DRAFT SCOPE OF WORK FOR AN ENVIRONMENTAL IMPACT STATEMENT FOR THE ST. JOHN'S TERMINAL BUILDING AT 550 WASHINGTON STREET

A. INTRODUCTION

The applicants, the New York City Department of City Planning (DCP) and SJC 33 Owner 2015 LLC, are requesting discretionary approvals (the "proposed actions") that would facilitate the redevelopment of the St. John's Terminal Building with a mix of residential and commercial uses, and public open space (the "proposed project") at 550 Washington Street (Block 596, Lot 1) (the "development site") in Manhattan Community District 2. The development site is zoned M1-5 and M2-4 and is located along Route 9A, south of Clarkson Street and intersected by West Houston Street, directly across from Pier 40 (see **Figure 1**).

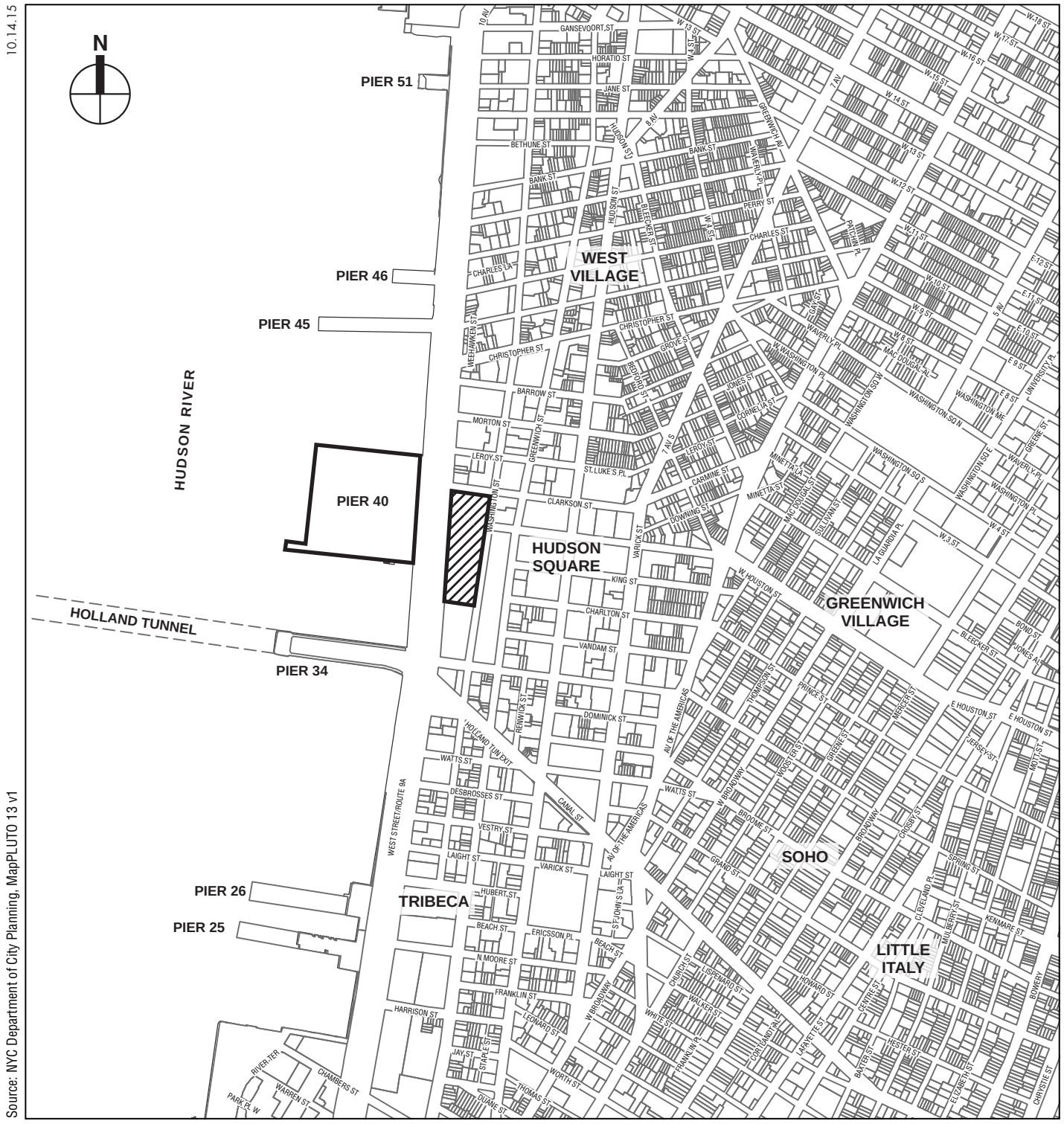
The proposed actions include a zoning text amendment, a zoning map amendment, two zoning special permits and a Chairperson's certification, as well as an action by the Hudson River Park Trust (HRPT).

DCP is proposing the following action:

- Zoning text amendment to establish the Special Hudson River Park District comprising Pier 40 and the development site. The text amendment would further define Pier 40 as the "granting site" and the development site as the "receiving site" in the special district. The special district would include provisions for a new special permit that, in accordance with a recent amendment to the Hudson River Park Act, would permit the transfer of floor area within the Special Hudson River Park District. The special permit would additionally allow specified bulk waivers and require that residences serve a variety of income levels on the development site. Under the proposed special district text, the uses and increased density permitted by the proposed zoning districts, described below, would not be applicable to the development site absent the grant of the special permit. The text amendment would also establish two Chairperson's Certifications to facilitate the transfer of floor area.

SJC 33 Owner 2015 LLC controls the development site and is proposing the following:

- A Zoning Map amendment to map the Special Hudson River Park District comprising Pier 40 and the development site and to rezone the development site. The Zoning Map amendment would rezone the portion of the development site north of West Houston Street from an M1-5 manufacturing zoning district to a C6-4 commercial zoning district, which would permit residential use and increased density; rezone a portion of the development site south of West Houston Street from an M2-4 manufacturing zoning district to a C6-3 commercial zoning district, which would also permit residential use and increased density; and rezone the remainder of the development site south of West Houston Street from an M2-4 manufacturing zoning district to an M1-5 manufacturing zoning district, which would permit hotel use but leave the existing permitted density unchanged.



Project Location
Figure 1

- A special permit pursuant to the proposed Special Hudson River Park District to permit the transfer of 200,000 square feet of floor area from Pier 40 to the development site and permit certain bulk waivers on the development site. Under the proposed special district text, the uses and increased density permitted by the proposed C6-4, C6-3 and M1-5 zoning districts would not be applicable to the development site absent the grant of the special permit
- A special permit pursuant to the Manhattan Core parking regulations (Zoning Resolution Section 13-45 and 13-451) for additional accessory parking.
- A Chairperson's Certification pursuant to the proposed Special Hudson River Park District to facilitate the transfer of floor area.

In addition to the approvals described above, the proposed project also requires an action by the Hudson River Park Trust (HRPT). HRPT must conduct a Significant Action process as required by the Hudson River Park Act, Chapter 592 of the Laws of 1998 ("the Act") before its Board of Directors can approve the sale of the defined amount of floor area. Further, before the Board can approve the sale, it must also comply with the State Environmental Quality Review Act (SEQRA) and adopt SEQRA Findings.

It is expected that there will be a Restrictive Declaration in connection with the proposed project, which would govern the proposed project's development.

The proposed actions would facilitate a proposal by SJC 33 Owner 2015 LLC to redevelop the development site with a mix of uses, which are assumed for analysis purposes to include up to approximately 1,586 residential units (including up to 476 permanently affordable units) and approximately 160,000 gsf of retail uses, 229,700 gsf of hotel (or office) space, 14,200 sf of publicly accessible open space, and 886 cellar-level parking spaces. The transfer of floor area within the Special Hudson River Park District made possible by the proposed actions would enable the critical repair and rehabilitation of Pier 40's infrastructure in Hudson River Park as provided for in the Act as amended in 2013.

DCP, acting on behalf of the City Planning Commission (CPC), will be the lead agency for the environmental review. HRPT will be an involved agency. Based on the Environmental Assessment Statement (EAS) that has been prepared, the lead agency has determined that the proposed project has the potential to result in significant adverse environmental impacts, requiring that an Environmental Impact Statement (EIS) be prepared. This Draft Scope of Work outlines the technical areas to be analyzed in the preparation of a Draft EIS (DEIS) for the proposed project. Scoping is the first step in the preparation of the EIS and provides an early opportunity for the public and other agencies to be involved in the EIS process. It is intended to determine the range of issues and considerations to be evaluated in the EIS. This Draft Scope of Work includes a description of the proposed project and the actions necessary for its implementation, presents the proposed framework for the EIS analysis, and discusses the procedures to be followed in the preparation of the DEIS. The *City Environmental Quality Review (CEQR) Technical Manual* will serve as a general guide on the methodologies and impact criteria for evaluating the proposed project's effects on the various environmental areas of analysis.

B. PROJECT DESCRIPTION

DEVELOPMENT SITE

The existing St. John's Terminal Building is located along Route 9A south of Clarkson Street (Manhattan Block 596, Lot 1) and spans a portion of West Houston Street, across from Pier 40

of the Hudson River Park (see **Figure 2**). While the portion of the building north of West Houston Street is largely vacant, the south building is occupied by commercial tenants (office, back office and communications) and is also used as temporary event space (fashion shows, exhibits, etc.). The existing buff-colored brick building is four stories tall, with three stories above West Houston Street. The ground floor is primarily a series of loading bays along both West Street and Washington Street. Originally built as a shipping terminal in the 1930s, the building is underutilized and obsolete for modern uses.

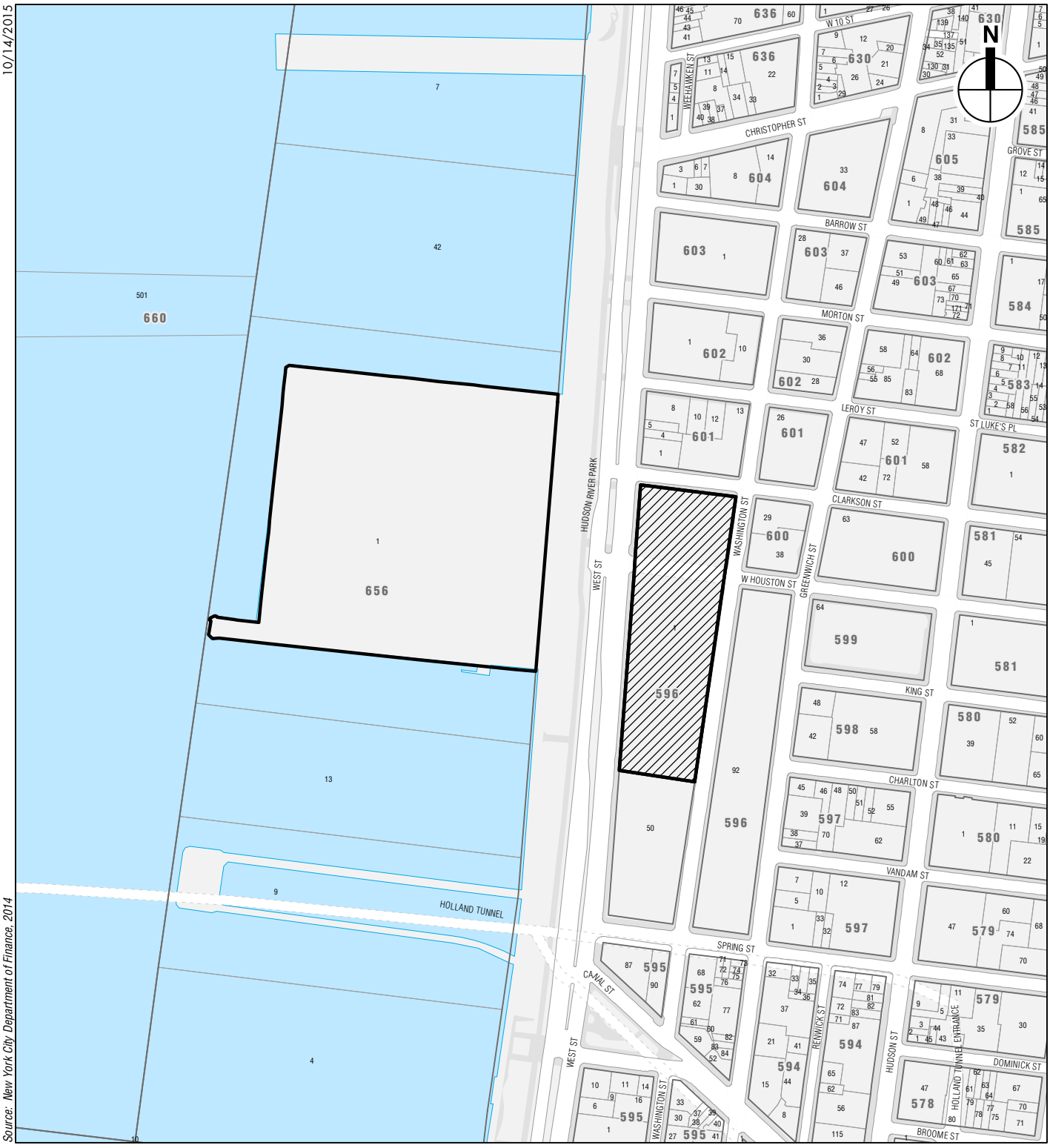
Under New York City zoning, the portion of the development site north of West Houston Street is zoned M1-5 and the area south of West Houston Street is zoned M2-4 (see **Figure 3** for the existing zoning). The development site is currently treated as a single zoning lot, measuring approximately 213,654 sf, which allows permitted office and retail floor area to be distributed anywhere on the development site, and to be transferred back and forth across West Houston Street, although hotel uses are only permitted north of West Houston Street, in the M1-5 district. For commercial and manufacturing uses, these zoning districts allow a maximum floor area Ratio (FAR) of 5.0. For the purpose of this analysis, the portion of the development site that spans West Houston Street is assumed not to generate floor area, which means that the development site is assumed to have an effective lot area of 196,410 sf, and allowable development potential of up to 982,050 zoning square feet (zsf). The existing building has a total of 739,231 zsf; therefore, the development site is underbuilt by 242,819 zsf when compared to the permitted maximum of 982,050 zsf.

GRANTING SITE

Pier 40 is an approximately 15-acre structure located over the Hudson River, directly west of the development site across Route 9A. The pier is located within Hudson River Park, and is under the jurisdiction of HRPT, pursuant to the Act. Originally used as a passenger ship terminal, Pier 40 currently contains a public parking facility, athletic fields and other recreational uses, maritime uses, offices for HRPT, and other operational functions. HRPT has reported that Pier 40 is in need of timely and critical infrastructure repairs to its supporting piles and deck. In addition, the building located on the pier is significantly deteriorated, needing repairs to its roof, electrical and plumbing systems, and façade. In recent years, HRPT has been forced to close portions of the public parking garage to ensure public safety. The balance of Pier 40's roof must be reconstructed, and the steel piles supporting the pier also need to be repaired.

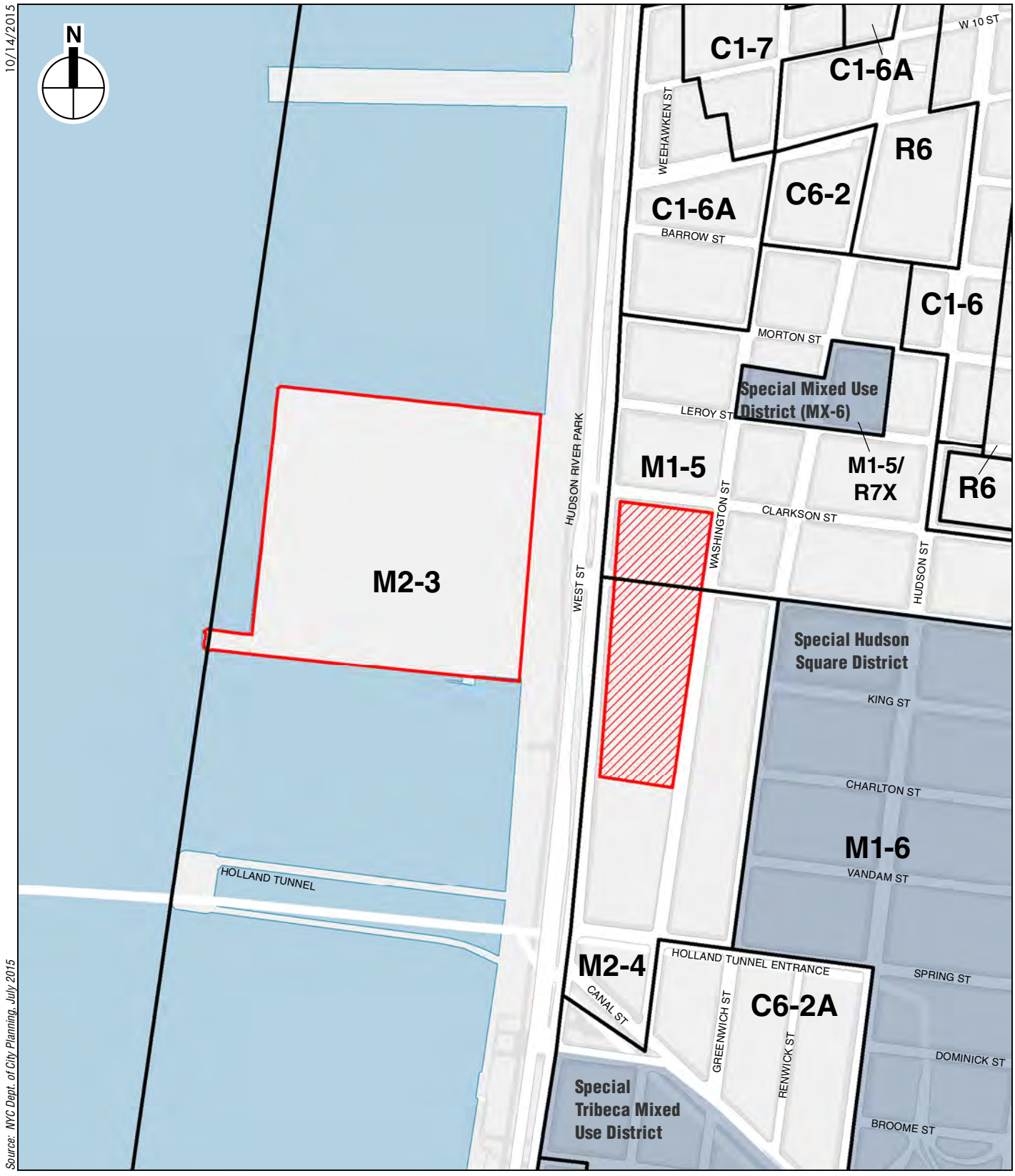
PROPOSED PROJECT

The development site comprises three sites, the North Site, Center Site, and South Site, as shown on **Figure 4**. The North Site on the block north of West Houston Street would be rezoned from M1-5 to C6-4. With the proposed project, it would be assumed to be redeveloped with residential towers with a height of 360 feet to the roof of the east tower and 430 feet to the roof of the west tower, and retail in the base of the buildings. Based on current plans, the North Site development is expected to total approximately 734,600 gross square feet (gsf). The applicant has committed to providing 30 percent of total units and 25 percent of total residential floor area as permanently affordable across the proposed project. Based on these assumptions, The North Site is assumed to contain up to 593 units (approximately 579,600 gsf of residential floor area), including up to approximately 415 market-rate units and 178 permanently affordable senior units (113,850 gsf) in a separate building. The North Site would also include approximately 100,000 gsf of retail uses on the ground, mezzanine, and second floors and approximately 55,000 gsf of parking uses (approximately 236 accessory parking spaces). There would also be a new



550 WASHINGTON STREET

Tax Map
Figure 2



Existing Zoning
Figure 3



Development Site Identification

Figure 4

approximately 14,200-square-foot outdoor publicly-accessible open space on the existing platform spanning West Houston Street. The platform would be modified to create large openings that would allow light and air to reach the street level.

The Center Site includes the portion of the development site that extends approximately 340 feet south of the midline of West Houston Street. It would be rezoned from M2-4 to C6-3 and is assumed to be redeveloped with two primarily residential buildings with heights of 320 feet and 240 feet to the roof. The applicant has committed to providing 30 percent of total units and 25 percent of total residential floor area as permanently affordable across the proposed project. Based on these assumptions, the Center Site is assumed to contain up to 993 residential units (approximately 754,500 gsf of residential floor area), including up to 695 market rate units and up to 298 affordable units (226,335 gsf). There would also be approximately 60,000 gsf of retail uses on the cellar, ground, mezzanine, and second floors.

