DRAFT SCOPE OF WORK FOR AN ENVIRONMENTAL IMPACT STATEMENT

500 Kent Avenue

CEQR No. 21DCP139K

Lead Agency:
NYC Department of City Planning

Applicant:
Kent Member LLC

Prepared by:
Philip Habib & Associates

17 February 2021

500 Kent Avenue

Draft Scope of Work (DSOW)

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A. INTRODUCTION

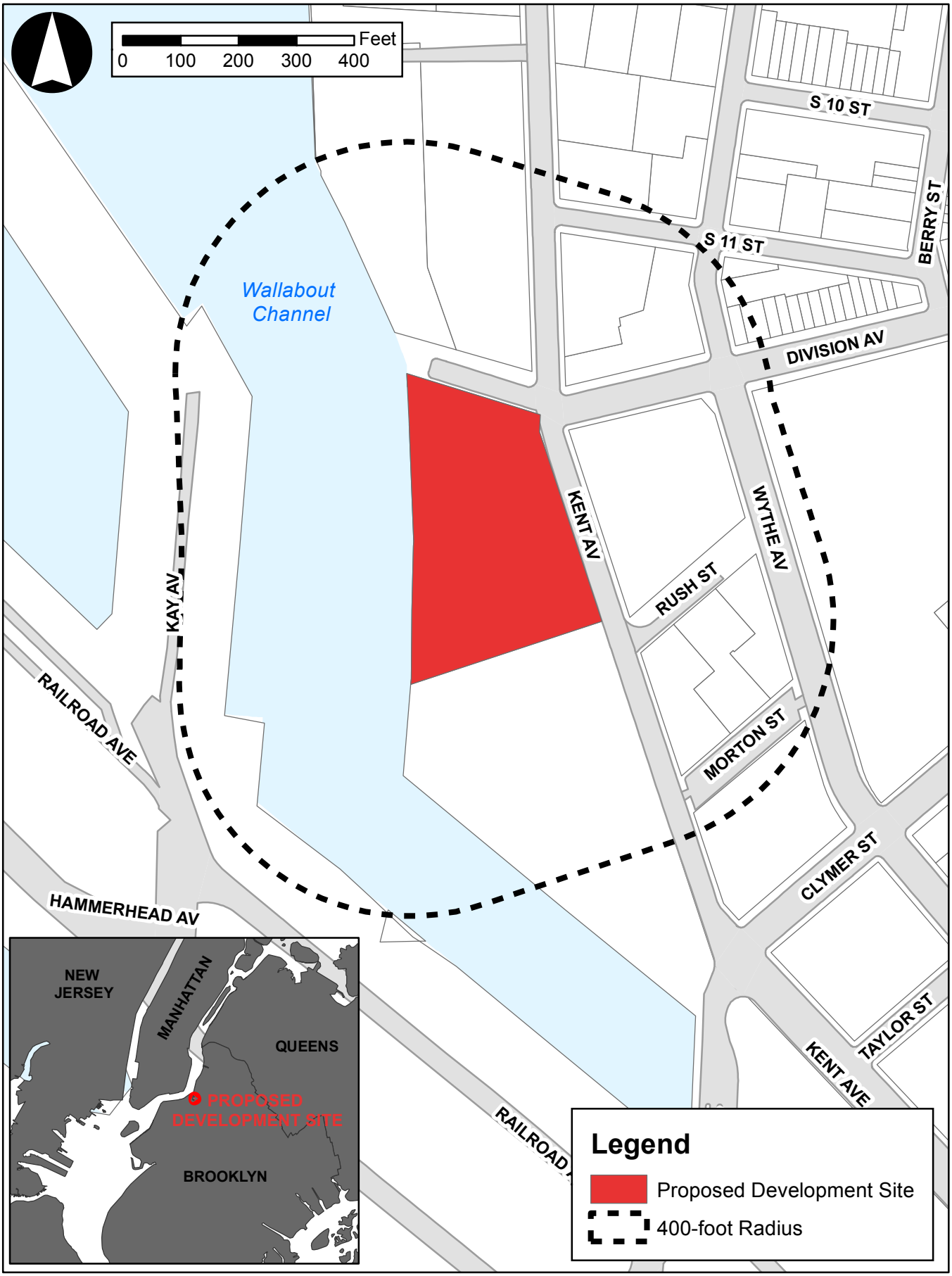
This Draft Scope of Work (DSOW) outlines the technical areas to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the 500 Kent Avenue proposal. The New York City Department of City Planning (DCP), acting on behalf of the New York City Planning Commission (CPC), as lead agency for City Environmental Quality Review (CEQR), has determined that the Proposed Actions may result in significant adverse environmental impacts and directed that an EIS be prepared.

The Applicant, Kent Member LLC, proposes to develop a new 23-story, 350-foot tall (roof height), 757,431-gross-square-foot commercial building at 500 Kent Avenue (Block 2023, Lot 10) in the South Williamsburg neighborhood of Brooklyn Community District (CD) 2 (the "Project Site"). The building would contain approximately 593,435 gross square feet (gsf) of office space, 20,476 gsf of retail, and 196 public parking spaces (143,520 gsf) (the "Proposed Project"). The Project Site, which is owned by the Applicant, is a 115,244-sf zoning lot (see **Figure 1**).

To facilitate the Proposed Project, the Applicant is seeking the following Proposed Actions: (1) a zoning map amendment that would rezone the 2.65-acre Project Site from M3-1 to M1-5; (2) a special permit pursuant to ZR 62-837 to modify various bulk requirements in sub-sections of ZR 62-341, including (i) ZR 62-341(a)(2) - initial setback distance, (ii) ZR 62-341(c)(1) - maximum base height, (iii) ZR 62-341(c)(2) - maximum building height, (iv) ZR 62-341(c)(5) - maximum width of wall facing shoreline, and (v) 62-341(a)(4)(ii) - permitted obstruction lot coverage maximum for penthouses; (3) a special permit pursuant to ZR 74-512 to allow a 196-space public parking garage; (4) a waterfront zoning authorization to permit modification of certain otherwise applicable waterfront zoning regulations. The project also requires one non-discretionary ministerial action by the City Planning Commission: a waterfront zoning certification pursuant to ZR 62-81 to demonstrate compliance with other applicable waterfront zoning regulations not modified pursuant to the authorization.

A reasonable worst-case development scenario (RWCDS) has been established for the Proposed Actions for an analysis year of 2024. Under the RWCDS, the Proposed Project would be constructed pursuant to the proposed zoning map amendment, zoning special permits, waterfront zoning authorization, and waterfront zoning certification, instead of an as-of-right development built pursuant to the existing zoning. Under the RWCDS the Proposed Actions are expected to result in a net increase of 555,911 gsf of commercial space, including office and retail spaces, a net reduction of 181,401 gsf of warehouse space and 279 off-street accessory parking spaces (a net increase of 196 parking spaces and a switch from accessory to public parking) as compared to the 2024 future without the proposed action, the baseline for environmental analysis.

Figure 1
Project Location



This document provides a description of and purpose and need for the Proposed Actions, the resulting Proposed Project and associated RWCDS, and task categories for all technical areas to be analyzed in the EIS.

B. REQUIRED APPROVALS AND REVIEW PROCEDURES

Required Approvals

The Proposed Actions would encompass discretionary approvals that are subject to review under the Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter, and CEQR process. These include:

- A zoning map amendment (Zoning Sectional Map 12d) approval by the CPC to change the zoning in the Proposed Rezoning Area from the existing M3-1 heavy manufacturing zoning district to an M1-5 light manufacturing zoning district (see **Figure 2**);
- A Special Permit approval by the CPC pursuant to ZR 62-837 to modify various waterfront bulk requirements contained in sub-sections of ZR 62-341, including: (i) initial setback distance, (ii) maximum base height, (iii) maximum building height, (iv) maximum width of wall facing shoreline, and (v) permitted obstruction lot coverage requirement for penthouses;
- A Special Permit pursuant to ZR 74-512 to allow a below-grade public parking garage with 196 spaces in the Proposed Project;
- A Waterfront Zoning Authorization pursuant to ZR 62-822(b) to allow modification of ZR 62-62(c)(1) planting area requirements.

The project is also seeking a non-discretionary Waterfront Zoning Certification by the CPC pursuant to ZR 62-81 to demonstrate compliance with other applicable visual corridor and waterfront public access regulations.

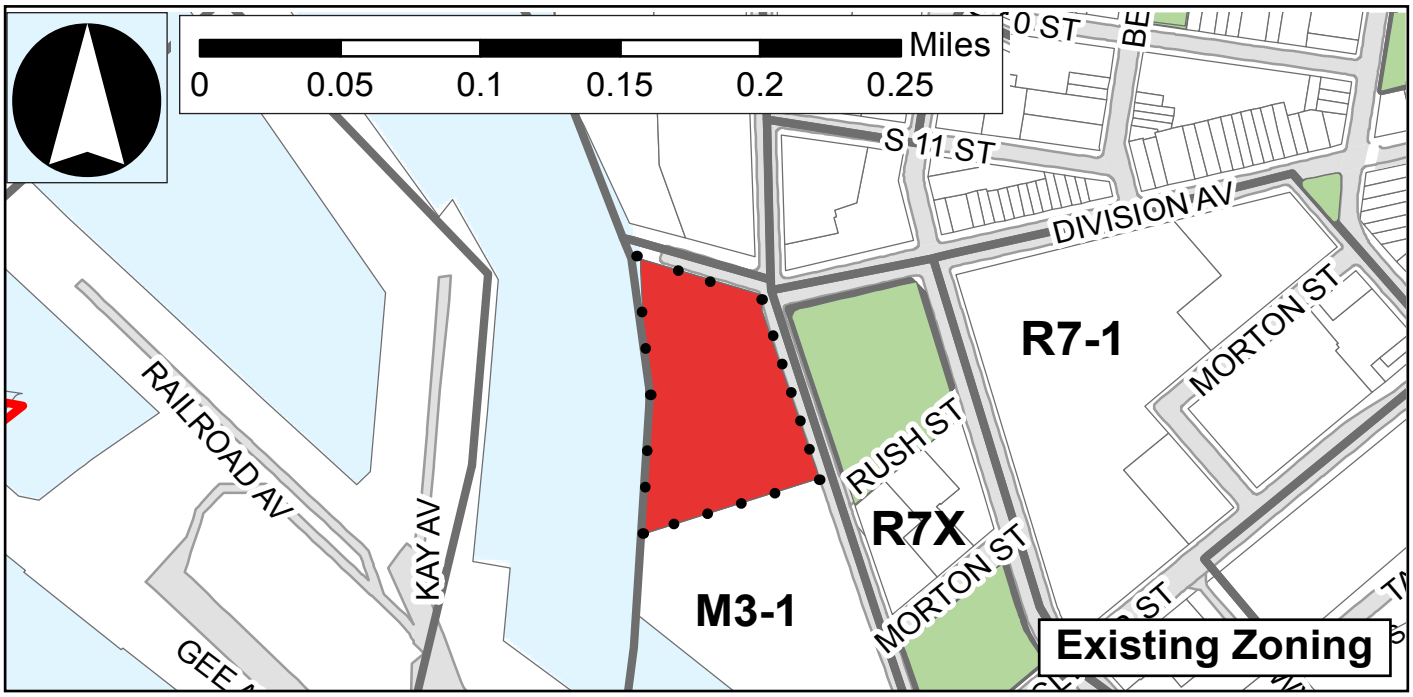
All of these approvals would only apply to the Project Site.

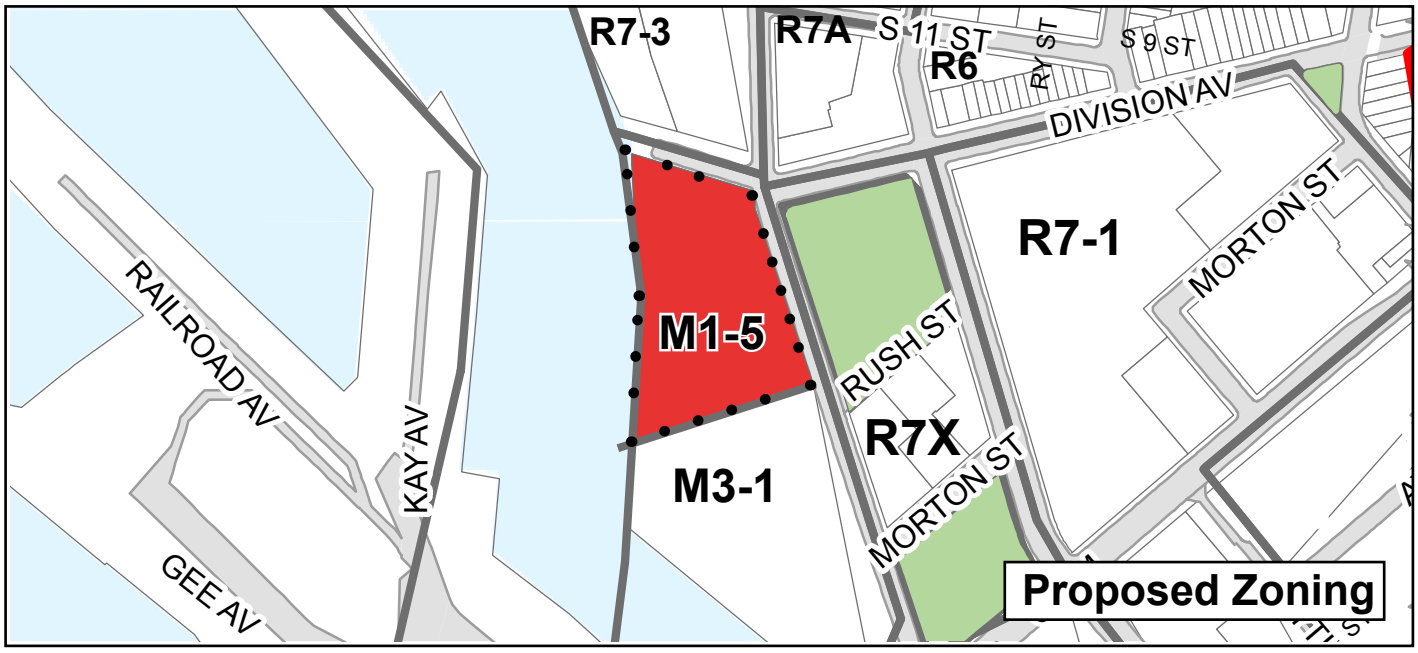
Zoning Map Amendment

The proposed zoning map amendment would rezone the Project Site (see **Figure 2**) from M3-1 to M1-5. As a result, changes to what is permitted/prohibited would include: prohibiting heavy manufacturing uses (Use Group 18) allowed under M3-1 and permitting certain types of community facility (Use Group 4) and transient accommodations (Use Group 5) not allowed under M3-1 while continuing to allow other types of commercial uses (Use Groups 6-14 and 16) and light manufacturing uses (Use Group 17) as-of-right; allowing higher densities of commercial and light manufacturing by increasing permitted FAR from 2.0 to 5.0 and allowing a community facility maximum FAR of 6.5; allowing a larger maximum permitted bulk envelope including increasing maximum base height from 60 to 65 feet and maximum building height from 110 to 185 feet; and eliminating accessory parking requirements for most permitted uses including those included in the Proposed Project. This would create opportunities for increased development at densities comparable to other waterfront developments in the area; for example, the area immediately to the north was rezoned from M3-1 to R7-3/C2-4 in 2006, increasing the maximum permitted FAR from 2.0 to 5.0 (Kedem Winery Redevelopment Rezoning: ULURP No. C 020518 ZMK).

Figure 2

Existing & Proposed Zoning





Legend

Area to be Rezoned

Project Site

Zoning Districts

ZR 62-837 Bulk Modifications on Waterfront Block Special Permit

The proposed Special Permit pursuant to ZR 62-837 would modify:

(i) initial setback distance: ZR 62-341(a)(2) requires a 10-foot setback from a wide street, a 15-foot setback from a narrow street, and a 30-foot setback from a shore public walkway above the required base height of 65 feet; the Proposed Project would provide a 10-foot setback at a height of 125 feet along Kent Avenue for a width of approximately 109 feet, i.e., setting back 65 feet higher than required;

(ii) maximum base height: ZR 62-341(c)(1) allows a maximum base height of 65 feet; the Proposed Project would have a base height of 125 feet;

(iii) maximum building height: ZR 62-341(c)(2) allows a maximum building height of 185 feet; the Proposed Project would have a building height of 350 feet;

(iv) maximum width of wall facing shoreline: ZR 62-341(c)(5) allows a maximum width of 100 feet for walls above the base height and facing the shoreline; however, the 23-story tower portion of the Proposed Project would have a wall facing the shoreline with a width of 135 feet;

(v) permitted obstruction lot coverage maximum for penthouses: ZR 62-341(a)(4)(ii) requires that penthouses, i.e., enclosed areas above the maximum permitted building height, have a gross area lot coverage equivalent to at least 50 percent and not more than 85 percent of highest story of building that is located entirely below the maximum permitted height; the Proposed Project penthouse would only cover 10.5 percent of said area.

ZR 74-512 Public Parking Garage Special Permit

The proposed Public Parking Garage Special Permit pursuant to ZR 74-512 by the CPC would allow the Proposed Project to provide a public parking garage in excess of 150 spaces on the Proposed Development. Without the proposed Public Parking Garage Special Permit, the Project Site would provide only the maximum number of spaces permitted pursuant to the proposed M1-5 zoning, i.e., 150 spaces if a single entry/exit curb cut provided or 225 spaces if complying separate entry/exit curb cuts are provided, which in either case would not fully address the Proposed Project's anticipated site-generated parking demand. (NB: with the proposed M1-5 zoning no parking would be required.) The Public Parking Garage Special Permit would enable the building to provide 196 parking spaces and to make productive use of its cellar space and fully accommodate its own on-site demand.

ZR 62-822(b) Waterfront Zoning Authorization

A waterfront zoning authorization pursuant to ZR 62-822(b) by the CPC is being sought to allow the Proposed Project to modify its compliance with ZR 62-513 planting area requirements in order to provide additional hardscape areas connecting the shore public walkway and upland waterfront public access areas. Given the site's grade, which rises from the waterfront toward Kent Avenue, these hardscape areas would include stepped and sloped paved areas facilitating public access through the site.

ZR 62-81 Waterfront Public Access and Visual Corridor Certification

Certification pursuant to ZR 62-81 by the CPC Chair to the DOB demonstrating compliance with other waterfront public access and visual corridor regulations.

City Environmental Quality Review (CEQR) and Scoping

The Proposed Project is classified as a Type 1 Action, as defined under New York State Codes, Rules, and Regulations Part 617.4 and NYC Executive Order 91 of 1977 §6-15 (2), subject to environmental review in accordance with CEQR guidance. An Environmental Assessment Statement (EAS) and Positive Declaration is anticipated to be issued on February 22, 2021 by DCP, as lead agency. DCP has determined that the Proposed Actions may result in significant adverse environmental impacts and directed that an EIS be prepared.

