ENVIRONMENTAL ASSESSMENT STATEMENT

7 W. 21ST STREET

CEQR No. 15DCP009M

Lead Agency: NYC Department of City Planning

Applicant: 7 West 21 LLC

Prepared by:
Philip Habib & Associates

September 25, 2014

7 W. 21st Street

Environmental Assessment Statement (EAS)

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City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) FULL FORM

Please fill out and submit to the appropriate agency (see instructions)

Part I: GENERAL INFORMATION

PROJECT NAME 7 W. 21st Street

1. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
15DCP009M	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
150077 ZSM, 150078 ZSM	

2a. *Lead Agency Information*			**2b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC City Planning Commission			7 West 21 LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Robert Dobruskin, AICP			Philip A. Habib, PE, Philip Habib & Associates		
ADDRESS 22 Reade Street, Room 4E			ADDRESS 102 Madison Avenue, 11th floor		
CITY New York	STATE NY	ZIP 10007	CITY New York	STATE NY	ZIP 10016
TELEPHONE 212.720.3425	EMAIL rdobrus@planning.nyc.gov		TELEPHONE 212.929.5656	EMAIL phabib@phaeng.com	

3. *Action Classification and Type*

SEQRA Classification

☐ UNLISTED ☒ TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended): 617.4(b)(9)

Action Type (refer to Chapter 2, "Establishing the Analysis Framework" for guidance)

☒ LOCALIZED ACTION, SITE SPECIFIC ☐ LOCALIZED ACTION, SMALL AREA ☐ GENERIC ACTION

4. *Project Description*

The proposed project would be a new mixed-use development on a 23,996-sf, midblock through-lot site, currently used as a 256-space public parking lot, in the LPC-designated Ladies' Mile Historic District. The proposed building would include two 185-foot tall residential towers on W. 21st and W. 22nd Streets joined by a base containing ground-floor retail, and an atrium extending above a small portion of the base, and below-grade parking. The reasonable worst case development scenario (RWCDS) for the With-Action conditions includes: 333 dwelling units (DUs), of which 67 would be affordable housing units; 10,000 gsf of retail, and 200 parking spaces. Under RWCDS No-Action conditions, an as-of-right 161-foot tall mixed use building with 297 DUs, of which 59 would be affordable housing units, 10,000 gsf of retail, and 62 parking spaces would be developed. The Build year for the proposed project is 2017.

Project Location

BOROUGH Manhattan	COMMUNITY DISTRICT(S) 5	STREET ADDRESS 7 W. 21st Street; aka 7-13 W. 21st Street & 6-14 W. 22nd Street
TAX BLOCK(S) AND LOT(S) Block 823, Lot 31		ZIP CODE 10010

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Midblock through lot with frontage on W. 21st Street and W. 22nd Street, on the block bounded by Fifth Avenue on the east and Sixth Avenue on the west.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY C6-4A | ZONING SECTIONAL MAP NUMBER 8d

5. *Required Actions or Approvals* (check all that apply)

***City Planning Commission*:** ☒ YES ☐ NO ☒ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

☐ CITY MAP AMENDMENT	☐ ZONING CERTIFICATION	☐ CONCESSION
☐ ZONING MAP AMENDMENT	☐ ZONING AUTHORIZATION	☐ UDAAP
☐ ZONING TEXT AMENDMENT	☐ ACQUISITION—REAL PROPERTY	☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY	☐ DISPOSITION—REAL PROPERTY	☐ FRANCHISE
☐ HOUSING PLAN & PROJECT	☐ OTHER, explain:	

☒ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION 1) 13-45 and 13-451 to modify 13-10, 13-11; 2) 74-712 to modify 23-44; 23-532; 23-633; 23-663; 35-24

***Board of Standards and Appeals*:** ☐ YES ☒ NO

☐ VARIANCE (use)
☐ VARIANCE (bulk)
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Department of Environmental Protection*:** ☐ YES ☒ NO If "yes," specify:

Other City Approvals Subject to CEQR (check all that apply)

☐ LEGISLATION
☐ RULEMAKING
☐ CONSTRUCTION OF PUBLIC FACILITIES
☐ 384(b)(4) APPROVAL
☐ OTHER, explain:
☐ FUNDING OF CONSTRUCTION, specify:
☐ POLICY OR PLAN, specify:
☐ FUNDING OF PROGRAMS, specify:
☐ PERMITS, specify:

Other City Approvals Not Subject to CEQR (check all that apply)

☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)
☒ LANDMARKS PRESERVATION COMMISSION APPROVAL
☒ OTHER, explain: Building Permits (DOB)

***State or Federal Actions/Approvals/Funding*:** ☒ YES ☐ NO If "yes," specify: NYC HFA bond financing

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

***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 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

☒ SITE LOCATION MAP ☒ ZONING MAP ☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP ☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 23,996
Waterbody area (sq. ft.) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 23,996
Other, describe (sq. ft.): 0

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

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 23,996
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 344,830 gsf
HEIGHT OF EACH BUILDING (ft.): 185 feet
NUMBER OF STORIES OF EACH BUILDING: 18 stories

Does the proposed project involve changes in zoning on one or more sites? ☐ YES ☒ NO
If "yes," specify: The total square feet owned or controlled by the applicant:
The total square feet not owned or controlled by the applicant:

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 OF TEMPORARY DISTURBANCE: sq. ft. (width x length)
VOLUME OF DISTURBANCE: 719,880 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 23,996 sq. ft. (width x length)

8. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational):

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 21 months

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO | IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

9. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Mixed-use buildings

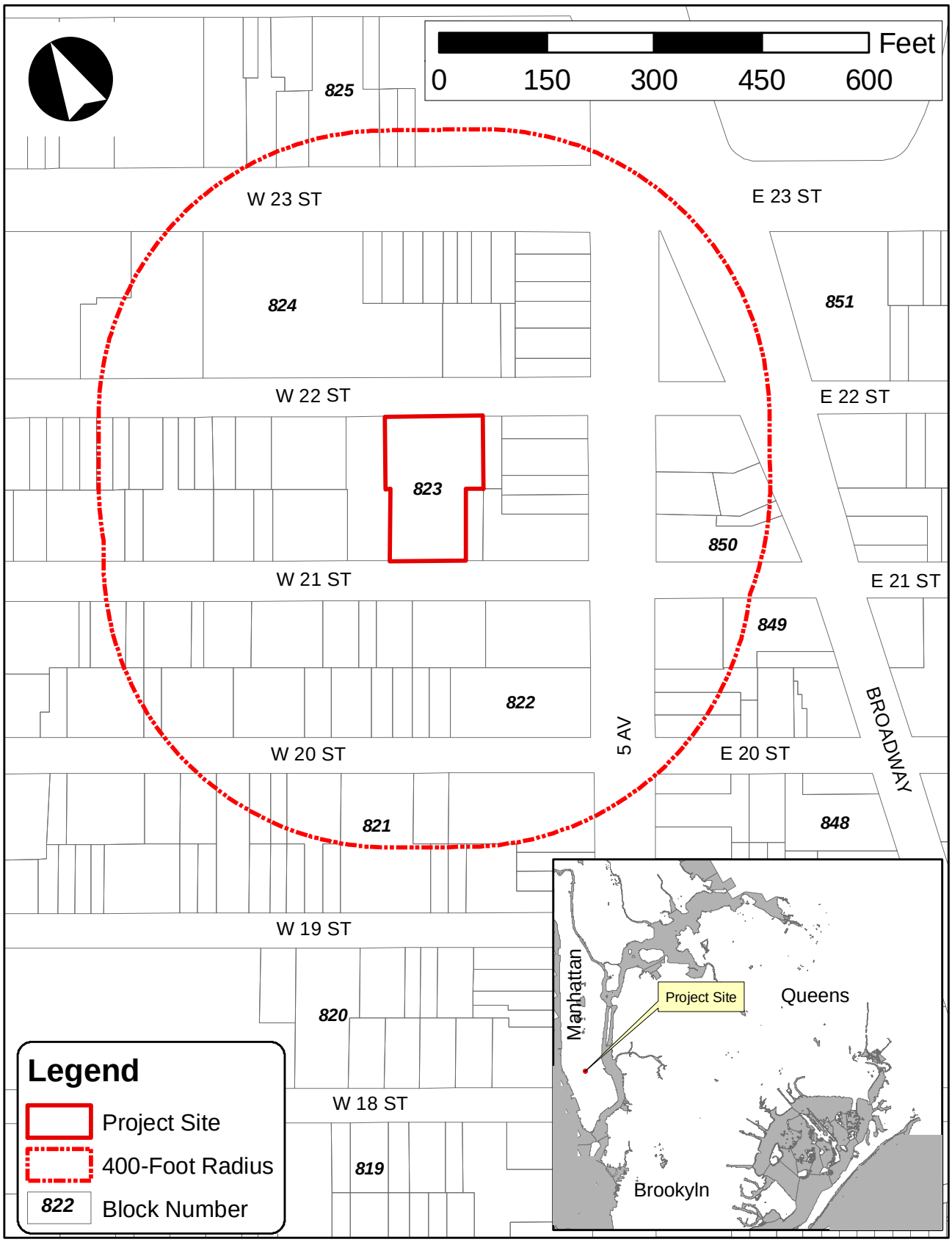
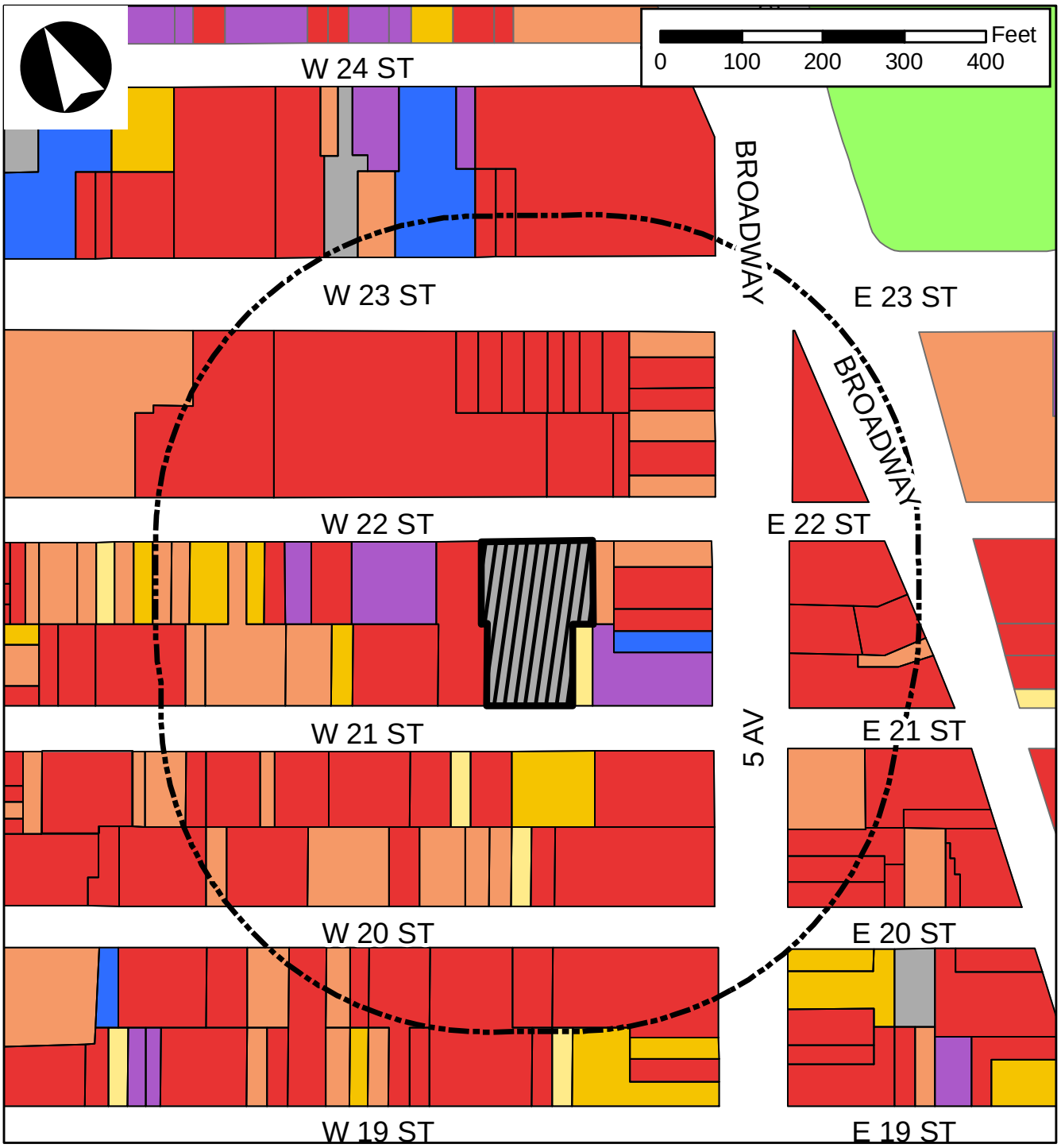

Feet
0
150
300
450
600
825
W 23 ST
E 23 ST
824
851
W 22 ST
E 22 ST
823
850
W 21 ST
E 21 ST
849
822
5 AV
BROADWAY
W 20 ST
E 20 ST
821
848
W 19 ST
820
W 18 ST
819
Legend
Project Site
400-Foot Radius
822
Block Number
Manhattan
Project Site
Queens
Brookyln

Figure 2

Land Use Map



Legend

- Project Site
- 400-Foot Radius

Land Use

- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Insitutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

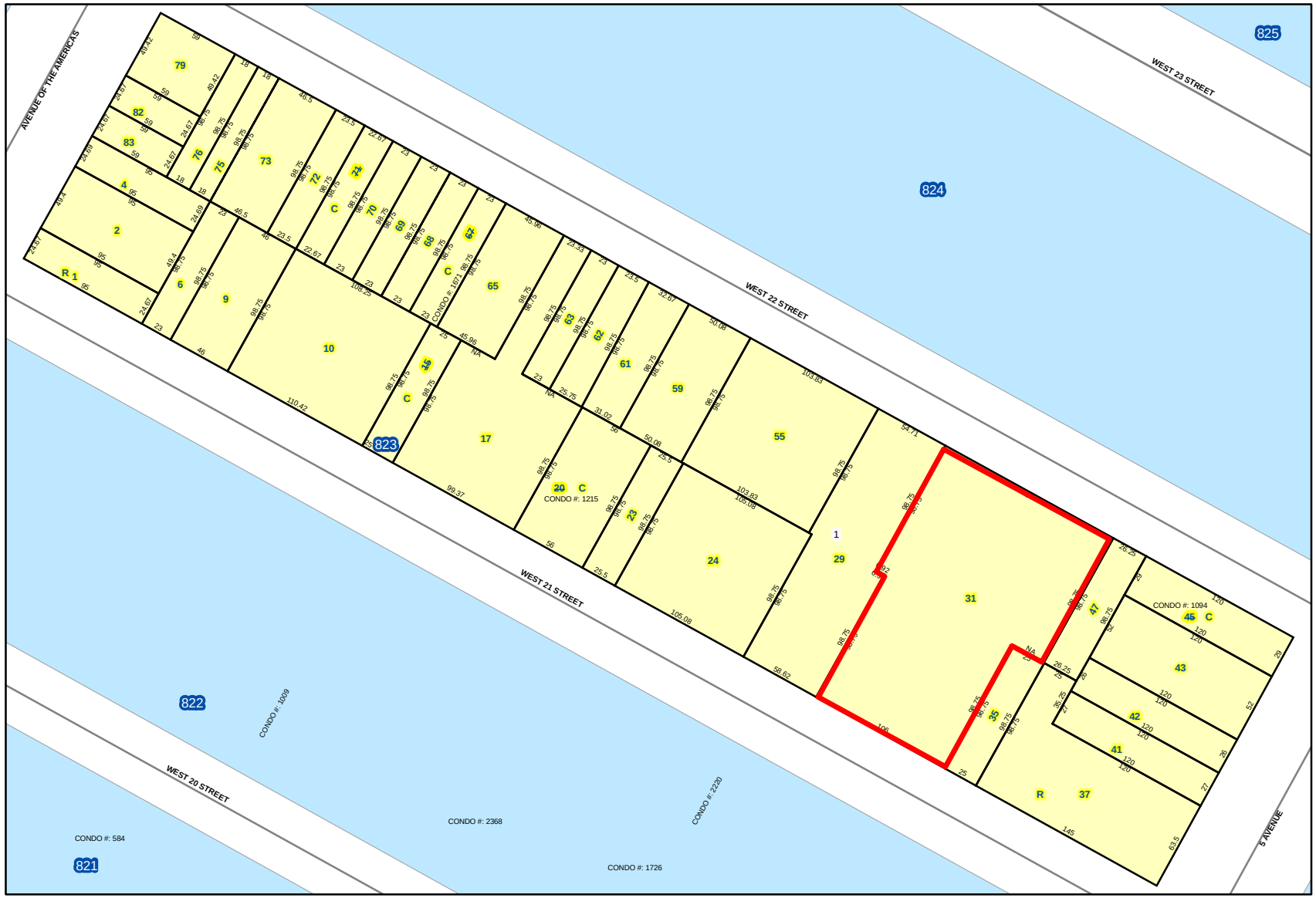
Figure 3
Zoning Map

Figure 4
Tax Map

NYC Digital Tax Map

Effective Date : 04-11-2013 15:52:27
End Date : Current

Manhattan Block: 823



Legend

- Streets
- Miscellaneous Text
- Possession Hooks
- Boundary Lines
- Lot Face Possession Hooks
- Regular
- Underwater
- Tax Lot Polygon
- Condo Number
- Tax Block Polygon
- Project Site

Feet
0 5 10 20 30 40

1: View of Project Site looking northeast from W 21st Street

2: View of Project Site looking northwest from W 21st Street

Figure 5b
Project Area Existing Conditions

3: View of Project Site looking north from W 21st Street

4: View from Project Site looking southeast from W 21st Street

Figure 5c
Project Area Existing Conditions

5: View from Project Site looking south on W 21st Street

6: View from Project Site looking southwest on W 21st Street

Figure 5d
Project Area Existing Conditions

7: View of Project Site looking southwest from W 22nd Street

8: View of Project Site looking southeast from W 22nd Street

Figure 5e
Project Area Existing Conditions

9: View of Project Site looking south from W 22nd Street

10: View from Project Site looking northwest on W 22nd Street

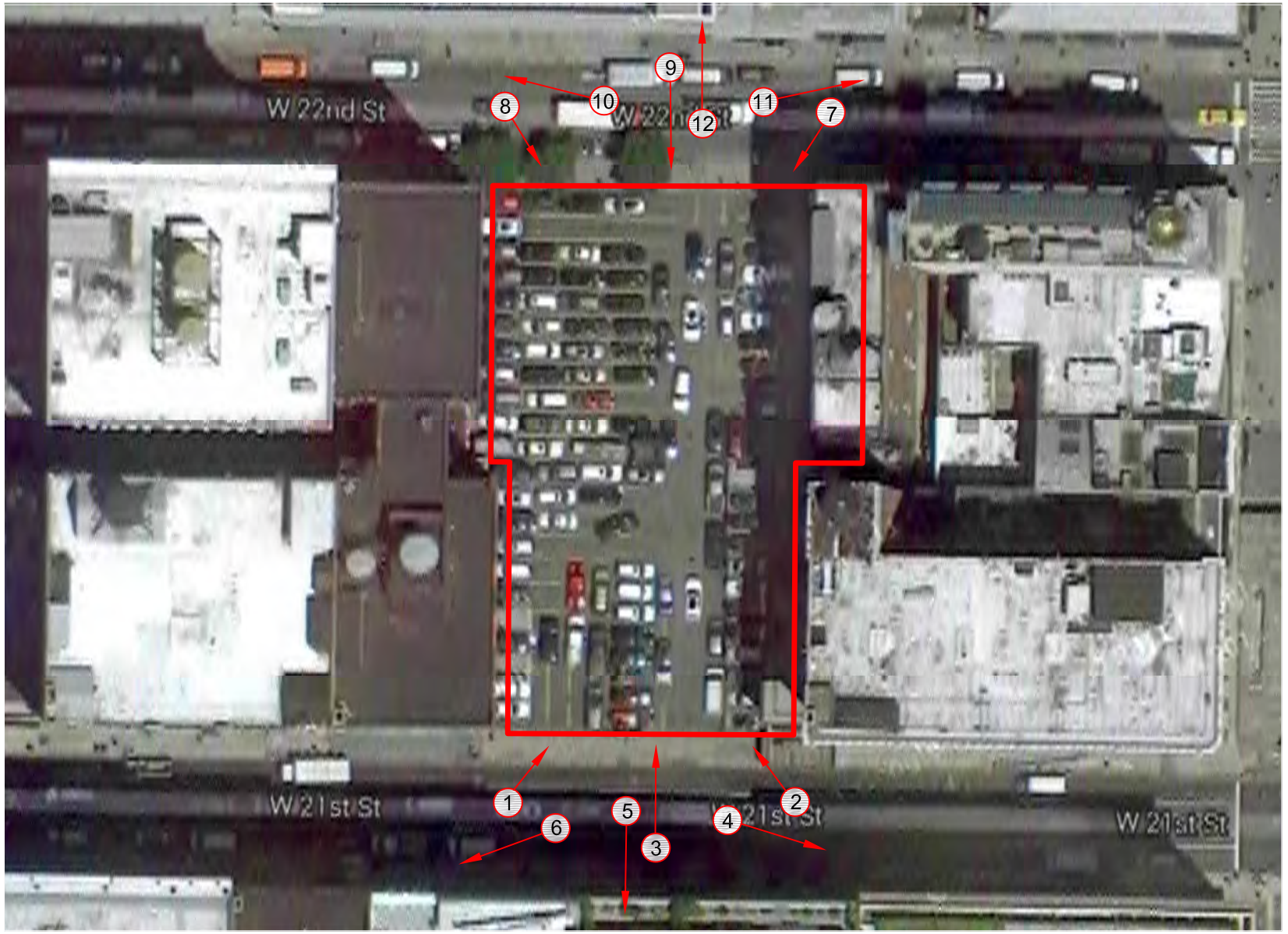
Figure 5f
Project Area Existing Conditions

11: View from Project Site looking northeast on W 22nd Street

12: View from Project Site looking north on W 22nd Street

Figure 6

Photo Key



Source: Google

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	WITH-ACTION CONDITION	INCREMENT
LAND USE				
Residential	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type of residential structures		1 development with 2 16-story towers	1 development with 18-story towers	
No. of dwelling units		297	333	36
No. of low- to moderate-income units		59	67	8
Gross floor area (sq. ft.)		252,506 gsf	282,839 gsf	30,333 gsf
Commercial	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type (retail, office, other)		Retail	Retail	No change
Gross floor area (sq. ft.)		10,000 gsf	10,000 gsf	No change
Manufacturing/Industrial	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type of use				
Gross floor area (sq. ft.)				
Open storage area (sq. ft.)				
If any unenclosed activities, specify:				
Community Facility	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type				
Gross floor area (sq. ft.)				
Vacant Land	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
Publicly Accessible Open Space	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):				
Other Land Uses	☒ YES ☐ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:	Public parking lot			
PARKING				
Garages	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces			200	200
No. of accessory spaces		62		-62
Operating hours		24 hours	24 hours	No change
Attended or non-attended		Unattended	Attended	Change to attended
Lots	☒ YES ☐ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces	256			
No. of accessory spaces				
Operating hours	24 hours			
Other (includes street parking)	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," describe:	Approx. 8 on-street spaces	Approx. 10 on-street spaces	Approx. 10 on-street spaces	No changes
POPULATION				
Residents	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify number:		472	529	57

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Briefly explain how the number of residents was calculated:	1.59 residents per DU, which is median household size for census tracts within 1/4-mile radius of project site			
Businesses	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. and type	Parking business	Retail; 1 or more establishments. Parking business	Retail; 1 or more establishments. Parking business	No change
No. and type of workers by business	5	Retail: 30 total. Parking: 1	Retail: 30 total. Parking: 4	Retail: no change. Parking: 3
No. and type of non-residents who are not workers	Parking patrons	Retail and parking patrons	Retail and parking patrons	No change
Briefly explain how the number of businesses was calculated:				
Other (students, visitors, concert-goers, *etc.*)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If any, specify type and number:				
Briefly explain how the number was calculated:				
ZONING				
Zoning classification	C6-4A	C6-4A	C6-4A	No change
Maximum amount of floor area that can be developed	239,960 zsf for residential (base), commercial (base), & community facility. 287,952 zsf for residential (bonus) & commercial (bonus)	239,960 zsf for residential (base), commercial (base), & community facility. 287,952 zsf for residential (bonus) & commercial (bonus)	239,960 zsf for residential (base), commercial (base), & community facility. 287,952 zsf for residential (bonus) & commercial (bonus)	No change
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	Refer to Attachment C for a description of existing predominant land uses. Zoning classifications within 400 feet include C6-4A, C6-4M, C5-2, and M1-6.	Refer to Attachment C for a description of land uses changes expected under No-Action conditions. No changes to zoning are expected.	Refer to Attachment C; proposed action would only affect land use conditions on the project site. No zoning map or text changes would occur as a result of the proposed action.	No changes except for project site.
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

Part II: TECHNICAL ANALYSIS

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, provide additional analyses (and, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a "yes" answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to 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
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☐	☒
(c) Is there the potential to affect an applicable public policy?	☒	☐
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. See Attachment C		
(e) Is the project a large, publicly sponsored project?	☐	☒
o If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
o If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
o Generate a net increase of more than 200 residential units *or* 200,000 square feet of commercial space?	☐	☒
▪ If "yes," answer *both* questions 2(b)(ii) and 2(b)(iv) below.		
o Directly displace 500 or more residents?	☐	☒
▪ If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
o Directly displace more than 100 employees?	☐	☒
▪ If "yes," answer questions under 2(b)(iii) and 2(b)(iv) below.		
o Affect conditions in a specific industry?	☐	☒
▪ If "yes," answer question 2(b)(v) below.		
(b) If "yes" to any of the above, attach supporting information to answer the relevant questions below. If "no" was checked for each category above, the remaining questions in this technical area do not need to be answered.		
i. Direct Residential Displacement		
o If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?	☐	☐
o 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?	☐	☐
ii. Indirect Residential Displacement		
o Would expected average incomes of the new population exceed the average incomes of study area populations?	☐	☐
o If "yes:"		
▪ Would the population of the primary study area increase by more than 10 percent?	☐	☐
▪ Would the population of the primary study area increase by more than 5 percent in an area where there is the potential to accelerate trends toward increasing rents?	☐	☐
o If "yes" to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and unprotected?	☐	☐
iii. Direct Business Displacement		
o Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	☐	☐
o Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve,	☐	☐

	YES	NO
enhance, or otherwise protect it?		
iv. Indirect Business Displacement		
o Would the project potentially introduce trends that make it difficult for businesses to remain in the area?	☐	☐
o Would the project capture retail sales in a particular category of goods to the extent that the market for such goods would become saturated, potentially resulting in vacancies and disinvestment on neighborhood commercial streets?	☐	☐
v. Effects on Industry		
o Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?	☐	☐
o 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) Direct Effects		
o Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
i. Child Care Centers		
o Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
o If "yes," would the project result in a collective utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent?	☐	☐
o If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
ii. Libraries		
o Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
o If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?	☐	☐
o If "yes," would the additional population impair the delivery of library services in the study area?	☐	☐
iii. Public Schools		
o Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
o If "yes," 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 100 percent?	☐	☐
o If "yes," would the project increase this collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
iv. Health Care Facilities		
o Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
o If "yes," would the project affect the operation of health care facilities in the area?	☐	☐
v. Fire and Police Protection		
o Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
o If "yes," would the project affect the operation of fire or police protection in the area?	☐	☐
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
(c) If "yes," would the 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 located in an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☒
(g) If "yes" to questions (c), (e), or (f) above, attach supporting information to answer the following:		
o If in an under-served area, would the project result in a decrease in the open space ratio by more than 1 percent?	☐	☐
o If in an area that is not under-served, would the project result in a decrease in the open space ratio by more than 5	☐	☐

	YES	NO
percent?		
o If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered? Please specify:	☐	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(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 would reach any sunlight-sensitive resource at any time of the year. See Attachment B		
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(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; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☒	☐
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☐	☒
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(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 not currently allowed by existing zoning?	☐	☒
(c) If "yes" to either of the above, please provide the information requested in Chapter 10. See Attachment D		
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
o If "yes," list the resources and attach supporting information on whether the project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
o If "yes," complete the Jamaica Bay Watershed Form and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses 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) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☒	☐
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☒	☐
(d) Would 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 of unknown origin?	☒	☐
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☒	☐
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
▯ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See Attachment B	☒	☐
(i) Based on the Phase I Assessment, is a Phase II Investigation needed?	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒

	YES	NO
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than that listed in Table 13-1 in Chapter 13?	☐	☐
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project 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, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(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 Wastewater Treatment Plant and/or contribute contaminated stormwater to 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 attach supporting documentation.		
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 969 lbs/week (increment); 11,346 lbs./week (With-Action)		
o 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?	☐	☒
o If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	☐	☐
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 3,908,948 MBTUs (increment); 37,950,429 MBTUs (With-Action)		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
o 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 of Chapter 16 for more information.*	☐	☐
o 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/rail trips per station or line?	☐	☐
o 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*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) See Attachment B	☐	☒
(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) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☒	☐
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. See Attachment B		
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) Would the proposed project result in the development of 350,000 square feet or more?	☐	☒
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?	☐	☒

	YES	NO
○ If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008; § 24-803 of the Administrative Code of the City of New York). Please attach supporting documentation.	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute 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 site 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) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☒	☐
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. See Attachment B		
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require 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 why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. See Attachment B		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ 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 a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☒	☐
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of 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. See Attachment B		

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 the pertinent books and records and/or after inquiry of persons who have personal knowledge of 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 applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME	SIGNATURE	DATE
Philip A. Habib, PE		9/25/14

PLEASE NOTE THAT APPLICANTS 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 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 or 1977, as amended), which contain the State and City criteria for determining significance.

1. 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.

IMPACT CATEGORY	Potentially Significant Adverse Impact: YES	NO
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	☐	☒

2. Are there any aspects of the project relevant to the determination of 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? ☐ YES ☒ NO

If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.

3. Check determination to be issued by the lead agency:

☐ **Positive Declaration**: 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* and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).

☐ **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 of 6 NYCRR Part 617.

☒ **Negative Declaration:** If the lead agency has determined that the project would not result in potentially significant adverse environmental impacts, then the lead agency issues a *Negative Declaration*. The *Negative Declaration* may be prepared as a separate document (see template) or using the embedded Negative Declaration on the next page.

4. ***LEAD AGENCY'S CERTIFICATION***

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	NYC Department of City Planning
NAME: Robert Dobruskin	DATE: 9/26/14
SIGNATURE: Robert Dobruskin	

ATTACHMENT A:
PROJECT DESCRIPTION

A. INTRODUCTION

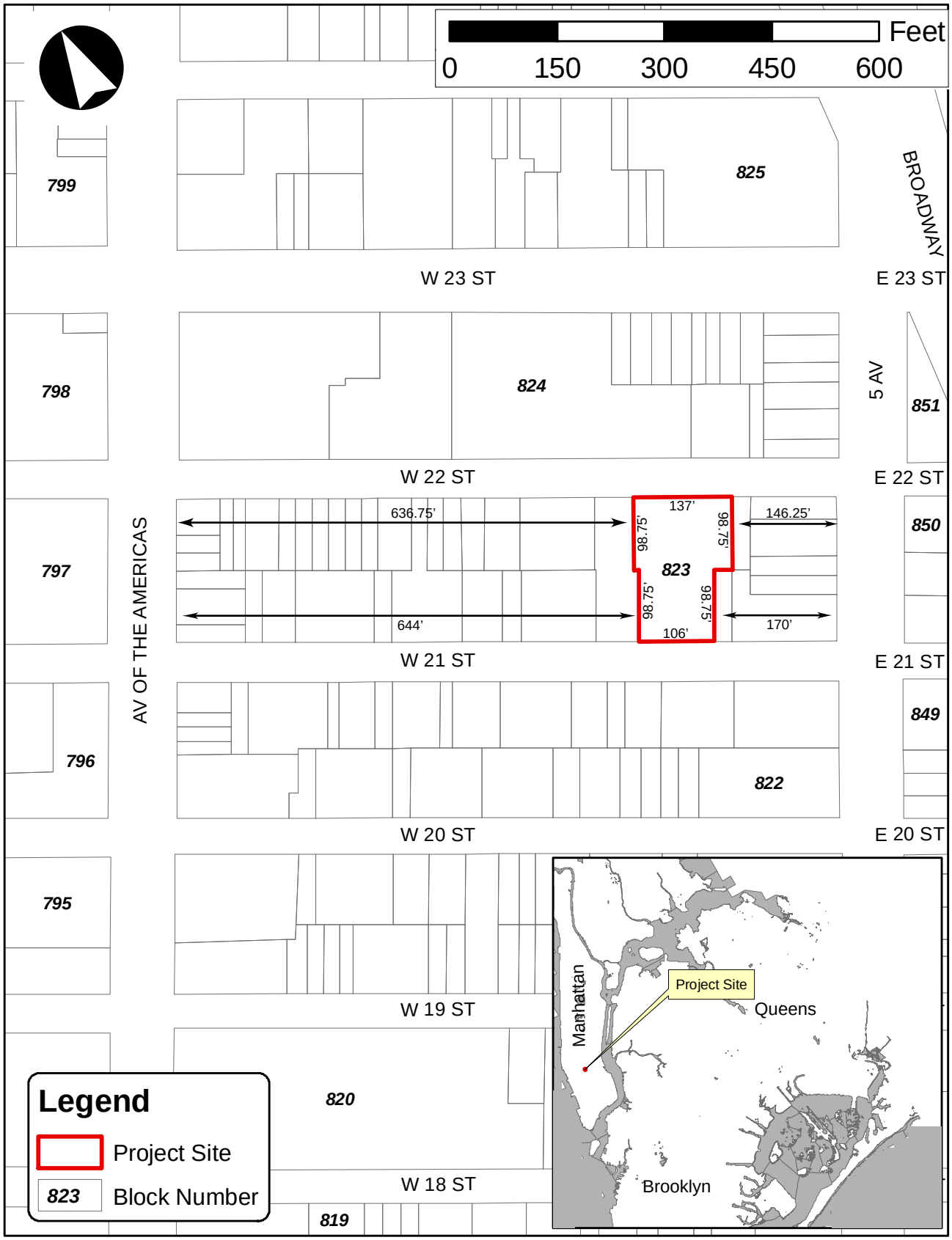
This Environmental Assessment Statement (EAS) has been prepared in support of a Land Use Review Application filed with the New York Department of City Planning (DCP). The applicant, 7 West 21 LLC, is proposing to develop a property it owns at 7 W. 21st Street in Manhattan Community District 5 ("project site") with a new mixed-use building ("proposed project") that requires discretionary approvals that are subject to environmental review. The project site is currently used as a public parking lot and under both reasonable worst case development scenario (RWCDS) No-Action and RWCDS With-Action conditions it would be redeveloped with a new mixed-use building. The "proposed action" includes two zoning special permits including one to allow increased parking on the project site and one to allow bulk modifications allowing the building to exceed the maximum permitted base height. The applicant is also seeking financing from the NYC Housing Finance Agency (HFA). Under RWCDS No-Action conditions, an as-of-right mixed-use building would be built on the project site and this EAS analyzes the effect of the net incremental change in conditions on the project site that would occur between RWCDS With-Action and RWCDS No-Action conditions. The proposed project is expected to be developed and occupied by 2017. The CPC is serving as the lead agency for environmental review.

As the project site is located within the City-designated Ladies' Mile Historic District, any new development on the site requires a Certificate of Appropriateness (C of A), a ministerial approval by the NYC Landmarks Preservation Commission (LPC). LPC issued a C of A for the design of the proposed project in October 2013, which it subsequently updated in April 2014, and the approved design is contingent on the granting of the proposed front setback waiver the applicant is seeking from the CPC.

B. PROJECT AREA EXISTING CONDITIONS

The project site, which consists of Block 823, Lot 31, is an irregularly-shaped approximately 23,996-square-foot (sf) midblock through lot with 106 feet of frontage on W. 21st Street and 137 feet of frontage on W. 22nd Street. Located between Fifth and Sixth Avenues, the range of addresses associated with the site includes 7-13 W. 21st Street and 6-14 W. 22nd Street. On W. 21st Street, the site is located 170 feet west of Fifth Avenue and 644 feet east of Sixth Avenue. On W. 22nd Street, the site is located 146.25 feet west of Fifth Avenue and 636.75 feet east of Sixth Avenue. (Refer to Figure A-1, Project Site Dimensions.)

Figure A-1
Project Site Dimensions



The project site is used currently as a 256-space licensed public parking lot with two curb cuts for driveways on each of the street frontages, i.e., four curb cuts in total (refer to Figure A-2, Aerial Photo). It is zoned C6-4A (refer to Figure 3, Zoning Map, attached to the EAS Form). As discussed in Attachment C, "Land Use, Zoning, and Public Policy," the project site was rezoned in 2004 as part of the Ladies' Mile Rezoning, a City-sponsored area-wide rezoning of portions of six blocks from M1-6 to C6-4A intended to facilitate residential and mixed-use redevelopment of underutilized properties in this area. The project site lies within the Ladies' Mile Historic District, which was designated by the NYC Landmarks Preservation Commission (LPC) in 1989 (refer to Figure A-3, Ladies' Mile Historic District).

The proposed action would directly affect only the project site and the site's boundary is coextensive with the boundary of the zoning lot, i.e., there are no other properties generating or receiving development rights from the site. As such, there are no potential "soft sites" that could be affected by the proposed action.

Table A-1 summarizes information about the project site.

Table A-1, Project Site

Block & Lot	Lot Area	Frontage	Existing Use	Zoning	Historic District
823: 31	23,996 sf	106' on W 21 St; 137' on W 22 St	256-space parking lot	C6-4A	Ladies' Mile

C. PROPOSED ACTION

The applicant is seeking discretionary approvals that collectively form the proposed action. These include:

* **Special Permit for Bulk Modifications:** pursuant to the New York City Zoning Resolution Section (ZR §) 74-712(b), "Developments in Historic Districts" to allow bulk modifications for a building located in a City-designated historic district. This would allow the proposed project to reach a height of 185 feet without any front setback from the streetwall on both its W. 21st Street and W. 22nd Street frontages, modifying the 150-foot maximum permitted streetwall height and required 15-foot front setback regulations of the site's C6-4A (R10A equivalent) contextual zoning district required per ZR § 23-633 and ZR § 35-24. In addition, the special permit would allow the towers to provide a 10-foot rear setback at a height of 154 feet, 6 inches, exceeding the 150-foot maximum permitted base height required by ZR § 23-663. The third waiver requested would permit a rear yard that does not comply with ZR § 23-532 due to two obstructions (a 10-foot high atrium and two garage exhaust vents located adjacent to stepped raised planters and with their tops flush with a planting bed area) that do not comply with ZR § 23-44. The CPC may grant this special permit to modify bulk regulations for new developments on sites in City-designated historic districts that are vacant or only contain minor improvements. Required findings for the special permit are that the modified design not adversely affect structures in the vicinity of the site in terms of scale, location, and access to

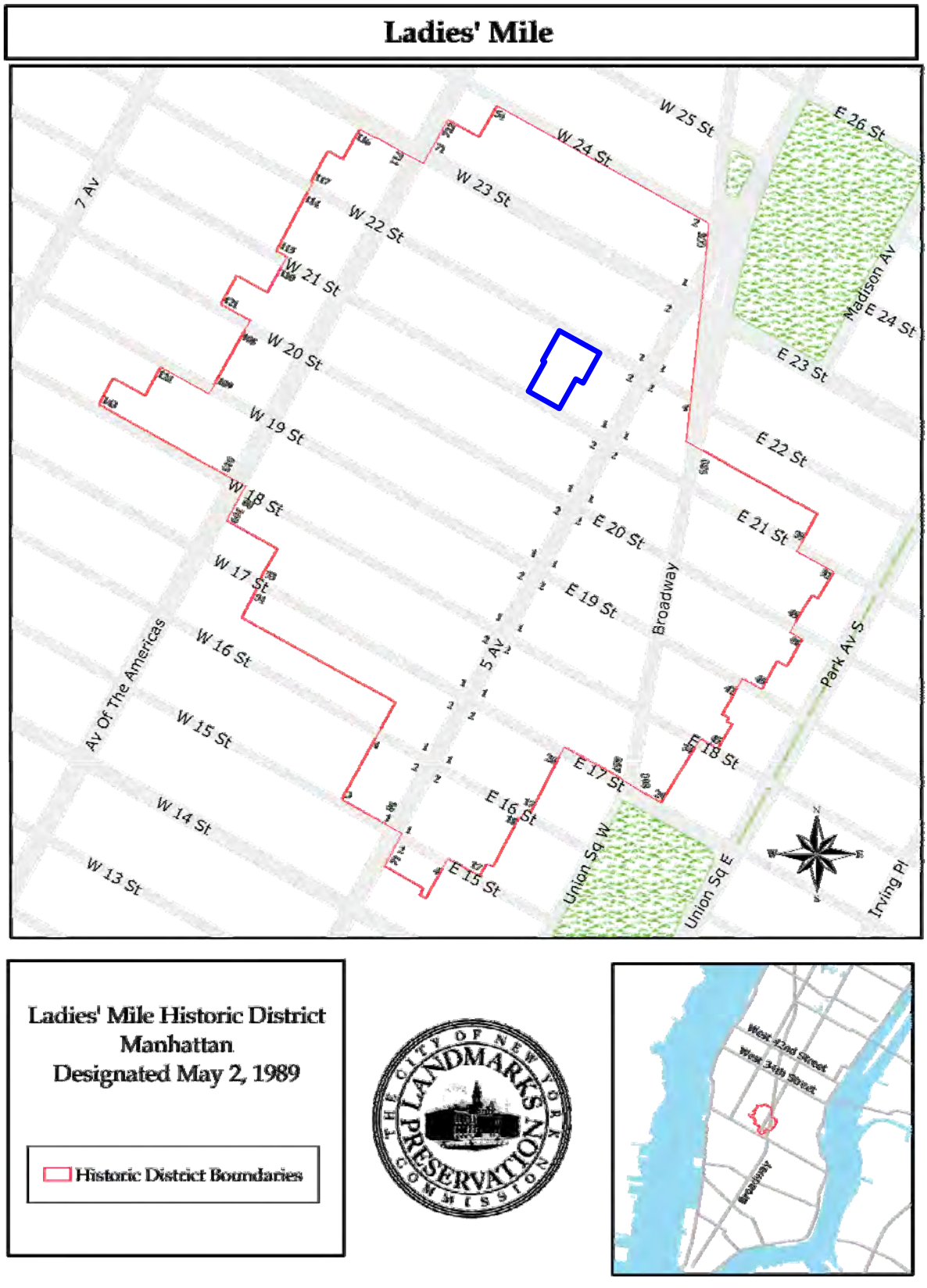
Figure A-2

Aerial Photo

Source: Google

Figure A-3

Ladies' Mile Historic District (NYCLPC)



light and air and also that the modified design relate harmoniously to other historic district buildings as evidenced by the granting of a C of A by LPC. In October 2013 LPC approved a C of A for the proposed design (with a subsequent update in April 2014). Without this special permit, zoning would permit a building with a total height of 185 feet above the 150-foot tall base. Thus while the special permit would allow modifications to the setback regulations, the maximum building height requirement would not be changed by the proposed action. Refer to Figure A-4a, Proposed Project/RWCDS With-Action Scenario: North-South Waiver Section and Figure A-4b, Proposed Project/RWCDS With-Action Scenario: Waiver Plan, which identify the modifications to height and setback regulations that would be allowed by this special permit.

