

ASTORIA COVE

FINAL

SCOPE OF WORK FOR AN ENVIRONMENTAL IMPACT STATEMENT

CEQR NO. 13DCP127Q

ULURP NOS. 130384MMQ; 140322ZMQ; 140323ZSQ; 140324ZSQ; N140325ZAQ; N140326ZAQ; N140327ZAQ; N140328ZCQ; N140329ZRQ

April 18, 2014

A. INTRODUCTION

This scope of work outlines the technical areas to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the Astoria Cove Development. The Applicant, 2030 Astoria Developers, LLC, is requesting several discretionary actions to facilitate a proposal by the Applicant to redevelop an approximately 8.7-acre site in the Astoria neighborhood of Queens Community District 1. The Proposed Action includes a zoning map amendment, a City map amendment, a zoning text amendment, large-scale general development special permits, a waterfront special permit, authorization to modify waterfront public access area requirements, and Chairperson's waterfront certification (collectively, the "Proposed Action"). The Proposed Action would facilitate a proposal by the applicant to construct a mixed-use predominantly residential development (the "proposed project") comprised of approximately 1,689 dwelling units (approximately 1,689,416 gross sf of residential floor area), of which 295 dwelling units would be affordable; approximately 109,470 gross sf of local retail space, including an approximately 25,000 gross sf supermarket; a site for an elementary school with approximately 456 seats (K-5); approximately 900 accessory parking spaces; and approximately 83,846 sf of publicly accessible open space.

This document provides a description of the Proposed Action and resultant proposed project, and includes task categories for all technical areas to be analyzed in the EIS.

B. REQUIRED APPROVALS AND REVIEW PROCEDURES

The Proposed Action would require several City Planning Commission (CPC) approvals. Some of these are discretionary actions requiring review under the Uniform Land Use Review Procedure (ULURP) and the City Environmental Quality Review (CEQR) process; others are ministerial.

The proposed project would require approval of discretionary actions by the CPC, including:

- Zoning Map Amendment to rezone the project site from M1-1 and R6 to R6B, R7-3 with a C2-4 commercial overlay, and R7A with a C2-4 commercial overlay.
- Zoning Text Amendment to make applicable the portion of the project site zone R7-3 to an Inclusionary Housing Designated Area pursuant to Zoning Resolution (ZR) §23-952 and Appendix F.

- A City Map amendment to:
 - Establish 4th Street from 26th Avenue to the waterfront public access area; and
 - Elimination of 8th Street from 27th Avenue to the waterfront.
- Large-Scale General Development (LSGD) Special Permits:
 - Pursuant to ZR §74-743(a)(1) to allow for the distribution of floor area from the non-waterfront zoning lot to the waterfront zoning lot that comprise the LSGD;
 - Pursuant to ZR §74-743(a)(2) to authorize reduction in distance between Building 2 and Building 3 and waive the court requirements for Buildings 1, 2, and 3;
 - Pursuant to ZR §74-743(a)(6) to waive minimum distance between Building 5's windows and western lot line; and
 - Extension of the vesting term to ten years for the LSGD Special Permits (ZR §11-42(c)).
- Waterfront Special Permit pursuant to ZR §62-836 to allow for the granting of waivers for yard, height and setback, tower footprint size, and maximum width of walls facing shoreline provisions.
- Waterfront Authorizations and Certifications:
 - Authorization under ZR §62-822
 - To modify requirements for area and minimum dimensions of waterfront public access areas and visual corridors (ZR §62-822(a));
 - To modify requirements of ZR §62-60 (Design Requirements for Waterfront Public Access Areas) pursuant to ZE §62-822(b); and
 - For phased development of waterfront public access areas (ZR §62-822(c)).
 - Certification under ZR §62-811 for waterfront public access and visual corridors as modified by the above-reference Authorizations (a ministerial action).

In addition, the proposed project will require approvals from the U.S. Army Corps of Engineers (USACE) and the New York State Department of Environmental Conservation (NYSDEC) for two proposed new stormwater outfalls to be located at the end of 4th and 9th Streets. NYSDEC approval will also be required as part of the proposed waterfront esplanade falls within NYSDEC-regulated adjacent area. Additionally, a State Pollution Discharge Elimination System (SPDES) permit from the NYSDEC will be required for stormwater discharges during the construction period because construction on the project site involves more than one acre. The Applicant also anticipates entering into a School Option Agreement with the New York City School Construction Authority (SCA), which would detail the terms under which the SCA can elect to take title to the school proposed as part of the project.

The Proposed Action would also place (E) designations on the project site to avoid significant adverse hazardous materials, air quality, and noise impacts. An (E) designation is a mechanism that ensures no significant adverse impacts would result from a proposed project because of procedures that would be undertaken as part of the development of the rezone site.

A Restrictive Declaration would be recorded at the time all land use-related actions required to authorize the proposed project's development are approved. The Restrictive Declaration would, among other things:

- Require development in substantial accordance with the approved plans, which establish an envelope within which the buildings must be construction, including limitations on height, bulk, building envelopes, and floor area;
- Require that the proposed project's development program be within the scope of the development scenario analyzed in the EIS;

- Provide for the implementation of “Project Components Related to the Environment” (PCREs) (i.e., certain project components which were material to the analysis of environmental impacts in the EIS);
- Provide for measures necessary to mitigate significant adverse impacts, if identified in the EIS, substantially consistent with the EIS; and

The Applicant may also seek New York City Housing Preservation and Development (HPD) approval of an Affordable Housing Plan pursuant to the Inclusionary Housing Program and potential financing from City and/or State agencies including HPD, the New York City Housing Development Corporation (HDC), and/or NYS Homes and Community Renewal (HCR) for affordable housing construction.

City Environmental Quality Review (CEQR) and Scoping

The Proposed Action triggers ULURP and requires environmental review under the City Environmental Quality Review (CEQR) procedures. An Environmental Assessment Statement (EAS) was completed on April 25, 2013. The New York City Department of City Planning (DCP), acting as lead agency on behalf of the City Planning Commission, determined that the Proposed Action would have the potential for significant adverse impacts, thus requiring that an Environmental Impact Statement (EIS) be prepared.

The CEQR scoping process is intended to focus the EIS on those issues that are most pertinent to the Proposed Action. The process at the same time allows other agencies and the public a voice in framing the scope of the EIS. This scoping document sets forth the analyses and methodologies which will be utilized to prepare the EIS. During the period for scoping, those interested in reviewing the draft scope may do so and give their comments to the lead agency. Therefore, in accordance with City and State environmental review regulations and methodologies, the Draft Scope of Work to prepare the EIS was issued on April 26, 2013. The public, interested agencies, Queens Community Board 1, and elected officials, were invited to comment on the draft scope, either in writing or orally, at a public scoping meeting held on May 28, 2013 at the Goodwill Astoria Headquarters located at 4-21 27th Avenue, Astoria, NY 11102. The public meeting was held in two sessions with the first meeting beginning at 3:00PM and second beginning at 6:30PM. Comments received during the draft scope’s public hearing, and written comments received up to 10 days after the hearing, [until June 7, 2013] were considered and incorporated as appropriate into this final scope of work. The lead agency (DCP) oversaw preparation of this final scope, which incorporates all relevant comments made on the draft scope and revises the extent or methodologies of the studies, as appropriate, in response to comments made during scoping. The draft EIS (DEIS) will be prepared in accordance with this final scope of work.

Once the lead agency is satisfied that the DEIS is complete, the document will be made available for public review and comment. The DEIS will accompany the Uniform Land Use Review Procedure (ULURP) application through the public hearings at the Community Board and City Planning Commission (CPC). A public hearing will be held on the DEIS in conjunction with the CPC hearing on the ULURP applications to afford all interested parties the opportunity to submit oral and written comments. The record will remain open for 10 days after the public hearing to allow additional written comments on the DEIS. At the close of the public review period, a Final EIS (FEIS) will be prepared that will incorporate all substantive comments made on the DEIS, along with any revisions to the technical analysis necessary to respond to those comments. The FEIS will then be used by the decision makers to evaluate CEQR findings, which address project impacts and proposed mitigation measures, before deciding whether to approve the requested discretionary actions.

C. DESCRIPTION OF PROPOSED ACTION AND RESULTANT PROPOSED PROJECT

Background

The Astoria Cove site (the "project site") comprises a total of approximately 377,726 square feet (ft) of lot area. The project site consists of approximately 292,155 sf along the waterfront (Block 907, Lots 1 & 8, and Block 906, Lots 1 & 5) and approximately 85,571 sf of upland area (Block 908, Lot 12 and Block 909, Lot 35) located along 26th Avenue between 4th Street and 9th Street (refer to aerial photo in Figure 1). The project site is currently zoned M1-1 north of 26th Avenue and R6 on the two upland lots south of 26th Avenue. As shown in Figure 1, the lots comprising the northern portion of the project site along the waterfront contain a total of seven warehousing and industrial buildings (with a combined total floor area of approximately 194,700 sf), as well as bus/vehicle storage and an estimated 100 accessory parking spaces. The project site currently encompasses two mapped but unbuilt segments of 8th Street (to the north and south of 26th Avenue), as well as an unimproved portion of 26th Avenue west of 9th Street. Portions of these street segments would be built and improved under future No-Action and/or With-Action conditions (see description below for details). The project site's northern edge along the waterfront is currently mostly developed with shoreline protection measures, in the form of riprap. The two upland portions of the site (which are zoned R6) are currently vacant lots used for vehicle storage.

The Proposed Action

Proposed Zoning Map Changes

The Proposed Action includes an amendment of the City's zoning map to rezone the project site from the existing M1-1 and R6 to R6B, R7-3 with a C2-4 commercial overlay, and R7A with a C2-4 commercial overlay, as illustrated in Figure 2; a portion of the R6 district would remain. The proposed zoning districts would allow residential uses in the entire rezoning area, which are prohibited under the existing M1-1 zoning on the northern portion of the project site. It would also allow a wider range of commercial uses through the mapping of a commercial overlay.

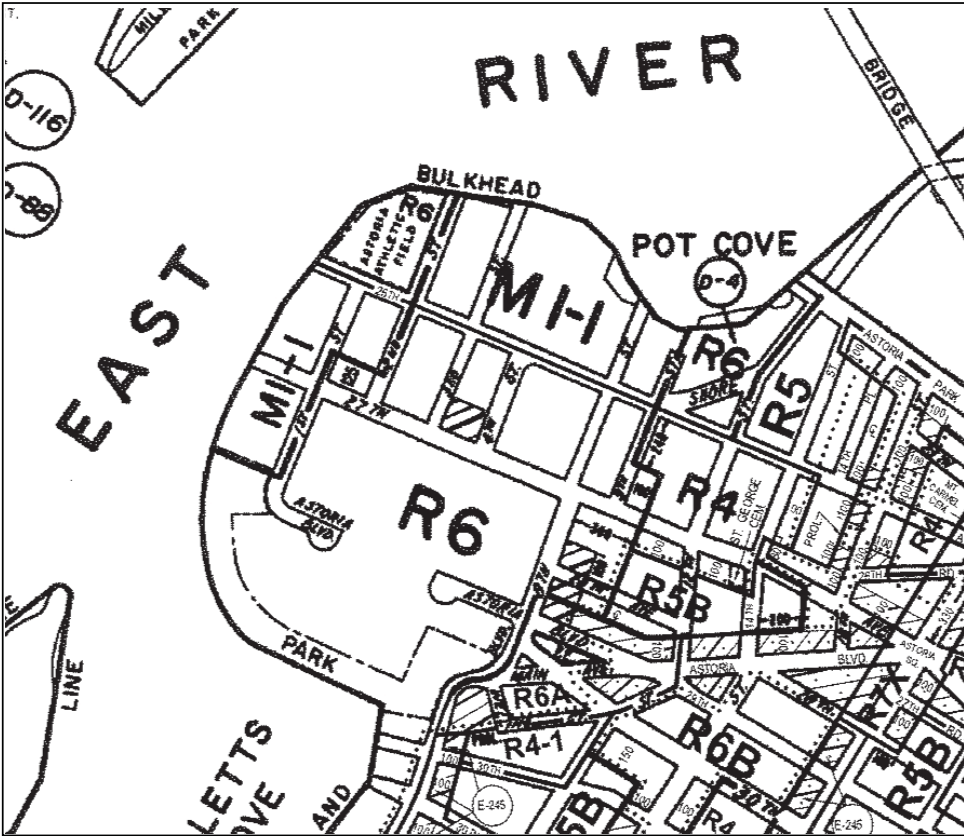
From R6 to R6B and R7A

The existing R6 zoning designation in the rezoning area would be replaced with contextual medium-density R7A and R6B residential zoning districts. The existing R6 zoning is a medium-density residential district that can range from neighborhoods with a diverse mix of building types and heights to large-scale "tower in the park" developments and has a maximum FAR of 2.43. Heights of buildings within R6 districts are governed by height factor regulations which often produce tall buildings set back from the street and surrounded by open space and on-site parking. There are no height limits for height factor buildings although they must be set within a sky exposure plane which begins at a height of 60 feet above the street line and then slopes inward over the zoning lot.

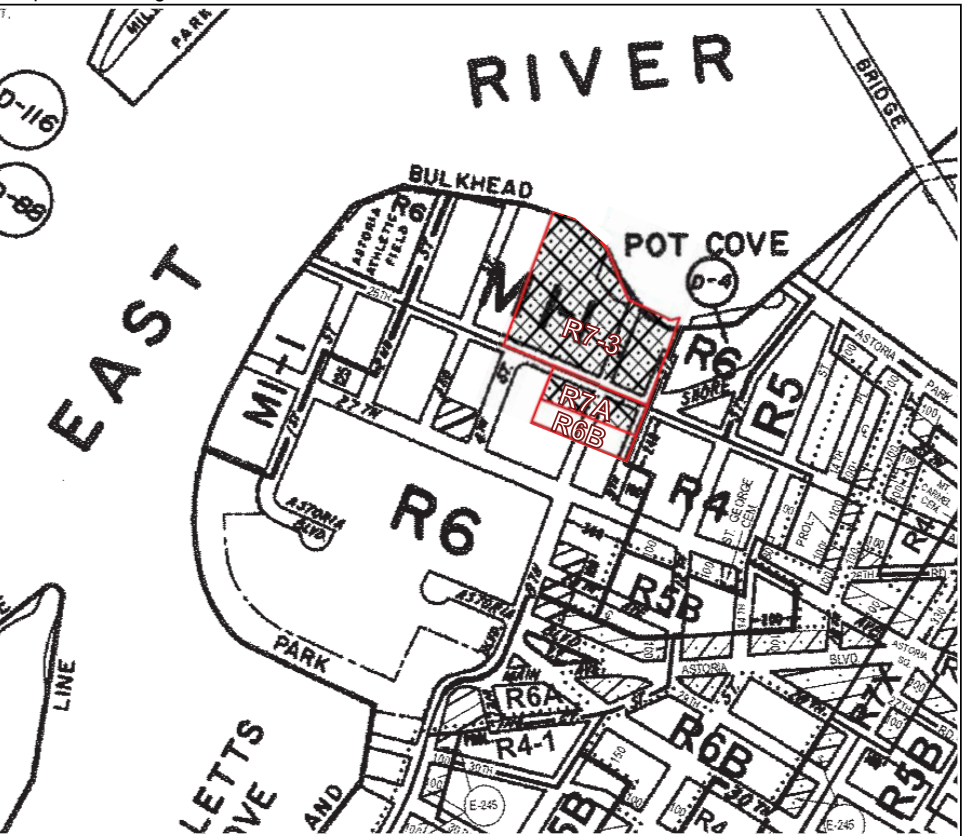
As shown in Figure 2, the proposed R7A district would be mapped along the southern portion of the rezoning area along the south side of 26th Avenue between 4th Street and 9th Street on portions of Block 908, Lot 12 and Block 909, Lot 35. R7A is a contextual residential district, which permits Use Groups 1 through 4 as-of-right with a maximum FAR of 4.0 for residential and community facility uses. This zoning district allows maximum building heights of 80 feet and streetwall heights of 40 to 65 feet. The building form encouraged by R7A regulations would result in residential buildings that are consistent with the



Existing Zoning M1-1 & R6



Proposed Zoning R7-3/C2-4, R7A/C2-4, and R6B



- Proposed Zoning District Boundary
- Proposed C2-4 Commercial Overlay

scale, streetwall and density of the existing buildings.

As shown in Figure 2, the proposed R6B zoning district would be mapped south of the proposed R7A district on portions of Block 908, Lot 12 and Block 909, Lot 35. R6B is a contextual residential zoning district, which permits Use Groups 1 through 4 as-of-right and has a maximum FAR of 2.0 for both residential and community facility uses. Streetwalls in R6B districts can rise 30 to 40 feet, with a maximum building height of 50 feet. The proposed R6B district, with lower bulk, height and street wall requirements would provide consistency with the existing built context of nearby low-scale areas.

From M1-1 to R7-3

The existing low-density M1-1 zoning designations on the project site's waterfront parcels would be replaced with a contextual medium-density R7-3 residential zoning district, which would allow residential development. The project site is located adjacent to an existing R6 zoning district to the north of 9th Street and to the south of 26th Avenue. Therefore, the proposed zoning map change would extend residential zoning with similar districts.

The existing M1-1 zoning is a light manufacturing district with high performance standards that permits Use Groups 5 through 14, 16, and 17 as-of-right, and has a maximum FAR of 1.0 for commercial and industrial uses. Certain community facility uses (Use Group 4) such as houses of worship and schools are also allowed in M1-1 districts up to an FAR of 2.4; residential uses are not permitted. M1-1 zoning districts typically act as buffers between M2 and M3 heavy manufacturing zoning districts and adjacent residential or commercial zoning districts.

As shown in Figure 2, the proposed R7-3 zoning district would be mapped in the northern portion of the rezoning area along the waterfront between 4th and 9th Streets on Block 906, Lots 1 and 5 and Block 907, Lots 1 and 8. R7-3 is a medium-density residential district that permits Use Groups 1-4 as-of-right and permits a maximum FAR of 5.0 with the Inclusionary Housing Program for residential and community facility uses on waterfront blocks. This zoning district allows maximum building heights of 185 feet, street wall heights of 65 feet on waterfront blocks.

C2-4 Commercial Overlays

As shown in Figure 2, C2-4 commercial overlays are proposed to be mapped on the south side of 26th Avenue over the proposed R7A district to a depth of 100 feet and on the entire waterfront portion of the project site between 4th and 9th Streets. C2 commercial overlays are mapped on streets within residential districts that serve the local retail needs of the surrounding residential neighborhood. Typical retail uses include grocery stores, restaurants, and beauty parlors. C2 districts permit a slightly wider range of uses than C1 districts, such as funeral homes and repair services. The proposed commercial overlays would be mapped within R7A and R7-3 districts. Within the proposed R7A and R7-3 districts; ground floor retail uses would be allowed up to 2.0 FAR in mixed residential/commercial buildings and buildings without residential uses would also be allowed 2.0 FAR of commercial uses.

The proposed C2-4 commercial overlays would allow for local retail development in the area that currently does not exist.

Proposed Zoning Text Amendment

In addition to the aforementioned zoning map amendments, the Proposed Action includes the following zoning text amendment.

Inclusionary Housing Program

The proposed zoning text amendment would modify ZR §23-922 of the New York City Zoning Resolution to include the appropriate R7-3 district as an “Inclusionary Housing Designated Area.” This would establish an inclusionary floor area ratio (FAR) bonus, providing opportunity and incentive for the development of affordable housing on the project site.