This Draft Scope of Work (DSOW) for the preparation of an EIS contains a description of the Proposed Actions and the tasks that would be undertaken to analyze the potential environmental impacts of the Proposed Actions and associated RWCDS. The issuance of the DSOW marks the beginning of the public comment period. The scoping process allows the public a voice in framing the scope of the EIS. The scoping document sets forth the analyses and methodologies that will be utilized to prepare the EIS. During the public comment period, those interested in reviewing the DSOW may do so and give their comments to the lead agency. The public, interested agencies, and elected officials, are invited to comment on the DSOW, either in writing or orally, at the public scoping meeting.

A public scoping meeting is anticipated to be held on March 25, 2021 starting at 2 pm. In support of the City's efforts to contain the spread of COVID-19, DCP will hold the public scoping meeting remotely through video conferencing. The meeting will be live streamed and accessible from New York City's online remote meeting portal- NYC Engage: www.nyc.gov/NYCEngage

Comments received during the scoping meeting and written comments received up to ten days after the meeting - through Monday, April 5, 2021, will be considered and incorporated, as appropriate, into the Final Scope of Work (FSOW). The FSOW will incorporate all relevant comments made on the DSOW and revise the extent or methodologies of the studies, as appropriate, in response to comments made during the CEQR scoping process. The Draft EIS (DEIS) will be prepared in accordance with the resulting FSOW.

Once the DEIS is complete, the document will be made available for public review and comment. A public hearing will be held on the DEIS in conjunction with the CPC hearing on the land use applications to afford all interested parties the opportunity to submit oral and written comments. At the close of the public review period, a Final EIS (FEIS) will be prepared. Comments made on the DEIS will be responded to and incorporated into the FEIS, as appropriate. The FEIS will then be used by the relevant City agencies to evaluate CEQR findings, which address project impacts and proposed mitigation measures, and to decide whether to approve the requested discretionary actions, with or without modifications. The rationale for this decision is then set forth in a document called a Statement of Findings.

C. PROJECT DESCRIPTION

Project Site

The 115,244-sf Project Site, which consists of one tax lot (Lot 10) on Block 2023, is an irregularly-shaped, waterfront property and corner lot bound by Wallabout Channel to the west, Division Avenue to the north, Kent Avenue to the east, and the Brooklyn Navy Yard's Nassau Gas Works site to the south. The lot, which is currently vacant, has approximately 227 feet of frontage on Division Avenue, approximately 372 feet of

frontage on Kent Avenue and approximately 528 feet of shoreline along Wallabout Channel. It was occupied by power generating plants from the late nineteenth to early twenty-first centuries. In 1959, Consolidated Edison (Con Edison) acquired the property from the City of New York. Con Edison continued to operate the power plant until shuttering it in 1999 and subsequently demolished the plant buildings in 2009. Con Edison performed environmental remediation which was completed in 2014 under New York State Department of Environmental Conservation supervision through the Voluntary Cleanup Program. The project site has been vacant since 2009 and the applicant acquired it from Con Edison in 2019 with the intent of redeveloping it.

The Project Site also constitutes the proposed rezoning area and the zoning lot that would be subject to the special permits, zoning authorization, and zoning certification, i.e., there are no other sites affected by the Proposed Actions. Similarly, there are no other sites that would transfer developments rights to or from the Project Site.

Zoning

As shown in **Figure 2,** the Project Site has been zoned M3-1 since the adoption of the 1961 Zoning Resolution, when the power plant was the existing use on the property. M3 districts are designated for heavy industries that generate noise, traffic, or pollutants. Typical uses include power plants, solid waste transfer facilities and recycling plants, and fuel supply depots, though permitted uses also include warehousing, automotive uses, and most types of commercial uses. Even in M3 districts, uses with potential nuisance effects are required to conform to minimum performance standards. M3 districts are usually located near the waterfront and buffered from residential areas. No new residences or community facilities are permitted as-of-right in M3 districts. Development within M3-1 districts can be built to a maximum FAR of 2.0, with bulk subject to special waterfront regulations as it is located on a waterfront block. Within M3-1 districts, off-street parking is required and varies by use.

Public Policy

The Project Site is located within the City's designated Coastal Zone and the Brooklyn Navy Yard Industrial Business Zone (IBZ), although it is not part of the Brooklyn Navy Yard.

The Coastal Zone, designated by the City pursuant to legislative guidance, consists of land and water that have a direct and significant effect on coastal waters. Proposed projects that are located within the designated boundaries of New York City's Coastal Zone must be assessed for their consistency with the City's Waterfront Revitalization Program (WRP).

The designation of an IBZ seeks to foster high-performing business districts by creating competitive advantages over locating in areas outside of New York City. The IBZs are supported by tax credits for relocating within them, zone-specific planning efforts, and direct business assistance from Industrial Providers of NYC Business Solutions Industrial and Transportation. In light of the purpose of IBZs to foster industrial sector growth by creating real estate certainty, residential rezonings are generally not supported within IBZs. Unlike the other properties in this IBZ, the Project Site is privately-owned and was not historically part of the Navy Yard.

Surrounding Area and Context

The Project Site is located in the southwestern portion of the Williamsburg neighborhood of Brooklyn and is immediately northeast of the Brooklyn Navy Yard, which is now an industrial park with many adaptively

reused older structures and some new buildings. Predominant land uses in the area surrounding the Project Site include low-, mid-, and high-rise apartment multi-family residential and mixed use buildings, commercial uses, industrial properties, and vacant land. Generally, there has been a trend of redevelopment of vacant land and underutilized and unoccupied properties formerly occupied by industrial and general service uses with new higher density residential and commercial development, particularly along the waterfront. There are several notable buildings within the surrounding area. These include Schaefer Landing, a waterfront apartment complex located 0.2 miles north of the Project Site completed in 2006 that consists of three apartment buildings and contains a total of approximately 350 DUs, of which 140 DUs are affordable housing units, approximately 10,000 gsf of retail, and approximately 146 accessory parking spaces. Also on the waterfront, 0.3 miles north of the project site is 420 Kent Avenue, an apartment complex with two separate buildings. The development, completed in 2019, has a total of 857 DUs, of which 186 DUs are affordable housing units, 15,867 sf of commercial space, and 429 accessory parking spaces. Notable institutional uses including Beikvie Hatzion and Ohel Sura Schools. There are several public open spaces in the vicinity of the Project Site including Roberto Clemente Ballfields, located across the street from the Project Site, Jacob's Ladder Playground, located one block southeast of the Project Site, Schaefer Landing Park, and 420 Kent Avenue waterfront public open space. Bedford Playground is located three blocks northeast of the project site, it is one acre and has basketball courts, handball courts and playgrounds.

Beside M3-1, which is also mapped in the Brooklyn Navy Yard area immediately to the south of the Project Site, predominant zoning designations in the surrounding area include an M1-2 light manufacturing district, C4-3 commercial district, and R6, R7X, R7A, R7-1, and R7-3 residential districts.

The Project Site is well served by public transit. The Marcy Avenue J/M/Z subway station (to the northeast at the intersection of Broadway and Williamsburg Street) is located approximately 0.7 miles from the Project Site. In addition, the B67 (connecting Williamsburg Bridge Plaza and Long Island City) runs along Kent and Wythe Avenues, the B62 (connecting Downtown Brooklyn/Fulton Mall and Long Island City) runs along Wythe and Kent Avenues, and the B32/Q59 (connecting Lefferts Gardens/Prospect Park and Greenpoint) run along Broadway. The South Williamsburg landing on the East River Ferry route is located less than 0.3 miles to the north of the Project Site at the western terminus of S. 10th Street. The site is served by bike lanes on Kent and Wythe avenues. The bike lane on Kent Avenue will eventually be a part of the Brooklyn Waterfront Greenway, a long corridor of bike lanes connecting open space along the waterfront in Brooklyn. There is also a Citi Bike station located on Kent Avenue and S 11th Street 300-feet to the north of the Project Site.

Purpose and Need for the Proposed Actions

Overview

In the vicinity of the Project Site both the demand for workspace and the residential population have increased substantially in recent years. The Brooklyn Navy Yard (BNY), immediately south and southwest of the Project Site, has undergone a transformation and is now home to over 400 commercial and light industrial businesses employing approximately 8,000 people with further growth anticipated. At the same time, there has been a resurgence of residential development in Williamsburg and other nearby neighborhoods. There are multiple new, high rise residential buildings near the Project Site and additional development expected in the future. The City is now promoting the increase of walk-to-work commuting patterns and new forms of public transportation along the waterfront including the NYC Ferry service. By providing a new hub of business development, the Proposed Project would be compatible with the ongoing development of the neighboring BNY and would be complementary to the increased residential

uses in the area, providing space for work (office) and shopping (retail) that could reduce travel times and distances for local residents.

As a medium-density, i.e., 5.0 FAR, commercial waterfront development the Proposed Project would provide a transitional land use between two distinct areas, the commercial-industrial BNY to the south and the redeveloping, predominantly residential waterfront corridor to the north. As such, it would infill a vacant site at a density similar to other nearby developments, buffering residential uses from the BNY and light industrial uses from residential developments across the street to the north and east. The applicant believes that this project, by leveraging demand for office in space in Brooklyn, would further the mission of the Brooklyn Navy Yard IBZ by strengthening the non-residential character of the IBZ with an active commercial use compatible with the mix of uses in present in the Navy Yard.

More broadly, the Proposed Project would result in the re-use of a vacant, former brownfield site that has been remediated and is served by existing water and sewer infrastructure and other utilities. The Proposed Project would contribute to the vitality of Brooklyn's East River waterfront and its new public waterfront open space by attracting new workers and visitors to the site.

Need for the Proposed Actions

The Proposed Actions are intended to facilitate the applicant's proposed 23-story, approximately 757,431-gsf (576,220-zsf) commercial building on the project site.

Proposed Zoning Map Amendment

The site's existing M3-1 zoning district, in place since the adoption of the 1961 Zoning Resolution, limits the maximum floor area ratio (FAR) for the site to 2.0 for permitted manufacturing and commercial uses (Use Groups 6-14, 16-18), specifies sky exposure plane bulk requirements as modified by waterfront zoning regulations, and requires parking at a rate of 1 space per 300 zsf for general retail and office uses. The Proposed Project could not be facilitated as-of-right under the existing zoning as M3-1 would not allow the project's proposed density and bulk envelope and would require substantially more parking spaces than the project's anticipated demand.

Given the Proposed Project's location in the BNY IBZ, City policy is that IBZ land be retained for potential industrial uses and should not allow for residential rezonings; accordingly, the applicant seeks a rezoning to M1-5 which would limit the site to permitted commercial, light manufacturing uses, and community facility uses; commercial hotel uses only would be allowed by special permit and the applicant is not seeking such a special permit.

The proposed zoning map amendment from M3-1 to M1-5 would establish maximum FAR of 5.0 for permitted manufacturing and commercial uses (Use Groups 5-14, 16-17) and 6.5 for community facility uses (Use Group 4), which the applicant considers to be a more appropriate density to achieve the development on the site. The M1-5 district regulations would act as a buffer between the future residential uses at 470 Kent Avenue to the north and the BNY to the south.

Proposed Special Permits

The proposed special permits would facilitate a design that the applicant believes is superior in terms of function and aesthetics to what can be achieved as-of-right under the proposed M1-5 zoning and allow for a provision of parking at a level commensurate to the site-generated demand.

Proposed Waterfront Zoning Authorization

The proposed waterfront zoning authorization pursuant to ZR 62-822(b) would allow a modification of planting requirements specified in ZR 62-62(c)(1) in the upland public access area. The applicant believes that strict compliance with planting coverage requirements would adversely affect the utility of the public open space. The increased hardscape area that would be permitted by the authorization would facilitate better pedestrian circulation between the shore public walkway and upland areas, thereby improving visitor experience and encouraging better public realm linkages between the waterfront and Kent Avenue. The modification allowed by the proposed authorization would not, in the applicant's opinion, detract from the public's use and enjoyment of the waterfront public access area. The applicant believes that this modification would result in a design that is functionally equivalent or superior to one prescribed by strict adherence to the applicable provisions.

The Proposed Project

The Proposed Actions would facilitate the development of the Proposed Project, a new 23-story (350-foot tall) commercial building with office and retail space on the Project Site. The Proposed Project would contain a total of 757,431 sf of gross floor area (gfa, a/k/a gsf) [576,220 sf of zoning floor area (zfa, a/k/a zsf)], comprised of: 593,435 gsf (556,358 zsf) of Use Group 6B office, 20,476 gsf (19,862 zsf) of Use Group 6A retail, and 143,520 gsf of below-grade parking. Two loading berths would be provided, as required by the office use. A 196-space public parking garage would be located in the cellar, which would be exempt from being counted as floor area. Waterfront public open space would be provided, including a 20,466-sf shore public walkway along Wallabout Channel, 2,714-sf supplemental public access area linking the shore public walkway to a covered corridor between two wings of the building extending up to Kent Avenue, and an approximately 14,053-sf area also serving as a visual corridor along the southern edge of the project site, linking Kent Avenue to the shore public walkway, for a total of 37,233 sf of publicly accessible open space.

D. ANALYSIS FRAMEWORK FOR ENVIRONMENTAL REVIEW

The Proposed Actions would change the regulatory controls governing land use and development on the Project Site. The 2020 *CEQR Technical Manual* will serve as the general guide on the methodologies and impact criteria for evaluating the Proposed Actions' potential effects on various environmental areas of analysis. The EIS defines a RWCDS for analysis using site-specific assumptions that can be reasonably anticipated base on zoning and surround land use trends. Based on this, the EIS considers the Proposed Actions' potential to result in significant adverse impacts on the environmental setting.

Reasonable Worst-Case Development Scenario (RWCDS)

In order to assess the possible effects of the Proposed Actions, a RWCDS was developed for both Future No-Action and Future With-Action conditions. The incremental difference between the Future No-Action and Future With-Action conditions will serve as the basis for the impact analyses of the EIS.

Analysis Year

Accounting for the ULURP approval timeline and based on the Proposed Project's anticipated 20-month construction timeline, it is assumed that full build-out would occur by 2024. Accordingly, the EIS will use

a 2024 analysis year. As development facilitated by the Proposed Actions is expected to be operational in 2024, its environmental setting is not the current environment, but the future environment. Therefore, the technical analyses assess current conditions and forecast these conditions to the analysis year of 2024 for the purposes of determining potential impacts.

Project Site

As noted above, the Proposed Actions would only have the potential to result in new development on the Project Site, i.e., there are no other areas that may have the potential to be directly affected by the Proposed Actions.

The Future without the Proposed Actions (No-Action Condition)

The future without the Proposed Actions condition—also known as the "No-Action condition"—assumes the future conditions on the Project Site and surrounding area without approval of the Proposed Actions. Absent the Proposed Actions, it is anticipated that the Project Site would be developed as-of-right under the existing M3-1 zoning. The No-Action development would have an FAR of 2.0 (1.5 FAR of warehouse use and 0.5 FAR of office space) maximizing the permitted 2.0 FAR and would be 74 feet tall with four stories. The project site would be occupied by approximately 312,599 gsf, including 58,000 gsf of office space, 181,401 gsf of warehouse space, and 73,198 gsf of accessory parking. In terms of zoning floor area, it would have 57,622 zsf of office space and 172,866 zsf of warehouse space. As the No-Action development would be predominantly Use Group 16d warehouse, the Project Site will be exempt from waterfront public access area and visual corridor requirements and therefore no on-site public open space would be provided. The Project Site would provide 279 accessory parking spaces on the first and mezzanine floors, meeting the minimum requirement that the site provide 1 space per 300 zsf of office space and 1 space per 2,000 zsf of warehouse space. A summary of the No-Action uses on the Project Site is provided in **Table 1**, below.

Table 1, Comparison of RWCDS No-Action and With-Action Development Scenarios (Project Site)

Use	No-Action Scenario	With-Action Scenario	Increment
Commercial			
Office	58,000 gsf	593,435 gsf	**+535,534 gsf**
Retail	0 gsf	20,476 gsf	**+20,476 gsf**
Warehouse	181,401 gsf	0 gsf	**-181,401 gsf**
Publically Accessible Open Space	0 gsf	37,233 gsf	**+37,233 gsf**
Parking			
Spaces	279 accessory spaces (attended)	196 public spaces (non-attended)	**-83 spaces**
Area	73,198 gsf		
TOTAL	***312,599 gsf***	***757,431 gsf***	***+444,832 gsf***
Building height (roof)	74 feet	350 feet	**+276 feet**
Building stories	4	23	**+19**
Workers[1]	413 workers	2,435workers	**2,022+ workers**

Notes:

[1] Estimate of workers is based on standard rates and are as follows: 1 worker per 250 gsf of office space; one worker per 333 gsf of retail space; and 1 worker per 1,000 gsf of warehouse space

The Future with the Proposed Actions (With-Action Condition)

The future with the Proposed Actions condition—also known as the "With-Action condition"—assumes the Project Site would be redeveloped as proposed by the Applicant, pursuant to the Proposed Actions.

As a result, the With-Action development scenario for the Project Site would include 593,435 gsf of commercial office uses, 20,476 gsf of retail uses, and 143,520 gsf of below-grade parking/mechanical space containing 196 public parking spaces (see **Table 1**).

Net Increment: Possible Effects of the Proposed Actions

Table 1 provides a comparison of the No-Action and With-Action scenarios identified for analysis purposes of the Proposed Actions. As shown, the incremental (net) change that would result from the Proposed Actions would be the net addition of 535,435 gsf of office space, 20,476 gsf of retail space, and 196 off-street public parking spaces, as well as a net reduction of approximately 181,401 gsf of warehouse space and 279 off-street accessory parking spaces (a net decrease of 83 spaces and a switch from accessory to public parking). **Table 1** also provides an estimate of the number of workers generated by the Proposed Actions. As shown in **Table 1**, based off these ratios, the incremental change in workers that would result from the Proposed Actions is the net addition of 2,022 workers. The With-Action building would be 276 feet and 19 stories taller than the No-Action building.

E. PROPOSED SCOPE OF WORK FOR THE EIS

Because the Proposed Actions would affect various areas of environmental concern and were found to have the potential for significant adverse impacts in a number of impact categories, pursuant to the EAS and Positive Declaration, an EIS will be prepared for the Proposed Actions that will analyze all technical areas of concern.

The EIS will be prepared in conformance with all applicable laws and regulations, including the State Environmental Quality Review Act (SEQRA; Article 8 of the New York State Environmental Conservation Law) and its implementing regulations found at 6 NYCRR Part 617, New York City Executive Order No. 91 of 1977, as amended, and the Rules and Procedure for CEQR, found at Title 62, Chapter 5 of the Rules of the City of New York.

The EIS, following the guidance of the *2020 CEQR Technical Manual*, will include:

- A description of the Proposed Actions, Proposed Project, and its environmental setting;
- A statement of the environmental impacts of the Proposed Actions, including short- and long-term effects and typical associated environmental effects;
- An identification of any adverse environmental effects that cannot be avoided if the Proposed Actions are implemented;
- A discussion of reasonable alternatives to the Proposed Actions;
- An identification of irreversible and irretrievable commitments of resources that would be involved in the Proposed Actions, should it be implemented; and
- A description of mitigation proposed to eliminate or minimize any significant adverse environmental impacts.