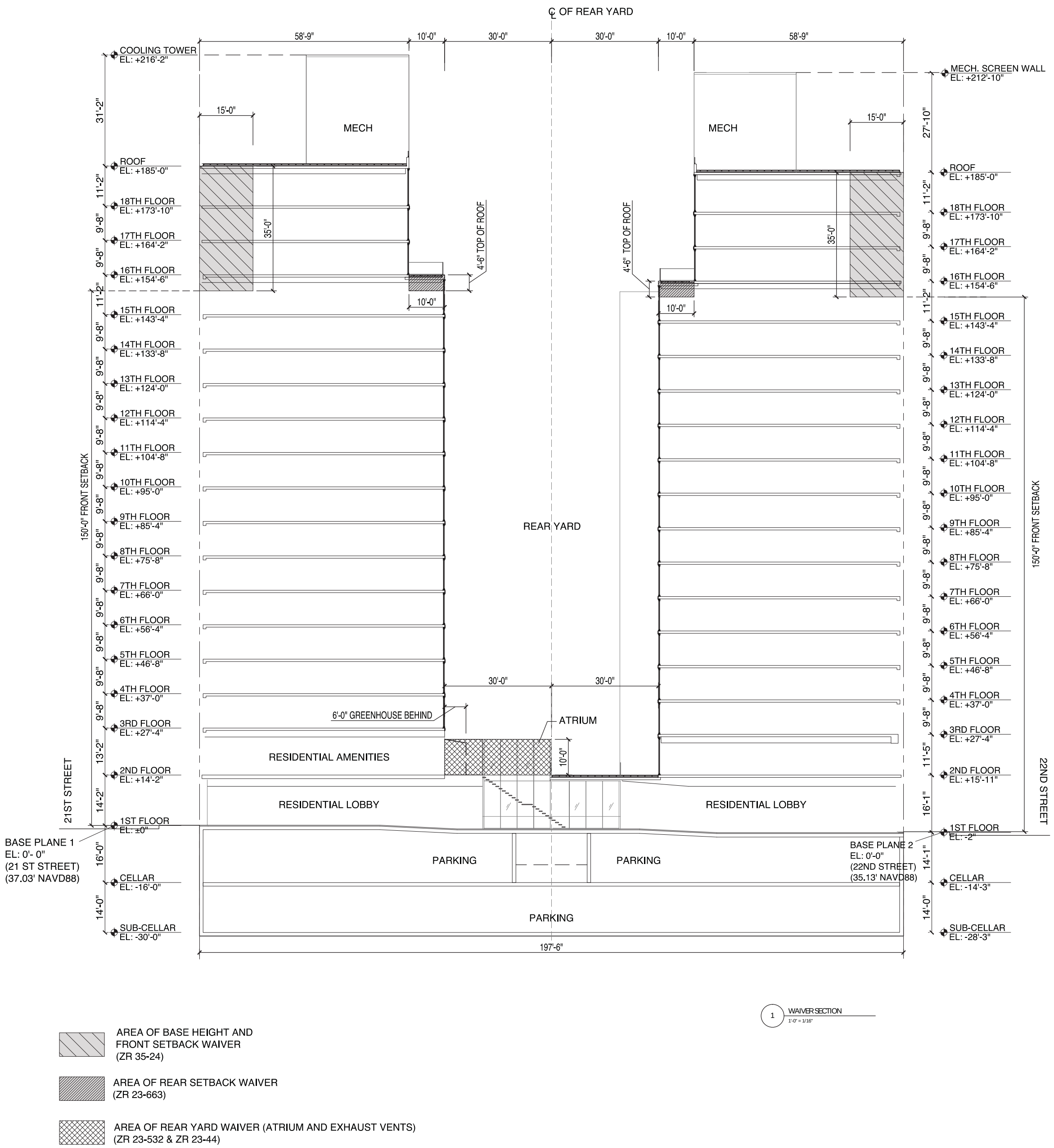
* **Special Permit for Additional Parking Spaces:** pursuant to ZR § 13-45, "Special Permits for Additional Parking Spaces" and ZR § 13-451, "Additional Parking Spaces for Residential Growth," to allow the proposed project to provide up to 200 public parking spaces. This would allow more parking than permitted for the proposed project as-of-right per ZR § 13-10. The proposed project would be permitted to provide approximately 63 parking spaces as-of-right; however, as discussed below, for No-Action conditions under the reasonable worst case development scenario (RWCDS) the site would have 62 parking spaces. The additional parking spaces provided by this special permit are intended to help increase the area's off-street parking supply. In the proximity of the project site related development trends have resulted in increased parking demand due to residential growth while there has been a reduction in the supply of existing off-street parking spaces as parking facilities have been redeveloped. Refer to Figure A-5, Special Permit Parking Plan, which shows the parking layout that would be allowed by this special permit.

* **HFA Financing:** approval of tax-exempt bond financing by HFA as part of the agency's 80/20 Housing Program, as 20 percent of the units would be affordable housing units.

The special permit approvals are subject to the City's Uniform Land Use Review Procedure (ULURP) public review process and to City Environmental Quality Review (CEQR). The use of HFA financing is subject to a review procedure conducted by HFA and is also subject to CEQR environmental review.

CEQR is a process by which agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment. ULURP is a process that allows public review of proposed actions at four levels: the Community Board, the Borough President, the City Planning Commission, and if applicable, the City Council. The procedure has mandated time limits for review at each stage to ensure a maximum review period of seven months.

Table A-2 summarizes the required approvals that comprise the proposed action.



7 WEST 21ST STREET

7 WEST 21ST STREET
NEW YORK, NY

Morris Adjmi Architects

MA

REVISION ISSUE DATE REMARKS

ULURP SUBMISSION

OWNER:
ROSE ASSOCIATES, INC
200 MADISON AVENUE, 5TH FLOOR
NEW YORK, NY 10016
T 212 328 5513

DESIGN ARCHITECT:
MORRIS ADJMI ARCHITECTS
45 EAST 20TH STREET, 11TH FLOOR
NEW YORK, NY 10003
T 212 982 2020
F 212 674 4511
MA.COM

ARCHITECTS AND PLANNERS:
THE STEPHEN B. JACOBS GROUPS, P.C.
381 Park Avenue South
NEW YORK, NY 10016
T 212 421 3712

STRUCTURAL ENGINEER:
ROSENWASSER/ GROSSMAM
CONSULTING ENGINEERS, P.C.
485 SEVENTH AVENUE, SUITE 1510
NEW YORK, NY 10018
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M.E.P. ENGINEER:
FMC ENGINEERING, P.C.
261 WEST 35TH STREET, #12A
NEW YORK, NY 10001
T 212 643 1720

TRANSPORTATION ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FLOOR
NEW YORK, NY 10016
T 212 929 5656

DATE 18 SEPTEMBER 2014
SCALE AS NOTED
WAIVER SECTION

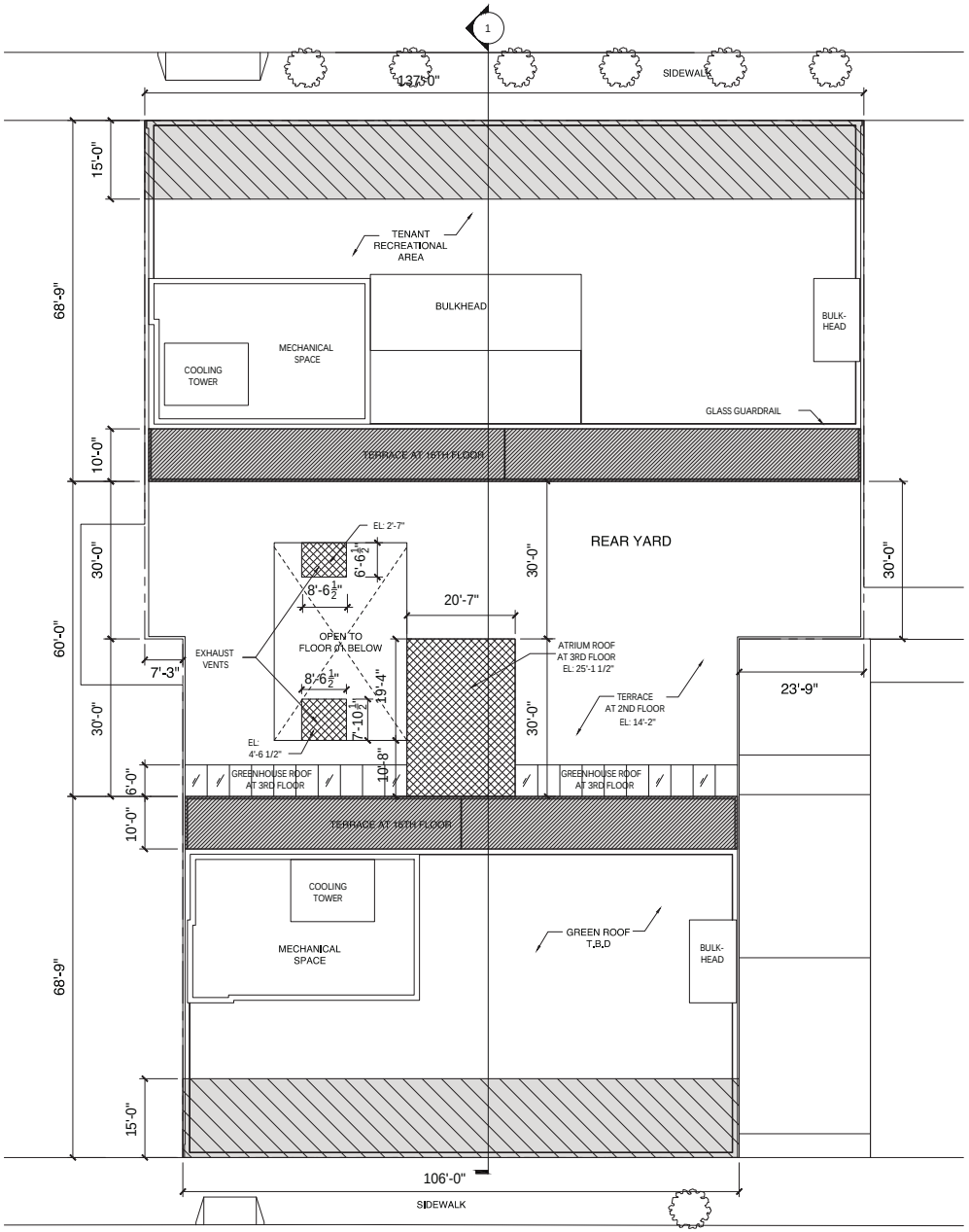
Z-140

2014 MA SHEET 1 OF X

7 W. 21st Street EAS

Figure A-4a

Proposed Project/RWCDS With-Action Scenario: North-South Waiver Section



7 WEST 21ST STREET

7 WEST 21ST STREET
NEW YORK, NY

Morris Adjmi Architects

MA

REVISION ISSUE DATE REMARKS

ULURP SUBMISSION

OWNER:
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STRUCTURAL ENGINEER:
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CONSULTING ENGINEERS, P.C.
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M.E.P. ENGINEER:
FMC ENGINEERING, P.C.
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NEW YORK, NY 10001
T 212 643 1720

TRANSPORTATION ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FLOOR
NEW YORK, NY 10016
T 212 929 9366

DATE 18 SEPTEMBER 2014
SCALE AS NOTED

WAIVER ROOF PLAN

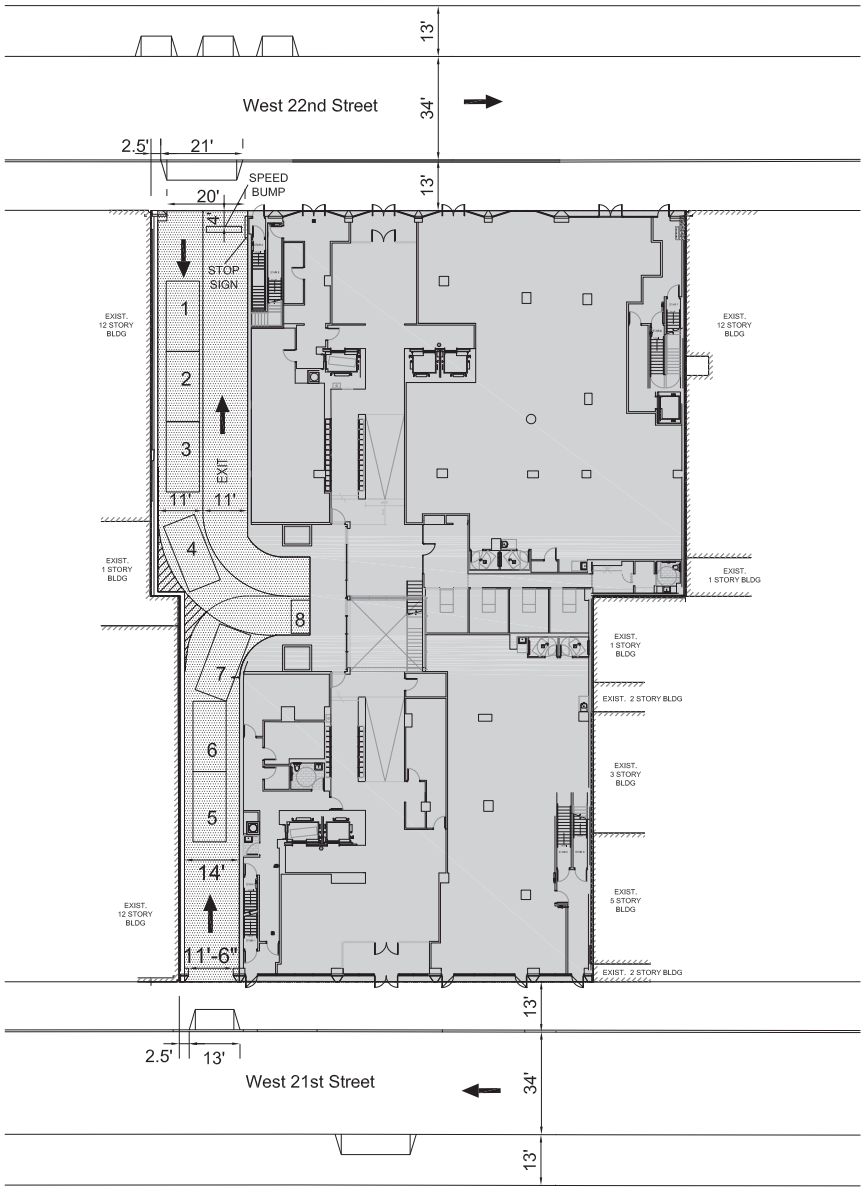
Z-140

2014 MA SHEET 1 OF X

7 W. 21st Street EAS

Figure A-4b

Proposed Project/RWCDS With-Action Scenario: Waiver Plan



7 WEST 21ST STREET PARKING GARAGE

NEW YORK, NEW YORK

APPLICANT:
7 West 21 LLC
200 Madison Avenue, 5th Fl
New York, NY 10016
Tel: 212-328-5513

TRANSPORTATION ENGINEER:
Philip Habib & Associates
102 Madison Avenue 11th Fl
New York, NY 10016
Tel: 212-929-5656

NOTES:

Garage Planning and Design Standards and Guidelines

Garage: Special permit for a public parking garage pursuant to sections 13-45 & 13-451. Special permit to include the following:

Curb-Cuts: Curb-cuts on public streets must be at a distance of at least 50 feet from any intersecting street line.

Reservoir Spaces: All reservoir spaces shall be located between the parking facility entrance and the attendant station. Each reservoir space shall be a minimum of 8'-6"x18'-0" and shall be painted on the floor of the facility so as to be clearly visible by patrons entering in cars. The attendant station shall be located at, or adjacent to the innermost reservoir space(s), as per ZR 13-25.

Pedestrian Circulation

Cashier's booths and car pick-up and patron waiting areas shall be located so as to provide patron security and safety enroute to and at these locations.

Pedestrian routes to and from garage access points shall be provided and be clearly posted. These routes shall have warning devices placed at all potential pedestrian/ vehicular conflict points.

Stop signs and visual and audible warning devices shall be placed at all vehicular egress points (at sidewalks).

Accessibility for the Disabled:
Garages shall conform to Local Law 58 of 1987 and to the Americans With Disabilities Act of 1991.

LEGEND:

VEHICULAR FLOW

RESERVOIR SPACE

CORES, MECHANICAL, ELECTRICAL OTHER SPACE NOT SUBJECT TO REQUESTED SPECIAL PERMIT INTERIOR SUBDIVISIONS, USE AND OTHER DESIGNATIONS ARE ILLUSTRATIVE ONLY AND SUBJECT TO CHANGE

ACCESS ZONE

NO.	DATE	REVISION
1	9/18/2014	DCP Comments

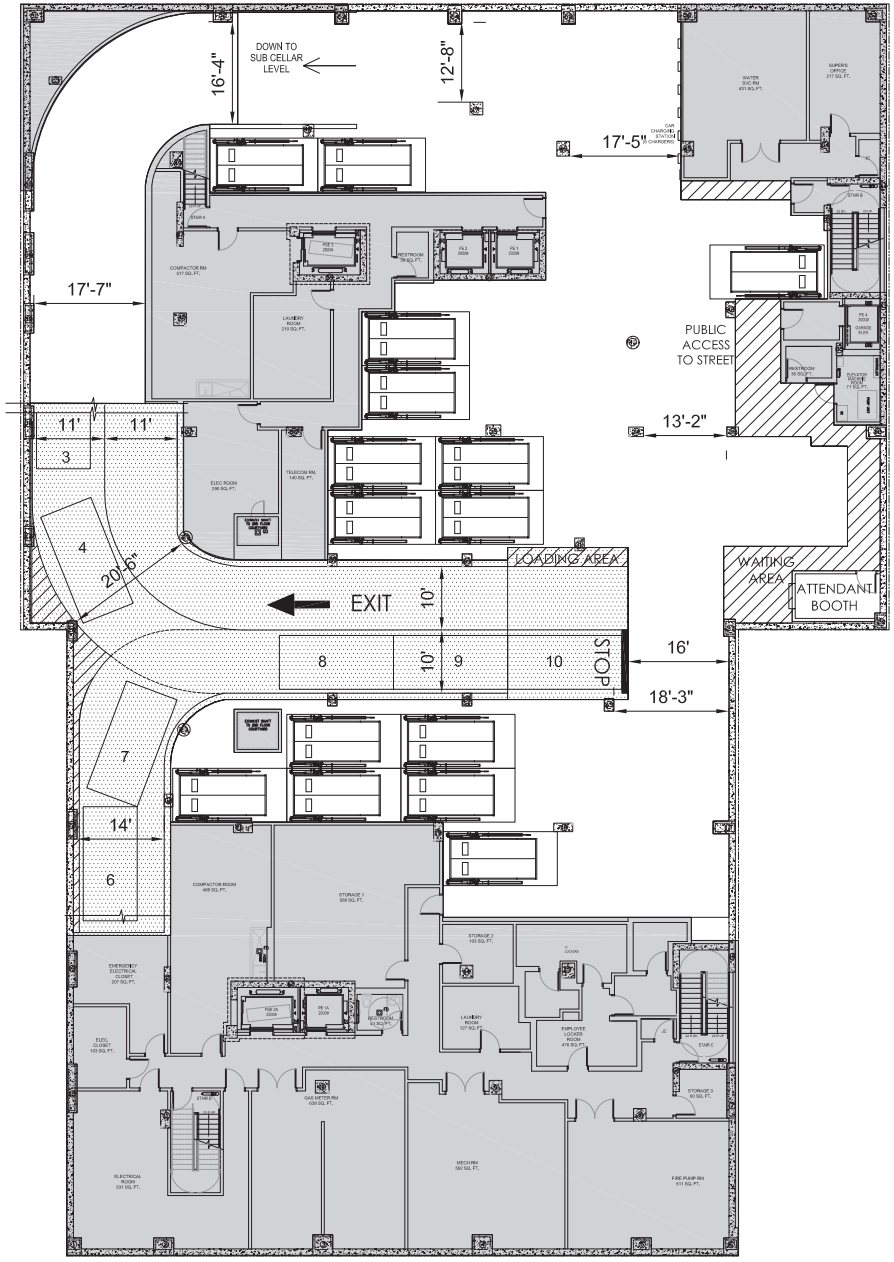
7 West 21st Street Parking Garage

PARKING PLAN GROUND LEVEL

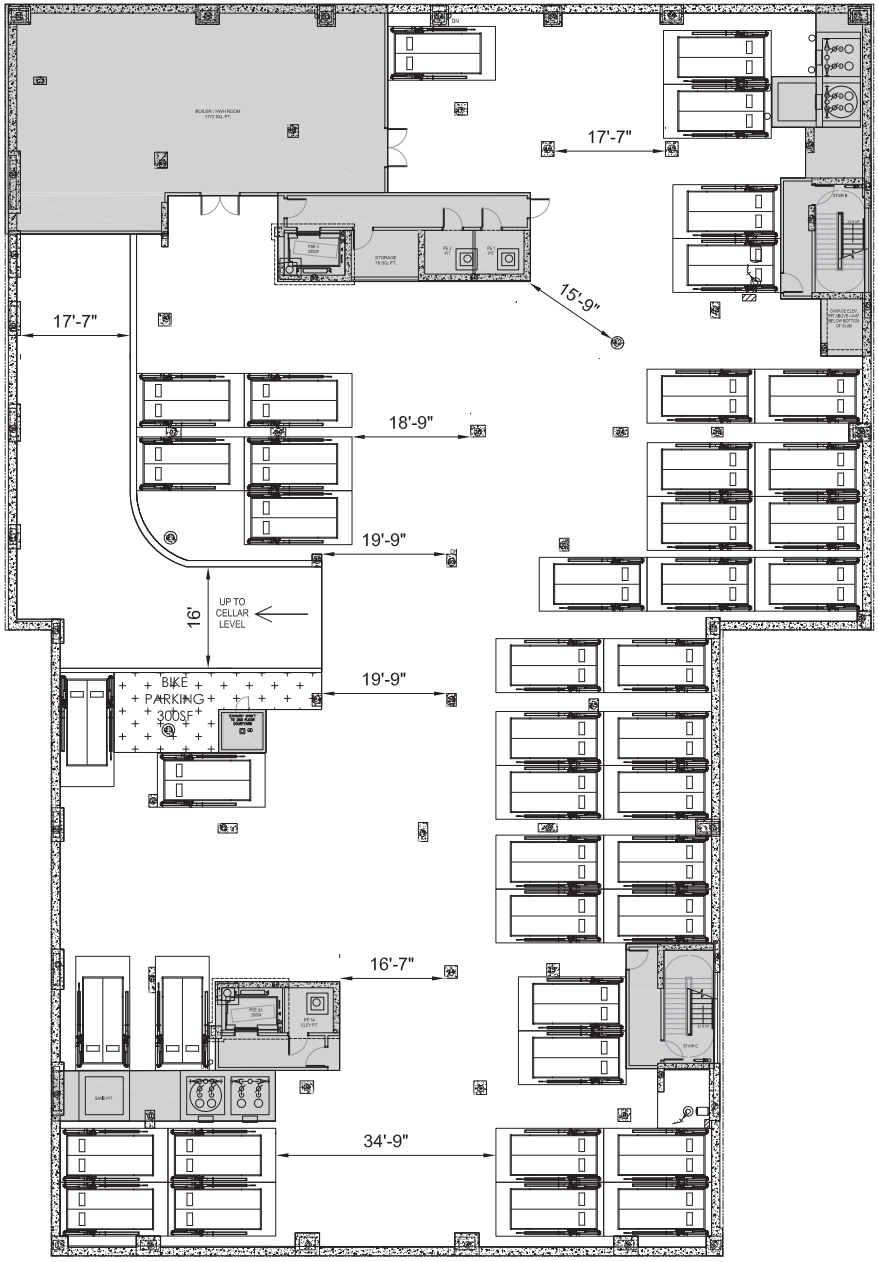
DATE	PROJECT NO.
8/12/2014	1350

DRAWN BY: S.W.
CHECKED BY: P.H.

Z-112



CELLAR LEVEL



SUBCELLAR LEVEL

7 WEST 21ST STREET GARAGE

Section D, below provides more information on the parking plan and building design that would result from the proposed special permits.

Table A-2, Summary of Required Approvals

TYPE OF ACTION	BRIEF DESCRIPTION
Zoning Special Permit Pursuant to ZR § 13-45 & 13-451	To allow the proposed development to provide 200 public parking spaces, exceeding the maximum allowed as-of-right, which is approximately 63 spaces. The additional parking would address growth in residential demand from new developments that have not provided parking and replace existing off-street parking eliminated from the surrounding area
Zoning Special Permit Pursuant to ZR §74-712	To allow bulk modifications for a building located in a City-designated historic district; specifically (a) modifying the 150-foot maximum permitted streetwall height and required 15-foot front setback to allow a 185-foot tall streetwall on both W. 21 St. & W 22 St. frontages; (b) also modifying the 150-foot maximum permitted base height to allow both building towers to provide a 10-foot rear setback at a height of 154 feet, 6 inches; (c) modifying the rear yard requirements by permitting rear yard obstructions as defined in section and plan.
HFA Financing	Tax-exempt bond financing as part of the 80/20 program for providing 20% affordable housing

D. PROPOSED PROJECT/REASONABLE WORST-CASE DEVELOPMENT SCENARIO (RWCDS)

A RWCDS for the project site has been identified in order to assess the environmental effects of development that could occur as a result of the proposed action. This includes the amount, type, and location of development that is expected to occur in both RWCDS No-Action and RWCDS With-Action conditions. The net incremental difference between the RWCDS With-Action and RWCDS No-Action serves as the basis for the environmental impact analyses.

RWCDS No-Action Conditions

Under the RWCDS No-Action scenario, the applicant would redevelop the proposed project site on an as-of-right basis pursuant to the C6-4A zoning with a development similar to the proposed project. As with any development on this site, the RWCDS No-Action development would require a C of A from LPC.

For analysis purposes it is assumed that the RWCDS No-Action development would be an approximately 314,497-gsf building with 266,506 gsf of above-ground space. Zoning would permit a 185-foot tall building with setbacks and/or penthouses above the 150-foot tall maximum permitted streetwalls. After discussion with LPC staff, it was determined that a reasonable assumption for the No-Action scenario would be a building with one level setback from the front streetwall. Therefore, the RWCDS No-Action development assumes a 16-story (approximately 161-foot tall) building with towers facing both frontages. Each tower would have a 150-foot tall streetwall, consisting of 15 stories, and above the streetwall the 16th story would have a front setback of 15 feet and a rear setback of 10 feet. These towers would be connected at the base with a nearly full lot coverage first floor and two below-grade

levels. There would not be a glass-wall atrium or garage vents at the level of the courtyard's sunken garden planting bed in the rear yard equivalent area. The building would include two below-grade levels under RWCDS No-Action conditions. Under RWCDS No-Action conditions the excavation area would encompass the entire site to a depth of approximately 30 feet. As a result, the two below-grade areas would include approximately 47,991 gsf.

Based on conceptual designs, the RWCDS No-Action development would have a total of 297 DUs in 252,506 gsf of residential space (assuming 850 gsf per DU), of which 59 DUs would be affordable housing units, 10,000 gsf of retail, and 62 below-grade parking spaces in approximately 18,600 gsf of parking area accessed via curb cuts on both W. 21st Street and W. 22nd Street. As there would be less below-grade parking area under RWCDS No-Action conditions than under RWCDS With-Action conditions, there would be additional storage area and other residential amenity spaces provided under RWCDS No-Action conditions in areas that under RWCDS With Action conditions would be used to accommodate the expanded parking area. The building would have a built FAR of approximately 10.6. For analysis purposes it is assumed that the development would qualify for 0.6 FAR of Inclusionary Housing bonus.

Under the RWCDS No-Action scenario, the project site would have approximately 472 residents, based on an average of 1.59 residents per household (the average household size for census tracts within a quarter-mile radius of the site, 2010 Census), approximately 30 retail employees based on an average of 3 retail employees per 1,000 gsf (a rate used in the *Ladies' Mile Rezoning EAS*, et al), and approximately 1 parking employee based on an average of 1 parking employee per 50 spaces (a rate used in the *125th Street Corridor Rezoning EAS*).

Refer to Table A-3, which summarizes the RWCDS for No-Action, With-Action, and Net Increment condition, and Figure A-6 which shows a North-South section of the RWCDS No-Action scenario building.

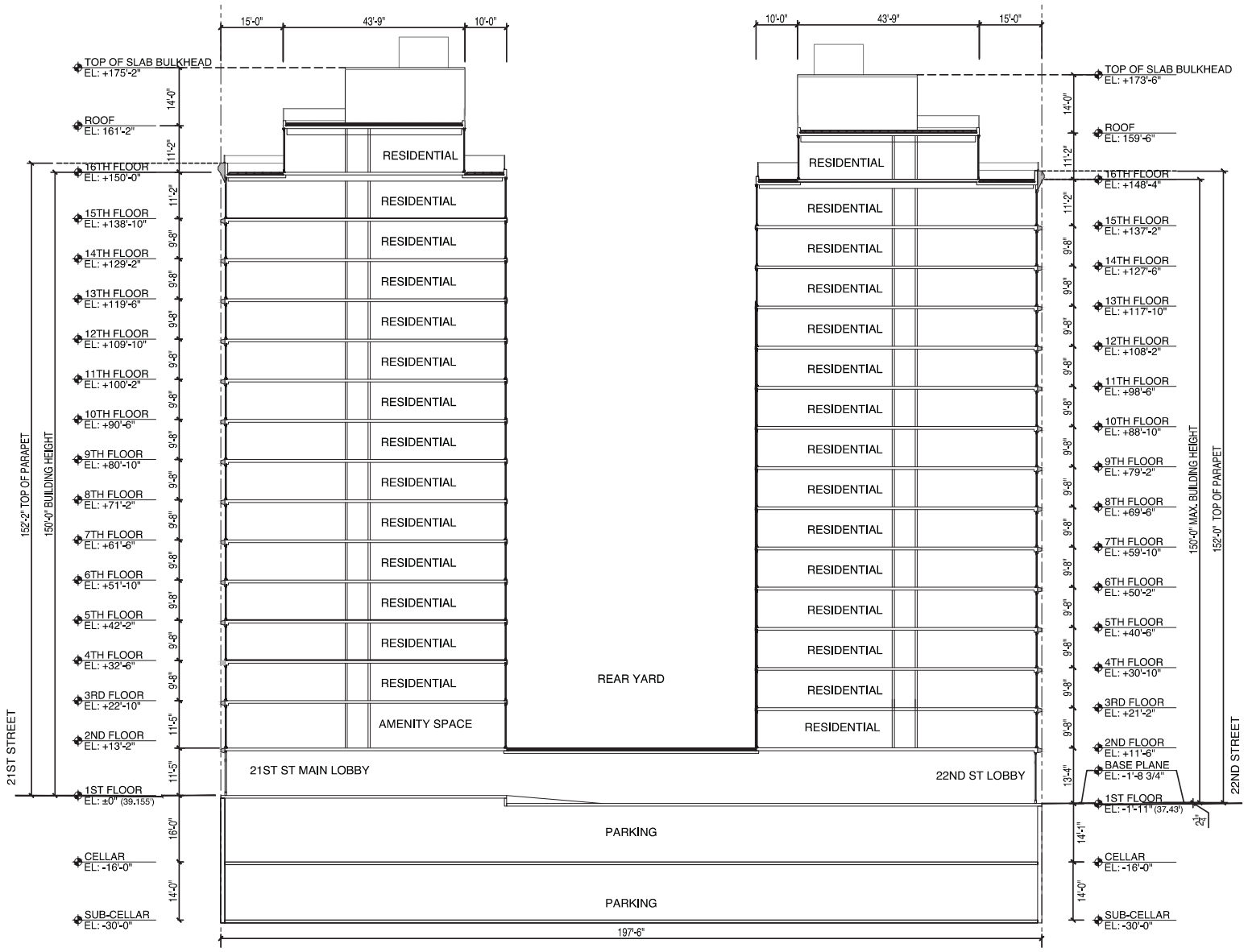
Table A-3, RWCDS

	RWCDS No-Action Conditions	**RWCDS With-Action Conditions**	**RWCDS Net Increment**
Residential			
- Affordable Units	59	67	+8
- Market-rate Units	238	266	+28
- Total Units	297	333	+36
- Residents[1]	*472*	*529*	*+57*
Local Retail Space	10,000 gsf	10,000 gsf	0
Parking	62 spaces	200 spaces	+138 spaces
Employees[2]	*43*	*47*	*+4*
Building Height	161 feet	185 feet	+24 feet

Notes:
[1] Resident population calculated as: 1.59 residents per household (Census tracts within ¼-mile of project site per 2010 US Census)
[2] Employee population calculated as: 1 residential building employee per 25 DUs (*West Clinton Rezoning EAS*); 3 retail employees per 1,000 gsf (*Ladies' Mile Rezoning EAS*); 1 parking employee per 50 spaces (*125th St. Corridor Rezoning EIS*).

Figure A-6

No-Action Scenario: North-South Plan



RWCDS With-Action Conditions

Under the proposed action, a range of new development could potentially occur on the project site in the future. For environmental analysis purposes, a RWCDS, which differs from the applicant's intended proposed project, has been identified for the site. Given development trends in the area, the site's dimensions and frontage, applicable zoning use and density controls, the provisions of the approved C of A for the site, and the modifications to zoning bulk and parking controls that would be permitted by the proposed action, this RWCDS for the With-Action scenario represents the upper bounds of residential, commercial, and parking uses for this site and ensures that the proposed action's effects would be no worse than those considered in the environmental review. As discussed below, the RWCDS for the With-Action condition differs somewhat from the applicant's proposed development on the project site.

Pursuant to the C of A approved by LPC, under RWCDS With-Action conditions the new building on the project site would be 18 stories tall with towers on both street frontages rising to a height of 185 feet without front setback. Each tower would provide a 10-foot rear setback at a height of approximately 154 feet, 6 inches. A one-story, nearly full-lot coverage base would connect the two residential towers as well as retail space, garage entries, lobbies, residential amenity space, and mechanical areas. Extending above the first floor base in the rear yard equivalent area there would be a glass-walled atrium adjoining the W. 21st Street tower. It would have a height of approximately 25 feet, i.e., extending approximately 10 feet (1 story) above the 15-foot tall first floor base, covering a rectangular area approximately 30 feet by approximately 21 feet. The atrium would be covered by a green roof and on one side would be located adjacent to a landscaped open air sunken courtyard and would contain a stairway connecting to the second floor of the W. 21st Street tower. The sunken courtyard area would include two garage exhaust vents located in a stepped garden area; the northern vent would be 6 feet, 6.5 inches by 8 feet, 6.5 inches, the southern vent would be 7 feet, 10.5 inches 8 feet, 6.5 inches, and both vents would lie horizontally with their tops flush to the surface of the planting bed.

As would be the case under RWCDS No-Action conditions, the building would include two cellar levels, with the site fully excavated to a depth of approximately 30 feet.

The building would have curb cuts for garage driveways on both street frontages, with a two-way ramp on W. 22nd Street and a one-way entry-only ramp on W. 21st Street. Both curb cuts would be located at the western edge of the site and would replace curb cuts for the existing public parking lot. The development would include retail entries on each street frontage as well two separate residential lobby entrances on each frontage connected via the first floor base. In addition to garage areas, the two below grade levels would also include additional residential amenity space, mechanical areas, storage, and other support space (refer to Figure A-4b, Proposed Project/RWCDS With-Action Scenario: Waiver Plan).

The RWCDS With-Action development would have a total of approximately 333 DUs in 282,839 gsf of residential space (assuming 850 gsf per DU). Twenty percent of the units, approximately 67 DUs, would be affordable housing units. It would also include 10,000 gsf of retail and 200 below-grade public parking spaces with double-height stackers in approximately 36,000 gsf of parking area.

Under the RWCDS With-Action scenario, the project site would have approximately 529 residents, based on an average of 1.59 residents per household (the average household size for census tracts within a quarter-mile radius of the project site) and approximately 47 employees, including 30 retail employees based on an average of 3 retail employees per 1,000 gsf (a rate used in the *Ladies' Mile Rezoning EAS*, et al), 13 residential building employees based on an average of 1 residential employee per 25 DUs (a rate used in the *West Clinton Rezoning EAS*), and 4 parking employees based on an average of 1 parking employee per 50 spaces (a rate used in the *125th Street Corridor Rezoning EIS*).

Table A-3 includes a summary of program and building information for RWCDS With-Action conditions.

Given the strong demand for and trend of residential development in this area, a new predominantly residential development is considered the most likely use of the project site under both RWCDS No-Action and RWCDS With-Action conditions.

While a 10 FAR commercial or community facility use (12 FAR commercial with plaza bonus) would be permitted under both RWCDS No-Action and RWCDS With-Action conditions, such uses are considered unlikely as the Ladies' Mile area has not experienced a significant trend of new construction of large multi-story commercial or community facility buildings in recent years.

In summary, the With-Action condition described herein represents the RWCDS for use, density, program, and bulk.

Applicant's Proposed Development

To be consistent with CEQR analysis methodologies, there are some differences between the development program for the proposed project, which reflects the applicant's intentions for the site, and the RWCDS With-Action scenario that will be analyzed for environmental review purposes. With the proposed action, the applicant intends to develop the project site with an 18-story, approximately 344,830-gsf (279,119-zsf) mixed-use building. It would include approximately 300 DUs, of which approximately 60 DUs would be affordable housing units; approximately 10,000 gsf of local retail space on the ground floor, and approximately 200 public parking spaces in two below-grade levels. Although the RWCDS With-Action scenario would not be compared to the applicant's proposed project for environmental review purposes, it should be noted that the RWCDS With-Action scenario development would have approximately 33 more DUs. These changes are an average DU size of 850 gsf for the RWCDS With-Action scenario as compared to 943 gsf for the

proposed project; both the applicant's proposed development and the RWCDS With-Action scenario would have 282,839 gsf of residential space.

Net Increment

Based on the RWCDS No-Action and RWCDS With-Action conditions identified above, the RWCDS incremental development for the proposed action would consist of a net increase of 30,333 gsf of above-ground space and no change in below-grade space. In terms of program, there would be a net increase of 28 market rate DUs and a net increase of 8 affordable housing DUs, resulting in a net increase of 36 total DUs. There would be no net change in retail space. There would be a net increase of 138 parking spaces. In terms of building envelope, there would be a net increase of 24 feet for the residential towers. There would be no incremental change in the area or volume of site in-ground disturbance or excavation. Table A-3 includes a summary of program and building information for the RWCDS Net Increment.

With these changes in the program, it is expected that the number of residents would increase by approximately 57, the number of residential building employees would increase by approximately 1, and the number of parking employees would increase by approximately 3, while the number of retail employees would not change between RWCDS No-Action and RWCDS With-Action conditions.

E. PURPOSE AND NEED

The proposed action would enable the applicant to redevelop its property in a manner consistent with the intent of the Ladies' Mile Rezoning. The purpose and need identified in the 2004 *Ladies' Mile Rezoning EAS* was to update zoning to reflect the current mixed-use character of the area. Specifically, to address the decline in industrial uses and the increase in residential and commercial use, the rezoning would allow residential development to bring sites into productive use while preserving the existing built character of the area.

The bulk special permit is needed to enable the applicant to build the building as approved in the C of A. This would allow a building design that is compatible with the existing built environment of the Ladies' Mile Historic District. Many of the buildings in the area, including those adjoining the site, are streetwall buildings of varying heights that rise without setbacks. These include the 16-story, approximately 190-foot tall building at 20 W. 22nd Street located one building west of the project site. The proposed rear yard modification would allow two obstructions in the rear yard area. One would be a glass-walled atrium in the rear yard equivalent area, which would contain an enclosed stairway connecting the ground floor common area to the second floor residential amenity space in the W. 21st Street tower. The proposed atrium is intended to enhance a key common area for building residents, providing an area with abundant natural light and visually connecting the indoor and outdoor areas in the building's interior area with the second floor amenity space. Without this stairway, W. 22nd Street tower residents would have to access the second floor amenity space through the south tower lobby or an unenclosed stairway (if one was

provided). The second type of obstruction would consist of two exhaust vents from the below-grade garage that would be located within the sunken garden area on the ground floor interior courtyard (their proposed location is shown in Figure A-4b). The vents would be placed in this location in order to avoid exhaust louvers on the building facades, which would be historically inappropriate within the built context of the Ladies' Mile Historic District. The northern vent would be 6 feet, 6.5 inches by 8 feet, 6.5 inches and would be approximately 2 feet, 7 inches in height and the southern vent would be 7 feet, 10.5 inches by 8 feet, 6.5 inches and would be 4 feet, 6.5 inches in height. The vents would be located within the stepped planting areas, and the tops of the vents will be flush to the surface of the planting bed.

The parking special permit would enable the proposed project to provide parking spaces to serve parking demand from the site and provide spaces for the surrounding mixed-use community. In recent years the number of off-street parking spaces has decreased while demand from new residential growth has not been fully addressed, as some new developments in the vicinity have not provided parking. As such, the additional parking permitted by this special permit is intended to prevent excessive on-street parking demand from residents and relieve traffic congestion. In addition, the parking special permit would enable the proposed project to make productive use of its cellar space.

The HFA financing would facilitate the provision of affordable housing DUs that would help to address the City's goal for the provision of needed affordable housing.

ATTACHMENT B:
SUPPLEMENTAL SCREENING

A. INTRODUCTION

This Environmental Assessment Statement ("EAS") has been prepared in accordance with the guidelines and methodologies presented in the 2014 *City Environmental Quality Review ("CEQR") Technical Manual*. For each technical area, thresholds are defined, which if met or exceeded, require that a detailed technical analysis be undertaken. Using these guidelines, preliminary screening assessments were conducted for the proposed action to determine whether detailed analysis of any technical area may be appropriate. Part II of the EAS Form identifies those technical areas that warrant additional assessment. For those technical areas that warranted a "Yes" answer in Part II of the EAS Form, including Land Use, Zoning, and Public Policy; Shadows; Historic and Cultural Resources; Urban Design and Visual Resources; Hazardous Material; Air Quality; Greenhouse Gas Emissions; Noise; Neighborhood Character; and Construction; supplemental screening assessments are provided in this attachment. The remaining technical areas detailed in the 2014 *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial *CEQR* thresholds and/or are unlikely to result in significant adverse impacts. These areas screened out from any further assessment include: Socioeconomic Conditions; Community Facilities; Open Space; Natural Resources; Water and Sewer Infrastructure; Solid Waste and Sanitation Services; Air Quality (Mobile Sources); Energy; and Public Health. Per the EAS Form, Transportation can be screened out from requiring further assessment, however, a discussion is provided herein to support the screening determination.

The supplemental screening assessments contained herein identified that detailed analyses are required in the areas of Land Use, Zoning, and Public Policy; Urban Design and Visual Resources; and Air Quality – Stationary Sources. These analyses are provided in Attachments C, D, and E, respectively, and are summarized in this attachment. Per the supplemental screening assessments provided in this attachment, more detailed analyses of the following technical areas are not required: Shadows; Historic and Cultural Resources; Hazardous Material; Greenhouse Gas Emissions; Noise; Neighborhood Character; and Construction. Table B-1 presents a summary of analysis screening information for the proposed action.

As described in Attachment A, "Project Description," to facilitate the development of a mixed-use residential-commercial building with below-grade parking, the applicant, 7 West 21 LLC is seeking a Special Permit for Bulk Modifications, a Special Permit for Additional Parking Spaces, and the approval for the use of tax-exempt bond financing by the NYC Housing Finance Agency (HFA) (the "proposed action") as part of the agency's 80/20 Housing Program, as 20 percent of the units would be affordable units.

Table B-1. Summary of CEQR Technical Areas Screening

CEQR TECHNICAL AREA	SCREENED OUT PER EAS FORM	SCREENED OUT PER SUPPLEMENTAL SCREENING	DETAILED ANALYSIS REQUIRED
Land Use, Zoning, & Public Policy			X
Socioeconomic Conditions	X		
Community Facilities and Services	X		
Open Space	X		
Shadows		X	
Historic & Cultural Resources		X	
Urban Design & Visual Resources			X
Natural Resources	X		
Hazardous Materials		X	
Water and Sewer Infrastructure	X		
Solid Waste & Sanitation Services	X		
Energy	X		
Transportation[1] - Traffic & Parking - Transit - Pedestrians	 X X X		
Air Quality - Mobile Sources - Stationary Sources	 X		 X
Greenhouse Gas Emissions		X	
Noise		X	
Public Health	X		
Neighborhood Character		X	
Construction		X	

[1] As indicated on the EAS form, the proposed project does not exceed the applicable screening thresholds for Transportation. Information supporting this finding is provided in this attachment and Appendix C.

The RWCDS With-Action scenario for the proposed action would result in the development of an approximately 344,830-gsf building with a one-story base and two cellar levels, containing two residential towers, retail spaces, garage entries, lobbies, residential amenity space, and mechanical areas. The project site is an irregularly-shaped midblock through lot on the block bounded by W. 21st Street, Fifth Avenue, W. 22nd Street, and Sixth Avenue. The 23,996-sf site (Block 823, Lot 31) would have residential towers on the W.21st Street and W. 22nd Street frontages. Both towers would rise to a height of 185 feet without front setback. Combined they would include approximately 333 dwelling units (DUs), of which approximately 67 DUs would be affordable housing units for low, moderate, and middle income residents; approximately 10,000 gsf of retail space; and approximately 200 below-grade public parking spaces in an approximately 36,000 gsf garage accessible from W. 21st Street and W. 22nd Street. The proposed project would be built pursuant to a Special Permit for Bulk Modification, allowing bulk modifications for a building located in a City-designated historic district, and a Special Permit for Additional Parking Spaces, which would allow the proposed project to provide up to 200 public parking spaces.