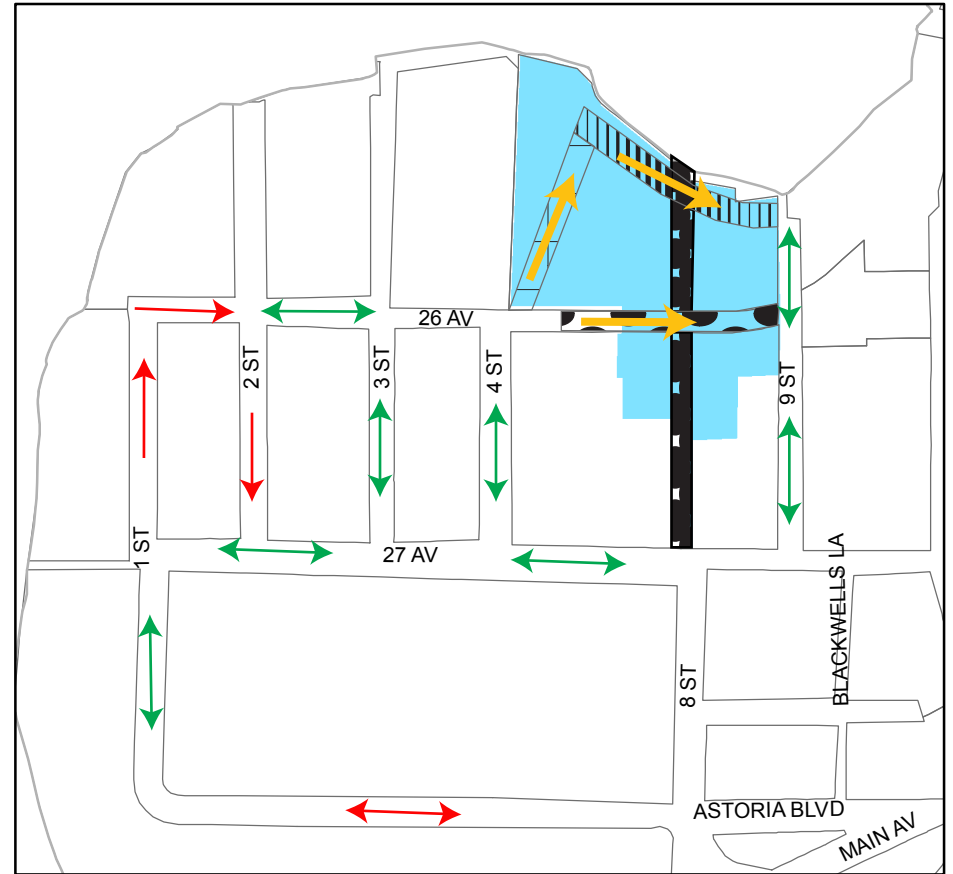
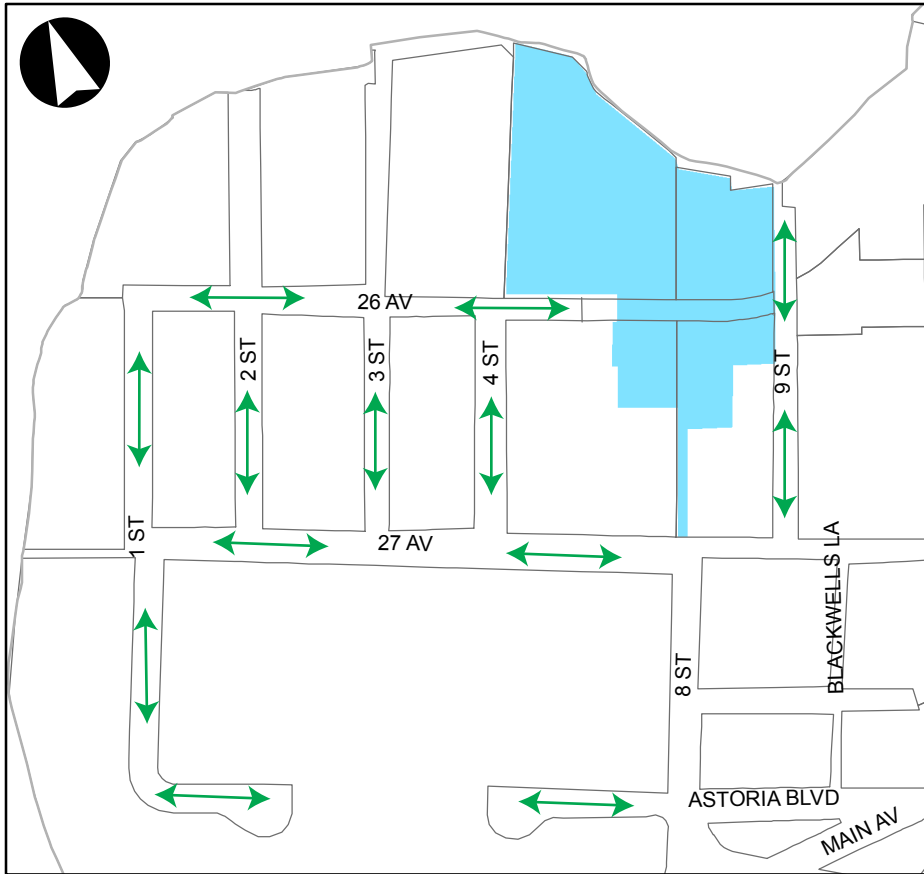
The proposed zoning text amendment would make the Inclusionary Housing Program (IHP) zoning regulations applicable in the proposed R7-3 zoning district in the rezoning area. The base and maximum FAR for R7-3 districts under the IHP are 3.75 and 5.0, respectively. In the areas where the IHP would be applicable, new residential developments that provide on- or off- site housing that will remain permanently affordable for low-and moderate-income families would receive increased floor area. Specifically, using the IHP, the floor area may be increased by 1.25 square feet for each square foot of affordable housing provided, up to the maximum FAR, essentially a 33 percent bonus in exchange for 20 percent of the floor area being set aside as affordable units. The additional floor area must be accommodated within the bulk regulations of the underlying zoning districts. Affordable units could be financed through City, State, and Federal affordable housing subsidy programs. Within the project site, the entire waterfront site would be subject to the IHP.

The affordable housing requirement of the Inclusionary Housing zoning bonus could be met through the development of affordable units, on-site, or off-site either through new construction or the preservation of existing affordable units. Off-site affordable units must be located within the same community district (CD), within a half-mile of the development receiving the FAR bonus, or anywhere within CD 1. The availability of on-site and off-site options provides maximum flexibility to ensure the broadest possible utilization of the program under various market conditions.

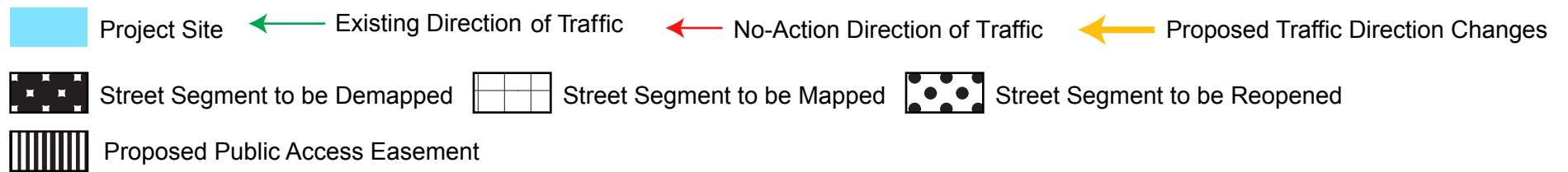
Proposed City Map Amendment

The Proposed Action also involves changes to the City Map, including: (1) the establishment of 4th Street from 26th Avenue to the waterfront esplanade; and (2) the elimination of 8th Street between 27th Avenue and the waterfront (refer to Figure 3). As a result of the proposed mapping action, 4th Street would provide access to the residential and commercial development on the waterfront sites as well as the proposed waterfront esplanade. The public access easement would function as a public right-of-way for vehicular traffic. 8th Street would be utilized as a pedestrian walkway between 27th Avenue and the waterfront. 4th Street would have a mapped width of 60 feet, including a 30-foot travel way and two 15-foot sidewalks. These widths are consistent with the adjacent streets connecting to this newly mapped street segment. New infrastructure to support the proposed project can be placed in the newly mapped public street. In addition to the proposed City Map amendment, a 30-foot wide public access easement would be developed within the waterfront public access area between 4th and 9th Streets. As shown in Figure 3, the public access easement would function as a one-way eastbound vehicular street.

The proposed new sidewalks and streets would connect the proposed new neighborhood with the surrounding neighborhood and allow for pedestrian and vehicle use.



Legend



Large-Scale General Development (LSGD) Special Permits

The proposed project would require LSGD Special Permits to allow for the distribution of floor area within the LSGD, waivers of minimum distance between buildings and between windows and lot line requirements (see Figure 4(a-d)). A Special Permit pursuant to ZR §74-743(a)(1) would allow for the distribution of floor area from the project site's non-waterfront zoning lot to the waterfront zoning lot (within the LSGD). A Special Permit pursuant to ZR §74-743(a)(2) would authorize a reduction in the distance Buildings 2 and 3 and waive the court requirements for Buildings 1, 2, and 3. A Special Permit pursuant to ZR §74-743(a)(6) would waive minimum distance between Building 5's windows and the western lot line. Lastly, an extension of the vesting term for the LSGD Special Permits to ten years is also being requested pursuant to ZR §11-42(c). This would facilitate, according to the Applicant, a superior site plan by authorizing the distribution of bulk within the overall density control and an increase in proposed open space.

Waterfront Special Permit

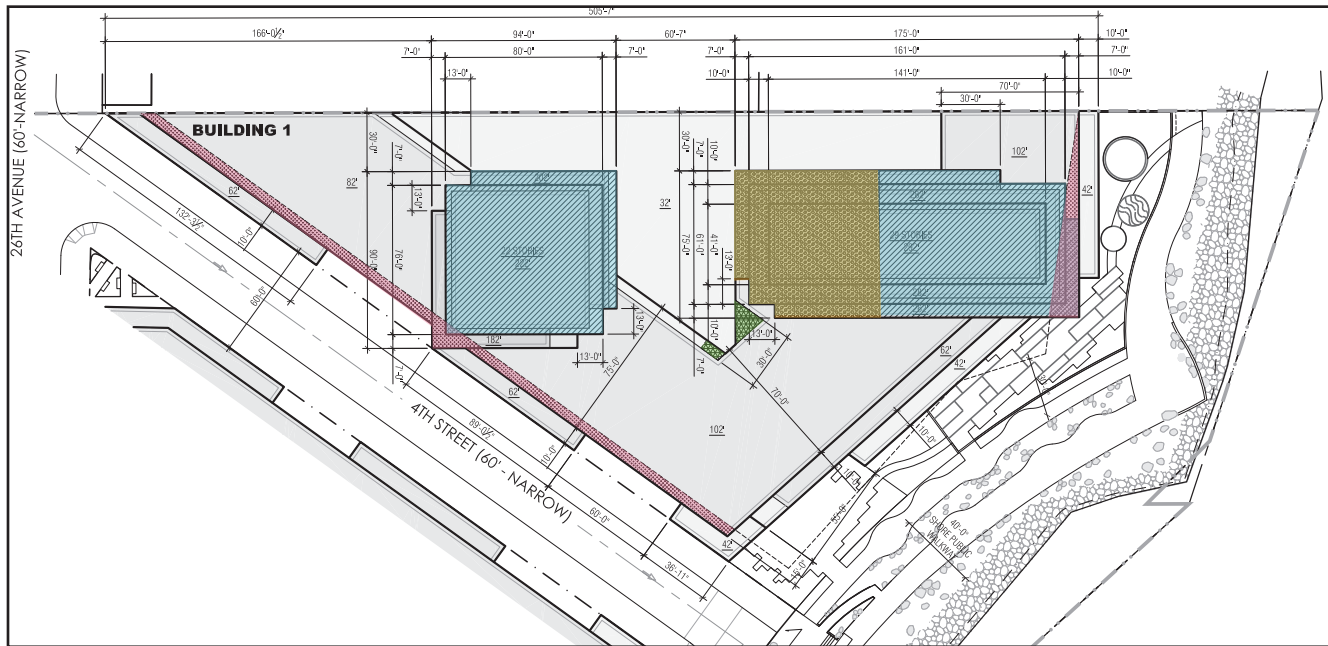
As shown in Figure 4(a-d), the proposed project would require a waterfront Special Permit to modify yard, height and setback, tower footprint size, and maximum width of walls facing the shoreline. A Special Permit pursuant to ZR §62-836 would allow for the granting of waivers for the rear yard provisions of ZR §23-47; setback provisions of ZR §62-341(a)(2) and ZR §62-341(d)(2)(i); base height provisions of ZR §62-341(c)(1) and ZR §62-341(d)(2); building height provisions of ZR §62-341(c)(2) and ZR §62-341(d)(1); the tower footprint size limitation provision of ZR §62-341(c)(4); and the maximum width of walls facing shoreline provision of ZR §62-341(c)(5). This is being requested in order to achieve, according to the Applicant, a better site plan and an enhanced relationship between the project site, streets, open space and the waterfront.

Waterfront Authorizations and Certifications

The proposed project would require an authorization pursuant to ZR §62-822 to modify the area and minimum dimensions of waterfront public access areas and visual corridors under ZR §62-50; modify the requirements of ZR §62-60 (Design Requirements for Waterfront Public Access Areas), as modified by the above-referenced authorizations; and, for phased development of waterfront public access area (ZR §62-822(c)). In addition, the Applicant would seek certification by the CPC Chairperson for compliance with waterfront public access and visual corridors, as modified by the above-referenced Authorizations, pursuant to ZR §62-811 (a ministerial action). The proposed authorizations and certification would allow, according to the Applicant, development of a waterfront public access area that is superior in access, layout and amenities that will substantially add to the public use and enjoyment of the waterfront.

Additional Actions - Not Subject to City Planning Commission Approval

The proposed project would include improvements to stormwater infrastructure to support the new development. Specifically, the proposed project would include the construction of new stormwater outfalls for the project site to enable direct discharge of stormwater flows into the East River. An existing 8-inch outfall currently exists at 9th Street. However, it is anticipated that this existing outfall would not be sufficient to support the new development and therefore two new outfalls are being proposed as part of the project. The outfalls are proposed to be located at 9th Street and 4th Street



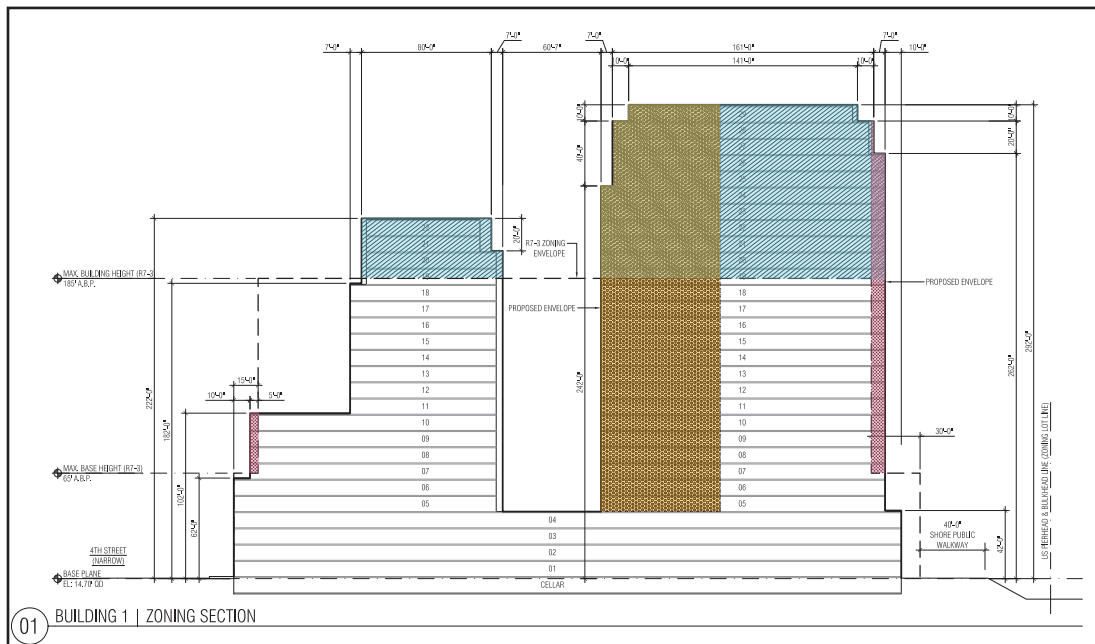
Legend

Waterfront Special Permit Waivers

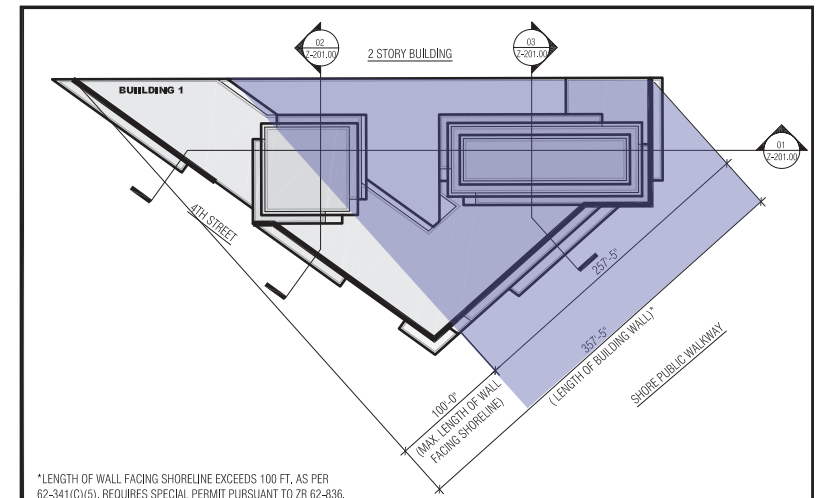
- Building exceeds maximum building height
- Gross area exceeds maximum residential tower size
- Building exceeds maximum base height without providing a setback
- Length of wall exceeding maximum length of wall facing shoreline