Based on the preliminary screening assessments as outlined in the *CEQR Technical Manual* and detailed in the EAS for the Proposed Actions, all of the CEQR technical areas warrant assessment and would

therefore be included in the EIS, with the following exceptions: community facilities and services; and solid waste and sanitation services. The specific technical areas to be included in the EIS, as well as their respective tasks and methodologies, are described below.

TASK 1. PROJECT DESCRIPTION

The first chapter of the EIS introduces the reader to the Proposed Actions and sets the context in which to assess impacts. This chapter contains a description of the Proposed Actions: site location; the background and/or history of the project; a statement of the purpose and need; key planning considerations that have shaped the current proposal; a detailed description of the Proposed Actions; and discussion of the approvals required, procedures to be followed, and the environmental review process. In addition, the Project Description chapter will present the planning background and rationale for the actions being proposed and summarize the RWCDS for analysis in the EIS.

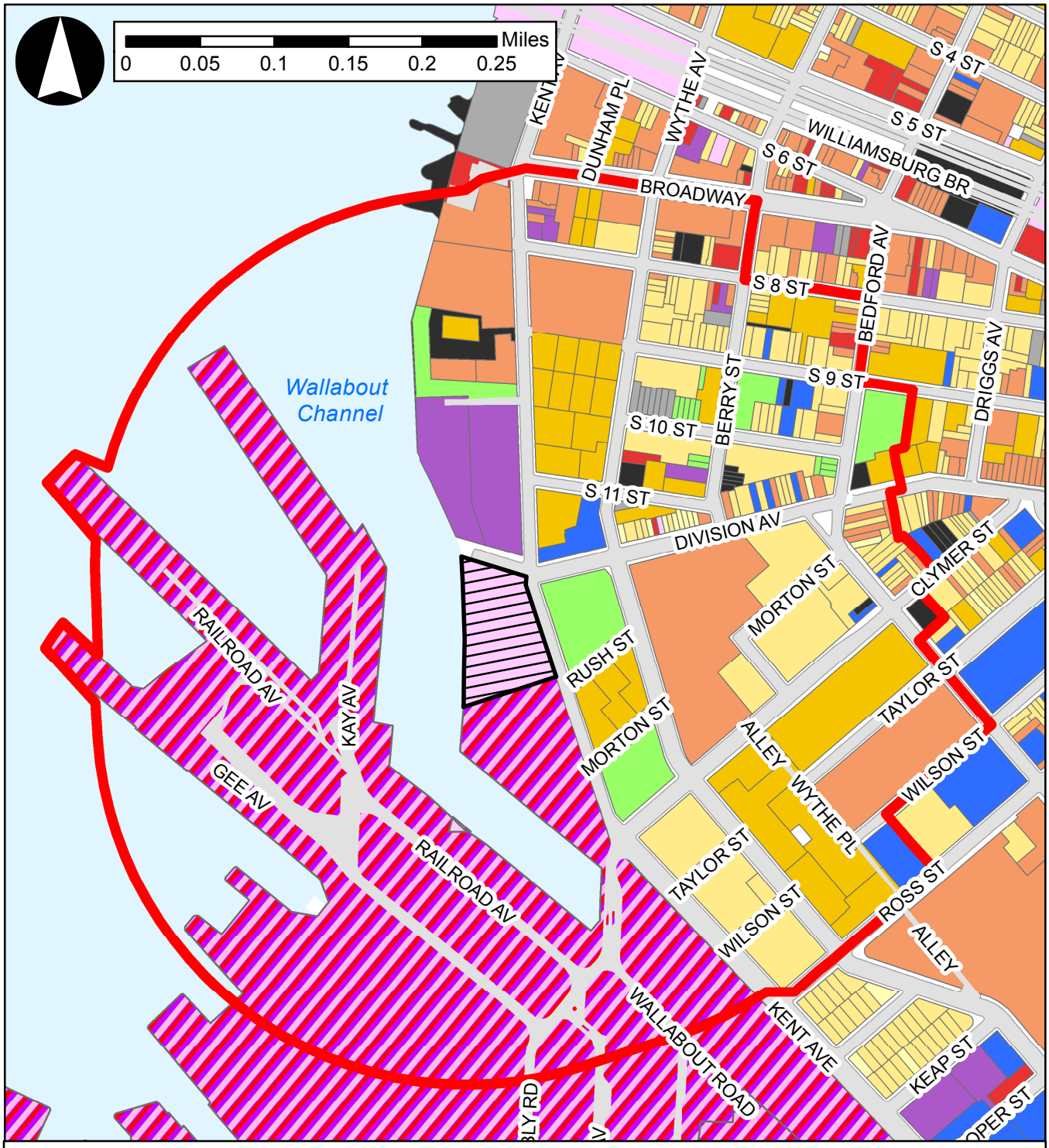
TASK 2. LAND USE, ZONING, AND PUBLIC POLICY

A land use analysis characterizes the uses and development trends in the area that may be affected by a proposed action, and determines whether a proposed action is either compatible with those conditions or whether it may affect them. Similarly, the analysis considers the action's compliance with, and effect on, the area's zoning and other applicable public policies. This chapter will analyze the potential impacts of the Proposed Actions on land use, zoning, and public policy, pursuant to the methodologies presented in the *CEQR Technical Manual*. The primary land use study area will consist of the Project Site, where the potential effects of the Proposed Actions would be directly experienced (reflecting the Proposed Actions and resultant RWCDS). The secondary land use study area would include the neighboring areas within a ¼-mile radius from the Project Site, as shown in **Figure 3**, which could experience indirect impacts. The analysis will include the following subtasks:

- Provide a brief development history of the primary (i.e., Project Site) and secondary study areas.
- Provide a description and map of land use patterns and trends in the study areas, including recent development activity.
- Describe and map existing zoning and recent zoning actions in the study areas.
- Describe public policies that apply to the study areas, including specific development projects and plans for public improvement, including: OneNYC Plan, the Williamsburg Waterfront 197-a Plan, the Brooklyn Navy IBZ, and the NYC Coastal Zone.
- Based on field surveys and prior studies, identify, describe, and graphically portray predominant land use patterns for the balance of the study areas. Describe recent land use trends in the study areas and identify major factors influencing land use trends.
- Prepare a list of future development projects in the study areas that are expected to be constructed by the 2024 analysis year and may influence future land use trends. Also, identify pending zoning actions or other public policy actions that could affect land use patterns and trends in the study areas. Based on these planned projects and initiatives, assess future land use and zoning conditions without the Proposed Actions (No-Action condition).
- Describe proposed zoning changes and the potential land use changes resulting from the Proposed Actions.
- Assess the potential impacts of the Proposed Actions on land use, land use trends, zoning, and public policy.
- Describe the Proposed Actions' potential effects related to issues of compatibility with surrounding land use, the consistency with zoning and other public policies, and the effect of the Proposed Actions on ongoing development trends and conditions in the study areas.

Figure 3

Land Use Study Area



Legend

- Proposed Development Site
- Land Use Study Area Boundary
- Brooklyn Navy Yard

Land Use

- All Others of No Data
- One & Two Family Buildings
- Multi-Family Walk-Up Buildings
- Multi-Family Elevator Buildings
- Mixed-Residential & Commercial Buildings
- Commercial & Office Buildings
- Industrial & Manufacturing
- Transportaion & Utility
- Public Facilities & Institutions
- Open Space & Outdoor Recreation
- Parking Facilities
- Vacant Land
- Industrial & Commercial Buildings

- If necessary, mitigation measures to avoid or reduce potential significant adverse land use, zoning, and/or public policy impacts will be identified.

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 the area. This chapter will assess the Proposed Actions' potential effects on the socioeconomic character of the study area.

The five principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant adverse impacts due to: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement; and (5) adverse effects on specific industries. As detailed below, the Proposed Actions do not warrant an assessment of socioeconomic conditions with respect to direct or indirect residential displacement, direct business displacement, or adverse effects on specific industries. The assessment of the remaining areas of concern will begin with a preliminary assessment to determine whether a detailed analysis is necessary, in conformance with the *CEQR Technical Manual* guidance. Detailed analyses will be conducted for those areas in which the preliminary assessment cannot definitively rule out the potential for significant adverse impacts. The detailed assessments will be framed in the context of existing conditions and evaluations of the Future No-Action and With-Action conditions in 2024, including any population and employment changes anticipated to take place by the analysis year of the Proposed Actions.

Direct Residential Displacement

The Proposed Actions would not directly displace any residents, and therefore this issue does not require analysis in the EIS.

Indirect Residential Displacement

The Proposed Actions would not indirectly displace any residents, given that it would not introduce any new residents, and therefore this issue does not require analysis in the EIS.

Direct Business Displacement

The Proposed Actions would not directly displace any business, and therefore this issue does not require analysis in the EIS.

Indirect Business Displacement

The indirect business displacement analysis determines whether the Proposed Actions may introduce trends that would make it difficult for those businesses that provide products or services essential to the local economy, or those subject to regulations or publicly adopted plans to preserve, enhance, or otherwise protect them, to remain in the area. The purpose of the preliminary assessment is to determine whether a proposed action has potential to introduce such a trend. The RWCDS would introduce a net

increment of 555,911 gsf of new commercial uses, which exceeds the 200,000-gsf analysis threshold for "substantial" new development warranting a preliminary assessment. The preliminary assessment will entail the following subtasks:

- Identify and characterize conditions and trends in employment and businesses within the study area. This analysis will be based on field surveys, employment data from the New York State Department of Labor (NYSDOL) and/or Census, and discussions with real estate brokers.
- Determine whether the RWCDS would introduce enough of a new economic activity or alter existing economic patterns.
- Determine whether the RWCDS would add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing economic patterns.
- Determine whether the RWCDS would directly displace uses of any type that directly support businesses in the area or bring people to the area that form a customer base for local businesses.
- Determine whether the RWCDS would directly or indirectly displace residents, workers, or visitors who form the customer base of existing businesses in the area.

If the preliminary assessment determines that the Proposed Actions could introduce trends that make it difficult for businesses that are essential to the local economy to remain in the area, a detailed analysis will be conducted. The detailed analysis would determine whether the Proposed Actions would increase property values and thus increase rents for a potentially vulnerable category of business and whether relocation opportunities exist for those businesses.

It should be noted that a preliminary assessment of indirect business displacement due to market saturation is not warranted. The Proposed Actions are not expected to add to, or create, a retail concentration that may draw a substantial amount of sales from existing businesses within the study area to the extent that certain categories of business close and vacancies in the area increase, thus resulting in a potential for disinvestment on local retail streets. The RWCDS is expected to introduce an increment of up to approximately 20,476 gsf of retail space as compared to the No-Action condition. Projects resulting in less than 200,000 sf of regional-serving retail in the study area, or less than 200,000 sf of locally-serving or regional-serving retail on a single site would not typically result in socioeconomic impacts, according to *CEQR Technical Manual* guidance. As the RWCDS would not exceed the CEQR threshold, further analysis is not warranted and will not be provided in the EIS.

Adverse Effects on Specific Industries

An assessment of adverse effects on specific industries is not warranted as the Proposed Actions would not involve regulatory changes or other activities that could affect business conditions in any industry or any category of businesses or indirectly substantially reduce employment or impair the economic viability in an industry or category of businesses.

TASK 4. OPEN SPACE

If a project may add population to an area, demand for existing open space facilities would typically increase. Indirect effects may occur when the population generated by a proposed action would be sufficiently large to noticeably diminish the ability of an area's open space to serve the future population. For the majority of projects, an assessment is conducted if the proposed action would generate more than 200 residents or 500 employees, or a similar number of other uses. However, the need for an open space assessment may vary in certain areas of the City that are considered either underserved or well-served by open space; if a project is located in an underserved area, an open space assessment should be conducted if that project would generate more than 50 residents or 125 workers. The Project Site is neither

underserved nor well-served per CEQR guidance, and the RWCDS exceeds the worker analysis threshold of 500. Therefore, an assessment of nonresidential open space is warranted and will be provided in the EIS.

The open space analysis will consider passive open space resources within a nonresidential (¼-mile radius) study area. The study areas will generally comprise those census tracts that have 50 percent or more of their area located within the ¼-mile radius of the Project Site, as recommended in the *CEQR Technical Manual*. The resultant open space study area is shown in **Figure 4**.

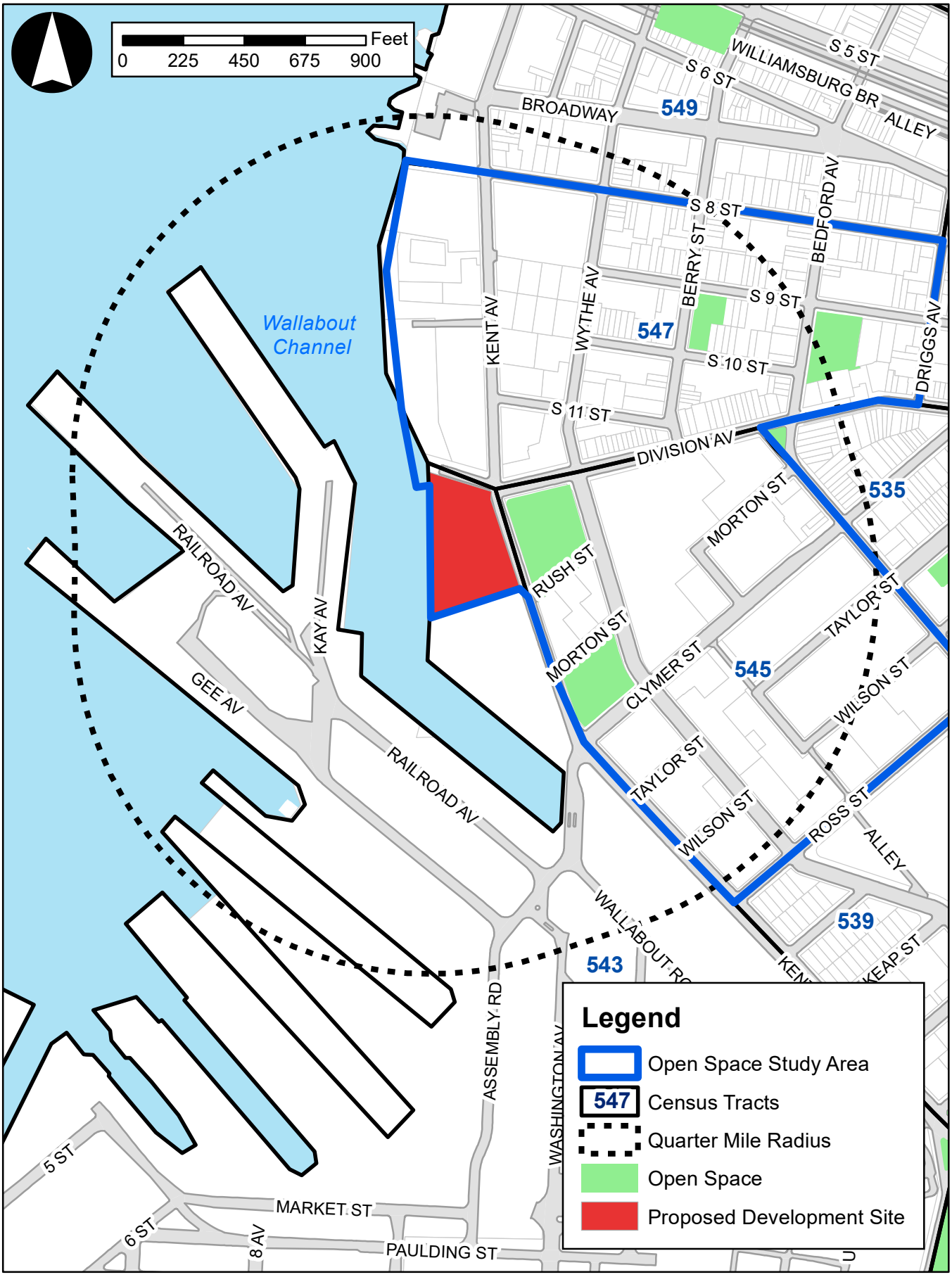
The detailed open space analysis in the EIS will include the following subtasks:

- Characteristics of worker/daytime open space users will be determined. The number of employees and daytime workers in the study area will be calculated based on 2010 Census reverse journey-to-work census data.
- Existing open spaces within the ¼-mile open space study area will be inventoried and mapped. The condition and usage of existing facilities will be described based on the inventory and field visits. Acreages of these facilities will be determined and the total study area acreages will be calculated. The percentage of passive and active open space will also be calculated.
- Based on the inventory of facilities and study area populations, a passive open space ratio will be calculated for the worker populations and compared to City guidance to assess adequacy. Passive open space ratios are expressed as the amount of passive open space acreage per 1,000 non-residential populations.
- Expected changes in future levels of open space supply and demand in the 2024 analysis year will be assessed, based on other planned development projects within the open space study area. Any new open space or recreational facilities that are anticipated to be operational by the analysis year will also be accounted for. The passive open space ratio will be calculated for future No-Action conditions and compared with the exiting ratio to determine the change in future levels of adequacy.
- Effects on open space supply and demand resulting from the increased worker population associated with the RWCDS will be assessed. Any open space facilities included in the RWCDS would also be taken into account. The assessment of the Proposed Actions' impacts will be based on a comparison of the passive open space ratio for the future No-Action versus future With-Action conditions. In addition to the quantitative analysis, a qualitative analysis will be performed to determine if the changes resulting from the Proposed Actions constitute a substantial change (positive or negative) or an adverse effect to open space conditions. The qualitative analysis will assess whether or not the study area is sufficiently served by passive open space, given the capacity, condition, and distribution of open space, and the profile of the study area population.

TASK 5. SHADOWS

A shadows analysis assesses whether new structures resulting from a proposed action would cast shadows on sunlight-sensitive publicly accessible resources or other resources of concern, such as natural resources, and to assess the significance of their impact. This chapter will examine the RWCDS's potential for significant and adverse shadow impacts pursuant to *CEQR Technical Manual* criteria. Generally, the potential for shadow impacts exists if an action would result in new structures or additions to buildings resulting in structures over 50 feet in height that could cast shadows on important natural features, publicly accessible open space, or on historic features that are dependent on sunlight. New construction or building additions resulting in incremental height changes of less than 50 feet can also potentially result in shadow impacts if they are located adjacent to, or across the street from, a sunlight-sensitive resource.