Development resulting from the proposed action would be required to comply with existing C6-4A zoning, except as modified by the proposed special permits. The project site was rezoned

from M1-6 to C6-4A in 2004 as part of the Ladies' Mile Rezoning which was intended to facilitate residential and mixed-use redevelopment of underutilized properties in the area. Current zoning limits expansions and new buildings to a maximum streetwall height of 125 feet (or up to 150 feet to match the streetwall heights of adjacent buildings) with a minimum setback distance of 15 feet above the streetwall, and a maximum building height of 185 feet on a narrow street and 210 on a wide street.

In the future without the proposed action, it is expected that the project site would accommodate an approximately 314,497-gsf building with 266,506 gsf of above-ground space. Each tower would have a 150-foot tall streetwall and above it one additional floor set back 15 feet and a total building height of approximately 161 feet. This building would be connected at the base with a nearly full lot coverage first floor and two below-grade levels. In the future without the proposed action, development on the project site would have 297 DUs in 252,506 gsf of residential space; 10,000 gsf of retail, and 62 below-grade parking spaces in a 18,600-gsf unattended garage accessible via curb cuts on both building frontages. These RWCDS No-Action conditions represent the baseline against which the effects of the proposed action will be compared. The effect of the proposed action, therefore, represents the incremental effect on conditions that would occur as a result of the net change in development between RWCDS No-Action conditions and the Future With the Proposed Action (also referred to as RWCDS "With-Action" or "Build" conditions). The net incremental change in development associated with the proposed action would include net increases of 30,333 gsf and approximately 138 more parking spaces, and 36 more DUs, and a building height increase of 24 feet.

The application of screening thresholds and, where warranted, detailed analyses, is based on this net incremental development, which represents the reasonable worst-case development scenario for the proposed action.

Previous Environmental Review

The *Ladies' Mile Rezoning Environmental Assessment Statement* (CEQR No. 04DCP038M) identified 7 W. 21st Street as "Projected Development Site 1" in the RWCDS for the rezoning and related applications. The site was projected to be developed with approximately 311 dwelling units, 23,996 sf of retail (equivalent to the site's lot area), and 363 public parking spaces. The development was assumed to be an 18-story building with approximately 145-foot tall streetwalls on both frontages, with 15-foot setbacks above the streetwall, and a 185-foot tall total building height. With the projected public parking, it was expected to have curb cuts on both street frontages and two below-grade levels.

At the time of the rezoning, an (E) designation (E-131) for air quality and noise was mapped for the site. Also in 2004, a Restrictive Declaration (RD) was recorded against the property requiring hazardous materials investigation and, if required, remediation subject to DEP review and approval before new building permits can be applied for or accepted.

B. SUPPLEMENTAL SCREENING AND SUMMARY OF DETAILED ANALYSES

Land Use, Zoning, and Public Policy

According to the 2014 *CEQR Technical Manual*, a detailed assessment of land use, zoning and public policy is appropriate if an action would result in a significant change in land use or would substantially affect regulations or policies governing land use. Zoning and public policy analyses are typically performed in conjunction with a land use analysis when an action would change the zoning on the site or result in the loss of a particular use. Land use analyses are required when an action would substantially affect land use regulation.

The proposed action includes a Special Permit for Bulk Modifications for a building located in a City-designated historic district and a Special Permit for Additional Parking Spaces. A detailed land use, zoning, and public policy assessment is provided in Attachment C, "Land Use, Zoning, and Public Policy." As discussed therein, no significant adverse land use, zoning, or public policy impacts are expected in the future with the proposed action.

Shadows

A shadows assessment considers proposed actions that result in new shadows long enough to reach a publicly accessible open space or historic resource (except within an hour and a half of sunrise or sunset). For proposed actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight). According to the 2014 *CEQR Technical Manual*, some open spaces contain facilities that are not sunlight-sensitive, and do not require a shadow analysis including paved areas (such as handball or basketball courts) and areas without vegetation.

As detailed in Attachment A, "Project Description," in the RWCDS, the project site could reasonably accommodate the construction of a new, 18-story, approximately 185-foot building without setback (approximately 216 feet including the setback mechanical bulkhead).[1] Under RWCDS No-Action conditions, it is anticipated that a new, 16-story, approximately 161-foot building (approximately 175 feet including the setback mechanical bulkhead) would be constructed on the project site. As the project site is located in the LPC-designated Ladies' Mile Historic District which could include sunlight-sensitive historic resources, a Tier 1 Screening Assessment was conducted to determine whether the proposed building would result in new shadows long enough to reach sunlight-sensitive resources, as compared to RWCDS No-Action conditions.

[1] Based on building designs, it is expected that the height of the bulkhead would be 214 feet tall; the shadows analysis used a slightly more conservative height of 216 feet.

Preliminary Screening Assessment

Tier 1 Screening Assessment

According to the 2014 *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height and occurs on December 21, the Winter Solstice. As such, the longest shadow that could be cast by in the RWCDS No-Action condition would be approximately 752.5 feet in length, as shown in Figure B-1.

Based on CEQR guidelines, the longest shadow that could be cast by under RWCDS With-Action conditions would be approximately 929 feet in length. As shown in Figure B-1, this would be approximately 176.5 feet longer than the shadow cast under RWCDS No-Action conditions.

As also shown in Figure B-1, the RWCDS With-Action longest shadow area includes portions of the LPC-designated Ladies' Mile Historic District and Madison Square North Historic District, as well as sections of three publicly accessible open spaces. Therefore, a Tier 2 Screening Assessment is warranted.

Tier 2 Screening Assessment

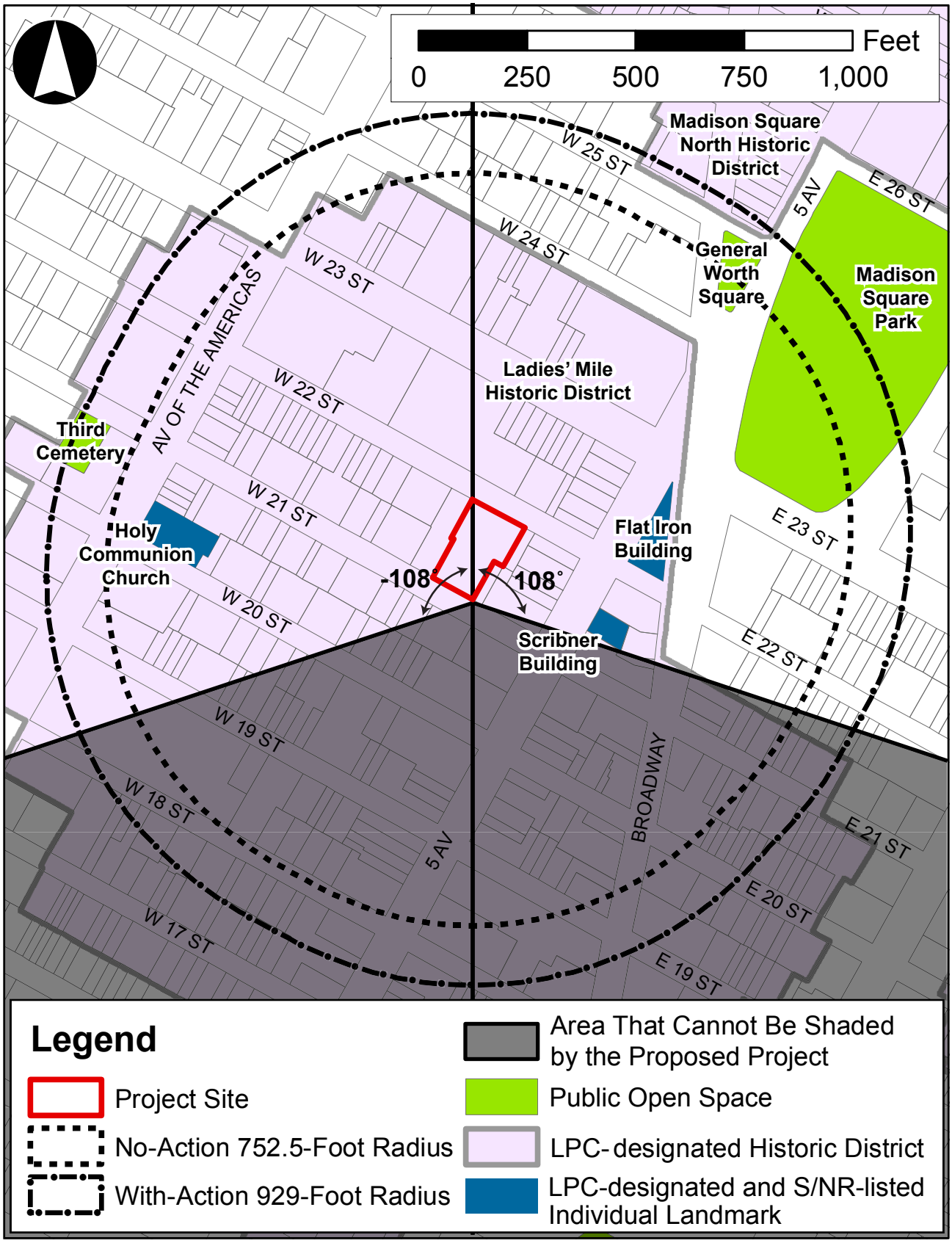
According to the 2014 *CEQR Technical Manual*, shadows cast by buildings fall to the north, east, and west. In New York City, the shadow area is between -108 degrees from true north and +108 degrees from true north. Conversely, any area lying to the south of a site in the triangular area beyond these angles cannot be shaded by a proposed project. The purpose of the Tier 2 screening is to determine whether the sunlight-sensitive resources identified in the Tier 1 screening lie within the portion of the longest shadow study area that potentially can be shaded as a result of the proposed action.

Figure B-1 presents the results of the Tier 2 screening assessment, i.e., the portion of the longest shadow study area lying within -108 degrees from true north and +108 degrees from true north as measured from the southernmost portion of the project site. As illustrated in Figure B-1, the northern portion of the LPC-designated Ladies' Mile Historic District and the southern tip of the LPC-designated Madison Square North Historic District, as well as the sections of three publicly accessible open spaces (Madison Square Park, General Worth Square, and the Third Cemetery of the Spanish-Portuguese Synagogue) fall within the maximum shadow radius, and as such, a Tier 3 screening assessment is warranted for the proposed action.

Tier 3 Screening Assessment

Based on the result of the Tier 2 screening assessment, a Tier 3 screening assessment was performed to determine if shadows resulting from the proposed action can reach the identified resources of concern any time between 1.5 hours after sunrise and 1.5 hours before sunset on representative analysis days. The proposed action represents the worst-case scenario for environmental analysis and was used for all three-dimensional computer modeling of shadows.

Figure B-1
Shadows Assessment: Tiers 1 & 2



As shadows from the proposed action would reach portions of the Ladies' Mile Historic District, Madison Square North Historic District, Madison Square Park, General Worth Square, and the Third Cemetery of the Spanish-Portuguese Synagogue as identified in the Tier 2 screening assessment on one or more of the four representative analysis days, a detailed shadow analysis is required as is presented below.

Detailed Analysis of Shadows Impacts

Resources of Concern

Publicly accessible open spaces and sunlight-sensitive architectural resources within an approximate 929-foot radius of the project site have been identified, as shadows created by the proposed development could fall in the direction of these resources (refer to Figure B-1). As discussed below, there are several open space resources and sunlight-sensitive architectural resources in the immediate vicinity of the project site.

Architectural Resources

According to the 2014 *CEQR Technical Manual*, historic resources are considered to be sunlight-sensitive if the features that make the resource significant depend on sunlight. The following architectural features are identified by CEQR as being sunlight sensitive: (a) buildings containing design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements (e.g. deep recesses or voids such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); (b) buildings distinguished by elaborate, highly carved ornamentation; (c) buildings with stained glass windows; (d) exterior materials and color that depend on direct sunlight for visual character; (e) historic landscapes; and (f) features in structures where the effect of direct sunlight is described as playing a significant role in the structure's significance as an historic landmark. A shadows impact on a historic resource would occur if shadows cast by a proposed building obscure the features or details that make that resource significant.

Ladies' Mile Historic District

The LPC-designated Ladies' Mile Historic District extends 28 blocks in Manhattan, encompassing approximately 440 buildings. As shown in Figure B-1, there are several buildings in the Ladies' Mile Historic District which fall within the RWCDS With-Action longest shadow radius and not the RWCDS No-Action longest shadow radius. These buildings are located to the west and northwest of the project site. Although these buildings in the LPC-designated Ladies' Mile Historic District fall within the proposed action's maximum shadow radius, it should be noted that only one building contains sunlight-sensitive features: the Church of the Holy Communion Complex at 656-662 Sixth Avenue, as discussed below. The remainder of the buildings in this area do not contain sunlight-sensitive features, and as such, would not be impacted by shadows created as a result of the proposed action.

Madison Square North Historic District

The LPC-designated Madison Square North Historic District encompasses approximately 96 buildings on ten blocks to the north of the project site. As shown in Figure B-1, there are two

buildings in the Madison Square North Historic District with southern facades that fall within the RWCDS With-Action longest shadow radius: 1121 Broadway and 202 Fifth Avenue. Neither of these buildings contains sunlight-sensitive features, and as such, shadows created by the proposed action would not have any significant adverse impacts on these historic buildings.

Individual Landmarks

There are three LPC-designated and S/NR-listed individual landmarks located within the longest shadow area: the Church of the Holy Communion Complex at 656-662 Sixth Avenue; the Flatiron Building at 175 Fifth Avenue; and the Scribner Building at 153-157 Fifth Avenue (refer to Figure B-1). Neither the Flatiron Building nor the Scribner Building contain sunlight-sensitive features, and as such, the proposed action would have no shadows impacts on either landmark. The Church of the Holy Communion Complex has stained glass windows which are sunlight-sensitive, making the landmark a resource of concern in the shadows analysis.

Open Space Resources

Madison Square Park

Madison Square Park is a 6.23-acre park with grass, trees, plants, and landscaping, which are considered sunlight-sensitive resources under CEQR. Some of these open space resources are located within the maximum shadows radius identified in Figure B-1.

General Worth Square

General Worth Square is a 0.27-acre square located within the maximum shadows radius illustrated in Figure B-1. General Worth Square contains pavement, tables, and chairs, as well as potted plants and potted trees, which are considered sunlight-sensitive resources under CEQR.

Third Cemetery of the Spanish-Portuguese Synagogue

The Third Cemetery of the Spanish-Portuguese Synagogue is located on W. 21st Street, in the maximum shadows radius for the proposed action. The Third Cemetery contains grass and trees, which are considered sunlight-sensitive resources under CEQR.

Shadows Analysis

Per 2014 *CEQR Technical Manual* guidelines, shadow analyses were performed for the resources of concern on four representative days of the year: March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and shortest day of the year. These four representative days indicate the range of shadows over the course of the year. CEQR guidelines define the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset. As discussed above, the results of the shadows analysis show the incremental difference in shadows impacts between the No-Action and With-Action scenarios (see Table B-2 below).

Table B-2
Duration of Shadows on Sunlight Sensitive Resources (Increment Compared to No-Action)

Resources Assessed for Potential Shadows Impacts		Analysis Date			
		March 21/ September 21 7:36AM – 4:49PM	**May 6/August 6 6:27AM – 5:18PM**	**June 21 5:57AM – 6:01PM**	**December 21 8:51AM – 2:53PM**
Church of the Holy Communion Complex	Beginning – Ending Time	-	-	-	-
	Duration (hours:minutes)	-	-	-	-
Madison Square Park	Beginning – Ending Time	4:21PM – 4:29PM	-	-	-
	Duration (hours:minutes)	8 minutes	-	-	-
General Worth Square	Beginning – Ending Time	-	-	-	-
	Duration (hours:minutes)	-	-	-	-
Third Cemetery of the Spanish-Portuguese Synagogue	Beginning – Ending Time	-	-	-	-
	Duration (hours:minutes)	-	-	-	-
Resources Screened Out From Further Assessment (Non-Sunlight Sensitive)					
- Buildings located in the Ladies Mile Historic District that fall within the maximum shadows radius (except the Church of the Holy Communion Complex, as noted above).					
- Buildings located in the Madison Square North Historic District that fall within the maximum shadows radius.					

Note: All times are Eastern Standard Time; Daylight Savings Time was not accounted for per 2014 *CEQR Technical Manual* guidelines.

As shown in Table B-2, the proposed action would increase shadow coverage at Madison Square Park on March 21/September 21. Figure B-2 illustrates the extent of incremental shadows cast by the proposed action on Madison Square Park on this date. The proposed action would not result in any incremental shadows to any other open space resources or architectural resources of concern in comparison to No-Action conditions.

It should be noted that, per the 2014 *CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time in effect from mid-March to early November. As such, the times reported in this chapter for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect Eastern Daylight Savings Time.

March 21/September 21
On the equinoxes, the time period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. As shown in Figure B-2, the proposed action would cast incremental shadows on Madison Square Park for a duration of approximately 8 minutes, from 4:21 PM to 4:29 PM. No incremental shadows would be cast on any of the other resources of concern on this analysis day.

May 6/August 6
On May 6, the time period for shadows analysis begins at 6:27 AM and continues until 5:18 PM. On the midpoint between the equinoxes and the solstices, the proposed action would not result in

Proposed building at 7 W. 21st Street

Church of the Holy Communion Complex

Open Space Resources

Incremental Shadow from 4:21 PM to 4:29 PM (8 minutes)

any incremental shadows cast on any of the open space resources or architectural resources of concern.

June 21
On June 21, the time period for shadows analysis begins at 5:57 AM and continues until 6:01 PM. On the summer solstice, no incremental shadows would be cast on any of the resources of concern as a result of the proposed action.

December 21
On December 21, the time period for shadows analysis begins at 8:51 AM and continues until 2:53 PM. On the winter solstice, the proposed action would not result in any incremental shadows cast on any of the open space resources or architectural resources of concern.

Assessment
As discussed above, the incremental shadows resulting from the proposed action would reach a small area at the southwestern edge of Madison Square Park on March 21/September 21 for a duration of 8 minutes. The area affected consists mostly of vegetation with paths and benches, and does not include any of the park's most notable recreational facilities such as the playground or dog run. As new incremental shadows cast by the proposed action would only occur on one of the analysis days, and would last for a very short duration and cover a negligible portion of the park, there would be no noticeable reduction in the usability of Madison Square Park nor a reduction in the sunlight-sensitive uses or features, and the proposed action would not adversely impact vegetation. The proposed action would not result in incremental shadows to any other resources of concern. As such, the incremental shadows cast by the proposed action would not create significant adverse shadows impacts on the sunlight-sensitive resources in the study area.

Historic and Cultural Resources

Historic resources are defined as districts, buildings, structures, sites and objects of historical, aesthetic, cultural and archaeological importance. This includes properties that have been designated or are under consideration as New York City Landmarks or Scenic Landmarks or are eligible for such designation; properties within New York City Historic Districts; properties listed for the State and/or National Register of Historic Places (S/NR); and National Historic Landmarks. According to the 2014 *CEQR Technical Manual* guidelines, a study area defined by a radius of 400 feet from the boundaries of the project site is typically adequate to assess potential impacts on historic/architectural resources. Archaeological resources are assessed only for areas proposed for development, if they would entail in-ground disturbance.

Certificate of Appropriateness

All properties that are City-designated landmarks or are located in City-designated historic districts, including open lots such as the project site, are subject to the City's Landmark Law. Under the law, any restoration, alteration, reconstruction, demolition, or new construction affecting any designated property requires a permit from the NYC Landmarks Preservation Commission (LPC). The types of permits issued by LPC include Certificates of No Effect, Permits for Minor Work, and Certificates of Appropriateness (C of A). The type of permit issued

depends upon the proposed work. A C of A is needed when the proposed work requires a Department of Buildings permit and will affect significant protected architectural features. The purpose of the C of A is to make certain that changes are appropriate and do not detract from the special character of the City's landmarks and historic districts. The issuance of an LPC permit, including a C of A, is a ministerial action and is not subject to CEQR.

As the project site is located within the Ladies' Mile Historic District and the proposed project involves a new building, it requires a C of A. As discussed below, a C of A was issued for the proposed project in October 2013 and subsequently updated in April 2014.

Architectural Resources

An assessment of architectural resources is usually required for projects that are located adjacent to historic or landmarked structures, or are located within a locally or nationally recognized historic district. As discussed in Attachment A, the study area directly affected by the proposed action is included in the Ladies' Mile Historic District. As such, all buildings within the study area have been designated as historic landmarks by the NYC Landmarks Preservation Commission (NYC LPC). These include 19 properties located within a 90-foot radius of the project site and therefore potentially sensitive to construction effects of the proposed action. Additionally, within the 400-foot radius of the study area, there are three properties also listed on the State and National Registers of Historic Places (S/NR). There are also three City designated individual landmarks and places of historic interest in the study area.

Table B-3 identifies resources individually listed on the S/NR and/or designated by the NYC LPC (resources 1-6) and properties included in the Ladies' Mile Historic District located within a 90-foot radius of the project site (resources 7-25). Figure B-3 shows the location of the resources in relation to the directly affected area. Detailed descriptions of S/NR listed resources and City designated individual landmarks are discussed below. For descriptions of properties in Table B-3 which are included in the Ladies' Mile Historic District, refer to Attachment D, "Urban Design and Visual Resources."

173-185 Fifth Avenue, Flatiron Building

Located on the triangle-shaped Block 851 at the intersection of E. 23rd Street, Broadway, and Fifth Avenue, the iconic Flatiron Building was designed by architect D.H. Burnham and constructed in 1902-03. The 21-story office and loft building occupies the entire lot and has exposed fronts on Broadway, Fifth Avenue, and E. 22nd Street. Built in the Beaux-Arts style, this slender structure is characterized by classically-inspired ornamentation, sash windows, and detailed stone and terracotta finishing. Due to its distinct shape, design, and location, the Flatiron Building is easily the most prominent building in the surrounding area, which has come to be known as the Flatiron District. It was listed on the S/NR in 1979, designated a National Historic Landmark in 1989, and designated a City landmark in 1966.

Figure B-3
Historic Resources

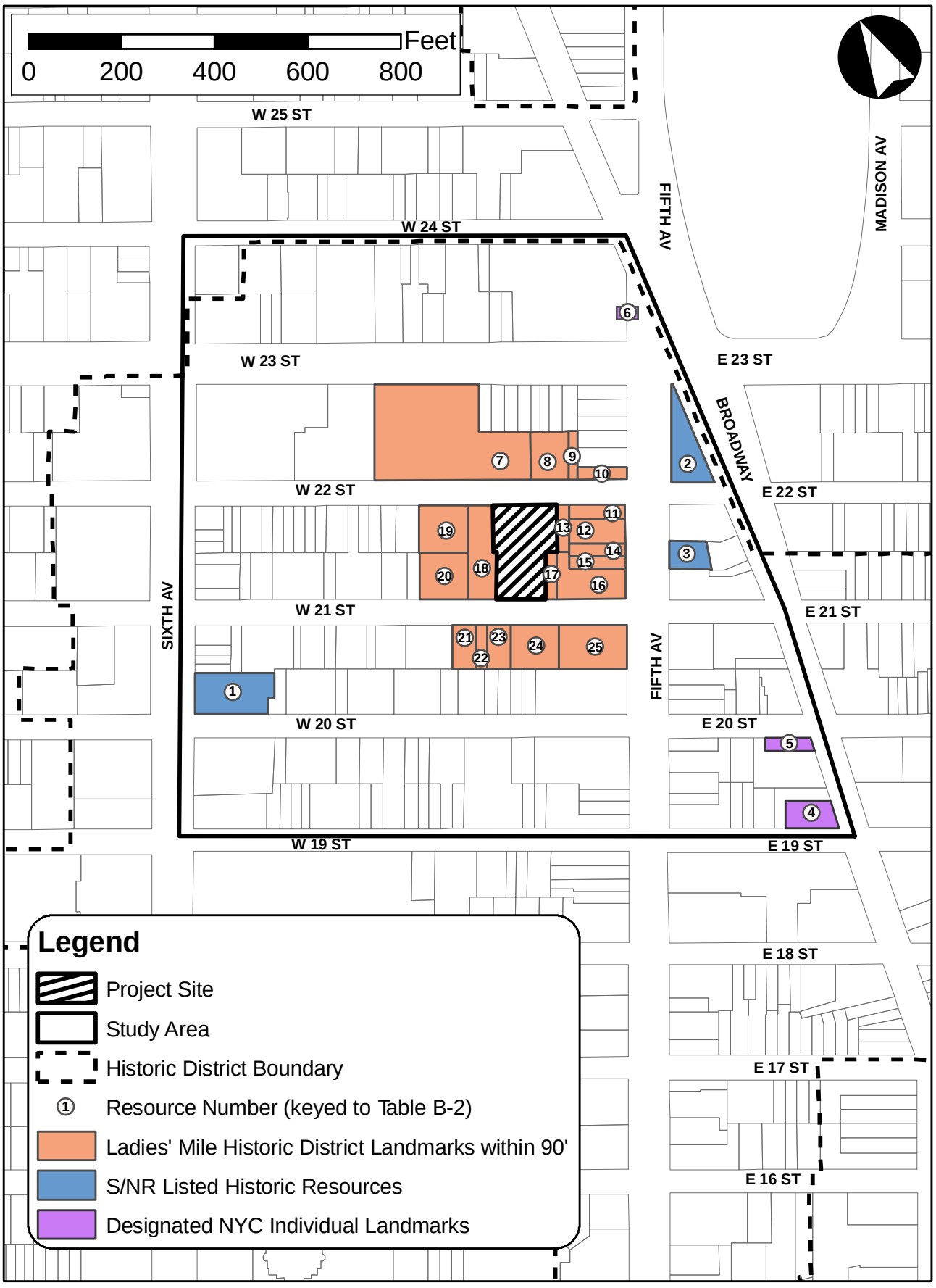


Table B-3, Historic Resources

No.	Name	Address	Status	Location
1	Flatiron Building	173-185 Fifth Avenue	NYC LPC and S/NR listed	Within 400' Radius of Project Area
2	Former Church of the Holy Communion Complex	656-662 Sixth Avenue	NYC LPC and S/NR listed	Within 400' Radius of Project Area
3	United Synagogue of America (fka Scribner Building)	153-157 Fifth Avenue	NYC LPC and S/NR listed	Within 400' Radius of Project Area
4	Former Gorham Manufacturing Building	889-891 Broadway	NYC LPC designated	Within 400' Radius of Project Area
5	Former Lord & Taylor Building	901 Broadway	NYC LPC designated	Within 400' Radius of Project Area
6	Sidewalk Clock at 200 5th Avenue	200 Fifth Avenue	NYC LPC designated	Within 400' Radius of Project Area
7	Stern Brother Annex	9 W. 22nd Street	Ladies' Mile HD	Within 90' Radius of Project Area
8	Spinning Wheel Building	3-7 W. 22nd Street	Ladies' Mile HD	Within 90' Radius of Project Area
9	1 W. 22nd Street	1 W. 22nd Street	Ladies' Mile HD	Within 90' Radius of Project Area
10	172 Fifth Avenue	172 Fifth Avenue	Ladies' Mile HD	Within 90' Radius of Project Area
11	Sohmer Building	170 Fifth Avenue	Ladies' Mile HD	Within 90' Radius of Project Area
12	Gertner Building	168 Fifth Avenue	Ladies' Mile HD	Within 90' Radius of Project Area
13	4 W. 22nd Street	4 W. 22nd Street	Ladies' Mile HD	Within 90' Radius of Project Area
14	166 Fifth Avenue	166 Fifth Avenue	Ladies' Mile HD	Within 90' Radius of Project Area
15	164 Fifth Avenue	164 Fifth Avenue	Ladies' Mile HD	Within 90' Radius of Project Area
16	Union Exchange Bank Building	162 Fifth Avenue	Ladies' Mile HD	Within 90' Radius of Project Area
17	5 W. 21st Street	5 W. 21st Street	Ladies' Mile HD	Within 90' Radius of Project Area
18	15 W. 21st Street	15 W. 21st Street	Ladies' Mile HD	Within 90' Radius of Project Area
19	20 W. 22nd Street	20 W. 22nd Street	Ladies' Mile HD	Within 90' Radius of Project Area
20	Spero Building	19-27 W. 21st Street	Ladies' Mile HD	Within 90' Radius of Project Area
21	18-20 W. 21st Street	18-20 W. 21st Street	Ladies' Mile HD	Within 90' Radius of Project Area
22	16 W. 21st Street	16 W. 21st Street	Ladies' Mile HD	Within 90' Radius of Project Area
23	12-14 W. 21st Street	12-14 W. 21st Street	Ladies' Mile HD	Within 90' Radius of Project Area
24	2-4 W. 21st Street	2-4 W. 21st Street	Ladies' Mile HD	Within 90' Radius of Project Area
25	Mohawk Building	160 Fifth Avenue	Ladies' Mile HD	Within 90' Radius of Project Area

656-662 Sixth Avenue, formerly The Church of the Holy Communion Complex

The Church of the Holy Communion Complex at Sixth Avenue and W. 20th Street dates back to the early development period of the Flatiron District before its commercial development. Designed by Richard Upton, and constructed between 1844 and 1853, it represents one of the most influential and well-maintained examples of Gothic Revival architecture in the country. The complex consists of four buildings which were first used as the church, sisters' house, parish house, and rectory. The most notable feature of the complex is its simple stone masonry, its high pitched roofs, and pointed-arch nave windows. The church building is currently used for commercial-retail purposes. The complex was listed on the S/NR in 1980 and designated a City landmark in 1966.

153-157 Fifth Avenue, United Synagogue of America, formerly The Scribner Building

This 6-story building was constructed in 1893-94 to house the publishing firm Charles Scribner's Sons, one of the many publishing firms which located in the Flatiron District towards the end of the 1800s. The original concept for the Scribner Building was for it to function as both publishing office and bookstore. Its architect, Ernest Flagg, designed the building in the Beaux-Arts style to highlight the first floor bookstore. The building was listed on the S/NR in 1980 and designated a City landmark in 1976.

889-981 Broadway, Gorham Building

The 8-story Queen Anne style building was designed by Edward Hale Kendall and constructed in 1883-84 as one of the first examples of a mixed-use building in New York City. The architect combined two stories of retail space for the original tenants, the Gorham Manufacturing Company, with six upper stories of bachelor apartments. By 1893, all residential uses were eliminated and the building was used exclusively for retail. The Gorham building was altered extensively during the 20th century; it was converted to lofts and offices by 1912, altered to permit manufacturing by 1922, and later restored to mixed-residential-commercial in 1977. It was designated a City landmark in 1984.

901 Broadway, formerly Lord & Taylor Building

Designed by James H. Giles in 1869-1870, this building is one of the last remaining structures that comprised the Lord & Taylor Department Stores complex from 1869 through 1912. Lord & Taylor was one of the major retail stores in the concentration of specialty stores that comprised "The Ladies' Mile" along Broadway. Following their move to an uptown location, the building was converted to manufacturing. While the first floor has been alternated, the rest of the building's facade remains intact. The structure was designated an individual City landmark in 1977.

Sidewalk Clock at 200 Fifth Avenue

The double-faced sidewalk clock at 200 Fifth Avenue was installed in 1909 when 200 Fifth Avenue was constructed to serve as an ornate advertisement for the building. It was individually designated a City landmark in 1981.

Ladies' Mile Historic District

As noted above, the entire study area is located within the City-designated Ladies Mile Historic District, including the 19 buildings listed in Table B-3 that are located within 90-feet of the project site. A description of the historic district is provided in Attachment D.

Effects of the Proposed Action

According to the 2014 *CEQR Technical Manual*, generally, if a proposed action would affect those characteristics that make a resource eligible for New York City Landmark designation or S/NR listing, this could be a significant adverse impact. Numerous historic resources in the study area are significant both for their architectural quality as well as for their value as part of the City's historic development. The proposed project was assessed in accordance with guidelines established in the 2014 *CEQR Technical Manual* (Chapter 3F, Part 420), to determine (a) whether there would be a physical change to any designated property or its setting as a result of the proposed action, and (b) if so, is the change likely to diminish the qualities of the resource that make it important (including non-physical changes such as context or visual prominence).

Direct Effects

The proposed action includes the development of the project site, Block 823, Lot 31, which is an irregularly-shaped midblock through lot. Currently, the project site is used as a 256-space licensed public parking lot. The C of A issued for the proposed project noted that "the Commission found that the existing parking lot is not a feature for which the Ladies' Mile Historic District was designated."

Since the lot is not currently occupied by an existing building, the proposed action would not result in any direct effects on historic resources.

Construction Effects

While the proposed action would not result in direct physical changes to or diminish the quality of existing resources, it would result in new construction adjacent to properties that have been identified as historic resources. There are 19 properties identified as historic resources within a 90-foot radius of the project site. This is the distance recognized under CEQR as being close enough to potentially experience adverse construction-related impacts from ground-borne construction-period vibrations, falling debris, and collapse. Accordingly, the proposed action's potential for construction effects must be considered.

There are two mechanisms to protect buildings in New York City from potential indirect damage caused by construction activities. All buildings are provided some protection from accidental damage through New York City Department of Buildings controls that govern the protection of any adjacent properties from construction activities, under Building Code Section 27-166 (C26-112.4). For all construction work, Building Code section 27-166 (C26-112.4) serves to protect buildings by requiring that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the requirements of Building Construction Subchapter 7 and Building Code Subchapters 11 and 19.

The second protective measure applies only to designated City landmarks and S/NR-listed historic buildings. For these structures, the DOB's *Technical Policy and Procedure Notice (TPPN) #10/88* applies. *TPPN 10/88* supplements the standard building protections afforded by the Building Code C26-112.4 by requiring a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or S/NR-listed resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed. Under TPPN *10/88*, a construction protection plan (CPP) must be provided to LPC for review and approval prior to construction. When required, a CPP would follow the guidelines set forth in LPC's Guidelines for Construction Adjacent to a Historic Landmark and Protection Programs for Landmark Buildings. With these measures, which would be required for the historic resources, significant, adverse construction-related impacts would not occur.

Indirect Effects

Indirect effects, also referred to as contextual effects, can occur when: development results in the isolation of a property from or alteration of its setting or visual relationship with the streetscape; introduction of incompatible visual, audible, or atmospheric elements to a resource's setting; replication of aspects of a resource so as to create a false historic appearance; or elimination or screening of publicly accessible views of the resource. Buildings in the study area reflect the historic development and evolution from a residential neighborhood to a commercial center and then a concentration of manufacturing uses, and now once again a mixed-use area with a growing residential community. Architectural styles in the Ladies' Mile Historic District include Beaux-Arts, Neo-Renaissance, and Italianate; these are featured prominently in the study area. The proposed action includes the creation of a contextually appropriate building with aesthetic features in keeping with the design of historic resources while reflecting contemporary provenance. The proposed building would be developed pursuant to contextual zoning regulations with special permits. As such, the development occurring as a result of the proposed action would have a height and building arrangement similar to adjacent existing buildings. Therefore, it would not introduce incompatible elements to the setting of the historic resources located within the vicinity of the project site.

LPC Review

Per the C of A permit issued October 25, 2013 and subsequently update on April 8th, 2014, LPC stated that the proposed project would enhance the special architectural and historic character of existing buildings and the Ladies' Mile Historic District. The permit notes that facades of the

proposed new building would reinforce the continuity of the block's streetwall and would be in keeping with the scale of buildings found in the historic district and on the block.

Archaeological Resources

Under RWCDS No-Action conditions, the new as-of-right development on the project site would be excavated to provide building foundations and two below-grade levels at a depth of approximately 30 feet below the base elevation. As discussed below under "Hazardous Materials", excavation and ground disturbance would occur in coordination with the Voluntary Cleanup Program. The same amount of excavation and ground disturbance would occur on the project site under RWCDS With-Action conditions. The 2004 *Ladies' Mile Rezoning EAS* noted that LPC, in its review of the rezoning proposal, determined that it is unlikely that there is any potential for archaeological resources on any of the rezoning area's projected and potential development sites (which included the 7 W. 21st Street project site).

Conclusion

The proposed action is not expected to result in significant adverse impacts on historic and cultural resources, and a detailed analysis is not warranted.

Urban Design and Visual Resources

An area's urban components and visual resources together define the look and character of the neighborhood. The urban design characteristics of a neighborhood encompass the various components of buildings and streets in the area. These include building bulk, use and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. An area's visual resources are its unique or important public view corridors, vistas, or natural or built features. For the *CEQR* analysis purposes, this includes only views from public and publicly-accessible locations and does not include private residences or places of business.

An analysis of urban design and visual resources is appropriate if a proposed project would (a) result in buildings that have substantially different height, bulk, form, setbacks, size, scale, use or arrangement than exists in an area; (b) change block form, demap an active street or map a new street, or affect the street hierarchy, street wall, curb cuts, pedestrian activity or streetscape elements; or (c) would result in above-ground development in an area that includes significant visual resources.

As the proposed action would result in a new, mixed-residential-commercial development with special permits for building bulk modifications, a detailed urban design and visual resources analysis is warranted. This analysis is provided in Attachment D, "Urban Design and Visual Resources." As discussed in Attachment D, there would be no significant adverse impacts to these technical areas as a result of the proposed action.

Hazardous Materials

As defined in the 2014 *CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semivolatile organic compounds, methane, polychlorinated biphenyls and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). According to the 2014 *CEQR Technical Manual*, the potential for significant adverse impacts from hazardous materials can occur when: (a) hazardous materials exist on a site, and (b) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials.

Ladies' Mile Rezoning EAS

The 2004 *Ladies' Mile Rezoning EAS* included a detailed review of environmental database listings for the area. Searches of the history of sites uses were conducted for all the projected and potential development sites identified in the *EAS*. Regarding 7 W. 21st Street (Block 823, Lot 31) in particular, the environmental review performed for the *EAS* concluded that development of the site has the potential for exposure to hazardous materials contamination.

Restrictive Declaration (RD)

As a result of the findings presented in the *EAS*, and in coordination with the NYC Department of City Planning (DCP) and the NYC Department of Environmental Protection (DEP), an RD by the site owners, dated 5 March 2004 ("2004 RD"), was recorded against the property in the Office of the City Register on 18 March 2004 (City Register File No. 2004000163530). The 2004 RD provides notice of the presence of an environmental requirement pertaining to potential hazardous materials contamination on this site. Under the 2004 RD, site investigation and, if required, site remediation work approved by the NYC Office of Environmental Remediation (OER)[2] must be performed prior to the application for or acceptance of any permits for grading, excavation, foundation, alteration, building, or other permit for the site which permits soil disruption, or temporary or permanent Certificate of Occupancy that reflects a change in Use Group from the NYC Department of Buildings (DOB). However, a DOB permit may be applied for and accepted if OER determines that such permit is necessary to further the implementation of an OER-approved Remediation Plan. The requirements of the 2004 RD are enforceable by the City of New York.

These requirements are more typically enforced by means of an (E) designation for hazardous materials. (E) designations are established in connection with a change in zoning or an action pursuant to a provision of the Zoning Resolution that would allow additional development to occur on a property, or would permit uses not currently allowed. Although the RD recorded against this site is not formally an (E) designation, it is functionally equivalent in terms of its purpose and required procedures and therefore equally protective of public health and the environment during project construction and site occupancy.

[2] Per the Declaration, the function of reviewing and approval investigation and remediation work was assigned to DEP. However, the City has transferred these responsibilities for all (E) designations and Restrictive Declarations to OER.

In addition to being recorded against the project site, the 2004 RD is also included in the official list maintained in the NYC *Zoning Resolution*, "Appendix C: City Environmental Quality Review Table 2 – Restrictive Declarations." It is listed under Restrictive Declaration Number R-26, type: "Hazmat."

2003 Phase I

The 2004 RD noted that a Phase I Environmental Site Assessment (ESA) was prepared in June 2003 for the applicant ("2003 Phase I"), by Fleming Lee Shue (FLS). The 2003 Phase I identified the following environmental concerns:

- Potential residual contamination in soil and groundwater on the property from historic use as a gasoline filling station;
- Possible metals, asbestos or lead-based paint in building demolition materials used as fill: and
- The many spills in the neighborhood (211 were listed as "active" in regulatory databases) have the potential to contaminate groundwater under the property.

The NYC Department of Environmental Protection (DEP) reviewed the document.[3] In a letter to DCP's Environmental Assessment and Review Division dated December 29, 2003 ("DEP 2003 Letter"), DEP stated that the 2003 Phase I indicated the potential presence of hazardous materials on the site. The letter noted that due to past historical uses of the site, and Recognized Environmental Conditions (RECs) identified in the 2003 Phase I, a Phase II subsurface soil investigation should be conducted. The letter further stated the following:

- A Phase II Work Plan and Health and Safety Plan (HASP) should be submitted to DEP for review and approval;
- No soil disturbance should occur without DEP's written approval of the Phase II Work Plan and HASP; and
- Based on the Phase II site investigation, DEP may require remediation work be conducted pursuant to a remedial action plan (RAP) that is reviewed and approved by DEP, before any soil disruption occurs for construction purposes.

As noted above, these functions are now performed by OER.

2012 Phase I

In 2012, a new Phase I ESA ("2012 Phase I") was completed for the site, by Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan). Langan identified the following RECs:

- Historic Gasoline Filling Station and Parking Lot - Leaks or spills of gasoline at the former filling station may have impacted soil, groundwater, and/or soil vapor at the site with

[3] The 2003 Phase I also addressed another site in the Ladies' Mile Rezoning area also owned by the applicant.

petroleum, solvents and/or metals. Underground storage tanks (USTs) may still exist at the site.

- Black Staining and Evidence of Oil Leaks Adjacent to Hydraulic Oil Tanks and Supply Lines - Black staining was observed on pavement at the base of hydraulic oil storage tanks and around hydraulic oil supply lines at the site. The hydraulic oil storage tanks and supply lines leaked at several locations and may have adversely impacted soil, groundwater, and/or soil vapor at the site.
- Historic Urban Fill Material - The site is underlain by a layer of historic urban fill that is approximately 11 to 17 feet thick. The historic fill predominately contains sand with varying amounts of gravel, silt, brick, concrete, wood, and pieces of decomposed mica schist. Historic fill in NYC also typically contains ash, demolition debris and municipal waste products, and may contain several types of contaminants at concentrations above current regulatory levels.
- E-Designation and Declaration - The site received an (E) designation (E-131) and was cited in an RD (DEP No. 04DEP107M) through the New York CEQR process. The RD is for Hazardous Materials and the (E) Designation associated with the site includes:
    - Air Quality – HVAC fuel limited natural gas;
    - Noise – Window/wall attenuation and alternate ventilation; and
- Adjoining and Surrounding Properties Use - Historic use of a property adjoining the site to the south across W. 21st Street included an automobile and gasoline service station and parking lot. Three drycleaner facilities are located nearby. Leaks or spills of petroleum products, solvents, and/or other hazardous materials, typically found at such properties, may have adversely impacted groundwater and/or soil vapor at the site.

Remedial Investigation

In 2013, pursuant to the 2004 RD and the 2003 DEP Letter, Langan conducted a thorough study, or remedial investigation (RI), of the project site. The RI included collection of soil, groundwater and soil vapor samples to identify possible contaminants present on the property. The RI investigated RECs based on the findings of Langan's 2012Phase I ESA. RI activities included the following:

- Completion of geophysical surveys to identify potential USTs and locate subsurface utilities;
- Advancement of 14 soil borings, visual and Photoionization detector (PID) screening of soil and collection of 18 soil samples for laboratory analysis;
- Gauging of existing site observation wells to estimate groundwater flow direction;
- Collection of two groundwater samples from site observation wells; and
- Installation and sampling of five soil vapor points, and collection of an ambient air sample.

The 2013 Remedial Investigation Report, dated July 17, 2013, summarizes the nature and extent of contamination and provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy that is protective of human health and the environment consistent with the proposed use of the property. The 2013

RIR acknowledges the 2004 RD and states that remediation is required to satisfy the environmental requirements.

NYC VCP

Due to the contamination present on the site, the applicant has the option to enroll in the NYC Voluntary Cleanup Program (VCP), which is administered by OER, to investigate and remediate the site. Completion of the NYC VCP would satisfy the environmental requirements of the 2004 RD. Whether or not the site is enrolled in the VCP, remediation would occur with or without the proposed action as any development on the project site requiring a new building permit or change of use group would trigger the 2004 RD's requirement for hazardous materials investigation and, if required, remediation. Accordingly, under both RWCDS No-Action and RWCDS With-Action conditions, the project site would undergo remediation that would satisfy the requirements of the 2004 RD.

Remedial Action Work Plan

Pursuant to the 2013 RIR, the applicant will prepare and submit a draft Remedial Action Work Plan (RAWP) to NYC OER for technical review. If the site is entered into the VCP there are requirements for public review and a citizen participation plan, including the opportunity for public input on the selected remedial actions. Any public comments related to environmental remediation will be considered by NYC OER prior to approval of this plan. Successful implementation of the RAWP and completion of a Remedial Action Report (RAR), whether or not this occurs under auspices of the VCP, would satisfy the requirements of the 2004 RD.