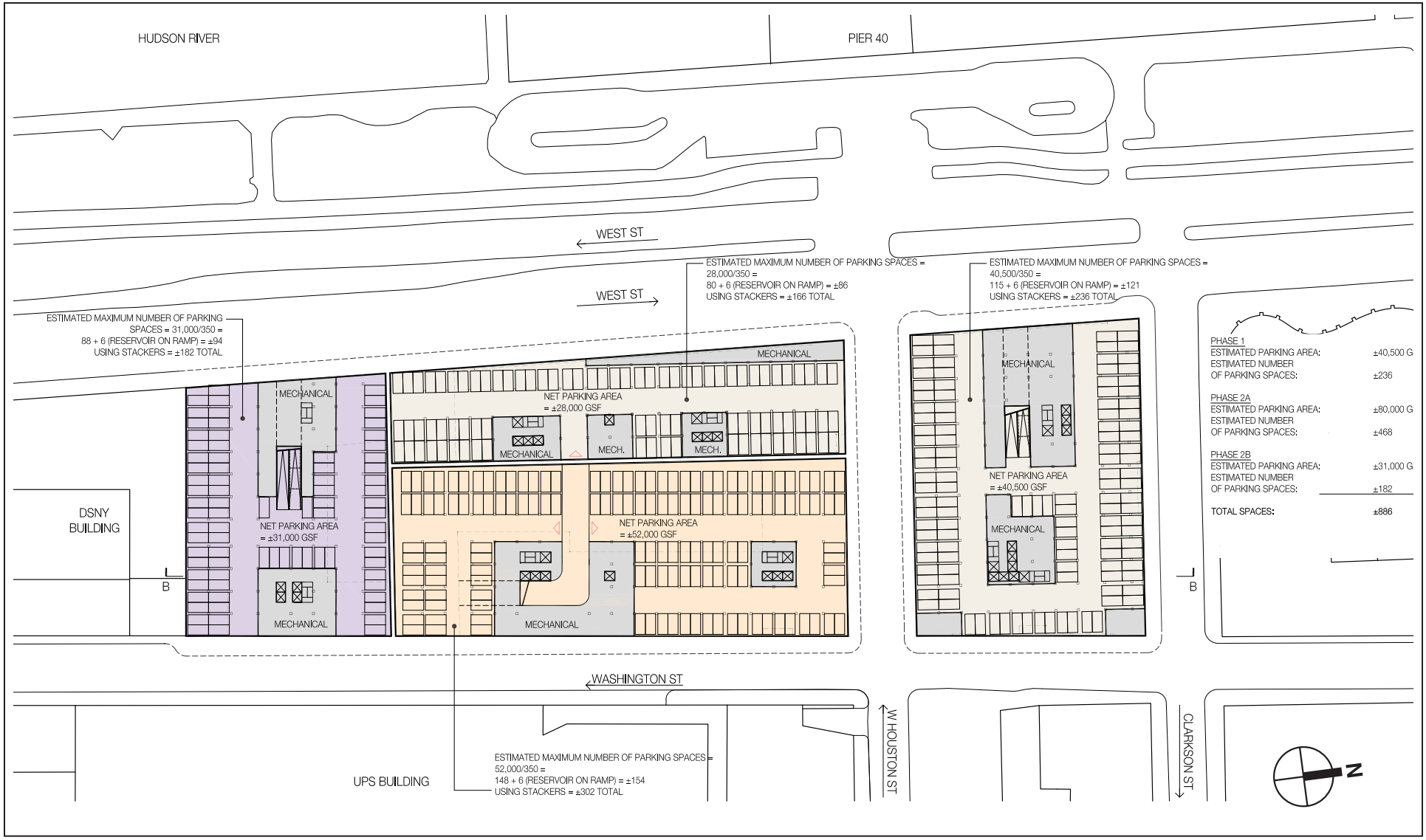
The South Site is immediately south of the Center Site and is the remainder of the development site, which would be rezoned from M2-4 to M1-5. It is assumed that the South Site would include an additional building with a height of 240 feet to the roof. This building would include approximately 229,700 gsf of hotel (or office) space and a 41,400-gsf event space.

As shown in **Table 1**, the full build out of the proposed project is assumed to include up to approximately 1,586 residential units (including up to approximately 476 permanently affordable units) and approximately 160,000 gsf of retail uses, 229,700 gsf of hotel (or office) space, 14,200 sf of publicly accessible open space, and 886 cellar-level parking spaces. See **Figures 5, 6, 7, and 8** for plans and a section of the proposed project. For analysis purposes and allowing three years for construction, it is assumed that full development would be complete by 2024.

Table 1
Development Program for Analysis (Approx. gsf)
Proposed Project

Use	North Site	Center Site	South Site	Total
Total Retail[1]:	100,000	60,000	—	160,000
Local Retail	*29,000*	*8,000*	—	*37,000*
Destination Retail	*71,000*	*52,000*	—	*123,000*
Residential	579,600 (593 units)	754,500 (993 units)	—	1,334,100 (1,586 units)
Hotel[2]	—	—	229,700 (353 rooms[3])	229,700
Event Space	—	—	41,400	41,400
Parking[4]	55,000 (236 parking spaces)	101,000 (468 parking spaces)	40,000 (182 parking spaces)	196,000 (886 parking spaces)
Total:	**734,600**	**915,500**	**311,100**	**1,961,200**

Notes: [1]The breakdown between local, destination, and big box retail uses is assumed for analysis purposes only.
[2]The proposed project may include either hotel or office space on the South Site. For analysis purposes, it is conservatively assumed to be hotel.
[3]Assumes 650 gsf per hotel room.
[4]A portion of the building mechanical space is also included.
Sources: CookFox Architects, SJC 33 Owner 2015 LLC



550 WASHINGTON STREET

Proposed Cellar Floor Plan

Figure 5

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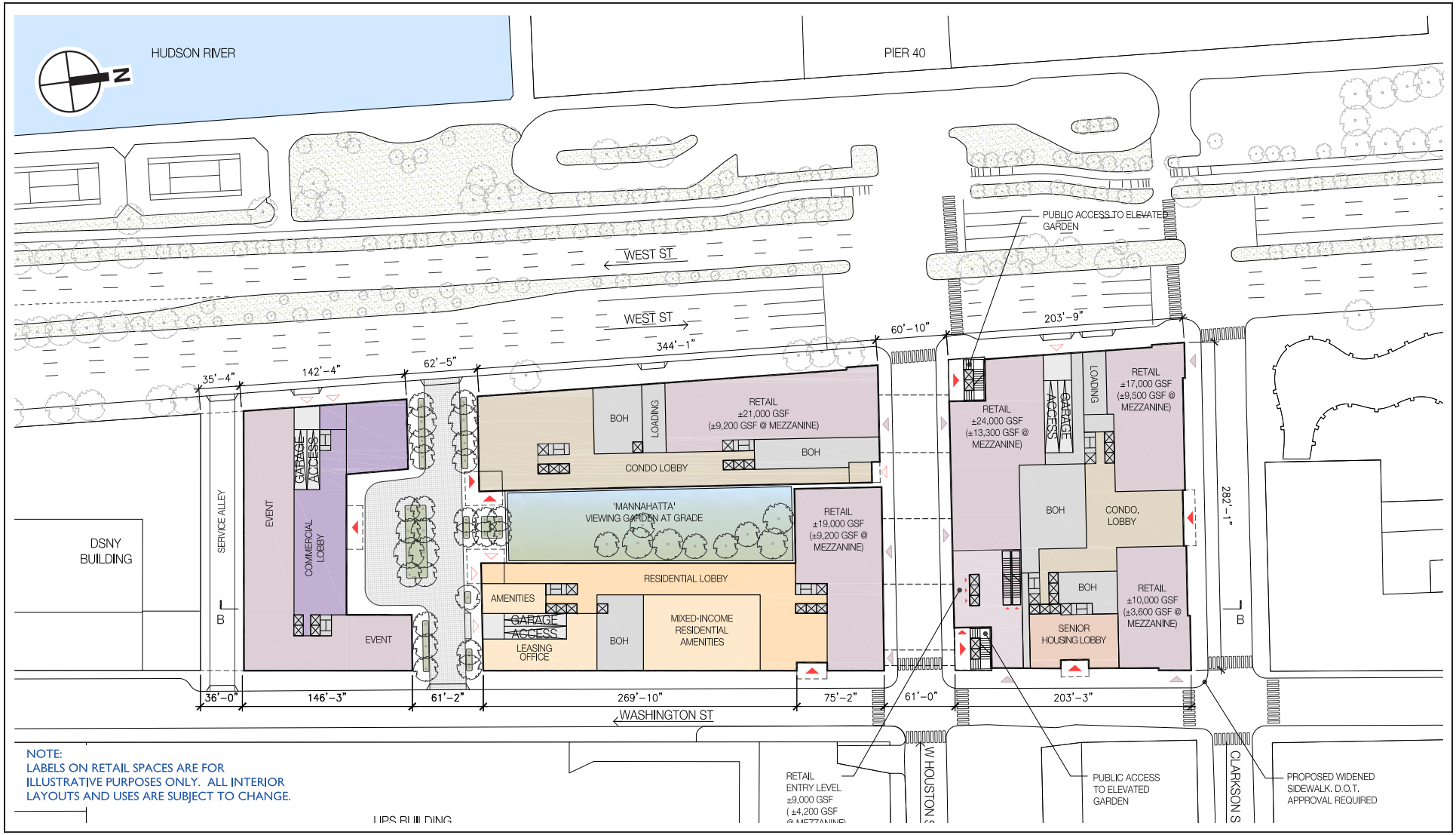

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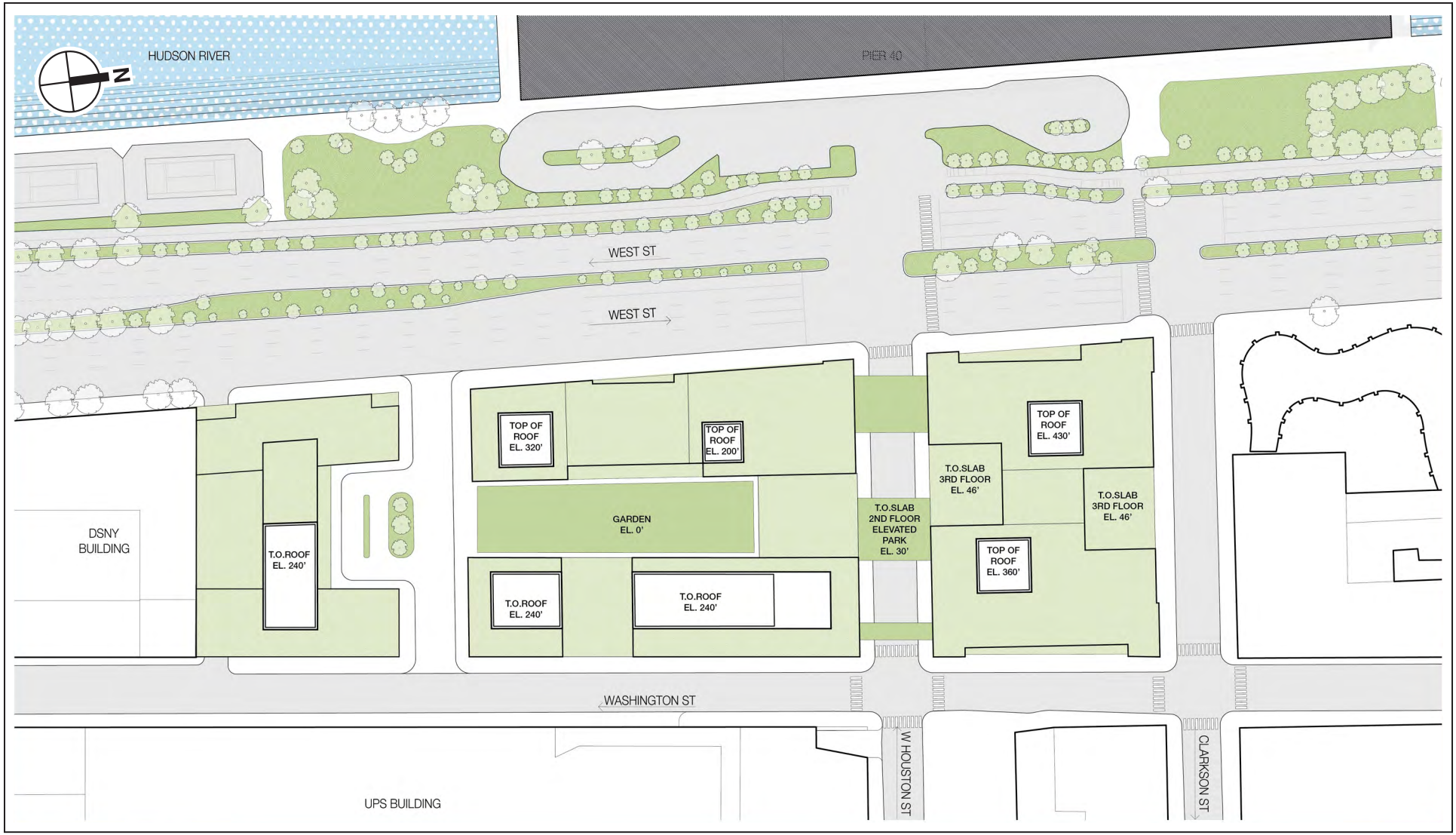
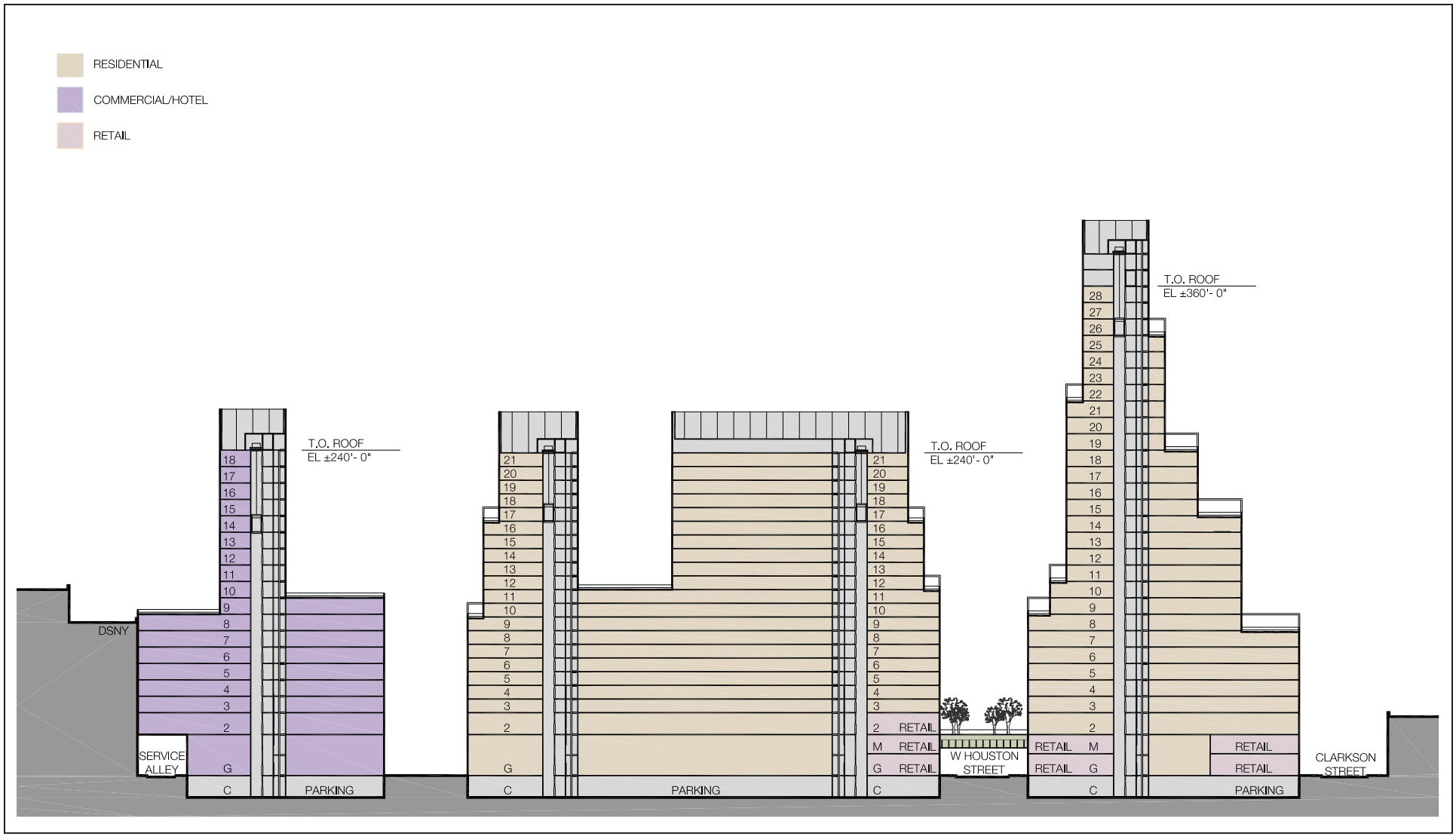
Proposed Ground Floor Plan

Figure 6



Proposed Roof Plan
Figure 7



Section Along Washington Street Looking West

Figure 8

PROPOSED PROJECT WITH BIG BOX RETAIL

The EIS will also analyze a second With Action scenario that includes a 104,000-gsf big box retail use within the ground and cellar levels of the Center Site. The proposed project with big box retail scenario would be similar to the proposed project, except that the amount of parking would decrease and the amount of retail would increase. As shown in **Table 2,** under the proposed project with big box retail scenario, the full build out of the development site is assumed to include up to approximately 1,586 residential units (including up to approximately 476 affordable units) and approximately 255,000 gsf of retail uses (including a 104,800-gsf big box use), 229,700 gsf of hotel space, 14,200 sf of publicly accessible open space, and 412 cellar-level parking spaces. See **Figures 9, 10,** and **11** for plans and a section of the proposed project with big box retail scenario.