Figure 4
Open Space Study Area



Based on the anticipated height and bulk of the RWCDS envelope, the Proposed Actions would result in the construction of new buildings that would be greater than 50 feet in height. The EIS will assess the RWCDS on a site-specific basis for potential shadowing effects on sunlight-sensitive uses and disclose the range of shadow impacts, if any, which are likely to result from the Proposed Actions. The shadows analysis in the EIS will include the following subtasks:

- A preliminary shadows screening assessment will be prepared to ascertain whether shadows from the RWCDS may potentially reach any sunlight-sensitive resources at any time of year.
    - A Tier 1 Screening Assessment will be conducted to determine the longest shadow study area for the RWCDS, which is defined as 4.3 times the height of a structure (the longest shadow that would occur on December 21, the winter solstice), pursuant to the *CEQR Technical Manual*. A base map that illustrates the locations of the Project Site in relation to the sunlight-sensitive resources will be developed.
    - A Tier 2 Screening Assessment will be conducted if any portion of a sunlight-sensitive resource lies within the longest shadow study area. The Tier 2 assessment will determine the triangular area that cannot be shaded by the developments, which in New York City is the area that lies between -108 and +108 degrees from true north.
    - If any portion of a sunlight-sensitive resource is within the area that could be potentially shaded by the developments, a Tier 3 Screening Assessment will be conducted. The Tier 3 Screening Assessment will determine if shadows resulting from the RWCDS can reach a sunlight-sensitive resource through the use of three-dimensional computer modeling software with the capacity to accurately calculate shadow patterns. The model will include a three-dimensional representation of the sunlight-sensitive resource(s), a three-dimensional representation of the Proposed Project, and a three-dimensional representation of the topographical information within the area to determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Actions.
- If the screening analysis does not rule out the possibility that action-generated shadows would reach any sunlight-sensitive resources, a detailed analysis of potential shadow impacts on publicly-accessible open spaces or sunlight-sensitive historic resources resulting from the Proposed Actions will be provided in the EIS. The detailed shadow analysis will establish a baseline condition (No-Action), which will be compared to the future condition resulting from the Proposed Actions (With-Action) to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow cast by the RWCDS buildings. The detailed analysis will include the following tasks:
    - The analysis will be documented with graphics comparing shadows resulting from the No-Action condition with shadows resulting from the RWCDS, with incremental shadow highlighted in a contrasting color.
    - A summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource will be provided.
    - The significance of any shadow impacts on sunlight-sensitive resources will be assessed.
    - If potential significant adverse impacts are identified, the amount of remaining sunlight on those sensitive resources, as well as the types of vegetation and or recreational activities involved, will be considered.

TASK 6. HISTORIC AND CULTURAL RESOURCES

Historic and cultural resources include both architectural and archaeological resources. Such resources are identified as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance in the *CEQR Technical Manual*. Impacts on historic resources are considered

on the affected site and in the surrounding area. The historic resources study area is therefore defined as the directly affected area, i.e., the project site, plus a 400-foot radius, as per the guidance provided in the *CEQR Technical Manual*. Archaeological resources are considered only for the project site, where new in-ground disturbance would occur compared to No-Action conditions. This is discussed in more detail below.

Archaeological Resources

As the Project Site has previously been disturbed, there will be consultation with LPC to see if any further evaluation of archaeological resources is needed. If LPC identifies the Project Site as archaeologically sensitive, a Phase 1A Archaeological Documentary Report would be prepared for the Project Site. The Phase 1A would include an evaluation of archaeological resources on the site, documentation of site history, its development and use, and the potential to host significant archaeological resources. The EIS would summarize the results of the Phase 1A report, if required.

If the Project Site is identified as having archaeological potential in the Phase 1A report and LPC concurs, the effect of the Proposed Project on those resources would be evaluated to determine if a significant adverse impact would result due to the Proposed Project. If it is found that a significant adverse impact to archaeological resources would occur, LPC would be consulted on what, if any, mitigation measures may be available to address those impacts.

Architectural Resources

Impacts to historic resources may result from both temporary (e.g., related to construction process) and permanent (e.g., related to long-term or permanent result of the Proposed Project or construction project) activities. As part of the architectural resources assessment, known and eligible architectural resources within 400 feet of the Project Site will be identified in consultation with the LPC and SHPO. Identified resources will be mapped and described. If known and/or eligible architectural resources are identified in the study area, probable impacts of the Proposed Project on architectural resources will be assessed. The assessment will address the following: (a) would there be a physical change to the property; or (b) would there be a physical change to its setting, such as context or visual prominence ("indirect impacts"), and, if so, is the change likely to alter or eliminate the significant characteristics of the resource that make it important. Additionally, the EIS will determine if the Proposed Project will result in the introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or on an historic structure if the features that make the structure significant depend on sunlight. For example, stained glass windows that cannot be seen without sunlight, or buildings containing design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements, such as deep window reveals and prominent rustication. This task will be coordinated with Task 5, "Shadows." If significant adverse impacts to architectural resources are identified, mitigation measures would be developed in consultation with LPC.

TASK 7. URBAN DESIGN AND VISUAL RESOURCES

Urban design is the totality of components that may affect a pedestrian's experience of public space. An assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. When an action would potentially obstruct view corridors, compete with icons in the skyline, or would result in substantial alterations to the streetscape of the neighborhood by noticeably changing the scale of buildings, a more detailed analysis of urban design and visual resources would be appropriate.

As the Proposed Actions would involve a rezoning to allow higher density and a building envelope not permitted under No-Action conditions, a preliminary assessment of urban design and visual resources will be provided in the EIS.

The urban design study area will be the same as that used for the land use analysis (delineated by areas within a ¼-mile radius from the Project Site boundary). For visual resources, the view corridors within the study area from which such resources are publicly viewable will be identified. The preliminary assessment will consist of the following:

- Based on field visits, the current urban design and visual resources of the Project Site and adjacent study area will be described using text, photographs, and other graphic material, as necessary, to identify critical features, use, bulk, form, and scale.
- In coordination with Task 2, Land Use, the changes expected in the urban design and visual character of the study area due to known development projects in the future No-Action condition will be described.
- Potential changes that could occur in the urban design character of the study area as a result of the Proposed Actions will be described. The analysis will focus on the general massing for the Proposed Project, consistent with the controls that would be established by the Proposed Actions, as well as elements such as streetwall height, setback, and building envelope. Photographs and/or other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources, including views of/to resources of visual or historic significance and a three-dimensional representation of the future With-Action condition streetscape.

A detailed analysis will be prepared if warranted based on the preliminary assessment. Examples of projects that may require a detailed analysis are those that would make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings, potentially obstructing view corridors, or competing with icons in the skyline, as described in the *CEQR Technical Manual*. The narrative will address the components of urban design as defined in the CEQR Technical Manual: streets, buildings, visual resources, open space, natural resources, wind, and sunlight. The detailed analysis would describe the Project Site and the urban design and visual resources of the surrounding area. The analysis would describe the potential changes that could occur to urban design and visual resources in the future with the Proposed Actions condition, in comparison to the future without the Proposed Actions condition, focusing on the changes that could negatively affect a pedestrian's experience of the area. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 8. NATURAL RESOURCES

The *CEQR Technical Manual* defines natural resources as water resources, including surface water bodies and groundwater; wetlands, including freshwater and tidal wetlands; terrestrial resources, such as grasslands and thickets; shoreline resources, such as beaches, dunes, and bluffs; gardens and other ornamental landscaping; and natural resources that may be associated with built resources, such as old piers and other waterfront structures. The Proposed Actions would facilitate development on a site located in proximity to a natural resource, specifically Wallabout Channel which is part of the larger East River waterway. It should be noted that the Proposed Project would not include any in-water disturbance, excavation, filling, or any other activities beyond the existing bulkhead or shoreline except for any repairs required or necessary to maintain the integrity of the bulkhead. Impact-avoidance techniques would be examined during the permitting process for any such work, which would also occur under No-Action conditions.

This section of the EIS will evaluate the presence of natural resources and the potential impact the Proposed Actions may have on such communities per *CEQR Technical Manual* guidance. If the results of the impact analysis identify a potential for significant adverse impacts, potential practicable mitigation measures to avoid or reduce those significant adverse impacts will be identified. A discussion of any related permits that may be required will be provided. As warranted, it is expected that the natural resources assessment will include the following subtasks:

- Describe the water quality conditions along the project site, including water quality trends and projection data as are available through existing literature and studies (e.g., the New York City Department of Environmental Protection [NYCDEP] Harbor Survey). This section will describe the general water quality characteristics of the East River, including currents, tidal range, water quality classification, and overall pollutant loads and chemical and biological conditions.
- Data on aquatic resources/habitats will be reviewed and presented for the study area. This task will also be undertaken using published literature, including the identification of essential fish habitats. The presence of tidal wetlands will be based on existing New York State Department of Environmental Conservation (NYSDEC) tidal wetlands maps.
- While there are limited issues with respect to terrestrial resources (flora and fauna) since the Project Site, although presently vacant, is a formerly developed urbanized lot, the Project Site will be characterized based on a review of aerial photography and a field visit.
- The New York State Natural Heritage Program and the U.S. Fish and Wildlife Service will be contacted to obtain any data on the potential presence of rare or endangered plant or animal species in the study area, and essential fish habitats along the East River.
- A projection will be made of natural resources conditions through the 2024 analysis year based on anticipated future conditions without the Proposed Actions.
- An assessment of potential impacts from the Proposed Actions will be presented analyzing any potential water quality and river disturbance issues, impacts to any fish and bird habitats, and terrestrial resources. A stormwater analysis will be performed that will specify how stormwater flows would be treated, and managed, and an analysis of appropriate Best Management Practices (BMP's) to be implemented will also be included in the EIS. Impact issues could include additional flow from outfalls (see also Task 10, "Water and Sewer Infrastructure," below). Any potential impacts on rare or endangered species or essential fish habitats will be identified. The need for any additional State or Federal approvals or will also be described.

This analysis will also evaluate the potential for impacts due to any combined sewer overflow resulting from the Proposed Actions (see also Task 10, "Water and Sewer Infrastructure," below).

TASK 9. HAZARDOUS MATERIALS

The objective of the hazardous materials assessment is to determine whether the directly affected area may have been adversely affected by current or historical uses at or adjacent to the site. As development facilitated by the Proposed Actions would require excavation and in-ground disturbance on the Project Site, this chapter of the EIS will examine the potential for impacts related to subsurface contamination per *CEQR Technical Manual* guidance, including an evaluation of the existing soil and groundwater conditions in areas that would be affected by the Proposed Actions.

The EIS will include a discussion of the site's history and current environmental conditions. The previous site, owner, Con Edison, performed environmental remediation which was completed in 2014 under New York State Department of Environmental Conservation (NYSDEC) supervision through the Voluntary Cleanup Program. A deed restriction running with the land was recorded against the property in 2014 outlining the required long-term engineering and institutional controls placed on the site under the VCP.

In 2015 NYSDEC approved the Site Management Plan (SMP) and Final Engineering Report and then issued an Assignable Release and Covenant Not to Sue. The SMP also includes notification to the NYSDEC if any intrusive work is conducted at the Site, and a Monitoring Plan to assess the performance and effectiveness of the remedy. It is anticipated that both the No-Action and With-Action conditions would result in new intrusive work and therefore NYSDEC oversight of such work will be required.

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.

If significant adverse impacts are identified, mitigation measures will be identified in conjunction with DCP as lead agency and any expert agencies, as appropriate.

TASK 10. WATER AND SEWER INFRASTRUCTURE

The water and sewer infrastructure assessment determines whether a proposed action may adversely affect the City's water distribution or sewer system and, if so, assess the effects of such actions to determine whether their impact is significant. The *CEQR Technical Manual* outlines thresholds for analysis of an action's water demand and its generation of wastewater and stormwater. The threshold of preliminary infrastructure analysis for projects outside Manhattan with combined sewers is 400 dwelling units (DUs) or 150,000 sf of commercial development. As the RWCDS With-Action condition would include a net increment of more than 150,000 sf of commercial development, an assessment of water demand, wastewater and stormwater conveyance systems is required. The water and sewer infrastructure analysis will be performed using *CEQR Technical Manual* guidance and will consider the potential for significant adverse impacts resulting from the Proposed Project. DEP will be consulted in preparation of this assessment.

Water Supply

- The existing water distribution system serving the Project site will be described based on information obtained from DEP's Bureau of Water Supply and Wastewater Collection.
- Water demand generated by the Project Site under existing conditions and No-Action and With-Action conditions will be projected.
- The effects of the incremental demand on the City's water supply system will be assessed to determine if there would be impacts to water supply or pressure. The incremental water demand will be the difference between the water demand in the Project Site in the With-Action condition and the demand in the No-Action condition.

Wastewater and Stormwater Infrastructure

- The appropriate study area for the assessment will be established in accordance with *CEQR Technical Manual* guidance and in consultation with DEP.
- The existing stormwater drainage system and surfaces (pervious or impervious) in the Project Site will be described, and the amount of stormwater generated in the Project Site will be estimated using DEP's volume calculation worksheet.
- The existing sewer system serving the Project Site will be described based on records obtained from DEP. The existing flows to the wastewater treatment plant (WWTP) serving the Project Site will be obtained for the latest twelve-month period, and the average dry weather monthly flow will be presented.

- Any changes to the stormwater drainage plan, sewer system, and surface area expected in the future without the Proposed Actions will be described, as warranted.
- Future stormwater generation from the Project Site will be assessed to determine the Proposed Actions' potential to result in impacts. Changes to the Project Site's surface area will be described, runoff coefficients and runoff for each surface type/area will be presented, and volume and peak discharge rates from the Project Site will be determined based on the DEP volume calculation worksheet.
- Sanitary sewage generation for the Project Site will also be estimated. The effects of the incremental demand on the system will be assessed to determine if there will be any impact on operations of the WWTP.

A more detailed assessment may be required if increased sanitary or stormwater discharges from the RWCDS With-Action condition are predicted to affect the capacity of portions of the existing sewer system, exacerbate combined sewer overflow (CSO) volumes/frequencies, or contribute greater pollutant loadings in stormwater discharged to receiving water bodies. The scope of a more detailed analysis, if necessary, will be developed based on conclusions from the preliminary infrastructure assessment and coordinated with DEP.

TASK 11. ENERGY

An EIS must include a discussion of the effects of a proposed project on the use and conservation of energy, if applicable and significant, in accordance with CEQR. In most cases, a project does not need a detailed energy assessment, but its operational energy is projected. A detailed energy assessment is limited to projects that may significantly affect the transmission or generation of energy. For other projects, in lieu of a detailed assessment, the estimated amount of energy that would be consumed annually as a result of the day-to-day operation of the buildings and uses resulting from a proposed project is disclosed, as recommended in the *CEQR Technical Manual*.

An analysis of the anticipated additional demand from the Proposed Actions and resultant RWCDS will be provided in the EIS. The EIS will disclose the projected amount of energy consumption during long-term operation resulting from the Proposed Actions. The projected amount of energy consumption during long-term operation will be estimated based on the average and annual whole-building energy use rates for New York City (per Table 15-1 of the *CEQR Technical Manual*).

TASK 12. TRANSPORTATION

The objective of a transportation analysis is to determine whether a proposed action may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, the safety of all roadway users (pedestrians, bicyclists and motorists), on- and off-street parking, or goods movement. The Proposed Actions are expected to induce new commercial development, which would generate additional vehicular travel and demand for parking, as well as additional subway and bus riders and pedestrian traffic. These new trips have the potential to affect the area's transportation systems.

Travel Demand and Screening Assessment

Detailed travel demand forecasts were prepared for the RWCDS using standard sources, including the *CEQR Technical Manual*, U.S. census data, previously-approved studies, and other references to determine the worse-case scenario to be analyzed in the EIS transportation analysis. The travel demand

forecast (a Level 1 screening assessment) is summarized by peak hour, mode of travel, and person and vehicle trips. The travel demand forecasts also identify the number of peak hour person trips made by transit and the numbers of pedestrian trips traversing the area's sidewalks, corner areas, and crosswalks. The results of these forecasts have been summarized in a Preliminary Transportation Planning Factors and Travel Demand Forecast (TPF/TDF) technical memorandum (refer to **Appendix 1**). Detailed vehicle, pedestrian and transit trip assignments (a Level 2 screening assessment) were prepared based on the results of the Proposed Actions' travel demand forecast to identify the intersections and pedestrian/transit elements selected for quantified analysis.

Traffic

The EIS will provide a detailed traffic analysis focusing on those peak hours and street network intersections where the highest concentrations of action-generated demand would occur. The peak hours for analysis will be selected, and the specific intersections to be included in the traffic study area will be determined based upon the assignment of project-generated traffic and the *CEQR Technical Manual* analysis threshold of 50 additional vehicle trips per hour, or at known congested locations. A discussion on the existing bicycle network in the study area will be included in the EIS.

The following outlines the anticipated scope of work for conducting a traffic impact analysis for the Proposed Actions:

- Conduct a count program for traffic analysis locations that includes a mix of automatic traffic recorder (ATR) machine counts and intersection turning movement counts, along with vehicle classification counts and travel time studies (speed runs) as support data for air quality and noise analyses. Turning movement count data will be collected at each analyzed intersection during the weekday and Saturday peak hours, and will be supplemented by nine days of continuous ATR counts. Vehicle classification count data will be collected during each peak hour at several representative intersections along each of the principal corridors in the study area. The turning movement counts, vehicle classification counts and travel time studies will be conducted concurrently with the ATR counts. Where applicable, available information from recent studies in the vicinity of the study area will be compiled, including data from such agencies as DOT and DCP.
- Inventory physical data at each of the analysis intersections, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, bicycle routes, curbside parking regulations, and vehicle queue lengths. Signal phasing and timing data for each signalized intersection included in the analysis will be obtained from DOT.
- Determine existing traffic operating characteristics at each analysis intersection including capacities, volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service (LOS) per lane group, per intersection approach, and per overall intersection. This analysis will be conducted using the 2000 Highway Capacity Manual (HCM) methodology with the latest approved Highway Capacity Software (HCS).
- Based on available sources, Census data, and standard references, including the *CEQR Technical Manual*, estimate the demand from other major developments planned in the vicinity of the Rezoning Area by the 2024 analysis year. This will include total daily and peak hour person and vehicular trips, and the distribution of trips by auto, taxi, and other modes. A truck trip generation forecast will also be prepared based on data from the *CEQR Technical Manual* and previous relevant studies. Mitigation measures accepted for all No-Action projects, as well as other DOT initiatives, will be included in the future No-Action network, as applicable.
- Compute the future 2024 No-Action traffic volumes based on approved background traffic growth rates for the study area (0.50 percent per year) and demand from major development projects expected to be completed in the future without the Proposed Actions. Incorporate any planned

changes to the roadway system anticipated by 2024, and determine the No-Action v/c ratios, delays, and LOS at analyzed intersections.

- Based on available sources, Census data, and standard references, including the *CEQR Technical Manual*, develop a travel demand forecast for the RWCDS based on the net change in uses compared to the No-Action condition. Determine the net change in vehicle trips expected to be generated by the RWCDS as described in the Preliminary TPF/TDF technical memorandum. Assign the net action-generated trips in each analysis period to likely approach and departure routes, and prepare traffic volume networks for the 2024 future with the Proposed Actions condition for each analyzed peak hour.
- Determine the v/c ratios, delays, and LOS at analyzed intersections for the With-Action condition, and identify significant adverse traffic impacts in accordance with *CEQR Technical Manual* criteria.
- Identify and evaluate potential traffic mitigation measures, as appropriate, for all significantly impacted locations in the study area in consultation with the lead agency and DOT. Potential traffic mitigation could include both operational and physical measures, such as changes to lane striping, curbside parking regulations and traffic signal timing and phasing, roadway widening, and the installation of new traffic signals. Where impacts cannot be fully or partially mitigated, they will be described as unavoidable adverse impacts.

Transit

Detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit trips according to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*. If a proposed action would result in 50 or more bus trips being assigned to a single bus line (in one direction), or if it would result in an increase of 200 or more trips at a single subway station or on a single subway line, a detailed bus or subway analysis would be warranted.