Conclusion

The same area and volume of site excavation and off-site disposal of excavated materials would occur under both RWCDS No-Action and RWCDS With-Action conditions pursuant to the remedy presented in the RAWP. With these required remedial actions that will be carried out to satisfy the RD under OER oversight as a pre-condition that must be satisfied before the project site can be redeveloped and occupied, the proposed action would not have the potential to result in significant adverse hazardous materials impacts and no further analysis is warranted for CEQR purposes.

Transportation

The objective of a transportation analysis is to determine whether a proposed action may have a potentially significant adverse impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists, and vehicles), on- and off-street parking or goods movement.

The 2014 *CEQR Technical Manual* identifies minimum incremental development densities that potentially require a transportation analysis. Development at less than the development densities shown in Table 16-1 of the 2014 *CEQR Technical Manual* generally result in fewer than 50 peak-hour vehicle trips, 200 peak-hour subway/rail or bus transit riders, and 200 peak-hour

pedestrian trips, where significant adverse impacts are considered unlikely. In Zone 1 (which includes the project site) the development thresholds include an increment of 240 DUs for residential, which the proposed action does not exceed, as the project increment is approximately 36 DUs. There would be no net change in retail space compared to RWCDS No-Action conditions. However, the Zone 1 development threshold for off-street parking facilities is 85 new spaces would be exceeded by the proposed action, which would have a project increment of approximately 138 spaces.

According to the 2014 *CEQR Technical Manual*, if an action would result in development greater than one of the minimum development density thresholds in table 16-1, a Level 1 (Project Trip Generation) Screening Assessment should be prepared. In most areas of the city, including the project area, if the proposed actions are projected to result in fewer than 50 peak-hour vehicle trips, 200 peak-hour subway/rail or bus transit riders, or 200 peak-hour pedestrian trips, it is unlikely that further analysis would be necessary. If these trip-generation screening thresholds are exceeded, a Level 2 (Project-generated Trip Assignment) Screening Assessment should be prepared to determine if the proposed action would generate or divert 50 peak-hour vehicle trips through any intersection, 200 peak-hour subway trips through a single station, 50 peak-hour bus trips on a single bus route in the peak direction, or 200 peak-hour pedestrian trips through a single pedestrian element. If any of these Level 2 screening thresholds are met or exceeded, detailed analysis for the respective mode is required.

A travel demand forecast was prepared for this net incremental development program to determine if the proposed action would result in 50 or more action-generated vehicle trips, 200 or more action-generated transit trips, or 200 or more pedestrian action-generated trips. This travel demand forecast included trip generation forecasting for both the projected RWCDS No-Action development scenario and the RWCDS With-Action development scenario in order to identify the incremental increase in travel demand generated by the proposed action. This forecast is detailed in a technical memorandum provided in Appendix C, "Travel Demand Forecast Memo."

As summarized in the memo, the proposed action would generate less than 50 vehicle trips, less than 200 transit trips, and less than 200 pedestrian trips in the weekday AM, weekday midday, weekday PM, and Saturday midday peak hours. Accordingly, the proposed action would be unlikely to result in any significant adverse transportation impacts and no further analysis is warranted.

Air Quality

According to the guidelines provided in the 2014 *CEQR Technical Manual*, air quality analyses are conducted in order to assess the effect of an action on ambient air quality (i.e., the quality of the surrounding air), or effects on the project because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and by pollutants produced by fixed facilities, i.e., "stationary sources." As per the 2014 *CEQR Technical Manual*, an air quality assessment should be carried out for actions that can result in either significant adverse mobile source or stationary source air quality impacts. Per the EAS Form, further analysis of air quality mobile sources from action-generated vehicle trips has been screened out in accordance with 2014 *CEQR Technical Manual* assessment screening thresholds.

Stationary Sources

Stationary source impacts could occur with actions that create new stationary sources or pollutants, such as emission stacks for industrial plants, hospitals, or other large institutional uses, or a building's boiler stacks used for heating/hot water, ventilation, and air conditioning ("HVAC") systems, that can affect surrounding uses. Impacts from boiler emissions associated with a development are a function of fuel type, stack height, minimum distance of the stack on the source building to the closest building of similar or greater height, building use, and the square footage size of the source building. In addition, stationary source impacts can occur when new uses are added near existing or planned emissions stacks, or when new structures are added near such stacks and those structures change the dispersion of emissions from the stacks so that they affect surrounding uses.

2004 (E) Designation

In order to preclude the potential for significant adverse impacts related to air quality due to development on the project site, as part of the 2004 Ladies Mile Rezoning, an (E) designation for air quality was recorded for the project site. The (E) designation, listed in the Zoning Resolution Appendix C, Table 1, Environmental Requirements, as "E-131", states "HVAC fuel limited to natural gas." This restriction was identified in the *Ladies' Mile Rezoning EAS*, based on a nomograph screening for Site 1 assuming 287,952 gsf of building space. That analysis found that a stack location requirement was not warranted.

Boiler Analysis

A stationary source analysis is required for the proposed project, as it would result in a new development that has the potential for stationary source air quality impacts on existing or future land uses due to emissions from heating and hot water systems (boilers). A detailed analysis of the building's boiler emissions is provided in Attachment E, "Air Quality – Stationary Source Analysis." As outlined therein, the analysis determined that the proposed action would not result in significant adverse impacts related to emissions from the proposed building's boilers. In order to preclude the potential for impacts, a new (E) designation would be required; the new (E) designation would retain the restriction to the use of natural gas and would add a stack height restriction. Refer to Attachment E for details.

Garage

The 2014 *CEQR Technical Manual* states projects that would result in parking facilities or applications to the City Planning Commission requesting the grant of a special permit or authorization for parking facilities should consult the lead agency regarding whether an air quality analysis of parking facilities is necessary. DCP, in its capacity as lead agency, has determined that a parking facility air quality analysis is not warranted for the proposed action. It should be noted that the 2004 *Ladies' Mile Rezoning EAS* included a detailed analysis of a 363-space parking garage on the development site which found that such a parking garage would not result in any significant adverse impacts.

Air Toxics

The proposed action would not change permitted uses on the C6-4A zoned site and as discussed in Attachment A, a similar as-of-right development with residential uses would be developed on the site under RWCDS No-Action conditions. As such, the proposed action would not introduce a new sensitive receptor for air toxics emissions. When the site was rezoned in 2004 as part of the Ladies' Mile Rezoning, the *EAS* for that action conducted an air toxics analysis and determined that there would no impacts from air toxics on any of the projected development sites.

Noise

The principal types of noise sources affecting the New York City environment are mobile sources (primarily motor vehicles), stationary sources (typically machinery or mechanical equipment associated with manufacturing operations or building heating, ventilating and air conditioning systems) and construction noise.

2004 (E) Designation and 2013 Update per OER

(E) designations for noise provide notice of the presence of an environmental requirement pertaining to high ambient noise levels on a particular tax lot. If an area is proposed to be rezoned, and the accompanying environmental analysis indicates that development on a property may be adversely affected by noise, then an (E) designation for window/wall attenuation and alternate means of ventilation may be placed on the property by the lead agency in order to address such issues in conjunction with any new development or new use of the property. For new developments, enlargements of existing buildings, or changes in use, the NYC Department of Buildings will not issue a building permit until the environmental requirements of the (E) designation are satisfied. OER administers the (E) Designation Environmental Review Program, which was formerly administered by the NYC Department of Environmental Protection (DEP), including at the time of the 2004 *Ladies' Mile Rezoning EAS*.

In order to preclude the potential for significant adverse impacts related to nose due to development on the project site, as part of the 2004 Ladies Mile Rezoning, an (E) designation for noise was recorded for the project site. The (E) designation, listed in the Zoning Resolution Appendix C, Table 1, Environmental Requirements, as "E-131", states "Window Wall Attenuation & Alternate Ventilation." This restriction was identified in the *Ladies' Mile Rezoning EAS*, which stated that a "new residential development must provide a closed window condition with a minimum of 30 dBA window/wall attenuation in order to maintain an interior noise level of 45 dBA. In order to maintain a closed-window condition, an alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners." It should be noted that the 30 dBA attenuation value in the EAS was incorrectly recorded in the "Negative Declaration" issued for the Ladies' Mile Rezoning as being a requirement for 35 dBA of attenuation.

NYC OER stated, in an email to the applicant's representatives (Langan and Rose Associates) dated November 20, 2013, that the required attenuation value for the site is 28 dBA (refer to Appendix A, Agency Correspondence). This reflects a technical update to the City's noise attenuation value requirements. In 2004 required noise attenuation values were rounded up to the next highest multiple of 5, so while the EAS analysis found that the site required 28 dBA attenuation, the required value was rounded to 30 dBA. This is no longer City practice and accordingly the required attenuation value for residential uses is now 28 dBA.

Assessment

The current proposed actions include an (E) designation (E-351) applicable to the project site (Block 823, Lot 31). This new (E) designation would preclude significant adverse impacts related to air quality and noise. This (E) designation supersedes the prior E-131 designation applied to the project site by the Ladies' Mile Rezoning EAS (CEQR No. 04DCP038M). The (E) designation related to noise is as follows:

In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with minimum attenuation of 28 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 45 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning or air conditioning sleeves containing air conditioners or HUD-approved fans.

Per the updated (E) designation requirement, in order to receive a Certificate of Occupancy from the NYC Department of Buildings the proposed project must provide the required 28 dBA window/wall attenuation value that NYC OER has determined would maintain an interior noise level of 45 dBA. With this measure in place, the proposed project would not result in any significant adverse noise impacts and no further analysis is necessary.

Neighborhood Character

As the proposed project requires detailed analyses of land use, zoning, and public policy (Attachment C); and urban design and visual resources (Attachment D), a supplemental screening analysis is necessary to determine if a detailed neighborhood character analysis is warranted.

Neighborhood character is an amalgam of various elements that give neighborhoods their distinct "personality." According to the 2014 *CEQR Technical Manual*, a preliminary assessment may be appropriate if a project has the potential to result in any significant adverse impacts on any of the following technical areas: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; or noise. Per the analyses provided in this EAS, although the proposed project required supplemental screening or detailed analyses of several of these technical areas, there would be no project-generated significant adverse impacts.

The 2014 *CEQR Technical Manual* also states that for projects not resulting in significant adverse impacts to any technical areas related to neighborhood character, additional analyses may be required to determine if the proposed project would result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. However, the 2014 *CEQR Technical Manual* indicates that neighborhood character impacts are rare and it would be unusual that, in the absence of a significant adverse impact in any of the relevant technical areas, a combination of moderate effects in the neighborhood would result in any significant adverse impact to neighborhood character.

As the proposed project would not be considered to have moderate effects on any of the technical areas relating to neighborhood character, a neighborhood character assessment can be screened out, and no significant adverse neighborhood characters impacts would occur.

Construction

Construction impacts, although temporary, can include disruptive and noticeable effects of a project. Determination of their significance and need for mitigation is generally based on the duration and magnitude of the impacts. Based on 2014 *CEQR Technical Manual* guidelines, where the duration of construction is expected to be short-term (less than two years), any impacts resulting from construction generally do not require detailed assessment. Construction of the proposed project is expected to be completed within approximately 21 months. Nevertheless, a preliminary screening of construction impacts resulting from the project is recommended because the proposed action could result in construction activities that may require the short-term closing, narrowing, or otherwise impeding of traffic, transit or pedestrian elements (roadways, parking spaces, sidewalks, crosswalks, corners, etc.) along streets bordering the site. In addition, construction activities on the site would be occurring within 400 feet of historic and cultural resources, as identified in the Historic and Cultural Resources section above.

The majority of construction activities would take place Monday through Friday, although the delivery or installation of certain equipment could occur on weekend days. Hours of construction are regulated by the New York City Department of Buildings (DOB) and apply in all areas of the City. In accordance with those regulations, almost all work could occur between 7 AM and 6 PM on weekdays, although some workers would arrive and begin to prepare work areas before 7 AM. Occasionally, Saturday or overtime hours could be required to complete time-sensitive tasks. Weekend work requires a permit from the DOB and, in certain instances, approval of a noise mitigation plan from NYCDEP under the City's Noise Code.

Preliminary Screening

As described in Attachment A, the proposed action would facilitate the construction of a new building on a site currently used as a parking lot. A similar building, though slightly smaller would be constructed on the site on an as-of-right basis under RWCDS No-Action conditions. Construction impacts are usually important when construction activity could affect the integrity of historical and archaeological resources, hazardous materials, traffic conditions, air quality, and noise conditions. A discussion of these areas of concern is provided below.

Historic and Cultural Resources

As described in the "Historical and Cultural Resources" section above, the historic resources that would be located within 90 linear feet of the proposed/projected development sites would be protected under TPPN 10/88 during construction activities occurring as a result of the proposed action. Therefore, the proposed action is not expected to result in any significant adverse historic resources (architectural) impacts. Also, as discussed above, the proposed action would not result in any incremental increase in the area or volume of in-ground disturbance or excavation and therefore the proposed action would not have the potential to result in any significant adverse archaeological impacts.

Hazardous Materials

As described in the "Hazardous Materials" section above, the applicant is enrolling the project site into the Voluntary Cleanup Program (VCP) to investigate and remediate contamination on the site with a remedy that is protective of human health and the environment consistent with the proposed use of the property. The remediation work will be subject to review and approval by NYC OER; this work will also satisfy the requirements of the RD recorded against the property. During construction, including investigation, site clearance, excavation, and foundation work, these activities will be conducted pursuant to OER-approved health and safety plans (HASPs) for the safe disposal of soil and construction debris. Accordingly, with these required measures in place, the proposed project would not result in any significant adverse hazardous materials impacts during construction.

Transportation

The project site has midblock frontage on both W. 21st Street and W. 22nd Street with curb cuts providing access to the existing parking lot. Curbside parking is restricted to 3-hour metered parking for commercial vehicles on weekdays between 8 AM and 6 PM and there are night regulations with no standing permitted 11 PM to 6 AM all days. The site is not located in a Central Business District (CBD) or along an arterial or major thoroughfare. There are no designated bicycle routes, bus lanes or routes, or access points to transit in the immediate vicinity of the project site. During construction the sidewalks along these streets adjacent to the site may need to be closed at times in order to accommodate construction vehicles, equipment, and supplies. If sidewalk closure is necessary, Jersey barriers or other protective structures would be erected and a covered pedestrian walkway would be created to accommodate pedestrian traffic around the property. Short-term closure of the parking lanes adjacent to the project site also may be necessary. These closures would be considered to be a routine closure that would be addressed by a permit (and pedestrian access plan) to be issued by the NYC Department of Transportation (DOT) Office of Construction Mitigation and Coordination (OCMC) at the time of closure so that impacts are not expected to occur. Standard practices would be followed to ensure safe pedestrian and vehicular access to nearby buildings and along affected streets and sidewalks. During construction, access to all adjacent businesses, residences, and other uses would be maintained according to the regulations established by the DOB. In addition, it is not anticipated that all vehicle moving lanes adjacent to the site would need to be closed during construction.

Vehicular access to/from the project site for construction vehicles would be via westbound W. 21st Street and eastbound W. 22nd Street. An analysis of transportation impacts from construction of the project is not required as the project construction period is less than two years and most construction traffic would take place outside of the AM and PM traffic peak hours in the vicinity of the site due to typical construction hours.

Accordingly, the proposed project would not result in any significant adverse transportation impacts during project construction.

ATTACHMENT C:
LAND USE, ZONING, AND PUBLIC POLICY

A. INTRODUCTION

The applicant is seeking two City Planning Commission (CPC) Zoning Special Permits, one being a special permit for additional parking spaces and the other a special permit for bulk modifications for a new mixed-use building being constructed on the site located at 7 W. 21st Street in the Ladies' Mile Historic District of Manhattan Community District 5. The project will also seek tax-exempt bond financing through the NYC Housing Finance Agency (HFA).

Projected Development

As discussed in Attachment A, "Project Description," on Block 823, Lot 31 the proposed action would facilitate the redevelopment of a current 256-space licensed public parking lot into an 18-story mixed-use building. Under the reasonable worst case development scenario (RWCDS) identified in Attachment A for the future with the proposed action (aka, RWCDS With-Action condition), it would include approximately 333 dwelling units (DUs), of which approximately 67 DUs would be affordable housing units; approximately 10,000 gsf of local retail space on the ground floor, and approximately 200 public parking spaces in two below-grade levels. The proposed project is expected to be completed in 2017.

Under the RWCDS in the future without the proposed action (aka, RWCDS No-Action condition) it is expected that the project site would be redeveloped with an as-of-right 16-story mixed-use building consisting of approximately 297 DUs, of which 59 DUs would be affordable housing units; 10,000 gsf of retail and 62 below-grade parking spaces in approximately 18,600 gsf of parking area. These RWCDS No-Action conditions represent the baseline against which the effects of the RWCDS With-Action condition will be compared. The effect of the proposed action, therefore, represents the incremental effect on conditions that would result as the net change in development between RWCDS No-Action conditions and the RWCDS With-Action conditions. The net incremental change in development associated with the proposed action would include a net increase of approximately 36 DUs, including a net increase of approximately 8 affordable DUs and a net increase of approximately 28 market rate DUs. There would be a net increase of 138 parking spaces.

The proposed action would not change the maximum permitted density on the project site; however, the RWCDS analysis conservatively assumes that under RWCDS No-Action conditions without the proposed bulk modification special permit, the new building on the site would have less gross floor area than under RWCDS With-Action conditions. As the site is in a City-designated historic district, any new development on the site requires a Certificate of Appropriateness (C of A) from the NYC Landmarks Preservation Commission (LPC) which specifies design details, including building volumes and number of stories, which determine the amount of above-grade gross floor area. LPC issued a C of A for the proposed project on October 25, 2013, which was subsequently updated on April 8th, 2014, and the building design identified and assessed in this EAS is consistent with the C of A.

Study Area

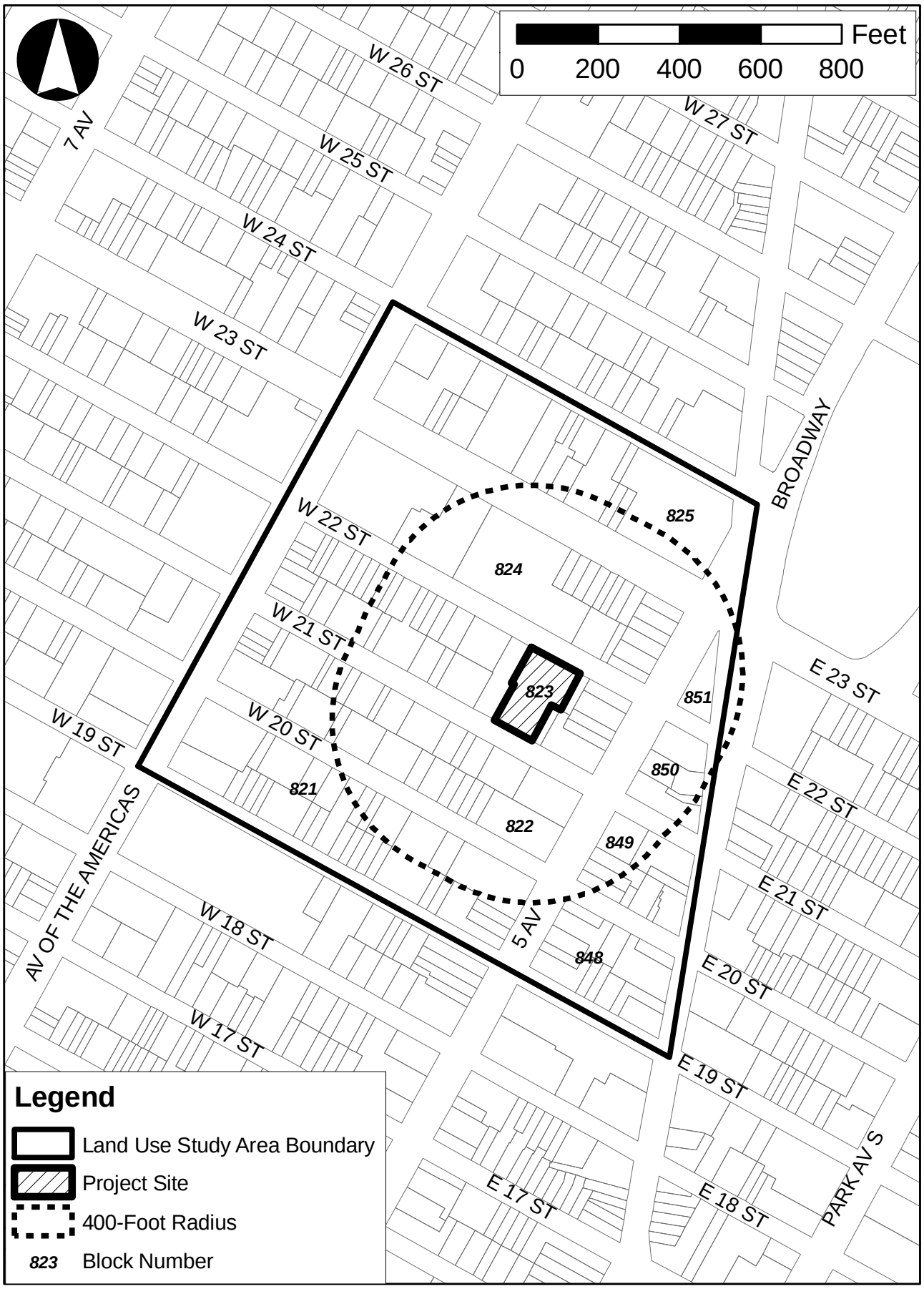
For the purpose of this analysis, the study area for land use, zoning and public policy is defined as including the primary study area, which would be affected directly by the proposed action, and the secondary study area where the proposed action could have indirect effects. For this project, the primary study area is defined as the project site (Block 823, Lot 31) and the secondary study area is defined as approximately 400 feet from the boundary of the project site, but has been modified and expanded as appropriate to include entire blocks, where applicable. As shown in Figure C-1, the study area is bounded to the north by W. 24th street between Fifth and Sixth Avenues, to the south by W. 19th Street between Fifth and Sixth Avenues, to the east by Fifth Avenue and Broadway and to the west by Sixth Avenue.

B. PRINCIPAL CONCLUSION

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidelines for determining impact significance set forth in the 2014 *CEQR Technical Manual*, are anticipated in the future with the proposed action in the primary and secondary study areas. The proposed action would not directly displace any land uses so as to adversely affect surrounding land uses, nor would it generate land uses that would be incompatible with existing or anticipated land uses, zoning, or public policy in the secondary study area. The proposed action would not create land uses or structures that would be incompatible with the underlying zoning, nor would it cause a substantial number of existing structures to become non-conforming. The proposed action would not result in land uses that conflict with public policies applicable to the primary or secondary study areas.

The proposed action would result in an overall increase in residential and parking uses on the project site, when compared to conditions in the future without the proposed action. The proposed action would change the building envelope by having a 185-foot tall streetwall on both W. 21st Street and W. 22nd, modifying the site's zoning which allows a 150-foot maximum permitted streetwall height and requires a 15-foot front setback above the streetwall. The proposed action would also allow for the towers to provide a 10-foot rear setback at a height of 154 feet, 6 inches, also exceeding the 150-foot maximum permitted base height and would allow rear yard obstructions. The proposed action would make changes on the project site in a manner that is intended to be consistent with existing trends and land uses in the area. The proposed

Land Use Study Area



action maintains the site's contextual zoning but would modify the regulations to facilitate a new building intended to be more compatible with the historic built context of the area.

C. EXISTING CONDITIONS

Land Use

The project site is located in the Ladies' Mile Historic District, which had historically been dominated by commercial and light industrial uses. In the late nineteenth century retail merchants began to move northward, establishing a shopping district on Broadway between E. 23rd and E. 14th streets. Large department stores established along W. 18th Street and W. 19th Street followed by smaller shops settling along Fifth Avenue. By the end of the First World War the large commercial stores in the area closed and moved further uptown. The area was then designated as a manufacturing district as a result of the 1916 Zoning Resolution.

More recently the NYC Department of City Planning (DCP) has undertaken rezoning initiatives to allow for mixed-use buildings as well as high density residential uses. This included the 2004 Ladies' Mile Rezoning, which rezoned the project site and other properties on the parts of six blocks from an M1-6M light manufacturing district (high performance) to a C6-4A general central commercial district; the residential equivalent of C6-4A is an R10A general residence district. The rezoning area consisted of the midblock area between Fifth Avenue and Sixth Avenue from W. 22nd Street to the south side of W. 17th Street. The rezoning has facilitated several residential and mixed-use developments with new developments required to be developed pursuant contextual zoning/quality housing program regulations.

Primary Study Area/Project Site

The 23,996-sf project site is an irregular-shaped midblock through-lot currently used as a licensed 256-space attended public parking lot with driveways on both W. 21st Street and W. 22nd Street. Apart from a small structure on the lot used by parking lot attendants, there are no buildings on the project site and as such it has a built FAR of 0.0. This site was previously occupied by several 4-story residential buildings that were demolished in 1926.[1]

Secondary Study Area

The secondary study area includes the five rectangular-shaped blocks bounded by W. 24th Street, Fifth Avenue, W. 19th Street, and Sixth Avenue, consisting of Blocks 821 through 825. The study area also includes the four irregularly-shaped blocks bounded by W. 23rd Street, Broadway, E. 19th Street, and Fifth Avenue. As shown in Figure C-1, these four blocks consist of the western portions of tax Blocks 848 to 851 (the eastern portions of these four tax blocks, located between Broadway and Park Avenue South, are outside the study area). The entire study area is located within the City-designated Ladies' Mile Historic District.

[1] NYC Landmarks Preservation Commission, "Ladies' Mile Historic District Designation Report," 1989.

The study area includes Fifth Avenue, Sixth Avenue, and 23rd Street which are major retail corridors. Along Fifth and Sixth Avenues most buildings contain ground-floor storefront retail with office or residential units above. The study area is characterized by high loft-style structures with four to five-story rowhouses dispersed throughout the blocks. The side streets connecting Fifth and Sixth Avenues are mostly comprised of smaller loft buildings with the exception of 23rd Street, which is made up of mostly larger structures.

A description of land uses for each of the nine study area blocks, including notable buildings, is provided herein and Figure C-2 shows generalized land uses for study area tax lots. For additional information on building types and other built characteristics of study area blocks, refer to Attachment D, "Urban Design and Visual Resources."

Block 821

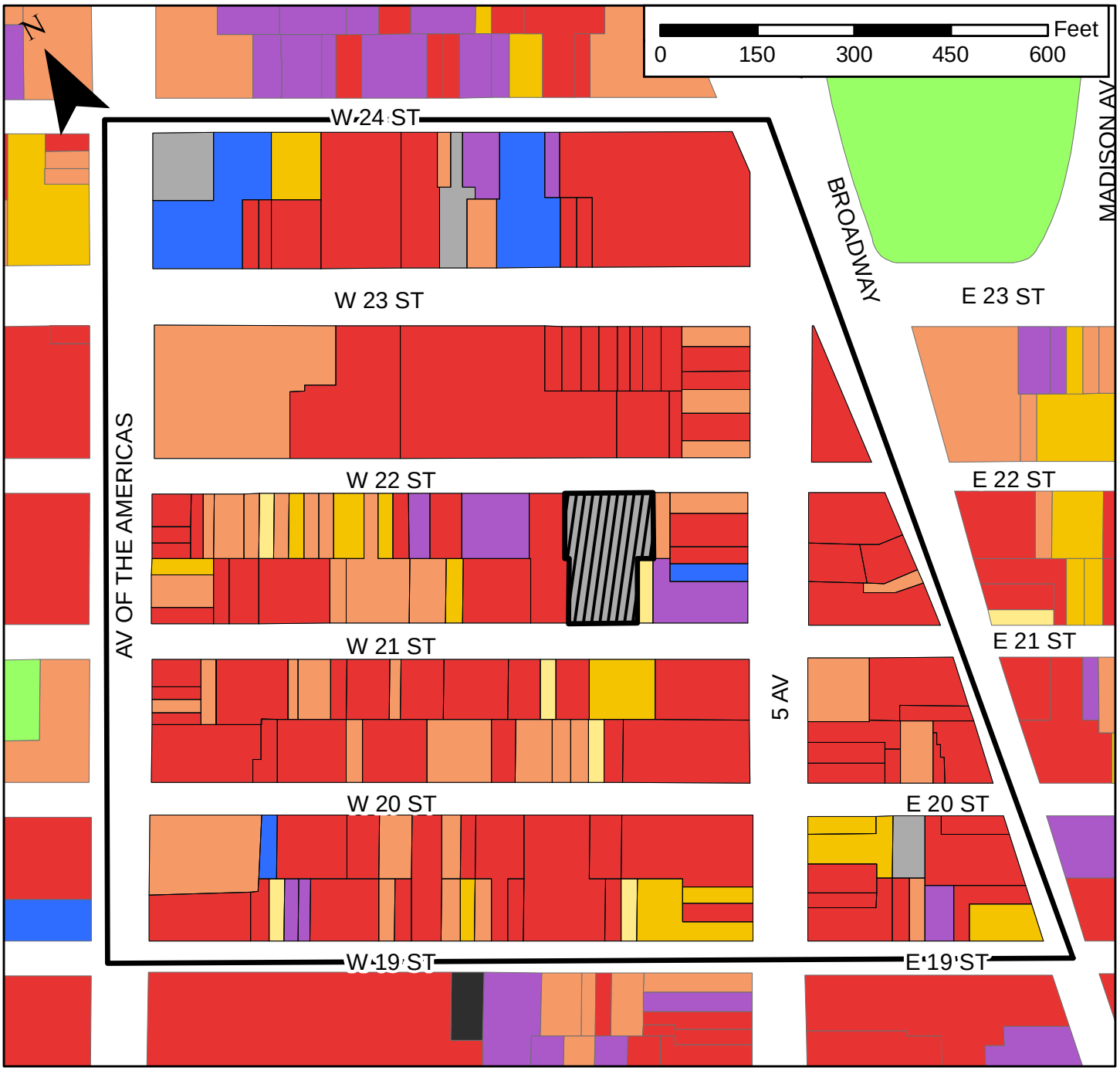
This block, located to the south of the project site, is bounded by W. 19th Street to the south, W. 20th Street to the north, Sixth Avenue to the west and Fifth Avenue to the east. The western portion of Block 821 includes the Cammeyer, a 7-story, approximately 70-foot tall mixed-use development, built in 1906. The Cammeyer consists of 67 loft condominiums DUs, with approximately 83,500 gsf of residential space, and 27,130 gsf of commercial space, which is currently being leased by Federal Express and an arts supplies store. This structure, located at 650 Sixth Avenue (Block 821, Lot 7503) was once a large shoe store but was converted to a mixed commercial and residential building in 2007. To the east of the Cammeyer is 29 W. 19th Street (Block 821, Lot 7502), a 5-story building converted from commercial to residential use with 5 DUs in 2005. Immediately to its east is the Emory, a 15-story, 150-foot tall residential building with 13 DUs. The Emory is located at 27 W. 19th Street (Block 821, Lot 7505) and was completed in 2009, replacing a 13-space public parking lot. It was developed pursuant to the Ladies' Mile Rezoning and a special permit was approved by the CPC in 2006 that allowed modification of certain bulk regulations. As required for all new buildings in the study area, it received a C of A from LPC. (It was identified in the 2004 *Ladies' Mile Rezoning EAS* as part of "Potential Development Site 8".) Besides these buildings, the block is comprised predominantly of commercial and residential uses, including several large, high lot coverage buildings, but it also contains several buildings on narrow lots. Other land uses present on this block include manufacturing/industrial and institutional.

Block 822

This block, located immediately to the south of the project site, is bounded by W. 20th Street to the south, W. 21st Street to the north, Sixth Avenue to the west, and Fifth Avenue to the east. A portion of Block 822 includes 4 W. 21st Street (Block 822, Lot 45), a 17-story, 185-foot tall mixed-use building that was completed by the applicant in 2006, replacing a 100-space public parking lot. It has 54 DUs, ground floor retail, and 65 parking spaces. It was developed pursuant to the Ladies' Mile Rezoning and a related parking garage special permit and received a C of A from LPC. (It was identified in the 2004 *Ladies' Mile Rezoning EAS* as "Projected Development Site 3".) Further west in the midblock area is 16 W. 21st Street (Block 822, Lot 7505), a 14-story, 150-tall building that was completed in 2010. This new development, which replaced a 1940s era low-rise brick building, has 9 DUs. (It was identified in the 2004 *Ladies'*

Figure C-2

Land Use



Legend

- Project Site
- Study Area

Land Use

- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Insitutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

Mile Rezoning EAS as "Potential Development Site 12".) The largest mixed-use development located on this block is 21 W. 20th Street (Block 822, Lot 7506). This 15-story building, known as 21W20 Flatiron, is currently under construction on the site of a former parking lot and will cantilever over the neighboring building at 19-25 W. 20th Street, which is a 52,797 gsf parking garage with a licensed capacity of 292 spaces.

Located on southwest corner of the block is the former Church of Holy Communion Complex (Block 822, Lots 1 and 8). The structures are no longer used for religious purposes; in 1975 they were converted to secular uses. Since 1975 the buildings have been used for many activities, including Limelight, a nightclub which closed in 2007. Currently, the building is used for commercial purposes and houses Limelight Marketplace, a conglomeration of retail shops. These buildings were designated as NYC Landmarks in 1966.

Besides these uses the block contains several commercial, residential, and mixed residential-commercial buildings. Most buildings are large lot, high lot coverage buildings although there are also several buildings on narrow lots.

Block 823

Block 823 is bounded by W. 22nd Street to the north, W. 21st Street to the south, Sixth Avenue to the west and Fifth Avenue to the east. The project site is located on the eastern portion of this block (Block 823, Lot 31). Also located on this block is AIGA the professional association for design (Block 823, Lot 41). This 3-story building, constructed in 1910 is approximately 48 feet tall. The predominant uses on this block include commercial and mixed residential-commercial buildings, but there are some manufacturing/industrial uses present. There is also a mixed-use building with a ground floor private pre-school. Similar to Block 822 there are several large, high lot coverage buildings as well as narrow lot buildings.

Block 824

This block, located immediately north of the project site, is bounded by W. 22nd Street to the south, W. 23rd Street to the north, Sixth Avenue to the west and Fifth Avenue to the east. Approximately one-third of the land area is occupied by residential buildings and mixed residential-commercial buildings and the remaining two-thirds of the block's land area is occupied by commercial buildings. Located on the western corner of this block is The Caroline, 51 W. 22nd Street (Block 824, Lot 11), a 20-story large mixed-use development, built in 2000. The structure includes 431 DUs and 12 commercial units as well as 41,978 sf of garage space with 195 spaces. Immediately east of the Caroline is a large commercial building on a through-lot at 43 W. 22nd Street, which is predominantly commercial but also includes Manhattan Village Academy, a public high school, on two floors. Located in the middle of the block (Block 824, Lot 28) is a large commercial building that was leased to Home Depot in 2003. The commercial structure is 6 stories and approximately 108,000 gsf including a street-level showroom and lower-level retail floor.

Besides the land uses mentioned above, this block also contains narrow lot buildings facing Fifth Avenue along on the eastern portion of the block. The block is comprised of commercial and office buildings with a few mixed-use buildings.

Block 825

Block 825 is located to the north of the project site and is bounded by W. 24th Street to the north, W. 23rd Street to the south, Fifth Avenue to the east and Sixth Avenue to the west. The western portion of this block includes the Trustees Masonic Hall, an institutional building built in 1912. This building is 19 stories and located at 716 Sixth Avenue (Block 825, Lot 1). Located in the middle of the block at 27 W. 23rd Street is Touro College and University System (Lot 24), a 6-story public facility constructed in 1915. This independent institution of higher and professional education is a Jewish-affiliated establishment.

Located on the eastern corner of Block 825 is the International Toy Center at 200 Fifth Avenue (Block 825, Lot 31), a 16-story commercial building with a height of approximately 211 feet, constructed in 1912. The clock located outside the structure's front entrance was designated as a NYC Landmark in 1981. Currently, the building houses a wide range of commercial businesses, including a ground-floor food market (Eataly), a brewery restaurant on the top floor, retail stores and Tiffany & Company's corporate headquarters.

Block 825 is comprised of mostly large lots with a few narrow lots. The narrow lots are mostly commercial with a few mixed-use buildings and manufacturing located in the middle of the block. The block has one parking facility located midway through the block.

Block 848

Block 848 is located southeast of the project site and is bounded by E. 19th Street to the south, E. 20th Street to the north, Fifth Avenue to the west and Broadway to the east. Located in the northeast corner of the block is the Gorham Building (Block 848 Lot 12), built in 1884, 9-stories and approximately 90 feet tall. This building is a mixed-use development with 17 DUs and 1 commercial unit. This building was designated a NYC Landmark in 1984. The former Lord & Taylor Building, located in the northeast corner of Block 848, was built in 1910 and is 5 stories with 2 DUs and 6 retail units. This building was designated a NYC Landmark in 1977.

Besides these buildings, Block 848 is mostly made up of commercial/office buildings with a few multi-family elevator buildings. The block has one parking facility located to on the northern side of the block on E. 20th Street. The tax lots are long and irregular shaped with the exception of a few wider parcels.

Block 849

Block 849 is located southeast of the project site. The block is bounded by E. 21st Street to the north, E. 20th Street to the south, Fifth Avenue to the west, and Broadway to the east. Approximately a fifth of the land area on this block is occupied by residential land uses while the rest of the block is occupied by commercial land uses. Located in the northwest corner of the

block is the former Merchant's Bank of New York building (Block 849, Lot 7505), constructed in 1897 and 15 stories tall. This building was converted to market-rate condominium apartments in 2009, pursuant to a Zoning Authorization approved by CPC in 2007 allowing residential conversion of the floors above its ground-floor retail base. This mixed residential and commercial building is made up of 34 DUs and 3 retail units.

Besides these buildings, the block is mostly comprised of commercial, retail and office use. The lot sizes are a mixture of large irregular shaped lots and narrow lots. Along Broadway and Fifth Avenue most of the buildings have storefront retail on the ground floor.

Block 850

Block 850 is located to the east of the project site and bounded by E. 22nd Street to the north, E. 21st Street to the south, Broadway to the east and Fifth Avenue to the west. The block is mostly comprised of commercial retail and office buildings with one mixed-use building that occupies approximately 5 percent of the block's lot area. The western portion of the block includes the Scriber Building (Block 850, Lot 4), a 7-story building, approximately 90-foot high tall, constructed in 1900. It served as the corporate headquarters for Charles Scribner's Sons, a prominent publishing firm, until 1973 when it was purchased by the United Synagogue of America. The Scribner Building was designated as a NYC Landmark in 1976. The large commercial building, located in the southern part of the block (Block 850, Lot 75) was built in 1910 and is 6-stories high. The only mixed-use development, 927 Broadway (Block 850, Lot 10) on this block was built in 1910 and is 5 stories tall, with a retail business in the base and apartments above.

Block 851

Only a portion of tax Block 851 falls within the project study area. Lot 1 which is located northeast of the project site is bounded by W. 22nd Street to the south, Fifth Avenue to the west and Broadway to the east. This lot is in a triangular shape; Broadway and Fifth Avenue intersect to the north of the lot. Lot 1 is made up of one office building, known as the Flatiron Building. The Flatiron was built in 1902 and is approximately 285-feet tall with 21 stories and ground-floor retail space. Similar to many of the buildings in the study area that were built before the NYC Zoning Resolution was adopted in 1916, the building rises with streetwalls on all street frontages and without setbacks. The building was designated as a NYC landmark in 1966 and a National Historic Landmark in 1989.

Study Area Generalized Land Uses

Table C-1 summarizes the existing generalized land uses within the land use study area. Residential and mixed-use properties (residential buildings with commercial and/or community facilities uses on the lower floors) collectively occupy approximately 25.9 percent of the total lot area, primarily consisting of mixed residential and commercial buildings. The most prevalent non-residential uses include commercial and office (a category that also includes retail and hotel), approximately 45.7 percent. No public open space is located within the study area; although Madison Square Park borders the study area boundary at its northeast corner.

Approximately 4.4 percent of the study area's land use is considered public facilities and institutions. Parking facilities represent less than 5 percent of the lot area and has been a decreasing land use as redevelopment of parking lots has been occurring in the area. There are no vacant land uses within the study area.

Table C-1, Land Use within the Study Area *

Land Use	Lots	% of Total Lots	Area sq ft	% of Total Land Area
Residential	49	30.06%	264,267	25.95%
One and Two Family	*0*	*0.00%*	*0*	*0.00%*
Multi-Family Walkup	*7*	*4.29%*	*13,961*	*1.37%*
Multi-Family Elevator Buildings	*11*	*6.75%*	*60,718*	*5.96%*
Mixed Residential and Commercial	*31*	*19.02%*	*189,588*	*18.62%*
Commercial and Office	63	38.65%	626,099	61.47%
Industrial and Manufacturing	43	26.38%	38,568	3.79%
Transportation and Utility	0	0.00%	0	0.00%
Public Facilities and Institutions	4	2.45%	45,007	4.42%
Open Space	0	0.00%	0	0.00%
Parking Facilities	4	2.45%	44,522	4.37%
Vacant Land	0	0.00%	0	0.00%
All Others or No Data	0	0.00%	0	0.00%
Total	**163**	**100%**	**1,018,463**	**100.0%**

* Note: some numbers may not add due to rounding.

Zoning

The description of zoning is provided in two parts. First, information on the location of study area districts is provided for the project site and the remainder of the study area. Second, a description of key use, density, and bulk controls is provided. Refer to Figure C-3, Study Area Zoning.

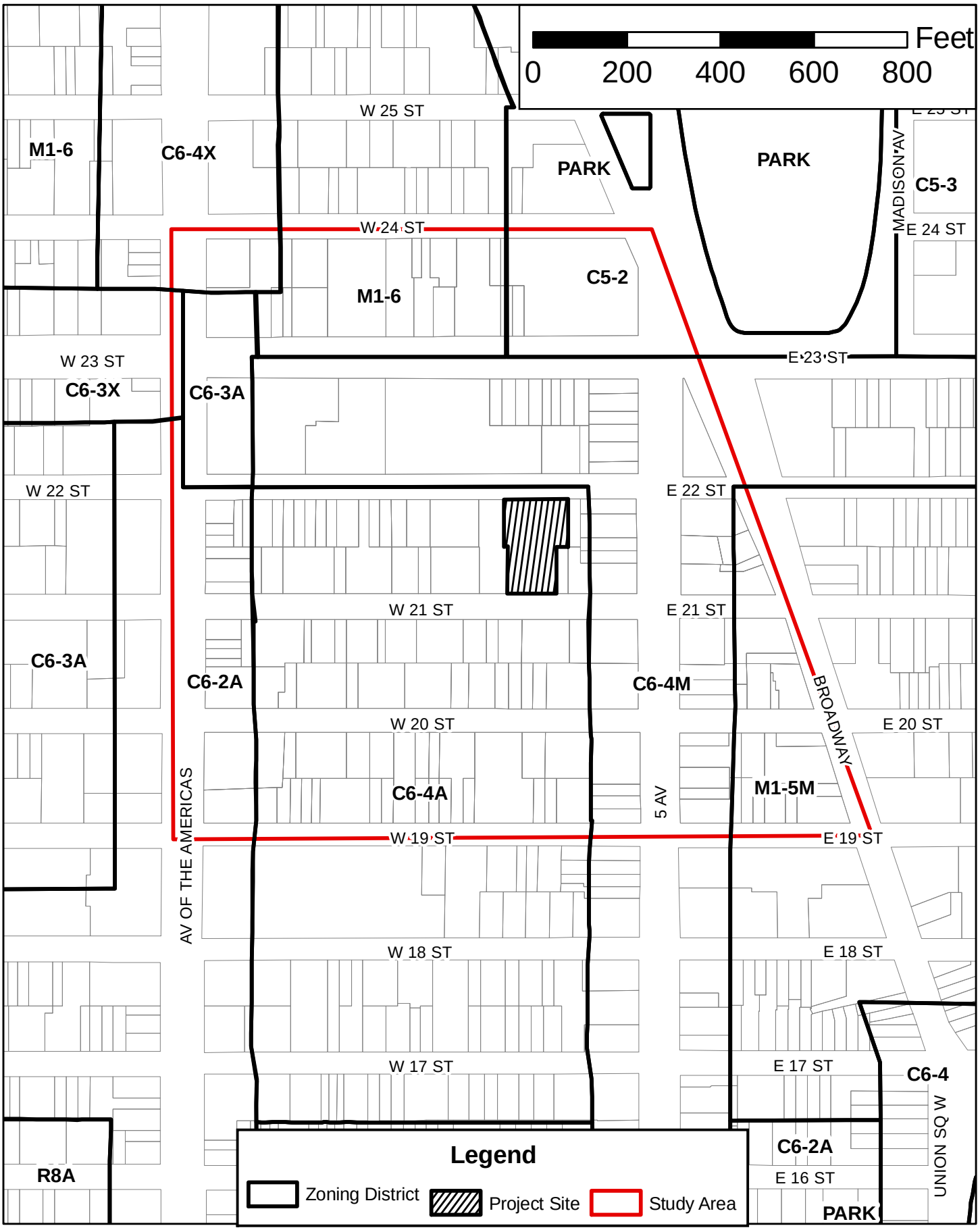
Project Site

The project site (Block 823, Lot 31) is within the C6-4A zoning district, which was mapped as part of the 2004 Ladies' Mile Rezoning. Table C-2 summarizes key information for this zoning district.