LSGD Special Permit Waivers

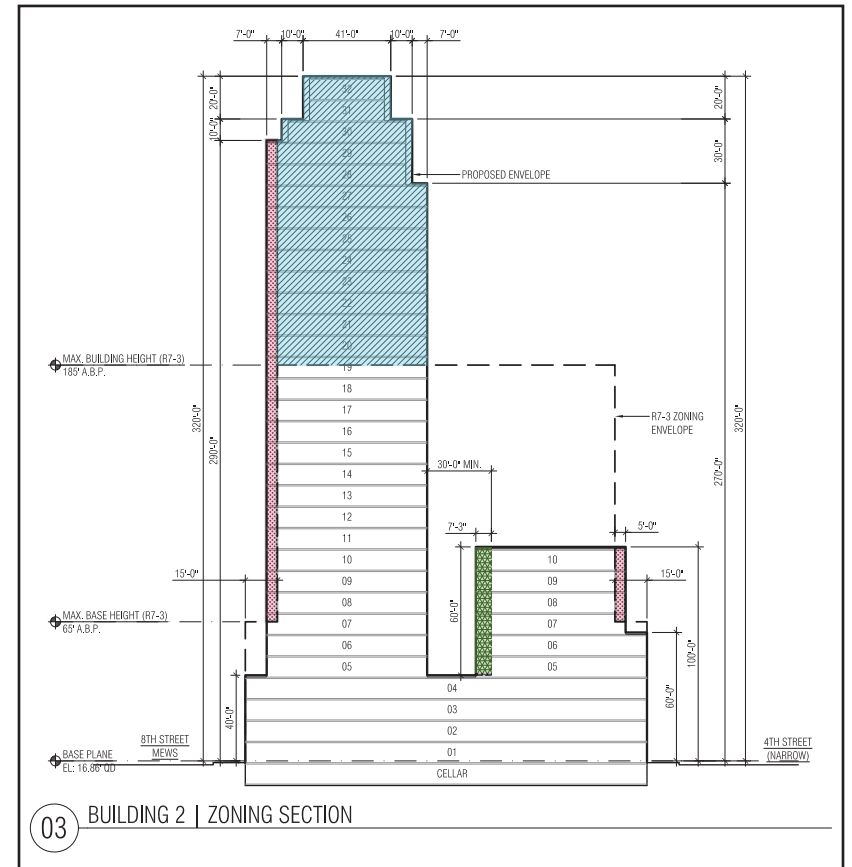
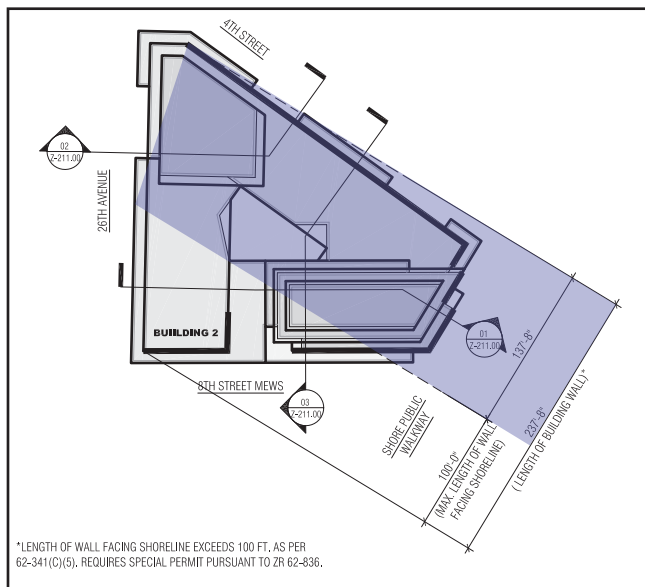
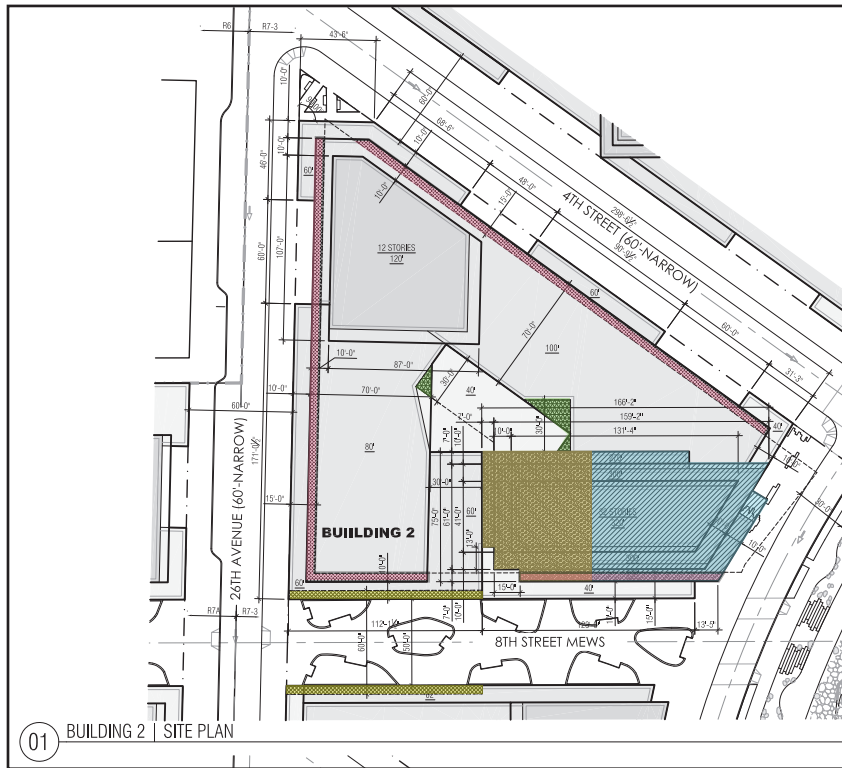
- Non-compliant minimum dimension of inner court
- Non-compliant minimum distance between buildings



Source: Studio V



*LENGTH OF WALL FACING SHORELINE EXCEEDS 100 FT. AS PER 62-341(C)(5), REQUIRES SPECIAL PERMIT PURSUANT TO ZR 62-836.



Legend

Waterfront Special Permit Waivers

- Building exceeds maximum building height
- Gross area exceeds maximum residential tower size
- Building exceeds maximum base height without providing a setback
- Length of wall exceeding maximum length of wall facing shoreline

LSGD Special Permit Waivers

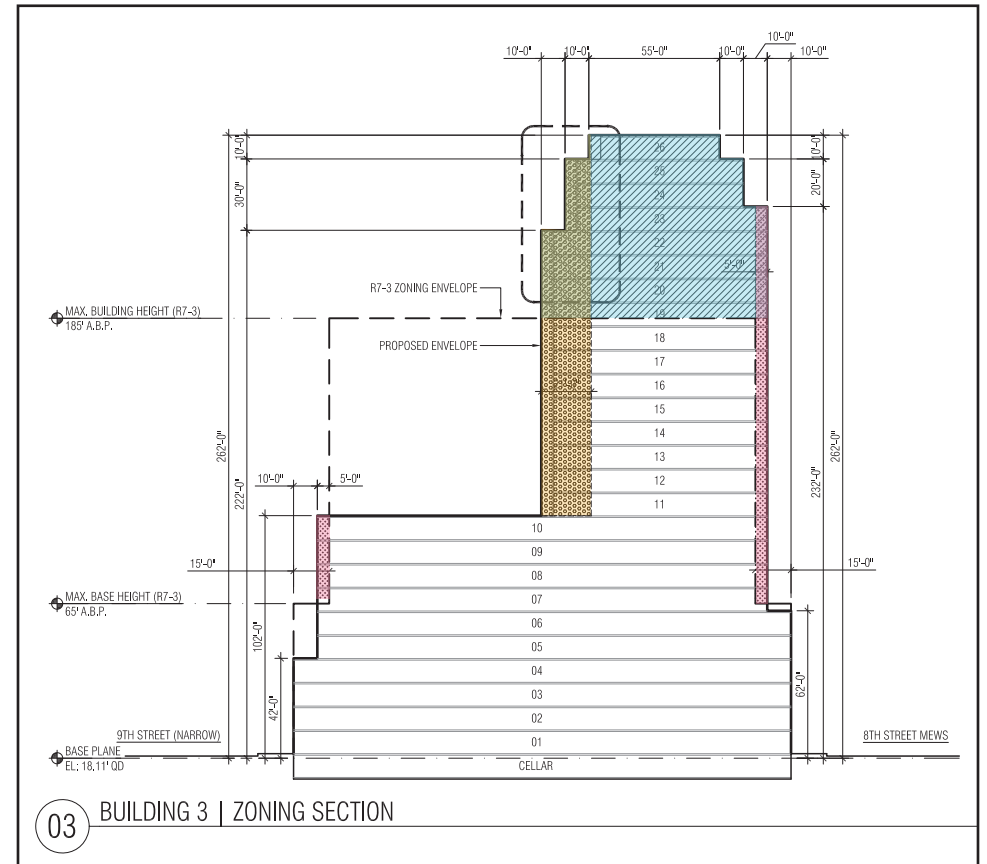
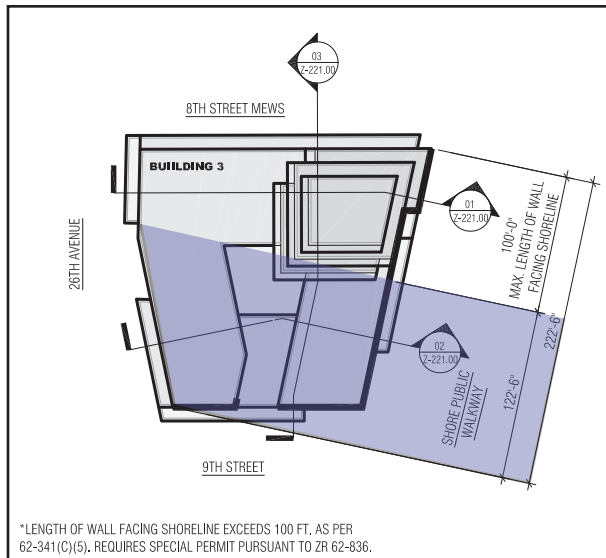
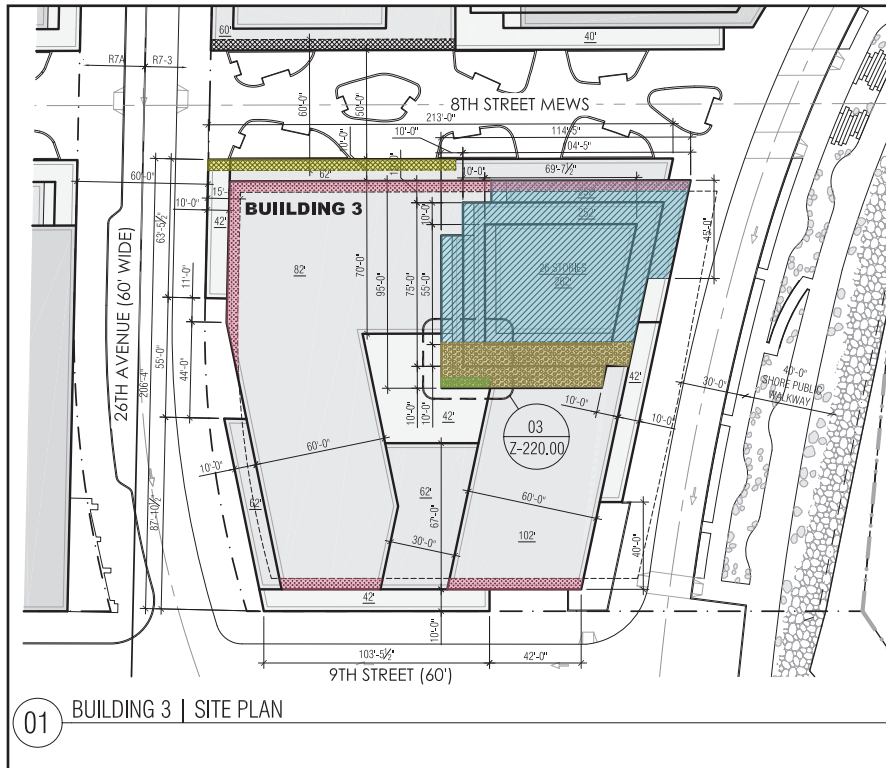
- Non-compliant minimum dimension of inner court
- Non-compliant minimum distance between buildings

Source: Studio V

Astoria Cove

Figure 4b

Requested Special Permits - Building 2



Legend

Waterfront Special Permit Waivers

- Building exceeds maximum building height
- Gross area exceeds maximum residential tower size
- Building exceeds maximum base height without providing a setback
- Length of wall exceeding maximum length of wall facing shoreline

LSGD Special Permit Waivers

- Non-compliant minimum dimension of inner court
- Non-compliant minimum distance between buildings

Source: Studio V

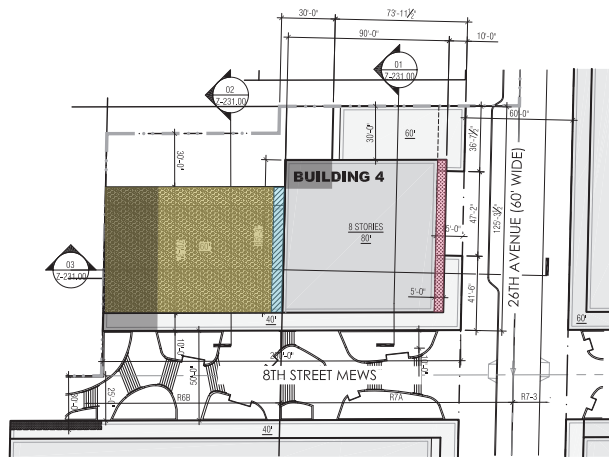
Astoria Cove

Figure 4c

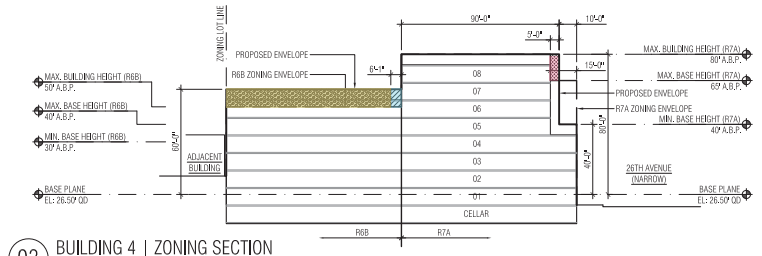
Requested Special Permits - Building 3

Requested Special Permits - Buildings 4 & 5

Building 4

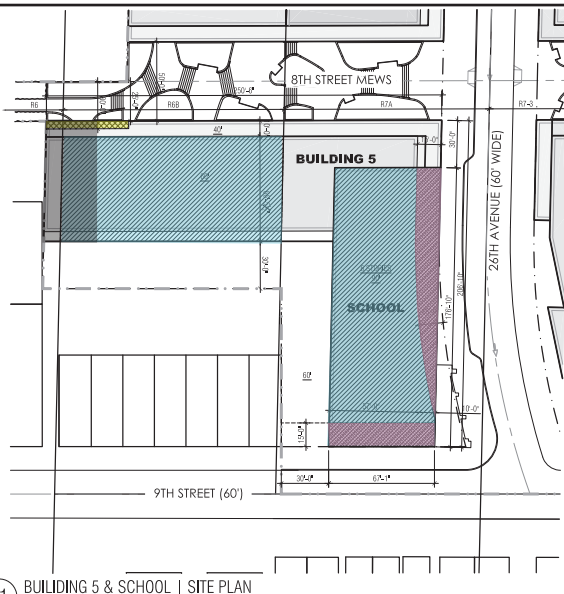


01 BUILDING 4 | SITE PLAN

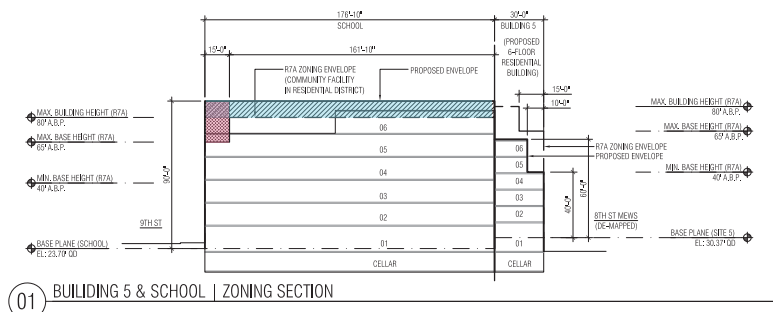


03 BUILDING 4 | ZONING SECTION

Building 5



01 BUILDING 5 & SCHOOL | SITE PLAN








01 BUILDING 5 & SCHOOL | ZONING SECTION


Source: Studio V

Legend

Waterfront Special Permit Waivers

-  Building exceeds maximum building height
-  Gross area exceeds maximum residential tower size
-  Building exceeds maximum base height without providing a setback
-  Length of wall exceeding maximum length of wall facing shoreline
-  Building exceeding minimum rear yard area

LSGD Special Permit Waivers

-  Non-compliant minimum dimension of inner court
-  Non-compliant minimum distance between buildings

(proposed to be mapped). These outfalls would be permitted by the New York State Department of Environmental Conservation (NYSDEC) and the United States Army Corp of Engineers (USACE), and the stormwater generated on-site would be treated for water quality prior to discharge. NYSDEC approval will also be required because part of the proposed waterfront esplanade falls within NYSDEC-regulated adjacent area. Additionally, a SPDES permit from the NYSDEC will be required for stormwater discharges during the construction period because construction on the project site involves more than one acre. These actions are subject to environmental review and will be conducted through a coordinated review with CPC, the lead agency.

In addition, the Applicant anticipates entering into a School Option Agreement with the New York City School Construction Authority (SCA), which would detail the terms under which the SCA can elect to take title to the school proposed as part of the project.

The Proposed Action would also place (E) designations on the project site to avoid significant adverse hazardous materials, air quality, and noise impacts. An (E) designation is a mechanism that ensures no significant adverse impacts would result from a proposed project because of procedures that would be undertaken as part of the development of the rezone site.

A Restrictive Declaration would be recorded at the time all land use-related actions required to authorize the proposed project's development are approved. The Restrictive Declaration would, among other things:

- Require development in substantial accordance with the approved plans, which establish an envelope within which the buildings must be construction, including limitations on height, bulk, building envelopes, and floor area;
- Require that the proposed project's development program be within the scope of the development scenario presented herein;
- Provide for the implementation of "Project Components Related to the Environment" (PCREs); and
- Provide for mitigation measures identified in the EIS, substantially consistent with the EIS.

The Applicant also intends to seek New York City Housing Preservation and Development (HPD) approval of an Affordable Housing Plan pursuant to the Inclusionary Housing Program and potential financing from City and/or State agencies including HPD, the New York City Housing Development Corporation (HDC), and/or NYS Homes and Community Renewal (HCR) for affordable housing construction.

Project Purpose and Need

The Proposed Action, according to the Applicant, is intended to provide opportunities for new residential and commercial development, as well as enhancement and upgrade of the waterfront area to provide waterfront access. The Applicant believes that the Proposed Action would create opportunities for new housing development, including affordable housing, on underutilized and vacant land formerly used for manufacturing, where there is no longer a concentration of industrial activity and where strong demand for housing exists. The proposed zoning map change on the project site is required to permit construction of the proposed project. This would allow the redevelopment of a former waterfront industrial site into an economically integrated mix of residential and local retail uses consistent with the planned and anticipated redevelopment of nearby waterfront sites to the east, and complementary to the existing neighborhood to the south and east. Thus, the Proposed Action would

allow the Applicant to maximize use of its property, while producing new waterfront development with a sensitive transition to the adjoining neighborhoods.

In addition, the Applicant believes that the Proposed Action would significantly advance the City's Comprehensive Waterfront Plan by facilitating the redevelopment of the area's inaccessible waterfront, and completing the street grid in this area of Astoria. As noted below, the Proposed Action would allow the Applicant to build-out the currently mapped but unbuilt segment of 8th Street north of 27th Avenue as a pedestrian walkway, as well as the unimproved and currently inaccessible segment of 26th Avenue. The Proposed Action would also allow the Applicant to establish 4th Street and develop a public access easement along the waterfront. Combined, these street network changes would complete the street grid and improve traffic and pedestrian flow in the area, and 8th Street north of 27th Avenue would operate as a pedestrian connection to the waterfront. Thus, the Proposed Action would allow for the creation of physical and visual access to the waterfront, including a publicly accessible waterfront esplanade with a possible linkage to the existing publicly accessible waterfront plaza at Shore Towers Condominiums to the east.

Finally, the proposed LSGD and waterfront Special Permits, including waivers of height and setback requirements, are being requested in order to redistribute floor area across the entire project site, including both the waterfront and upland parcels, thereby creating a site plan and building layout and design superior to what would be allowed as-of-right under the proposed zoning districts. The Applicant believes that the proposed modification of waterfront access requirements would serve to facilitate an improved open space plan compared to what could be developed as-of-right.