Subway

The Proposed Actions are expected to generate a net increase of more than 200 additional subway trips at the Marcy Avenue (J/M/Z) station in one or more peak hour (refer to **Appendix I**), and would therefore require a detailed subway analysis of this station. In addition, as the RWCDS could generate more than 200 new peak hour subway trips per line in one direction, an analysis of the J/M/Z subway line haul conditions is therefore warranted per *CEQR Technical Manual* analysis criteria. Transit analyses typically focus on the weekday AM and PM commuter peak hours when overall demand on the subway and bus systems is usually highest. The detailed subway analysis will include the following subtasks:

- Identify for analysis those stairways and fare entrance control elements expected to be used by significant concentrations of action-generated demand in the weekday AM and PM peak hours.
- Conduct counts of existing weekday AM and PM peak hour demand at the Marcy Avenue (J/M/Z) station elements and determine existing v/c ratios and LOS based on *CEQR Technical Manual* criteria.
- Determine volumes and conditions at the Marcy Avenue (J/M/Z) station elements in the future without the Proposed Actions using approved background growth rates and accounting for any trips expected to be generated by No-Action development within the Project Site, as well as major No-Action projects in the vicinity of the Project Site.
- Add action-generated demand to the No-Action volumes at analyzed subway station elements and determine AM and PM peak hour volumes and conditions in the future with the Proposed Actions.

- Identify potential significant adverse impacts at subway station stairways and fare control elements based on *CEQR Technical Manual* impact criteria.
- As the RWCDS could generate 200 or more subway trips in one direction of the J/M/Z subway lines, subway line haul conditions will also be assessed in the EIS.
- Mitigation needs and potential subway station improvements will be identified, as appropriate, in conjunction with the lead agency and New York City Transit (NYCT). Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

Bus

As part of the EIS, a Level 1 trip generation and (if warranted) Level 2 bus trip assignment will be prepared for the RWCDS. A detailed analysis of bus conditions is generally not required if a proposed action is projected to result in fewer than 50 peak hour trips being assigned to a single bus route (in one direction) based on the general thresholds used by the MTA and specified in the *CEQR Technical Manual*. As the incremental person-trips by bus generated by the Proposed Actions are expected to exceed 50 peak hour trips in one direction on two of the five routes serving the Project Site, a detailed bus analysis is warranted to determine whether or not significant adverse impacts are anticipated (refer to **Appendix 1**).

Pedestrians

Projected pedestrian volumes of less than 200 persons per hour at any pedestrian element (sidewalks, corner areas, and crosswalks) would not typically be considered a significant impact, since the level of increase would not generally be noticeable and therefore would not require further analysis under *CEQR Technical Manual* criteria. Based on the level of new pedestrian demand generated by the RWCDS, it is anticipated that action-generated pedestrian trips would exceed the 200-trip analysis threshold at one or more locations in one or more peak hour. A detailed pedestrian analysis will therefore be prepared for the EIS focusing on selected sidewalks, corner areas, and crosswalks along corridors that would experience more than 200 additional peak hour pedestrian trips. Pedestrian counts will be conducted at each analysis location and used to determine existing LOS. No-Action and With-Action pedestrian volumes and LOS will be determined based on approved background growth rates, trips expected to be generated by No-Action development on the Project Site and other major projects in the vicinity of the study area, and action-generated demand. The specific pedestrian facilities to be analyzed will be determined in consultation with the lead agency once the assignment of action-generated pedestrian trips has been finalized (see **Appendix 1** for a preliminary list). The analysis will evaluate the potential for incremental demand from the Proposed Actions to result in significant adverse impacts based on current *CEQR Technical Manual* criteria. Potential measures to mitigate any significant adverse pedestrian impacts will be identified and evaluated, as warranted, in consultation with the lead agency and DOT.

Vehicular and Pedestrian Safety

The City's Vision Zero initiative seeks to eliminate all deaths from traffic crashes regardless of whether on foot, bicycle, or inside a motor vehicle. In an effort to drive these fatalities down, DOT and New York City Police Department (NYPD) developed a set of five plans, each of which analyzes the unique conditions of one New York City borough and recommends actions to address the borough's specific challenges to pedestrian safety. The *Vision Zero Brooklyn Pedestrian Safety Action Plan* outlines a series of recommended actions comprised of engineering, enforcement, and education measures that intend to alter the physical and behavioral conditions on City streets that lead to pedestrian fatality and injury, as well as identifying Priority Areas which are prioritized for safety interventions. According to the 2019 updated plan, the Project Site is not located within a Priority Area.

Data on traffic crashes involving pedestrians and/or cyclists at study area intersections will be obtained from DOT for the most recent three-year period available. These data will be analyzed to determine if any of the studied locations may be classified as high crash locations based on *CEQR Technical Manual* thresholds and whether vehicle and/or pedestrian trips and any street network changes resulting from the Proposed Actions would adversely affect vehicular and pedestrian safety in the area. If any high crash locations are identified, feasible improvement measures will be explored to alleviate potential safety issues.

Parking

As part of the EIS transportation task, an hourly parking accumulation forecast was prepared for the RWCDS. As the RWCDS would consist of non-residential uses, peak parking demand would be expected in the weekday midday period, when parking in a business area is expected to be highest. As the overall anticipated demand would not exceed the With-Action on-site accessory parking capacity, a detailed parking analysis would not be required and will not be included in the EIS.

Although it is not anticipated, if the overall anticipated demand exceeds the With-Action on-site accessory parking capacity, a detailed parking analysis would be prepared to determine if there is sufficient on- and off-street capacity in the surrounding area to accommodate overflow demand from the Project Site. As the RWCDS would consist of non-residential uses, the analysis of on-street and off-street parking conditions would focus on the weekday midday period, when demand is expected to be highest. Existing on- and off-street parking inventories would be conducted for the weekday midday period (when parking in a business area is frequently at peak occupancy) to document existing supply and demand for each period. Parking utilization within a ¼-mile of the Project Site will be analyzed. If the initial on- and off-street parking assessment shows conditions at or near capacity, then a parking assessment would be conducted up to a ½-mile radius to determine if capacity is available to accommodate the projected demand. The parking analysis would document changes in the parking utilization in proximity to the Project Site under the No-Action and With-Action conditions based on accepted background growth rates and projected demand from No-Action and With-Action development in the Project Site and other major projects in the vicinity of the study area.

TASK 13. AIR QUALITY

CEQR Technical Manual criteria require an air quality assessment for actions that can result in significant air quality impacts. There are mobile source impacts that could arise when an action increases or causes a redistribution of traffic, creates any other mobile sources of pollutants, or adds new uses near existing mobile sources. There are mobile source impacts that could be produced by parking facilities, parking lots, or garages. Stationary source impacts could occur with actions that (a) create new stationary sources or pollutants such as emission stacks from industrial plants, hospitals, or other large institutional uses, or a building's boilers, that can affect surrounding uses; or (b) when they add uses near existing or planned future emission stacks, and the new uses might be affected by the emissions from the stacks; or (c) when they add structures near such stacks and those structures can change the dispersion of emissions from stacks so that they begin to affect surrounding uses.

The vehicle trips generated by the Proposed Development would potentially exceed the *CEQR Technical Manual's* carbon monoxide (CO) screening threshold of 170 vehicles in a peak hour at one or more intersections and/or the particulate matter (PM) emission screening threshold discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*. Therefore, a screening analysis for mobile sources

will be performed. If any screening thresholds are exceeded, a detailed mobile source analysis would be required. The Proposed Project's parking facility will be analyzed to determine its effect on air quality. Potential impacts on surrounding uses from the heating and hot water systems that would serve the Proposed Project 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 also will be analyzed.

Mobile Source Analysis

A screening analysis for CO and PM 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.

If warranted, a detailed mobile source analysis will be prepared in accordance with CEQR guidance, to evaluate the Proposed Actions for potential impacts from CO, and fine particulate matter less than 10 microns and 2.5 microns in diameter (PM 10 and 2.5, respectively), due to vehicular traffic anticipated to be generated by the Proposed Development. If required, at least two worst-case intersections would be selected for detailed analysis for both CO and PM2.5, as described below:

Emissions Modeling

Vehicular cruise and idle CO and PM emission factors to be utilized in the dispersion modeling will be computed using the most current EPA's Motor Vehicle Emission Simulator (MOVES). Each selected intersection will be divided into distinct links for emissions modeling purposes reflecting different types of vehicle activity in accordance with the recommendations of the USEPA's Guideline on Air Quality Models, Policy DAR-10: NYSDEC Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis. Project-specific traffic data obtained through field studies will be used, as well as county-specific hourly temperature, relative humidity, vehicle age distribution, fuels and inspection/maintenance program data obtained from the New York State Department of Environmental Conservation (NYSDEC). The analysis will include vehicle classification, which will be consistent with the *2020 CEQR Technical Manuals* classifications.

In order to account for the suspension of fugitive road dust in air from vehicular traffic in the local microscale analysis, $PM_{2.5}$ emission rates will include fugitive road dust. However, as DEP considers fugitive road dust to have an insignificant contribution on a neighborhood scale, fugitive road dust will not be included in the neighborhood scale $PM_{2.5}$ microscale analyses. Road dust emission factors will be calculated according to the latest procedure delineated by EPA.

Dispersion Modeling

The CO mobile source analysis will be conducted using the US Environmental Protection Agency (EPA) CAL3QHC model Version 2.0. $PM_{2.5}$ analysis will be conducted using the refined CAL3QHCR model and five years of meteorological data. The $PM_{2.5}$ analysis will include estimating off-peak traffic volumes based on available 24-hour count data in the study area.

Parking Garage Analysis

The Proposed Project is expected to include 196-space accessory parking spaces in below-grade parking garages. The parking garage accumulation table from the transportation chapter will serve as the basis for analysis. Mobile source emission factors will be developed using the latest version of the EPA MOVES model (MOVES). An analysis of CO and PM emissions from the garage will be performed using MOVES-

generated emission factors and 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 garages will be calculated, where appropriate.

Stationary Source Analysis

HVAC Analysis

The analysis of the HVAC systems of the Proposed Project will consider impacts following the screening procedures outlined in the *CEQR Technical Manual* to determine the potential for impacts on existing developments as well as the potential for "project-on-project impacts." The nearest existing or planned building of a similar or greater height will be analyzed as the potential receptor. If the results fail the initial screening, a refined modeling analysis will be prepared using the latest EPA-approved version of the AERMOD model and five years of representative meteorological data (2015-2019). Emission rates will be developed based on the size of the Proposed Project and assumptions developed to represent boiler stack location(s). Concentrations of nitrogen dioxide (NO_2), sulfur dioxide (SO2), and particulate matter (PM_{10} and $PM_{2.5}$) will be determined at surrounding publicly-accessible locations. Receptors will be placed at publically accessible locations at ground level and at elevated locations on all facades at multiple elevations on adjacent buildings (including the Proposed Project) to identify maximum pollutant concentrations and concentration increments per the guidance provided in the *CEQR Technical Manual*.

Projected potential values will be compared with the National Ambient Air Quality Standards (NAAQS) for NO_2, SO_2, and PM_{10}, and the CEQR *de minimis* criteria for $PM_{2.5}$. If required, an enforceable legal mechanism will be proposed to mandate fuel, system, operational, and/or exhaust stack restrictions that would be required to avoid any potential significant adverse air quality impacts.

Major/Large Emission Source Analysis

A preliminary review of existing land uses within 1,000 feet of the Project Site showed one large emission source, Kent Village Housing Corporation (i.e., Title V or State Facility permits). Since an emission sources was found, a Major/Large Source Analysis is proposed.

Industrial Source Analyses

The Project Site's existing zoning allows the proposed uses that would be developed under With-Action conditions and therefore the Proposed Actions would not introduce any new uses not currently permitted. While under With-Action conditions, community facility uses would be permitted, uses not permitted under the existing/No-Action zoning, no such uses are proposed or expected under the RWCDS, therefore the Proposed Actions would not introduce any new uses not currently permitted under M3-1 zoning. However, if it is determined that the increase in commercial density resulting from the Proposed Actions would necessitate an Industrial Source Analysis, an analysis would be provided as follows:

- EPA, NYSDEC, and NYCDEP database searches and permit records will be reviewed to identify industrial sources within 400 feet of the proposed rezoning area including areas across the Wallabout Channel within the Brooklyn Navy Yard.
- A field survey will be performed to confirm the operational status of the sites identified in the permit search, and to identify any additional sites that have sources of emissions that would warrant an analysis.

- Emission rates for industrial sources within the study area will be estimated based on air permit data. If industrial sites are present that do not pass the *CEQR Technical Manual* industrial source screening procedure, detailed analysis will be conducted with AERMOD.
- Predicted worst-case impacts would be compared with the short-term guideline concentrations (SGCs) and annual guideline concentrations (AGCs) recommended in NYSDEC's DAR-1 AGC/SGC Tables.

If significant adverse impacts are identified, mitigation measures will be identified in conjunction with DCP as lead agency and any expert agencies, as appropriate.

TASK 14. GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Greenhouse Gas Emissions

Increased greenhouse (GHG) emissions are changing the global climate, which is predicted to lead to wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be felt at the local level. As the RWCDS exceeds the 350,000 sf development threshold, a GHG emissions assessment will be provided in the EIS.

In accordance with the *CEQR Technical Manual*, GHG emissions generated by the RWCDS will be quantified, and an assessment of consistency with the City's established GHG reduction goal will be prepared. 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. 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.

- *Building Operational Emissions*: GHG emissions from the RWCDS development will be estimated based on carbon intensity factors specified in the *CEQR Technical Manual*.
- *Mobile Source Emissions*: GHG emissions from vehicle trips to and from the Project Site will be quantified using trip distances and vehicle emission factors provided in the *CEQR Technical Manual*.
- *Potential Measures to Reduce GHG Emissions*: Design features and operational measures to reduce the Proposed Project's energy use and GHG emissions will be discussed to the extent that information is available.
- *Consistency with the City's GHG Reduction Goal*: Consistency of the Proposed Project and the Proposed Actions overall will be assessed. While the City's overall goal is to reduce GHG emissions by 30 percent below 2005 level by 2025, individual project consistency is evaluated based on building energy efficiency, proximity to transit, on-site renewable power and distributed generation, efforts to reduce on-road vehicle trips and/or to reduce the carbon fuel intensity or improve vehicle efficiency for project-generated vehicle trips, and other efforts to reduce the project's carbon footprint.
- *Construction Emissions*: Direct emissions resulting from the operation of construction vehicles and equipment will be assessed. Emissions resulting from the manufacture or transport of construction materials used for the project will be assessed.

Climate Change

As the Project Site is located within the NYC Coastal Zone, a Climate Change assessment will be provided in the EIS. The Climate Change assessment will be performed in accordance with the *CEQR Technical Manual* and will include the following:

- Projections for the future sea level rise and, to the extent available, likely future flood zone boundaries projected for the area of the site for different years within the expected life of the development will be provided.
- Any city, state, or federal initiatives to improve coastal resilience, such as those set forth in the Special Initiative for Rebuilding and Resiliency (SIRR) Report, "A Stronger, More Resilient New York," will be discussed if they have the potential to affect the Project Site.
- An analysis of consistency with policy 6.2 of the revised (and CPC and City Council approved) WRP will be provided.

If the results of the greenhouse gas emissions and climate change analyses identify a potential for a significant adverse impact, potential mitigation measures will be discussed.

TASK 15. NOISE

For the Proposed Actions, there are two major areas of concern regarding noise: (1) the effect the Proposed Actions would have on noise levels in the surrounding community; and (2) the level of building attenuation necessary to achieve interior noise levels that satisfy CEQR requirements.

The Proposed Actions would generate vehicle trips, but given the background conditions and the anticipated project-generated traffic, it is not expected that project-generated traffic would be likely to result in significant adverse mobile-source noise impacts. However, a screening assessment will be performed to determine whether there are any locations where there is the potential for the Proposed Actions to result in significant noise impacts (i.e., doubling of Noise Passenger Car Equivalents [PCEs]) due to action-generated traffic. A detailed analysis of potential noise impacts due to outdoor mechanical equipment is not required as the outdoor mechanical equipment for any future development facilitated by the Proposed Actions would be required to meet applicable DOB regulations, which ensures that noise levels from equipment are below *CEQR Technical Manual* impact criteria. The noise analysis will also examine the level of building attenuation necessary to meet CEQR interior noise level requirements.

The following tasks will be performed in compliance with *CEQR Technical Manual* guidance:

- Based on the traffic studies conducted for Task 11, Transportation, a screening analysis will be conducted to determine whether there are any locations where there is the potential for the Proposed Actions to result in potential significant noise impacts (i.e., doubling Noise PCEs) due to action-generated traffic. If it is determined that Noise PCEs would double at any sensitive receptor, a detailed analysis would be conducted in accordance with *CEQR Technical Manual* guidance.
- Appropriate noise descriptors for building attenuation purposes would be selected. Based on CEQR criteria, the noise analysis will examine the L_{10} and the one-hour equivalent ($L_{eq(1)}$) noise levels.
- Existing noise levels will be measured at the Project Site. Measurements will be made at receptor locations adjacent to the Project Site. At each receptor site, 20-minute measurements will be performed during typical weekday AM, midday, and PM peak periods (coinciding with the traffic

peak periods). Noise measurements will be recorded in conformance with *CEQR Technical Manual* procedures and will be measured in units of "A" weighted decibel scale (dBA), as well as one-third octave bands. The measured noise level descriptors will include equivalent noise level (L_{eq}), maximum level (L_{max}), minimum level (L_{min}), and statistical percentile levels such as L_1, L_{10}, L_{50}, and L_{90}. A summary table of existing measured noise levels will be provided as part of the EIS.

- Following procedures outlined in the *CEQR Technical Manual* for assessing mobile source noise impacts, future No-Action and With-Action noise levels will be estimated at the noise receptor locations based on acoustical fundaments. All projections will be made with L_{eq} noise descriptor.
- The level of building attenuation necessary to satisfy CEQR requirements (a function of the exterior noise levels) will be determined based on the highest L_{10} noise level estimated at each monitoring site. The building attenuation requirements will be memorialized by (E) designations placed on the block and lot requiring specific levels of attenuation pursuant to Section 11-15 of the New York City Zoning Resolution and the (E) Rules, as referenced above in the Hazardous Materials and Air Quality sections. The EIS would include (E) designation language describing the requirements that would apply.

- If the results of the screening analysis indicated that any sensitive receptor location would experience a doubling of traffic between the Future No-Action and Future With-Action conditions, a detailed mobile source noise analysis would be performed at that location in compliance with *CEQR Technical Manual* guidance.

If significant adverse impacts are identified, mitigation measures will be identified in conjunction with DCP as lead agency and any expert agencies, as appropriate.

TASK 16. PUBLIC HEALTH

Public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status, as defined in the *CEQR Technical Manual*. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a proposed action, and, if so, to identify measures to mitigate such effects.

A public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, hazardous materials, or noise, according to the *CEQR Technical Manual*. If unmitigated significant adverse impacts are identified for the Proposed Actions in any of these technical areas and a public health assessment is warranted, an analysis will be provided for the specific technical area(s).