Study Area

Zoning classifications within the study area of the proposed project include C6-4A, C6-3A, C6-4M, C5-2, M1-5M, and M1-6. In addition to the project site, C6-4A is mapped on the midblock portions of all study area blocks between Fifth and Sixth Avenues south of W. 22nd Street. To the north and east of the C6-4A district, C6-4M is mapped on the block north of the project site,

Figure C-3
Study Area Zoning



except for the portion within 100 feet of Sixth Avenue, and C6-4M is also mapped on both sides of Fifth Avenue south of W. 23rd Street to a depth of 100 feet, including the entire "Flatiron" block bounded by W. 23rd Street to the north, Broadway to the east, W. 22nd Street to the south, and Fifth Avenue to the west. To the west of the C6-4A zoned midblock area, along Sixth Avenue to a depth of 100 feet C6-2 A is mapped south of W. 22nd Street and C6-3A is mapped north of W. 22nd Street up to the midpoint of the block between W. 23rd Street and W. 24th Street on the north. Other zoning districts within the study area include C6-4X, along the east side of Sixth Avenue on the northern half of the block between W. 23rd Street and W. 24th Street to a depth of 150 feet; C5-2 on the eastern portion of the block bounded by W. 24th Street, Fifth Avenue/Broadway, W. 23rd Street, and Sixth Avenue to a depth of 275 feet from Fifth Avenue; M1-6 on the midblock portion of the same block; and M1-5M is mapped in the southeastern portion of the study area south of W. 22nd Street and more than 100 feet east of Fifth Avenue (refer to Figure C-3).

Table C-2, Project Site C6-4A Key Zoning Requirements

Project Site Zoning	C6-4A *(R10A Equivalent)*
Maximum Permitted Floor Area Ratio	10.0 residential *(2 FAR bonus for inclusionary housing)* 10.0 commercial 10.0 community facility
Permitted Use Groups	Use Groups 1 to 12
Maximum Permitted Lot Coverage Applicable to Project Site	Through lot/Interior: 70%
Yard Requirements Applicable to Project Site	No front or side yards required; for through lots a rear yard equivalent of at least 60 feet in depth required, which may be occupied by a 1-story building up to a height of 23 feet
Height and Setback, Mandatory Contextual Regulations*, Narrow Street Regulations Applicable to Project Site	60' minimum street wall height 125' maximum street wall height *(or up to 150 feet to match adjacent buildings)** 185' maximum building height 15-foot front setback, 10-foot rear setback
Maximum Accessory Parking, Manhattan Core Regulations for CDs 1-6 Applicable to Project Site)	0.2 space per DU 1 space per 4,000 sf of retail floor area

*Special rules apply for Historic Districts

Zoning District Characteristics

Contextual Zoning Districts

C6-4A (R10A residential equivalent), C6-2A (R8A residential equivalent), C6-3A (R9A residential equivalent), and C6-4X (R10X equivalent) are contextual zoning districts. Contextual districts are designed to maintain the scale and form of the city's traditional moderate- and higher-density neighborhoods. These districts, which have an A, B, D, or X letter suffix are mapped where buildings of similar size and shape form a strong neighborhood context, or where redevelopment would create a uniform context. The bulk regulations for these districts are known as Quality Housing regulations. The Quality Housing Program was established in the

1980s to provide an optional set of contextual bulk regulations for residential development in non-contextual moderate- and higher-density (R6-R10) districts. The bulk regulations (e.g., height and setback, floor area, lot coverage), existing or desired, promote building forms in keeping with specific neighborhood characteristics. The program also sets certain quality standards for building safety, landscaping, recreation space and other amenities. In contextual zoning districts the quality housing program is mandatory while it is optional in non-contextual districts.

Non-contextual Zoning Districts

C5-2 (R10 residential equivalent) and M1-6 are non-contextual zoning districts. The bulk regulations for non-contextual districts encourage the development of buildings without specific height limits but mandate that as buildings rise on a site that they are setback from the street. The size and shape of a building is determined by a set of rules involving maximum FAR, required setbacks and sky exposure planes, lot coverage, and yard regulations. In C5-2 districts, these regulations allow three different sets of rules governing building bulk. These include "height factor" and "tower" regulations; in addition, the Quality Housing Program's contextual regulations for R10A may be followed instead of the non-contextual options.

Loft Districts

C6-4M and M1-5M are non-contextual zoning districts with special "loft" regulations that apply to the residential conversion of non-residential buildings in existence prior to December 15, 1961. In these districts conversion of non-residential floor area to residential use may take place only if floor area appropriate for certain commercial or manufacturing uses is preserved, either in the same building or elsewhere within the district. The amount of floor area to be preserved depends upon the size of the floors in the building being converted.

C5-2, C6-2A, C6-3A, C6-4A, C6-4X, and C6-4M

C5 and C6 districts permit a wide range of high-bulk commercial uses requiring a central location, including corporate headquarters, large hotels, entertainment facilities, retail stores and high-rise residences in missed-use buildings. C5-2, C6-4A, C6-4X, and C6-4M districts allow for an FAR 0f 10.0 for commercial, residential and community facilities. C6-2A districts allow for 6.0 FAR for residential, 6.02 FAR for commercial, and 6.5 FAR for community facility uses. C6-3A districts allow for 6.0 FAR for residential, 7.52 FAR for commercial, and 7.5 FAR for community facility. There are no designated Inclusionary Housing areas located within the study area; however all C6-4A and C6-4X districts are permitted a residential floor area bonus of 2.0 (for a maximum FAR of 12.0) for the creation or preservation of affordable housing pursuant to the Inclusionary Housing Program.

M1-5M and M1-6

M1districts are designed for a wide range of manufacturing and related uses, which conform to a high level of performance standards. They serve as buffers to commercial and residential uses or provide for enclave for light industrial and general service uses adjacent to commercial,

residential, or mixed-use areas where such uses would not be permitted. M1-5M allow for a maximum manufacturing and commercial FAR of 5.0. Community facility uses have a maximum FAR of 6.5 and M1-6 allows for a maximum FAR of 10.0 for commercial, manufacturing, and community facility uses. As noted above, M1-5M districts allow for conversion of upper floor space to residential uses under certain circumstances while continuing to permit high performance industrial uses as-of-right.

Parking

Parking is generally not required in the Manhattan Core, which spans from Battery Park City to W. 110th Street on the West Side and E. 96th Street on the East Side. In Manhattan Community Districts 1 through 6 accessory parking is generally permitted in new development and expansions for up to 1 space per 20 percent of residential units and 1 space for each 4,000 sf of most types of commercial, manufacturing, or community facility space.

Recent Rezonings

The Ladies' Mile Rezoning was a zoning map amendment approved by the NYC City Planning Commission in 2004 that changed the zoning in the areas on the midblock between Fifth and Sixth Avenues from the centerline between W. 16th and W. 17th Streets to the south, to W. 22nd Street to the north. This rezoning encompassed a five-block area including three blocks within the study area. The area was previously zoned M1-6M, a 10 FAR district that allowed for a mix of manufacturing and commercial uses. M1-6M allows for limited residential conversions but new residential construction is prohibited. With the rezoning, it was changed to a C6-4A district to allow for commercial, residential, and community facility uses with a base FAR of 10 and maximum FAR with Inclusionary Housing bonus of 12.0. The major difference between these two zoning districts is the allowance for as-of-right residential construction and conversion and the prohibition of new light manufacturing and general services uses in C6-4A (though existing non-conforming uses can remain if they meet performance standards). This rezoning was reflective of the area's evolution from a primarily manufacturing dominated area to an area that has wide range of uses, including residential. The C6-4A rezoning district accommodates the increasing demand for new housing construction, including the potential for affordable housing.

At the same that the City approved the rezoning, it also approved several related actions including a parking garage special permit for the application to allow a 363-space public parking garage as part of a proposed new development on the project site. As development of the site did not proceed following the 2004 approvals, the CPC renewed the special permit for an additional three years in 2008 and for an additional three years in 2012. As development of the project site has been delayed due to economic conditions, this special permit will lapse prior to the proposed project's substantial construction. Thus, the project site's owners are applying for a new parking garage special permit pursuant to ZR Section 13-451.

The Ladies' Mile Rezoning EAS conservatively projected that the 2004 rezoning would facilitate the development of approximately 900 DUs on six underutilized sites over the ensuing 10 years, thereby contributing to the City's effort to address the housing shortage. The project site was identified in the 2004 EAS as "Projected Development Site 1". It was projected to be developed

with approximately 311 dwelling units, 23,996 sf of retail (equivalent to the site's lot area), and 363 public parking spaces. The development was assumed to be an 18-story building with approximately 145-foot tall streetwalls on both frontages, with 15-foot setbacks above the streetwall, and a 185-foot tall total building height. With the projected public parking, it was expected to have curb cuts on both street frontages and two below-grade levels.

Public Policy

Existing Conditions

The project site and surrounding area are not controlled by or located in any an urban renewal area, a designed in-place industrial park, or within the coastal zone boundary. The proposed project site is located within the Ladies' Mile Historic District and the western portion of the study area (along Sixth Avenue) is in the area addressed by the Chelsea 197-a Plan. Refer to Figure A-3 in Attachment A.

The City-designated Ladies' Mile Historic District, which is subject to the City's Landmark Law, is discussed in Attachment B. Attachment B provides an assessment of the proposed project's potential for significant adverse impacts on the historic district. As discussed therein, the proposed project, which has received a C of A from LPC, would not result in any significant adverse historic resources impacts.

Section 197-a of the NYC Charter

The NYC Charter authorizes community boards and borough boards, as well as the Mayor, the City Planning Commission, the Department of City Planning and any other Borough President, to sponsor plans for the development, growth, and improvement of the city, its boroughs and communities. Proposed 197-a plans are reviewed by the community boards and borough presidents, and by the City Planning Commission and Council accordance with the procedures and timetable set out in "Rules for the Processing of Plans Pursuant to Charter Section 197-a". Once approved by the Commission and the City Council, 197-a plans are published and distributed, together with any modifications made by the Commission and Council, so that they may guide subsequent actions by City agencies.

The proposed action is consistent with the Community Board 4's goals of providing orderly growth and change, proving opportunities for new economically-integrated housing. The *Chelsea 197-a Plan: A Contextual Zoning Proposal to Create Housing Opportunities* report was adopted on May 22, 1996 and covered the L-shaped area bounded by Tenth Avenue to the west, Sixth Avenue to the east, W. 14th Street to the south, W. 26th Street and W. 34th Street to the north. As the plan addresses the east side of Sixth Avenue between W. 14th Street and W. 26th Street, it encompasses a portion of the study area. The plan recommended zoning changes for the 64-block area which would balance the need for new development with the need to preserve the neighborhood context. More specific actions were proposed by the plan; such as allowing residential structures to be built on parking garages and empty lots at a scale comparable to that of the surrounding loft buildings. The proposed action would be consistent with the goals and

recommendations put forth by the Chelsea 197-a Plan, although it should be noted that the project site is not within the area addressed directly by the Plan.

There are no other public policies applicable to the proposed action or affection the primary or secondary study area. Therefore, no further assessment of other public policies is necessary for the proposed action.

D. FUTURE WITHOUT THE PROPOSED ACTION

In the 2017 future without the proposed action, a new building would be constructed on the project site, replacing the existing 256-space public parking lot.

Land Use

Development Site

As discussed in Attachment A and summarized in Table A-3, in the future without the proposed action, the project site would be redeveloped on as-of-right basis pursuant to the site's C6-4A zoning with a new mixed-use building. For analysis purposes it is assumed that the RWCDS No-Action development would have a total of approximately 297 DUs, or which 59 DUs would be affordable housing units, in 252,506 gsf of residential space (assuming 850 gsf per DU), 10,000 gsf of retail, and 62 below-grade unattended parking spaces in approximately 18,600 gsf of parking area accessed via curb cuts on both W. 21st Street and W. 22nd Street. The building would be 16 stories tall, with a 150-foot tall streetwall rising 15 stories and the sixteenth story setback 15 feet from the streetwall with a roof height of approximately 161 feet. The RWCDS No-Action building would have a built FAR of 10.6.

Study Area

There are several notable changes within the land use study area expected by the project build year of 2017.

As shown in Table C-3, and Figure C-4, there are three anticipated No-Build developments within the land use study area. These No-Build development sites would introduce a combined total of 52 additional residential units. As the entire study area is located within the LPC-designated Ladies' Mile Historic District, each of these three projects are being constructed pursuant to a C of A issued by LPC. The planned development at 39 W. 23rd Street is applying for a parking garage special permit to accommodate residential growth pursuant to ZR 13-451, to allow the site to provide more parking than is permitted as-of-right. The two residential projects are replacing public parking lots; 21W20 Flatiron is replacing a 14-space facility and the 39 W. 23rd Street project is replacing a 42-space facility. (It should be noted that the 21W20 development site was identified as "Potential Development Site 7" in the 2004 *Ladies' Mile Rezoning EAS*.)

Figure C-4
Study Area No-Build Developments

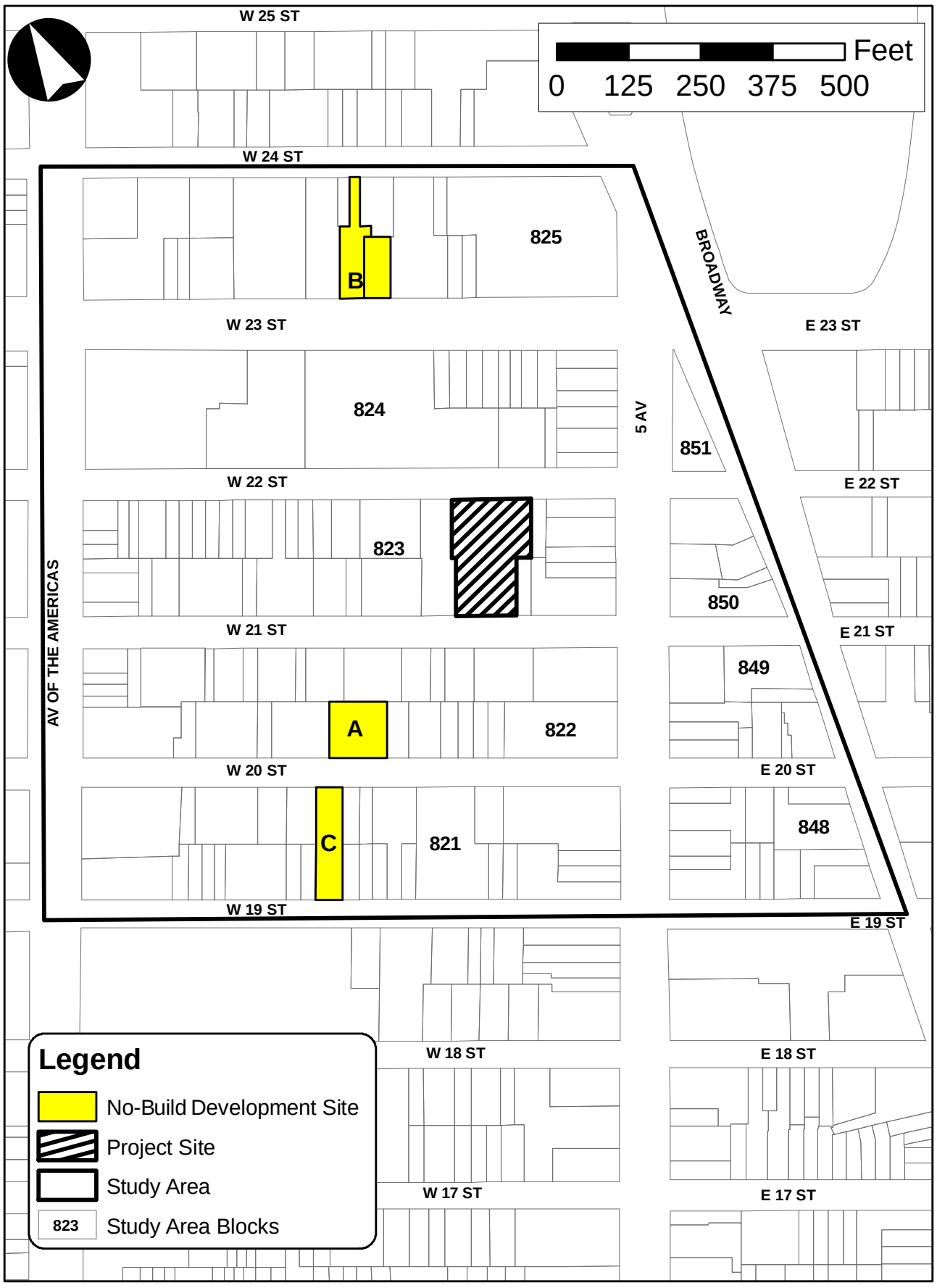


Table C-3, No-Build Developments within the Land Use Study Area

Map Key	Project Name	Location/Address	Program	Year	Notes
A	21W20 Flatiron	21 W 20 St. (Block 822, Lot 7506)	12 DUs (condos); 15 stories	2015	Will cantilever over neighboring garage
B	39 W 23 St Project	39-41 W 23 St (Block 825, Lots 20, 7501)	40 DUs (condos); 22 stories 50 Parking Spaces	2016	Will cantilever over neighboring building
C	33 W 19 St Enlargement	31-33 W 19 St/ 28-30 W 20 St (Block 821, Lot 21)	Commercial (office) enlargement	2016	2-story addition to existing 6-story building
		TOTAL	52 DUs; 50 parking spaces; new office space		

The anticipated developments in the study area and the projected RWCDS No-Action development on the project site reflect trends in this area and in the City generally to redevelop underutilized manufacturing and parking uses into residential and mixed residential-commercial buildings. These developments are being facilitated due in part to the 2004 Ladies' Mile Rezoning which makes such residential development as-of-right.

Zoning

There are no pending or anticipated applications for zoning map or text amendments for the development site or study area.

Public Policy

Apart from applications for minor alterations to buildings that require a C of A, there are no anticipated changes related public policies in the study area under RWCDS No-Action conditions.

E. FUTURE WITH THE PROPOSED ACTION

Under RWCDS With-Action conditions, the proposed special permits for bulk modifications and for parking would result in changes to the development on the project site. As discussed in Attachment A, the proposed bulk modifications would allow residential towers on W. 21st Street and W. 22nd Street to rise to the 185-foot maximum permitted building height without providing the required 15-foot front setback that would be required at a height of 150 feet. The building would also include three modifications to bulk regulations in the rear portion of the project site. The residential towers would be permitted to provide the required 10-foot rear setback at the at a height of approximately 154.5 feet, approximately 4.5 feet higher than the maximum permitted base height of 150 feet. These setback waivers are required to make the building consistent with the design for the building approved by LPC in the C of A for the project. The bulk modification special permit also includes a modification of rear yard obstruction regulations to permit a glass-walled atrium structure and two garage exhaust vents in a stepped garden area within the building's interior courtyard. The atrium would extend above a height of 23 feet; specifically it

would be approximately 30 feet long by approximately 21 feet wide and would extend to a height of approximately 25 feet, 10 feet above the 1-story, approximately 15-foot tall base. The garage exhaust vents would include the northern vent which would be 6 feet, 6.5 inches by 8 feet, 6.5 inches, and the southern vent which would be 7 feet, 10.5 inches by 8 feet, 6.5 inches; the top of both vents would be flush to the surface of the planting bed. The parking special permit would allow a 200-space public parking garage, providing more spaces than the 62 as-of-right spaces projected for RWCDS No-Action conditions. These spaces would accommodate residential growth in the surrounding area as in recent years the changes in the supply of off-street residential parking have not met the increase in residential units (and resulting parking demand).

Per the RWCDS presented in Attachment A, under RWCDS With-Action conditions, the project site would have approximately 333 DUs, of which approximately 67 DUs would be affordable housing units, approximately 10,000 gsf of retail space, and approximately 200 public parking spaces. The development would have a built FAR of approximately 11.5. The incremental change in development from RWCDS No-Action conditions would be an increase of approximately 36 DUs (consisting of an increase of 8 affordable housing DUs and an increase of 28 market rate DUs), no change in retail space, and an increase of 138 parking spaces. The building height would increase by approximately 24 feet and the built FAR would increase by approximately 0.9.

Land Use

As compared to RWCDS No-Action conditions, under RWCDS With-Action conditions, the project site would be redeveloped with the same uses and at a similar density. Under both scenarios, the site would contain new residential, retail, and parking, consistent with ongoing trends in the Ladies' Mile/Flatiron area. The proposed action would not change permitted uses or density on the project site or any other location. The effects of the proposed changes in bulk are assessed in Attachment D, "Urban Design and Visual Resources." As discussed therein, the proposed bulk modifications would not result in significant adverse impacts on urban design and visual resources.

The proposed project would be compatible with the existing and planned land uses in the study area. While the project site would be built at a higher density under RWCDS With-Action conditions than under RWCDS No-Action conditions, it would be within the permitted FAR allowed as-of-right and comparable to other nearby buildings. For example, 4 W. 21st Street, located across the street from the project site, is a 17-story, approximately 185-foot tall apartment building completed in 2005 with a built FAR of approximately 12.0. Similarly, west of the project site 16-18 W. 22nd Street is a 12-story, approximately 150-foot tall commercial building completed in 1910 with a built FAR of approximately 10.9, and 20 W. 22nd Street is a 16-story, approximately 185-foot tall commercial building completed in 1911 with a built FAR of approximately 16.6.

As the proposed action would result in a new building that would be compatible with existing land uses in the study area, the proposed action would not result in any significant adverse land use impacts.

Zoning

The proposed action does not involve a zoning map or text amendment; however it consists of two zoning special permits that allow for the modification of zoning regulations provided certain findings are met.

Bulk Special Permit

The bulk special permit would allow modifications to the building volume pursuant to ZR Section 74-712, "Development in historic districts." This allows the CPC to modify bulk regulations provided it makes the following findings: (1) the modifications shall not adversely affect structures or open space in the vicinity in terms of scale, location and access to light and air; and (2) the modifications relate harmoniously to buildings in the Historic District as evidenced by a C of A or other permit from the Landmarks Preservation Commission.

The design for the proposed project has received a C of A from LPC, which noted that facades of the proposed new building would reinforce the continuity of the block's streetwall and would be in keeping with the scale of buildings found in the historic district and on the block. The neighboring building to the west is 150 feet tall and does not have any setbacks and there are many other buildings in the study area of similar height without setbacks such as the approximately 185-foot tall 149 Fifth Avenue building at the northeast corner of Fifth Avenue and E. 21st Street, a half-block from the project site. As such, the proposed project would be at a similar scale to existing buildings in the area that have similar building envelopes. The proposed design would not alter the established relationship in this area between buildings and access to light and air. The built environment of the area reflects historic building patterns established over a century ago and is maintained for new developments and expansions by current zoning regulations and historic district landmark designation. Under RWCDS With-Action conditions the streetwall would be 35 feet higher and the overall building roof height would be 24 feet higher on the project site as compared to RWCDS No-Action; this would not represent a substantial change in the access to light and air of neighboring buildings which also have high streetwalls and similar building heights. The proposed bulk modifications would not have any effects on access to light and air from open space as most properties in the study area contain high lot coverage buildings that do not provide open areas such as terraces with a line of sight to the project site and the closest public open space to the project site, Madison Square Park, does not provide visual access to the project site. As discussed in Attachment B, the proposed action would not result in any significant adverse shadows impacts on any sunlight sensitive open spaces or historic resources.

The proposed rear yard obstructions would be located in the interior portion of the project site and would not be visible from the street and would be minimally visible from adjacent lot line windows of neighboring buildings. Although the atrium would constitute an obstruction of the rear yard area, its transparent glass walls would not visually obstruct views from apartments with lines of sight to it and its landscaped green roof is intended to provide a visually appealing feature for building residents. It would be located adjacent to the second floor residential amenity space in the W. 21st Street tower and therefore would not be immediately adjacent to

any residential unit windows. The garage exhaust vents would be minimally visible as their grilles would be flush with the surface of a planting bed within a sunken garden in the interior courtyard. They would be partly or fully screened from many angles by adjoining plantings. These elements in the rear area would not create a significant adverse zoning impact as they would be limited in scope, would not affect public views, and, in the case of the atrium, would provide a visual amenity for buildings residents.

Parking Special Permit

The parking special permit would allow the proposed project to provide more parking spaces than allowed as-of-right pursuant to ZR Section 13-451, "Additional parking spaces for residential growth." This allows the CPC to increase permitted parking provided it makes certain findings, including: that either (a) the number of off-street parking spaces in such proposed parking facility is reasonable and not excessive in relation to recent trends in close proximity to the proposed facility with regard to: (1) the increase in the number of dwelling units; and (2) the number of both public and accessory off-street parking spaces, or (b) the proposed ratio of parking spaces to dwelling units in the proposed development or enlargement does not exceed: (1) 20 percent of the total number of dwelling units, where such units are located within Community District 1, 2, 3, 4, 5 or 6; or (2) 35 percent of the total number of dwelling units, where such units are located within Community District 7 or 8.

In support of the application for this special permit, the applicant prepared a "residential growth" parking study for the area within a one-third mile radius of the project site. In order to identify the ratio of recent off-street residential parking spaces to recent residential units developed in the study area, the study focused on changes in conditions since 2003 through the anticipated 2017 Build year. The study found with the 200 spaces that would be provided as a result of the proposed action that this ratio would be well below 20 percent and as such the proposed larger garage would help to meet the need for residential parking in this area which has experienced substantial new residential development. A number of new developments in this area have been in new buildings that replaced public parking lots (as would be the case for the proposed project). There have also been several existing non-residential buildings converted to residential use, which do not provide parking. Based on the findings of the parking study, the proposed 200-space public parking garage would be reasonable and not excessive in relationship to recent trends in close proximity to the project site as the project satisfies the required residential growth finding for the special permit.

Conclusion

As the CPC can make the required findings for the proposed zoning special permits and the proposed project would otherwise comply and conform with the existing C6-4A zoning, including use and density regulations, the proposed action would not result in any significant adverse zoning impacts.

Public Policy

The proposed action would be consistent with the NYC Landmarks Law, as evidenced by the C of A granted by LPC on October 25, 2013 and subsequently updated on April 8th 2014. As there are no other public policies applicable to the project site or the proposed project, the proposed action would not result in any significant adverse public policy impacts.

ATTACHMENT D:
URBAN DESIGN AND VISUAL RESOURCES

A. INTRODUCTION

The applicant is seeking two City Planning Commission (CPC) Zoning Special Permits, one being a special permit for additional parking spaces and the other a special permit for bulk modifications for a new mixed-use building being constructed on the site located at 7 W. 21st Street in the Ladies' Mile Historic District of Manhattan Community District 5. The project will also seek tax-exempt bond financing through the NYC Housing Finance Agency (HFA).

This attachment assesses the potential effects on urban design and visual resources that could result from the proposed action.

The proposed action affects Lot 31 on Block 823 which is bounded by W. 22nd Street on the north, Fifth Avenue on the east, W. 21st Street on the south, and Sixth Avenue (Avenue of the Americas) on the west. The site of the proposed action is located within the NYC Landmarks Preservation Commission (LPC)-designated Ladies' Mile Historic District and a Special Permit for Bulk Modifications would involve changes to the bulk requirements in an LPC-designated historic district. Therefore a detailed urban design and visual resource analysis has been prepared in accordance with the 2014 *CEQR Technical Manual*. The proposed action would also include a Special Permit for Additional Parking Spaces that would allow more parking than permitted as-of-right.

The proposed action would result in the development of a new 18-story 344,830-gross square foot (gsf) building with a one-story base connecting two residential towers, retail spaces, garage entries, lobbies, residential amenity space, and mechanical areas. Located on Block 823 and bounded by W. 21st Street, Fifth Avenue, W. 22nd Street, and Sixth Avenue, the proposed action would have residential towers on the W. 21st and W. 22nd Street frontages. Both towers would rise to a height of 185 feet without front setback; per the RWCDS for With-Action conditions, combined they would include approximately 333 dwelling units (DUs), of which approximately 67 DUs would be affordable housing units; approximately 10,000 gsf of retail space; and approximately 200 below-grade public parking spaces in an approximately 36,000 gsf garage accessible from W. 21st Street and W. 22nd Street.

Under RWCDS No-Action conditions it is expected that the project site would be redeveloped on an as-of-right basis with a 161-foot tall, 16-story building. It would have a total area of

approximately 314,497 gsf with 266,506 gsf of above-ground space. Each tower would have a 15-story, 150-foot tall streetwall with the 16th floor setback from the streetwall. This building would be connected at the base with a nearly full lot coverage first floor and two below-grade levels. In the future without the proposed action, development on the project site would have 297 DUs in 252,506 gsf of residential space; 10,000 gsf of retail; and 62 below-grade parking spaces in a 18,600-gsf unattended garage accessible via curb cuts on both building frontages. These RWCDS No-Action conditions represent the baseline against which the effects of the proposed project will be compared. As detailed in Attachment C, "Land Use, Zoning, and Public Policy," three additional No-Build development sites have been identified within the study area.

Together, the urban design components and visual resources of an area define the distinctive identity of a neighborhood. In an urban design assessment under CEQR, one considers whether and how a project may change the visual experience of a pedestrian in the project area. The assessment focuses on the components of a proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment, as experienced by pedestrians in the study area. These components include building bulk, use, and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. The concept of bulk is created by the size of a building and the way it is massed on a site. Height, length and width define a building's size; volume, shape, setbacks, lot coverage, and density define its mass. The analysis of visual resources will assess the effects of the proposed action on the study area's visual resources, which are its unique, or important public view corridors, vistas, or natural or built features. Waterfront views, public parks, landmarked structures, landmarked districts, and natural resources are examples of visual resources. As per the guidelines of CEQR, only views of visual resources from public and publicly accessible locations will be assessed. The analysis in this attachment addresses each of these characteristics of existing conditions and the future without and with the proposed action for the year 2017.

B. PRINCIPAL CONCLUSIONS

The proposed action would not result in significant adverse impacts to urban design and visual resources, as defined by the guidelines for determining impact significance set forth in the 2014 *CEQR Technical Manual*. The proposed action comprises two applications for Zoning Special Permits and seeks to redevelop an underutilized site under current contextual zoning requirements, as modified by one of the special permits, while remaining congruous to existing development in the LPC-designated Ladies' Mile Historic District. A Special Permit for Bulk Modifications would allow for the construction of 185-foot tall towers on the W. 21st Street and W. 22nd Street frontages. Each tower would rise to the maximum allowable building height of 185 feet in a C6-4A contextual district without required front setbacks. The bulk Special Permit would also allow for a modification of the height of the required rear setback and would allow rear yard obstructions, which would not be visible from the street or other publicly-accessible areas.

As detailed in the following sections, the proposed action is anticipated to result in development on Block 823, Lot 31 in keeping with the built form of the Flatiron District. As the proposed project is located within the LPC-designated Ladies' Mile Historic District, it must adhere to

additional regulations applicable to development in historic districts. A Certificate of Appropriateness (C of A, granted by NYC LPC after review of the proposed project, has determined that the design of the proposed project is appropriate for the Ladies' Mile Historic District (refer to Appendix A).

Through the development of an underutilized site, the proposed project would enhance pedestrian experiences in the LPC-designated Ladies' Mile Historic District. The proposed action would not result in any changes to street pattern, block form, or building arrangement, and would not block any significant view corridors, views of visual resources, or limit access to any visual resources in the study area. As such, the proposed project would not result in any significant impacts on urban design in the study area, and no significant adverse impacts on visual resources are anticipated as a result of the proposed project.

C. METHODOLOGY

Determining whether an Urban Design Analysis is Necessary

Urban design is the totality of components that may affect a pedestrian's experience of public space. These components include streets, buildings, visual resources, open space, natural features, and wind and sunlight conditions. These elements, as defined in the 2014 *CEQR Technical Manual*, are described below:

Streets. For many neighborhoods, streets are the primary component of public space. The arrangement and orientation of streets define the location and flow of activity in an area, set street views, and create the blocks on which buildings and open spaces are organized. The apportionment of street space between cars, commercial vehicles, bicycles, transit, and sidewalk is critical to making a successful streetscape, as is the careful design of street furniture, grade, materials used, and permanent fixtures, including plantings, street lights, fire hydrants, curb cuts, or newsstands.

Buildings. Buildings support streets. A building's streetwalls form the most common backdrop in the city for public space. A building's size, shape, setbacks, lot coverage, placement on the zoning lot and block, the orientation of active uses, and pedestrian and vehicular entrances all play major roles in the vitality of the streetscape. The public realm also extends to building facades and rooftops, offering more opportunity to enrich the visual character of an area.

Visual Resources. A visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.

Open Space. For the purpose of urban design, open space includes public and private areas such as parks, yards, cemeteries, parking lots and privately owned public spaces.

Natural Resources. Natural features include vegetation and geologic, topographic, and aquatic features. Rock outcroppings, steep slopes or varied ground elevation, beaches, or wetlands may help define the overall visual character of an area.

Wind. Channelized wind pressure from between tall buildings and downwashed wind pressure from parallel tall buildings may cause winds that may jeopardize pedestrian safety.

In general, an assessment of urban design is needed when the project may have effects on one or more of the elements that contribute to the pedestrian experience, which are described above. As the proposed action and subsequent development within the rezoning area could result in physical changes to the proposed rezoning area beyond the bulk and form currently permitted as-of-right, it has the potential to result in development that could alter the arrangement, appearance, and functionality of the built environment, and therefore, change the experience of a pedestrian in the project area. This urban design analysis follows the guidelines of the 2014 *CEQR Technical Manual.*

Per criteria of Section 230 of the 2014 *CEQR Technical Manual*, a study of wind conditions and their effect on pedestrian level safety may be warranted under certain circumstances for projects involving the construction of large buildings at locations that experience high wind conditions. The proposed zoning changes would facilitate new development that would relate to the existing scale and character of the surrounding neighborhood. The proposed action is not expected to result in the construction of unusually large or tall buildings. Pursuant to the proposed special permit, the maximum building height permitted on the project site would be approximately 185 feet tall, which is similar to several existing buildings in the area. Further, the project site is located in a densely-developed neighborhood in the center of Manhattan which is not an area that typically experiences high wind conditions. Therefore, a study of wind conditions and their effect on pedestrian level safety is not warranted.

Study Area

The urban design study area is defined as approximately 400 feet from the boundary of the project site, but has been modified and expanded as appropriate to include entire blocks, where applicable. As shown in Figure D-1, the study area is bounded on the north by W. 24th Street, on the east by Broadway, on the south by W. 19th Street, and on the west by Sixth Avenue. This urban design and visual resources study area is consistent with the boundary of the land use study area identified in Attachment C, "Land Use, Zoning, and Public Policy". The northern, southern, and eastern portions of the study area consist of blocks with varying characteristics, and as such, are divided into separate Sub-Areas for the urban design and visual resources assessment. These study area sub areas are illustrated in Figure D-2. The study area is enclosed within the boundaries of the LPC-designated Ladies' Mile Historic District, which is generally bounded by W. 24th Street on the north, Sixth Avenue on the west, W. 16th Street and E. 15th Street on the south, and meanders through the blocks to the east of Broadway.

The analysis of urban design and visual resources is based on field visits, photography, and computer imaging of the proposed rezoning area and surrounding study area, with particular emphasis on proposed and projected developments and their vicinity.

Figure D-1
Urban Design Study Area

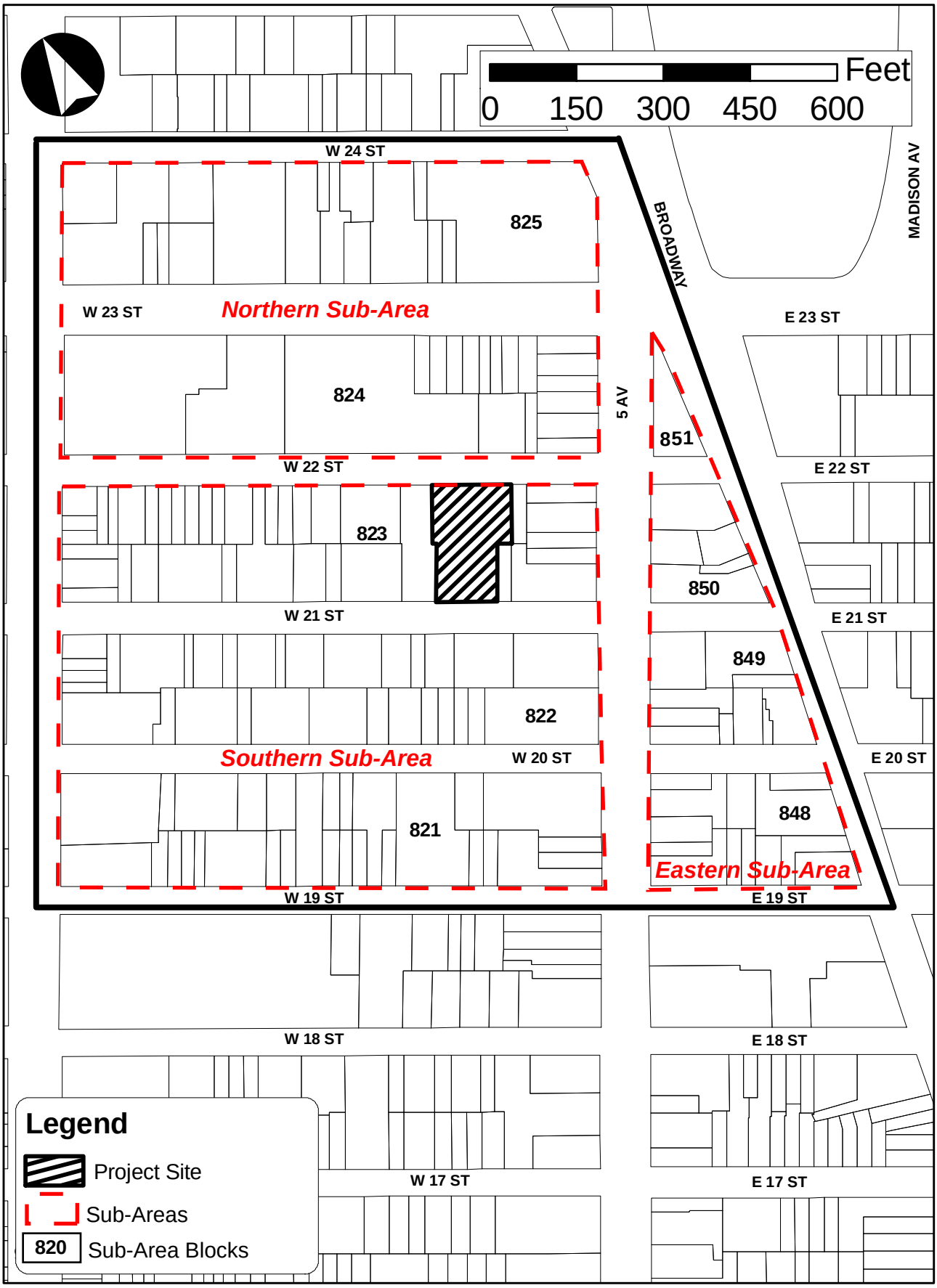
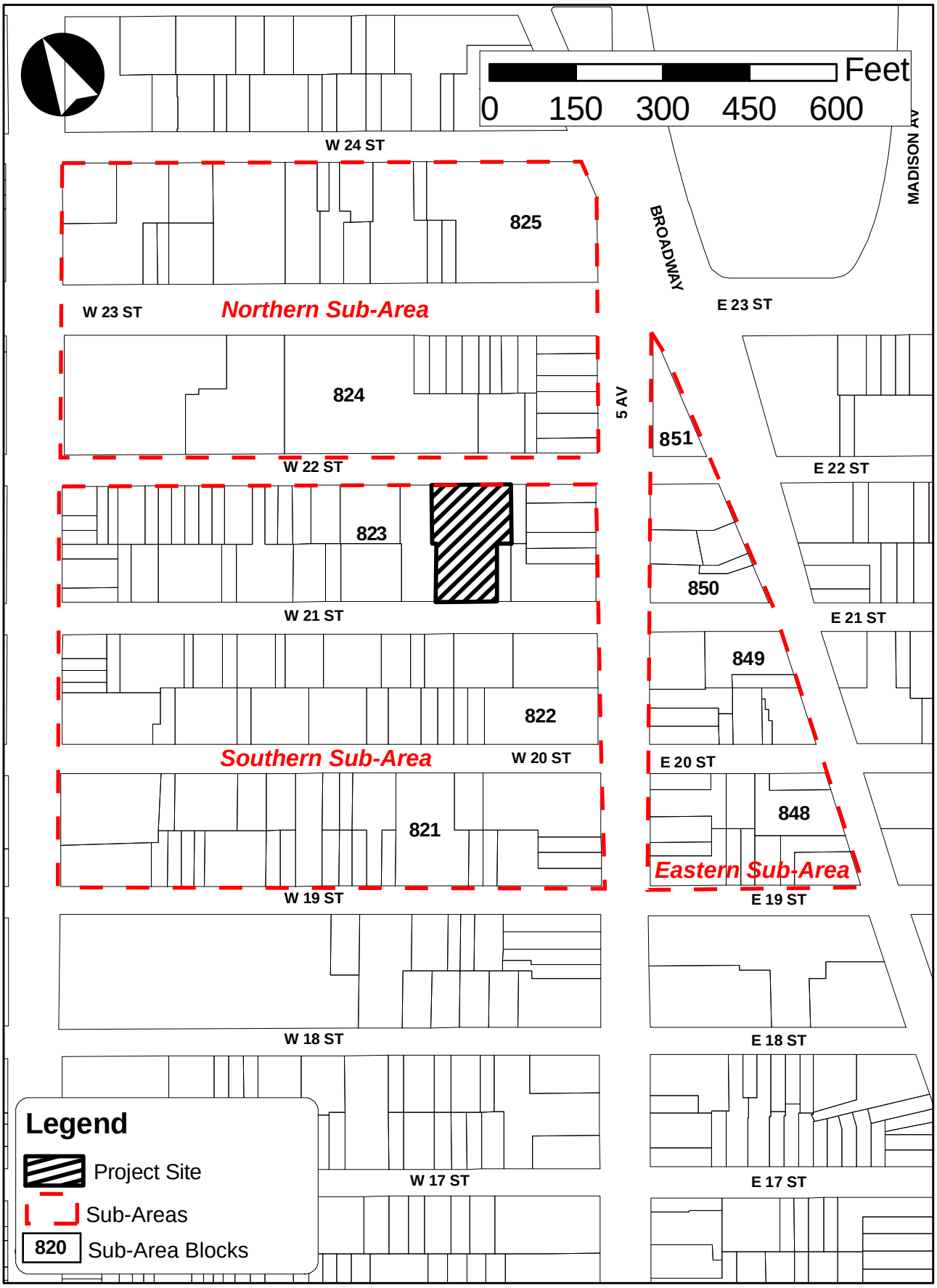


Figure D-2
Urban Design Sub-Areas



D. PRELIMINARY ASSESSMENT

Under CEQR, a preliminary assessment of urban design 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, including the following: 1) projects that permit the modification of yard, height, and setback requirements; and 2) 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 action. According to the 2014 *CEQR Technical Manual*, detailed analyses are generally appropriate if an action introduces a new building requiring exception to existing zoning and would result in changes in height and setback requirements. As the proposed action calls for a zoning special permit that allows for modifications to bulk regulations, a detailed analysis of urban design has been conducted and is provided below.

E. EXISTING CONDITIONS

Figure D-3 shows the existing density, in terms of floor area ratios (FAR) per tax lot for the study area, while Figure D-4 shows the existing building heights. Both figures are referenced throughout the following sections. Figure D-5 provides a key map for the photos in Figures D-6a through D-6j, which are discussed in detail below.

Project Area Block

As shown in Figure D-1, the project site consists of one midblock lot on Block 823. The project area block is currently zoned C6-4A, and mostly contains medium to high density buildings and a mix of commercial, mixed commercial/residential, residential, institutional and manufacturing uses. The proposed development would occupy Lot 31, which is currently used for at-grade parking.