Reasonable Worst-Case Development Scenario (RWCDs)

In order to assess the potential effects of the Proposed Action, a reasonable worst-case development scenario (RWCDs) for both the future without the Proposed Action (No-Action) and the future with the Proposed Action (With-Action) conditions will be analyzed for an analysis year, or Build Year, of 2023. The future With-Action scenario identifies the amount, type and location of development that is expected to occur by the end of 2023 as a result of the Proposed Action. The future without the action (No-Action) scenario identifies similar development projections for 2023 absent the Proposed Action. The effect of the Proposed Action would be the incremental change in conditions between the No-Action and With-Action scenarios.

Future without the Proposed Action (No-Action Condition)

In the future without the Proposed Action, the project site would not be rezoned. It is expected that Applicant would retain and fully occupy the existing light industrial and warehousing uses would remain on the project site. These consist of approximately 194,700 sf of warehouse and storage space, and an estimated 100 accessory parking spaces. Absent the Proposed Action, the upland portions of the project site, which are currently zoned R6, would be redeveloped by the Applicant on an as-of-right basis. These upland parcels are estimated to accommodate approximately 166 residential units in the No-Action condition.² Pursuant to current zoning, approximately 83 accessory parking spaces would be required to be provided for the as-of-right residential development. In conjunction with this as-of-right residential

² Based on the following assumptions: lot area of approximately 65,237 sf, a maximum allowable FAR of 2.43, a 5% increase to estimate gsf, and an assumption of 1,000 gsf per unit.

development, the portions of the unbuilt segment of 8th Street to the south of 26th Avenue and/or portions the unimproved segment of 26th Avenue, would be built-out in order to satisfy New York City Department of Buildings (DOB) requirements regarding street frontage.

Future with the Proposed Action (With-Action Condition)

The development program and building design for the Applicant's proposed project, as described below, would represent the reasonable worst case development scenario for environmental analysis purposes, as it maximizes the site's allowable floor area ratio (FAR) pursuant to the proposed new zoning and related actions.

Description of the Proposed Project

The Applicant is requesting several actions to facilitate a proposal by the Applicant to redevelop an approximately 8.7-acre site in the Astoria neighborhood of Queens Community District 1. The project site comprises a total of approximately 377,726 square feet (sf) of lot area. The project site consists of approximately 292,155 sf along the waterfront (Block 907, Lots 1 & 8, and Block 906, Lots 1 & 5) and approximately 85,571 sf of upland area (Block 908, Lot 12 and Block 909, Lot 35) located along 26th Avenue between 4th Street and 9th Street (see Figure 1).

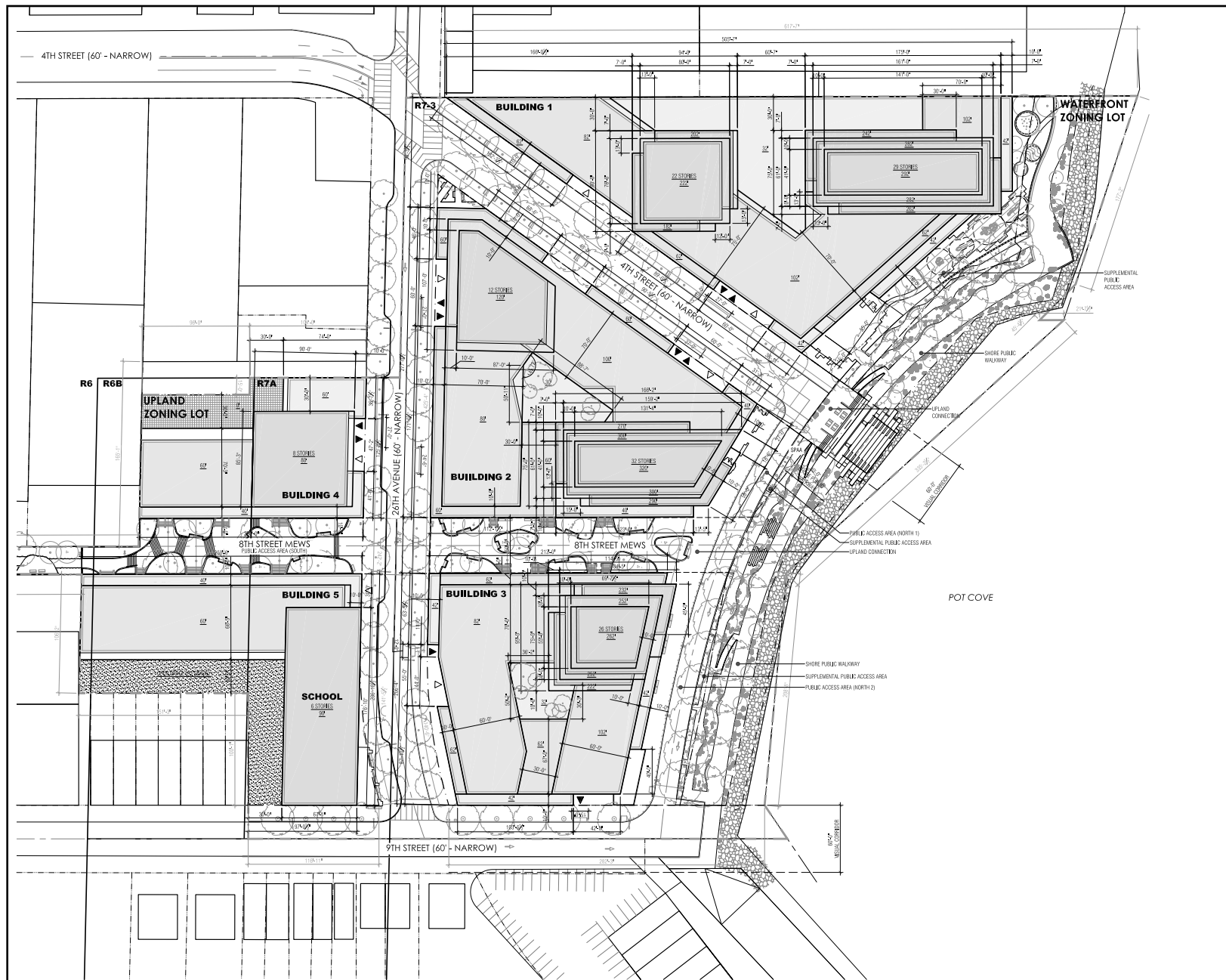
The Proposed Action would facilitate a proposal by the Applicant to construct a new mixed-use, predominantly residential, development on the approximately 377,726 sf project site (the "proposed project"). The proposed project would include the following components:

- Up to approximately 1,689,416 gross square feet (gsf) of residential floor area, comprised of a total of approximately 1,689 dwelling units, of which 295 units would be affordable.
- Approximately 109,470 gsf of local retail space, including an approximately 25,000 gsf supermarket.
- A site for an elementary school with approximately 456-seats (K-5).
- Approximately 900 accessory parking spaces.
- Approximately 83,846 sf of publicly accessible open space.

The 1,689 dwelling units are expected to include a mix of rental and condominium units. The proposed project is expected to be completed by 2023.

In conjunction with the proposed project, the mapped but unbuilt portion of 8th Street between 27th Avenue and the waterfront would be demapped and built out to provide pedestrian public access to the waterfront. (the "8th Street Mews") In addition, the currently unimproved and inaccessible portion of 26th Avenue would also be built out in conjunction with the proposed project, thereby providing access to 9th Street and improving traffic circulation in the area. The Applicant is also proposing to establish 4th Street from 26th Avenue to the waterfront esplanade to provide public access to the proposed project and the waterfront (see Figure 5).

Figure 5 provides preliminary plans for the project site that are consistent with the ULURP application. As shown in these preliminary plan, the proposed project would be accessible via entrances/exits on the north and south side of 26th Avenue, the west side of 9th Street, and the east and west side of 4th Street. As also shown in Figure 5, the proposed project would be comprised of five buildings, three located along the waterfront north of 26th Avenue, and two on the upland parcels south of 26th Avenue.



For Illustrative Purposes Only

Astoria Cove

Figure 5
Preliminary Site Plan

Local retail would be located along all vehicular streets within the project site and would include an approximately 25,000 gsf supermarket along 26th Avenue in Building 2.

In addition, the proposed project as currently anticipated include the provision of a site for a public school in the building proposed for upland Block 908, Lot 12 (Building 5). As currently planned, the proposed school would accommodate approximately 456 elementary (K-5) seats and an approximately 4,000-sf (0.09-acre) private open space to be utilized for school-related activities.

The proposed project would include approximately 83,846 sf (1.92 acres) of publicly accessible open space which would include a waterfront esplanade that would run along the entire length of the project site, providing multi-layered active and passive recreation space. The waterfront esplanade would also be open to vehicular traffic via the proposed public access easement (see Figure 5). The proposed project would also improve the portion of 8th Street on the project site as a landscaped pedestrian walkway which would provide access from 27th Avenue to the waterfront, while also serving as a visual corridor.

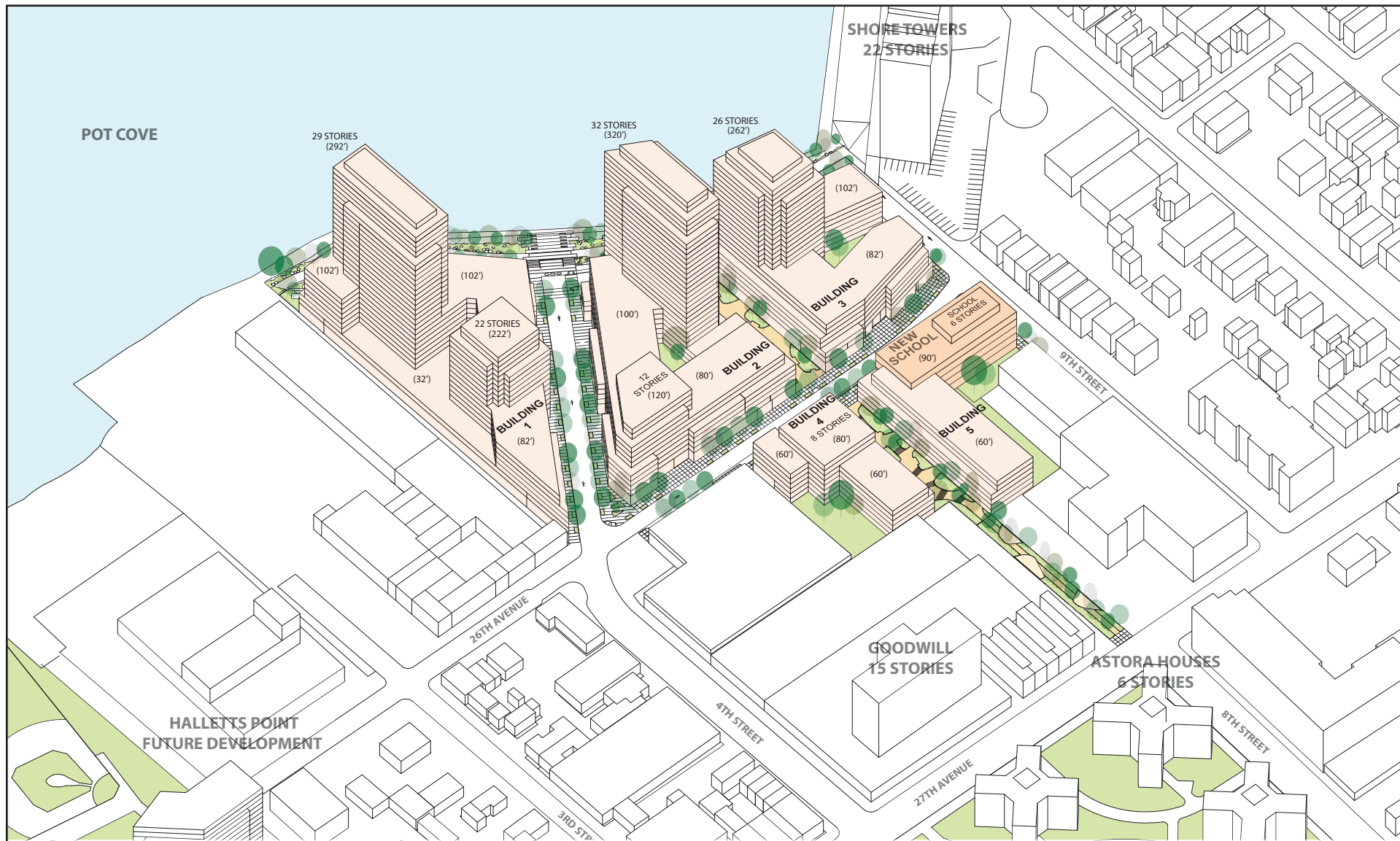
Figure 6 provides preliminary massing diagrams that are consistent with the ULURP application. As illustrated in the figure, the buildings comprising the proposed project will range in height from 80 feet on the upland parcels, to a maximum of 320 feet on the waterfront. The buildings located along the waterfront (Buildings 1, 2, and 3) would have base heights between 40 and 102 feet that would be topped with towers ranging in height from 120 to 320 feet (see Figure 6). The buildings located on the upland parcels (Buildings 4 and 5) would have base heights between 40 and 90 feet; Building 4 would have a maximum height of 80 feet, and Building 5 would have a maximum height of 90 feet. Townhouses that would be located within the bases of Building 2, 3, 4, and 5 along 8th Street and 9th Street.

As there are no subway stations in the immediate vicinity of the project site, it is anticipated that the proposed project would provide shuttle service for residents during the weekday AM and PM peak hours to and from the 30th Avenue station serving the N and Q lines. Based on the anticipated demand generated by the proposed project, it is assumed three shuttles with a 40-passenger capacity would make up to four runs each per hour during the weekday commuter peak hours, depending on ridership demand.

Parking for the proposed project would be located on both the upland and waterfront parcels. The three waterfront buildings would include below- and above-grade parking, and the upland buildings would include one continuous below-grade parking garage.

Reasonable Worst-Case Development Scenario for Analysis Purposes

As summarized in Table 1, compared to future conditions without the Proposed Action, the RWCDs anticipates that the Proposed Action would result in a net increase of 1,523 dwelling units (approximately 1,522,964 gsf), 109,470 gsf of retail space, a 456-seat elementary school, and 817 accessory parking spaces, as well as a reduction of approximately 194,700 sf of warehouse/industrial space. This net increment would represent the basis for environmental analyses in the EIS. As noted above, at this time it is anticipated that the residential component of the proposed project would include 295 affordable units, and this estimate will be used for analysis purposes where applicable.



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TABLE 1
Net Change in Land Uses as a Result of the Proposed Project

Use	No-Action	With-Action	Net Increment
Residential	166,452 gsf 166 DU	<u>1,689,416</u> gsf <u>1,689</u> DU	<u>1,522,964</u> gsf <u>1,523</u> DU
Retail - Local	--	<u>109,470</u> gsf	<u>109,470</u> gsf
Warehouse/Storage	194,700 gsf	--	-194,700 gsf
Public School - Elementary	--	456 seats	456 seats
Parking Spaces - Accessory	83	<u>900</u>	<u>817</u>
Open Space (publicly accessible)	--	<u>83,846</u> sf	<u>83,846</u> sf

D. PROPOSED SCOPE OF WORK FOR THE EIS

As the RWCDs associated with the Proposed Action would affect various areas of environmental concern and was found to have the potential for significant adverse impacts, pursuant to the EAS and Positive Declaration, an Environmental Impact Statement (EIS) pursuant to CEQR will be prepared for the Proposed Action. The EIS will analyze the Proposed Action for all technical areas of concern.

The EIS will be prepared in conformance with all applicable laws and regulations, including 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 of Procedure for CEQR, found at Title 62, Chapter 5 of the Rules of the City of New York. The EIS will follow the guidance of the *CEQR Technical Manual*, dated June 2012, and will contain:

- A description of the Proposed Action and its environmental setting;
- A statement of the environmental impacts of the Proposed Action, including its short- and long-term effects and typical associated environmental effects;
- An identification of any adverse environmental effects that cannot be avoided if the Proposed Action is implemented;
- A discussion of reasonable alternatives to the Proposed Action;
- An identification of irreversible and irretrievable commitments of resources that would be involved in the Proposed Action 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 outlined in the *CEQR Technical Manual* and detailed in the EAS document, the following environmental areas would not require detailed analysis in the EIS: solid waste and sanitation services.

The specific areas to be included in the EIS, as well as their respective tasks, are described below.

TASK 1. PROJECT DESCRIPTION

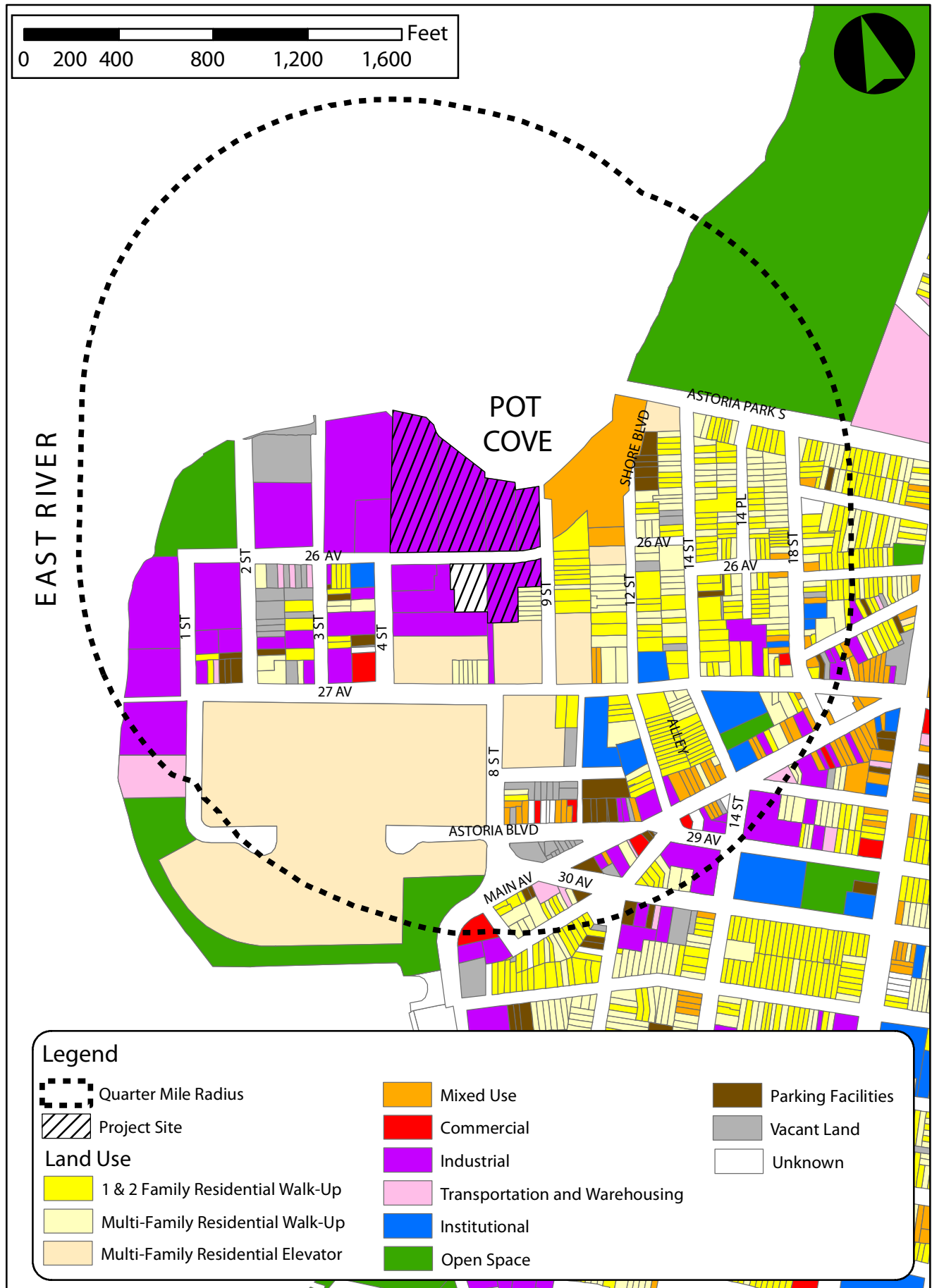
The first chapter of the EIS introduces the reader to the Proposed Action and sets the context in which to assess impacts. The chapter contains a description of the Proposed Action: its location; the background and/or history of the project; a statement of the purpose and need; key planning considerations that have shaped the current proposal; a detailed description of the Proposed Action; and discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the Proposed Action and its impact, and gives the public and decision-makers a base from which to evaluate the Proposed Action.