TASK 17. NEIGHBORHOOD CHARACTER

Neighborhood character is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other physical features that include traffic and pedestrian patterns, noise, etc. The Proposed Actions have the potential to alter certain elements contributing to the affected area's neighborhood character. Therefore, a preliminary assessment of neighborhood character will be provided in the EIS to determine whether changes expected in other technical analysis areas—land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; transportation; and noise—may affect a defining feature of neighborhood character. The preliminary assessment will:

- Identify the defining features of the existing neighborhood character.

- Summarize changes in the character of the neighborhood that can be expected in the future With-Action condition and compare to the future No-Action condition.
- Evaluate whether the Proposed Actions have the potential to affect these defining features, either through the potential for a significant adverse impact or a combination of moderate effects in the relevant technical areas.

If the preliminary assessment determines that the Proposed Actions could affect the defining features of neighborhood character, a detailed analysis will be conducted in accordance with the *CEQR Technical Manual* guidance.

TASK 18. CONSTRUCTION

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity has the potential to affect transportation conditions, archaeological resources and the integrity of historic resources, community noise levels, air quality conditions, and mitigation of hazardous materials. Projects with overall construction periods lasting longer than two years and that are near to sensitive receptors should undergo a preliminary impact assessment according to the *CEQR Technical Manual*. While the proposed developed is expected to be constructed over a period of less than two years, if construction last longer than two years a preliminary construction assessment is warranted, in accordance with CEQR. Technical areas to be assessed include the following:

- *Transportation Systems:* The assessment will consider temporary losses in lanes, on- and off-street parking, sidewalks, and other transportation services on the adjacent streets during the various phases of construction and identify the increase in vehicle trips from construction workers and equipment going to/from the Project Site. A travel demand forecast for the worst-case construction period will be prepared if warranted under CEQR guidance, including the preparation of a trip generation table identifying the number of construction worker vehicles and equipment-related for the construction AM and PM peak hours for each construction quarter. Based on trip projections of activities associated with peak construction, an assessment of potential transportation impacts during construction and how they compare to the trip projections and origin destinations under the operation condition would be provided. If this effort identifies the need for a separate detailed analysis, a detailed construction transportation analysis will be provided for those locations that are determined to be needed in consultation with DOT.
- *Air Quality:* The construction air quality impact section will include a qualitative discussion of both mobile source emissions from construction equipment and worker and delivery vehicles, and fugitive dust emissions. If warranted, a detailed construction air quality analysis would review the projected activity and equipment in the context of intensity, duration, and location of emissions relative to nearby sensitive locations. This would include a detailed dispersion analysis of construction sources to determine the potential for air quality impacts on sensitive receptor locations. The pollutants of concern include carbon monoxide (CO), particulate matter (PM), and nitrogen dioxide (NO_2). The concentrations to the National Ambient Air Quality Standards (NAAQS), or by comparison of the predicted increase in concentrations to applicable interim guidance thresholds. The construction air quality analysis, if warranted, would also include a discussion of the strategies and best management practices to reduce project related air pollutant emissions associated with construction activities.
- *Noise:* The construction noise impact section will contain an assessment of noise from the Proposed Project's construction activity. This will include estimates of construction noise levels at nearby receptors during the various phases of construction. If warranted, the construction noise

analysis would rely on the conceptual construction schedule developed for the Proposed Project to identify peak periods of construction activity. Assumptions would be developed regarding equipment usage factors and typical equipment noise levels. The magnitude and duration of construction noise experienced at nearby noise receptors will be determined and evaluated. The noise analysis, if warranted, will take into account strategies to reduce noise associated with construction activities. Based on the results of the construction noise analysis, if necessary, the feasibility, practicability, and effectiveness of implementing measures to mitigate significant construction noise impacts will be examined. Appropriate recommendations, if any, will be made to comply with DEP Rules for Citywide Construction Noise Mitigation and the New York City Noise Control Code.

- *Other Technical Areas:* As appropriate, other areas of environmental assessment—such as hazardous materials, historic resources, open space, and socioeconomic conditions—will be analyzed for potential construction-related impacts.

If significant adverse impacts are identified, mitigation measures will be identified in conjunction with DCP as lead agency and any expert agencies, as appropriate.

TASK 19. MITIGATION

Where significant adverse impacts have been identified in Tasks 2 through 18, measures to mitigate those impacts will be described. The chapter will also consider when mitigation measures will need to be implemented. These measures will be developed and coordinated with the responsible City/State agencies, as necessary. Where impacts cannot be fully mitigated, they will be disclosed as unavoidable adverse impacts.

TASK 20. ALTERNATIVES

The purpose of an alternative section in an EIS is to examine development options that would tend to reduce action-related impacts. The alternatives will be better defined once the full extent of the Proposed Project's impacts have been identified. The EIS will include, at a minimum, a No-Action alternative and a No Impact/No Unmitigated Impact alternative. The alternatives analysis will be qualitative, except in those technical areas where significant adverse impacts for the Proposed Actions have been identified. The level of analysis provided will depend on an assessment of project impacts determined by the analysis connected with the appropriate tasks.

TASK 21. SUMMARY EIS CHAPTERS

The EIS will include the following three summary chapters, in accordance with CEQR guidance:

- *Unavoidable Adverse Impacts*: summarizes any significant adverse impacts that are unavoidable if the Proposed Actions are implemented regardless of the mitigation employed (or if mitigation is not feasible).
- *Growth-Inducing Aspects of the Proposed Actions*: which generally refer to "secondary" impacts of the Proposed Actions that trigger further development.
- *Irreversible and Irretrievable Commitments of Resources*: which summarizes the Proposed Actions and its impact in terms of the loss of environmental resources (loss of vegetation, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.

TASK 22. EXECUTIVE SUMMARY

The executive summary will utilize relevant material from the body of the EIS to describe the Proposed Actions, the environmental impacts, measures to mitigate those impacts, and alternatives to the Proposed Actions. The executive summary will be written in enough detail to facilitate drafting of a notice of completion by the lead agency.

APPENDIX 1:
PRELIMINARY TDF TECHNICAL MEMORANDUM

Philip Habib & Associates

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TECHNICAL MEMORANDUM

TO: New York City Department of City Planning

FROM: Philip Habib & Associates

DATE: February 10, 2021

PROJECT: 500 Kent Avenue Rezoning (PHA #1814)

RE: Preliminary Travel Demand Factors (Revised)

INTRODUCTION

This memorandum summarizes the preliminary travel demand factors to be used for the project transportation analyses of the 500 Kent Avenue environmental impact statement (EIS). The Proposed Project is an approximately 749,629-gross square foot (gsf) commercial development located at 500 Kent Avenue (Block 2023, Lot 10) in the South Williamsburg neighborhood of Brooklyn Community District 2 (the "Project Site") (see **Figure 1**). As the project's net incremental development program would exceed the development density screening thresholds specified in Table 16-1 of the 2020 *CEQR Technical Manual*, a travel demand forecast is necessary to determine if detailed transportation analysis is warranted. Provided below are preliminary estimates of the Proposed Project's peak incremental travel demand, along with a discussion of preliminary trip assignment methodologies and study area definitions.

THE PROPOSED ACTIONS

The applicant, Kent Member LLC, is seeking discretionary approvals by the City Planning Commission under the Uniform Land Use Review Procedure (ULURP) that would facilitate the Project Site's redevelopment. These actions include: zoning map amendment, height and setback special permit, public parking garage special permit and waterfront zoning authorization. The project also requires a waterfront zoning certification (ministerial action pursuant to ZR 62-81) to demonstrate compliance with applicable waterfront zoning regulations not modified pursuant to the authorization.

The Project Site encompasses an 115,244 sf lot with approximately 528 feet of shoreline along Wallabout Channel, approximately 227 feet of frontage on Division Avenue and approximately 372 feet of frontage on Kent Avenue. The Project Site is currently vacant, but until 2009 it was occupied by a power plant.

500 Kent Avenue

Figure 1

Transit Map and Project Location



Legend

- Proposed Development Site
- 1/4 Mile Radius
- South Williamsburg Ferry
- Marcy Avenue Subway Station

Subway Lines

- J-Z
- M

Bus Routes

- B32
- B39
- B44
- B62
- B67
- Q59

The Proposed Project, which represents the Reasonable Worst Case Development Scenario (RWCDS) for the With-Action condition, would consist of a new 23-story 350-foot tall (roof height) approximately 749,629-gsf commercial building comprised of approximately 593,435 gsf of Use Group 6b office space and 20,476 gsf of Use Group 6A retail space, as well as 143,520 gsf of mechanical and below-grade parking (approximately 196 parking spaces), which would be exempt from being counted as floor area. This 5.0 built floor area ratio (FAR) building would have 576,220 zoning square feet (zsf) of floor area and would provide two loading berths, as required by the office use. Additionally, the Proposed Project would provide approximately 37,233 sf of public open space.

In the vicinity of the Project Site, both the demand for workspace and the residential population have increased substantially in recent years. The Brooklyn Navy Yard (BNY), immediately south and southwest of the Project Site, has undergone a transformation and is now home to over 400 commercial and light industrial businesses employing approximately 8,000 people – with further growth anticipated. At the same time, there has been a resurgence of residential development in Williamsburg and other nearby neighborhoods. There are multiple new, high-rise residential buildings near the Project Site and additional development is expected in the future. The City is now promoting the increase of walk-to-work commuting patterns and new forms of public transportation along the waterfront – including the NYC Ferry service. By providing a new hub of business development, the Proposed Project would be compatible with the ongoing development of the neighboring BNY and would be complementary to the increased residential uses in the area, providing space for work (office), shopping (retail) and recreational activities (open space) that could reduce travel times and distances for local residents.

REASONABLE WORST-CASE DEVELOPMENT SCENARIO (RWCDS)

In order to assess the potential effects of the Proposed Actions, a RWCDS for both the future without the proposed action (the "No-Action" condition) and the future with the proposed action (the "With-Action" condition) is forecasted for an analysis year, or Build Year, of 2024. To develop a reasonable estimate of future growth, tax Lot 10 on Block 2023 was identified as the Project Site and considered for the purposes of the transportation analyses. The No-Action condition represents the baseline against which the effects of the Proposed Actions will be compared in the EIS. The effect of the Proposed Actions, therefore, represents the incremental effect on conditions that would result from the net change in development between the No-Action and With-Action conditions (the "Project Increment"). **Table 1** below shows a summary of the No-Action conditions, With-Action conditions, and the increment for the Project Site. No other properties that would be directly affected by the Proposed Actions.

The Future Without the Proposed Actions (No-Action Condition)

Under the RWCDS No-Action conditions, it is projected that the existing 115,244-sf lot would be developed as-of-right under the existing M3-1 zoning district with an approximately 312,599-gsf commercial building including approximately 58,000 gsf of office space, approximately 181,401 gsf of warehouse use and roughly 279 accessory parking spaces in 73,198 gsf of space. The Project Site, under existing zoning, permits manufacturing and general service (semi-industrial) uses as well as commercial uses with a maximum FAR of 2.0, much like the neighboring Brooklyn Navy Yard. Parking requirements include one space for every 300 sf of office floor area and one space for 2,000 sf of warehouse floor area. As such, this development is required

to provide 279 accessory parking spaces. Therefore, the development under the No-Action condition would be built as-of-right and would not require discretionary actions.

The Future With the Proposed Actions (With-Action Condition)

Under the RWCDS With-Action conditions, the Proposed Project would be constructed pursuant to the proposed zoning map amendment, zoning special permits, zoning certification, and waterfront zoning authorizations. Combined, under the RWCDS, the Proposed Actions are expected to result in the development of a new 23-story, 350-foot tall commercial building. The approximately 749,629-gsf building would consist of approximately 593,435 gsf of office space, 20,476 gsf of retail and 196 public parking spaces. Although no parking is required under the proposed M1-5 zoning district, the parking would be permitted via a special permit. The building would have a zoning floor area of approximately 576,220 zsf equaling a built FAR of 5.00. Under the RWCDS, the Proposed Project would provide approximately 20,466 sf of Waterfront Public Access Areas and an additional 16,767 sf of public open space comprised of an approximately 2,714 sf central public walkway and an approximately 14,053-sf area along the southern edge of the project site.

Project Increment

As shown in **Table 1**, the project increment, the difference between the No-action and With-action conditions, would result in a net increase of approximately 544,048 gsf of total commercial space – including an increase of 535,435 gsf of office, an increase of 20,476 gsf of retail and a decrease of 181,401 gsf of warehouse use. Additionally, the Proposed Project would add approximately 37,233 sf of public open space. The Proposed Actions would also result in a decrease of 83 parking spaces.

Table 1: Project Increment Summary

Use	No-Action Scenario	With-Action Scenario	Increment
Commercial			
Office	58,000 gsf	593,435 gsf	+ 535,435 gsf
Warehouse	181,401 gsf	0 gsf	- 181,401 gsf
Retail	0 gsf	20,476 gsf	+ 20,476 gsf
Total Commercial Increment			**+ 374,510 gsf**
Parking			
Parking Spaces	279	196	- 83
Total Parking Increment			**- 83**
Open Space			
Waterfront Public Access Areas	0 gsf	20,466 gsf	+ 20,466 gsf
Public Open Space	0 gsf	16,767 gsf	+16,767 gsf
Total Open Space Increment			**+ 37,233 gsf**

PRELIMINARY TRANSPORTATION PLANNING ASSUMPTIONS

The preliminary transportation planning factors used to forecast travel demand for the RWCDS land uses are summarized in **Table 2** and discussed below. **Table 2** provides the daily trip generation rates, temporal and directional distributions, modal splits, vehicle occupancies and truck trip factors for the land uses discussed above. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel

demand) and the weekday midday and Saturday peak hours (typical peak periods for local retail demand). Subway and subway-to-bus mode splits for all peak periods were adapted to reflect area transportation characteristics.

Local Retail

Based on the 2020 *CEQR Technical Manual*, the travel demand forecast for local retail used weekday and Saturday trip generation rates of 205 and 240 trips per 1,000 gsf, respectively. Temporal distributions of 3 percent, 19 percent, 10 percent and 10 percent for the weekday AM, midday and PM and the Saturday peak periods, respectively, were also based on data from the *CEQR Technical Manual*. Modal splits (11 percent, 0.0 percent, 2 percent, 1.1 percent, 2 percent and 84 percent for auto, taxi, subway-only, subway-to-bus, bus-only and walk/ferry/other modes, respectively) were based on the data provided by NYCDOT for local retail use in a Brooklyn Transit Zone and were adapted to reflect area transportation characteristics. Directional in/out split and auto and taxi vehicle occupancy for all periods were based on the *Atlantic Yards Arena and Redevelopment FEIS* (2014). As it is likely that there will be overlap between office users with retail, a 25 percent linked-trip credit is assumed for local retail uses in accordance with *CEQR Technical Manual* guidelines.

Warehouse

Table 2 details the preliminary transportation planning factors for the decrease in gsf of warehouse use that would occur within the Project Area as a result of the Proposed Actions which were used to forecast the warehouse travel demand. As shown in **Table 2**, the weekday person trip generation rate of 2.36 person trips per 1,000 gsf, Saturday trip generation rate of 0.20 person trips per 1,000 gsf, temporal distributions and the in/out split were based on data from *ITE Trip Generation Manual, 10th Edition*, Land Use Code 150 (Warehousing) with adjustments based on NYCDOT trip generation survey data. Modal split and vehicle occupancy rates were based on data from the *East New York Rezoning Proposal FEIS* (2016). Truck trip generation, truck temporal distribution and truck in/out split were based on NYCDOT trip generation survey data, as well as data from *ITE Trip Generation Manual, 10th Edition*, Land Use Code 150 (Warehousing).

Table 2: Preliminary Transportation Planning Assumptions

Land Use:	**Local Retail**		**Warehouse**		**Office**		**Open Space**	
Size/Units:	20,476 gsf		-181,401 gsf		535,435 gsf		37,233 sf	
Trip Generation:	(1)		(4)(5)		(1)		(1)	
Weekday	205		2.36		18		44.0	
Saturday	240		0.20		3.9		62.0	
	per 1,000 sf		per 1,000 sf		per 1,000 sf		per acre	
Temporal Distribution:	(1)		(4)		(1)		(1)	
AM	3.0%		10.0%		12.0%		3.0%	
MD	19.0%		9.0%		15.0%		5.0%	
PM	10.0%		11.0%		14.0%		6.0%	
Sat	10.0%		33.0%		17.0%		6.0%	
	(2)		(6)		(10)	(9)	(6)	
Modal Splits:	All Period		All Period		AM/PM/Sat	MD	All Period	
Auto	11.0%		51.0%		12.1%	2.0%	5.0%	
Taxi	0.0%		2.0%		5.9%	1.0%	5.0%	
Subway-Only	2.0%		18.2%		29.7%	4.5%	3.3%	
Subway-to-Bus	1.1%		9.8%		16.0%	2.5%	1.8%	
Bus	2.0%		7.0%		6.2%	7.0%	5.0%	
Walk/Ferry/Other	84.0%		12.0%		30.1%	83.0%	80.0%	
	100.0%		100.0%		100.0%	100.0%	100.0%	
	(3)		(4)		(10)		(6)	
In/Out Splits:	In	Out	In	Out	In	Out	In	Out
AM	50%	50%	77.0%	23.0%	94%	6%	50%	50%
MD	50%	50%	53.0%	47.0%	39%	61%	50%	50%
PM	50%	50%	27.0%	73.0%	5%	95%	50%	50%
Sat	50%	50%	64.0%	36.0%	60%	40%	50%	50%
Vehicle Occupancy:	(3)		(6)		(10)		(6)	
	All Periods		All Periods		All Periods		All Periods	
Auto	2.00		1.30		1.15		2.00	
Taxi	2.00		1.30		1.85		2.00	
Truck Trip Generation:	(1)		(4)(5)(7)		(1)		(6)	
Weekday	0.35		0.91		0.32		n/a	
Saturday	0.04		0.08		0.01		n/a	
	per 1,000 sf		per 1,000 sf		per 1,000 sf		per 1,000 sf	
Truck Temporal Distribution:	(1)		(4)(8)		(1)		(6)	
AM	8.0%		9.9%		10.0%		n/a	
MD	11.0%		8.0%		11.0%		n/a	
PM	2.0%		7.0%		2.0%		n/a	
Sat	11.0%		28.0%		11.0%		n/a	
Truck In/Out Split:	In	Out	In	Out	In	Out	In	Out
AM	50.0%	50.0%	67.0%	33.0%	50.0%	50.0%	n/a	n/a
MD	50.0%	50.0%	57.0%	43.0%	50.0%	50.0%	n/a	n/a
PM	50.0%	50.0%	60.0%	40.0%	50.0%	50.0%	n/a	n/a
Sat	50.0%	50.0%	42.0%	58.0%	50.0%	50.0%	n/a	n/a

Notes :

(1) *2020 City Environmental Quality Review (CEQR) Technical Manual*
(2) Based on data provided by NYCDOT for local retail use in Brooklyn Transit Zone
(3) Based on data from Atlantic Yards Arena and Redevelopment FEIS (2014)
(4) Based on data from *ITE Trip Generation Manual, 10th Edition,* Land Use Code 150 (Warehousing)
(5) Included 1.51 adjustment factor per NYCDOT Trip Generation Survey
(6) Based on data from the *Domino Sugar Rezoning FEIS* (2010)
(7) Adjusted per the ratio between weekday and Saturday based on information from the ITE Trip Generation *Handbook, 10th Edition,* Land Use Code 150 (Warehousing)
(8) Based on NYCDOT Trip Generation Survey
(9) Based on data from *12 Frnaklin Street EAS* (2017)
(10) Based on 2019 PHA mode choice survey data for office use in Williamsburg, Brooklyn

Office

As shown in **Table 2**, the weekday and Saturday trip generation rates (18 and 3.9 trips per 1,000 gsf, respectively) and temporal distributions (12 percent, 15 percent, 14 percent and 17 percent for the weekday AM, midday and PM and for the Saturday periods, respectively) were based on data cited in the CEQR *Technical Manual* – along with the truck trip generation, temporal distribution and directional distributions for the office component of the Proposed Project. Based on 2019 PHA mode choice survey data for office use in Williamsburg, Brooklyn, mode splits for the weekday AM, PM and Saturday peak periods were estimated to be 12.1 percent, 5.9 percent, 29.7 percent, 16.0 percent, 6.2 percent and 30.1 percent by auto, taxi, subway-only, subway-to-bus, bus-only and walk/ferry/other, respectively. Office in/out splits and vehicle occupancy (1.15 auto, 1.85 taxi) were estimated using these same data. The weekday midday modal split was estimated to be 2 percent, 1 percent, 4.5 percent, 2.5 percent, 7 percent and 83 percent for those same modes based on data from the *12 Franklin Street EAS* (2017).