Buildings

As detailed in Attachment C, "Land Use, Zoning, and Public Policy", the project area block consists of a range of uses, with commercial, residential, mixed residential/commercial, institutional, and manufacturing uses. The project area block is within the Ladies' Mile Historic District where building types and heights are generally determined by distinct architectural phases in the District's development, and where many buildings have been designated individual landmarks in addition to being considered contributing resources to the Ladies' Mile Historic District. Two- to 6-story buildings represent styles from the earlier development phase of the District while taller buildings come from later development periods. There are a variety of building footprints, though most buildings have high lot coverage and a continuous streetwall, and a significant presence of ground floor activity.

The project site on Block 823, Lot 31 is currently occupied by a 23,996-sf at-grade parking lot with entrances on W. 21st and W. 22nd Streets. Located to the west of the project site at 15 W.

Figure D-3
Existing Density

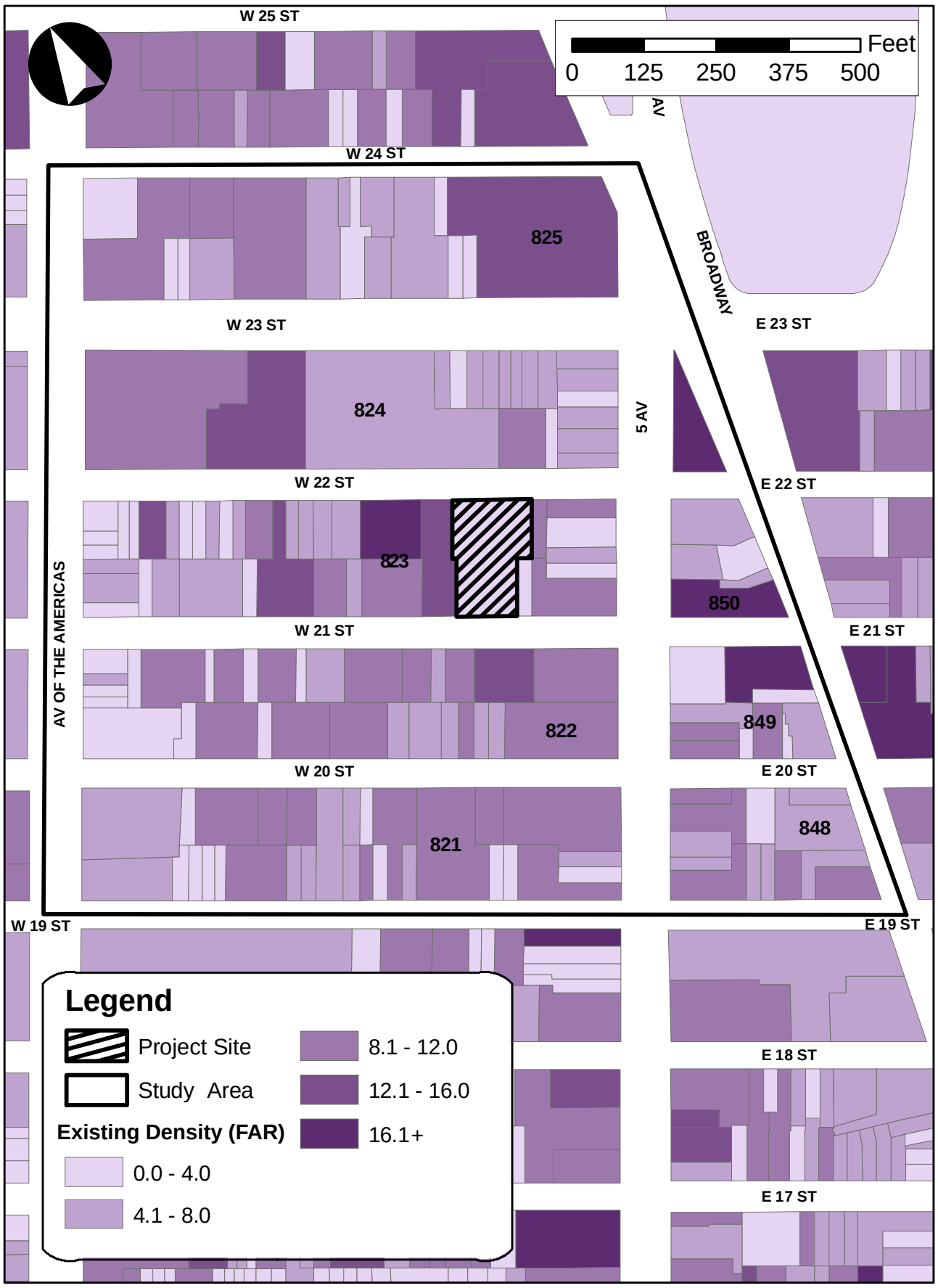


Figure D-4
Existings Building Heights

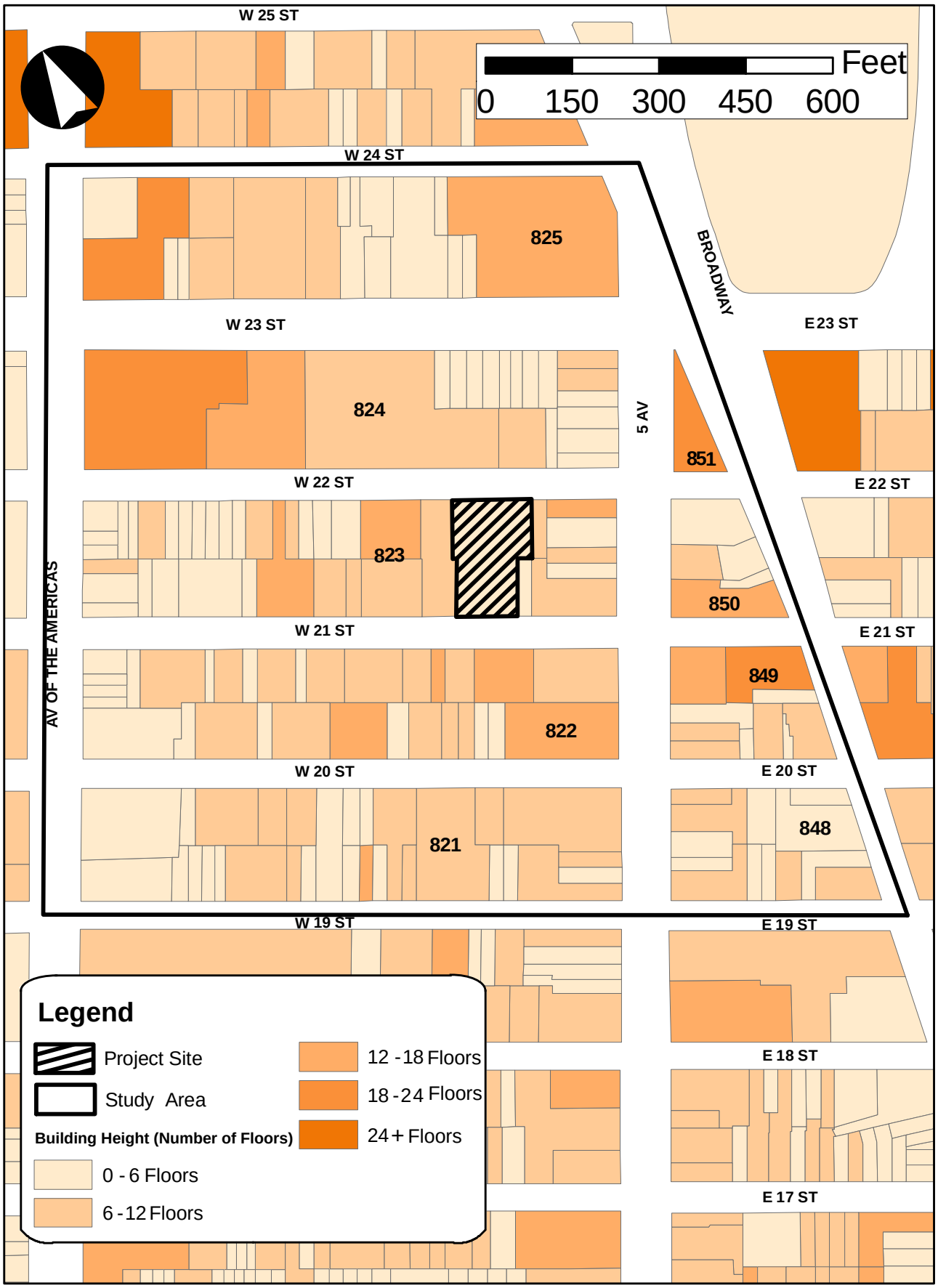
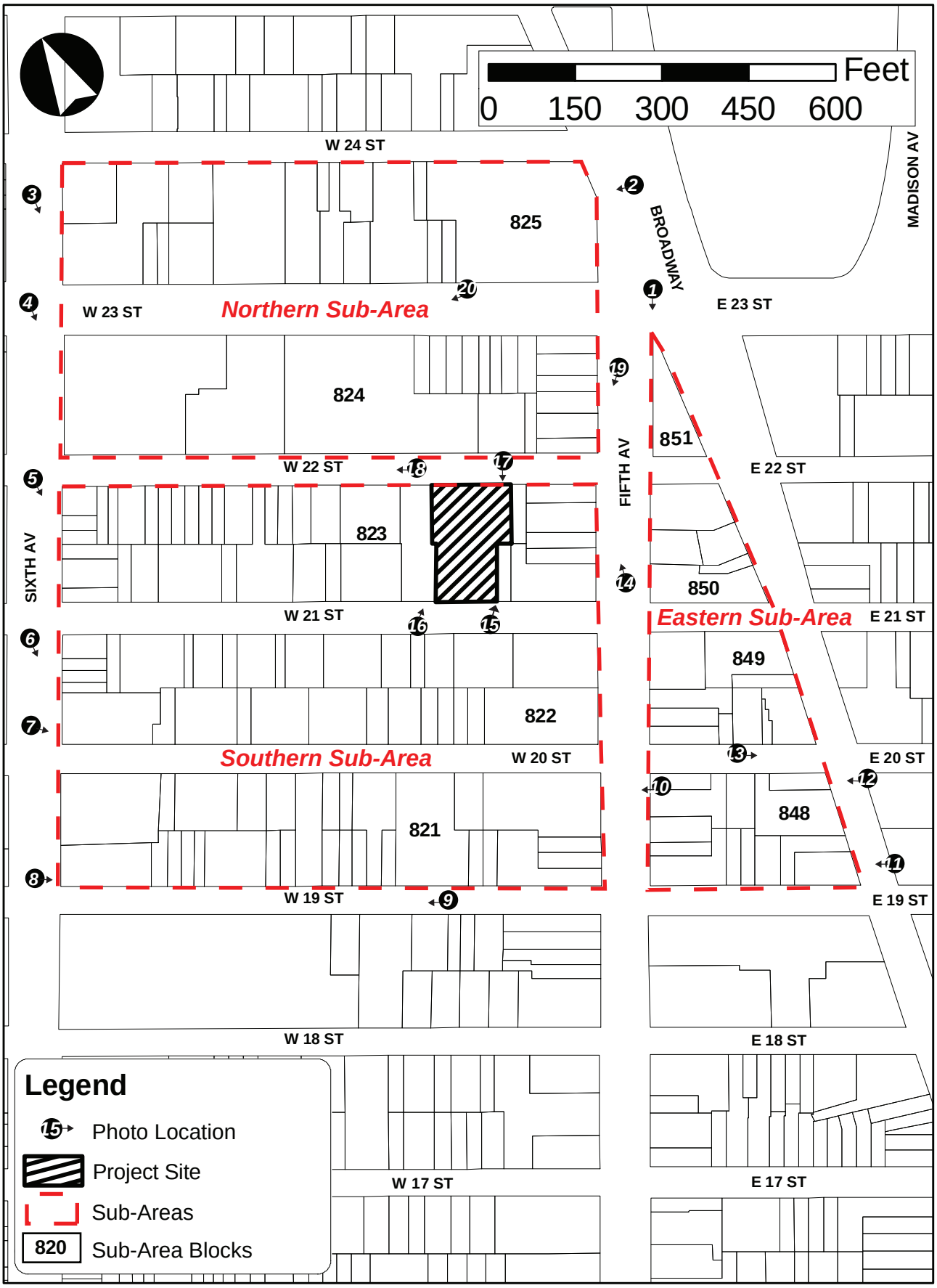


Figure D-5
Urban Design Sub-Areas Photo Key



1.The Flatiron Building on Block 851, a part of the Eastern Sub-area.

2. The Fifth Avenue Building (formerly the Toy Center Building) in the Northern Sub-area located at the intersection of Broadway, Fifth Avenue, and W. 23rd Street.

3. The Masonic Building at the corner of Sixth Avenue and W. 23rd Street in the Northern Sub-Area.

4. The western frontage of the project block, Block 823, contains landmarked commercial buildings.

5. The recently constructed mixed-residential-commercial property on the western frontage of Block 824 in the Northern Sub-area.

6. A series of rowhouses and the former Church of the Holy Communion Complex on Sixth Avenue in the Southern Sub-area.

7. The pitched-roof main building of the former Church of the Holy Communion Complex on Block 822 in the Southern Sub-area.

8. A typical commercial-office building in the study area.

9. A variety of landmarked structures on W. 20th Street on Blocks 822 and 821 in the Southern Sub-area.

10. The Methodist Book Concern, faced in red brick and white stone, on Fifth Avenue in the Southern Sub-area.

11. The landmarked Gorham Building in the Eastern Sub-area; the only Queen Anne style building in the study area.

12. The former Lord & Taylor Building on the corner of W. 20th Street and Broadway; a remnant of the Ladies' Mile section of Broadway.

13. A typical view of buildings in the Eastern Sub-area.

14. Diverse buildings at the corner of Fifth Avenue and W. 21st Street.

15. Buildings located directly east of the project site on the W. 21st Street frontage.

16. Buildings located directly west of the project site on the W. 21st Street frontage.

Urban Design and Visual Resources Sub-Area Photos

17. The Beaux-Arts style Dezer building located to the east of the project site on the W. 22nd Street frontage.

18. A typical view of buildings in the Northern Sub-area.

19. A view of Fifth Avenue from Madison Square Park along the eastern boundary of the study area.

20. A view of W. 23rd Street, a major thoroughway in the study area.

21st Street (Block 823, Lot 29) is a 12-story, 150-foot tall commercial building with frontages on W. 21st and W. 22nd Streets. On the W. 21st Street frontage, the 2-story base contains a 7-pane projecting window on the first floor connecting to a continuous pane of single-pane wood sash on the second floor. The third story is ornately decorated with terra-cotta and stone and transitions to a repeated three-bay window pattern on floors 4 through 10. Stories 11 and 12 continue the 3-bay window pattern which are separated by decorative terra-cotta pilasters. The W. 22nd Street frontage is virtually identical to that on W. 21st Street. The 12-story Dezer building located to the east of the project site at 4 W. 22nd Street (Lot 47) is a Beaux-Arts-style construction faced in terracotta and brick. The first floor has a projected display window under five segmental-arched windows on the second floor, the transitional third floor contained decorative terra-cotta panels which are repeated through floor nine. Floors 10 through 12 possess terra-cotta piers and ornamental grillwork. The 5-story building commercial building to the east of the site at 5 W. 21st Street (Lot 35) with frontage on W. 21st Street has a brick-fronted extension on the first two floors which is capped with decorative brickwork and corbelling. Floors 3 through 5 are faced in painted brownstone with three window openings on each floor.

The project area block is comprised of 2- to 6-story buildings to the west and along Sixth Avenue with taller buildings interspersed throughout the block. The portion of the block to the east of the project site includes buildings from 3- to 13-stories with frontages on Fifth Avenue occupied by ground floor retail spaces. The properties on the portion of the block to the west of the project site include a mix of commercial, mixed commercial/residential, residential, and manufacturing uses. Buildings with frontages on Sixth Avenue have ground floor commercial spaces mainly occupied by popular restaurant chains. Block 823 has uniformed setbacks and street wall that can be seen on many blocks throughout the study area.

Visual Resources and Natural Features

The project area block is fully urbanized and does not include any significant natural resources. However, all buildings are included in the Ladies' Mile Historic District and so possess significant built features.

Open Space

The project area block contains no open space resources.

Study Area

Streets

The street pattern in the overall study area is the typical Manhattan street grid system with wide avenues running north-south and narrow cross streets running east-west. Broadway interrupts this rectilinear street pattern at 23rd Street and Fifth Avenue to form irregular blocks along the eastern boundary of the study area. The east-west streets, excepting 23rd Street, carry local one-way traffic, while Fifth Avenue and Sixth Avenue each carries several lanes of southbound and northbound traffic, respectively. 23rd Street carries two-way traffic. Broadway carries southbound one-way traffic. The principle arterials within the study area include Fifth Avenue,

Sixth Avenue, and Broadway. Sixth Avenue extends on a north-south alignment from the intersection of Franklin and Church Streets in Lower Manhattan to 59th Street by Central Park. Fifth Avenue extends on a north-south alignment from Washington Square Park to the Harlem River Drive. Broadway, running diagonally to the typical Manhattan street grid, extends on a north-south alignment from Bowling Green through the northern portion of Manhattan and enters the Bronx. Sixth Avenue, Fifth Avenue, and 20th and 21st Streets have mapped bicycle paths; Broadway has a mapped, protected bike path and greenway between 23rd and 19th Streets. Broadway, 23rd Street and Fifth Avenue, between 22nd and 26th Streets, are also local truck routes.

The streetscape elements of the study area typically include wide sidewalks with few street trees. Other streetscape elements include the following typical street furniture: standard street signs, cobra head lampposts, mesh and custom waste receptacles, fire hydrants, parking meters, newspaper dispensers, mail boxes, bus stop signs and shelters, recycling bins, and bike racks. Most of the study area streets are lined with parallel-parked vehicles.

Northern Sub-Area

The Northern Sub-Area is bounded by W. 24th Street on the north, Fifth Avenue on the east, W. 22nd Street on the south, and Sixth Avenue on the west. The sub-Area is bisected by W. 23rd Street, a major commercial throughway. This portion of the Sub-Area contains a range of low to high density buildings (refer to Figure D-3 for Building Density), and residential, commercial, institutional, manufacturing, and mixed uses. The largest buildings in the study area are located with the Northern Sub-Area.

Buildings

Blocks 825 and 824, the blocks in the Northern Sub-Area, are mostly occupied by a mix of tall, high density commercial developments and low rise commercial buildings. Many of the store and loft buildings on Block 825 have frontages on both W. 24th and W. 23rd Streets. As detailed in Attachment C, Block 825 includes: a landmarked Masonic Building, which is a 19-story Beaux-Arts building completed in 1913; buildings with frontages on both W. 23rd and W. 24th Streets including the neo-Gothic building at 49 W. 23rd Street/30 W. 24th Street, the 8-story building at 43 W. 23rd Street/24 W. 24th Street, and the Touro College building at 27 W. 23rd Street/8 W. 24th Street; and the 630,000-gsf Fifth Avenue Building (formerly known as the Toy Center Building) located at the intersection of Broadway, Fifth Avenue and W. 23rd Street. The Fifth Avenue building has a sky bridge on the ninth floor which was added after the building's completion and connects to the building across W. 24th Street. Block 824 is occupied by the mixed residential/commercial development at 696 Sixth Avenue, a comparatively new construction completed in 2000; landmarked structures at 37 W. 22nd Street/48 W. 23rd Street, 9 W. 22d Street/28 W. 23rd Street, and 3 W. 22nd Street; and additional 4- to 9-story landmarked buildings along Fifth Avenue.

Visual Resources and Natural Features

A significant visual resource in the Northern Sub-Area is the sidewalk clock at 200 Fifth Avenue. Designated a City landmark in 1981, the clock was constructed in 1909 to advertise the Fifth Avenue Building. As detailed above, the Northern Sub-Area is within the boundaries of the Ladies' Mile Historic District and contains significant visual resources. There are no natural features located in the Northern Sub-Area.

Open Space

The Northern Sub-Area does not include any open spaces. However, the eastern boundary of the study area lies next to the approximately 27,000-sf Madison Square Park. This open space offers views of the surrounding buildings and skyline, particularly the historic Flatiron Building located at the southern end of the park. Northeast of the Sub-area is General Worth Square, a small public plaza bounded by W. 25th Street, Fifth Avenue, W. 24th Street, and Broadway, containing a monument marking the grave of its namesake.

Southern Sub-Area

The Southern Sub-Area contains Block 823 (the project site block), Block 822 and Block 821, and is bounded to the north by W. 22nd Street, to the east by Fifth Avenue, to the south by W. 19th Street, and to the west by Sixth Avenue. This Sub-Area is predominantly commercial with some residential and mixed commercial/residential developments with a high concentration of 3- to 6-story building (see Figure D-4, Building Heights). Many of the structures in the Southern Sub-Area are individually landmarked or located within the Ladies' Mile Historic District.

Buildings

As described in Attachment C, "Land Use, Zoning, and Public Policy", the Southern Sub-Area is occupied by commercial, mixed commercial/residential, residential and some remaining manufacturing uses. Blocks 821 through 823 include high lot-coverage buildings that range from 2- to 6-stories (see Figure D-3, Existing Density). Block 823, the project block, includes: the project site, Lot 31, which is currently being used for parking; the previously detailed Dezer Building; landmarked structures in the Beaux-Arts, Italianate, and Art Deco styles; and a concentration of 2- to 6-story buildings on the block's Sixth Avenue frontage. Block 822 includes: the former Church of the Holy Communion Complex, which is located on western portion of the block, a collection of neo-Renaissance buildings comprising a former church, sisters' house, parish house, and rectory. The rest of the western frontage of Block 822 consists of a series of landmarked rowhouses and a two-story building with a glass facade constructed in 1960. The interior and eastern frontage of Block 822, like many blocks throughout the study area, mainly consists of taller buildings of 7- to 12-stories. These buildings, on Block 822's northern and southern frontage, are typically landmarked commercial loft constructions in the neo-Renaissance style. Block 821 includes: the 10-story Bradbury Building on the southwest corner of the block; the Methodist Book Concern, faced in red brick and white stone, constructed by the Methodist Episcopal Church; and several converted 5-story buildings originally constructed as residences.

Visual Resources and Natural Features

The Southern Sub-Area does not include any significant natural resources. As detailed above, this area contains significant visual resources including many individually landmarked structures and contributing historic resources in the Ladies' Mile Historic District.

Open Space

The Southern Sub-Area does not include any open spaces.

Eastern Sub-Area

The Eastern Sub-Area comprises the irregularly-shaped eastern portions of Blocks 848 through 851 as Broadway crosses the rectilinear Manhattan street grid. This triangular-shaped Sub-Area is bounded to the west by Fifth Avenue, to the south by E. 19th Street, and to the north/east by Broadway. This portion of the study area, contains a range of low to high density buildings (refer to Figure D-3 for Building Density), and commercial, residential, mixed residential-commercial, and manufacturing uses.

Buildings

Buildings on the Eastern Sub-Area blocks include 3- to 5-story residences from the Flatiron District's earliest phases of development which have been converted to commercial use, low- and mid-rise commercial loft buildings (though have some have been converted back to mixed-use in recent years), with a few high-rise buildings interspersed. Blocks in this portion of the study area contain many buildings which once belonged to major retailers such as Lord & Taylor. Currently, there are commercial, residential, mixed-commercial-residential, and manufacturing uses in the Eastern Sub-Area. Buildings heights range from 3-story converted buildings to the 21-story landmarked Flatiron Building (see Figure D-4).

The portion of Block 848 within the study area includes: the Gorham Building in the Queen Anne style, an uncommon building style in the Flatiron District; the former Lord & Taylor Building, which housed the prestigious retailer on the segment of Broadway called "The Ladies' Mile" which passes through the study area; various buildings on the block's north side that formed the Lord & Taylor complex; 5- to 10-story commercial buildings on the south side of the block; a parking lot on the block's north side, one of the few undeveloped properties in the study area. Block 849 consists of mainly commercial and mixed commercial/residential uses with mainly Renaissance-inspired buildings on its northern and southern frontages. Block 850 is a short block containing three structures on it southern frontage and mainly 3- to 5-story commercial buildings along Broadway and Fifth Avenue. The triangle-shaped Block 851 at the intersection of Broadway and Fifth Avenue is solely occupied by the iconic Flatiron Building. Completed in 1903 in the Beaux-Arts style, this building is currently used for commercial-office space.

Visual Resources and Natural Features

The Eastern Sub-Area does not include any significant natural resources. As detailed above, this area contains significant visual resources. The Eastern Sub-Area is within the boundaries of the Ladies' Mile Historic District.

Open Space

The Eastern Sub-Area does not include any open spaces.

F. THE FUTURE WITHOUT THE PROPOSED ACTION (NO-ACTION)

Project Site

In the absence of the proposed project (RWCDS No-Action conditions), it is anticipated that the project site would be redeveloped as-of-right. It is assumed that the RWCDS No-Action development would be an approximately 314,497-gsf building with 266,506 gsf of above-ground space. Zoning would permit a 185-foot tall building with setbacks and/or penthouses above the 150-foot tall maximum permitted streetwall, and it is reasonable to assume that LPC would issue a Certificate of Appropriateness for a design with one level setback from the front streetwall, as LPC has previously approved buildings with similar designs in the Ladies' Mile Historic District. Thus, it is assumed the RWCDS No-Action development would be a 16-story (approximately 161-foot tall) building with towers facing both frontages. Each tower would have 150-foot tall streetwall, consisting of 15 stories, and above the streetwall the 16th story would have a front setback of 15 feet and a rear setback of 10 feet. These towers would be connected at the base with a full lot coverage first floor and two below-grade levels.

Study Area

Within the study area, there are three projects that are expected to be completed by 2017. These development sites would include mostly medium-scale buildings that would comply with building bulk, use and type set forth by the zoning and by the neighborhood's landmark designation; thereby not significantly altering urban design or visual resources in the area. These new developments will infill underdeveloped sites, which are expected to follow and continue ongoing trends to convert manufacturing properties to residential and/or commercial uses. These projects are not anticipated to alter existing street hierarchy or block forms in the study area.

Table C-3 in Attachment C, "Land Use, Zoning, and Public Policy", identifies the No-Build developments that are projected to occur in the study area in the future without the proposed action. There are three anticipated No-Build developments involving new construction or changes in use to existing structures. These new developments are identified as No-Build Developments A, B, and C in Table C-2.

No-Build Site A, 21 W. 20 Flatiron, located in Block 822 (Lot 19), is currently under construction and will result in a 15-story high-lot coverage mixed residential/commercial

development. The building will have 12 market rate condominiums. It is expected to be completed and occupied in 2015 (see Figure C-4 in Attachment C). No-Build Site B is the 39 W. 23rd Street Anbau project on Block 825 (Lots 20 and 7501), a 22-story residential development slated for a 2017 completion. No-Build Site C involves the enlargement of existing commercial buildings at 31-33 W. 19th Street and 28-30 W. 20th Street situated on Block 821 (Lot 21).

G. THE FUTURE WITH THE PROPOSED ACTION (WITH-ACTION)

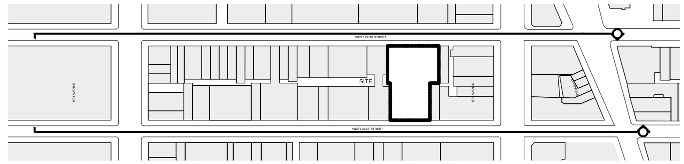
The proposed action includes special permits for Bulk Modifications and Additional Parking Spaces and seeks approval for the use of tax-exempt bond financing for development affecting Block 823, Lot 31 in the Flatiron District in Manhattan Community District 5. This section describes the effects of the proposed action on the urban design and visual resource conditions in the area by 2017, and evaluates the potential for the proposed action to result in significant adverse urban design impacts.

Project Site

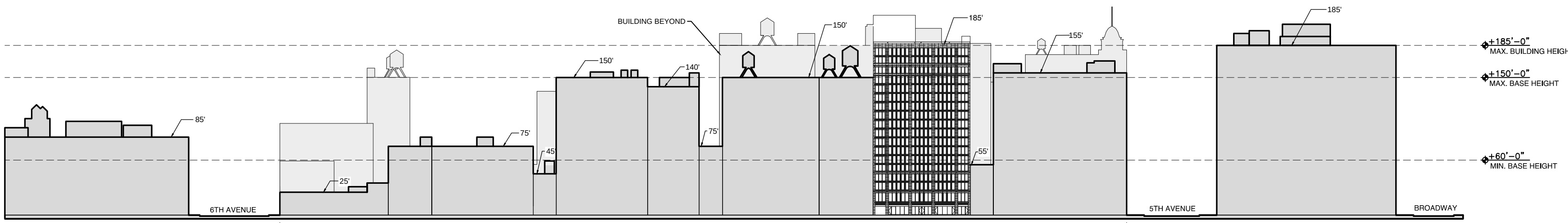
As described in Attachment A, "Project Description," the proposed project includes a proposed mixed-use, primarily residential building to be located on Block 823, Lot 31. The proposed action would include the development of an 18-story, 185-foot tall mixed residential/commercial building with frontages on W. 21st and W. 22nd Streets in the LPC-designated Ladies' Mile Historic District. The building would consist of two towers that would rise to the maximum allowable building height of 185 feet in a C6-4A zoning district without required front setbacks. Both residential towers would share a commercial base. The proposed project would have up to 200 below-grade public parking spaces, more than are allowed as-of-right. The proposed bulk special permit would also permit three other changes that would not be visible from the public street: 1) a modification to the rear setback requirement, allowing the 10-foot rear setback to be provided at a height of 154.5 feet, 4.5 feet above the 150-foot permitted maximum; 2) an obstruction in the rear yard area to permit an atrium that would be 30 feet long, 21 feet wide, and 25 feet tall (extending approximately 10 feet above the approximately 15-foot tall building base) that would be located adjacent to and provide a stairway connection with the second floor of the W. 21st Street tower; and 3) another obstruction in the rear yard to permit two garage exhaust vents located in a sunken, stepped garden area within the site's interior courtyard; the northern vent would be 6 feet, 6.5 inches by 8 feet, 6.5 inches, the southern vent would be 7 feet, 10.5 inches by 8 feet, 6.5 inches, and both vents will lie horizontally with their tops flush to the surface of the planting bed and as such would be only minimally visible within the courtyard area and not visible from the public street.

Study Area

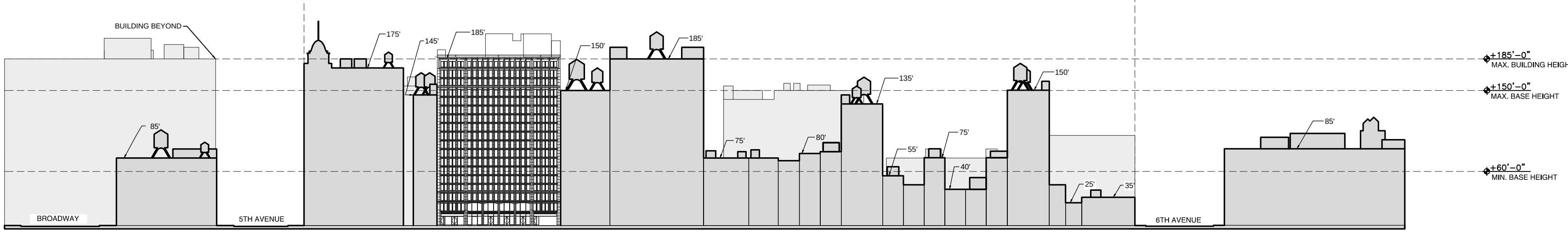
The proposed project is site-specific, and would not alter any street patterns, street hierarchies, block forms, building uses, bulk regulations or arrangements in the study area surrounding the project site. The proposed project would be consistent with the surrounding LPC-designated Ladies' Mile Historic District, as illustrated in Figures D-7 to D-9, which show the building volume permitted by the proposed action in the context of neighboring buildings, and as detailed



1 KEY PLAN



2 WEST 21ST STREET



3 WEST 22ND STREET

Note: Facade details are not subject to proposed special permit.
General appearence of facade is consistent with the requirements of the certificate of appropriateness

NOTE:
ALL BULKHEAD AND BUILDING HEIGHTS (EXCEPT FOR PROJECT) ARE APPROXIMATE AND PROVIDED FOR INFORMATION ONLY

7 WEST 21ST STREET

7 WEST 21ST STREET
NEW YORK, NY

Morris Adjmi Architects

MA

LEGEND :

ZONING LOT BOUNDARY

REVISION	ISSUE DATE	REMARKS

ULURP SUBMISSION

OWNER:
ROSE ASSOCIATES, INC
200 MADISON AVENUE, 5TH FLOOR
NEW YORK, NY 10016
T 212 328 5513

DESIGN ARCHITECT:
MORRIS ADJMI ARCHITECTS
45 EAST 20TH STREET, 11TH FLOOR
NEW YORK, NY 10003
T 212 982 2020
F 212 674 4511
MA.COM

ARCHITECTS AND PLANNERS:
THE STEPHEN B. JACOBS GROUPS, P.C.
381 Park Avenue South
NEW YORK, NY 10016
T 212 421 3712

STRUCTURAL ENGINEER:
ROSENWASSER/ GROSSMAM
CONSULTING ENGINEERS, P.C.
485 SEVENTH AVENUE, SUITE 1510
NEW YORK, NY 10018
T 212 564 2424

M.E.P. ENGINEER:
FMC ENGINEERING, P.C.
261 WEST 35TH STREET, #12A
NEW YORK, NY 10001
T 212 643 1720

TRANSPORTATION ENGINEER:
PHILIP HABIB & ASSOCIATES
102 MADISON AVENUE, 11TH FLOOR
NEW YORK, NY 10016
T 212 929 5656

DATE	08 JULY 2014
SCALE	AS NOTED

Z-201

2014 MA SHEET 1 OF X

7 W. 21st Street EAS

Figure D-7

Proposed Project/RWCDS With-Action Building Massing Context

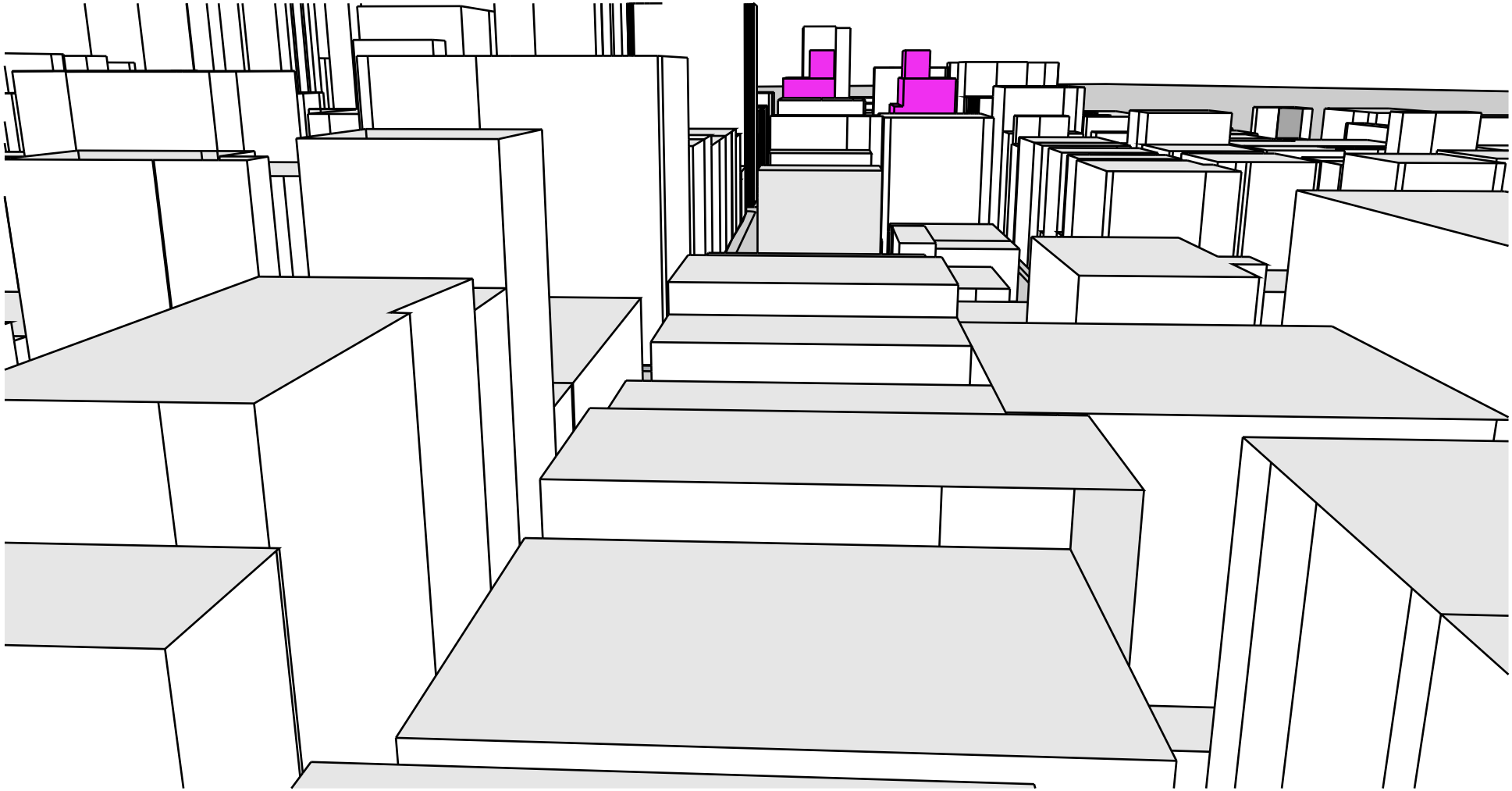
WEST 21ST STREET STREETSCAPE

WEST 22ND STREET STREETSCAPE

Note: Facade details are not subject to proposed special permit. General appearence of facade is consistent with the requirements of the certificate of appropriateness

Figure D-8

Proposed Project/RWCDS With-Action Front Elevation

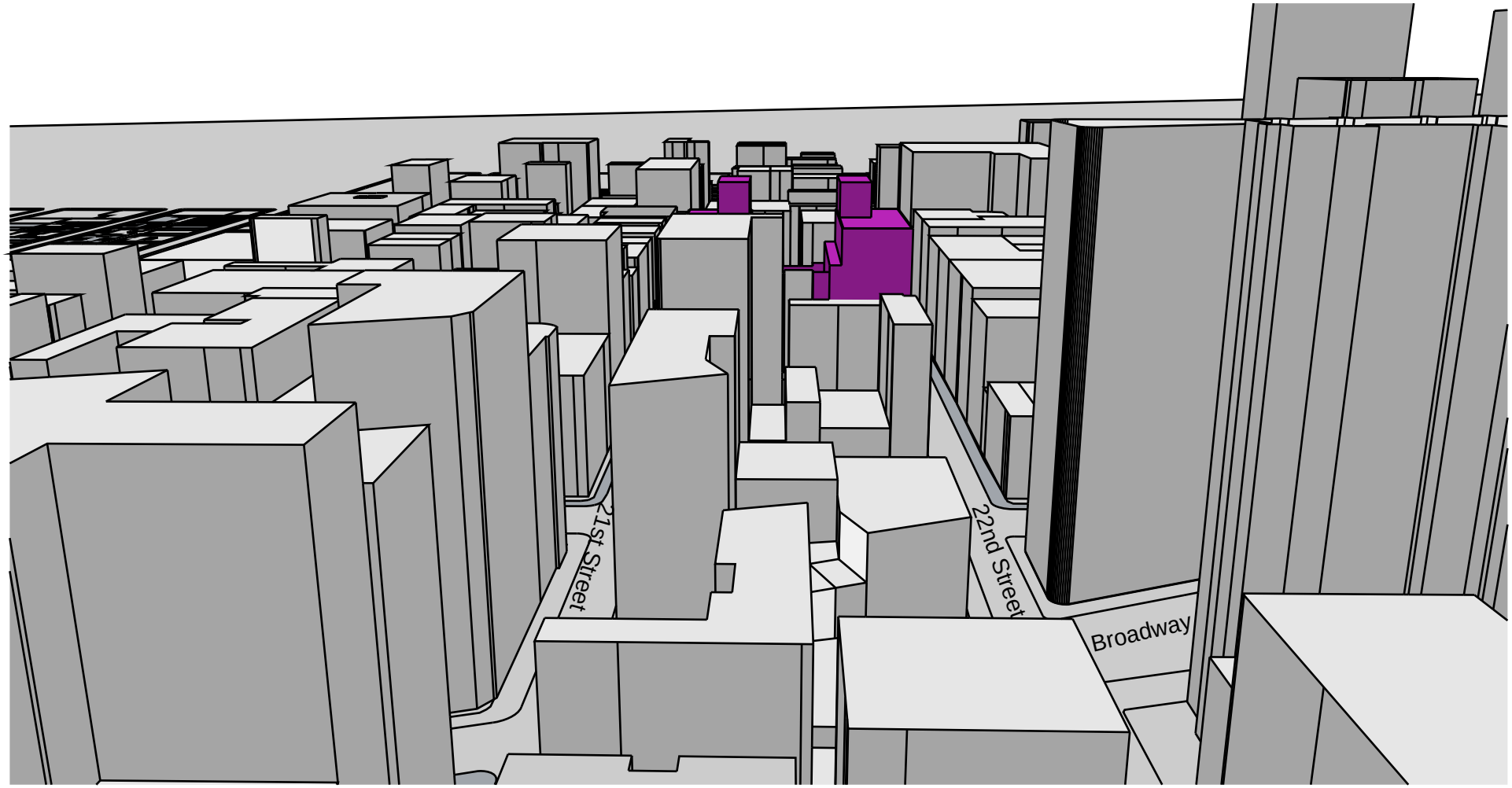


Proposed Development

7 W. 21 Street EAS

Figure D-9a

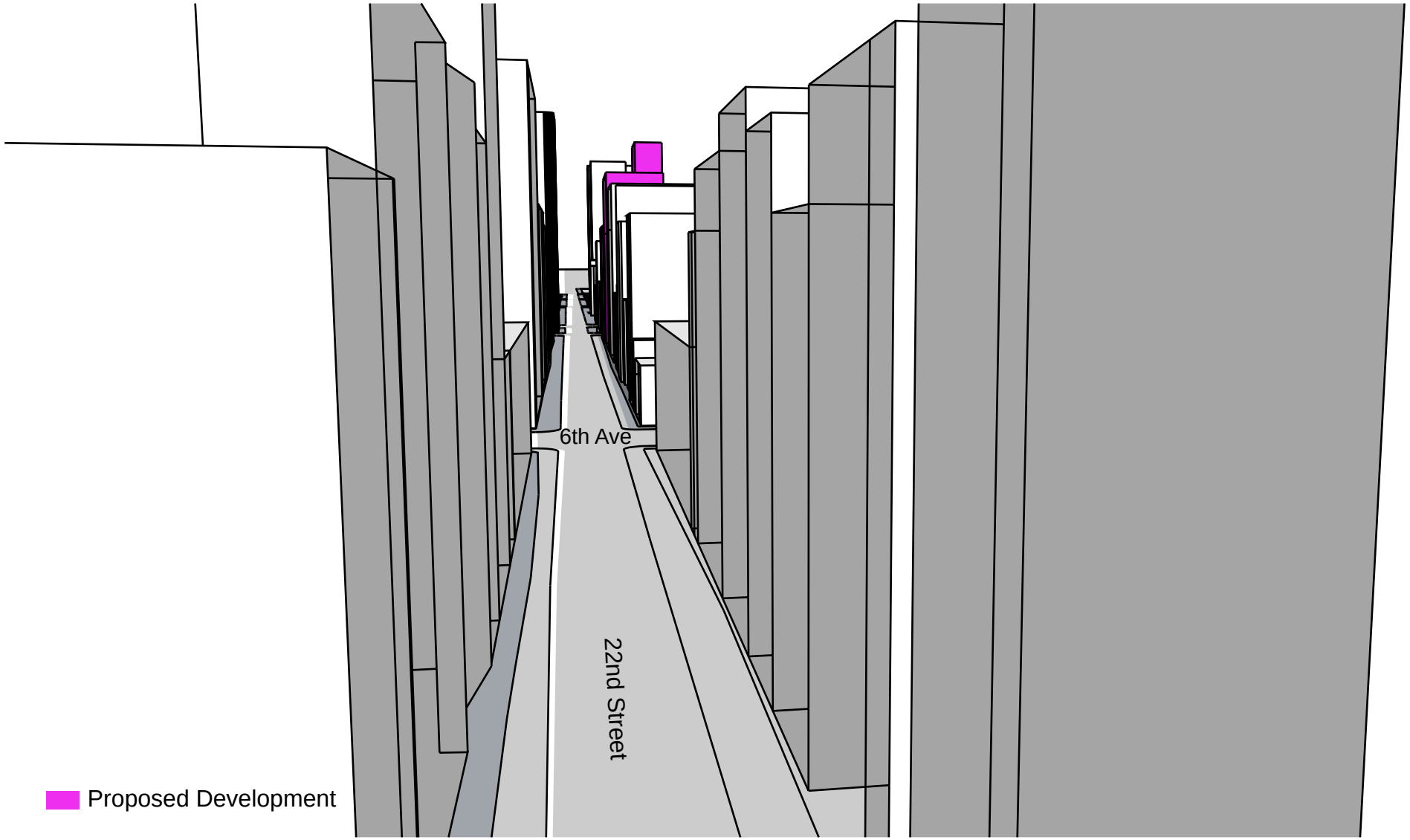
3-d Streetscape Photo Illustration: West 22st Street Looking East



Proposed Development

7 W. 21 Street EAS **Figure D-9b**

3-d Streetscape Photo Illustration: West 22st & West 21st Street Looking West



3-d Streetscape Photo Illustration: West 22st Street Looking East

in the C of A (refer to Appendix A). Development on the project site would complete the streetwall on the W. 21st and W. 22nd Street frontages in a manner that appropriately reflects the aesthetics of surrounding landmarked structures. This would reinforce a consistent built character to the midblock area and provide continuity with surrounding buildings that is currently lacking due to the underutilization of the project site. The proposed project would complement the existing surrounding buildings and would have a positive visual effect on the surrounding area.