In addition, the project description chapter will present the planning background and rationale for the actions being proposed and summarize the reasonable worst-case development scenario for analysis in the EIS. The section on approval procedures will explain the Uniform Land Use Review Procedure (ULURP) process, its timing, and hearings before the Community Board, the Queens Borough President's Office, the New York City Planning Commission (CPC), and the New York City Council. The role of the EIS as a full-disclosure document to aid in decision-making will be identified and its relationship to ULURP and the public hearings described.

TASK 2. LAND USE, ZONING, AND PUBLIC POLICY

This chapter will analyze the potential impacts of the Proposed Action on land use, zoning, and public policy. The land use, zoning and public policy analysis will be consistent with the methodologies presented in the *CEQR Technical Manual*. In completing the following subtasks, the land use study area will consist of the project site, where the land use impacts will be straightforward and direct (reflecting the proposed project), and the neighboring areas where indirect impacts may be felt. For the purpose of environmental analysis, the study area will extend approximately a ¼-mile from the borders of the project site, as illustrated in Figure 7. Subtasks will include the following:

- Provide a brief development history of the project site and surrounding study area.
- Provide a description and map of existing land uses and zoning in the area affected by the Proposed Action and the surrounding study area. Other public policies that apply to the study area will also be described, including PlaNYC and the City's Waterfront Revitalization Program. Recent development trends in the land use study area will also be noted.
- Based on field surveys and prior studies, identify, describe, and graphically portray predominant land use patterns for the balance of the land use study area. Based on consultations with New York City Department of City Planning and other public or private agencies and local real estate brokers, describe recent land use trends in the study area and major factors influencing those land use trends.
- Prepare a list of future development projects in the study area that would be expected to be constructed by the 2023 Build 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 area in coordination with NYCDCP. Based on these planned projects and initiatives, assess future conditions in the land use and zoning study area in the future without the Proposed Action (No-Action condition).
- Describe proposed zoning changes, and the potential land use changes based on the Proposed Action's RWCDs (With-Action condition).



- Assess effects of the Proposed Action on land use and land use trends, public policy, and zoning in the study area. Discuss the Proposed Action's potential effects related to issues of compatibility with surrounding land use, consistency with zoning and other public policy (including PlaNYC), the effect of the loss of manufacturing zoning, and the effect of the proposed project on ongoing development trends and conditions in the area.
- The project is located in the New York City Coastal Zone, and therefore, it will be assessed for its consistency with the city's Waterfront Revitalization Program (WRP). The analysis will assess, for those relevant policies identified on the project's Consistency Assessment Form (provided as Appendix A to the EAS), the consistency of the Proposed Action and resultant proposed project with the WRP policies.

TASK 3. SOCIOECONOMIC CONDITIONS

This chapter will examine the effects of the Proposed Action on socioeconomic conditions in the study area, including population characteristics, increase in economic activity, and the potential displacement of businesses and employment. Screening analyses will be conducted pursuant to the *CEQR Technical Manual* methodology. The analysis will present sufficient information regarding the effects of the Proposed Action to make a preliminary assessment either to rule out the possibility of significant impacts or to establish that more detailed analysis is required to make a determination as to impacts. The preliminary assessment will examine five areas of concern including (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement; and (5) adverse effects on specific industries. For each area of concern, if it has been determined that a socioeconomic impact is likely or cannot be ruled out based on the preliminary screening assessment, then a detailed analysis will be conducted.

As there are no residential uses and few business establishments and employees currently located on the project site, detailed analyses for direct business displacement and direct residential displacement are not warranted. The existing businesses at the project site will be identified, including a description of the type of businesses, and estimate of the number of employees.

According to the *CEQR Technical Manual*, projects that are small to moderate in size would typically not have significant socioeconomic effects unless they are likely to generate socioeconomic conditions that are very different from existing conditions in the area. Residential development of 200 units or less or commercial development of 200,000 square feet or less would typically not result in significant socioeconomic impacts. For projects exceeding these thresholds, the *CEQR Technical Manual* indicates that preliminary assessments of indirect residential displacement and indirect business displacement are appropriate.

The proposed project would represent a sizeable increase in the residential population in the area. According to the *CEQR Technical Manual*, a residential development of 200 dwelling units or more might result in significant socioeconomic impacts. As the proposed project would create a net total of approximately 1,523 dwelling units (including 295 affordable units), it could result in significant socioeconomic impacts, particularly indirect residential displacement. Therefore, a detailed analysis of the socioeconomic effects of indirect residential displacement will be provided in the EIS.

The proposed project would represent a moderate increase in the retail inventory of the surrounding area. The proposed mixed-use development would include a total of approximately 109,470 square feet of local retail space on the project site (including an approximately 25,000 sf supermarket). As such, it

does not exceed the CEQR threshold and would therefore be unlikely to result in significant adverse socioeconomic impacts. Further, the local retail anticipated under the Proposed Action would not significantly affect business conditions in any specific industry or any category of businesses, nor would it indirectly reduce employment or impair the economic viability of any specific industry or category of business, as such concerns are contemplated by the *CEQR Technical Manual*. Therefore, as discussed in the EAS, further analysis of indirect business displacement and adverse effects on specific industries is not warranted for the EIS.

The socioeconomic analysis in the EIS will therefore focus primarily on the residential component of the proposed project along with, a minimum, a preliminary assessment for direct business displacement. Subtasks include:

Direct Residential and Business Displacement

The EIS will disclose that there is no direct displacement of residences and no additional analysis is required.

For direct business displacement, the type and extent of businesses and workers to be directly displaced by the proposed project will be disclosed. According to the *CEQR Technical Manual*, if a project would directly displace more than 100 employees, a preliminary assessment of direct business displacement is appropriate. The preliminary assessment will determine (1) whether the businesses to be displaced provide products or services essential to the local economy that would no longer be available in its “trade area” to local residents or businesses due to the difficulty of either relocating the businesses or establishing new, comparable businesses; and (2) whether a category of businesses is the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it. It is not anticipated that a detailed direct business displacement analysis will be warranted; however, if found to be necessary, it will be conducted in accordance with the *CEQR Technical Manual*.

Indirect Residential Displacement

The indirect residential displacement analysis will use the most recent available U.S. Census data, New York City Department of Finance’s Real Property Assessment Data (RPAD) database, as well as current real estate market data, to present demographic and residential market trends and conditions for a ½-mile study area. However, as a result of data collection problems incurred by the U.S. Census Bureau, 2010 Census data may present information that is not fully representative of the ½-mile study area. As a result, information about existing conditions in the study area will be supplemented by conversations with real estate brokers and community leaders. The presentation of study area characteristics will include population, housing value and rent, estimates of the number of housing units not subject to rent protection, and median household income. Following *CEQR Technical Manual* guidelines, the preliminary assessment will perform the following step-by-step evaluation:

- **Step 1:** Determine if the proposed project would add substantial new population with different income as compared with the income of the study area population. If the expected average incomes of the new population would be similar to the average incomes of the study area populations, no further analysis is necessary. If the expected average incomes of the new population would exceed the average incomes of the study area populations, then Step 2 of the analysis will be conducted.
- **Step 2:** Determine if the proposed project population is large enough to affect real estate market conditions in the study area. If the population increase is greater than 5 percent in the study area as

a whole or within any identified subareas, then Step 3 will be conducted. If the population increase is greater than 10 percent in the study areas as a whole or within any identified subarea, then a detailed analysis is required.

- **Step 3:** Consider whether the study area has already experienced a readily observable trend toward increasing rents and the likely effect of the action on such trends. This evaluation will consider the following:
 - a. If the vast majority of the study area has already experienced a readily observable trend toward increasing rents and new market development, further analysis is not necessary. However, if such trends could be considered inconsistent and not sustained, a detailed analysis may be warranted.
 - b. If no such trend exists either within or near the study area, the action could be expected to have a stabilizing effect on the housing market within the study area by allowing limited new housing opportunities and investment, and no further analysis is necessary.
 - c. If those trends do exist near to or within smaller portions of the study area, the action could have the potential to accelerate an existing trend. In this circumstance, a detailed analysis will be conducted.

If the preliminary assessment finds that the proposed project would introduce a trend or accelerate an existing trend of changing socioeconomic conditions that may have the potential to displace a residential population and substantially change the socioeconomic character of the neighborhood, a detailed analysis will be conducted. The detailed analysis would utilize more in-depth demographic analysis and field survey to characterize existing conditions of residents and housing, identify populations at risk of displacement, assess current and future socioeconomic trends that may affect these populations, and examine the effects of the proposed action on prevailing socioeconomic trends and, thus, impacts on the identified population at risk.

TASK 4. COMMUNITY FACILITIES

The demand for community facilities and services is directly related to the type and size of the new population generated by development resulting from the Proposed Action. The Proposed Action would add a net increment of approximately 1,523 new residential units to the area (compared to No-Action conditions), of which 295 units would be affordable. According to the *CEQR Technical Manual*, the number and type of new residential units to be developed as a result of the Proposed Action would trigger detailed analyses of potential impacts on public schools, libraries, and publicly funded day care centers. The Proposed Action would also increase the capacity in the study area by adding an approximately 456-seat elementary school as part of the proposed project. According to the *CEQR Technical Manual*, a detailed analysis of police and fire services and health care facilities is required if a Proposed Action would (a) introduce a sizeable new neighborhood where one has not previously existed, or (b) would displace or alter a hospital or public health clinic, fire protection services facility, or police station. As the Proposed Action would not result in any of the above, no significant adverse impacts would be expected to occur, and a detailed analysis of police/fire services and health care facilities is not required.

Public Schools

- According to the *CEQR Technical Manual*, the primary study area for the analysis of elementary and intermediate schools should be the school districts' "sub-district" in which the project is

located. The project site is located within sub-district 3 of Community School District 30, which will constitute the primary study area. The Proposed Action also triggers an analysis of high schools, which are assessed on a borough-wide basis (primary study area).

- Identify and locate the public elementary and intermediate schools serving the primary study area defined above. Existing capacity, enrollment, and utilization data for all public elementary and intermediate schools within sub-district 3 of Community School District 30 will be provided for the current or most recent school year, noting any specific shortages of school capacity. In accordance with *CEQR Technical Manual* guidelines, similar data will be provided for high schools within the study area.
- Identify conditions that would exist in the future without the Proposed Action (No-Action condition), taking into consideration projected changes in future enrollment, including those associated with other developments in the vicinity of the project site, and plans to alter school capacity either through administrative actions on the part of the New York City Department of Education or as a result of the construction of new school space. Planned new capacity projects from the DOE's Five Year Capital Plan will not be included in the quantitative analysis unless the projects have commenced site preparation and/or construction. They may, however, be included in a qualitative discussion. As per CEQR guidelines, the No-Action condition RWCDs for a borough high school analysis will be obtained from the SCA's Projected New Housing Starts as used in the 2011-2021 Enrollment Projections. The Queens school districts will be aggregated into borough totals, which will be used for the No-Action borough high school analysis.
- Analyze future conditions with the Proposed Action, adding students likely to be generated by the proposed project to the projections for the future No-Action condition, as well as the additional 456 elementary seats expected to be developed as part of the proposed project. Project impacts will be assessed based on the difference between the future With-Action projections and the future No-Action projections (at the school sub-district level for elementary and intermediate schools and at the borough level for high schools) for enrollment, capacity and utilization in 2023.
- It is a significant impact. A significant adverse impact may result, warranting consideration of mitigation, if the Proposed Action would result in: (1) a collective utilization rate of the elementary and/or intermediate schools in the sub-district study area that is equal to or greater than 100 percent in the With-Action Condition (a determination of impact significance for high schools is conducted at the borough level); and (2) an increase of five percent or more in the collective utilization rate between the No-Action and With-Action conditions.

Libraries

- Identify the local public library branch(es) serving the area within approximately three-quarters of a mile from the project site, which is the distance that one might be expected to travel for such services. Show the identified local public library branch(es) within a ¾-mile radius on a map.
- Describe existing population served by the branch(es), using information gathered for the socioeconomic conditions assessment, information services provided by branch(es), circulation, holdings, level of utilization, and other relevant existing conditions. Details on library operations will be based on publicly available information and/or consultation with library officials. If applicable, holdings per resident may be estimated to provide a quantitative gauge of available resources in the applicable branch libraries in order to form a baseline for the analysis.

- For No-Action conditions, projections of population change in the area and information on any planned changes in library services or facilities will be described and the effects of these changes on library services will be assessed. Using the information gathered for the existing conditions, holdings per resident in the No-Build condition will be estimated.
- Determine the effects of the addition of the population resulting from the Proposed Action on the library's ability to provide information services to its users. Holdings per resident in the With-Action Scenario will be estimated and compared to the No-Action holdings estimate.
- Determine whether the Proposed Action would result in a significant impact. According to the *CEQR Technical Manual*, if the Proposed Action would increase the ¼-mile study area population by five percent or more over No-Build levels, and it is determined, in consultation with the appropriate library agency that this increase would impair the delivery of library services in the study area, a significant impact may occur, warranting consideration of mitigation.

Child Care Centers

- Identify existing public day care and Head Start facilities within approximately 1.5 miles of the project site. Describe each facility in terms of its location, ages served, capacity, and number of available slots in consultation with the Administration for Children's Services (ACS).
- For No-Action conditions, information will be obtained on any changes planned for day care programs or facilities in the area, including closing or expansion of existing facilities and establishment of new facilities. Any expected increase in the population of children under 6 within the eligibility income limitations will be discussed as potential additional demand; and the potential effect of any population increases on demand for day care services in the study area will be assessed. The available capacity or resulting deficiency in slots and the utilization rate for the study area will be calculated for the No-Build condition.
- The potential effects of the additional eligible children resulting from the proposed project will be assessed by comparing the estimated net demand over capacity to the net demand over capacity estimated in the No-Action analysis.
- Determine whether the Proposed Action would result in a significant impact. According to the *CEQR Technical Manual*, a significant adverse impact may result, warranting consideration of mitigation, if the Proposed Action would result in: (a) a collective utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent in the With-Action condition; and (b) an increase of five percent or more in the collective utilization rate of the child care/Head Start centers in the study area between the No-Build and With-Action scenarios.

TASK 5. OPEN SPACE

The Proposed Action would add up to approximately 1,523 net additional residential units (compared to No-Action conditions), and would therefore increase the demands for existing local parks and recreational facilities. As discussed in the Project Description, the proposed project would provide approximately 83,846 sf of publicly accessible open space. The Proposed Action would generate more than the CEQR threshold of 200 residents, but is not expected to exceed the CEQR threshold of 500 net additional workers. Therefore, a detailed open space analysis is warranted for the residential population only, which would be included in the EIS pursuant to the following sub-tasks.

- As the Proposed Action would primarily introduce new residents to the area (the number of new workers would not exceed the threshold for worker analysis), the analysis will focus on both active and passive open space resources.
- Using 2010 Census data, calculate the total residential population of the open space study area. As per CEQR guidelines and as shown in Figure 8, the open space study area is defined as the area within a ½-mile boundary from the project site, adjusted to include all census tracts with at least 50 percent of their land area within the ½-mile radius.
- Inventory existing active and passive open spaces within the open space study area. The condition and usage of existing facilities will be described based on the inventory and field visits. Jurisdiction, features, user groups, quality/condition, factors affecting usage, hours of operation, and access will be included in the description of facilities. Acreage of these facilities will be determined and total study area acreage calculated. The percentage of active and passive open space will also be calculated. A map showing the locations of open spaces keyed to the inventory will be provided.
- Based on the inventory of facilities and residential study area populations, open space ratios will be calculated for the residential population in the study area, and compared to City guidelines to assess adequacy. As per the *CEQR Technical Manual*, open space ratios are expressed as the amount of open space acreage per 1,000 user population, and will be calculated for active and passive open space, as well as the ratio for the aggregate open space.
- Assess expected changes in future levels of open space supply and demand in the 2023 analysis year, 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. Open space ratios will be developed for future No-Action conditions and compared with existing ratios to determine changes in future levels of adequacy.
- Assess the effects on open space supply and demand resulting from increased residential populations added by the Proposed Action. Any new accessory open space facilities proposed as part of the proposed project would also be taken into account. The assessment of the Proposed Action's impacts will be based on a comparison of open space ratios for the future No-Action versus future With-Action conditions. In addition to the quantitative analysis, qualitative analysis will be performed to determine if the changes resulting from the Proposed Action constitute a substantial change (positive or negative) or an adverse effect to open space conditions. Accessory open space to be provided as part of the proposed project would be included in the qualitative assessment.
- If the results of the impact analysis identify a potential for a significant impact, discuss potential mitigation measures.

TASK 6. SHADOWS

This chapter will examine the Proposed Action'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 existing structures, greater than 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. The Proposed Action would result in buildings of greater than 50 feet, with shadows cast on the East River, which is a sunlight sensitive natural resource, and potentially Hellgate Field, located 800 feet to the west of the project site. Therefore, a preliminary assessment will be conducted, which will be coordinated with the EIS analysis of open space and natural resources. The preliminary screening assessment will include the following tasks:

Open Space Study Area (Census Tracts Within the 1/2-Mile Radius)



Legend

Half Mile Radius

Open Space Study Area

Project Site

Proposed Rezoning Area

Census Tracts

Open Space

- Develop a base map illustrating the project site in relation to publicly-accessible open spaces, historic resources with sunlight-dependent features, and natural features in the area.
- Perform a preliminary screening assessment to ascertain whether shadows from the proposed project could reach any sunlight-sensitive resources at any time of year.

If the preliminary screening assessment cannot eliminate the possibility of new shadows reaching sunlight-sensitive resources, a detailed analysis will be performed. This will include the following tasks:

- Develop a three-dimensional computer model of the elements of the base map developed in the preliminary assessment.
- Develop a “worst-case” three-dimensional representation of the proposed project.
- Develop three-dimensional representations of the No-Action condition at the project site.
- Determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Action on four representative days of the year.
- Document the analysis with graphics comparing shadows resulting from the No-Action condition with shadows resulting from the Proposed Action, with incremental shadow highlighted in a contrasting color.
- Provide a summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource.
- Assess the significance of any shadow impacts on sunlight-sensitive resources.

TASK 7. HISTORIC AND CULTURAL RESOURCES

A historic resources assessment is required if there is the potential to affect either archaeological or architectural resources. According to *CEQR Technical Manual* guidelines, impacts on historic architectural resources are considered on those sites directly affected by the Proposed Action and in the area surrounding identified development sites. As discussed in the EAS, the New York City Landmarks Preservation Commission (LPC) has determined that the project site does not contain any designated historic architectural resources, and there are no designated architectural resources within an approximate 400-foot radius of the project site; however, an assessment of architectural resources will be conducted to verify that there are no resources that could meet the eligibility criteria that could be affected by the Proposed Action.