Open Space

Based on the 2020 *CEQR Technical Manual*, the travel demand forecast for the publically accessible open space to be provided by the Proposed Project used weekday and Saturday trip generation rates of 44 and 62 per acre, respectively, and temporal distributions of 3 percent, 5 percent, 6 percent and 6 percent for the weekday AM, midday, PM and Saturday peak periods, respectively. Modal split, in/out split, vehicle occupancy and truck rates were also based on data from the *Domino Sugar Rezoning FEIS*.

TRIP GENERATION

Tables 3a and **3b** show estimates of incremental peak hour person trips and vehicle trips, respectively, that would occur in the 2024 future with the proposed action. Total incremental trips generated by the proposed action are further summarized in **Table 4**. As discussed above, the transportation analyses in the EIS will be based on the transportation planning assumptions made for the RWCDS detailed in **Table 2**. The estimated person, vehicle, transit and pedestrian trips generated by the Proposed Project are discussed below in the Level 1 screening assessment.

LEVEL 1 SCREENING ASSESSMENT

According to the *CEQR Technical Manual* guidelines, a two-tier screening process is used to determine whether quantified analyses of any technical areas of the transportation system are necessary. A Level 1 screening is typically necessary if a proposed project has the potential to exceed either 50 vehicle trips, 200 transit trips or 200 pedestrian trips during any given peak hour. If these thresholds are exceeded, a Level 2 screening assessment is required in order to ensure that there are not 50 vehicle trips, 50 bus trips, 200 subway/rail trips, or 200 pedestrian trips assigned to an individual transportation element (intersections, bus routes, subway stations, etc.), during any analysis peak hour. Based on the preliminary planning factors shown in in **Table 2**, a preliminary travel demand forecast (Level 1 screening) was prepared for the Proposed Project and is shown below in **Tables 3a** and **3b** and summarized in **Table 4**.

Table 3a: Preliminary Travel Demand Forecast – Person Trips

		Increment									
Land Use:		**Local Retail***		**Warehouse**		**Office**		**Open Space**		**Total**	
Size/Units:		20,476 gsf		-181,401 gsf		535,435 gsf		37,233 sf			
Peak Hour Trips:											
	AM	94		-43		1,157		1		1,209	
	MD	598		-39		1,446		2		2,007	
	PM	316		-47		1,349		2		1,620	
	Sat	370		-12		356		4		718	
Person Trips:											
		In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto**	5	5	-17	-5	133	6	0	0	121	6
	Taxi	0	0	-1	0	66	3	0	0	65	3
	Subway-Only	1	1	-6	-2	330	14	0	0	325	12
	Subway-to-Bus	0	0	-3	-1	178	7	0	0	175	7
	Bus	1	1	-2	-1	69	3	0	0	68	3
	Walk/Ferry/Other	40	40	-4	-1	334	14	1	0	371	53
	Total	47	47	-33	-10	1,110	47	1	0	1,125	84
		In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto**	33	33	-11	-11	11	18	0	0	32	40
	Taxi	0	0	0	0	6	9	0	0	6	9
	Subway-Only	6	6	-4	-3	25	40	0	0	27	42
	Subway-to-Bus	3	3	-2	-2	14	22	0	0	15	23
	Bus	6	6	-1	-1	39	62	0	0	44	67
	Walk/Ferry/Other	251	251	-2	-2	468	732	1	1	719	982
	Total	299	299	-20	-19	563	882	1	1	843	1,163
		In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto**	17	17	-6	-17	8	155	0	0	19	154
	Taxi	0	0	0	-1	4	76	0	0	4	75
	Subway-Only	3	3	-3	-7	20	381	0	0	21	378
	Subway-to-Bus	2	2	-1	-4	11	205	0	0	11	203
	Bus	3	3	-1	-2	4	79	0	0	6	80
	Walk/Ferry/Other	133	133	-2	-4	20	386	1	1	152	516
	Total	158	158	-13	-34	67	1,282	1	1	213	1,406
		In	Out	In	Out	In	Out	In	Out	In	Out
Sat	**Auto**	20	20	-4	-2	26	17	0	0	42	35
	Taxi	0	0	0	0	13	8	0	0	13	8
	Subway-Only	4	4	-1	-1	64	42	0	0	66	46
	Subway-to-Bus	2	2	-1	0	34	23	0	0	36	25
	Bus	4	4	-1	0	13	9	0	0	16	13
	Walk/Ferry/Other	155	155	-1	-1	64	43	2	2	220	199
	Total	185	185	-8	-4	214	142	2	2	393	325

*25% link trip applied to Local Retail trips

Table 3b: Preliminary Travel Demand Forecast – Vehicle Trips

		Increment									
Land Use:		**Local Retail***		**Warehouse**		**Office**		**Open Space**		**Total**	
Size/Units:		20,476 gsf		-181,401 gsf		535,435 gsf		37,233 sf			
Peak Hour Trips:											
	AM	94		-43		1,157		1		1,209	
	MD	598		-39		1,446		2		2,007	
	PM	316		-47		1,349		2		1,620	
	Sat	370		-12		356		4		718	
		Increment								*Total*	
Vehicle Trips :											
		In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto (Total)**	3	3	-13	-4	94	4	0	0	84	3
	Taxi	0	0	-1	0	46	2	0	0	45	2
	Taxi Balanced	0	0	-1	-1	48	48	0	0	47	47
	Truck	0	0	-11	-5	9	9	0	0	-2	4
	Total	3	3	-25	-10	151	61	0	0	129	54
		In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto (Total)**	17	17	-8	-8	8	13	0	0	16	22
	Taxi	0	0	0	0	4	6	0	0	4	6
	Taxi Balanced	0	0	0	0	10	10	0	0	10	10
	Truck	0	0	-8	-6	9	9	0	0	1	3
	Total	17	17	-16	-14	27	32	0	0	27	35
		In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto (Total)**	9	9	-5	-13	6	109	0	0	10	104
	Taxi	0	0	0	-1	3	54	0	0	3	53
	Taxi Balanced	0	0	-1	-1	57	57	0	0	56	56
	Truck	0	0	-7	-5	2	2	0	0	-5	-3
	Total	9	9	-13	-19	65	168	0	0	61	157
		In	Out	In	Out	In	Out	In	Out	In	Out
Sat	**Auto (Total)**	10	10	-3	-2	18	12	0	0	25	20
	Taxi	0	0	0	0	9	6	0	0	9	6
	Taxi Balanced	0	0	0	0	15	15	0	0	15	15
	Truck	0	0	-2	-2	0	0	0	0	-2	-2
	Total	10	10	-5	-4	33	27	0	0	38	33

*25% link trip applied to Local Retail trips

Table 4: Incremental Preliminary Travel Demand Forecast Summary

Peak Hour	**Person Trips**														
	Net Vehicle[1]			**Total Subway[2]**			**Total Bus[3]**			**Net Walk**			**Total Pedestrian Trips[4]**		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
AM	**129**	**54**	**183**	**500**	**19**	**519**	**243**	**10**	**253**	**371**	**53**	**424**	**939**	**75**	**1,014**
MD	**27**	**35**	**62**	**42**	**65**	**107**	**59**	**90**	**149**	**719**	**982**	**1,701**	**805**	**1,114**	**1,919**
PM	**61**	**157**	**218**	**32**	**581**	**613**	**17**	**283**	**301**	**152**	**516**	**668**	**190**	**1,177**	**1,367**
Sat	**38**	**33**	**71**	**102**	**70**	**172**	**52**	**38**	**89**	**220**	**199**	**419**	**338**	**282**	**620**

[1]Includes Auto, Taxi and Truck trips for all peak hours
[2]Includes Subway-Only and Subway-to-Bus trips
[3]Includes Subway-to-Bus and Bus-Only trips
[4]Includes Walk-Only and pedestrians en route to/from nearby subway stations and bus stops

Traffic

Under *CEQR Technical Manual* criteria, if a proposed action is expected to generate 50 or more peak hour vehicle trips, there is likely a need for further analysis. As shown in **Table 4**, the Proposed Project would result in a net increase of 183, 62, 218 and 71 vehicle trips in the weekday AM, weekday midday, weekday PM, and Saturday peak periods, respectively. As the number of incremental peak hour trips would exceed the *CEQR Technical Manual* analysis thresholds for vehicular traffic during all peak hour periods, a Level 2 screening analysis is warranted to identify if any area intersections may require additional detailed analyses.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if a proposed development is projected to result in fewer than 200 peak hour subway/rail or bus transit riders. If a proposed action would result an increase of 200 or more passengers at a single subway station or on a single subway line/bus route, a detailed subway and/or bus analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours as it is during these periods that overall demand on the subway and bus system is usually highest.

Subway

As shown in **Table 4**, the project would generate a net increase of approximately 519 and 613 person trips by subway (subway-only and subway-to-bus combined) in the weekday AM and PM peak hours, respectively. As these numbers of trips would exceed the 200 trip *CEQR Technical Manual* analysis threshold, a Level 2 screening analysis is warranted to determine which subway stations and routes would require quantified analysis.

Bus

According to the general thresholds used by the MTA and specified in the *CEQR Technical Manual*, a detailed bus-line haul analysis is generally not required if the project generated increase in person trips by bus is fewer than 200 additional passengers during a peak hour or fewer than 50 peak hour passengers in a single direction on a single route. Due to the Project Site's placement within the City's subway network, some subway trips would be expected to include a subway-to-bus connection, depending on the trip origin.

As shown in **Table 4**, the project would generate a net increase of 253 and 301 person trips by bus (subway-to-bus and bus-only combined) during the weekday AM and PM peak hours, respectively. While the projected bus trips would exceed 200 trips only during the PM peak hour, the Proposed Project could generate 50 or more passengers per hour during both the AM and PM peak periods and, therefore, a Level 2 analysis is warranted.

Pedestrians

According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As shown in **Table 4**, the Proposed Actions' RWCDS would

generate an incremental increase of 424, 1,701, 668 and 419 walk-only trips (in and out combined) during the weekday AM, weekday midday, weekday PM and Saturday peak periods, respectively. In addition to the walk-only trips, the Proposed Project would generate pedestrian trips en route to and from nearby subway stations and bus stops. Including these additional pedestrian trips, the total project generated pedestrian demand would be 1,014, 1,919, 1,367 and 620 trips in the weekday AM, midday, PM and Saturday peak hours, respectively. As the total walk trips exceed the CEQR threshold during the weekday AM, midday, PM and Saturday peak hours, a more detailed analysis is warranted.

LEVEL 2 SCREENING ASSESSMENT: TRIP ASSIGNMENT

Traffic

A Level 2 traffic screening assessment involves the assignment of action-generated vehicle trips to the study area street network and the identification of specific locations where the incremental increase in demand may potentially exceed the *CEQR Technical Manual* analysis threshold of 50 or more vehicle trips at an intersection and, therefore, require a quantitative analysis. As shown in **Table 4** and discussed above, the Proposed Actions' RWCDS is expected to result in a net incremental increase of approximately 183, 62, 218 and 71 vehicle trips during the weekday AM, midday, PM and Saturday peak hours, respectively. As these traffic volumes would exceed 50 trips in the weekday AM, midday, PM and Saturday peak hours (the *CEQR Technical Manual* Level 1 screening threshold for a detailed analysis), an assignment of net increment traffic volumes was prepared for these periods (a Level 2 screening assessment) to help identify individual intersections for analysis.

The assignments of auto and taxi trips to the street network in proximity to the Project Site are based on the anticipated origins and destinations of vehicle trips associated with the different land uses projected under the RWCDS (i.e. office, local retail and warehouse uses). The origins/destinations of office and warehouse uses were based on 2012-2016 American Community Survey (ACS) five-year reverse journey-to-work data and AASHTO Census Transportation Planning Products program (CTPP). Origins/destinations for local retail, which generate mostly local trips, were based on population density in proximity to the Project Site and surrounding neighborhoods within an approximately three quarter-mile radius. It should be noted that the majority of Census Tract 543 consists of the Brooklyn Navy Yard, a light industrial and manufacturing hub differing from the surrounding residential neighborhoods, and therefore was not included in the population density calculations. Using these distributions, auto and taxi trips were assigned to various portals on the periphery of Williamsburg and from there were assigned to the Project Site via the most direct route. **Tables 6** and **7** below shows the directional distributions of auto and taxi trips by land use based on this data.

Table 6: Origin Distribution for Office and Warehouse Uses

Origin Location	Percent of Total
Bronx	6.5%
Brooklyn	37.9%
Manhattan	2.4%
Queens	15.6%
Staten Island	6.2%
Long Island	16.7%
New Jersey/Pennsylvania	5.5%
Upstate NY/Connecticut	2.3%
Westchester	6.9%

Source: U.S. Census Bureau, 2012-2016 5-year estimates and AASHTO Special Tabulation: Census Transportation Planning Products program (CTPP)

Table 7: Origin Distribution for Local Retail Uses

Origin Location	Percent of Total
North	40%
East	60%

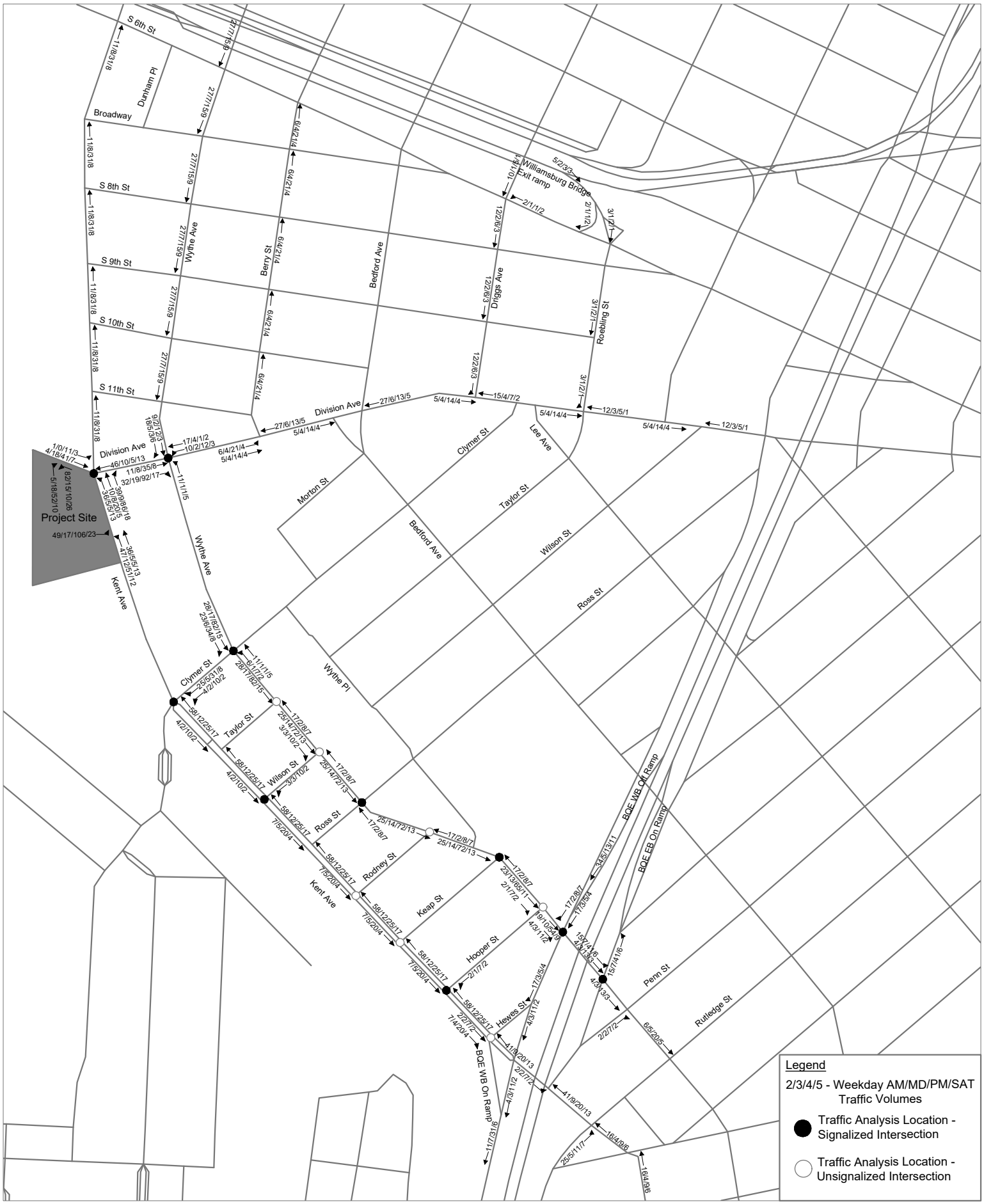
Note: Based on population density within approximately ¾-mile of the Project Site

Figure 2 shows the assignment of incremental vehicle trips generated by the Proposed Actions during the weekday AM, weekday midday, weekday PM and Saturday peak hours, along with the intersections expected to exceed the 50-trip *CEQR Technical Manual* analysis threshold. As shown in **Figure 2,** a total of 17 intersections (10 signalized, seven unsignalized) exceeded this threshold and were selected for detailed analysis. These intersections are listed below along with the peak hour in which the 50 vehicle threshold is expected to be exceeded:

Preliminary Traffic Analysis Locations

1. Kent Avenue at Division Avenue *(signalized*)
2. Kent Avenue at Clymer Street *(signalized)*
3. Kent Avenue at Wilson Street *(signalized)*
4. Kent Avenue at Rodney Street *(unsignalized)*
5. Kent Avenue at Keap Street *(unsignalized)*
6. Kent Avenue at Hooper Street *(signalized*)
7. Kent Avenue at Hewes Street *(unsignalized)*
8. Wythe Avenue at Division Avenue *(signalized*)
9. Wythe Avenue at Clymer Street (*signalized*)
10. Wythe Avenue at Taylor Street *(unsignalized)*
11. Wythe Avenue at Wilson Street *(unsignalized)*
12. Wythe Avenue at Ross Street *(signalized)*
13. Wythe Avenue at Rodney Street *(unsignalized)*
14. Wythe Avenue at Keap Street *(signalized*)
15. Wythe Avenue at Hooper Street *(unsignalized)*
16. Wythe Avenue at Williamsburg Street West *(signalized*)
17. Wythe Avenue at Williamsburg Street East *(signalized*)

Incremental Traffic Volumes



Subway

Typically, transit analyses examine conditions during the weekday AM and PM commuter peak periods, as it is during these times that overall transit demand (and the potential for significant adverse impacts) is generally greatest. As indicated above in **Table 2**, approximately 45.7 percent of office trips, the land use which represent the largest number of action-generated peak hour trips, are expected to utilize the subway while 3.1 percent of local retail trips and 28 percent of warehouse trips would be made by subway. **Figure 1** shows the nearest subway station to the Project Site (the Marcy Avenue station), as well as nearby bus routes and ferry landing.