Table 2
Development Program for Analysis (Approx. gsf)
Proposed Project with Big Box Retail

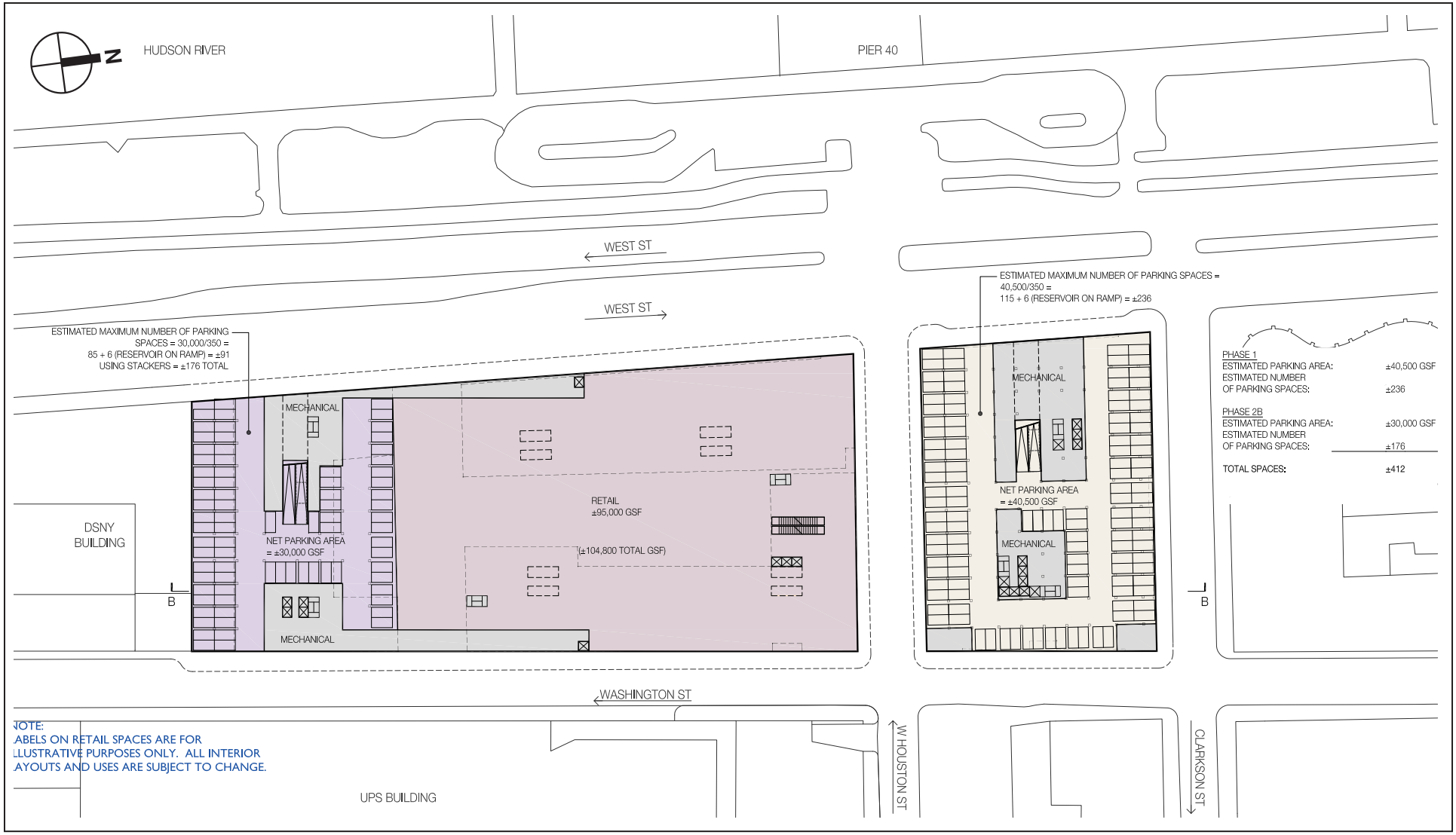
Use	North Site	Center Site	South Site	Total
Total Retail[1]:	100,000	155,000	—	255,000
Local Retail	*29,000*	*8,000*	—	*37,000*
Destination Retail	*71,000*	*42,200*	—	*113,200*
Big Box Retail	—	*104,800*	—	*104,800*
Residential[2]	579,600 (593 units)	754,500 (993 units)	—	1,334,100 (1,586 units)
Hotel[2]	—	—	229,700 (353 rooms[3])	229,700
Event Space	—	—	41,400	41,400
Parking[4]	55,000 (236 parking spaces)	6,000	40,000 (176 parking spaces)	101,000 (412 parking spaces)
Total:	**734,600**	**915,500**	**311,100**	**1,961,200**

Notes: [1]The breakdown between local, destination, and big box retail uses is assumed for analysis purposes only.
[2]The proposed project may include either hotel or office space on the South Site. For analysis purposes, it is conservatively assumed to be hotel.
[3]Assumes 650 gsf per hotel room.
[4]A portion of the building mechanical space is also included.
Sources: CookFox Architects, SJC 33 Owner 2015 LLC

PROPOSED ACTIONS

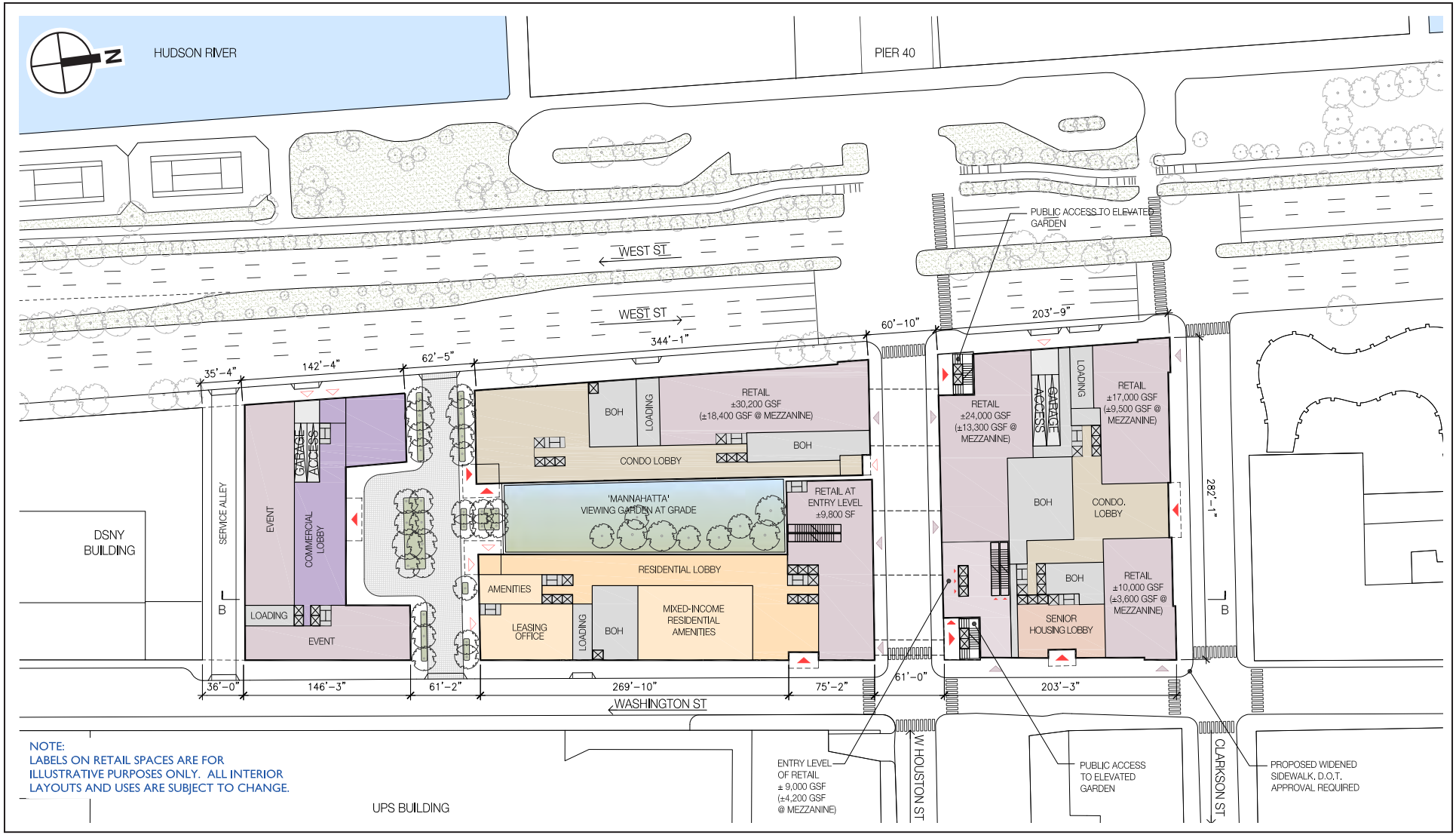
In order to facilitate the proposed project, a series of discretionary approvals are needed. DCP is proposing the following action:

- Zoning text amendment to establish the Special Hudson River Park District comprising Pier 40 and the development site. The text amendment would further define Pier 40 as the "granting site" and the development site as the "receiving site" in the special district. The special district would include provisions for a new special permit that, in accordance with a recent amendment to the Hudson River Park Act, would permit the transfer of floor area within the Special Hudson River Park District. The special permit would additionally allow specified bulk waivers and require that residences serve a variety of income levels on the development site. Under the proposed special district text, the uses and increased density permitted by the proposed zoning districts, described below, would not be applicable to the



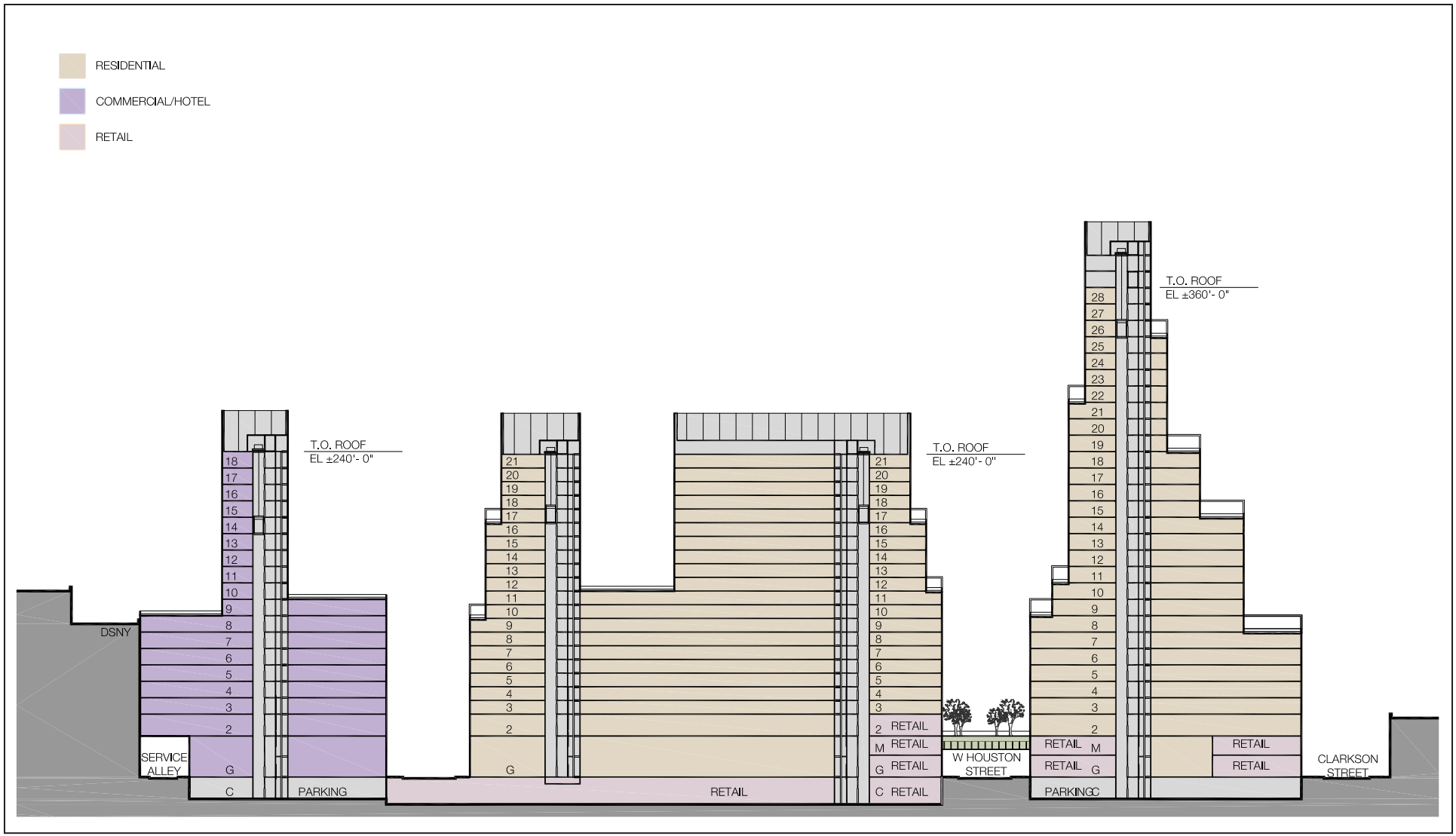
Proposed Cellar Plan:
Proposed Project with Big Box Retail

Figure 9



Proposed Ground Floor Plan:
Proposed Project with Big Box Retail

Figure 10



Proposed Section View:
Proposed Project with Big Box Retail

Figure 11

development site absent the grant of the special permit. The text amendment would also establish two Chairperson's Certifications to facilitate the transfer of floor area.

SJC 33 Owner 2015 LLC controls the development site and is proposing the following:

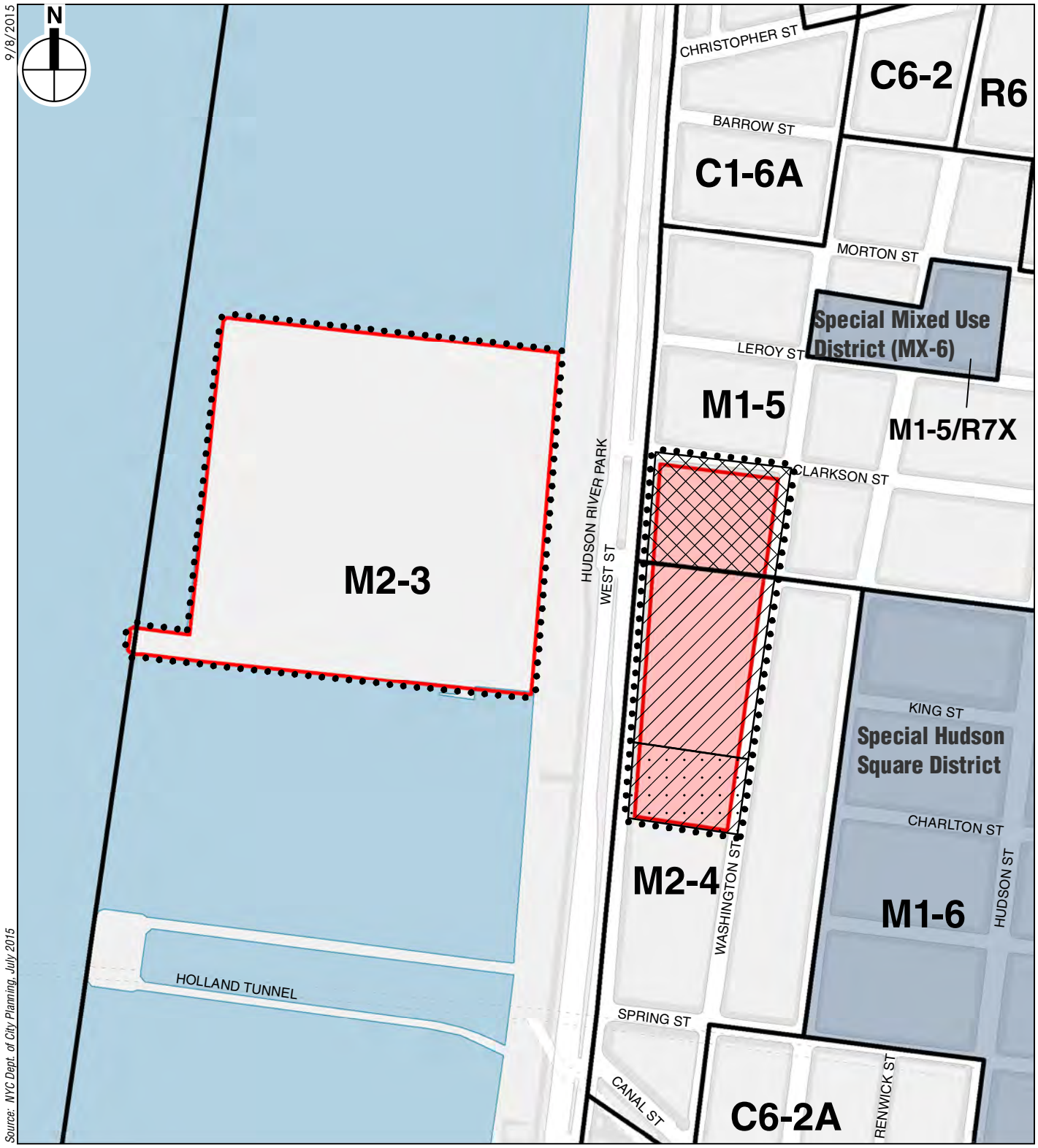
- A Zoning Map amendment to map the Special Hudson River Park District comprising Pier 40 and the development site and rezone the development site. The Zoning Map amendment would rezone the portion of the development site north of West Houston Street from an M1-5 manufacturing zoning district to a C6-4 commercial zoning district, which would permit residential use and permit increased density; rezone a portion of the development site south of West Houston Street from an M2-4 manufacturing zoning district to a C6-3 commercial zoning district, which would also permit residential use and increased density; and rezone the remainder of the development site south of West Houston Street from an M2-4 manufacturing zoning district to an M1-5 manufacturing zoning district, which would permit hotel use but leave the existing permitted density unchanged. The proposed zoning is shown on **Figure 12**.
- A special permit pursuant to the proposed Special Hudson River Park District to permit the transfer of 200,000 square feet of floor area from Pier 40 to the development site and permit certain bulk waivers on the development site. Under the proposed special district text, the uses and increased density permitted by the proposed C6-4, C6-3 and M1-5 zoning districts would not be applicable to the development site absent the grant of the special permit
- A special permit pursuant to the Manhattan Core parking regulations (Zoning Resolution Section 13-45 and 13-451) for additional accessory parking.
- A Chairperson's Certification pursuant to the proposed Special Hudson River Park District to facilitate the transfer of floor area.

In addition to the approvals described above, the proposed project also requires an action by HRPT. HRPT must conduct a Significant Action process as required by the Hudson River Park Act, Chapter 592 of the Laws of 1998 ("the Act") before its Board of Directors can approve the sale of the defined amount of floor area. Further, before the Board can approve the sale, it must also comply with SEQRA and adopt SEQRA Findings.

New York State Department of Transportation (NYSDOT) approval of the proposed curb cut changes on Route 9A would also be required.

It is expected that there will be a Restrictive Declaration in connection with the proposed project, which would govern the proposed project's development. The Restrictive Declaration would, among other things:

- Require development in substantial accordance with the approved plans, which will establish an envelope within which the buildings must be constructed, including limitations on height, bulk, building envelopes, and floor area;
- Require development of 25 percent of the residential floor area and 30 percent of the residential units, across the project, as permanently affordable housing, at specified income levels;
- Require that the proposed project's development program be within the scope of the development scenario analyzed in the EIS;
- Provide for the implementation of "Project Components Related to the Environment" (PCREs) (i.e., certain project components which were material to the analysis of environmental impacts in the EIS);



Proposed Zoning
Figure 12

- Provide for measures necessary to mitigate significant adverse impacts, if identified in the EIS, substantially consistent with the EIS;
- Provide that the special permit will be vested for the project by substantial construction of any one building, in accordance with Zoning Resolution Section 11-42; and

PURPOSE AND NEED

The proposed project is intended to enable the transformation of an underutilized and outmoded building into a vibrant, mixed-use development with new shops, residences serving a variety of income levels, publicly-accessible open space and amenities to enliven this waterfront site. Significantly, the transfer of floor area that is part of the proposed project will support infrastructure repairs to Pier 40, a critical asset to Hudson River Park, as provided for in the Act.

C. FRAMEWORK FOR ENVIRONMENTAL REVIEW

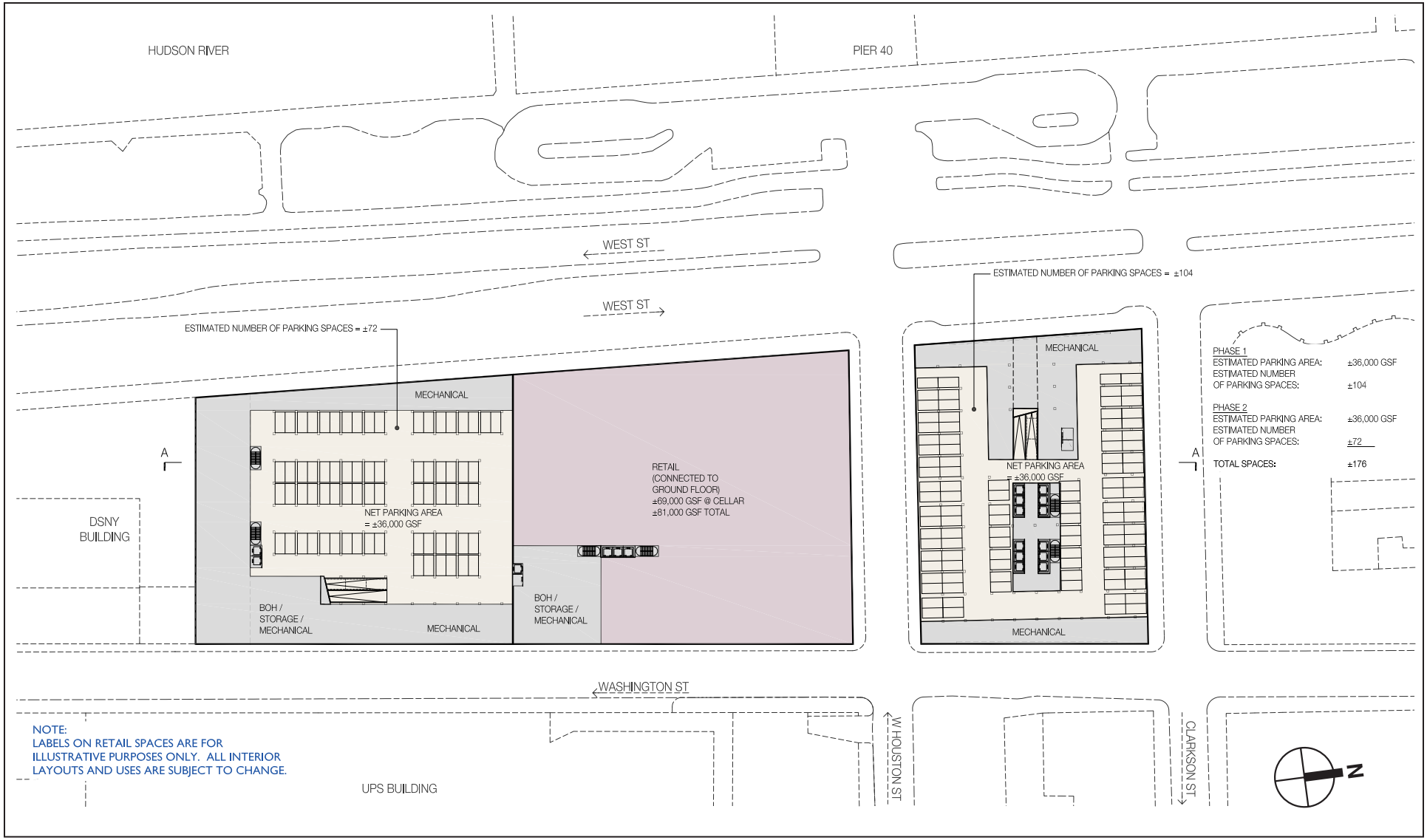
The lead agency is required to take a "hard look" at the environmental impacts of proposed actions and, to the maximum extent practicable, avoid or mitigate potentially significant adverse impacts on the environment, consistent with social, economic, and other essential considerations. An EIS is a comprehensive document used to systematically consider environmental effects, evaluate reasonable alternatives, and identify and mitigate, to the maximum extent practicable, any potentially significant adverse environmental impacts. The EIS provides a means for the lead and involved agencies to consider environmental factors and choose among alternatives in their decision-making processes related to a proposed action.

