 5 pm business day. The temporal distributions from *Curbside Pickup and Delivery Operations and Arterial Traffic Impacts* were used in place of those from the *Museum of Modern Art Expansion FEIS* because the temporal distributions from the latter (25% of all trips occurring during the weekday midday and PM peak hours) were assumed to be excessively conservative.

cc: L. Lennon
D. Fields

² The *Museum of Modern Art Expansion FEIS* did not include a Saturday daily truck trip generation rate.