Because the proposed project would result in new in-ground disturbance, the Proposed Action has the potential to result in impacts to archaeological resources. *Per CEQR Technical Manual* guidelines, archaeological resources are considered only in those areas where new in-ground disturbance is likely to occur, which are limited to the lots comprising the project site. A LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 19th Century and Native American occupation for portions of the project site (Block 906, Lot 1; Block 908, Lot 12; and Block 909, Lot 35). Accordingly, those specific lots warrant further study and assessment for their potential sensitivity to yield remains of archaeological and historical significance. As such, an archaeological documentary study (Phase IA) will be prepared for the lots identified by LPC to clarify these initial findings and provide the threshold for the next level of review.

Archaeology

In coordination with the research conducted for the land use and hazardous materials tasks, this chapter of the EIS will include an overview of the study area's history and land development. This history will be detailed enough to determine whether any potential archaeological resources may be on the site, requiring further study. Subtasks will include:

- Based on City and State files, identify and map inventoried archaeological resources and/or sensitive locations.
- Determine the earliest dates of available municipal water and sewer services in the streets within the study area.
- For those lots identified by LPC or other record searches as archaeologically sensitive, prepare a Phase IA Archaeological Documentary Report. The work will document the site history, its development and uses, and the potential for the site to contain significant undisturbed archaeological features. Identify categories of resources that may be present and their potential to remain undisturbed on the site.
- Summarize the results of the Phase IA analysis in the EIS. Submit the full report to LPC for review.
- Discuss any measures required to be implemented prior to or during construction of the proposed project to avoid significant impacts, such as those outlined in a Phase 1B Work Plan, if warranted.
- Assess probable impacts of the proposed project on archaeological resources.

TASK 8. URBAN DESIGN/VISUAL RESOURCES

A preliminary analysis 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, including the following: 1) projects that permit the modification of yard, height, and setback requirements; and 2) projects that result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the Proposed Action. CEQR stipulates a detailed analysis for projects that would result in substantial alterations to the streetscape of the neighborhood by noticeably changing the scale of buildings.

The project site is currently characterized by low-density industrial uses including light industrial/warehousing uses as well as open storage areas. The area surrounding the project site includes predominantly low-density light industrial and warehousing uses, as well as residential uses to the south and east, including a high-rise (23-story) residential building to east, across 9th Street from the project site. The surrounding area also includes visual resources, with views toward the East River, the Manhattan skyline, Randall's Island, and the RFK (Triborough) Bridge. As the Proposed Action would increase the permitted density and the built floor area on the northern portion of the project site (which is currently zoned M1-1), a detailed analysis of urban design and visual resources will be provided in the EIS. The assessment will be based on *CEQR Technical Manual* methodologies, and include the following:

- Based on field visits, describe the project site and the urban design and visual resources of the surrounding area, using text and photographs as appropriate.

- In coordination with the land use task, describe the changes expected in the urban design and visual character of the study area due to planned development projects in the future without the Proposed Action (No-Action condition).
- Describe the potential changes that could occur in the urban design character of the study area as a result of the Proposed Action (With-Action condition). 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 (landmark structures, historic districts, parks, etc.).

Construction of large buildings at locations that experience high wind conditions may result in an exacerbation of wind conditions due to ‘channelization’ or ‘downwash’ effects that may affect pedestrian safety. As the Proposed Action would facilitate the construction of multiple large buildings close to one another along the East River, a pedestrian wind analysis will be prepared in accordance with *CEQR Technical Manual* guidelines.

TASK 9. NATURAL RESOURCES

The project site lies along Hell Gate – a narrow tidal strait in the East River that separates Astoria from Randall’s Island/Wards Island – and is mostly developed with shoreline protection measures (riprap). It is not anticipated that the proposed project would entail any in-water disturbance; however, new outfalls are proposed as part of the Proposed Action.

The EIS will provide an assessment of natural resources. Any existing natural resources on or in the vicinity of the project site would be identified, including any significant fish habitats in the adjacent waterway. The Proposed Action’s potential impacts on any identified natural resources would be assessed, including short-term construction effects (if any) as well as any potential long-term effects such as additional run-off, etc. A discussion of any related permits that may be required would be provided. 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 most of the upland is developed, 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 2023 analysis year based on anticipated future conditions without the Proposed Action.

- An assessment of potential impacts from the Proposed Action 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 11, "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 Action (see also Task 11, "Water and Sewer Infrastructure," below).

TASK 10. HAZARDOUS MATERIALS

The objective of the hazardous materials assessment is to determine whether the project site may have been adversely affected by current or historical uses at or adjacent to the site. The Proposed Action would result in new residential development in areas currently zoned for manufacturing, and therefore has the potential to result in significant hazardous materials impacts.

This chapter of the EIS will primarily examine the potential for impacts related to subsurface contamination, including an evaluation of the existing soil and groundwater conditions in areas that would be affected by the Proposed Action. This chapter will summarize the results of the project site's Phase I Environmental Site Assessment and any other subsequent relevant studies. It will also include discussion of any measures required to be implemented prior to or during construction of the proposed project to avoid significant impacts, such as implementation of a Remedial Action Plan and Construction Health and Safety Plan, if warranted.

TASK 11. WATER AND SEWER INFRASTRUCTURE

The *CEQR Technical Manual* outlines thresholds for analysis of a project's water demand and its generation of wastewater and stormwater. As discussed in detail in the EAS, for the Proposed Action, an analysis of water supply is not warranted as the proposed project would not result in a demand of more than 1 million gpd and the proposed project is not located in an area that experiences low water pressure. However, as a preliminary assessment of the Proposed Action's effects on wastewater and stormwater infrastructure is warranted because the Proposed Action would result in the development of more than 400 dwelling units in Queens (although it does not exceed the commercial threshold of 150,000 sf), the proposed project's total water demand will be calculated for the purposes of determining the sewage generated under With-Action conditions. Therefore, this chapter will analyze the Proposed Action's potential effects on water supply and wastewater and stormwater infrastructure. NYCDEP will be consulted during the preparation of the preliminary stormwater and wastewater infrastructure assessment.

- The existing water supply system serving the project site, surrounding area, and the City, including a discussion of existing City water mains fronting the project site. The estimated water demand from existing uses on the project site will be calculated based on the consumption rates provided in Table 13-2, "Water Usage and Sewage Generation Rates for Use in Impact Assessment," of the CEQR Technical Manual.
- The existing stormwater drainage system and surfaces (pervious or impervious) on the project site will be described, and the amount of stormwater generated on the site will be estimated using

- NYCDEP's volume calculation worksheet. Drainage areas with direct discharges and overland flow will be presented.
- The existing sewer system serving the project site will be described based on records obtained from NYCDEP. Records obtained will include sewer network maps, drainage plans, capacity information for sewer infrastructure components, and other Freedom of Information Law (FOIL) requests (such as sewer backup complaints/repair data) if warranted. The existing flows to the Bowery Bay water pollution control plant (WPCP) that serves the site will be obtained for the latest 12-month period, and the average dry weather monthly flow will be presented. Existing capacity information for pump stations, regulators, etc. downstream of the affected drainage area will be presented.
 - Any changes to the site's water consumption under No-Action conditions will be estimated using the same consumption rates applied to the existing uses. Any changes to the site's stormwater drainage system and surface area expected in the future without the Proposed Action will be described. Any changes to the sewer system that are expected to occur in the future without the Proposed Action will be described based on information provided by NYCDEP.
 - Calculate future With-Action water demand from the project site based on the rates provided in Table 13-2 of the CEQR Technical Manual.
 - Assess future stormwater generation from the proposed project and assess the Proposed Action's potential to create impacts. The project site does contain an existing 8-inch outfall within 9th Street. However, it is anticipated that this existing outfall would not be sufficient to support the new development and therefore two new outfalls are being proposed as part of the project. As such, two new outfalls are proposed for the site and would be described. The project's stormwater management plan will be assessed and incorporated into the infrastructure assessment. The assessment will also discuss any planned sustainability elements and best management practices (BMPs) that are intended to reduce stormwater runoff from the site. Changes to the site's proposed surface area (pervious or impervious) will be described, and runoff coefficients and runoff for each surface type/area will be presented. Volume and peak discharge rates of stormwater from the site will be determined based on the NYCDEP volume calculation worksheet.
 - Sanitary sewage generation for the proposed project will 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 WPCP.
 - Based on the assessment of future stormwater and wastewater generation, the change in flows and volumes to the combined sewer system and/or waterbodies due to the Proposed Action will be determined.

TASK 12. ENERGY

According to the *CEQR Technical Manual*, actions resulting in new construction would not create significant energy impacts because all new structures requiring heating and cooling are subject to the New York State Energy Conservation Code, which reflects State and City energy policy. Therefore, a detailed energy assessment is not required. For CEQR analysis purposes, energy analysis focuses on an action's consumption of energy. This chapter will include an estimate of the additional energy consumption associated with the proposed project and describe the energy systems that will supply the proposed project with electricity and/or natural gas. This will include descriptions of the capacity and existing demand of the entire systems, and of the distribution networks serving the project.

TASK 13. TRANSPORTATION

The proposed new residential, commercial, and community facility uses would generate additional vehicular travel and increase demand for parking, as well as pedestrian traffic and subway and bus riders. These new trips have the potential to affect the area's transportation systems. Therefore, the transportation studies for the EIS will include the following analyses.

Traffic

The proposed project program exceeds the minimum development density screening thresholds specified in Table 16-1 of the *CEQR Technical Manual*. Therefore, a trip generation forecast is required to determine if the project would generate 50 or more vehicle trips. Based on preliminary analyses conducted by the Applicant, the Proposed Action is expected to generate more than 50 additional vehicular trips in the weekday AM, midday, and PM peak hours. Therefore, the EIS will provide a detailed traffic analysis focusing on those peak hours and intersections where the highest concentrations of project-generated demand would occur. The EIS traffic analysis will include the following:

- Select peak hours for analysis and define a traffic study area consisting of intersections to be analyzed adjacent to the project site and along major routes leading to and from the site. Based on preliminary trip generation estimates for the proposed residential and commercial uses, the EIS will analyze weekday AM, midday, and PM peak hours. 30 intersections would be analyzed, as listed below and shown in Figure 9.

1. 26th Avenue @ 4th Street
- A. 26th Avenue @ 9th Street
2. 27th Avenue @ 4th Street
3. 27th Avenue @ 8th Street
4. 27th Avenue @ 12th Street
5. Astoria Boulevard @ 8th Street
6. Astoria Boulevard @ 18th Street
7. Astoria Boulevard @ 21st Street
8. Astoria Boulevard @ Crescent Ave
9. Astoria Boulevard @ 29th Street
10. Astoria Boulevard @ 31st Street
11. 30th Ave @ 14th Street
12. 30th Ave @ 21st Street
13. Vernon Boulevard/Main Avenue @ 8th St/Welling Court
14. 27th Avenue @ 14th Street
15. 27th Avenue @ 18th Street
16. Hoyt Avenue North @ 21st Street
17. Hoyt Avenue North @ 29th Street
18. Astoria Park South/Hoyt Avenue South @ 21st Street
19. Astoria Boulevard @ 23rd Street
20. Astoria Boulevard @ 27th Street
21. Astoria Boulevard @ 28th Street
22. Astoria Boulevard @ 30th Street
23. Hoyt Avenue North @ 31st Street



● Analyzed Locations

- 24. Hoyt Avenue South/Astoria Blvd @ 33rd Street
- 25. Hoyt Avenue North/Astoria Blvd @ 32nd Street
- 26. 27th Avenue @ 9th Street
- 27. Vernon Boulevard @ 31st Avenue
- 28. Vernon Boulevard @ Broadway
- 29. 31st Avenue @ 21st Street

- Conduct a count program for traffic analysis locations that includes a mix of automatic traffic recorder (ATR) machine counts and manual intersection turning movement counts, along with vehicle classification counts and travel time studies (speed runs) as support data for air quality and noise analyses. ATRs will provide 24-hour traffic volumes for a full week at selected arterial locations. Where applicable, available information from recent studies in the vicinity of the study area will be compiled, including data from such agencies as the New York City Department of Transportation (DOT) and the New York City Department of City Planning (DCP).
- Inventory physical data at each of the analysis intersections, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, and parking regulations. 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 traffic movement, per intersection approach, and per overall intersection. The methodology of the 2000 Highway Capacity Manual (HCS+, Version 5.5) will be used for the analysis. Allowances for any on-going construction or temporary road closures will be made.
- Based on available sources, 2010 US Census data and standard references, estimate the travel demand for the future without the Proposed Action (the No-Action condition), which will include the demand from significant development sites planned in the vicinity of the study area by the analysis year. This will include daily and hourly person trips, and a modal distribution to estimate trips by auto, taxi, and other modes. A truck trip generation forecast will also be prepared. Mitigation measures accepted for all No-Action projects and other NYCDOT initiatives will be included in the future No-Action network.
- Compute the future 2023 No-Action traffic volumes based on an approved background traffic growth rate (0.5% per year for years one through five, and 0.25% per year for subsequent years) for the study area and any significant development projects expected to be completed in the future without the Proposed Action. Incorporate any planned changes to the roadway system anticipated by the project Build Year, and determine the No-Action intersection v/c ratios, delays and levels of service.
- Based on available sources, 2010 US Census data, and standard references, develop a travel demand forecast for the traffic RWCDs for the proposed project. Assign that volume of traffic in each analysis period to the approach and departure routes likely to be used, incorporating goods deliveries and loading berth locations, and prepare traffic volume networks for the future with the Proposed Action (With-Action) condition for each analyzed peak hour. Determine the resulting v/c ratios, delays, and LOS at analyzed intersections for the 2023 With-Action condition.
- Identify the Proposed Action's potential to have significant adverse traffic impacts, in accordance with *CEQR Technical Manual* criteria.
- Discuss changes to the street network in the future With-Action condition and the location of the proposed project's parking garage entrances and loading berths.

- Conduct a supplementary No-Action and With-Action traffic impact analysis (“Alternate No-Action condition” and “Alternate With-Action condition”) without the nearby Halletts Point development and associated mitigation measures (as analyzed and presented in the 2013 Halletts Point FEIS) to identify the Proposed Action’s potential to have significant adverse traffic impacts should construction of the Halletts Point development’s proceed on a time frame differing from that analyzed and presented in the 2013 Halletts Point FEIS.
- Identify and evaluate traffic mitigation measures, as appropriate, for all significantly impacted locations in the study area for both the RWCDs With-Action condition and the Alternate With-Action condition, where practicable. This includes potential mitigation for the street system, including possible roadway modifications, new signal installations, signage, signal changes, and parking regulation changes. Development of these measures will be coordinated with DOT and other agencies as necessary. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

Parking

The EIS will provide a parking analysis to determine if the accessory parking to be provided as part of the proposed project is sufficient to accommodate the projected peak demand. Based on a preliminary parking demand analysis, while the proposed project’s accessory off-street parking garages and new on-street parking on the project site would provide sufficient parking supply to accommodate the majority of the proposed project’s parking demand, a portion of the parking demand would need to be accommodated by on-street parking spaces in the surrounding area during the peak evening and overnight hours. Therefore, the EIS will provide any analysis of on-street parking conditions during the evening hours within two study areas: a ¼-mile radius and a ½-mile radius (a 10-minute walk) of the project site. The EIS parking assessment will include the following tasks:

- Inventory the number of legal on-street parking spaces within the study areas, noting their general utilization levels during the evening/overnight period.
- Forecast parking availability in the 2023 analysis year (future without the Proposed Action) based on the CEQR-defined annual background growth rate.
- Forecast the net increase in future parking demand that would result from development of the proposed project.
- Evaluate the capacity of the supply of on-street parking to accommodate project-generated demand.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority and specified in the *CEQR Technical Manual*, detailed transit analyses are not required if the Proposed Action is expected to result in less than 200 new peak hour subway or bus transit riders, as fewer than this number of new transit trips is considered unlikely to create significant impacts on existing transit facilities.

Subway

Based on preliminary trip generation estimates, the Proposed Action is expected to exceed the *CEQR Technical Manual* threshold of more than 200 total peak hour subway trips and 200 peak hour subway trips at a single station during one or more peak hours. The 30th Avenue station on the N and Q lines

would be the closest facility to the project site and would be the assumed destination for the majority of the subway trips. Because of the distance between the project site and this station, a shuttle service is anticipated between the 30th Avenue Station and the project site. Additionally, it is assumed that approximately 20 percent of the total subway trips would utilize the 21st Street – Queensbridge station on the F line which can be accessed by the Q103 bus route. However, this would result in less than 200 peak hour subway trips at this station and therefore analysis of this station would not be warranted. As such, the majority of subway transit trips generated by the proposed project are expected to be assigned to the 30th Avenue station. Generally, detailed analyses are not provided during the weekday midday peak hours as subway system ridership is substantially lower during these time periods than during the weekday AM and PM peak periods and incremental demand from an individual project can be accommodated without noticeably affecting system operations. Therefore, the EIS will provide a detailed subway transit analysis for the weekday AM and PM peak hours only, for the 30th Avenue station. This analysis will focus on the key stairways and entrance control areas of the station, and will include the following subtasks:

- A detailed analysis of subway station stairways, entrance control areas will be conducted at the 30th Avenue subway station in the weekday AM and PM peak hours. It is anticipated that the following 30th Avenue subway station elements will be analyzed: the northwest entrance stair, the fare arrays, and the platform stairs.
- A detailed analysis of subway line-haul conditions at the East River portal stations in both Queens and Manhattan for the F, N, and C subway lines in the weekday AM and PM peak hour.
- The analysis will be conducted based on a combination of counts conducted at those control areas and/or pedestrian circulation elements that would be traversed by significant concentrations of project-generated trips and data requests to NYCT.
- Conditions and volumes in the future without the Proposed Action will be determined using background growth rates specified in the *CEQR Technical Manual* and accounting for any trips generated by No-Action developments.
- Conditions and volumes in the future with the Proposed Action will be determined based on the assignment of subway trips generated by the transportation RWCDs program (assuming a generic supermarket and fewer residential units).
- Any potential impacts on the analyzed subway stations and/or lines will be identified using CEQR impact criteria. Transit mitigation, if any, will be determined in conjunction with the lead agency and NYC Transit.

Bus

Bus routes serving the study area include the Q102, Q103 and Q18 bus routes, which travel along 27th Avenue. The Q102 and Q18 bus routes both provide access to the 30th Avenue subway station. The Q103 bus route provides access to the 21st Street – Queensbridge station on the F line. Although the Proposed Action would result in more than 200 bus trips (bus only and subway to bus transfer trips) in the AM, midday, and PM peak period, it is expected that the bus-only trips would be divided among the three bus routes serving the project site and the subway-to-bus transfer trips would be assigned to the Q103. As the number of trips on the Q103 would result in over 50 trips on a single route in a given direction in the AM and PM peak hours, a detailed analysis of the Q103 in the AM and PM peak hours would be warranted. Although the Proposed Action is projected to result in more than 50 trips on the Q103 in a given direction during the weekday midday peak period, these trips would be off-peak when the bus system has ample capacity. As such, this off-peak period will not be analyzed in the EIS. It is not

expected that any other route would experience 50 or more trips in one direction in any of the peak hours. The detailed analysis will include the following:

- The analysis will include documenting existing AM and PM peak hour Q103 route services and peak load point ridership, determining conditions in the future without the Proposed Action (No-Action), assignment of bus trips generated by the transportation RWCDs program (assuming a generic supermarket and fewer residential units), including subway trips with a bus transfer, to bus routes serving the site and assessing the effects of new project-generated peak hour bus trips (With-Action).