This section outlines the conditions to be examined in the EIS.

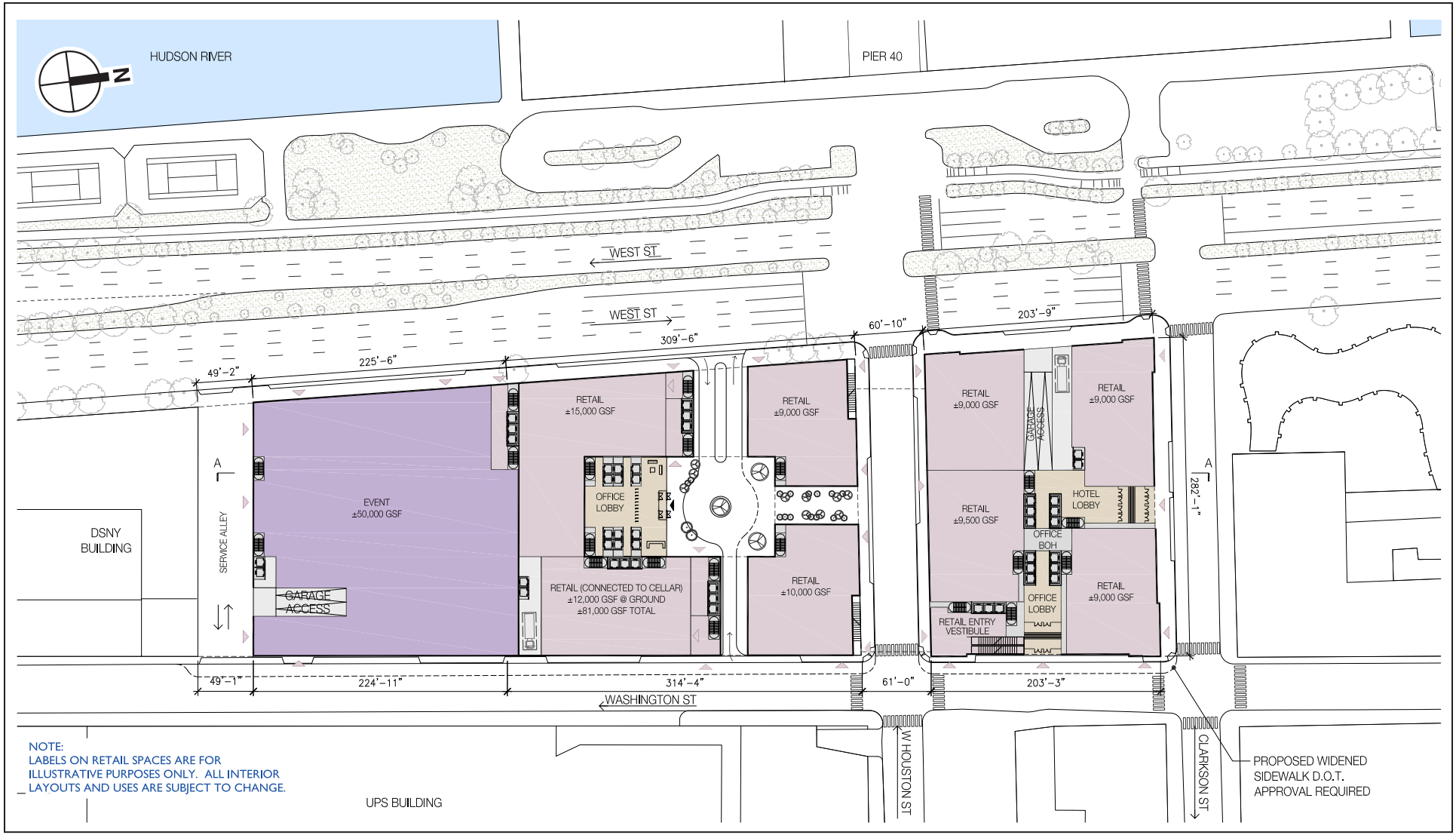
FUTURE WITHOUT THE PROPOSED ACTIONS

In the future without the proposed actions (the No Action condition), the development site is expected to be redeveloped with a program that does not require any discretionary approvals. The No Action development would utilize the available unused floor area of 242,819 zsf as well as existing floor area above West Houston Street that would be demolished and reused on the north site. The platform space above West Houston Street would be developed as a private open space serving the building tenants.

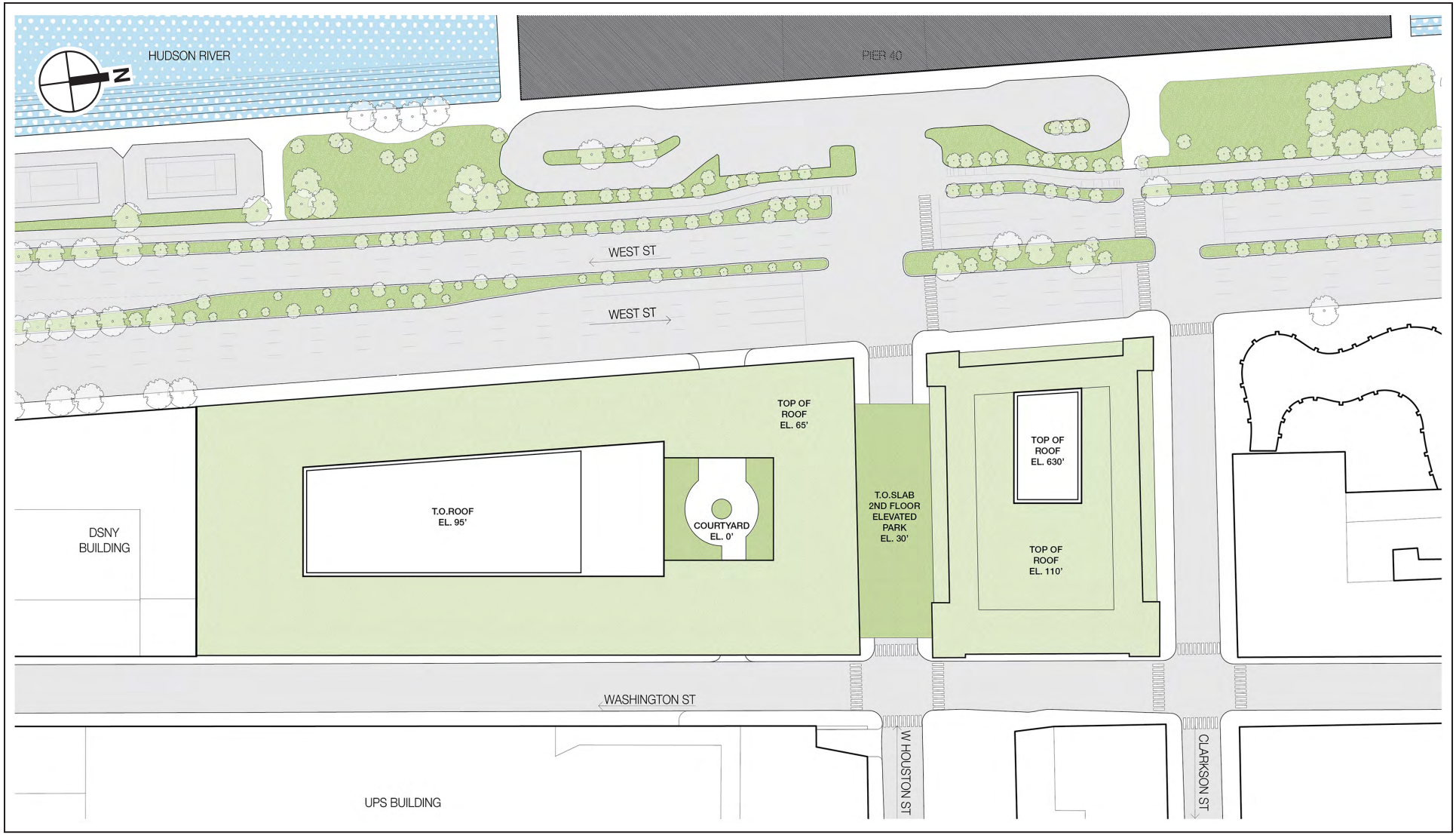
On the North Site, the No Action development will include hotel, office, and retail uses in a 48-story (approximately 630 feet) building. South of West Houston Street in the No Action condition, the existing building will be demolished and rebuilt but there will be no change in floor area. The development on the Center and South sites will include office uses, event space, and retail uses. Overall, as summarized in **Table 3**, the No Action development is assumed to include approximately 322,000 gsf of retail uses (including 61,500 gsf of local retail and 260,500 gsf of destination retail), 427,000 gsf of office space, a 285,000-gsf hotel (438 rooms), and approximately 176 accessory parking spaces. **Figures 13, 14, 15** and **16** show conceptual plans for the No Action condition development of the development site.



No Action Cellar Floor Plan
Figure 13

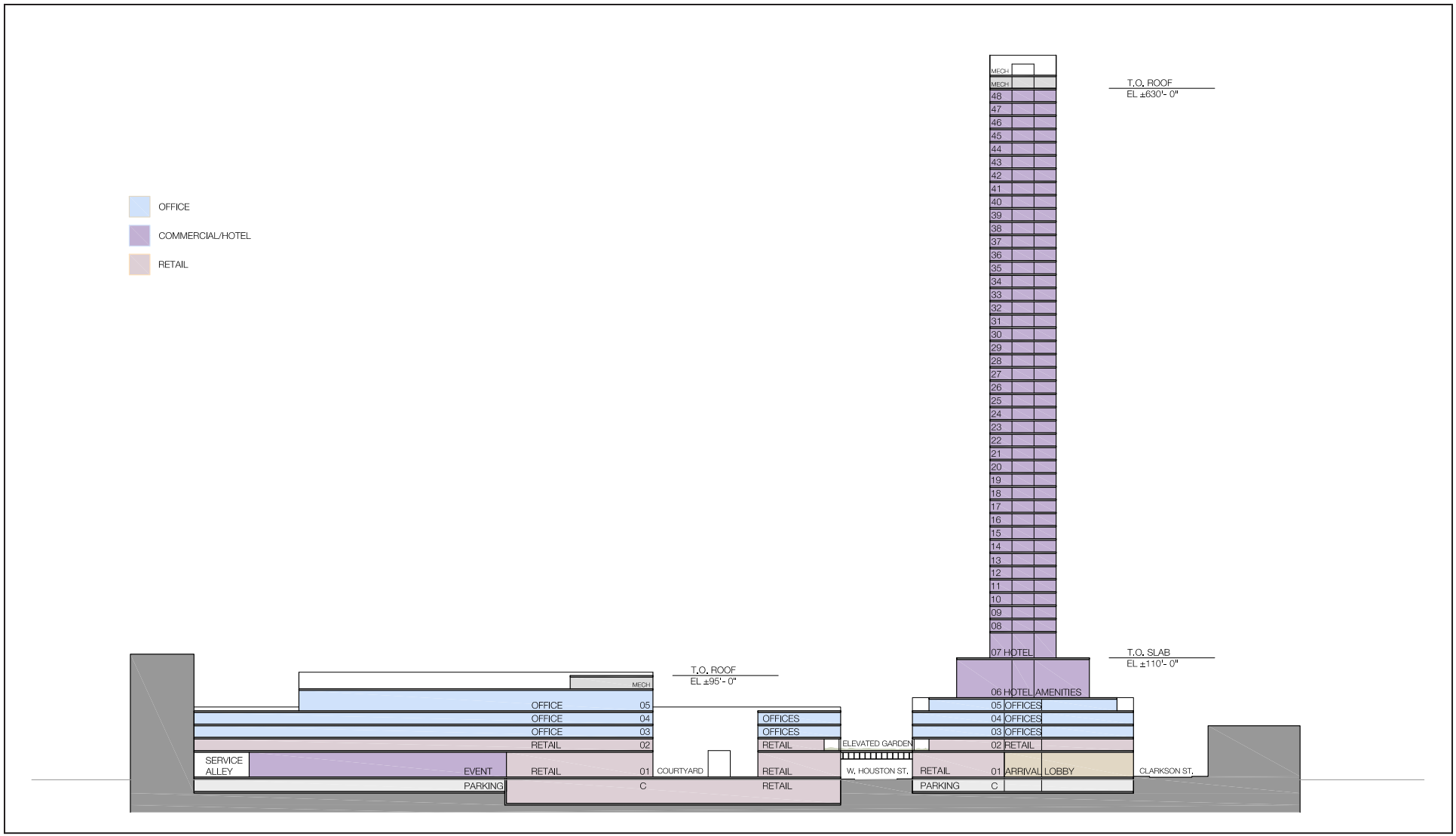


No Action Ground Floor Plan
Figure 14



550 WASHINGTON STREET

No Action Roof Plan
Figure 15



550 WASHINGTON STREET

No Action Section View
Figure 16

Table 3
No Action Scenario Program For Analysis

Use	Approximate gsf
Retail[1]	322,000
Local Retail	*61,500*
Destination Retail	*260,500*
Office	427,000
Hotel	285,000 (438 rooms)
Event Space	50,000
Parking	68,000 (176 spaces)
No Action Building gsf	**1,152,000**

Note: [1]The breakdown between local and destination retail uses is assumed for analysis purposes only.
Sources: CookFox Architects, SJC 33 Owner 2015 LLC

FUTURE WITH THE PROPOSED ACTIONS

In the future with the proposed actions (the With Action condition), the development site is assumed to be redeveloped with one of the two development programs described above, under "Project Description:" the proposed project or the proposed project with big box retail.

The analysis assumptions for the No Action development, With Action development (proposed project scenario), and increment for analysis are summarized below in **Table 4**.

Table 4
Comparison of No Action and With Action Conditions (gsf)
Proposed Project

Uses	No Action Condition	With Action Condition	Increment for Analysis
Total Retail[1]	322,000	160,000	-162,000
Local Retail	*61,500*	*37,000*	*-24,500*
Destination Retail	*260,500*	*123,000*	*-137,500*
Big Box Retail	—	—	—
Residential	—	1,334,100 (1,586 units)	1,334,100 (1,586 units)
Hotel[2]	285,000 (438 rooms)	229,700 (353 rooms)	-55,300 (-85 rooms)
Office	427,000	—	-427,000
Event Space	50,000	41,400	-8,600
Parking	68,000 (176 spaces)	196,000 (886 spaces)	128,000 (710 spaces)
Total:	**1,152,000**	**1,961,200**	**809,200**

Notes: [1]The breakdown between local, destination, and big box retail uses is assumed for analysis purposes only.
[2]The proposed project may include either hotel or office space on the South Site. For analysis purposes, it is conservatively assumed to be hotel.

As shown in **Table 4**, the proposed project is assumed to result in the incremental development of 809,200 the development site, compared to the No Action condition.

The analysis assumptions for the No Action development, With Action development (proposed project with big box retail scenario), and increment for analysis are summarized below in **Table 5**.

Table 5
Comparison of No Action and With Action Conditions (gsf)
Proposed Project with Big Box Retail

Uses	No Action Condition	With Action Condition	Increment for Analysis
Retail[1]	322,000	255,000	-67,000
Local Retail	*61,500*	*37,000*	*-24,500*
Destination Retail	*260,500*	*113,200*	*-147,300*
Big Box Retail	—	*104,800*	*104,800*
Residential	—	1,334,100 (1,586 units)	1,334,100 (1,586 units)
Hotel[2]	285,000 (438 rooms)	229,700 (353 rooms)	-55,300 (-85 rooms)
Office	427,000	—	-427,000
Event Space	50,000	41,400	-8,600
Parking	68,000 (176 spaces)	101,000 (412 spaces)	17,000 (236 spaces)
Total:	**1,152,000**	**1,961,200**	**809,200**

Notes: [1]The breakdown between local, destination, and big box retail uses is assumed for analysis purposes only.
[2]The proposed project may include either hotel or office space on the South Site. For analysis purposes, it is conservatively assumed to be hotel.

As shown in **Table 5**, the proposed project with big box retail scenario is assumed to result in the incremental development of 809,200 gsf on the development site, compared to the No Action condition.

The increments between the No Action and With Action conditions, taken together with the proposed changes in use, will form the basis for analysis in the EIS. The technical chapters of the EIS will account for both With Action scenarios, as appropriate. As noted above, the gsf and program components for the development are provided for the purpose of environmental analysis as a reasonable upper limit. These estimates are conservative since usable built area is expected to be less.

The EIS will consider the potential for the proposed project to result in significant adverse environmental impacts upon complete build out of the proposed project, which is assumed for analysis purposes to be in 2024. Since the proposed project may be phased and development of the three sites may take place in any order, an interim build year will be considered if full development would result in significant adverse impacts requiring mitigation.

D. SCOPE OF WORK

As described earlier, the environmental review provides a means for decision-makers to systematically consider environmental effects along with other aspects of project planning and design, to evaluate reasonable alternatives, and to identify, and mitigate where practicable, any significant adverse environmental impacts.

The EIS will contain:

- A description of the proposed project and the environmental setting;
- A statement of the environmental impacts of the proposed project, including its short- and long-term effects and typical associated environmental effects;
- An identification of any adverse environmental effects that cannot be avoided if the proposed project is implemented;
- A discussion of reasonable alternatives to the proposed project;

- An identification of irreversible and irretrievable commitments of resources that would be involved if the proposed project is built; and
- A description of measures proposed to minimize or fully mitigate any significant adverse environmental impacts.

The first step in preparing the EIS document is the public scoping process. Scoping is the process of focusing the environmental impact analysis on the key issues that are to be studied in the EIS. The proposed scope of work for each technical area to be analyzed in the EIS follows. The EAS that has been prepared for the proposed project identified one technical area (solid waste and sanitation services) in which the proposed project would not result in significant adverse impacts and therefore does not require further analysis in the EIS. The scope of work and the proposed impact assessment criteria below are based on the methodologies and guidance set forth in the *CEQR Technical Manual*.