It should be noted that Figures D-7 and D-8 show the proposed general appearance of the building facades that are not subject to the proposed special permit. However, the design of the facades is subject to the C of A.

Assessment

Project Site

As described above, the proposed project would be located in a historic district with a range of uses, building types and heights reflecting the development periods of the Ladies' Mile/Flatiron District area. It would complement the existing trend towards residential and commercial uses in the area and would further activate and enliven the street level frontages on W. 21st and W. 22nd Streets. It would facilitate development of an underutilized lot that detracts from the unique urban aesthetics of the Flatiron District, enhancing pedestrian experiences in the area. The proposed action would not result in changes in block form, the demapping of streets or the mapping of new streets, nor would it affect the street hierarchy. Further, the proposed project would not block any significant view corridors, view of visual resources, or limit access to any visual resources in the study area. Therefore, the proposed action would not result in any significant adverse impacts on urban design on the project site, and no significant adverse impacts on visual resources are anticipated as a result of the proposed project.

Study Area

The proposed project is limited to the project site and would complement the urban character of the neighborhood. It would not affect any existing views of visual resources in the study area as it would not impede any existing public views of notable built or natural features. Accordingly, the proposed action would not result in any significant urban design and visual resources impacts in the study area.

ATTACHMENT E:
AIR QUALITY – STATIONARY SOURCE ANALYSIS

I. INTRODUCTION

The proposed action would facilitate the new development of the property at 7 W. 21st Street in Manhattan on Block 823 Lot 31. The previously projected building on this site was studied as part of the EAS for the 2004 rezoning amendment of the Ladies' Mile Rezoning Project in Community District 5. That amendment contained restrictions related to hazardous materials, noise, and air quality. As it pertains to air quality, it was stated in the amendment, as an E-designation, that any development on the above-referenced property must use natural gas as the fuel for the development's heating, ventilation and air conditioning (HVAC) to avoid a significant adverse impact of the HVAC emissions.

The current design would facilitate development of a residential building on the same site but with a new conceptual design, including two 18-story, 185-foot tall, towers facing each other, with frontages on W. 21st and W. 22nd Streets (Figure E-1). The tower facing W. 22nd Street would house an exhaust stack for the HVAC system for the whole building (i.e., including both towers). The boiler stack is proposed to be located 3 feet above the mechanical bulkhead on the roof of the north tower.

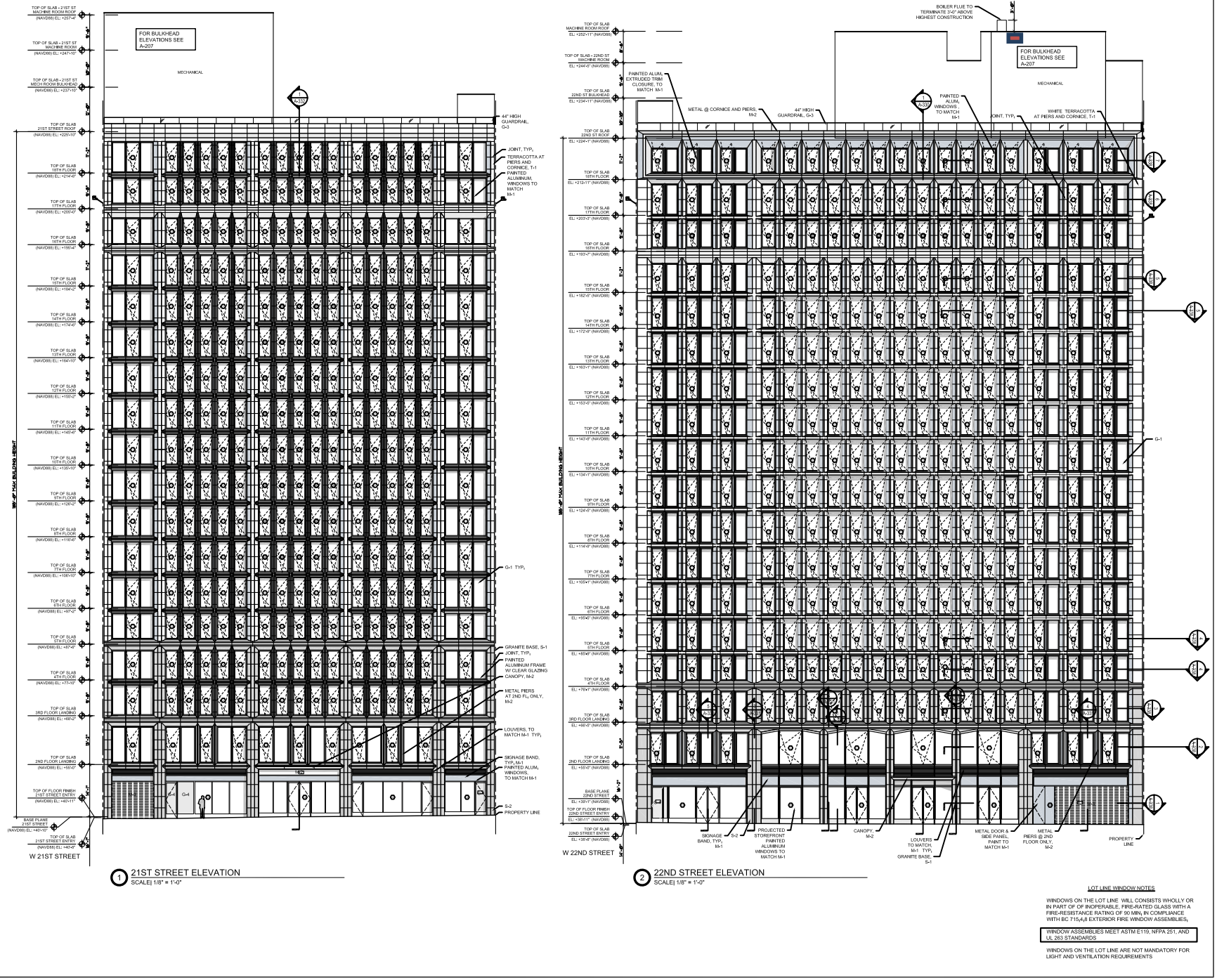
Emissions released from the HVAC system through the stack could potentially affect sensitive receptors (i.e., operable windows) on the other tower (project-on-project) as well as on a nearby 21-story commercial/office building (project-on-existing). The potential air quality impacts of these emissions were estimated following the procedures and methodologies prescribed in the 2014 *New York City Environmental Quality Review (CEQR) Technical Manual*.

However, in accordance with CEQR guidance and as discussed in Attachment B:

- Because the number of project-generated vehicles (automobiles) would be below CEQR screening threshold values at any affected intersection, no significant mobile source air quality impacts are expected as a result of the proposed development; and
- As the development site already allows for residential uses, there is no need to conduct an analysis to estimate the potential air toxic impacts of existing industrial facilities on the proposed development.

II. MOBILE SOURCE ANALYSIS

Changes in vehicular travel associated with the proposed development have the potential to result in significant mobile source (vehicular related) air quality impacts. The potential impact of the vehicular emissions associated with the proposed development was considered.



7 W. 21st Street EAS **Figure E-1**

Proposed Building Conceptual Design with Two Tower Configuration (front elevation)

Localized increases in CO levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed development. According to the 2014 *CEQR Technical Manual* screening threshold criteria for this area of the City, if 170 or more project-generated vehicles pass through a signalized intersection in any given peak period, there is potential for mobile air quality impacts and a detailed analysis is required.

A preliminary traffic analysis for the proposed residential development site indicates that the number of project-generated vehicles was below CEQR screening threshold values during both the AM and PM peak periods at any affected intersection. Therefore, no detailed air quality analysis is required and no significant mobile source air quality impacts are expected as a result of the proposed development. The air quality analysis, therefore, focuses on potential stationary source impacts.

III. STATIONARY SOURCE ANALYSIS

Relevant Air Pollutants

The EPA has identified several pollutants, which are known as criteria pollutants, as being of concern nationwide. As the proposed building would be heated by the natural gas, the two criteria pollutants associated with natural gas combustion – nitrogen dioxide (NO_2) and particulate matter smaller than 2.5 microns ($PM_{2.5}$) – were considered for analysis with $PM_{2.5}$ being the critical pollutant.

Applicable Air Quality Standards and Significant Threshold Values

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA. The NAAQS are concentrations set for each of the criteria pollutants in order to protect public health and the nation's welfare, and New York has adopted the NAAQS as the State ambient air quality standards.

In addition to the NAAQS, the 2014 *CEQR Technical Manual* requires that projects subject to *CEQR* apply a $PM_{2.5}$ criteria (based on concentration increments) developed by the New York City Department of Environmental Protection (NYCDEP) to determine whether potential adverse $PM_{2.5}$ impacts was significant. If the estimated impacts of a proposed project are less than these increments, the impacts are not considered to be significant.

This analysis addressed compliance of the potential impacts of the proposed project with the 1-hour and annual NO_2 NAAQS and the 24-hour and annual $PM_{2.5}$ *CEQR* incremental concentration thresholds. The current standards that were applied to this analysis, together with their health-related averaging periods, are presented in Table E-1.

Table E-1,
Applicable National Ambient Air Quality Standards

Pollutant	Averaging Period	National and State Standards
NO_2	1 Hour	0.10 ppm (188 µg/m^3)
	Annual	.053 ppm (100 µg/m^3)
$PM_{2.5}$	24 Hour	35 µg/m^3
	Annual	12 µg/m^3

Source: US Environmental Protection Agency, "National Primary and Secondary Ambient Air Quality Standards." (49 CFR 50) (www.epa.gov/air/criteria.html) and New York State Department of Environmental Conservation (http://www.dec.ny.gov/chemical/8542.html.

Notes: ppm = parts per million
µg/m^3 = micrograms per cubic meter

NO_2 NAAQS

Nitrogen oxide (NOx) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NOx in these emissions are then gradually converted to NO_2, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The 1-hour NO_2 NAAQS standard of 0.100 ppm (188 ug/m^3) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100 percent) conversion of NOx to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80 percent to the NOx estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model.

With background concentrations included, the model internally adds up the 8th highest daily maximum NO_2 concentrations and the hourly NO_2 background concentrations, and averages these values over the numbers of the years modeled. Total estimated concentrations are then generated in the statistical form of the 1-hour NO_2 NAAQS format and can be directly compared with the 1-hour NO_2 NAAQS standard. This approach that is recognized as being conservative by EPA and NYCDEP and is referenced in EPA modeling guidance was used in the analysis.

The annual NO_2 standard is 0.053 ppm (100 ug/m^3). In order to conservatively estimate annual NO_2 impacts, a NO_2 to NOx ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO_2 analysis, was applied.

$PM_{2.5}$ Significant Threshold Values (STV)

CEQR guidance includes the following criteria for evaluating potential 24-hour $PM_{2.5}$ impacts:

> *The 24-hour STV for $PM_{2.5}$ is defined as the half of the difference between the 24-hour $PM_{2.5}$ NAAQS of 35 ug/m^3 and the 3-year average of applicable $PM_{2.5}$ background concentrations, and should be based on the maximum value estimated for any year of the five analysis years.*

The 24-hour $PM_{2.5}$ background concentration of 26 ug/m^3 was obtained from the monitoring station closest to the development site Manhattan -- PS19. It was compiled by the NYCDEP as the average of the 98th percentile for the latest 3 years of available monitoring data collected by the NYSDEC for 2010-2012 (CEQR Page 27, Monitored Pollutant Background Level for Various Region within New York City, December 2013 Update). As the applicable background value is 26 ug/m^3, half of the difference between the NAAQS and this background value is 4.5 ug/m^3. As such, a STV of 4.5 ug/m^3 was used for determining whether potential 24-hour $PM_{2.5}$ impacts on the proposed development are considered to be significant.

For annual average $PM_{2.5}$ concentration increments, according to CEQR guidance:

> *An annual concentration increment that is predicted to be greater than 0.3 ug/m^3 at a discrete receptor location (elevated or ground level) is considered to be significant.*

The above 24-hour and annual STVs was used to evaluate the significance of the predicted $PM_{2.5}$ impacts on the proposed development.

CEQR Screening Analysis

A review of existing land uses within 400 feet of the development site via the New York City Open Accessible Space Information System (OASIS) Land Use interactive mapping application and Google imaging map shows that the only nearby taller building is a 21-story commercial/office building located on Block 851, Lot 1 (the Flatiron Building at 175 Fifth Avenue).

Based on CEQR guidance, as a first step, a screening analysis was conducted to predict the potential impacts of the emissions from the W. 22nd Street tower HVAC system on:

- The taller 21-story commercial/office building; and
- The proposed W. 21st Street tower.

The total gross square footage (gsf) of the projected building (344,800 gsf) was used in the analysis and the CEQR TM Air Quality Appendix Figure 17-7 was applied. This nomograph depicts size of the development versus distance below which the potential impact can occur, and provides an estimate of the threshold distance.

If the actual distance between a stack and the affected building is greater than the threshold distance for a building size, then that building passes the screening analysis (and no significant impact is predicted). However, if the actual distance is less than the threshold distance for a building, then there is a potential for a significant impact and a detailed analysis would be required.

The threshold distance for the W. 22nd Street tower, with 344,800 gsf of the floor area, was determined to be approximately 135 feet while the actual distance:

- To the commercial/office building is 315 feet; and
- To the W. 21st Street tower is 80 feet.

The result of the screening analysis, therefore, is while the nearby commercial/office building passed the screen (and no further analysis for that building is required), the W. 21st Street tower failed the screen and a detailed building-on-building dispersion analysis is required for that tower.

Dispersion Analysis

A dispersion modeling analysis was conducted to estimate impacts from the stack emissions of the W. 22nd Street tower using the latest version of EPA's AERMOD dispersion model 7.9 (EPA version 14134). In accordance with CEQR guidance, this analysis was conducted assuming stack tip downwash, urban dispersion surface roughness length, and the elimination of calms. AERMOD's Plume Volume Molar Ratio Method (PVMRM) module was utilized for 1-hour NO_2 analysis -- to account for NOx to NO_2 conversion.

Emissions

Emission rates were estimated as follows:

- Emission rates of NOx and $PM_{2.5}$ were calculated based on annual fuel usage corresponding to the gross floor area of the each building, EPA AP-42 emission factors for natural gas combustion in small boilers, and gross heating values of natural gas (1,020 Btu per million cubic feet).
- $PM_{2.5}$ emissions from natural gas combustion were accounted for both fractions – filterable and condensable particulate matter.
- Short-term NO_2 and $PM_{2.5}$ emission rates were estimated by accounting for seasonal variation in heat and hot water demand.
- The natural gas fuel usage factor (45.2 cubic foot per square foot per year) used to estimate annual natural gas usage was obtained from *CEQR Air Quality Technical Appendix,* Table C25, Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings in New York City, 2003.

Table E-2 provides pollutant emission rates from the boiler firing natural gas used in the dispersion analysis. The diameter of the stacks and the exhaust's exit velocities were estimated based on values obtained from NYCDEP "CA Permit" database for the corresponding boiler

sizes (i.e., rated heat input or million Btus per hour). Boiler sizes were estimated based on assumption that all fuel was consumed during the 100 day (or 2,400 hour) heating season. The stack exit temperature was assumed to be 300°F (423°K), which is appropriate for boilers.

Table E-2: $PM_{2.5}$ and NO_2 Emission Rates from Natural Gas Combustion

Stack ID	Annual Natural Gas Usage (1)	Emission Factors		Boiler Heat Load (4)	Annual Emission Rates		Peak Short-Term Emission Rates
	scf/yr	lb/10^6scf	lb/MMBtu	MMBtu/hr	lb/yr	g/sec	g/sec
Stack on the 22nd Street Tower	15,584,960	$PM_{2.5}$ Emission Factor (2)		6.6	$PM_{2.5}$ Emission Rates		
		7.6	0.0075		118	1.70E-03	6.22E-03
		NO_2 Emission Factor (3)			NO_2 Emission Rates		
		100	0.098		1,558	2.24E-02	8.18E-02

Notes:

1. Annual gas usage was estimated based on the total floor area of the building of 344,800 square foot.
2. $PM_{2.5}$ emission factor for natural gas combustion of 7.6 lb/10^6 cubic feet included filterable and condensable particulate matter (Filterable $PM_{2.5}$=1.9 lb/10^6 cubic feet and condensable $PM_{2.5}$=5.7 lb/10^6 cubic feet (AP-42, Table 1.4-2).
3. NOx emission factor for natural gas of 100 lb/10^6 cubic feet for uncontrolled boilers with <100MMBtu/hr (AP-42, Table 1.4-1).
4. Boiler size was estimated based on a fuel consumption rate of 1,020 Btu/ft^3 and the assumption that all fuel is consumed in a 100 day (2,400 hours) heating season using the following equation: MMBtu/hr = X ft^3/yr / 2,400hrs/yr * 1020 Btu/ft^3/10^6 MMBtu/Btu.

Meteorological Data

All analyses were conducted using the latest five consecutive years of meteorological data (2008-2012). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. Data was processed by Trinity Consultants, Inc. using the current EPA AERMET version 12345 and the EPA procedure. These meteorological data will provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

Where applicable, meteorological data were combined to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs.

Background Concentrations

Hourly NO_2 and hourly ozone background concentrations was developed from available monitoring data collected by the NYSDEC at Queens College monitoring station for the 5 consecutive years (2008-2012), and compiled into AERMOD's required hourly emission (NO_2) and concentration (ozone) data format.

The annual NO_2 background concentration of 42 ug/m^3, which is the maximum annual average for latest 5 years (2008-2012), was used.

Stack and Receptor Locations

According to the design of the proposed building, the HVAC exhaust stack would be located on the top of the 214-foot tall mechanical bulkhead of the W. 22nd Street tower -- at a height of 217 feet above the ground. As the windows on the top floor of the W. 21st Street tower (i.e., where the highest impacts on any receptors are expected to occur) would be approximately 185 feet above the ground level, the top of the windows on this tower would be approximately 30 feet lower than the exhaust point of the proposed stack.

Receptors were placed around all faces of the W. 21st Street tower in 10 foot increments on all 18-floor levels, starting at 10 feet above the ground and extending up to the roof level to account for all potential impacts wherever they may occur. These receptors represent the operable windows of the proposed residential units.

Analysis were conducted with and without the effects of wind flow around the proposed towers (i.e., with and without downwash). While the highest impacts (particularly with direct plume impact without downwash) are expected to occur at the upper windows levels close to the stack elevation, the potential impacts of the exhaust plume with downwash effects could potentially be greater at lower windows levels. Ground-level receptors around the proposed towers were also considered. More than 700 receptors were considered in the analysis to assure that maximum impacts are estimated.

Results of Dispersion Analyses

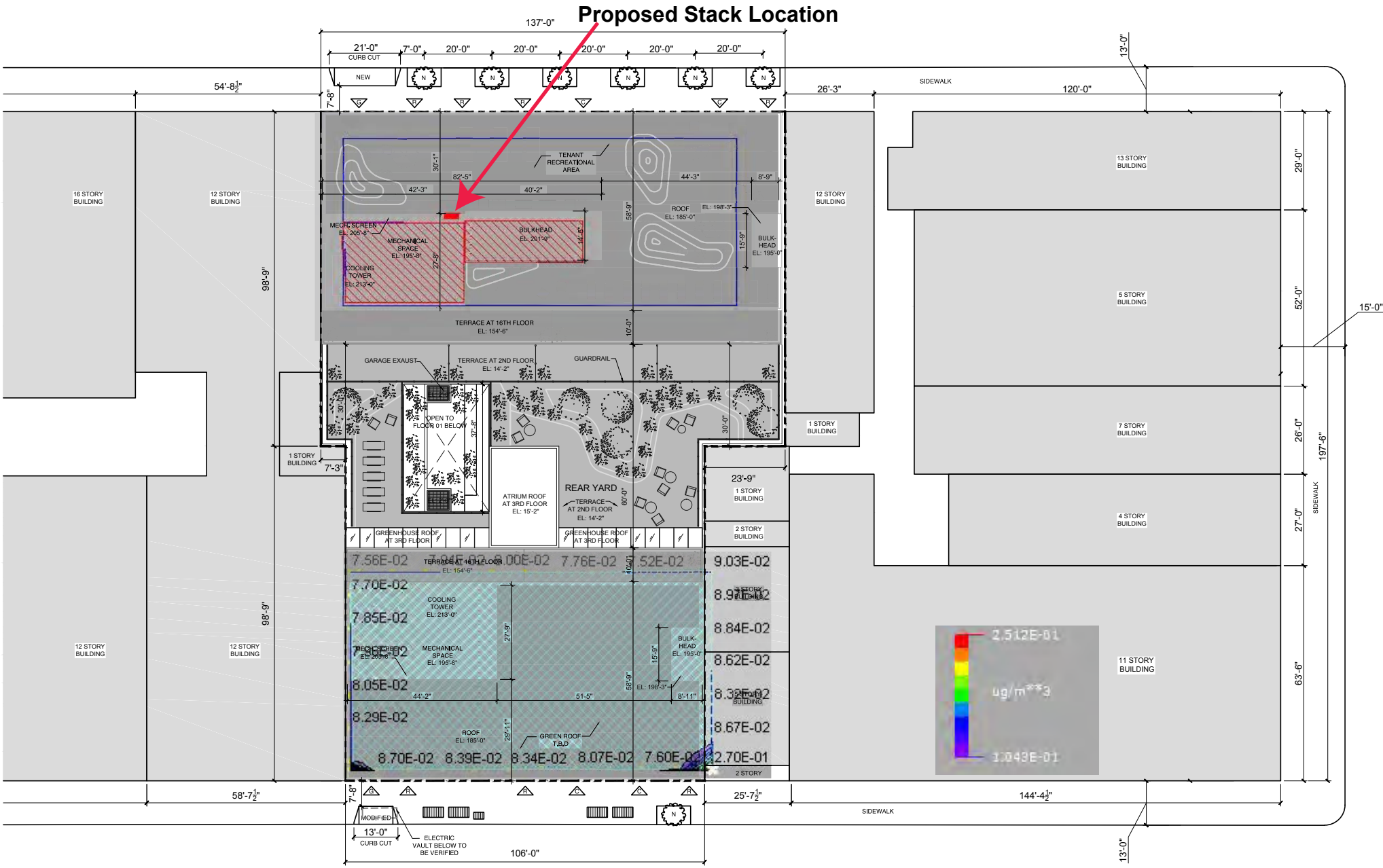
Results are compared with the 24-hour/annual $PM_{2.5}$ STVs, and the 1-hour/annual NO_2 NAAQS.

$PM_{2.5}$ Analysis Results

Results of the potential $PM_{2.5}$ impacts from W. 22nd Street tower emissions on residential uses of the W. 21st Street tower presented in Table E-3 (and Figure E-2) are as follows:

1. The maximum 24-hour $PM_{2.5}$ impact is estimated to be 0.27 ug/m^3 (with downwash); and
2. The annual average impact is estimated to be 0.02 ug/m^3

As shown, estimated values are less than the significant thresholds level for $PM_{2.5}$ of 4.5 ug/m^3 and 0.3 ug/m^3, respectively. Therefore, $PM_{2.5}$ emissions from the W. 22nd Street tower would not significantly impact the residential uses of the W. 21nd Street tower.



7 W. 21st Street EAS

Figure E-2

24-Hour PM 2.5 Impact Contoured Map

Table E-3: Maximum Potential $PM_{2.5}$ Impacts on the W. 21st Street Tower

Analysis Year	Stack on top of Mechanical Bulkhead
2008	0.23
2009	0.20
2010	**0.27***
2011	0.21
2012	0.25

***** Maximum estimated value

One-hour/Annual NO_2 Results

Results of the 1-hour NO_2 impacts of the W. 22nd Street tower emissions on the residential uses of the W. 21st Street tower are that the 1-hour NO_2 8th highest daily 1-hour concentration with added background hourly concentrations averaged over 5 years is 102.9 ug/m^3 (Table E-4 with downwash) and the maximum annual total NO_2 concentration is 42.2 ug/m^3 (impact of 0.2 ug/m^3 and background value of 42 ug/m^3). Both the 1-hour and annual NO_2 concentrations are less than the 1-hour and annual NO_2 NAAQS of 188 ug/m^3 and 100 ug/m^3, respectively. Therefore, the 1-hour and annual NO_2 emissions at the proposed stack location on the W. 22nd Street tower would not significantly impact the residential uses of the W. 21st Street tower.

Table E-4: Maximum Potential 1-Hour NO_2 Impact on the W. 21st Street Tower

Analysis Year	**Max Annual Impact** (ug/m^3)
2008	102.0
2009	102.0
2010	101.9
2011	108.3
2012	95.2

Note: The maximum estimated 5 year Average 1-hour NO_2 impact is 101.9 ug/m^3.

Summary of Results

The results of the $PM_{2.5}$ and NO_2 analyses, which are summarized in Table E-5, are that neither the applicable NAAQS nor STV will be exceeded.

Table E-5: Summary of Results

Pollutant/ Time Period	Maximum Estimated Impact (ug/m^3)	Background (ug/m^3)	Maximum Impact/Concentration (ug/m^3)	Evaluation Criteria (ug/m^3)
24-hr $PM_{2.5}$	0.27 with Downwash 0.13 Without Downwash	N/A	0.27	4.5 (*STV*)
Annual $PM_{2.5}$	0.02 with Downwash 0.003 Without Downwash	N/A	0.02	0.3 (*STV*)
1-hr NO_2	102.9 with Downwash 101.9 Without Downwash	*	102.9	188 (NAAQS)
Annual NO_2	0.2 with Downwash 0.04 Without Downwash	42	42.2	100 (NAAQS)

*The 1-hour NO_2 background concentration was added to estimated impacts on an hour-by-hour basis within the dispersion model.

IV. CONCLUSION

The result of the analysis is that no significant adverse air quality impacts from the HVAC emissions released from the W. 22nd Street tower stack are predicted.

(E) Designation

Based on the stationary source screening analyses, to preclude the potential for significant adverse air quality impacts from the proposed project's HVAC emissions, a new (E) designation for the proposed development would supersede the existing (E) designation. The new (E) designation would retain the natural gas requirement of the existing (E) designation and would specify a stack height requirement, as follows:

> *Manhattan Block 823, Lot 31: Any new residential and/or commercial development on the above-referenced properties must use natural gas for HVAC systems and ensure that the heating, ventilating and air conditioning stack is located on the northern (W. 22nd Street) tower at the highest tier or at least 214 feet high to avoid any potential significant adverse air quality impacts.*

APPENDIX A:
AGENCY CORRESPONDENCE

THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION
1 CENTRE STREET 9TH FLOOR NORTH NEW YORK, NY 10007
TEL: 212 669-7700 FAX: 212 669-7780

PERMIT

CERTIFICATE OF APPROPRIATENESS

ISSUE DATE:	EXPIRATION DATE:	DOCKET #:	COFA #:
04/08/14	10/15/2019	154493	COFA 15-6218

ADDRESS	BOROUGH:	BLOCK/LOT:
7 WEST 21ST STREET HISTORIC DISTRICT LADIES' MILE	MANHATTAN	823 / 31

Display This Permit While Work Is In Progress

ISSUED TO:

William Friedland, Manager
7 West 21 LLC
c/o Friedland Properties
22 East 65th Street
New York, NY 10021

Pursuant to Section 25-307 of the Administrative Code of the City of New York, the Landmarks Preservation Commission, at the Public Meeting of April 8, 2014, following the Public Meeting of October 15, 2013, and the Public Meeting and Public Hearing of September 24, 2013, voted to approve a proposal to amend Certificate of Appropriateness 15-0280 to construct a new building at the subject premises to include canopies. The approval will expire October 15, 2019.

The proposal, as approved, consists of the installation of two canopies above the ground floor residential entry bays facing West 21st Street and West 22nd Street, featuring metal cladding, chamfered profiles, recessed lighting and lettering. The proposal was shown in photographs and drawings labeled 1 through 18 dated by April 8, 2014, prepared by Morris Adjmi Architects, submitted as components of the application and presented at the Public Meeting.

With regard to this proposal, the Commission noted that the Ladies' Mile Historic district designation report describes the property as a vacant lot. The Commission also noted that Certificate of Appropriateness 15-0280, was issued October 25, 2013, for the construction of two buildings on the vacant through-block lot, facing West 21st Street and West 22nd Street, featuring 18-story terra cotta clad primary elevations with stone and metal elements.

With regard to this proposal, the Commission found that the widths of the canopies will respond to the widths of the entrance doors below, harmonizing with the architectural rhythm of the ground floor; that the scale of the canopies will not overwhelm either of the two entrances, or the ground floor of the building; that the

metal cladding, chamfered profile and recessed lighting of the proposed canopies will relate well to the design of the building; that the there is precedent in the district for canopies, both historic buildings and other Commission approved buildings; and that the proposed work enhance the special architectural and historic character of the building and the Ladies' Mile Historic District. Based on these findings, the Commission determined the work to be appropriate to the building and to the Ladies' Mile Historic District and voted to approve this application.

The Commission notes that the applicant is applying to the Department of City Planning for certain variances. Any changes to the design required by the Department of City Planning approval must be submitted to the Landmarks Preservation Commission for review and approval prior to the issuance of the final approval letter.PLEASE NOTE: This permit is issued contingent upon the Commission's review and approval of the final Department of Building filing set of drawings. No work can begin until the final drawings have been marked approved by the Landmarks Preservation Commission with a perforated seal. Please submit these drawings to the Landmarks Preservation Commission staff when they become available.

This permit is issued on the basis of the building and site conditions described in the application and disclosed during the review process. By accepting this permit, the applicant agrees to notify the Commission if the actual building or site conditions vary or if original or historic building fabric is discovered. The Commission reserves the right to amend or revoke this permit, upon written notice to the applicant, in the event that the actual building or site conditions are materially different from those described in the application or disclosed during the review process.

All approved drawings are marked approved by the Commission with a perforated seal indicating the date of approval. The work is limited to what is contained in the perforated documents. Other work or amendments to this filing must be reviewed and approved separately. The applicant is hereby put on notice that performing or maintaining any work not explicitly authorized by this permit may make the applicant liable for criminal and/or civil penalties, including imprisonment and fines. This letter constitutes the permit; a copy must be prominently displayed at the site while work is in progress. Please direct inquiries to Jared Knowles.

Robert B. Tierney
Chair

PLEASE NOTE: PERFORATED DRAWINGS AND A COPY OF THIS PERMIT HAVE BEEN SENT TO:
Valerie Campbell, Kramer Levin Naftalis & Frankel LLP

cc: Sarah Carroll, Director of Preservation/LPC

THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION
1 CENTRE STREET 9TH FLOOR NORTH NEW YORK, NY 10007
TEL: 212 669-7700 FAX: 212 669-7780

P.E.R.M.I.T

CERTIFICATE OF APPROPRIATENESS

ISSUE DATE:	EXPIRATION DATE:	DOCKET #:	COFA #:
10/25/13	10/15/2019	150228	COFA 15-0280

ADDRESS	BOROUGH:	BLOCK/LOT:
7 WEST 21ST STREET HISTORIC DISTRICT LADIES' MILE	MANHATTAN	823 / 31

Display This Permit While Work Is In Progress

ISSUED TO:

William Friedland
7 West 21 LLC
c/o Friedland Properties
22 East 65th Street
New York, NY 10021

Pursuant to Section 25-307 of the Administrative Code of the City of New York, the Landmarks Preservation Commission, at the Public Meeting of October 15, 2013 following the Public Meeting and Public Hearing of September 24, 2013, the Landmarks Preservation Commission voted to approve a proposal to construct a new building at the subject premises, as put forward in your application completed October 9, 2013, and as you were notified in Status Update Letter 14-9527 (LPC 147856), issued on October 15, 2013. The approval will expire October 15, 2019.

The proposal, as approved, consists of the construction of two buildings on the vacant through-block lot, facing West 21st Street and West 22nd Street, featuring 18-story terra cotta clad primary elevations with stone and metal elements, built in plane with the facades along both streets, with a base shaft and capital configuration and further broken up into 5 bays on West 21st Street and 10 bays and a two story base on West 22nd Street, with recessed window openings creating a gridded pattern on the facades. The proposal, as initially presented, included a design for a façade featuring 11 bays on West 22nd Street with a one story base. The proposal was shown in photographs and drawings labeled 1 through 26 dated by LPC staff October 15, 2013, prepared by Morris Adjmi Architects, submitted as components of the application and presented at the Public Hearing and Public Meeting. The proposal, as initially presented, was shown on boards labeled 1 through 20, dated September 24, 2013, prepared by Morris Adjmi Architects.

With regard to this proposal, the Commission noted that that the parking lot is not a property for which the Ladies' Mile Historic District was designated. The Commission also noted that the historical development of the Ladies' Miles Historic District occurred in several phases, resulting in a variety of building heights

and widths adjacent to each other, including early 19th century residential development which included residences and stable buildings; early commercial development which included mid-rise building and the commercial adaptation of some residential buildings and stables; turn of the century large department stores; 20th century large loft buildings and the conversion of older buildings to manufacturing use; and that many streets combine buildings from several or all of these periods, with taller buildings facing the avenues and the major cross-town streets, such as West 14th and West 23rd Streets; and that the facades of the taller buildings frequently feature a strongly articulated base, shaft, and crown and uniform materials (brick, stone and terra cotta), and classically inspired ornament. The Commission further noted that West 21st Street and West 22nd Street are comprised of a combination of large, early 20th Century commercial buildings and small scale 19th Century rowhouses with punched masonry openings and converted commercial ground floors.

With regard to this proposal, the Commission found that the existing parking lot is not a feature for which the Ladies' Mile Historic District was designated, and the construction of a new building on the site will complete the street wall and will return the location to a built form in keeping with the history of the historic district; that the construction of a new building will reinforce the continuity of the streetwall which is currently disrupted on both West 21st and 22nd Streets by the parking lot; that the façades of the proposed new building will maintain the street wall and are in keeping with the scale of buildings found in this district and on this block; that the careful massing of the building into two distinct, but architecturally related parts allows the facades to relate successfully to the streetscape on both West 21st Street and West 22nd Street; that the proposed height and massing of both new buildings will be compatible with other buildings on these streets and in this historic district; that the facades of the proposed new building are arranged with a base, shaft and termination recalling the typical composition of the early 20th Century commercial buildings located throughout the historic district; that the stone terra cotta and metal façade materials and metal windows of the proposed new building will relate well to the materials found on buildings on both streets and in the historic district; that the dense pier grid will downplay the floor heights and proportions, while the heavier vertical and horizontal elements will relate to the scale and proportions of historic buildings in the district; that the simple recessed detailing of the grid is an abstraction of the robust projecting ornament on the historic facades in this historic district; that while the detailing is simple, it will create a level of depth and articulation typically found in the facades of the historic buildings in the district; and that the proposed work enhance the special architectural and historic character of the building and the Ladies' Mile Historic District. Based on these findings, the Commission determined the work to be appropriate to the building and to theLadies' Mile Historic District and voted to approve this application.

The Commission notes that the applicant is applying to the Department of City Planning for certain variances. Any changes to the design required by the Department of City Planning approval must be submitted to the Landmarks Preservation Commission for review and approval prior to the issuance of the final approval letter.

PLEASE NOTE: This permit is issued contingent upon the Commission's review and approval of the final Department of Building filing set of drawings. No work can begin until the final drawings have been marked approved by the Landmarks Preservation Commission with a perforated seal. Please submit these drawings to the Landmarks Preservation Commission staff when they become available.

Also, as the approved work consists of subsurface work, the applicant is required to strictly adhere to the Department of Buildings TPPN 10/88 governing in-ground construction adjacent to historic buildings. It is the applicant's obligation at the time of applying for their permit to inform the Department of Buildings that the TPPN applies.

This permit is issued on the basis of the building and site conditions described in the application and disclosed during the review process. By accepting this permit, the applicant agrees to notify the Commission if the actual building or site conditions vary or if original or historic building fabric is discovered. The Commission reserves the right to amend or revoke this permit, upon written notice to the applicant, in the event that the actual building or site conditions are materially different from those described in the application or disclosed during

the review process.

LPC

All approved drawings are marked approved by the Commission with a perforated seal indicating the date of approval. The work is limited to what is contained in the perforated documents. Other work or amendments to this filing must be reviewed and approved separately. The applicant is hereby put on notice that performing or maintaining any work not explicitly authorized by this permit may make the applicant liable for criminal and/or civil penalties, including imprisonment and fines. This letter constitutes the permit; a copy must be prominently displayed at the site while work is in progress. Please direct inquiries to Jared Knowles.

APPROVED

Robert B. Tierney
Chair

PLEASE NOTE: PERFORATED DRAWINGS AND A COPY OF THIS PERMIT HAVE BEEN SENT TO:
Valerie Campbell, Kramer Levin Naftalis & Frankel LLP

cc: Morris Adjmi, Morris Adjmi Architects; Sarah Carroll, Director of Preservation/LPC

Landmarks Preservation Commission
1 Centre Street
9th Floor North
New York, NY 10007
Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / 15DCP009M
Project:
Address: 7 WEST 21 STREET, **BBL:** 1008230031
Date Received: 9/10/2014

[ ] No architectural significance

[X] No archaeological significance

[X] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[ ] May be archaeologically significant; requesting additional materials

Comments:

The LPC is in receipt of the revised EAS and shadow study dated 8/27/14. There are no additional concerns and the documents are acceptable.

Gina Santucci 9/10/2014

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 29750_FSO_GS_09102014.doc

From: Morris, Samantha
Sent: Wednesday, November 20, 2013 10:06 AM
To: jhayes@langan.com; mraygorodetsky@langan.com; 'memasi@rosenyc.com'
Cc: Moore, Hannah; Chawla, Shaminder; 'Bertini, Maurizio'
Subject: Meeting follow up- 7 West 21st Street - 13RHAN114M

Hi all,

It was nice meeting with you yesterday. Looks like this site has all the ingredients for success. Please find attached the sign in sheet from the meeting. As we discussed, the requirements and mitigation strategies for this site include:

- Noise: required attenuation is 28 dBA, there is the potential for a reduction on windows facing the interior courtyard
- Air: all HVAC systems must use Natural Gas
- Hazardous Materials Remedy scope:
    - Excavation to bedrock
    - Waterproofing/ vapor barrier as a part of general construction
    - If Track 1 is attained, removal of the E designation for Haz Mat

We will be waiting for the RIR, edited with the new development plans, and the RAWP. Please do not hesitate to contact me with any questions.

Sincerely,

Samantha Morris

Project Manager

Mayor's Office of Environmental Remediation

SMorris@dep.nyc.gov

(212) 341-2082

APPENDIX B:
PHASE I ENVIRONMENTAL SITE ASSESSMENT EXECUTIVE SUMMARY

PHASE I ENVIRONMENTAL SITE ASSESSMENT
7 WEST 21ST STREET
NEW YORK, NEW YORK

Prepared For:

Equity Residential
Two N. Riverside Plaza Ste 400
Chicago, IL 60606-2609

Prepared By:

Langan Engineering and Environmental Services, P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor
New York, New York 10001

May 30, 2012
Langan Project No. 170198901

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

EXECUTIVE SUMMARY

Langan Engineering and Environmental Services, P.C. (Langan) was retained by Equity Residential, (the "User") to prepare a Phase I Environmental Site Assessment (ESA) for 7 West 21st Street (the "Site"), also identified as Tax Block 823, Lot 31 in New York, New York. This Phase I ESA was performed to support the User's due diligence.

The Site is located on the city block bordered by 22nd Street to the north, Fifth Avenue to the east, 21st Street to the south, and Sixth Avenue (Avenue of the Americas) to the west. The Site encompasses an approximate area of 24,000 square feet occupied by an asphalt-paved parking lot with 43 hydraulic car-parking lifts and a small two-room, ground level office kiosk with storage space.

This Phase I ESA was conducted in general accordance with the American Society for Testing Materials (ASTM) Practice E1527-05 (Standard Practice for ESA: Phase I ESA Process) and the United States Environmental Protection Agency's (USEPA) All Appropriate Inquiry (AAI) Rule. The objective of this Phase I ESA was to identify the presence or likely presence, use, or release on the Subject Properties of hazardous substances or petroleum products as defined in ASTM E1527-05 as a recognized environmental condition (REC) and to satisfy the AAI needed to qualify for the bona fide prospective purchaser liability protections available under the Comprehensive Environmental Response Compensation and Liability Act ("CERCLA").

The Phase I ESA identified the following RECs at the Site:

<u>REC 1 – Historic Gasoline Filling Station and Parking Lot</u>

A gasoline filling station/service station was located on Lot 31 from approximately 1944 to 2004. The Site has been a parking lot since circa 2004. Leaks or spills of gasoline at the former station may have impacted soil, groundwater, and/or soil vapor at the Site with petroleum, solvents and heavy metals. Underground storage tanks (USTs) may still exist at the site.

REC 2 –Black Staining and Evidence of Oil Leaks Adjacent to Hydraulic Oil Tanks and Supply Lines

Black staining was observed on pavement at the base of hydraulic oil storage tanks and around hydraulic oil supply lines at the Site. A puddle of water with an oily sheen was observed beneath the hydraulic lifts in the northeastern area of the Site. The hydraulic oil storage tanks and supply lines have leaked at several locations and may have adversely impacted soil, groundwater, and/or soil vapor at the Site.

REC 3 – Historic Urban Fill Material

According to historic Sanborn maps, residential buildings were present at the property until between 1920 and 1944. During demolition of buildings in the urban area of NYC, basements are sometimes filled with building debris or fill of unknown origin. Historic fill typically includes ash, demolition debris and municipal waste products and may contain several types of contamination at concentrations above current regulatory levels.

REC 4 – "e" Designation and Declaration

The Site received an "e" zoning designation (E-131) and was cited in a restrictive Declaration (DEP No. 04DEP107M) through the New York City Environmental Quality Review (CEQR) process. The E-designation associated with the Site includes the following:

- Air Quality – HVAC fuel limited to natural gas;
- Noise - Window/wall attenuation and alternate ventilation.

The Declaration associated with the Site addresses:

- Potential hazardous materials

The "e" designation and Declaration prevent the issuance of Department of Buildings construction permits and Certificates of Occupancy, and requires that the New York City Office of Environmental Remediation (NYCOER) and New York City Department of Environmental Protection (NYCDEP) approve Remedial Action Plans to satisfy each agency's respective restrictions before site development can proceed.

REC 5 – Adjoining and Surrounding Properties Use

Historic use of a property adjoining the Site to the south across West 21st Street included an automobile and gasoline service station and parking lot. Five petroleum storage tanks, ranging in size from 2,500-gallons to 15,000-gallons, are currently in-use at properties adjoining the Site. Three drycleaner facilities are located between 340 and 665 feet east and upgradient of the Site. Leaks or spills of petroleum products, solvents, and/or other hazardous materials, typically found at such properties, may have adversely impacted groundwater and/or soil vapor at the Site.

Asbestos, Lead, and Polychlorinated Biphenyl (PCBs)

An intrusive survey to identify asbestos-containing material (ACM), lead-based paint (LBP) and/or PCB-containing material was not conducted as part of this Phase I ESA; however, there is a potential that the site structure contains ACM, LBP, or PCBs.