As shown below in **Table 8**, it is anticipated that the majority of project-generated subway trips would utilize the Marcy Avenue subway station, which is located approximately 0.6 mile northeast of the site and served by the J/M/Z subway lines. Only project-generated trips commencing or terminating at the Marcy Avenue Station are considered subway-only trips and are included in the subway analysis. The remaining action-generated subway trips are expected to be dispersed among other nearby subway stations were riders are assumed to complete their journey via bus (i.e. Subway-to-Bus trips). This dispersion is detailed in **Table 8** below and is based on U.S Census Bureau, American Community Survey (ACS) 5-year (2012-2016) reverse journey-to-work data utilizing the AASHTO Census Transportation Planning Products program (CTPP). Subway-to-bus trips were added to the bus-only trips to derive the total bus trips and are evaluated in the bus analysis below.

Table 8: Preliminary Subway Assignment Summary

Subway Station/Line Summary	AM Peak Hour			PM Peak Hour		
	Projected Sites			Projected Sites		
	In	Out	Total	In	Out	Total
Peak Hour Incremental Subway Trips	500	19	519	32	581	613
Marcy Avenue (J,M,Z)	325	12	337	21	378	399
York Street (F)	35	1	36	2	41	43
Atlantic Terminal	35	1	36	2	41	43
DeKalb Ave	15	1	16	1	17	18
Jay Street	45	2	47	3	52	55
Franklin Ave	25	1	26	2	29	31
Bedford Ave	20	1	21	1	23	24
Total	500	19	519	32	581	613

Source: U.S. Census Bureau, ACS 2012-2016 5-year reverse journey-to-work estimates and AASHTO Census Transportation Planning Products program (CTPP)

As shown in **Table 8**, the Proposed Action would generate approximately 337 and 399 subway-only trips (in and out combined) in the AM and PM peak periods, respectively, at the Marcy Avenue station, which exceeds the 200-trip CEQR threshold. Therefore, the EIS transit analysis will quantitatively examine subway conditions of circulation and fare control elements, such as stairs and fare arrays, at this station. Additionally, the EIS will assess line haul conditions to determine whether detailed analyses would be required on any one line (J, M or Z) in the peak direction.

Bus

The Project Site is primarily served by the B67 New York City Transit (NYCT) bus route which operates between Kensington and Williamsburg via Downtown Brooklyn and the Brooklyn Navy Yard. The route runs along Kent Avenue and Wythe Avenue in the vicinity of the Project Site. Service is also provided by the B62 NYCT bus which is routed along Wythe Avenue in proximity to the Project Site and operates between Queens Plaza and Downtown Brooklyn. Additional service is provided by the B44 select bus service (SBS), the B32 and the Q59. These services and the principle corridors on which they operate in proximity to the Project Site are listed below in **Table 9**.

Table 9: Bus Routes Serving the Project Site

Route	Operating Agency	Rout Endpoints	Corridors Served in Proximity to the Project Site
B67	NYCT	Kensington – Downtown Brooklyn	Kent Av/Wythe Av
B62	NYCT	Queens Plaza – Downtown Brooklyn	Wythe Av/Division Av
B44	NYCT	Sheepshead Bay - Williamsburg	Bedford Av/Lee Av
B32	NYCT	Long Island City - Williamsburg	Kent Av/Wythe Av/Broadway
Q59	NYCT	Rego Park – Williamsburg	Kent Av/Wythe Av/Broadway

As shown in **Table 3a**, the Proposed Project is expected to generate a net total (in and out combined) of approximately 71 and 86 incremental bus-only trips during the weekday AM and PM peak hours, respectively. As discussed above, due to the location of the site some subway trips are expected to also include a bus element to complete the journey. These additional subway-to-bus riders are expected to increase the number of incremental bus trips by 182 and 215 in the AM and PM peak hours, respectively, for a net total of 253 and 301 trips utilizing local bus routes in the AM and PM peak hours, respectively. Total bus trip dispersion was based on ridership data provided by NYC MTA and is detailed in **Table 10** below.

Table 10: Preliminary Bus Line Assignment Summary

Bus Line	Bus Only						Subway to Bus						Total Bus Trip					
	AM			PM			AM			PM			AM			PM		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Peak Hour Incremental Bus Trips	68	3	71	6	80	86	175	7	182	11	203	215	243	10	253	17	283	301
B67	14	1	15	1	16	17	75	3	78	5	87	92	89	4	93	6	103	109
B62	15	1	16	1	18	19	75	3	78	5	87	92	90	4	94	6	105	111
B44	17	1	18	2	20	22	25	1	26	2	29	31	42	2	44	4	49	53
B32	11	0	11	1	13	14	0	0	0	0	0	0	11	0	11	1	13	14
Q59	11	0	11	1	13	14	0	0	0	0	0	0	11	0	11	1	13	14
Total	68	3	71	6	80	86	175	7	182	12	203	215	243	10	253	18	283	301

Source: U.S. Census Bureau, ACS 2012-2016 5-year reverse journey-to-work estimates and AASHTO Census Transportation Planning Products program (CTPP)

According to the general thresholds used by the MTA and specified in the *CEQR Technical Manual*, a detailed analysis of bus conditions is generally not required if a proposed action is projected to result in fewer than 50 peak hour trips being assigned to a single bus route (in one direction), as this level of new demand is

considered unlikely to result in significant adverse impacts. As shown in **Table 10**, two routes (the B67 and B62) are expected to experience 50 or more new trips in one or more directions during one or both peak hours and will be analyzed in the EIS.

Pedestrians

As discussed above and summarized in **Table 4**, the Proposed Actions would generate 1,014, 1,919, 1,367 and 620 incremental pedestrian trips (including walk-only, subway and bus trips) during the weekday AM, weekday midday, weekday PM and Saturday peak hours, respectively. The analysis of pedestrian conditions focuses on the pedestrian elements – sidewalks, corner areas and crosswalks – where the new trips generated by a proposed development are expected to be concentrated. These elements are primarily located within the vicinity of the Project Site and corridors connecting the site to area subway station entrances and bus stops. A pedestrian assignment was conducted to determine which pedestrian elements exceeded the CEQR threshold of 200 or more incremental pedestrian trips.

Although the number of pedestrian trips in the Saturday peak hour would also exceed the 200-trip *CEQR Technical Manual* analysis threshold, the 620 trips generated during this period would be less than the trips generated in the weekday peak hours. Additionally, the distribution of trips to area sidewalks and crosswalks in the Saturday peak hour is expected to be similar to the distribution in the weekday midday. Consequently, significant adverse pedestrian impacts on Saturday over and above those identified for the weekday peak hours are considered unlikely. Therefore, the analysis of pedestrian conditions will focus on the weekday AM, midday and PM peak hours and the Saturday peak hour is not analyzed.

The locations of elements where incremental pedestrian trips generated by the Proposed Actions during the weekday AM, midday and PM peak hours are expected to exceed the 200 or more incremental pedestrian trip threshold are shown in **Figure 3**. As presented in **Figure 3** the Proposed Project would generate 200 or more pedestrian trips at 31 pedestrian elements during the weekday AM, midday and PM peak hours. Accordingly, the EIS will provide detailed analyses for the weekday AM, midday and PM peak hours for these 32 pedestrian facilities (7 sidewalks, 8 crosswalks and 17 corner areas), which are listed below.

Preliminary Pedestrian Analysis Locations

Sidewalk

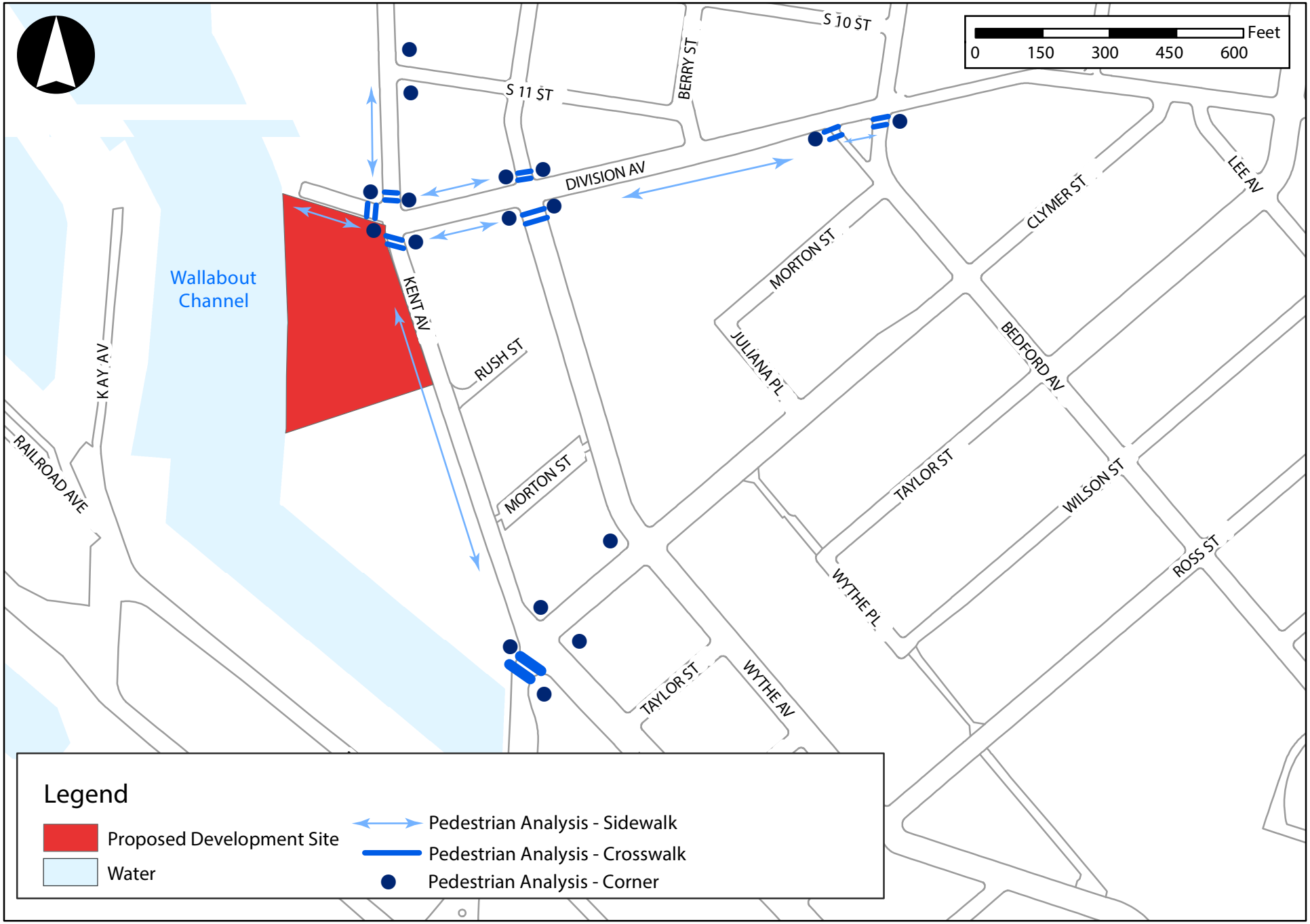
1. Kent Avenue between S. 11th Street and Division Avenue *(west sidewalk)*
2. Kent Avenue between Division Avenue and Clymer Street *(west sidewalk)*
3. Division Avenue between Kent Avenue and Wallabout Channel *(south sidewalk)*
4. Division Avenue between Kent Avenue and Wythe Avenue *(north sidewalk)*
5. Division Avenue between Kent Avenue and Wythe Avenue *(south sidewalk)*
6. Division Avenue between Wythe Avenue and Bedford Avenue *(south sidewalk)*
7. Division Avenue between Bedford Avenue – Cohen Triangle and Bedford Avenue *(south sidewalk)*

Crosswalk

1. Kent Avenue and Division Avenue *(north crosswalk)*
2. Kent Avenue and Division Avenue *(south crosswalk)*
3. Kent Avenue and Division Avenue *(west crosswalk)*

Figure 3

Preliminary Pedestrian Analysis Locations



4. Kent Avenue and Clymer Street *(west crosswalk)*
5. Division Avenue and Wythe Avenue *(north crosswalk)*
6. Division Avenue and Wythe Avenue *(south crosswalk)*
7. Division Avenue and Cohen Triangle – Bedford Avenue *(southwest crosswalk)*
8. Division Avenue and Bedford Avenue – Cohen Triangle *(southeast crosswalk)*

Corner

1. Kent Avenue and South 11th Street *(northeast corner)*
2. Kent Avenue and South 11th Street *(southeast corner)*
3. Kent Avenue and Division Avenue *(northwest corner)*
4. Kent Avenue and Division Avenue *(northeast corner)*
5. Kent Avenue and Division Avenue *(southeast corner)*
6. Kent Avenue and Division Avenue *(southwest corner)*
7. Kent Avenue and Clymer Street *(northwest corner)*
8. Kent Avenue and Clymer Street *(northeast corner)*
9. Kent Avenue and Clymer Street *(southeast corner)*
10. Kent Avenue and Clymer Street *(southwest corner)*
11. Wythe Avenue and Division Avenue *(northwest corner)*
12. Wythe Avenue and Division Avenue *(northeast corner)*
13. Wythe Avenue and Division Avenue *(southeast corner)*
14. Wythe Avenue and Division Avenue *(southwest corner)*
15. Wythe Avenue and Clymer Street *(northwest corner)*
16. Bedford Avenue and Division Avenue – Cohen Triangle *(southeast corner)*
17. Bedford Avenue and Division Avenue – Cohen Triangle *(southwest corner)*

Vehicular and Pedestrian Safety

Under *CEQR Technical Manual* guidance, an evaluation of vehicular and pedestrian safety is needed for locations within the traffic and pedestrian study areas that have been identified as high crash locations. These are defined as locations with 48 or more total reportable and non-reportable crashes or where five or more pedestrian/bicyclist injury crashes have occurred in any consecutive 12 months of the most recent three-year period for which data are available. For these locations, crash trends will be identified to determine whether projected vehicular and pedestrian traffic would further impact safety, or whether existing unsafe conditions could adversely impact the flow of the projected new trips.

Parking

In the future with the Proposed Actions, the site would be rezoned from M3-1 to M1-5. As such, on-site parking would not be required for the proposed uses – although it is anticipated that the proposed 196 on-site parking spaces to be provided at the Project Site will be sufficient to accommodate the overall demand generated by the Proposed Actions. The proposed parking supply is based on the weekday peak parking demand that would be generated by the Proposed Project, shown below in **Table 11**. As mentioned earlier, 196 spaces would be provided as part of the Proposed Project. Therefore, as the proposed parking supply would accommodate the peak parking demand generated under the RWCDS, a detailed parking analysis is not warranted and will not be included in the EIS.

Table 11: Preliminary With-Action Weekday Parking Accumulation Forecast

	Local Retail			Office			Total
	20,476 gsf			593,435 gsf			
	In	Out	Accum.	In	Out	Accum.	Accum.
Overnight			2			2	
12-1 AM	0	0	2	0	0	2	4
1-2	0	0	2	0	0	2	4
2-3	0	0	2	0	0	2	4
3-4	0	0	2	0	0	2	4
4-5	0	0	2	0	0	2	4
5-6	0	0	2	0	0	2	4
6-7	0	0	2	9	0	11	13
7-8	1	0	3	37	1	47	50
8-9	4	4	3	103	7	143	146
9-10	4	3	4	52	10	185	189
10-11	6	4	6	20	15	190	**196**
11-12	9	8	7	16	44	162	169
12-1 PM	22	22	7	53	83	132	139
1-2	20	21	6	75	39	168	174
2-3	11	13	4	44	21	191	195
3-4	8	7	5	16	19	188	193
4-5	9	6	8	11	65	134	142
5-6	12	12	8	6	121	19	27
6-7	6	10	4	6	19	6	10
7-8	3	4	3	5	6	5	8
8-9	1	2	2	2	5	2	4
9-10	0	0	2	0	0	2	4
10-11	0	0	2	0	0	2	4
11-12	0	0	2	0	0	2	4
Total	116	116		455	455		

CONCLUSIONS

A transportation forecast and assessment has been prepared for the Proposed Actions. As the Proposed Actions would facilitate the development of a 749,629-gsf commercial building at 500 Kent Avenue, which would exceed the development density screening thresholds specified in Table 16-1 of the *CEQR Technical Manual*, further screening is necessary to determine if detailed analysis of traffic, transit, pedestrians and parking is warranted.

Level 1 Screening Assessment: Trip Generation

The Proposed Project would generate more than 50 incremental vehicle trips, more than 200 subway trips, more than 50 bus trips on one line (in one direction) and more than 200 pedestrian trips during peak periods. As such, Level 2 traffic, subway, bus and pedestrian screenings were warranted.

Level 2 Screening Assessment: Trip Assignment

As the number of action-generated vehicle trips exceeds the CEQR threshold of 50 peak hour trips during the weekday AM, midday, PM and Saturday peak periods, a traffic assignment was prepared. Based on the preliminary traffic assignment, it was determined that a total of 17 intersections would have an increase of 50 or more action-generated net vehicles during these peak periods. As such, detailed traffic analyses at these locations will be provided in the EIS.

A net increase of 200 or more project generated person trips would be experienced during the weekday AM and PM peak periods at the Marcy Avenue subway station. As such, a detailed analysis of key subway station circulation elements and a subway line haul analysis will be provided in the EIS.

Additionally, based on the preliminary travel demand forecast and subsequent assigning of subway-to-bus trips to corresponding bus routes, the Proposed Project is expected to generate 50 or more bus trips in one single direction on the B67 and B62 bus routes. Therefore, line haul analyses of these routes will be included in the EIS.

Based on the preliminary pedestrian assignment, it was determined that a total of 32 pedestrian elements are expected to have a net incremental increase of 200 or more pedestrians during at least one of the weekday AM, midday or PM peak periods. As such, these locations have been selected for further analysis in the EIS.

Although parking is not required under the proposed M1-5 zoning district regulations, the 196 accessory parking spaces to be provided by the Proposed Project would be sufficient to accommodate the overall incremental demand generated by the Proposed Actions. As such, detailed parking analyses are not warranted and will not be included in the EIS.