TASK 1: PROJECT DESCRIPTION

As the first chapter of the EIS, the Project Description will introduce the reader to the proposed project and set the context in which to assess impacts. The chapter will identify the proposed project (brief description and location of the proposed project) and provide the following:

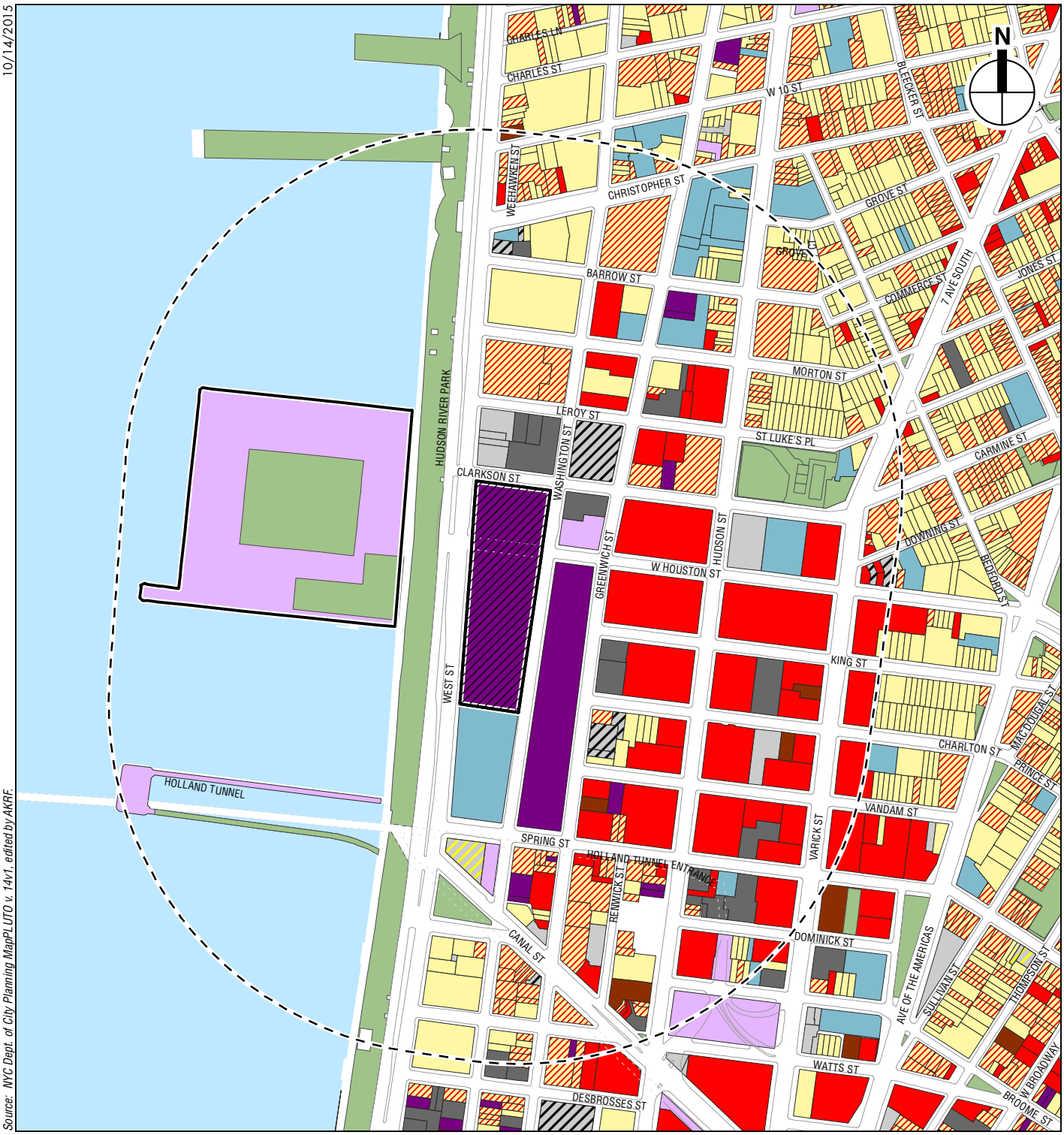
- An introduction to the background and history of the development site, the granting site, and the proposed project;
- A statement of the public purpose and need for the proposed project, and key planning considerations that have shaped the proposal;
- A description of the analysis framework for the environmental review, including a discussion of the No Action condition and the build year(s) for analysis;
- A detailed description of the proposed project, including both the No Action program and the With Action program (for both Phase 1 and Phase 2);
- A description of the design of the proposed project with supporting figures;
- A discussion of the approvals required, procedures to be followed, the role of the EIS in the process, and its relationship to any other approvals.

TASK 2: LAND USE, ZONING, AND PUBLIC POLICY

Under CEQR, a land use analysis characterizes the uses and development trends in the area that may be affected by a proposed project, describes the public policies that guide development, and determines whether a proposed project is compatible with those conditions and policies or whether it may affect them. In addition to considering the proposed project's effects in terms of land use compatibility and trends in zoning and public policy, this chapter will also provide a baseline for other analyses.

The land use chapter will provide the following:

- A brief development history of the development site, the granting site, and the study area. The study area will include the development site and the area within approximately ¼-mile (see **Figure 17**).
- Describe conditions in the study area, including existing uses and the current zoning.
- Describe predominant land use patterns in the study area, including recent development trends and zoning changes.



10/14/2015

Source: NYC Dept. of City Planning MapPLUTO v. 14v1, edited by AKRF.

Development Site
Granting Site
Study Area (Quarter-Mile boundary)
Commercial and Office Buildings
Hotels
Industrial and Manufacturing
Open Space and Outdoor Recreation
Parking Facilities
Public Facilities and Institutions
Residential
Residential with Commercial Below
Transportation and Utility
Vacant Land
Vacant Building
Under Construction

0 500 FEET

550 WASHINGTON STREET

Land Use
Figure 17

- Summarize other public policies that may apply to the development site and study area, including any formal neighborhood or community plans, the New York City Waterfront Revitalization Program (WRP), and OneNYC.
- Prepare a list of other projects expected to be built in the study area that would be completed by the 2024 analysis year. Describe the effects of these projects on land use patterns and development trends. Also, describe any pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area.
- Describe the proposed actions and provide an assessment of the impacts of the proposed project on land use and land use trends, zoning, and public policy. Consider the effects of the proposed project related to issues of compatibility with surrounding land use, consistency with public policy initiatives, and the effect on development trends and conditions in the area.

TASK 3: SOCIOECONOMIC CONDITIONS

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Although socioeconomic changes may not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of an area.

According to the *CEQR Technical Manual*, the six principal issues of concern with respect to socioeconomic conditions are whether a proposed project would result in significant impacts due to: (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement due to increased rents; (5) indirect business displacement due to retail market saturation; and (6) adverse effects on a specific industry. The following describes how each of these issues needs to be addressed in the analysis.

DIRECT RESIDENTIAL DISPLACEMENT

There are no residential uses located on the development site; therefore, the proposed project would not result in any direct residential displacement impacts, and no further assessment of this issue is required.

DIRECT BUSINESS DISPLACEMENT

The development site contains two active businesses. In the With Action condition, these businesses would likely relocate when their leases expire, or they may be relocated within the development site. This would not be considered direct displacement under CEQR; therefore, an analysis of direct business displacement will not be required.

INDIRECT RESIDENTIAL DISPLACEMENT

The proposed project would introduce more residential units than the 200-unit threshold requiring a preliminary assessment of potential indirect residential displacement. The concern with respect to indirect residential displacement is whether the proposed project—by introducing a substantial new development that is markedly different from existing uses, development, and activities within the neighborhood—could lead to increases in property values, and thus rents, making it difficult for some residents to afford their homes. The objective of the indirect

residential displacement assessment is to determine whether the proposed project would either introduce a trend or accelerate a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change.

The indirect residential displacement assessment will use the most recent available U.S. Census data, New York City Department of Finance's Real Property Assessment Data (RPAD) database, as well as current real estate market data to present demographic and residential market trends and conditions for a 1/2-mile study area. The presentation of study area characteristics will include population, housing value and rent, and average household income. Following *CEQR Technical Manual* guidelines, the preliminary assessment will perform the following step-by-step evaluation:

- **Step 1**: Determine if the proposed project would add substantial new population with different income as compared with the income of the study area population. If the expected average incomes of the new population would be similar to the average incomes of the study area populations, no further analysis is necessary. If the expected average incomes of the new population would exceed the average incomes of the study area populations, then Step 2 of the analysis will be conducted.
- **Step 2**: Determine if the proposed project population is large enough to affect real estate market conditions in the study area. If the population increase is greater than 5 percent in the study area as a whole or within any identified subareas, then Step 3 will be conducted. If the population increase is greater than 10 percent in the study areas as a whole or within any identified subarea, then a detailed analysis is required.
- **Step 3**: Consider whether the study area has already experienced a readily observable trend toward increasing rents and the likely effect of the action on such trends. This evaluation will consider the following:
  - If the vast majority of the study area has already experienced a readily observable trend toward increasing rents and new market development, further analysis is not necessary. However, if such trends could be considered inconsistent and not sustained, a detailed analysis may be warranted.
  - If no such trend exists either within or near the study area, the action could be expected to have a stabilizing effect on the housing market within the study area by allowing limited new housing opportunities and investment, and no further analysis is necessary.
  - If those trends do exist near to or within smaller portions of the study area, the action could have the potential to accelerate an existing trend. In this circumstance, a detailed analysis will be conducted.

If the preliminary assessment cannot rule out the potential for significant adverse impacts due to indirect residential displacement, then a detailed analysis will be conducted. The detailed analysis would utilize more in-depth demographic analysis and field surveys to characterize existing conditions of residents and housing, identify populations at risk of displacement, assess current and future socioeconomic trends that may affect these populations, and examine the effects of the proposed project on prevailing socioeconomic trends and, thus, impacts on the identified population at risk.

INDIRECT BUSINESS DISPLACEMENT

The concern with respect to indirect business displacement is whether a proposed project may introduce trends that make it difficult for businesses to remain in the area. In the With Action condition, the proposed project would introduce approximately the same amount of retail space and less commercial office space to the development site than the No Action condition. Since the proposed project would not result in an addition of more than 200,000 sf of commercial space, an assessment of potential indirect business displacement is not required.

SPECIFIC INDUSTRIES

A preliminary assessment will consider whether the proposed project could significantly affect business conditions in any industry or category of businesses within or outside the study area, or would substantially reduce employment or impair viability in a specific industry or category of businesses.

TASK 4: COMMUNITY FACILITIES AND SERVICES

The demand for community facilities and services is directly related to the type and size of the new population generated by any proposed development. New workers tend to create limited demands for community facilities and services, while new residents create more substantial and permanent demands. According to the thresholds presented in the *CEQR Technical Manual*, the proposed project is not expected to trigger detailed analyses of outpatient health care facilities or police and fire protection serving the development site. However, the proposed project would introduce a residential population that would have the potential to affect elementary/middle schools, child care, and public libraries. The assessments of potential impacts on each are described below.

A schools analysis is required under CEQR for proposed actions that would result in more than 50 elementary/middle school or 150 high school students. In Manhattan, based on CEQR guidelines, this would require that 310 or more residential units be constructed as part of the proposed project to require an elementary and intermediate schools analysis. Accordingly, a detailed analysis of elementary and intermediate schools will be included in the EIS. This analysis will include the following:

- Identify schools serving the development site and discuss the most current information on enrollment, capacity, and utilization using information from the New York City Department of Education (DOE).
- Based on the data provided from DOE and DCP, determine future No Action conditions in the area.
- Based on methodology presented in the *CEQR Technical Manual*, assess the potential impact of students generated by the proposed project on schools.

However, since the proposed project would not result in more than 2,492 residential units (the CEQR threshold for performing an analysis of high school conditions), an analysis of high schools is not warranted.

Because the number of affordable residential units (excluding senior citizen units) would exceed the minimum number of residential units (170) requiring detailed analyses of publicly funded child care, the EIS will also include an analysis of child care as described below:

- Identify existing publicly funded group child care facilities within approximately 1.5 miles of the development site.
- Describe each facility in terms of its location, number of slots (capacity), and existing enrollment. Information will be based on publicly available information and consultation with the Administration for Children's Services' Division of Child Care and Headstart (CCHS).
- Any expected increases in the population of children under 12 within the eligibility income limitations, based on CEQR methodology, will be discussed as potential additional demand, and the potential effect of any population increases on demand for publicly funded group child care services in the study area will be assessed. The potential effects of the additional eligible children resulting from the proposed project will be assessed by comparing the estimated net demand over capacity to the net demand over capacity estimated in the No Action condition.

The proposed project would also exceed the CEQR threshold requiring analysis of public libraries (901 residential units). Therefore, using the guidance of the *CEQR Technical Manual*, the EIS will:

- Describe and map the local libraries and catchment areas in the vicinity of the development site.
- Identify the existing user population, branch holdings and circulation. Based on this information, estimate the holdings per resident.
- Determine conditions in the No Action condition based on planned developments and known changes to the library system.
- Based on the population to be added by proposed project, estimate the holdings per resident and compare conditions in the No Action condition and the With Action condition.

TASK 5: OPEN SPACE

The *CEQR Technical Manual* recommends performing an open space assessment if a project would have a direct effect on an area open space (e.g., displacement of an existing open space resource) or an indirect effect through increased population size (for the development site, an assessment would be required if the proposed project's population is greater than 200 residents or 500 employees).

Compared to conditions in the future No Action condition, the proposed project is not expected to result in an incremental increase of 500 or more employees; therefore, an assessment of the potential for indirect effects on open space due to an increased worker population is not warranted. However, the increase in the residential population resulting from the proposed project will exceed the 200-resident CEQR threshold requiring a residential open space analysis. The methodology set forth in the *CEQR Technical Manual* consists of establishing a study area for analysis, calculating the total population in the study area, and creating an inventory of publicly accessible open spaces within a 1/2-mile of the development site (such as Hudson River Park); this inventory will include examining these spaces for their facilities (active vs. passive use), condition, and use (crowded or not). The chapter will project conditions in the No Action condition, and assess impacts of the proposed project based on quantified ratios and qualitative factors. New public open space created as part of the proposed project will be described and considered in the analysis.The analysis will begin with a preliminary assessment to determine

the need for further analysis. If warranted, a detailed assessment will be prepared, following the guidelines of the *CEQR Technical Manual.*

TASK 6: SHADOWS

The *CEQR Technical Manual* requires a shadows assessment for proposed actions that would result in new structures (or additions to existing structures) greater than 50 feet in height or located adjacent to, or across the street from, a sunlight-sensitive resource. Such resources include publicly accessible open spaces, important sunlight-sensitive natural features, or historic resources with sun-sensitive features.

The proposed project would result in new structures taller than 50 feet. In addition, the development site is located adjacent to Hudson River Park, a publicly-accessible open space. Specific features of Hudson River Park located adjacent to the development site include the Pier 40 facility, which contains public ball fields. A portion of the Route 9A walkway/bikeway also runs through the area. In addition, the Hudson River itself is considered a sunlight-sensitive natural feature. A shadows assessment is therefore required to determine how the Project-generated shadow might affect these resources, and whether it would reach other nearby sunlight-sensitive resources. The proposed project's shadows will be compared to shadows generated by development that would occur on the development site in the No Action condition.

The shadows assessment will follow the methodology described in the *CEQR Technical Manual*, and will include the following tasks:

- Develop a base map illustrating the development site in relationship to publicly accessible open spaces, historic resources with sunlight-dependent features, and natural features in the area.
- Determine the longest possible shadow that could result from the proposed project to determine whether it could reach any sunlight-sensitive resources at any time of year.
- Develop a three-dimensional computer model of the elements of the base map developed in the preliminary assessment.
- Develop a three-dimensional representation of the proposed project and the No Action project.
- Using three-dimensional computer modeling software, determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the proposed project on four representative days of the year.
- Document the analysis with graphics comparing shadows resulting from the No Action condition with shadows in the With Action condition, with incremental shadow highlighted in a contrasting color. Include a summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource.
- Assess the significance of any shadow impacts on sunlight-sensitive resources. If any significant adverse shadow impacts are identified, identify and assess potential mitigation strategies.

TASK 7: HISTORIC AND CULTURAL RESOURCES

According to the *CEQR Technical Manual*, a historic and cultural resources assessment is required if there is the potential to affect either archaeological or architectural resources. Since

the proposed project would require at least some subsurface disturbance on portions of the development site, it will be necessary to analyze the potential impacts of the proposed project on archaeological resources. The development site building is not a known architectural resource, but there are architectural resources in the surrounding area. Therefore, consistent with the *CEQR Technical Manual*, the historic and cultural resources analysis will include the following tasks.

- Request a preliminary determination of archaeological sensitivity for the portions of the development site that would experience subsurface disturbance from the New York City Landmarks Preservation Commission (LPC) and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). If it is determined that all or part of the development site may be sensitive for archaeological resources, a Phase 1A Archaeological Documentary Study of the affected area will be prepared as directed by LPC and/or OPRHP.
- Select the study area for architectural resources, and map and briefly describe designated architectural resources in the study area. Consistent with the guidance of the *CEQR Technical Manual*, designated architectural resources include: New York City Landmarks (NYCL), Interior Landmarks, Scenic Landmarks, New York City Historic Districts; resources calendared for consideration as one of the above by LPC; resources listed on or formally determined eligible for inclusion on the State and/or National Registers of Historic Places (S/NR), or contained within a district listed on or formally determined eligible for listing on the Registers; resources recommended by the New York State Board for listing on the Registers; and National Historic Landmarks (NHL).
- Conduct a field survey of the development site and study area to identify any potential architectural resources that could be affected by the proposed project.
- Assess the potential effects of the proposed project on archaeological and architectural resources, including visual and contextual changes as well as any direct physical impacts.
- If necessary, measures to avoid, minimize, or mitigate any adverse impacts on historic and cultural resources would be developed and described.

TASK 8: URBAN DESIGN AND VISUAL RESOURCES

According to the methodologies of the *CEQR Technical Manual*, if a project requires actions that would result in physical changes to a development site beyond those allowable by existing zoning and which could be observed by a pedestrian from street level, a preliminary assessment of urban design and visual resources should be prepared. Since the proposed project would result in an increase in allowable built floor area on the development site, a preliminary assessment of urban design and visual resources will be prepared in the EIS. The preliminary assessment will determine whether the proposed project, in comparison to the No Action condition, would create a change to the pedestrian experience that is sufficiently significant to require greater explanation and further study. The study area for the preliminary assessment of urban design and visual resources will be consistent with that of the study area for the analysis of land use, zoning and public policy. The preliminary assessment will include a narrative and graphics depicting the existing project area, the future No Action condition, and the future With Action condition. A detailed analysis will be prepared if warranted based on the preliminary assessment.

TASK 9: NATURAL RESOURCES

As stated in the *CEQR Technical Manual*, a natural resource is defined as a plant or animal species and any area capable of providing habitat for plant and animal species or capable of functioning to support environmental systems and maintain the City's environmental balance. Such resources include surface and groundwater, wetlands, dunes and beaches, grasslands, woodlands, landscaped areas, gardens, and built structures used by wildlife. An assessment of natural resources is appropriate if a natural resource exists on or near the site of the proposed action, or if an action involves disturbance of that resource. The development site is located in a fully developed area of Manhattan, contains limited natural resources other than exterior structural habitat and common urban wildlife species that use these structural habitats (e.g., rock doves, house sparrow, etc.). Any individual wildlife that use the development site would be expected to move to adjacent similar habitats.

As noted above, the proposed project has the potential to cast shadows on the Hudson River, a natural resource. Therefore, this chapter of the EIS will summarize the findings of the shadows analysis pertaining to the Hudson River.

TASK 10: HAZARDOUS MATERIALS

A hazardous materials assessment determines whether a proposed action may increase the exposure of people or the environment to hazardous materials and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. The potential for significant impacts related to hazardous materials can occur when: a) elevated levels of hazardous materials exist on a site and the project would increase pathways to human or environmental exposure; b) a project would introduce new activities or processes using hazardous materials and the risk of human or environmental exposure is increased; or c) the project would introduce a population to potential human or environmental exposure from off-site sources.

The hazardous materials section will examine the potential for significant hazardous materials impacts from the proposed project. The EIS will include a discussion of the site's history and current environmental conditions. A Phase I Environmental Site Assessment (ESA) for the project site will be prepared that will include the review of historic Sanborn maps, regulatory databases, and a site reconnaissance. The results of the Phase I ESA, as well as any previous relevant Phase II Subsurface Site Investigations will be summarized in the hazardous materials chapter. If needed, additional hazardous materials studies (e.g., Phase II Subsurface Site Investigation) will also be performed. The chapter will include a discussion of the proposed project's potential to result in significant adverse hazardous materials impacts and, if necessary, will include a description of any additional further testing, remediation, or other measures that would be necessary to avoid impacts.