APPENDIX C:
TRAVEL DEMAND FORECAST MEMORANDUM

Philip Habib & Associates

Engineers and Planners • 102 Madison Avenue • New York, NY 10016 • 212 929 5656 • 212 929 5605 (fax)

MEMORANDUM

To: New York City Department of City Planning, Environmental Review Team
From: PHA On behalf of 7 West 21 LLC (affiliate of Richard Chapman and Associates)
Date: September 16, 2014
Re: **Travel Demand Forecast for 7 W. 21st Street**
Project ID: P2013M0466; CEQR No.: 15DCP009M

I. INTRODUCTION

7 West 21 LLC is applying for three discretionary actions: 1) a special permit for additional parking spaces per the Zoning Resolution Section 13-451, "Additional parking spaces for residential growth"; 2) a special permit for bulk modification; and 3) bond financing from NYC HFA. These approvals, referred to collectively as the proposed action, would facilitate development of a mixed-use building on a property the applicant owns at 7 W. 21st Street in Manhattan Community District 5. Under the reasonable worst case development scenario (RWCDS), the incremental development that would occur as a result of the proposed action includes net increases of 36 dwelling units and 138 parking spaces. There would be no incremental change in the amount of retail space on the project site.

To determine whether detailed quantified traffic, parking, transit, and pedestrian analyses would be needed as part of the environmental review for this project, travel demand generated by the RWCDS incremental development was determined. The findings presented in this memo are that, per *City Environmental Quality Review ("CEQR") Technical Manual (2014)*[1] guidance, detailed analyses of traffic, parking, transit, and pedestrians can be screened out.

Development Site Conditions

The development site, which is located at 7 W. 21st Street (Block 823, Lot 31) in the Flatiron District in Manhattan Community District 5, occupies a portion of the block bounded by W. 21st Street on the south, Sixth Avenue (Avenue of the Americas) on the west, W. 22nd Street on the north, and Fifth Avenue on the east. The development site has frontage on two streets, including 106 feet along W. 21st Street and 137 feet along W. 22nd Street. As the site has frontage on W. 22nd Street, the addresses 6-14 W. 22nd Street are also associated with the property.

The development site is currently used as a 256-space licensed public parking lot with two-way driveways on both W. 21st Street and W. 22nd Street. It is an attended facility that operates at

[1] The City of New York, Mayor's Office of Environmental Coordination, *City Environmental Quality Review Technical Manual*, March 2014.

all times, i.e., 24 hours per day, seven days per week. Existing staffing is two to three parking attendants per day, working in shifts.

II. DEVELOPMENT DENSITY THRESHOLD SCREENING

The 2014 *CEQR Technical Manual* identifies minimum development densities that potentially require transportation analysis. Development at less than the development densities shown in Table 16-1 of the 2014 *CEQR Technical Manual* generally result in fewer than 50 peak-hour vehicle trips, 200 peak-hour subway/rail or bus transit riders, and 200 peak-hour pedestrian trips, where significant adverse impacts are considered unlikely. In Zone 1 (which includes the Project Site, since it is in Manhattan south of 110th Street), the development threshold for off-street parking facilities is 85 new spaces, which the proposed project exceeds. The development threshold for residential is 240 DUs, which the proposed project falls well below with its increment of 36 DUs.

According to the 2014 *CEQR Technical Manual*, if an action would result in development greater than these minimum development density thresholds, a Level 1 (Project Trip Generation) Screening Assessment should be prepared. In most areas of the city, including the project area, if the proposed actions are projected to result in fewer than 50 peak-hour vehicle trips, 200 peak-hour subway/rail or bus transit riders, or 200 peak-hour pedestrian trips, it is unlikely that further analysis would be necessary. If these trip-generation screening thresholds are exceeded, a Level 2 (Project-generated Trip Assignment) Screening Assessment should be prepared to determine if the proposed action would generate or divert 50 peak-hour vehicle trips through any intersection, 200 peak-hour subway trips through a single station, 50 peak-hour bus trips on a single bus route in the peak direction, or 200 peak-hour pedestrian trips through a single pedestrian element. If any of these Level 2 screening thresholds are met or exceeded, detailed analysis for the respective mode is required.

Traffic and Parking

As the proposed project exceeds the 85-space development density screening threshold for off-street parking, a Level 1 (Project Trip Generation) Screening Assessment has been prepared.

Transit and Pedestrians

As noted above, the proposed action would fall well below the residential development density screening threshold and the proposed action would only exceed the development density screening threshold for off-street parking. The proposed parking garage would be used by not only building residents, but also by residents of other nearby buildings, and visitors to the area (aka, transient parkers) who would travel on foot to and from the garage. Therefore the garage would generate pedestrian trips and a Level 1 (Project Trip Generation) Screening Assessment has been prepared for pedestrian trips. Few, if any, trips by garage patrons would be made via transit, thus the proposed action would not have the potential to result in significant adverse transit impacts. Any transit or pedestrian trips by staff would be negligible as the expected incremental increase in parking employees is expected to be approximately three per day.

III. LEVEL 1 (PROJECT TRIP GENERATION) SCREENING: TRAFFIC

A Level 1 (Project Trip Generation) Screening Assessment has been prepared to determine if the proposed action would generate or divert 50 or more vehicle trips in any peak hour. (A Level Screening Assessment of pedestrian trips is provided following the traffic screening.)

A. RWCDS No-Action Conditions

Under RWCDS No-Action Conditions, an as-of-right building will be completed and its uses will include approximately 62 off-street parking spaces, approximately 297 dwelling units, and 10,000 gsf of local retail space. In the RWCDS No-Action scenario, the off-street parking spaces are conservatively assumed to be used by building residents only. If available spaces during the day were used by non-residents under RWCDS No-Action conditions, then this would result in additional peak hour vehicle trips and as such reduce the incremental demand associated with the proposed action.

B. RWCDS With-Action Conditions

Under RWCDS With-Action conditions, the proposed project would include approximately 200 off-street parking spaces, approximately 333 dwelling units, and 10,000 gsf of retail space. In the RWCDS With-Action scenario it is assumed that during the overnight period (when residential parking demand peaks) the 200 spaces would be fully used by building residents and residents of other buildings in the area. This is consistent with the "residential growth" parking study prepared for the applicant's ULURP application which has demonstrated that the supply of residential parking has not grown proportionally with the increase in demand for residential parking in the vicinity of the project site. It is conservatively assumed for CEQR purposes that spaces not used by residents during the day would be available for public use by non-residents. The information for RWCDS No-Action and RWCDS With-Action conditions is summarized in Table 1.

Table 1. Development Site RWCDS No-Action and RWCDS With-Action Conditions

RWCDS No-Action			RWCDS With-Action			RWCDS Increment		
DU	Parking Spaces	Retail gsf	DU	Parking Spaces	Retail gsf	DU	Parking Spaces	Retail gsf
297	62	10,000	333	200	200	36	138	0

C. Net Project-generated Trips

Traffic and Parking

The net change in development on the project site from RWCDS No-Action to RWCDS With-Action conditions is 138 parking spaces and 36 dwelling units. In order to identify the resulting incremental change in site-generated vehicle trips, parking demand utilization patterns were forecasted for the site under both RWCDS No-Action and RWCDS With-Action conditions. A trip generation pattern for residential parking was taken from the 2004 *Hudson Yards FGEIS* and

adjusted to reflect local mode split and vehicle occupancy, assuming an overnight residential parking demand of 100 percent under RWCDS No-Action conditions (62 spaces) and RWCDS With-Action conditions (200 spaces).[2] Residential overnight parking demand is expected to include approximately 88 vehicles associated with building residents, reflecting a vehicle to DU rate of 26.5 percent, as indicated by Census data, and approximately 112 vehicles associated with residents of other buildings in the area.[3] A trip generation pattern for public parking for RWCDS With-Action conditions was generated based on October 2013 data for the existing 7 W. 21st Street parking lot.

As all site-generated residential vehicle trips are expected to utilize the on-site garage under both RWCDS No-Action and RWCDS With-Action conditions, the trip generation forecast for the parking garage accounts for site-generated residential vehicle trips and a discrete residential auto trip generation forecast is not necessary as it would double-count residential vehicle trips. The incremental increase in taxi trips that would occur as a result of the 36-unit increase in residential units under RWCDS With-Action conditions would be minimal and would not contribute significantly to site-generated vehicular trips.

RWCDS No-Action Vehicle Trips

Under RWCDS No-Action conditions, the as-of-right 62-space garage would be fully utilized overnight by building residents and for analysis purposes no credit is taken for use during the day by transient parkers. (In addition, as discussed below, not all building residents could be accommodated by the 62-space garage as the site's residential parking demand would exceed 62 spaces.) The number of hourly vehicle trips to and from the garage would be low. There would be 16, 8, and 18 vehicle trips in the weekday AM (8-9), midday (12-1), and PM (5-6) peak hours, respectively. Refer to Table 2.

During the Saturday midday period under RWCDS No-Action conditions, there would be 16 auto trips per hour during the 12-1 PM hour, which would be the highest number of hourly trips on Saturday. Refer to Table 3.

It should be noted that under the RWCDS No-Action conditions it is expected that the 297 DUs on the project site would generate a total overnight vehicle demand of approximately 79 spaces, reflecting a vehicle ownership rate of 26.5 percent as indicated by the Census data cited above[2]. Accordingly, approximately 17 vehicles owned by building residents would park off-site. The parking demand and associated vehicle trips generated by these 17 vehicles are not reflected in

[2] According to US Census data (2012 American Community Survey, 5-year average) for Census Tract 58, the tract containing the project site, 9.6% of journey-to-work trips are made by auto and 26.5% of households own a vehicle.

[3] As indicated in the "Residential Growth Parking Study Analysis" prepared for this project's ULURP application, in the area within a one-third mile radius of the development site there are several new residential buildings that have been completed since 2003 or are expected to be completed by 2017 (the Build year for the proposed project) that do not provide any off-street parking. Additionally, several public parking facilities that in part served residential parkers have been or will be eliminated within the same time frame. Accordingly, this study area has fallen well below DCP's target rate of having residential parking increase at a rate equal to 20 percent of new dwelling units. As identified in the parking study ("associated sites"), the proposed 200-space garage would accommodate residential parking demand from sites close to the development site.

Tables 2 and 3 but would be present either in on-street spaces or at off-street spaces at other locations.

Table 2. RWCDS No-Action Conditions: Project Site Weekday Parking Accumulation, Residential Users Only

	62-space Garage				Residential Trip Pattern*		
	In	Out	Total	Accumulation	In (% of all trips)	Out (% of all trips)	Total (% of all trips)
12-6 AM	2	2	4	62	1.75%	1.75%	3.50%
6-7	0	1	1	61	0.09%	0.51%	0.60%
7-8	1	6	7	56	0.59%	3.32%	3.90%
8-9	2	14	16	44	1.50%	8.50%	10.0%
9-10	2	8	10	38	1.49%	5.12%	6.60%
10-11	3	5	8	36	2.00%	3.00%	5.00%
11-12	4	4	8	36	2.20%	2.20%	4.40%
12-1 PM	4	4	8	36	2.50%	2.50%	5.00%
1-2	4	4	8	36	2.30%	2.30%	4.60%
2-3	3	3	6	36	2.10%	2.10%	4.20%
3-4	5	4	9	37	3.24%	2.16%	5.40%
4-5	8	4	12	41	5.04%	2.16%	7.20%
5-6	13	5	18	49	7.70%	3.30%	11.00%
6-7	11	5	16	55	6.58%	2.82%	9.40%
7-8	6	5	11	56	3.89%	2.91%	6.80%
8-9	6	4	10	58	3.47%	2.33%	5.80%
9-10	4	3	7	59	0.73%	1.68%	2.40%
10-11	3	1	4	61	1.65%	0.66%	2.31%
11-12	2	1	3	62	1.20%	0.70%	1.90%
Total	83	83	166		50.00%	50.00%	100.00%

* Residential accumulation pattern source: Hudson Yards FEIS

Table 3. RWCDS No-Action Conditions: Project Site Saturday Parking Accumulation, Residential Users Only

	62-space Garage				Residential Trip Pattern*		
	In	Out	Total	Accumulation	In (% of all trips)	Out (% of all trips)	Total (% of all trips)
12-6 AM	2	2	4	62	1.57%	1.63%	3.20%
6-7	0	1	1	61	0.15%	0.35%	0.50%
7-8	1	3	4	59	0.50%	1.50%	2.00%
8-9	3	7	10	55	1.50%	3.50%	5.00%
9-10	6	8	14	53	2.80%	4.20%	7.00%
10-11	6	8	14	51	2.80%	4.20%	7.00%
11-12	7	7	14	51	3.50%	3.50%	7.00%
12-1 PM	8	8	16	51	4.00%	4.00%	8.00%
1-2	7	7	14	51	3.50%	3.50%	7.00%
2-3	7	7	14	51	3.60%	3.60%	7.20%
3-4	9	6	15	54	4.32%	2.88%	7.20%
4-5	10	4	14	60	5.04%	2.16%	7.20%
5-6	7	5	12	62	3.46%	2.74%	6.20%
6-7	7	7	14	62	3.50%	3.50%	7.00%
7-8	8	8	13	62	3.51%	2.49%	6.00%
8-9	4	4	8	62	2.00%	2.00%	4.00%
9-10	3	3	6	62	1.50%	1.50%	3.00%
10-11	3	3	6	62	1.50%	1.50%	3.00%
11-12	2	2	7	62	1.25%	1.25%	2.50%
Total	100	100	200		50.00%	50.00%	100.00%

* Residential accumulation pattern source: Hudson Yards FEIS

RWCDS With-Action Vehicle Trips

Under RWCDS With-Action conditions, the proposed 200-space garage would be fully utilized overnight by building residents (88 vehicles) and residents of other buildings in the area (112 vehicles). During the day, it is conservatively assumed that some transient parkers, such as commuters, shoppers, and other visitors to the area, would utilize available capacity at the garage. Tables 4a, 4b, and 4c show the weekday accumulation patterns for the residential users from the on-site building, residential users from other buildings in the area, and transient users, respectively, and Table 4d shows the combined pattern. As shown in Table 4d, there would be 75, 37, and 83 site-generated vehicle trips under RWCDS With-Action conditions in the weekday AM, midday, and PM peak hours, respectively.

Table 4a.
RWCDS With-Action Conditions: Project Site Weekday Accumulation, Residential Users from On-site Building

200-space Garage: On-site Residents					Residential Trip Pattern*		
	In	Out	Total	Accumulation	In (% of all trips)	Out (% of all trips)	Total (% of all trips)
12-6 AM	3	3	6	88	1.75%	1.75%	3.50%
6-7	0	1	1	87	0.09%	0.51%	0.60%
7-8	1	8	9	80	0.59%	3.32%	3.90%
8-9	4	20	24	64	1.50%	8.50%	10.0%
9-10	4	12	16	56	1.49%	5.12%	6.60%
10-11	5	7	12	54	2.00%	3.00%	5.00%
11-12	5	5	10	54	2.20%	2.20%	4.40%
12-1 PM	6	6	12	54	2.50%	2.50%	5.00%
1-2	5	5	10	54	2.30%	2.30%	4.60%
2-3	5	5	10	54	2.10%	2.10%	4.20%
3-4	8	5	13	57	3.24%	2.16%	5.40%
4-5	12	5	17	64	5.04%	2.16%	7.20%
5-6	18	8	26	74	7.70%	3.30%	11.00%
6-7	16	7	23	83	6.58%	2.82%	9.40%
7-8	9	7	16	85	3.89%	2.91%	6.80%
8-9	8	5	13	88	3.47%	2.33%	5.80%
9-10	2	4	6	86	0.73%	1.68%	2.40%
10-11	4	2	6	88	1.65%	0.66%	2.31%
11-12	3	3	6	88	1.20%	0.70%	1.90%
Total	118	118	236		50.0%	50.0%	100.00%

* Residential accumulation pattern source: Hudson Yards FEIS

Table 4b.
RWCDS With-Action Conditions: Project Site Weekday Accumulation, Residential Users from Off-site Buildings

200-space Garage: Off-site Residents					Residential Trip Pattern*		
	In	Out	Total	Accumulation	In (% of all trips)	Out (% of all trips)	Total (% of all trips)
12-6 AM	8	8	16	112	1.75%	1.75%	3.50%
6-7	0	2	2	110	0.09%	0.51%	0.60%
7-8	2	10	12	102	0.59%	3.32%	3.90%
8-9	4	25	29	81	1.50%	8.50%	10.0%
9-10	4	15	19	70	1.49%	5.12%	6.60%
10-11	6	9	15	67	2.00%	3.00%	5.00%
11-12	7	7	14	67	2.20%	2.20%	4.40%
12-1 PM	7	7	14	67	2.50%	2.50%	5.00%
1-2	7	7	14	67	2.30%	2.30%	4.60%
2-3	6	6	12	67	2.10%	2.10%	4.20%
3-4	9	6	15	70	3.24%	2.16%	5.40%
4-5	15	6	21	79	5.04%	2.16%	7.20%
5-6	23	10	33	92	7.70%	3.30%	11.00%
6-7	19	8	27	103	6.58%	2.82%	9.40%
7-8	12	10	22	105	3.89%	2.91%	6.80%
8-9	10	9	19	106	3.47%	2.33%	5.80%
9-10	2	3	5	105	0.73%	1.68%	2.40%
10-11	4	0	4	109	1.65%	0.66%	2.31%
11-12	3	0	3	112	1.20%	0.70%	1.90%
Total	148	148	296		50.0%	50.0%	100.00%

* Residential accumulation pattern source: Hudson Yards FEIS

Table 4c.
RWCDS With-Action Conditions: Project Site Weekday Accumulation, Transient (Non-Residential) Users

200-space Garage					Transient Trip Pattern**		
	In	Out	Total	Accumulation	In (% of all trips)	Out (% of all trips)	Total (% of all trips)
12-6 AM	0	0	0	0	0.00%	0.00%	0.00%
6-7	1	0	1	1	0.57%	0.00%	0.57%
7-8	3	0	3	4	1.72%	0.00%	1.72%
8-9	21	1	22	24	12.07%	0.57%	12.64%
9-10	13	1	14	36	7.47%	0.57%	8.05%
10-11	11	2	13	45	6.32%	1.15%	7.47%
11-12	6	3	9	48	3.45%	1.72%	5.17%
12-1 PM	7	4	11	51	4.02%	2.30%	6.32%
1-2	4	2	6	53	2.30%	1.15%	3.45%
2-3	4	4	8	53	2.30%	2.30%	4.60%
3-4	4	8	12	49	2.30%	4.60%	6.90%
4-5	3	10	13	42	1.72%	5.75%	7.47%
5-6	3	21	24	24	1.72%	12.07%	13.79%
6-7	4	14	18	14	2.30%	8.05%	10.34%
7-8	1	5	6	10	0.57%	2.87%	3.45%
8-9	1	5	6	6	0.57%	2.87%	3.45%
9-10	1	3	4	4	0.57%	1.72%	2.30%
10-11	0	2	2	2	0.00%	1.15%	1.15%
11-12	0	2	2	0	0.00%	1.15%	1.15%
Total	87	87	174		50.00%	50.00%	100.00%

** Transient accumulation pattern source: based on 7 W. 21st St. Public Parking Lot data, Tuesday-Thursday average for October 2013

Table 4d. RWCDS With-Action Conditions: Project Site Weekday Parking Accumulation, All Users

200-space Garage					
	In	**Out**	**Total**	**Accumulation**	**Available Spaces**
12-6 AM	11	11	22	200	0
6-7	1	3	4	198	2
7-8	6	18	24	186	14
8-9	29	46	75	169	31
9-10	21	28	49	162	38
10-11	22	18	40	166	34
11-12	18	15	33	169	31
12-1 PM	20	17	37	172	28
1-2	16	14	30	174	26
2-3	15	15	30	174	26
3-4	21	19	40	176	24
4-5	30	21	51	185	15
5-6	44	39	83	190	10
6-7	39	29	68	200	0
7-8	22	22	44	200	0
8-9	19	19	38	200	0
9-10	5	10	15	195	5
10-11	8	4	12	199	1
11-12	6	5	11	200	0
Total	353	353	706		

Tables 5a, 5b, and 5c show the Saturday accumulation patterns for the residential users from the on-site building, residential users from other buildings, and transient users, respectively, and Table 5d shows the combined pattern. As shown in Table 5d, during the Saturday midday peak hour under RWCDS With-Action conditions, there would be 60 auto trips.

Table 5a.
RWCDS With-Action Conditions: Project Site Saturday Accumulation, Residential Users from On-site Building

200-space Garage: On-site Residents					Residential Trip Pattern*		
	In	**Out**	**Total**	**Accumulation**	**In (% of all trips)**	**Out (% of all trips)**	**Total (% of all trips)**
12-6 AM	5	5	10	88	1.57%	1.63%	3.20%
6-7	0	1	1	87	0.15%	0.35%	0.50%
7-8	2	5	7	84	0.50%	1.50%	2.00%
8-9	5	11	16	78	1.50%	3.50%	5.00%
9-10	9	13	22	74	2.80%	4.20%	7.00%
10-11	9	13	22	70	2.80%	4.20%	7.00%
11-12	11	11	22	70	3.50%	3.50%	7.00%
12-1 PM	12	12	24	70	4.00%	4.00%	8.00%
1-2	11	11	22	70	3.50%	3.50%	7.00%
2-3	11	11	22	70	3.60%	3.60%	7.20%
3-4	13	9	20	74	4.32%	2.88%	7.20%
4-5	16	7	20	83	5.04%	2.16%	7.20%
5-6	11	8	24	86	3.46%	2.74%	6.20%
6-7	11	11	22	86	3.50%	3.50%	7.00%
7-8	10	8	19	88	3.51%	2.49%	6.00%
8-9	6	6	16	88	2.00%	2.00%	4.00%
9-10	5	5	10	88	1.50%	1.50%	3.00%
10-11	5	5	10	88	1.50%	1.50%	3.00%
11-12	4	4	8	88	1.25%	1.25%	2.50%
Total	156	156	312		50.00%	50.00%	100.00%

* Residential accumulation pattern source: Hudson Yards FEIS

Table 5b.
RWCDS With-Action Conditions: Project Site Saturday Accumulation, Residential Users from Off-site Buildings

200-space Garage: Off-site Residents					Residential Trip Pattern*		
	In	Out	Total	Accumulation	In (% of all trips)	Out (% of all trips)	Total (% of all trips)
12-6 AM	6	6	12	112	1.57%	1.63%	3.20%
6-7	1	1	2	112	0.15%	0.35%	0.50%
7-8	1	5	6	108	0.50%	1.50%	2.00%
8-9	5	11	15	102	1.50%	3.50%	5.00%
9-10	9	14	23	97	2.80%	4.20%	7.00%
10-11	9	14	23	92	2.80%	4.20%	7.00%
11-12	11	11	22	92	3.50%	3.50%	7.00%
12-1 PM	13	13	26	92	4.00%	4.00%	8.00%
1-2	11	11	22	92	3.50%	3.50%	7.00%
2-3	12	12	24	92	3.60%	3.60%	7.20%
3-4	14	9	23	97	4.32%	2.88%	7.20%
4-5	16	7	23	106	5.04%	2.16%	7.20%
5-6	11	9	20	108	3.46%	2.74%	6.20%
6-7	11	11	22	108	3.50%	3.50%	7.00%
7-8	12	8	20	112	3.51%	2.49%	6.00%
8-9	7	7	14	112	2.00%	2.00%	4.00%
9-10	5	5	10	112	1.50%	1.50%	3.00%
10-11	5	5	10	112	1.50%	1.50%	3.00%
11-12	4	4	8	112	1.25%	1.25%	2.50%
Total	163	163	326		50.00%	50.00%	100.00%

* Residential accumulation pattern source: Hudson Yards FEIS

Table 5c.
RWCDS With-Action Conditions: Project Site Saturday Accumulation, Transient (Non-Residential) Users

200-space Garage					Transient Trip Pattern**		
	In	Out	Total	Accumulation	In (% of all trips)	Out (% of all trips)	Total (% of all trips)
12-6 AM	5	5	10	0	4.69%	4.71%	9.40%
6-7	0	0	0	0	0.31%	0.00%	0.31%
7-8	1	0	1	1	0.63%	0.00%	0.63%
8-9	2	0	2	3	2.19%	0.32%	2.51%
9-10	3	0	3	6	2.81%	0.32%	3.14%
10-11	5	2	7	9	4.38%	1.61%	5.99%
11-12	4	2	6	11	4.06%	1.94%	6.00%
12-1 PM	7	3	10	15	6.25%	2.58%	8.83%
1-2	6	4	10	17	5.00%	3.87%	8.87%
2-3	4	6	10	15	3.75%	5.48%	9.23%
3-4	3	5	8	13	2.81%	4.19%	7.01%
4-5	2	6	8	9	1.88%	5.48%	7.36%
5-6	2	5	7	6	1.88%	4.84%	6.71%
6-7	2	4	6	4	1.94%	3.55%	5.49%
7-8	1	5	6	0	0.63%	4.29%	4.92%
8-9	1	1	2	0	0.94%	2.97%	3.91%
9-10	2	2	4	0	1.56%	2.15%	3.71%
10-11	3	3	6	0	2.56%	0.76%	3.32%
11-12	2	2	4	0	1.75%	0.94%	2.69%
Total	55	55	110		50.00%	50.00%	100.00%

** Transient accumulation pattern source: based on 7 W. 21st St. Public Parking Lot data, Saturday average for October 2013

Table 5d. RWCDS With-Action Conditions: Project Site Saturday Parking Accumulation, All Users

200-space Garage					
	In	**Out**	**Total**	**Accumulation**	**Available Spaces**
12-6 AM	16	16	32	200	0
6-7	1	2	3	199	1
7-8	4	10	14	193	7
8-9	12	22	34	183	17
9-10	21	27	48	177	23
10-11	23	29	52	171	29
11-12	26	24	50	173	27
12-1 PM	32	28	60	177	23
1-2	28	26	54	179	21
2-3	27	29	56	177	23
3-4	30	23	53	184	16
4-5	34	20	54	198	2
5-6	24	22	46	200	0
6-7	24	26	50	198	2
7-8	23	21	44	200	0
8-9	14	14	28	200	0
9-10	12	12	24	200	0
10-11	13	13	26	200	0
11-12	10	10	20	200	0
Total	374	374	748		

Incremental Vehicle Trips

Based on the RWCDS No-Action and RWCDS With-Action trip forecasts, the incremental vehicle trips generated or diverted by the proposed action would consist of 59, 29, 65, and 44, in the weekday AM, weekday midday, weekday PM, and Saturday midday peak hours, respectively. This increment would include vehicle trips by on-site residents using the garage, vehicle trips by residents of nearby buildings using the garage, and visitors to the area, i.e., transient parkers. Except for the parking demand generated by the 36-DU increase that would occur on the project site under RWCDS With-Action conditions, residential parking demand generated by the project site and other nearby residential developments that would be accommodated by the 200-space garage and the associated vehicle trips would likely be present in the area under RWCDS No-Action and diverted to this facility instead of parking on-street or using off-street parking facilities at other locations.

As such, the proposed action's incremental peak hour vehicle trips would exceed the Level 1 50-trip screening threshold in the weekday AM and PM peak hours and therefore requires a Level 2 (Project-generated Trip Assignment) Screening Assessment to determine if a Detailed Analysis is warranted. The Level 2 screening is provided below. For the weekday midday and Saturday midday peak hours, the proposed action would not exceed the Level 1 50-trip screening threshold and no further analysis of those peak hours is warranted.

Table 6. Peak Hour Vehicle Trips

	RWCDS No-Action			RWCDS With-Action			RWCDS Increment		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Weekday AM	2	14	16	29	46	75	27	32	59
Weekday Midday	4	4	8	20	17	37	16	13	29
Weekday PM	13	5	18	44	39	83	31	34	65
Saturday Midday	8	8	16	32	28	60	24	20	44

IV. LEVEL 2 (PROJECT-GENERATED TRIP ASSIGNMENT) SCREENING: TRAFFIC

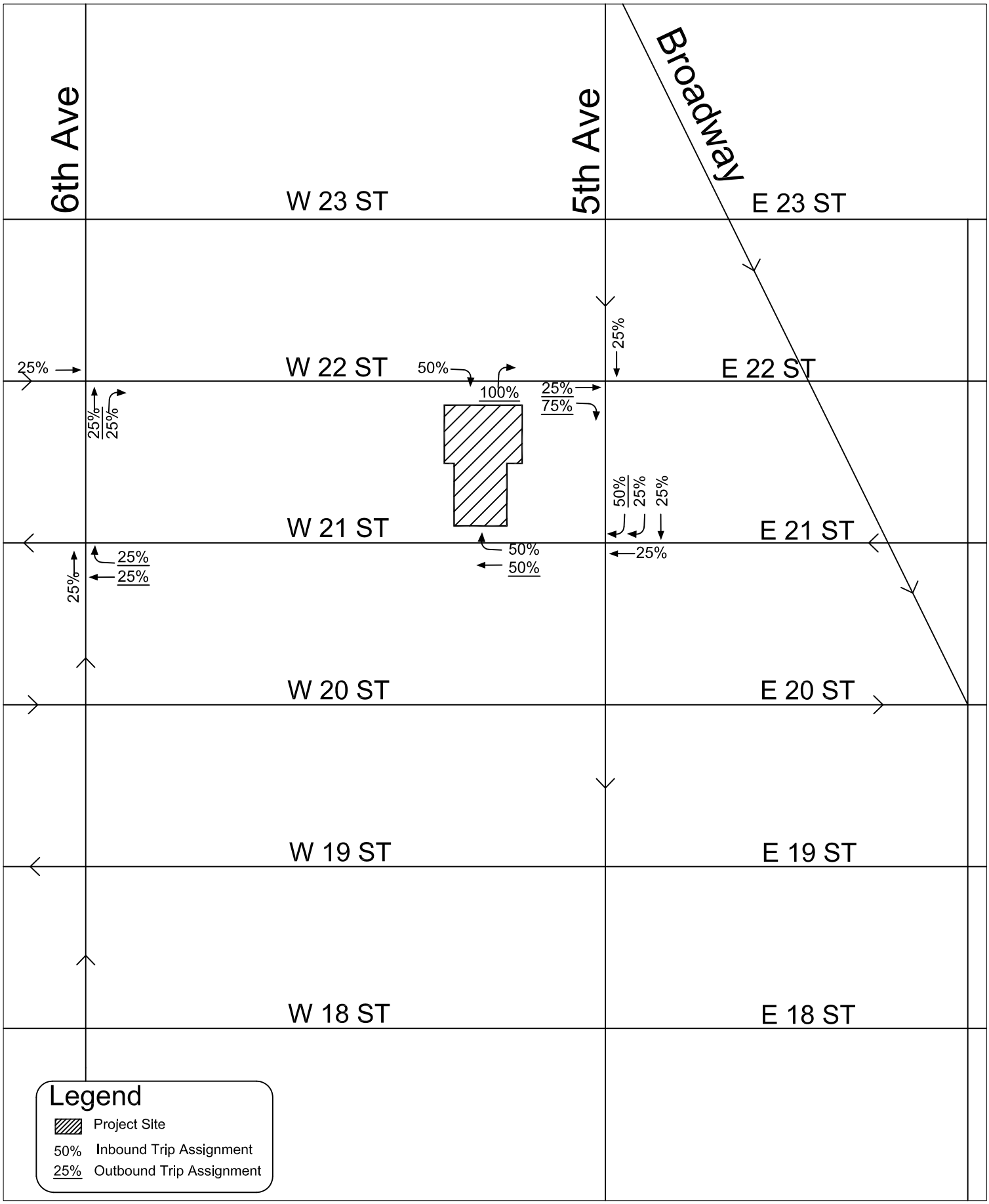
As discussed above, a Level 2 (Trip Assignment) Screening Assessment is required for the proposed action for traffic in the weekday AM and weekday PM peak hours as the proposed action would generate an increment of more than 50 vehicle trips during those peak hours. A trip assignment for the project increment during those peak hours was prepared to determine if any single intersection would process 50 or more action-generated vehicular trips and therefore require detailed traffic analysis.

All inbound vehicular trips to the garage were assigned to either the one-way, entry-only W. 21st Street driveway, or to the two-way W. 22nd Street driveway. Reflecting the one-way pattern of the streets in the vicinity of the development site, vehicles entering the garage via W. 21st Street would travel to the site westbound via the intersection of Fifth Avenue and W. 21st Street, vehicles entering the garage via W. 22nd Street would travel to the site eastbound via the intersection of Sixth Avenue and W. 22nd Street, and vehicles exiting the garage via the W. 22nd Street driveway would travel from the site eastbound via the intersection of W. 22nd Street and Fifth Avenue. Given the development's site central location within the grid, it is anticipated that vehicles traveling to and from the site's garage would be well distributed in terms of trip origin/destination points. As such, given the one-way street pattern, central location, and entrances on two different streets, no single intersection would process all action-generated incremental vehicular trips. Figure TDF-1 shows the expected trip assignment patterns for action-generated trips and Figures TDF-2 and TDF-3 show the assignments of action-generated trips for the weekday AM and weekday PM peak hours, respectively. As shown in the figures, no intersection would process 50 or more action-generated vehicular trips in a single peak hour. The intersection of Fifth Avenue and W. 22nd Street would process the greatest number of such trips, with 39 and 42 trips in the weekday AM and weekday PM peak hours, respectively. The intersection of Fifth Avenue and W. 21st Street would also process 42 trips in the PM peak hour.

As the proposed action would not exceed the Level 2 screening threshold, detailed traffic and parking analysis is not warranted and, per the 2014 *CEQR Technical Manual*, no significant adverse traffic and parking impacts would be expected to occur.

Figure TDF - 1

Traffic Assignment Patterns



Traffic Assignment Weekday AM

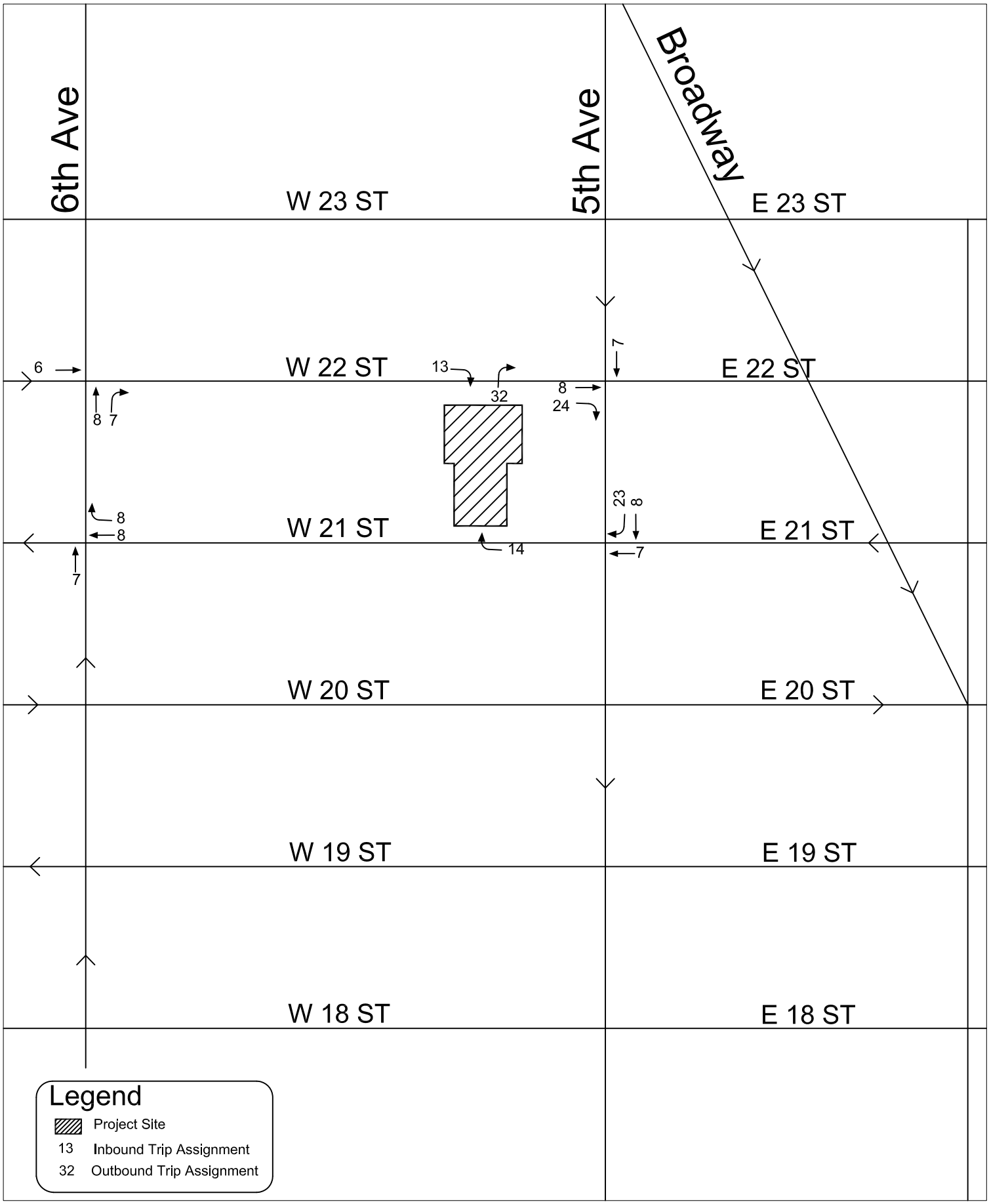
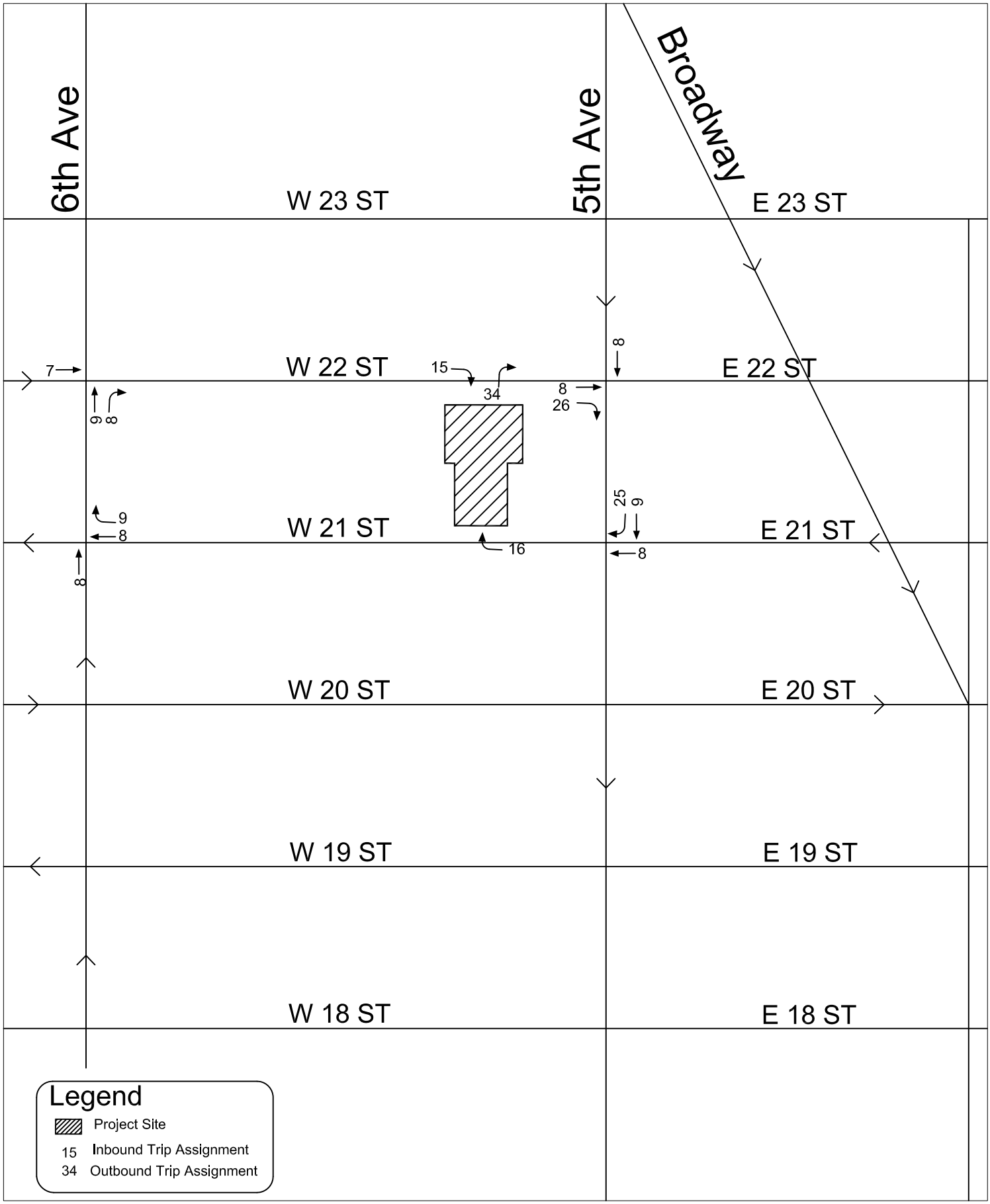


Figure TDF - 3

Traffic Assignment Weekday PM



V. LEVEL 1 (PROJECT TRIP GENERATION) SCREENING: PEDESTRIANS

All vehicle occupants traveling to and from the garage who live in other nearby buildings or who are visiting the area would include a pedestrian trip via sidewalks adjacent to the development site. An inbound vehicle trip to the site by non-building residents would result in an outbound pedestrian trip from the site and vice versa, an outbound vehicle trip by non-building residents would be preceded by an inbound pedestrian trip to the site.

In order to determine if the proposed action would exceed the Level 1 200-trip screening threshold for pedestrian analysis, the number of peak hour vehicle trips by non-building residents must be converted into person trips. Table 7 provides this calculation for With-Action conditions (there would be no pedestrian trips generated under RWCDS No-Action conditions as the only users of the garage under RWCDS No-Action conditions would be building residents). As shown in the table, the proposed action would generate 56, 27, 62, and 40 pedestrian trips associated with the 200-space garage in the weekday AM, midday, PM, and Saturday midday peak hours, respectively. Besides these garage-related pedestrian trips, the number of peak-hour pedestrian trips generated by the proposed action's 36-DU residential increment would be negligible; as noted above the proposed action falls well below the 240-DU development density screening threshold for transportation analysis specified in Table 16-1 of the 2014 *CEQR Technical Manual*.

Accordingly, the proposed action would fall well below the Level 1 200-person trip screening threshold for pedestrians and a Level 2 Project-generated Trip Assignment screening, identifying origin/destination of action-generated pedestrian trips, is not warranted. No significant adverse pedestrian impacts would be anticipated.

Table 7. Peak Hour Increment Pedestrian Trips

PEAK HOUR	Off-site Resident Vehicle Trips[1]	Off-site Resident Ped. Trips[2]	Transient (non-residential) Vehicle Trips[3]	Transient (non-residential) Ped. Trips[2]	Total, Ped Trips
Weekday AM	29	32	22	24	56
Weekday MD	14	15	11	12	27
Weekday PM	33	36	24	26	62
Sat. MD	26	29	10	11	40

[1] Off-site Resident Vehicle Trips from Table 4b (RWCDS With-Action weekday AM, MD, & PM, and Table 5b (RWCDS With-Action Sat. MD).
[2] Vehicle trips converted to pedestrian trips by multiplying vehicle trips by 1.1, which is the vehicle occupancy rate identified in the US Census American Community Survey (2012 5-year average) for Census Tract 58 (tract containing development site).
[3] Transient (non-residential) Vehicle Trips from Table 4c (RWCDS With-Action weekday AM, MD, & PM, and Table 5b (RWCDS With-Action Sat. MD).

VI. CONCLUSION

PHA projected the hourly auto trips that would be generated by the project site garage under both RWCDS No-Action and RWCDS With-Action conditions. Consistent with the findings of the

residential growth analysis prepared for the applicant's "Residential Growth" parking special permit ULURP application, it is expected that the proposed garage would be used primarily by residents of the proposed building and residents from the surrounding area as the growth of residential off-street parking has not increased proportionally with the growth of residential parking demand associated with new residential developments in the area. There is expected to be some use by transient (non-residential) parkers under RWCDS With-Action conditions. As detailed in this memo, the proposed action would not exceed the 50-vehicle Level 1 (Trip Generation) Screening threshold for traffic in the weekday midday and Saturday midday peak hours. Although it would exceed the Level 1 screening threshold in the weekday AM and weekday PM peak hours, it would not exceed the 50-vehicle Level 2 screening threshold at any intersection in those peak hours. The proposed action would not exceed the 200-person trip Level 1 screening threshold for pedestrians in any peak hour. In addition, the proposed action would not exceed the development density screening thresholds for transit. Accordingly, detailed analysis of transportation is not warranted for the proposed action as there is no potential for significant adverse transportation impacts to occur.