Pedestrians

Except for trips by auto or taxi, all project-generated trips would include a walk component using local sidewalks, street corners, and crosswalks to access the project site. As a result, there would be more than 200 pedestrian trips in all peak hours, with volumes highest on those facilities closest to the project site entrances and gradually diminishing as project-generated pedestrian volumes become more dispersed further from the site. Accordingly, the EIS will provide detailed pedestrian analyses for the pedestrian facilities in the immediate vicinity of the project site, with a focus on 26th Avenue. In addition, as the proposed project includes a shuttle service to the 30th Avenue subway station with a drop-off/pick-up location proposed along the north side of 30th Avenue at 31st Street, the northwest corner of 31st Street and 30th Avenue, the north sidewalk on 30th Avenue between 30th and 31st Streets, and the west sidewalk on 31st Street between Newtown Avenue and 30th Avenue would also be assessed in the pedestrian analysis. This analysis will include the following subtasks:

- Conduct and analyze pedestrian counts at critical locations in the study area. Corners, crosswalks, and adjoining sidewalks will be evaluated at locations receiving the greatest concentration of action-generated pedestrian trips. Pedestrian assignment diagrams will be prepared to assist in identifying these locations. It is expected that up to fifteen (15) locations will be analyzed:

Sidewalks

- 26th Avenue (north and south sidewalks) east of 4th Street
- 27th Avenue (north and south sidewalks) between 4th and 8th Streets
- 27th Avenue (north and south sidewalks) between 8th and 9th Streets
- 30th Avenue (north sidewalk) between 30th and 31st Streets
- 4th Street (east sidewalk) between 26th and 27th Avenues
- 8th Street (east sidewalk) between 27th Avenue and Astoria Boulevard
- 9th Street (west sidewalk) north of 27th Avenue
- 31st Street (west sidewalk) between Newtown Avenue and 30th Avenue

Corners

- 27th Avenue (southeast and southwest corners) at 8th Street
- 30th Avenue (northwest corner) at 31st Street

Crosswalks

- 27th Avenue (east crosswalk) at 8th Street

- Analyze pedestrian conditions at critical sidewalks along the proposed project's new pedestrian elements to the north of 26th Avenue. Pedestrian assignment diagrams will be prepared to assist

in identifying these locations. Based on a preliminary analysis, it is expected that up to three (3) sidewalks will be analyzed for With-Action conditions:

- 4th Street (west sidewalk) north of 26th Avenue
- 8th Street Mews between 26th and 27th Avenue
- Public Access Easement (south sidewalk) between 4th and 8th Streets
- Public Access Easement/Waterfront Esplanade (north sidewalk) between 4th and 9th Streets

- Identify the potential for the Proposed Action to have significant pedestrian impacts, through a comparison of future No-Action to the future With-Action conditions for pedestrian elements that would existing under both conditions.
- Identify the potential for the Proposed Action to have significant pedestrian impacts, through an LOS analysis of With-Action conditions for pedestrian impacts that would exist only in future With-Action conditions.
- If significant pedestrian impacts are identified, feasible mitigation measures, including widening crosswalks, extending corners, and eliminating sidewalk obstructions, will be explored to alleviate these impacts.

Vehicular and Pedestrian Safety

Traffic accidents involving pedestrians as well as bicycles at key study area intersections will be researched and documented. These data will be analyzed to determine if any of the studied locations may be classified per CEQR criteria as high vehicle crash or high pedestrian/bike accident locations and whether trips and changes resulting from the proposed project would adversely affect vehicular and pedestrian safety in the area. A discussion of future vehicular and pedestrian safety concerns along the proposed project's new streets and waterfront open space will also be presented. The potential for the Proposed Action to have significant pedestrian and/or bicycle impacts will be identified and possible remedies and/or improvements will be proposed for DOT consideration.

In addition, as the proposed project would provide loading berths in compliance with zoning and based on the projected demand for loading capacity, the vehicular and pedestrian safety assessment will discuss the ability of the proposed project to accommodate goods delivery demand without interfering with vehicular, pedestrian, and bicycle traffic or compromising safety. A discussion of safety measures incorporated into the proposed project to minimize pedestrian and vehicular conflicts in the vicinity of the proposed project's elementary school will also be presented.

TASK 14. AIR QUALITY

The air quality studies for the proposed project will include both mobile and stationary source analyses. The number of project-generated vehicle trips may exceed the *CEQR Technical Manual* screening thresholds above which detailed analyses of mobile source emissions of carbon monoxide (CO) and particulate matter (PM) on ambient pollutant levels in the study area are required, and thus these detailed analyses will be performed. (For Queens, the threshold for conducting an analysis of carbon monoxide (CO) concentrations corresponds to 170 vehicles at a given intersection in the peak hour.) The need for conducting an analysis of PM concentrations is based on the number of peak hour heavy-duty diesel vehicle traffic or its equivalent in vehicular PM_{2.5} emissions as determined using the worksheet discussed on page 17-10 of the *CEQR Technical Manual*. In addition, since the proposed project will provide a new accessory parking garages, the effects of CO emissions from vehicles within the parking

facilities will be analyzed.

The stationary source air quality impact analysis will assess the effects of emissions (e.g., sulfur dioxide, particulate matter, and nitrogen oxides) from the proposed project's heating, ventilation, and air conditioning (HVAC) systems. The proposed project will also introduce new residential uses in an area that is currently zoned for manufacturing uses. Therefore, an analysis to examine the potential for impacts from light industrial uses in the surrounding area on the proposed sensitive uses will be performed. In addition, emissions from large sources within 1,000 feet of the development site, and large commercial, institutional and large scale residential uses will be examined for their potential impact on the proposed project.

No waterborne ferries or tugboats would operate adjacent to the project site, and the emissions from vehicular traffic on the RFK (Triborough) Bridge are located too far from the proposed project site (more than 1,000 feet away) to adversely impact the proposed residential developments.

Mobile Source Analysis

The mobile source analysis methodology is relatively straightforward: it entails selecting appropriate receptor sites, calculating vehicular emissions, calculating pollutant levels using dispersion models that have been approved by the applicable air quality review agencies (i.e., U.S. Environmental Protection Agency, NYSDEC, and NYCDEP), and determining whether the project would result in potential impacts. The methodologies used for this analysis would be consistent with the *CEQR Technical Manual*.

The specific work program for the mobile source air quality study will include the following tasks, with certain tasks performed only if the vehicle or emissions thresholds specified in the *CEQR Technical Manual* are exceeded:

- Gather existing air quality data. Collect and summarize existing ambient air quality data for the study area. Specifically, ambient air quality monitoring data published by NYSDEC will be compiled for the discussion of ambient background conditions. Existing air quality will be presented from available data rather than being modeled or obtained from field monitoring. Existing pollutant levels will be compared with National Ambient Air Quality Standards (NAAQS).
- Identify intersections in the study area, based on data obtained from the traffic analysis, that would exceed the CEQR volume thresholds for CO or for Truck Equivalent calculations for PM_{2.5}. Receptor locations will include locations where maximum project impacts and high pollutant levels are expected. It is anticipated that up to two intersection locations would be analyzed: 26th Avenue at 4th Street and at 9th Street. The analysis will be performed only for the pollutants for which the CEQR thresholds for performing a detailed analysis are exceeded.
- Select intersections and time periods for further study that constitute worst-case conditions. It is anticipated that two intersection locations would be analyzed: 27th Avenue at 4th and 9th Streets. The analysis will be performed only for the pollutants for which the CEQR thresholds for performing a detailed analysis are exceeded.
- Determine receptor locations for microscale analysis. Receptor locations will extend along each leg of the intersection to be analyzed for a distance of approximately 350 feet for the 24-hour and 8-hour analyses. For the annual PM_{2.5} neighborhood analysis, the receptor grid would cover an approximately 1 kilometer area surrounding the worst-case intersection.
- Select dispersion model for analysis. EPA's CAL3QHCR refined intersection model will be used at intersections that are found to exceed the screening volume threshold for CO and for the

- PM₁₀/PM_{2.5} intersection analysis. For the CAL3QHCR analysis, five years of meteorological data from LaGuardia Airport and concurrent upper air data from Brookhaven, New York will be used.
- Identify input parameters needed to compute emissions in micrograms per vehicle-mile or vehicle-hour. The task will involve obtaining vehicular cruise and idle emissions from EPA's MOVES2010b model with NYCDEP- and NYSDEC-supplied inputs to the model for the state vehicle inspection and maintenance (I&M) program (including any applicable future I&M programs), meteorology, age distribution, and the state anti-tampering program.
 - For the pollutants requiring a detailed analysis, determine future concentrations without the Proposed Action using MOVES2010b emission factors and the CAL3HQR dispersion model. Pollutant levels without the Proposed Action will be determined for the future analysis year of 2023. At each receptor location, maximum 1- and 8-hour CO concentrations, maximum 24-hour PM₁₀ concentrations, and maximum 24-hour and annual PM_{2.5} concentrations will be calculated as needed.
 - If detailed analyses are required, future CO and PM₁₀ pollutant levels without the Proposed Action will be compared to NAAQS to determine compliance with standards.
 - If detailed analyses are required, determine future CO, PM₁₀, and PM_{2.5} pollutant levels with the Proposed Action. Pollutant levels with the Proposed Action will be determined for the future analysis year at each receptor location. At the receptor location with the highest modeled value at each intersection location, maximum 1- and 8-hour incremental CO concentrations, maximum PM_{2.5} incremental concentrations, and total CO and PM₁₀ concentrations will be calculated for each of the peak periods analyzed, in accordance with the *CEQR Technical Manual*.
 - Compare future levels with the Proposed Action with standards and de minimis criteria. If detailed analyses are required, future total CO and PM₁₀ pollutant levels with the Proposed Action will be compared with NAAQS to determine compliance with standards. CO concentration increments will also be compared with the City's de minimis criteria (i.e., a comparison of future levels with the Proposed Action versus future levels without the Proposed Action) to determine project impacts. PM_{2.5} concentration increments will be compared with the NYCDEP de minimis criteria.
 - Assess the potential CO impacts associated with the proposed accessory parking garage(s). Select the worst-case garage based on the total potential arriving and departing vehicles within a one-hour period. Identify the garage vent location and the worst-case receptors on the near sidewalk, the fare sidewalk, and a window across the street from the vent. A screening analysis will be used following the procedures prescribed in the *CEQR Technical Manual* to determine maximum potential worst-case concentrations. Cumulative concentrations from on-street sources and emissions from the proposed garage will be calculated at the identified receptor points. Future CO pollutant levels will be compared with standards and the de minimis criteria. No analysis of PM₁₀ or PM_{2.5} from the proposed garage(s) will be carried out.
 - Qualitatively assess the consistency of the Proposed Action with the State Implementation Plan (SIP). An assessment to determine the consistency of the Proposed Action with the strategies contained in the applicable SIP for the area will also be performed.

Stationary Source Analyses

HVAC Analysis

The analysis process would be conducted, in accordance with the *CEQR Technical Manual* procedures, as follows:

- The effects of emissions from stationary sources associated with the Proposed Action will be addressed. Analyses will be performed using the nomograph screening procedures from the CEQR Technical Manual to determine whether emissions from the on-site HVAC facilities require more detailed study. This task will assess the potential for impacts on existing or planned developments with sensitive uses, such as residences or community facilities. Relevant pollutants for the screening analysis will be NO_x and PM_{2.5} for HVAC units using natural gas and SO₂ for HVAC units using fuel oil.
- If warranted, based on the screening analysis, analyze the project's potential impacts on existing and planned developments using the AERMOD model and five years of meteorological data from LaGuardia Airport. Relevant pollutants would include NO_x and PM_{2.5} for natural-gas fired boilers and PM₁₀, PM_{2.5}, and SO₂ for boilers using fuel oil.
- If warranted, based on the screening analysis, analyze project-on-project impacts from individual buildings using the AERMOD model and five years of meteorological data from LaGuardia Airport. Relevant pollutants would include NO_x and PM_{2.5} for natural-gas fired boilers and PM₁₀, PM_{2.5}, and SO₂ for boilers using fuel oil.
- If warranted, analyze the potential combined impacts from clusters of HVAC emissions (i.e., HVAC emissions from buildings resulting from the Proposed Action of approximately the same height that are located in close proximity to one another) to significantly impact existing land uses and other buildings resulting from the Proposed Action. Clusters will be selected based on the sizes of the buildings that comprise the cluster, proximity of the cluster buildings to each other, and the difference in stack heights no more than 10 to 15 feet with no city street in between.

Industrial Source Analysis

The analysis process would be conducted, in accordance with the *CEQR Technical Manual* procedures, as follows:

- A field survey will be performed to identify manufacturing or processing facilities within 400 feet of the project site. The DEP's Bureau of Environmental Compliance (BEC) files will be examined to determine if there are permits for any industrial facilities that are identified. A review of federal and state permits will also be conducted. Based on this information, a determination will be made of whether further detailed analysis is necessary.
- If active operational permits are identified, calculate pollutant levels at the project site using the CEQR Technical Manual's Industrial Source Screen methodology. Predicted worst-case concentrations at the project site will be compared with the short-term guideline concentrations (SGC) and annual guideline concentrations (AGC) reported in the DEC's DAR-1 AGC/SGC Tables to determine the potential for significant impacts. A health risk assessment will also be performed to determine any public health impacts from these emissions on future residents.
- Conduct additional analyses if the pollutant concentrations are projected to exceed the SGCs or AGCs. If additional detailed analysis is necessary, the AERMOD dispersion model screening database will be used to project the short-term and/or annual concentrations of critical pollutants at the potential receptor sites. Predicted worst-case concentrations at the project will be compared with the shortterm guideline concentrations (SGC) and annual guideline concentrations (AGC) reported in the DEC's DAR-1 AGC/SGC Tables to determine the potential for significant impacts. In the event that violations of standards are predicted, NYCDEP will be contacted to determine whether the facility of interest is subject to providing additional means to reduce pollutant emissions.

TASK 15. Greenhouse Gas Emissions and Climate Change

Greenhouse Gas Emissions

As the proposed project would exceed 350,000 sf of development, the analysis of GHG emissions will be included as a separate chapter in the EIS.

- Sources of GHG from the proposed project will be identified. The pollutants for analysis will be discussed, as well as the various City, State, and Federal goals, policy, regulations, standards and benchmarks for GHG emissions.
- GHG emissions due to electricity and fuel consumption will be developed using projections of energy consumption developed for the proposed project and the most recent emission factors provided in the City's Inventory of New York City Greenhouse Gas Emissions.
- GHG emissions associated with project-related traffic will be estimated for the Proposed Action using data from the project's "Transportation" analysis. A calculation of Vehicle Miles Traveled (VMT) will be prepared.
- A qualitative discussion of stationary and mobile sources of GHG emissions will be provided in conjunction with a discussion of goals for reducing GHG emissions to determine if the project is consistent with GHG reduction goals, including building efficient buildings, use of clean power, transit-oriented development and sustainable transportation, reduction of construction operations emissions, and use of building materials with low carbon intensity.

As the construction schedule for most of the proposed buildings is not expected to take longer than two years, and the proposed project is not expected to fundamentally change the City's solid waste management system, no estimates of emissions from construction or solid waste management are required.

Climate Change

Rising sea levels and increases in storm surge and coastal flooding are the most immediate threat in New York City for which site-specific conditions can be assessed. As the proposed project would be located along the waterfront, a discussion of the early integration of climate change conditions into the project will be provided, including climate resiliency proposals and/or adaptive management strategies if warranted.

TASK 16. NOISE

As the Proposed Action involves residential development in an existing manufacturing zone, noise studies will be completed to determine whether standard window wall attenuation would be sufficient or if portions of the proposed project would require additional noise attenuation that would ensure acceptable indoor noise conditions. In addition, the potential for project-induced traffic to affect sensitive existing and future land uses would be evaluated by estimating future vehicular traffic-induced noise levels and comparing them with traffic noise levels in the No-Action scenario at the sensitive receptor sites most likely to be affected.

No detailed analysis of potential noise impacts due to outdoor mechanical equipment will be performed, as outdoor mechanical equipment would be designed to meet applicable regulations. Moreover, the project site is not located in the vicinity of air or rail facilities, and is more than two miles away from the mapped noise contours for LaGuardia airport. The following tasks would be performed in compliance with guidelines contained in the *CEQR Technical Manual*:

- Select appropriate noise descriptors. Appropriate noise descriptors for building attenuation purposes would be selected. Based on CEQR criteria, the noise analysis would examine the L_{10} , and 1-hour equivalent ($L_{eq(1)}$) noise levels.
- Select receptor locations for building attenuation purposes. Two types of receptor sites would be selected: 1) sites where the Proposed Action would have the potential for significant noise impacts due to project-generated traffic, and 2) sites where proposed new construction would require specification of window/wall attenuation that would ensure acceptable indoor noise conditions as prescribed in regulations.
- Determine existing noise levels. A 20-minute measurement would be performed during typical weekday AM, midday, and PM peak periods. Hourly L_{eq} , L_1 , L_{10} , L_{50} , and L_{90} values will be recorded.
- Determine background noise levels by comparing the monitored noise levels with existing vehicular traffic noise levels calculated using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) Version 2.5.
- Calculate future No-Action and future With-Action noise levels at receptor locations using either a proportional modeling technique or TNM; the proportional modeling technique will be used where existing and future noise levels are primarily a result of the level of traffic on the immediately adjacent roadway segments and the TNM model will be used to account for noise associated with the additional traffic on the proposed new street segments (4th Street north of 26th Avenue, 26 Avenue east of 4th Street, and the waterfront public access easement).
- Determine amount of any building attenuation required for residential and commercial uses as applicable. The level of building attenuation necessary to satisfy CEQR requirements is a function of exterior noise levels and will be determined. Measured values will be compared to appropriate standards and guideline levels. As necessary, recommendations regarding noise attenuation measures needed for the proposed project to achieve compliance with standards and guideline levels will be made.
- Determine whether project-generated traffic would have the potential for causing a significant noise impact. If project-generated traffic would result in a doubling of Noise PCEs (passenger-car-equivalents), a detailed mobile source noise analysis would be prepared.
- Determine the potential for significant adverse noise impacts due to the potential outdoor play area on the Building 5 school site. Using the methodology outlined in the *CEQR Technical Manual*, noise levels, associated with the proposed school's play area, will be calculated at nearby noise-sensitive uses. The analysis results will be compared to CEQR impact criteria.

TASK 17. PUBLIC HEALTH

According to the *CEQR Technical Manual*, 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. 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 project, and if so, to identify measures to mitigate such effects.

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

TASK 18. NEIGHBORHOOD CHARACTER

The character of a neighborhood 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 area surrounding the project site is composed of residential development to the south and east, transportation uses, and commercial/warehouse uses. Vacant, undeveloped land and parking lots are also prevalent throughout the area.