TASK 11: WATER AND SEWER INFRASTRUCTURE

According to the *CEQR Technical Manual*, a water and sewer infrastructure assessment analyzes whether a proposed project may adversely affect New York City's water distribution or sewer system and, if so, assess the effects of such projects to determine whether their impact is significant, and present potential mitigation strategies and alternatives. Because the proposed project would introduce an incremental increase above the No Action condition of more than 1,000 residential units and is located in a combined sewer area within Manhattan, an analysis of water and sewer infrastructure is warranted. This analysis will consist of the following:

- A description of the existing stormwater drainage system and surfaces (pervious or impervious) on the project site and of the existing sewer system that serves the project site (based on records obtained from DEP).
- A description of any changes to the site's stormwater drainage system, the site's surface area, and the area's sewer system that are expected in the No Action condition.
- An analysis of potential project impacts that will consist of the identification and assessment of the effects of the incremental With Action sanitary and stormwater flows on the capacity of the sewer infrastructure. The DEP volume calculation worksheet will be prepared. Any best management practices to be included as part of the proposed project will be described.

TASK 12: ENERGY

According to the *CEQR Technical Manual*, because all new structures requiring heating and cooling are subject to the New York State Energy Conservation Code (which reflects State and City energy policy), actions resulting in new construction would not create significant energy impacts, and as such would not require a detailed energy assessment. For CEQR purposes, energy impact analyses focuses on an action's consumption of energy. A qualitative assessment will be provided in the EIS, as appropriate, including an estimate of the additional energy consumption associated with the proposed project.

TASK 13: TRANSPORTATION

The transportation analysis will be undertaken pursuant to the methodologies outlined in the *CEQR Technical Manual.* This analysis will begin with the projection of travel demand estimates to identify transportation elements that would be subject to the evaluation of potential impacts, will present the collection of baseline data, and will continue with detailed analyses of existing and future conditions. Where necessary, improvement measures will be explored to address significant adverse impacts identified by the detailed analyses.

TRAVEL DEMAND PROJECTIONS AND SCREENING ASSESSMENTS

The transportation analysis for the environmental review will compare the proposed project with the No Action scenario to determine the trip-making increments that could occur as a result of the proposed project. Travel demand estimates and a transportation screening analysis have been prepared and summarized in a draft Travel Demand Factors (TDF) Memorandum (see **Appendix 1**). Detailed trip estimates were developed using standard sources, including the *CEQR Technical Manual*, U.S. census data, approved studies, and other references. The trip estimates (Level-1 screening assessment) were summarized by peak hour (weekday AM, midday, and PM, and Saturday afternoon), mode of travel, and person vs. vehicle trips. The trip estimates also identified the number of peak hour person trips made by transit and the number of pedestrian trips traversing the area's sidewalks, corner reservoirs, and crosswalks.

The *CEQR Technical Manual* states that quantified transportation analyses may be warranted if a proposed action results in 50 or more vehicle-trips and/or 200 or more transit/pedestrian trips during a given peak hour. The *CEQR Technical Manual* also indicates that the analysis should include intersections identified as problematic (in terms of operation and/or safety) or congested, even though the assigned trips may be less than the established thresholds. The information presented in the draft TDF memo will be reviewed with the lead agency and involved expert agencies, such as the New York City Department of Transportation (DOT) and/or New York

City Transit (NYCT). For technical areas determined to require further detailed analyses (i.e., traffic, parking, transit, and/or pedestrians), those analyses will be prepared in accordance with *CEQR Technical Manual* procedures.

TRAFFIC

Based on the trip estimates presented in the draft TDF memo, a study area comprising primarily intersections along the West Houston Street, Washington Street, West Street, and Canal Street corridors will be included for a detailed analysis of potential traffic impacts. These intersections could include:

- West Street at Clarkson Street;
- West Street at West Houston Street;
- West Street at Spring Street;
- West Street at Canal Street North;
- West Street at Canal Street South;
- Washington Street at Clarkson Street;
- Washington Street at West Houston Street;
- Washington Street at Spring Street;
- Greenwich Street at West Houston Street;
- Greenwich Street at Canal Street;
- Hudson Street at West Houston Street;
- Hudson Street at Canal Street;
- Varick Street at West Houston Street;
- Varick Street at Spring Street;
- Varick Street at Canal Street; and
- Avenue of the Americas at West Houston Street.

This list of study area intersections is preliminary and is subject to change based on findings made from the travel demand estimates, traffic distribution, and assignment patterns, and accident patterns.

Data Collection and Baseline Traffic Volumes

Data collection efforts will be undertaken pursuant to *CEQR Technical Manual* guidelines. The traffic data collection program will include 9-day automatic traffic recorder (ATR) counts, intersection turning movement counts, vehicle classification counts, conflicting bike/pedestrian volumes, and an inventory of existing roadway geometry (including street widths, travel directions, lane markings, curbside regulations, bus stop locations, etc.) and traffic control. Official signal timing data will be obtained from DOT for incorporation into the capacity analysis described below. Using the collected traffic data, balanced traffic volume networks will be developed for the weekday AM, midday, and PM, and Saturday afternoon peak hours.

Existing Conditions Capacity Analysis

The traffic analysis will be performed using the 2000 *Highway Capacity Manual* (HCM) procedures and the Highway Capacity Software (HCS+) version 5.5. Analysis results for the weekday AM, midday, and PM, and Saturday peak hours will be tabulated to show intersection, approach, and lane group volume-to-capacity (v/c) ratio, average vehicle delay, and level-of-service (LOS). Congested vehicle movements will be described.

No-Action Condition Analysis

The future No-Action traffic volumes will incorporate *CEQR Technical Manual* recommended background growth plus trips expected to be generated by nearby development projects and the as-of-right development program on the project site. The same intersections selected for analysis under existing conditions will be assessed to identify changes in v/c ratio, average vehicle delay, and LOS. Notable deteriorations in service levels will be described.

With-Action Condition Analysis

Incremental vehicle trips associated with the proposed project will be overlaid onto the No-Action peak hour traffic networks for analysis of potential impacts. Vehicle movements found to incur delays exceeding the CEQR impact thresholds will be described. For these locations, traffic engineering improvement measures will be explored to mitigate the identified significant adverse traffic impacts to the extent practicable.

TRANSIT

Transit services to the project site are available via the No. 1 subway line along Varick Street and the C and E lines along Sixth Avenue, as well as, the M20 and M21 local bus routes. There are also several express bus routes serving the area. Based on the findings presented in the draft TDF memo, the incremental subway and bus trips would be below the *CEQR Technical Manual* analysis thresholds of 200 subway trips and 50 bus trips on a particular route in one direction, respectively, during the weekday AM and PM peak hours. However, an assignment of the projected subway trips will be undertaken to determine if the varying directionality of the projected subway trips and the varying distribution patterns associated with the No-Action and With-Action land uses would result in the need to prepare a detailed analysis of subway station elements and line-haul conditions. Where warranted, the associated analyses would be presented in the EIS to assess the potential for any significant adverse subway impacts.

PEDESTRIANS

Based on the findings presented in the draft TDF memo, the incremental pedestrian trips would be below the *CEQR Technical Manual* analysis threshold of 200 pedestrian trips during any peak hour. However, an assignment of the projected pedestrian trips will be undertaken to determine if the varying directionality of the projected pedestrian trips and the varying distribution patterns associated with the No-Action and With-Action land uses would result in the need to prepare a detailed analysis of area sidewalks, corner reservoirs, and crosswalks. The pedestrian study area determined for impact assessment would also consider the sensitive land uses near the project site, such as Pier 40 and Hudson River Park across West Street, and safety conditions along key pedestrian routes to these land uses. Where warranted, the associated analyses would be presented in the EIS to assess the potential for any significant adverse pedestrian impacts.

PARKING

An off-street parking supply and utilization analysis will be performed for an area within ¼-mile of the project site. This analysis will involve an inventory of existing parking levels, projection of future No-Action and With-Action utilization levels (including parking accumulation estimates for the No-Action and With-Action development programs), and comparison of these projections to the future anticipated parking supply to determine the potential for a parking shortfall.

VEHICULAR-PEDESTRIAN SAFETY

The most recent three years of crash data from NYSDOT for the study area intersections will be reviewed and summarized to identify high-accident locations, which according to the *CEQR Technical Manual*, are those that had 48 or more crashes or 5 or more bike/pedestrian-related accidents over a 12-month period. Improvement measures will be explored, where warranted, to address the identified unsafe geometric and/or operational deficiencies.

TASK 14: AIR QUALITY

The vehicle trips generated by the proposed project are not likely to exceed the *CEQR Technical Manual's* carbon monoxide (CO) screening threshold of 170 vehicles in a peak hour at any intersection or the particulate matter (PM) emission screening threshold discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual.* Therefore, it is anticipated that the mobile source air quality analysis will include a screening analysis; if screening thresholds are exceeded, a detailed mobile source analysis would be required. However, the proposed project's parking facilities will be analyzed to determine their effect on air quality. In addition, since the development site is situated near an existing UPS and Federal Express distribution facilities, and the Department of Sanitation's garage parking garage, potential impacts from diesel trucks may be of concern. Therefore, an analysis of emissions from trucking operations associated with the aforementioned facilities will be performed. Potential impacts from the heating and hot water systems that would serve the proposed project on surrounding uses will also be assessed. The effect of heating and hot water systems associated with large or major emission sources in existing buildings on the proposed project will be analyzed, if required by the lead agency. The analysis may include an analysis of large emission sources, as needed.

MOBILE SOURCE ANALYSIS

- A screening analysis for CO and PM for the worst case scenario location(s) will be prepared based on the traffic analysis and the above mentioned CEQR criteria. If screening levels are exceeded, a dispersion analysis would be required.
- Calculate emission factors for the parking facility analysis. Select emission calculation methodology. Compute vehicular cruise and idle emission factors for the parking garage for the proposed project with and without the big box retail using the MOVES 2014 model and applicable assumptions based on guidance by EPA, DEC and DEP.
- Select appropriate background levels. Select appropriate CO and PM background levels for the study area.
- Perform an analysis of CO and PM for the proposed project's parking facilities. The analysis will use the procedures outlined in the *CEQR Technical Manual* for assessing potential

impacts from proposed parking facilities. Cumulative impacts from on-street sources and emissions from parking garage will be calculated, where appropriate.

- Compare with benchmarks and evaluate impacts. Evaluate potential impacts by comparing predicted future CO and PM levels with standards, and *de minimis* criteria. If significant adverse impacts are predicted, recommend design measure to minimize impacts.
- An analysis of emissions from the nearby UPS truck distribution facility, Fedex ship center and DSNY/UPS parking garage will be performed to determine the potential for impacts on the proposed project. The trips generated by DSNY/UPS parking garage will also be included in the no action scenario for mobile air quality analysis purposes. The U.S. Environmental Protection Agency (EPA) MOVES model will be used to calculate emissions. The EPA CAL3QHC intersection model will be used to predict 1-hour and 8-hour average CO concentrations, and the CAL3QHCR model will be used for 24-hour and annual average $PM_{2.5}$ and 24-hour average PM_{10} concentrations, as required by the screening. The predicted levels will be compared to the national ambient air quality standards for CO and PM_{10}, and the City's CO and $PM_{2.5}$ *de minimis* criteria.

STATIONARY SOURCE ANALYSIS

- A detailed stationary source analysis will be performed using the EPA AERMOD dispersion model to estimate the potential impacts from the heating and hot water systems for the proposed project. Five years of recent meteorological data, consisting of surface data from the nearest representative National Weather Service Station, and concurrent upper data from Brookhaven, New York, will be used for the simulation modeling. Concentrations of the air contaminants of concern will be determined at sensitive receptor locations on the proposed project, as well as at off-site locations from the cumulative effects of the emission sources associated with the proposed project. Predicted values will be compared with the corresponding guidance thresholds and national ambient air quality standards.
- Since the development site is located in a manufacturing district, an analysis of uses surrounding the development site will be conducted to determine the potential for impacts from industrial emissions is required in accordance with *CEQR Technical Manual* methodologies. A field survey will be performed to determine if there are any processing or manufacturing facilities within 400 feet of the development site. In addition, the potential impacts generated by the future operation of DSNY/UPS parking facility on 500 Washington Street will also be evaluated. A copy of the air permits for each of these facilities will be requested from DEP's Bureau of Environmental Compliance. A review of DEC Title V permits and the EPA Envirofacts database will also be performed to identify any federal or state-permitted facilities. If permit information on any emissions from processing or manufacturing facilities within 400 feet of the development site are identified, an industrial source screening analysis as detailed in the *CEQR Technical Manual*, will be performed.

In addition, the new multi-level DSNY/UPS facility on 500 Washington Street (CEQR No. 07DOS003M) may have fueling, washing, storage and maintenance operations for DSNY vehicles and UPS semi-trailer storage. Therefore, potential impacts generated by emissions from automobile related operations will be analyzed, as needed. Potential transitory odor impacts on the development site from DSNY collection vehicles at the DSNY garage will be evaluated.

TASK 15: GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

In accordance with the *CEQR Technical Manual*, a greenhouse gas (GHG) emissions analysis discloses the GHG emissions that could result from a large-scale proposed project, and assesses the consistency of the proposed project with the City's goals to reduce GHG emissions. Therefore, this chapter of the EIS will quantify Project-generated GHG emissions and assess the consistency of the proposed project with the City's established GHG reduction goal. Emissions will be estimated for the analysis year and reported as carbon dioxide equivalent (CO_2e) metric tons per year. GHG emissions other than carbon dioxide (CO_2) will be included if they would account for a substantial portion of overall emissions, adjusted to account for the global warming potential. GHG emissions associated with the proposed project will be compared to those that would otherwise occur in the No Action condition.

Relevant measures to reduce energy consumption and GHG emissions that could be incorporated into the proposed project will be discussed, and the potential for those measures to reduce GHG emissions from the proposed project will be assessed to the extent practicable.

As the development site is located in a flood hazard zone, the potential impacts of climate change on the proposed project will be evaluated. The discussion will focus on sea level rise and changes in storm frequency projected to result from global climate change and the potential future impact of those changes on project infrastructure and uses.

The GHG analysis will consist of the following subtasks:

- The potential effects of climate change on the proposed project will be evaluated based on the best available information. The evaluation will focus on potential future sea and storm levels and the interaction with project infrastructure and uses. The discussion will focus on early integration of climate change considerations into the project design to allow for uncertainties regarding future environmental conditions resulting from climate change.
- Direct Emissions—emissions from on-site boilers used for heat and hot water and on-site electricity generation, if any, would be quantified. Since fuel types are not known, emissions will be based on the carbon intensity factors specified in Table 18-3 of the *CEQR Technical Manual*.
- Indirect Emissions—emissions from purchased electricity generated off-site and consumed on-site during operation will be estimated, also using the information provided in Table 18-3 of the *CEQR Technical Manual*.
- Indirect Mobile Source Emissions—emissions from ferry trips to or from the development site will be estimated based on available information on the number of ferry trips, fuel type, ferry fuel efficiency, and trips distances. Emissions from project-generated vehicle trips to and from the ferry terminals will also be accounted for using trip distances provided in the *CEQR Technical Manual* and vehicle emission factors from the MOVES model.
- Emissions from construction and emissions associated with the extraction or production of construction materials will be qualitatively discussed. Opportunities for reducing GHG emissions associated with construction will be considered. If found to be a potentially significant component of overall emissions, embodied GHG emissions from the use of construction materials, including concrete and steel, will be determined.
- Potential measures to reduce energy use and GHG emissions will be discussed and quantified to the extent that information is available.

- Consistent with the guidelines of the *CEQR Technical Manual*, the benefits or drawbacks of the proposed project will be qualitatively discussed in relation to the achievement of the City's GHG reduction goal.

TASK 16: NOISE

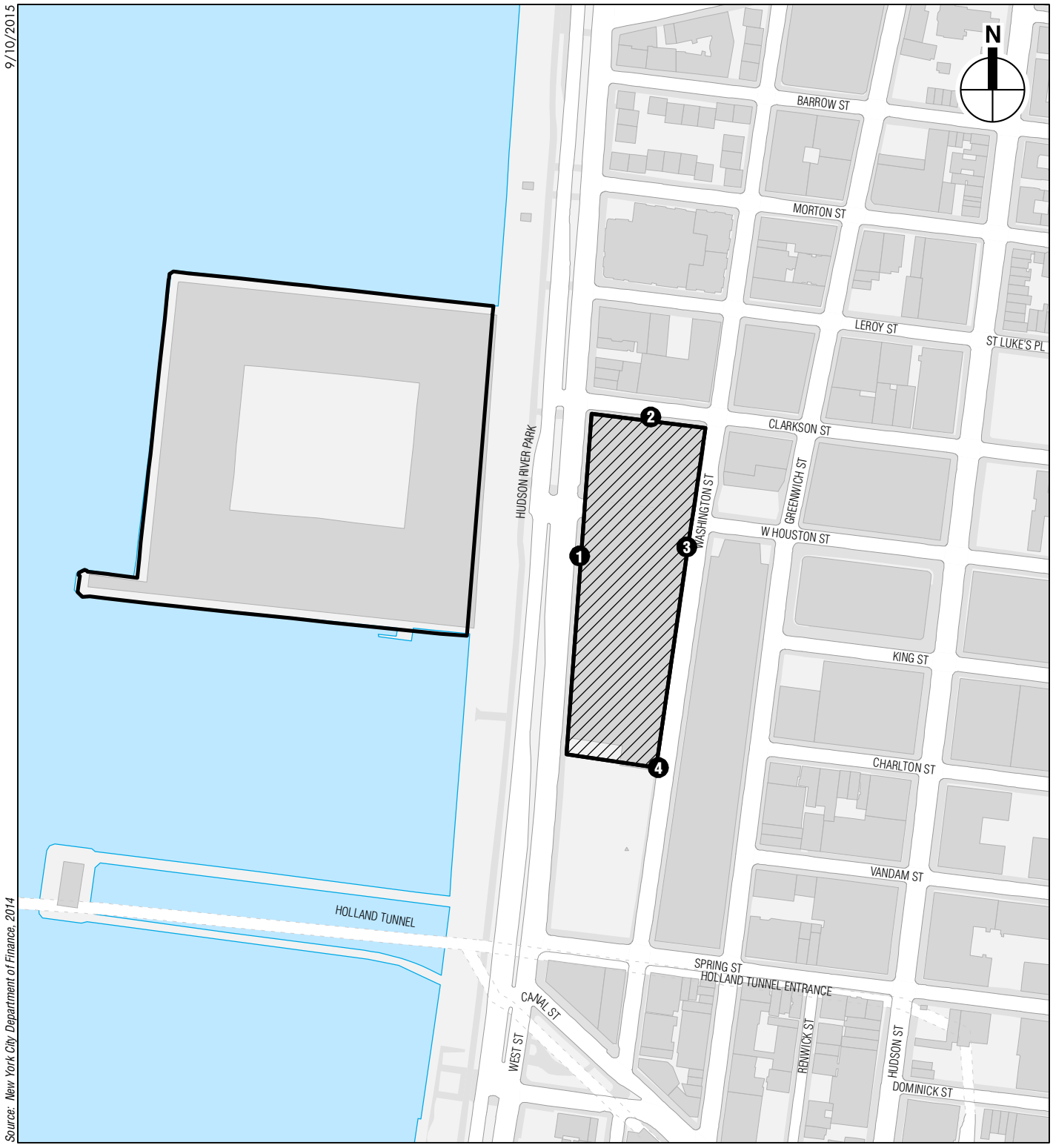
The *CEQR Technical Manual* requires that the noise study address whether the proposed project would result in a significant increase in noise levels (particularly at sensitive land uses such as residences) and what level of building attenuation is necessary to provide acceptable interior noise levels within the development resulting from the proposed project.

With regard to mobile sources of noise, because of the heavy traffic volumes on streets and roadways adjacent to the development site, Project-generated traffic may not result in significant noise impacts. A screening-level analysis will be used to assess the potential for a mobile source noise impact. In addition, analyses will be performed to determine the level of building attenuation necessary to satisfy CEQR interior noise requirements at the development site.

With regard to stationary sources of noise, all of the proposed project's mechanical equipment would be designed to meet all applicable noise codes and regulations. Consequently, no detailed stationary source noise analysis would be provided.

Specifically, the proposed work program will include the following tasks:

- Select appropriate noise descriptors. Appropriate noise descriptors to describe the existing noise environment will be selected. The L_{eq} and L_{10} levels will be the primary noise descriptors used for the analysis. Other noise descriptors including the L_1, L_{10}, L_{50}, L_{90}, L_{min}, and L_{max} levels will be examined as appropriate.
- Based on the traffic studies, perform a screening analysis using proportional modeling techniques to determine whether there are any locations where there is the potential for the proposed project to result in significant noise impacts (i.e., doubling of Noise PCEs) due to project-generated traffic.
- Select four receptor locations for building attenuation analysis purposes. As shown on **Figure 18,** receptor locations will be adjacent to the proposed development site.
- Perform 20-minute measurements at each receptor location during typical weekday AM, midday, and PM peak periods. L_1, L_{10}, L_{50}, L_{90}, L_{min}, and L_{max} values will be recorded. Where site access and security permits, a continuous measurement may be performed in lieu of a 20-minute measurement.
- Data analysis and reduction. The results of the noise measurement program will be analyzed and tabulated.
- Determine future noise levels both with and without the proposed project. Future noise levels will be determined based on the measured existing noise levels and the incremental changes in noise levels calculated by the mobile source noise screening analysis. In addition, the No Action noise level will incorporate the noise level generated by truck operations in the DSNY/UPS parking garage.
- Determine the level of attenuation necessary to satisfy CEQR criteria. The level of building attenuation necessary to satisfy CEQR requirements is a function of exterior noise levels and will be determined. The building attenuation study will identify the level of building attenuation required to satisfy CEQR requirements by building and façade.



Noise Measurement Locations

Figure 18

Recommendations regarding general noise attenuation measures needed for the proposed project to achieve compliance with standards and guideline levels will be made.

- Identify and analyze any measures necessary to mitigate noise impacts predicted to occur as a result of the proposed project.

TASK 17: PUBLIC HEALTH

According to the guidelines of the *CEQR Technical Manual*, a public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. If unmitigated significant adverse impacts are identified in any one of these technical areas and the lead agency determines that a public health assessment is warranted, an analysis will be provided for that specific technical area.

TASK 18: NEIGHBORHOOD CHARACTER

Neighborhood character is determined by a number of factors, including land use, socioeconomic conditions, open space, historic and cultural resources, urban design, visual resources, shadows, transportation, and noise. According to the guidelines of the *CEQR Technical Manual*, an assessment of neighborhood character is generally needed when a proposed project has the potential to result in significant adverse impacts in one of the technical areas presented above, or when a project may have moderate effects on several of the elements that define a neighborhood's character. Therefore, if warranted based on an evaluation of the proposed project's impacts, an assessment of neighborhood character would be prepared following the methodologies outlined in the *CEQR Technical Manual*. The analysis would begin with a preliminary assessment, which would involve identifying the defining features of the area that contribute to its character. If the preliminary assessment establishes that the proposed project would affect a contributing element of neighborhood character, a detailed assessment will be prepared to examine the potential neighborhood character-related effects of the proposed project through a comparison of future conditions both with and without the proposed project.

TASK 19: CONSTRUCTION IMPACTS

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction activity could affect transportation conditions, community noise patterns, air quality conditions, and mitigation of hazardous materials. This chapter will describe the reasonable worst-case construction schedule and logistics assumptions for the proposed project. It will also include a discussion of anticipated on-site activities and will provide estimates of construction workers and truck deliveries.

Technical areas to be analyzed include:

- *Transportation Systems*. This assessment will consider losses in lanes, sidewalks, off-street parking on the development site, and effects on other transportation services, if any, during the construction periods, and identify the increase in vehicle trips from construction workers and equipment. Based on the trip projections of activities associated with peak construction and completed portions of the proposed project, an assessment of potential impacts during construction and how they are compared to the project's operational impacts will be provided.

- *Air Quality*. The construction air quality impact section will contain a detailed qualitative discussion of emissions from on-site construction equipment, on-road construction-related vehicles, and fugitive dust. The analysis will qualitatively review the projected activity and equipment in the context of intensity, duration, and location of emissions relative to nearby sensitive locations, and identify any Project-specific control measures required to further reduce the effects of construction and to ensure that significant impacts on air quality do not occur.
- *Noise*. The construction noise impact section will contain a detailed qualitative discussion of noise from each phase of construction activity. Appropriate recommendations will be made to comply with DEP Rules for Citywide Construction Noise Mitigation and the New York City Noise Control Code. The analysis will qualitatively review the projected activity and equipment in the context of intensity, duration, and location of emissions relative to nearby sensitive locations, and identify any project-specific control measures required to further reduce construction noise.
- *Hazardous Materials*. In coordination with the hazardous materials summary, determine whether the construction of the project has the potential to expose construction workers to contaminants.
- *Other Technical Areas*. As appropriate, discuss other areas of environmental assessment for potential construction-related impacts.
- If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 20: MITIGATION

Where significant adverse project impacts have been identified for the proposed project, measures to mitigate those impacts will be identified and described. The mitigation chapter will address the anticipated impacts requiring mitigation, likely mitigation measures, and the timing of the mitigation measures. Where impacts cannot be practicably mitigated, they will be disclosed as unavoidable adverse impacts.

TASK 21: ALTERNATIVES

The purpose of an alternatives analysis is to examine reasonable and feasible options that avoid or reduce project-related significant adverse impacts and achieve the stated goals and objectives of the proposed actions. The EIS will include an analysis of the following alternatives:

- A No Action Alternative, which is analyzed throughout the EIS as the No Action condition;
- An alternative that reduces any unmitigated significant adverse impacts; and
- Other possible alternatives that may be developed during the EIS preparation process.

The specifics of these alternatives will be finalized as project impacts become clarified. The description and evaluation of each alternative will be provided at a level of detail sufficient to permit a comparative assessment of each alternative discussed.

TASK 22: EIS SUMMARY CHAPTERS

In accordance with *CEQR Technical Manual* guidelines, the EIS will include the following three summary chapters, where appropriate to the proposed project:

- Unavoidable Adverse Impacts—which summarizes any significant adverse impacts that are unavoidable if the proposed project is implemented regardless of the mitigation employed (or if mitigation is impossible);
- Growth-Inducing Aspects of the proposed project—which generally refers to "secondary" impacts of a proposed project that trigger further development; and
- Irreversible and Irretrievable Commitments of Resources—which summarizes the proposed project and its impacts in terms of the loss of environmental resources (i.e., use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.

TASK 23: EXECUTIVE SUMMARY

The executive summary will utilize relevant material from the body of the EIS to describe the proposed project, its significant and adverse environmental impacts, measures to mitigate those impacts, and alternatives to the proposed project. ✷

Appendix 1: Transportation Demand Factors Memorandum

Environmental and Planning Consultants

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Draft Memorandum

To: Project File

From: AKRF, Inc.

Date: October 14, 2015

Re: 550 Washington Street—Travel Demand Analysis

cc: NYCDCP EARD; 550 Washington Street Project Team

A. INTRODUCTION

This memorandum details the trip generation assumptions and travel demand estimates for the redevelopment of the St. John's Terminal Building at 550 Washington Street (the Development Site) with a mixed-use development (the Proposed Project). The Development Site is located on the west side of Manhattan, south of Clarkson Street between Washington Street and Route 9A/West Street.

In the Future Without the Proposed Project, the Development Site would be developed with approximately 427,000 gsf of office use, 322,000 gsf of retail use, 285,000 gsf of hotel use (438 rooms), 50,000 gsf of event space, and 176 accessory parking spaces. In the Future With the Proposed Project, the Development Site could be developed with two possible development scenarios—1) Proposed Project Without Big Box and 2) Proposed Project With Big Box. Based on current plans, the "Without Big Box" development scenario would consist of approximately 1,334,100 gsf of residential use (1,586 dwelling units), 160,000 gsf of retail use, 229,700 gsf of hotel use (353 rooms), 41,400 gsf of event space, and 886 accessory parking spaces. The "With Big Box" development scenario would include the same amount of residential, hotel, and event space uses; however, there would be more retail space with less parking, specifically 255,000 gsf of retail use and 412 accessory parking spaces. **Table 1** provides a comparison of the Future Without the Proposed Project and the Future With the Proposed Project.

Based on the screening analysis presented below, the incremental trips generated by the Proposed Project Without Big Box scenario and by the Proposed Project With Big Box scenario would exceed the CEQR traffic analysis threshold only. Detailed traffic and parking analysis will be conducted for the Proposed Project to identify the potential for significant adverse impacts. For transit and pedestrians, since the incremental trips generated by the Proposed Project under either development scenario would be below the *CEQR Technical Manual* analysis thresholds, the Proposed Project is not expected to result in any significant adverse transit or pedestrian impacts.

Table 1
Comparison of the Future Without and With the Proposed Project

Components	Future Without the Proposed Project (No-Action)	Future With the Proposed Project (With-Action)			
		Without Big Box	Increment	With Big Box	Increment
Residential					
GSF	0	1,334,100	1,334,100	1,334,100	1,334,100
Dwelling Unit	0	1,586	1,586	1,586	1,586
Office (GSF)	427,000	0	-427,000	0	-427,000
Retail (GSF)					
Destination	260,500	123,000	-137,500	113,200	-147,300
Big Box	0	0	0	104,800	104,800
Local	61,500	37,000	-24,500	37,000	-24,500
Total	322,000	160,000	-162,000	255,000	-67,000
Hotel					
GSF	285,000	229,700	-55,300	229,700	-55,300
Room*	438	353	-85	353	-85
Event Space					
GSF	50,000	41,400	-8,600	41,400	-8,600
Person	1,500	1,242	-258	1,242	-258
Accessory Parking (Space)	176	886	710	412	236

Notes: GSF = Gross Square Feet
* Based on one room per 650 GSF (*606 West 57th Street FEIS. 2014*)
Source: SJ OWNER LLC and CookFox Architects, 2015

B. TRANSPORTATION PLANNING ASSUMPTIONS

Trip generation factors for the Proposed Project were developed based on information from the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, 2013 *Hudson Square Rezoning FEIS*, U.S. Census Data, and other approved EASs and EISs. The travel demand assumptions and trip generation sources are summarized in **Table 2**.

RESIDENTIAL

The daily person trip rate and temporal distribution are from the 2014 *CEQR Technical Manual*. The directional distributions for all peak hours are from the 2013 *Hudson Square Rezoning FEIS*. The modal split is based on the Journey-to-Work (JTW) data for the 2009-2013 U.S. Census Bureau American Community Survey (ACS) for Manhattan census tracts 33, 37, 39, 47, 49, 67, and 69. The vehicle occupancies are from the 2009-2013 U.S. Census ACS for autos and from the 2013 *Hudson Square Rezoning FEIS* for taxis. The daily delivery trip rate and temporal and directional distributions are from the 2014 *CEQR Technical Manual*.

OFFICE

The daily person trip rate and temporal distribution are from the 2014 *CEQR Technical Manual*. The directional distributions for all peak hours are based on the 2013 *Hudson Square Rezoning FEIS*. The weekday AM and PM peak hour modal splits are based on the Reverse-Journey-to-Work (RJTW) data for the 2006-2010 U.S. Census Bureau ACS (Special Tabulation: Census Transportation Planning) for Manhattan census tracts 33, 37, 39, 47, 49, 67, and 69. The weekday midday and Saturday peak hour modal splits are based on the 2013 *Hudson Square Rezoning FEIS*. The vehicle occupancies are from the 2006-2010 U.S. Census ACS for autos and from the 2013 *Hudson Square Rezoning FEIS* for taxis. The daily delivery trip rate and temporal and directional distributions are from the 2014 *CEQR Technical Manual*.

DESTINATION RETAIL

The daily person trip rate and temporal distribution are from the 2014 *CEQR Technical Manual*. The directional distributions, modal split, and vehicle occupancies are from the 2013 *Hudson Square Rezoning FEIS*. The daily delivery trip rate and temporal and directional distributions are also from the 2013 *Hudson Square Rezoning FEIS*.

BIG BOX RETAIL

The travel demand assumptions for the big box retail are based on the destination retail use. The modal split was adjusted for a higher auto share based on the results of the East River Plaza travel demand survey conducted in 2010. And the vehicle occupancies are based on NYCDOT surveys.

LOCAL RETAIL

The daily person trip rate and temporal distribution are from the 2014 *CEQR Technical Manual*. In keeping with accepted City practice, a 25-percent linked trip credit was applied to the local retail trip generation estimates. The directional distributions, modal split, and vehicle occupancies are from the 2013 *Hudson Square Rezoning FEIS*. The daily delivery trip rate and temporal and directional distributions are from the 2014 *CEQR Technical Manual*.

HOTEL

The daily person trip rate and temporal distribution are from the 2014 *CEQR Technical Manual*. The directional distributions, modal split, and vehicle occupancies are from the 2013 *Hudson Square Rezoning FEIS*. The daily delivery trip rate and temporal and directional distributions are also from the 2013 *Hudson Square Rezoning FEIS*.

Table 2
Travel Demand Assumptions

Use	Residential				Office				Destination Retail				Big Box Retail			
Total Daily Person Trip	(1) Weekday 8.075 Trips / DU			Saturday 9.600	(1) Weekday 18.0 Trips / KSF			Saturday 3.9	(1) Weekday 78.2 Trips / KSF			Saturday 92.5	(1) Weekday 78.2 Trips / KSF			Saturday 92.5
Trip Linkage	0%			0%	0%			0%	0%			0%	0%			0%
Net Daily Person trip	Weekday 8.075 Trips / DU			Saturday 9.600	Weekday 18.0 Trips / KSF			Saturday 3.9	Weekday 78.2 Trips / KSF			Saturday 92.5	Weekday 78.2 Trips / KSF			Saturday 92.5
	AM	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**
Temporal	(1)				(1)				(1)				(1)			
	10%	5%	11%	8%	12%	15%	14%	17%	3%	9%	9%	11%	3%	9%	9%	11%
Direction	(2)				(2)				(2)				(2)			
In	15%	50%	70%	50%	96%	48%	5%	57%	50%	55%	47%	52%	50%	55%	47%	52%
Out	85%	50%	30%	50%	4%	52%	95%	43%	50%	45%	53%	48%	50%	45%	53%	48%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(3)				(2)(4)				(2)				(2)(7)			
	AM	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**
Auto	8.0%	8.0%	8.0%	8.0%	13.0%	2.0%	13.0%	2.0%	9.0%	9.0%	9.0%	9.0%	35.0%	35.0%	35.0%	35.0%
Taxi	8.0%	8.0%	8.0%	8.0%	2.0%	3.0%	2.0%	3.0%	4.0%	4.0%	4.0%	4.0%	5.0%	5.0%	5.0%	5.0%
Subway	55.0%	55.0%	55.0%	55.0%	68.0%	6.0%	68.0%	6.0%	28.5%	20.0%	28.5%	20.0%	28.5%	20.0%	28.5%	20.0%
Railroad	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bus	1.0%	1.0%	1.0%	1.0%	10.0%	6.0%	10.0%	6.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Walk	28.0%	28.0%	28.0%	28.0%	7.0%	83.0%	7.0%	83.0%	50.5%	59.0%	50.5%	59.0%	23.5%	32.0%	23.5%	32.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	(2)(3) Weekday/Saturday				(2)(4) Weekday/Saturday				(2) Weekday/Saturday				(8) Weekday/Saturday			
Auto	1.14				1.13				2.00				1.3/1.4			
Taxi	1.40				1.40				2.00				1.3/1.4			
Daily Delivery Trip Generation Rate	(1) Weekday 0.06 Delivery Trips / DU			Saturday 0.02	(1) Weekday 0.32 Delivery Trips / KSF			Saturday 0.01	(2) Weekday 0.35 Delivery Trips / KSF			Saturday 0.04	(2) Weekday 0.35 Delivery Trips / KSF			Saturday 0.04
	AM	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**
Delivery Temporal	(1)				(1)				(2)				(2)			
	12%	9%	2%	9%	10%	11%	2%	11%	8%	11%	2%	11%	8%	11%	2%	11%
Delivery Direction	(1)				(1)				(2)				(2)			
In	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 2 (continued)
Travel Demand Assumptions

Use	Local Retail				Hotel				Event Space			
Total Daily Person Trip	(1) Weekday 205.0 Trips / KSF			Saturday 240.0	(1) Weekday 9.4 Trips / Room			Saturday 9.4	(5) Weekday 2.68 Trips / Person			Saturday 2.68
Trip Linkage	25%			25%	0%			0%	0%			0%
Net Daily Person trip	Weekday 153.75 Trips / KSF			Saturday 180.0	Weekday 9.4 Trips / Room			Saturday 9.4	Weekday 2.68 Trips / Person			Saturday 2.68
	AM	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**
Temporal	(1)				(1)				(5)			
	3%	19%	10%	10%	8%	14%	13%	9%	0%	0%	32%	0%
Direction	(2)				(2)				(5)			
In	50%	50%	50%	50%	39%	54%	65%	56%	50%	50%	75%	50%
Out	50%	50%	50%	50%	61%	46%	35%	44%	50%	50%	25%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(2)				(2)				(6)			
	AM	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**
Auto	2.0%	2.0%	2.0%	2.0%	9.0%	8.0%	9.0%	9.0%	17.4%	17.4%	17.4%	17.4%
Taxi	3.0%	3.0%	3.0%	3.0%	18.0%	15.0%	18.0%	18.0%	6.4%	6.4%	6.4%	6.4%
Subway	6.0%	6.0%	6.0%	6.0%	24.0%	13.0%	24.0%	24.0%	20.0%	20.0%	20.0%	20.0%
Railroad	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bus	6.0%	6.0%	6.0%	6.0%	3.0%	3.0%	3.0%	3.0%	8.4%	8.4%	8.4%	8.4%
Walk	83.0%	83.0%	83.0%	83.0%	46.0%	61.0%	46.0%	46.0%	47.8%	47.8%	47.8%	47.8%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	(2) Weekday/Saturday				(2) Weekday/Saturday				(6) Weekday/Saturday			
Auto	1.65				1.40				2.20			
Taxi	1.40				1.80				2.30			
Daily Delivery Trip Generation Rate	(1) Weekday 0.35 Delivery Trips / KSF			Saturday 0.04	(2) Weekday 0.06 Delivery Trips / Room			Saturday 0.01	(5) Weekday 0.01 Delivery Trips / Person			Saturday 0.01
	AM	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**	**AM**	**MD**	**PM**	**Saturday**
Delivery Temporal	(1)				(2)				(5)			
	8%	11%	2%	11%	12.2%	8.7%	1.0%	9.0%	0.0%	6.0%	1.0%	0.0%
Delivery Direction	(1)				(2)				(5)			
In	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Sources:
(1) 2014 *CEQR Technical Manual*
(2) *Hudson Square Rezoning FEIS* (2013)
(3) U.S. Census Bureau, ACS 2009-2013 Five-Year Estimates - Journey-to-Work (JTW) Data for Census Tracts 33, 37, 39, 47, 49, 67, and 69
(4) U.S. Census Bureau, ACS 2006-2010 Five-Year Estimates. Special Tabulation: Census Transportation Planning – Reverse-Journey-to-Work (RJTW) Data for Census Tracts 33, 37, 39, 47, 49, 67, and 69.
(5) *Pier 57 Redevelopment FEIS* (2013) - PM assumed to be the same as Pier 57 Park Evening.
(6) *Hudson Square Rezoning FEIS* (2013). Modal split and vehicle occupancy assumed the same as Catering Hall use.
(7) Based on destination retail factors and adjusted for higher auto share based on the results of the East River Plaza travel demand survey conducted in 2010.
(8) Based on NYCDOT surveys.

EVENT SPACE

The daily person trip rate and temporal and directional distributions are from the 2013 *Pier 57 Redevelopment FEIS*. The modal split and vehicle occupancies are from the 2013 *Hudson Square Rezoning FEIS*. It was assumed that the event space's modal splits and vehicle occupancies would be the same as those for the catering hall use in the 2013 *Hudson Square Rezoning FEIS*. The daily delivery trip rate and temporal and directional distributions are from the 2013 *Pier 57 Redevelopment FEIS*.

C. CEQR SCREENING ASSESSMENTS

The 2014 *CEQR Technical Manual* identifies procedures for evaluating a proposed project's potential impacts on traffic, transit, pedestrian, and parking conditions. This methodology begins with the preparation of a trip generation analysis to determine the volume of person and vehicle trips associated with the proposed project. The results are then compared with the *CEQR Technical Manual*-specified thresholds (Level 1 screening analysis) to determine whether additional quantified analyses are warranted. If the proposed project would result in 50 or more peak hour vehicle trips, 200 or more peak hour transit

trips (200 or more peak hour transit riders at any given subway station or 50 or more peak hour bus trips on a particularly route in one direction), and/or 200 or more peak hour pedestrian trips, a Level 2 screening analysis (involving trip assignment) is undertaken. If the level 1 screening analysis does not indicate an exceedance of these thresholds, further analysis may not be required. However, the *CEQR Technical Manual* also indicates that the analysis should include intersections identified as problematic (in terms of operation and/or safety) or congested, even though the assigned trips may be less than the established thresholds.

For the Level 2 screening analysis, project-generated trips would be assigned to specific intersections, transit routes, and pedestrian elements. If the results of this analysis show that the proposed project would generate 50 or more peak hour vehicle trips through an intersection, 50 or more peak hour bus riders on a bus route in a single direction, 200 or more peak hour subway passengers at any given station, or 200 or more peak hour pedestrian trips per pedestrian element, further quantified analyses may be warranted to evaluate the potential for significant adverse traffic, transit, pedestrian, and parking impacts. As stated above, problematic or congested locations that are expected to incur fewer trips than these established thresholds may also be subject to further detailed analyses of potential impacts.

TRIP GENERATION SUMMARY

As summarized in **Table 3**, in the Future Without the Proposed Project, the No-Action development is estimated to generate 2,149, 5,361, 5,674, and 4,410 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. Approximately 282, 407, 590, and 344 vehicle trips would be generated during the same respective peak hours.

Table 3

Trip Generation Summary: Future Without the Proposed Project (No-Action Condition)

Peak Hour	In/Out	Person Trip						Vehicle Trip			
		Auto	Taxi	Subway	Bus	Walk	Total	Auto	Taxi	Delivery	Total
AM	In	158	57	729	126	393	1,463	127	47	14	188
	Out	54	53	169	43	367	686	33	47	14	94
	Total	212	110	898	169	760	2,149	160	94	28	282
Midday	In	145	131	329	177	1,990	2,772	85	109	15	209
	Out	125	118	289	164	1,893	2,589	74	109	15	198
	Total	270	249	618	341	3,883	5,361	159	218	30	407
PM	In	293	174	587	193	1,452	2,699	148	117	2	267
	Out	302	128	1,109	241	1,195	2,975	204	117	2	323
	Total	595	302	1,696	434	2,647	5,674	352	234	4	590
Saturday	In	157	114	369	159	1,501	2,300	86	89	1	176
	Out	143	101	333	147	1,386	2,110	78	89	1	168
	Total	300	215	702	306	2,887	4,410	164	178	2	344

As summarized in **Table 4**, in the Future With the Proposed Project, the With-Action development under the Without Big Box scenario would generate 2,009, 3,053, 4,338, and 3,436 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. Approximately 334, 314, 503, and 379 vehicle trips would be generated during the same respective peak hours.

As summarized in **Table 5**, in the Future With the Proposed Project, the With-Action development under the With Big Box scenario would generate 2,231, 3,722, 5,006, and 4,403 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. Approximately 416, 550, 739, and 695 vehicle trips would be generated during the same respective peak hours.

Table 4

Trip Generation Summary: Proposed Project Without Big Box (With-Action Scenario 1)

Peak Hour	In/Out	Person Trip						Vehicle Trip			
		Auto	Taxi	Subway	Bus	Walk	Total	Auto	Taxi	Delivery	Total
AM	In	39	43	177	22	246	527	27	96	10	133
	Out	117	125	684	33	523	1,482	95	96	10	201
	Total	156	168	861	55	769	2,009	122	192	20	334
Midday	In	100	99	336	81	973	1,589	66	86	8	160
	Out	89	90	314	72	899	1,464	60	86	8	154
	Total	189	189	650	153	1,872	3,053	126	172	16	314
PM	In	286	205	902	135	1,228	2,756	173	121	1	295
	Out	141	105	469	85	782	1,582	86	121	1	208
	Total	427	310	1,371	220	2,010	4,338	259	242	2	503
Saturday	In	130	115	525	83	908	1,761	88	103	1	192
	Out	122	107	507	78	861	1,675	83	103	1	187
	Total	252	222	1,032	161	1,769	3,436	171	206	2	379

Table 5

Trip Generation Summary: Proposed Project With Big Box (With-Action Scenario 2)

Peak Hour	In/Out	Person Trip						Vehicle Trip			
		Auto	Taxi	Subway	Bus	Walk	Total	Auto	Taxi	Delivery	Total
AM	In	81	48	209	31	269	638	59	104	11	174
	Out	159	130	716	42	546	1,593	127	104	11	242
	Total	240	178	925	73	815	2,231	186	208	22	416
Midday	In	238	118	410	110	1,081	1,957	173	105	10	288
	Out	202	105	374	97	987	1,765	147	105	10	262
	Total	440	223	784	207	2,068	3,722	320	210	20	550
PM	In	404	221	992	160	1,293	3,070	264	142	1	407
	Out	275	124	569	113	855	1,936	189	142	1	332
	Total	679	345	1,561	273	2,148	5,006	453	284	2	739
Saturday	In	319	141	626	123	1,054	2,263	224	130	1	355
	Out	297	131	600	115	997	2,140	209	130	1	340
	Total	616	272	1,226	238	2,051	4,403	433	260	2	695

As summarized in **Table 1** above, each of the development programs would provide on-site parking—176 spaces under the No-Action condition, 886 spaces under the With-Action without Big Box scenario, and 412 spaces under the With-Action with Big Box scenario. These parking spaces would be used primarily for the project site's residents, employees, and visitors. But when there is excess capacity, the parking spaces would be available for use by the general public. To determine the potential trip-making associated with off-site generated trips resulting from an excess availability in on-site parking supply, parking demand estimates were developed for each of the three development programs. As presented in **Table 6**, excess parking capacity would be expected only under the With-Action without Big Box scenario.

Parking data on the adjacent 1,909-space Pier 40 parking facility were obtained from the Hudson River Park Trust to estimate the amount of additional traffic expected to be generated by the excess parking capacity forecasted for the proposed project under the With-Action without Big Box scenario. In addition, based on current development trends in the area, it is assumed that the forecasted excess parking capacity would attract other off-site residential parking demand to the proposed garage resulting in an additional overnight parking demand of approximately 296 vehicles. As shown in **Tables 7A and 7B**, the additional trip-making would amount to 120, 59, 108, and 91 vehicle trips during the weekday AM, weekday midday, weekday PM, and Saturday peak hours, respectively. Adding these vehicle trips to those summarized in **Table 4** would yield 454, 373, 611, and 470 vehicle trips during the same corresponding peak hours.

Table 6
Development Program Parking Demand Summary

Hour	No-Action		Proposed Project Without Big Box		Proposed Project With Big Box	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
12 AM - 01 AM	28	28	552	552	552	552
01 AM - 02 AM	29	29	553	553	553	553
02 AM - 03 AM	29	29	553	553	553	553
03 AM - 04 AM	29	29	553	553	553	553
04 AM - 05 AM	29	29	553	553	553	553
05 AM - 06 AM	29	29	553	553	553	553
06 AM - 07 AM	29	29	553	548	553	548
07 AM - 08 AM	37	34	524	531	524	543
08 AM - 09 AM	131	44	456	513	456	547
09 AM - 10 AM	210	53	421	490	440	544
10 AM - 11 AM	213	75	402	468	445	551
11 AM - 12 PM	217	116	396	453	457	622
12 PM - 01 PM	228	126	402	421	483	604
01 PM - 02 PM	233	134	400	426	489	619
02 PM - 03 PM	230	134	396	437	476	639
03 PM - 04 PM	237	126	396	445	491	653
04 PM - 05 PM	225	117	444	457	530	658
05 PM - 06 PM	169	124	531	480	605	681
06 PM - 07 PM	118	147	539	526	598	705
07 PM - 08 PM	100	171	559	592	618	707
08 PM - 09 PM	43	123	525	594	574	651
09 PM - 10 PM	24	75	527	591	527	591
10 PM - 11 PM	26	25	540	549	540	549
11 PM - 12 AM	27	27	551	551	551	551

Note: Parking demand estimates developed based on travel demand assumptions presented in **Table 2**.

Table 7A
Proposed Project Without Big Box Parking Demand Analysis - Weekday

Hour	Proposed Project [1]				Area Residential [2][3]				Transient Parkers [4][5]				Total			
	In	Out	Total	Parking Demand	In	Out	Total	Parking Demand	In	Out	Total	Parking Demand	In	Out	Total	Parking Demand
12 AM - 01 AM	8	7	15	552	5	5	10	296	5	9	14	-4	18	21	39	844
01 AM - 02 AM	4	3	7	553	2	2	4	296	2	4	6	-6	8	9	17	843
02 AM - 03 AM	2	2	4	553	1	1	2	296	1	3	4	-8	4	6	10	841
03 AM - 04 AM	2	2	4	553	1	1	2	296	1	1	2	-8	4	4	8	841
04 AM - 05 AM	2	2	4	553	1	1	2	296	7	1	8	-2	10	4	14	847
05 AM - 06 AM	2	2	4	553	1	1	2	296	5	1	6	2	8	4	12	851
06 AM - 07 AM	3	3	6	553	2	2	4	296	15	2	17	15	20	7	27	864
07 AM - 08 AM	6	35	41	524	2	22	24	276	38	5	43	48	46	62	108	848
08 AM - 09 AM	27	95	122	456	9	53	62	232	41	17	58	72	77	165	242	760
09 AM - 10 AM	21	56	77	421	8	33	41	207	47	14	61	105	76	103	179	733
10 AM - 11 AM	24	43	67	402	8	23	31	192	19	15	34	109	51	81	132	703
11 AM - 12 PM	33	39	72	396	11	16	27	187	15	12	27	112	59	67	126	695
12 PM - 01 PM	66	60	126	402	16	16	32	187	13	14	27	111	95	90	185	700
01 PM - 02 PM	63	65	128	400	14	14	28	187	14	16	30	109	91	95	186	696
02 PM - 03 PM	47	51	98	396	13	13	26	187	15	20	35	104	75	84	159	687
03 PM - 04 PM	50	50	100	396	17	16	33	188	16	23	39	97	83	89	172	681
04 PM - 05 PM	108	60	168	444	27	18	45	197	19	27	46	89	154	105	259	730
05 PM - 06 PM	173	86	259	531	48	20	68	225	17	23	40	83	238	129	367	839
06 PM - 07 PM	102	94	196	539	41	17	58	249	14	30	44	67	157	141	298	855
07 PM - 08 PM	92	72	164	559	36	15	51	270	11	21	32	57	139	108	247	886
08 PM - 09 PM	39	73	112	525	16	7	23	279	8	29	37	36	63	109	172	840
09 PM - 10 PM	27	25	52	527	13	5	18	287	6	31	37	11	46	61	107	825
10 PM - 11 PM	20	7	27	540	10	5	15	292	6	13	19	4	36	25	61	836
11 PM - 12 AM	17	6	23	551	9	5	14	296	6	10	16	0	32	21	53	847

Notes:
(1) Proposed project parking demand estimates developed based on travel demand assumptions presented in **Table 2**.
(2) Off-site residential generated parking demand estimates based on the proposed project residential travel demand assumptions and parking demand profiles.
(3) Average vehicle occupancy of 1.14 based on U.S. Census ACS 2009-2013 JTW statistics.
(4) Travel demand assumptions for the transient parkers were based on detailed 24 hour ins and outs profiles developed from the Hudson River Park Trust Pier 40 parking facility data.
(5) Average vehicle occupancy of 1.13 based on U.S. Census ACS 2006-2010 RJTW statistics.

Table 7B

Proposed Project Without Big Box Parking Demand Analysis - Saturday

Hour	Proposed Project [1]				Area Residential [2][3]				Transient Parkers [4][5]				Total			
	In	Out	Total	Parking Demand	In	Out	Total	Parking Demand	In	Out	Total	Parking Demand	In	Out	Total	Parking Demand
12 AM - 01 AM	4	3	7	552	2	2	4	296	5	8	13	-3	11	13	24	845
01 AM - 02 AM	4	3	7	553	2	2	4	296	3	9	12	-9	9	14	23	840
02 AM - 03 AM	0	0	0	553	0	0	0	296	1	7	8	-15	1	7	8	834
03 AM - 04 AM	0	0	0	553	0	0	0	296	1	3	4	-17	1	3	4	832
04 AM - 05 AM	0	0	0	553	0	0	0	296	1	1	2	-17	1	1	2	832
05 AM - 06 AM	5	5	10	553	4	4	8	296	0	1	1	-18	9	10	19	831
06 AM - 07 AM	3	8	11	548	2	6	8	292	2	3	5	-19	7	17	24	821
07 AM - 08 AM	12	29	41	531	6	18	24	280	3	6	9	-22	21	53	74	789
08 AM - 09 AM	22	40	62	513	7	22	29	265	6	11	17	-27	35	73	108	751
09 AM - 10 AM	25	48	73	490	9	28	37	246	6	17	23	-38	40	93	133	698
10 AM - 11 AM	36	58	94	468	11	33	44	224	6	17	23	-49	53	108	161	643
11 AM - 12 PM	62	77	139	453	12	36	48	200	18	19	37	-50	92	132	224	603
12 PM - 01 PM	54	86	140	421	13	39	52	174	24	14	38	-40	91	139	230	555
01 PM - 02 PM	88	83	171	426	30	30	60	174	17	14	31	-37	135	127	262	563
02 PM - 03 PM	79	68	147	437	31	22	53	183	11	12	23	-38	121	102	223	582
03 PM - 04 PM	79	71	150	445	31	21	52	193	11	10	21	-37	121	102	223	601
04 PM - 05 PM	70	58	128	457	30	21	51	202	17	16	33	-36	117	95	212	623
05 PM - 06 PM	89	66	155	480	31	21	52	212	19	36	55	-53	139	123	262	639
06 PM - 07 PM	118	72	190	526	34	18	52	228	21	17	38	-49	173	107	280	705
07 PM - 08 PM	146	80	226	592	39	13	52	254	21	9	30	-37	206	102	308	809
08 PM - 09 PM	85	83	168	594	33	11	44	276	22	10	32	-25	140	104	244	845
09 PM - 10 PM	61	64	125	591	28	9	37	295	24	5	29	-6	113	78	191	880
10 PM - 11 PM	20	62	82	549	12	11	23	296	16	5	21	5	48	78	126	850
11 PM - 12 AM	7	5	12	551	4	4	8	296	13	18	31	0	24	27	51	847

Notes:
(1) Proposed project parking demand estimates developed based on travel demand assumptions presented in **Table 2**.
(2) Off-site residential generated parking demand estimates based on the proposed project residential travel demand assumptions and parking demand profiles.
(3) Average vehicle occupancy of 1.14 based on U.S. Census ACS 2009-2013 JTW statistics.
(4) Travel demand assumptions for the transient parkers were based on detailed 24 hour ins and outs profiles developed from the Hudson River Park Trust Pier 40 parking facility data.
(5) Average vehicle occupancy of 1.13 based on U.S. Census ACS 2006-2010 RJTW statistics.

LEVEL 1 SCREENING

The net incremental trips generated in the Future Without and With the Proposed Project under the Without Big Box and With Big Box development scenarios are shown in **Tables 8 and 9**, respectively.

Table 8

Trip Generation Summary: Net Incremental Trips (Without Big Box Scenario)

Peak Hour	In/Out	Person Trip						Vehicle Trip			
		Auto	Taxi	Subway	Bus	Walk	Total	Auto	Taxi	Delivery	Total
AM	In	-40	-14	-552	-104	-147	-857	-50	49	-4	-5
	Out	119	72	515	-10	156	852	132	49	-4	177
	Total	79	58	-37	-114	9	-5	82	98	-8	172
Midday	In	-11	-32	7	-96	-1,017	-1,149	10	-23	-7	-20
	Out	-3	-28	25	-92	-994	-1,092	16	-23	-7	-14
	Total	-14	-60	32	-188	-2,011	-2,241	26	-46	-14	-34
PM	In	42	31	315	-58	-224	106	90	4	-1	93
	Out	-87	-23	-640	-156	-413	-1,319	-75	4	-1	-72
	Total	-45	8	-325	-214	-637	-1,213	15	8	-2	21
Saturday	In	23	1	156	-76	-593	-489	49	14	0	63
	Out	32	6	174	-69	-525	-382	49	14	0	63
	Total	55	7	330	-145	-1,118	-871	98	28	0	126

Table 9
Trip Generation Summary: Net Incremental Trips (With Big Box Scenario)

Peak Hour	In/Out	Person Trip						Vehicle Trip			
		Auto	Taxi	Subway	Bus	Walk	Total	Auto	Taxi	Delivery	Total
AM	In	-77	-9	-520	-95	-124	-825	-68	57	-3	-14
	Out	105	77	547	-1	179	907	94	57	-3	148
	Total	28	68	27	-96	55	82	26	114	-6	134
Midday	In	93	-13	81	-67	-909	-815	88	-4	-5	79
	Out	77	-13	85	-67	-906	-824	73	-4	-5	64
	Total	170	-26	166	-134	-1,815	-1,639	161	-8	-10	143
PM	In	111	47	405	-33	-159	371	116	25	-1	140
	Out	-27	-4	-540	-128	-340	-1,039	-15	25	-1	9
	Total	84	43	-135	-161	-499	-668	101	50	-2	149
Saturday	In	162	27	257	-36	-447	-37	138	41	0	179
	Out	154	30	267	-32	-389	30	131	41	0	172
	Total	316	57	524	-68	-836	-7	269	82	0	351

TRAFFIC

As shown in **Table 8**, the net incremental trips generated by the Proposed Project Without Big Box would be 172, -34, 21, and 126 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. For the Proposed Project With Big Box scenario, the net incremental trips, as shown in **Table 9**, would be 134, 143, 149, and 351 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. In consultation with NYCDCP and NYCDOT, a study area comprising primarily intersections along the West Houston Street, Washington Street, West Street, and Canal Street corridors will be included for a detailed analysis of potential traffic impacts. These intersections could include:

- West Street at Clarkson Street;
- West Street at West Houston Street;
- West Street at Spring Street;
- West Street at Canal Street North;
- West Street at Canal Street South;
- Washington Street at Clarkson Street;
- Washington Street at West Houston Street;
- Washington Street at Spring Street;
- Greenwich Street at West Houston Street;
- Greenwich Street at Canal Street;
- Hudson Street at West Houston Street;
- Hudson Street at Canal Street;
- Varick Street at West Houston Street;
- Varick Street at Spring Street;
- Varick Street at Canal Street; and
- Avenue of the Americas at West Houston Street.

This list of study area intersections is preliminary and is subject to change based on findings made from the travel demand estimates, traffic distribution, and assignment patterns.

PARKING

Based on the traffic screening assessment and preliminary parking demand estimates presented above, a parking analysis will be warranted to inventory existing parking levels within ¼-mile of the project site, project future No-Action parking utilization, and assess the proposed project's potential for a parking shortfall or any significant adverse parking impacts.

TRANSIT

As shown in **Table 8**, the net incremental transit trips generated by the Proposed Project Without Big Box were projected to be -37, 32, -325, and 330 person trips by subway and -114, -188, -214, and -145 person trips by bus during the weekday AM, midday, PM, and Saturday peak hours, respectively. For the Proposed Project With Big Box scenario, the net incremental transit trips, as shown in **Table 9**, would be 27, 166, -135, and 524 person trips by subway and -96, -134, -161, and -68 person trips by bus during the weekday AM, midday, PM, and Saturday peak hours, respectively. The incremental subway trips under both development scenarios would be below the *CEQR Technical Manual* analysis threshold of 200 transit trips during the weekday AM and PM peak hours. Similarly, the incremental bus trips under both development scenarios would be below the *CEQR Technical Manual* analysis threshold of 50 peak hour bus trips on a particular route in one direction. However, an assignment of the projected subway trips will be undertaken to determine if the varying directionality of the projected subway trips and/or the varying distribution patterns associated with the No-Action and With-Action land uses would result in the need to prepare a detailed analysis of subway station elements and line-haul conditions. Where warranted, the associated analyses would be presented in the EIS to assess the potential for any significant adverse subway impacts.

PEDESTRIAN

Other than the person trips by autos that are made directly to/from the on-site parking, all person trips generated by the Proposed Project and those generated by off-site generated uses would traverse the pedestrian elements surrounding the project site. As shown in **Table 8**, the net incremental person trips generated by the Proposed Project Without Big Box would be -5, -2,241, -1,213, and -871 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. For the Proposed Project With Big Box scenario, the net incremental person trips, as shown in **Table 9**, would be 82, -1,639, -668, and -7 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. The incremental person trips under both development scenarios would be below the *CEQR Technical Manual* analysis threshold of 200 peak hour person trips. However, an assignment of the projected pedestrian trips will be undertaken to determine if the varying directionality of the projected pedestrian trips and/or the varying distribution patterns associated with the No-Action and With-Action land uses would result in the need to prepare a detailed analysis of area sidewalks, corner reservoirs, and crosswalks. Where warranted, the associated analyses would be presented in the EIS to assess the potential for any significant adverse pedestrian impacts. ✷