The proposed project has the potential to alter certain constituent elements of the affected area's neighborhood character, including land use patterns, socioeconomic conditions, open space, shadows, urban design, traffic, and noise, and therefore a preliminary analysis will be provided in the EIS. As suggested by the *CEQR Technical Manual*, the study area for the preliminary analysis of neighborhood character will be consistent with the study areas in the relevant technical areas that contribute to the defining elements of the neighborhood. The chapter will summarize changes that can be expected in the character of the neighborhood in the future without the Proposed Action (No-Action condition) as well as describing the Proposed Action's impacts on neighborhood character. Subtasks will include:

- Describe the predominant factors that contribute to defining the character of the neighborhood, drawing on relevant EIS chapters.
- Summarize changes in the character of the neighborhood that can be expected in the future No-Action condition based on planned development projects, public policy initiatives, and planned public improvements, as applicable.
- Summarize changes in the character of the neighborhood that can be expected in the future With-Action condition, based on the RWCDs, and compare to the future No-Action condition. A qualitative assessment will be presented, which will include a description of the potential effects of the Proposed Action on neighborhood character.

TASK 19. CONSTRUCTION IMPACTS

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity has the potential to affect traffic conditions, archaeological resources and the integrity of historic resources, community noise patterns, air quality conditions, and mitigation of hazardous materials. For this chapter of the EIS, the construction phasing and schedule for the proposed project will be described, along with a discussion of general construction practices, the types of activities likely to occur during construction, and the number of construction trucks and workers. An assessment of potential impacts of construction activity and the methods that may be employed to avoid or minimize potential significant adverse impacts will be presented. Technical areas to be analyzed based

on a detailed construction schedule and phasing plan to be developed for the proposed project are listed below. For each of the various technical areas to be analyzed, appropriate construction analysis years will be selected to represent reasonable worst-case conditions relevant to the technical areas, which can occur at different times for different analyses.

Transportation

The traffic analysis for the peak potential construction impact condition will include traffic generated both by buildings that will have been completed and fully occupied by the construction traffic peak period and vehicular traffic from construction trucks and workers driving to and from the project site. Peak weekday 6-7 AM and 3-4 PM No-Action background traffic volumes will be established for the construction traffic peak period. Weekday peak 6-7 AM and 3-4 PM vehicular trips will be determined and assigned to the street network. Construction truck trips will be assigned to NYCDOT-designated truck routes en route to the project site. Based on preliminary analyses, it is expected that the five intersections most proximate to the project site that would experience the greatest peak construction traffic volumes will be analyzed. The operations at these intersections will be analyzed using HCS version 5.5. The traffic analysis will also consider the temporary losses in travel lanes that may be associated with construction activities as well as the proposed project's phased street construction, and its implication on area traffic conditions. Significant traffic impacts will be identified, and appropriate traffic improvement measures will be identified to mitigate those impacts, where feasible.

The construction transportation analyses will also include an assessment of the need for parking that would be generated by construction workers driving to the site. As peak construction worker trips would occur outside of area peak hours, a discussion of transit and pedestrian trip projections and a qualitative assessment of potential impacts will be prepared.

Air Quality

As the proposed project's construction period exceeds two years, the construction air quality section will contain a quantitative analysis of: (1) mobile source emissions from construction workers' vehicles and delivery trucks (including fugitive dust emissions); and (2) exhaust emissions and fugitive dust from on-site construction equipment.

For mobile source air quality, based on the construction traffic increments, the worst-case intersections and peak periods will be determined. If peak construction traffic volumes exceed the 2023 With-Action volumes assessed in the operational mobile source air quality analysis, the emissions and concentrations will be modeled with MOVES2010b and CAL3QHCR.

For stationary source air quality, the worst-case construction period(s) will be identified. Stationary and mobile equipment sources for the selected building site(s) and periods will be modeled using NonRoad model for emission factors and AERMOD for dispersion model, assuming a baseline year of 2012 for age of equipment. Pollutants will include SO₂, PM₁₀, PM_{2.5}, and NO_x; NO_x 1-hour values will be modeled for stationary equipment but not mobile equipment. Results at site boundaries will be compared to NAAQS and the City's *de minimis* criteria.

Based on potential for impacts, a refined analysis of additional construction periods will be conducted, if warranted. Measures will be identified and recommended, if necessary, to reduce air quality impacts.

Noise

As the construction period for the proposed project would exceed two years, the construction noise section will contain a quantitative analysis of: (1) mobile source noise from construction workers' vehicles and delivery trucks; and (2) noise from on-site construction equipment. Preliminary review indicates that traffic noise will be analyzed during the peak construction traffic period (2022) during two peak hours: 6 to 7 AM and 3 to 4 PM. Noise PCEs from mobile sources will be calculated for the construction No-Action and construction With-Action and compared to the PCEs for 2023 With-Action Conditions. If the construction With-Action PCEs exceed 2023 With-Action PCEs, further analysis will be undertaken to determine the potential for a 3 dBA increase during the two construction peak periods. If the construction With-Action noise PCEs would be less than the 2023 With-Action PCEs, then no further analysis of construction traffic noise is needed.

Noise from construction equipment will be calculated to determine the potential for noise levels to exceed impact criteria. Based on potential for impacts, a refined analysis potentially using CADNA or the FHWA's RCNM model will be conducted, if warranted. Measures will be identified and recommended, if necessary, to reduce noise impacts.

Other Technical Areas

As appropriate, the construction assessment will discuss the other areas of environmental concern, including Land Use and Neighborhood Character, Socioeconomic Conditions, Community Facilities, Open Space, Historic and Cultural Resources, Natural Resources, and Hazardous Materials, for potential construction-related impacts. The analysis of other technical areas will consider whether construction of the proposed project would require continuous use of a property for an extended duration and whether construction conditions would affect access to areas businesses or community facilities and the potential consequences concerning their continued viability; summarize the potential for direct or indirect impacts on nearby open space resources during the project's construction; summarize actions to be taken during project construction to protect identified archaeological resources, to protect nearby natural resources, and to limit exposure of construction workers, residents, and the environment to potential contaminants;

TASK 20. MITIGATION

Where significant adverse project impacts have been identified in Tasks 2 through 19, measures to mitigate those impacts will be described. These measures will be developed and coordinated with the responsible City/State agencies as necessary, including ACS, the New York City Department of Parks and Recreation (DPR), and NYCDOT. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

TASK 21. ALTERNATIVES

The purpose of an alternatives section in an EIS is to examine development options that would tend to reduce project-related impacts. At this time, the provision of ferry service at the project site is being considered; however, it should be noted that this would be contingent upon the City's approval to extend the existing ferry service to this area. Given this, the EIS will have four alternatives: a) a No-Action Alternative; b) a lower density alternative; c) a no significant impact alternative; and d) a proposed project with ferry service (at the project site) alternative. The alternatives analysis is

qualitative, except where significant adverse impacts of the Proposed Action have been identified. The level of analysis depends on an assessment of project impacts determined by the analysis connected with the appropriate tasks.

TASK 22. SUMMARY EIS CHAPTERS

In accordance with CEQR guidelines, the EIS will include the following three summary chapters, where appropriate to the Proposed Action:

- **Unavoidable Adverse Impacts** - which summarizes any significant adverse impacts that are unavoidable if the Proposed Action is implemented regardless of the mitigation employed (or if mitigation is not feasible).
- **Growth-Inducing Aspects of the Proposed Action** - which generally refer to “secondary” impacts of a Proposed Action that trigger further development.
- **Irreversible and Irretrievable Commitments of Resources** - which summarizes the Proposed Action and its impacts 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 23. EXECUTIVE SUMMARY

Once the EIS technical sections have been prepared, a concise executive summary will be drafted. The executive summary will use relevant material from the body of the EIS to describe the proposed project, the necessary approvals, study areas, environmental impacts predicted to occur, measures to mitigate those impacts, unmitigated and unavoidable impacts (if any), and alternatives to the proposed project.

APPENDIX 1

Transportation Planning Factors Technical Memorandum



Philip Habib & Associates

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TO: NYCDP

FROM: Philip Habib & Associates

DATE: April 17, 2014

PROJECT: Astoria Cove (CEQR No. 13DCP127Q)

RE: Transportation Planning Assumptions & Travel Demand Forecast

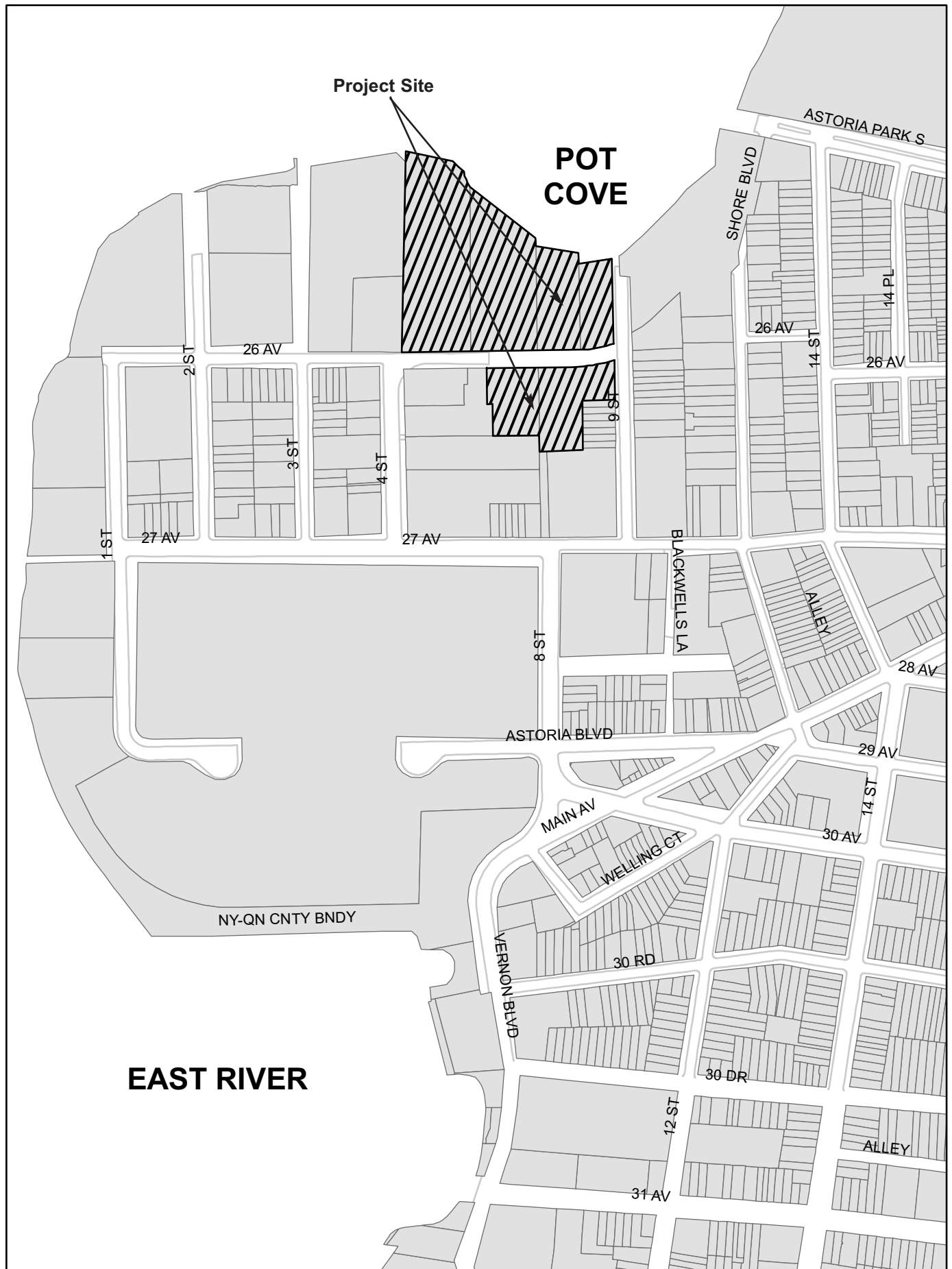
This memorandum summarizes the transportation planning factors to be used for the analyses of traffic, parking, transit, and pedestrian conditions for the proposed Astoria Cove EIS, in Astoria, Queens. Estimates of the Proposed Action's peak travel demand are provided, along with a discussion of trip assignment methodologies and study area definitions.

THE PROPOSED ACTION

The applicant, 2030 Astoria Developers, LLC ("the applicant"), is requesting several actions to facilitate a new mixed-use predominantly residential development ("the proposed development") in the Astoria neighborhood of Queens Community District 1 (refer to site location map in Figure 1). The Proposed Action includes a zoning map amendment, City Map amendments, several zoning text amendments, a large-scale general development, waterfront special permits, authorization to modify waterfront public access area requirements, and Chairperson's waterfront certification (collectively, the "Proposed Action").

The Astoria Cove site ("project site") comprises a total of approximately 377,726 square feet (sf) of lot area. The project site consists of approximately 293,451 sf along the waterfront (Block 907, Lots 1 & 8, and Block 906, Lots 1 & 5) and approximately 85,571 sf of upland area (Block 908, Lot 12 and Block 909, Lot 35) located along 26th Avenue between 4th Street and 9th Street, the area surrounding the project site includes predominantly low-density light industrial and warehousing uses, as well as residential uses to the south and east, including a high-rise (23-story) residential building to the east, across 9th Street from the project site.

The project site is currently zoned M1-1 north of 26th Avenue, and R6 on the two upland lots south of 26th Avenue. The lots comprising the northern portion of the project site contain a total of seven warehousing and industrial buildings with a combined total floor area of approximately 194,700 sf as well as bus/vehicle storage, and an estimated 100 accessory parking spaces. The project site currently encompasses two mapped but unbuilt segments of 8th Street (to the north and south of 26th Avenue), as well as an unimproved portion of 26th Avenue west of 9th Street. Both street segments would be



built and improved under future No-Build and/or Build conditions (see description below for details). In addition, a portion of 4th Street will be established from 26th Avenue to the waterfront esplanade and a public access easement would be established within the waterfront Public Access Area. The two upland portions of the site (which are zoned R6) are currently vacant.

Reasonable Worst-Case Development Scenario (RWCDs)

In order to assess the potential effects of the Proposed Action, a reasonable worst-case development scenario (RWCDs) for both “future No-Action” (No-Build) and “future with the Proposed Action” (Build) conditions will be analyzed for an analysis year, or Build year, of 2023. The future With-Action (Build) scenario identifies the amount, type and location of development that is expected to occur by the end of 2023 as a result of the Proposed Action. The future without the action (No-Build) scenario identifies similar development projections for 2023 absent the Proposed Action. The effect of the Proposed Action would be the incremental change in conditions between the No-Build and Build scenarios.

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

In the future without the Proposed Action, the project site would not be rezoned. For analysis purposes, it is expected that the existing light industrial and warehousing uses would remain and be fully occupied on the project site. These consist of approximately 194,700 sf of warehouse and storage space and an estimated 100 accessory parking spaces. It is assumed that the upland portions of the project site south of 26th Avenue, which are currently zoned R6, would be redeveloped on an as-of-right basis in the future without the Proposed Action. These upland parcels are estimated to accommodate approximately 166 residential units in the No-Build condition. Pursuant to zoning, approximately 83 accessory parking spaces are assumed to be provided for the as-of-right residential development. In conjunction with this as-of-right residential development, it is assumed that portions of the unbuilt segment of 8th Street to the south of 26th Avenue and/or portions the unimproved segment of 26th Avenue, would be built-out in order to satisfy NYC Department of Buildings requirements regarding street frontage for these upland parcels.

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

The development program and building design for the applicant’s proposed development, as described below, would represent the reasonable worst case development scenario for environmental analysis purposes, as it maximizes the site’s allowable floor area ratio (FAR) pursuant to the proposed new zoning.

Description of the Proposed Development

The Proposed Action would facilitate a proposal by the applicant to construct a new mixed-use, predominantly residential, development on the approximately 377,726 sf project site (the “proposed development”). The proposed development would include the following components:

- Up to approximately 1,689,416 gross square feet (gsf) of residential floor area, comprised of a total of approximately 1,689 dwelling units, of which a minimum of 295 dwelling units would be affordable.
- Approximately 109,470 gsf of local retail space, including an approximately 25,000 gsf supermarket.
- An elementary school with approximately 456-seats (K-5).
- Approximately 900 accessory parking spaces.
- Approximately 83,846 sf of publicly accessible open space

The 1,689 dwelling units are expected to include a mix of rental and condominium units. The proposed development is expected to be completed by 2023.

In conjunction with the proposed development, the mapped but unbuilt portion of 8th Street between 27th Avenue and the waterfront would be demapped and would be built out to provide pedestrian public access to the waterfront. The currently unimproved and inaccessible portion of the mapped 26th Avenue would also be built out in conjunction with the proposed development, thereby providing access to 9th Street and improving traffic circulation in the area. The applicant is also proposing to establish an extension of 4th Street from 26th Avenue to the waterfront esplanade and a public access easement within the waterfront Public Access Area to provide access to the proposed development and the waterfront.

As summarized in Table 1, compared to future conditions without the Proposed Action, the RWCDs anticipates that the Proposed Action would result in a net increase of 1,523 dwelling units (approximately 1,522,964 gsf), 109,470 gsf of retail space, a 456-seat elementary school, and 817 accessory parking spaces, as well as a reduction of approximately 194,700 sf of warehouse/industrial space. This net increment would represent the basis for environmental analyses in the EIS. As noted above, at this time it is anticipated that the residential component of the proposed development would include 295 affordable units, and this estimate will be used for analysis purposes where applicable.

TABLE 1

Net Change in Land Uses as a Result of the Proposed Development

Use	No-Action	With-Action	Net Increment
Residential	166,452 gsf 166 DU	1,689,416 gsf 1,689 DU	1,522,964 gsf 1,523 DU
Retail - Local/Supermarket	--	109,470 gsf	109,470 gsf
Warehouse/Storage	194,700 gsf	--	-194,700 gsf
Public School – Elementary	--	456 seats	456 seats
Parking Spaces - Accessory	83 (estimated)	900	817

PRELIMINARY TRANSPORTATION PLANNING ASSUMPTIONS

Although the applicant is confident that a FRESH supermarket certification will be pursued in the future, per the guidance of the New York City Department of City Planning (NYCDP), the transportation analyses will assume that a generic supermarket would be provided on site. In general a RWCDs (Variant 1) with a FRESH supermarket and corresponding bonus (residential) floor area is the appropriate analysis basis as most of the density-related analyses are more sensitive to the number of dwelling units and/or residential population. However, for conservative purposes the transportation analyses will be based on a RWCDs (Variant 2) that includes a generic supermarket and less residential floor area (net increase in dwelling units of 1,502) as this program is expected to generate substantially more vehicular traffic.

Tables 2 and 3 shows the preliminary transportation planning assumptions to be used in the forecast for RWCDs Variant 1 and Variant 2, respectively. The tables provide the daily trip generation rates, temporal and directional distributions, mode choice factors, vehicle occupancies and truck trip factors for each of the land uses above. It should be noted that there is currently another proposed project (*Halletts Point Rezoning*) in the vicinity of the project site. Because of the similarities in both location and land use, NYCDP has recommended that the transportation planning assumptions used for this proposed development be consistent with those used for the *Halletts Point Rezoning* and already documented in that project's FEIS.

Local Retail

The trip generation rates and the temporal distributions for the local retail component of the proposed development were based on the *City Environmental Quality Review (CEQR) Technical Manual*. The modal and directional in/out splits and the vehicle occupancy rates were based on the *Dutch Kills Rezoning and Related Actions FEIS (2008)*. The truck trip generation rates and temporal distributions were based on the *CEQR Technical Manual*. It should also be noted that a twenty-five percent linked trip credit is taken for the project-generated local retail trips.

Residential

The trip generation rates and the temporal distributions for the residential component of the proposed development were also based on the *CEQR Technical Manual*. The modal splits and vehicle occupancies were based on the 2007-2011 *American Community Survey Journey to Work* data for Queens census tracts 81, 83, 91, 97, 101, 103 and 105. The directional in/out splits were based on the *ITE Trip Generation Handbook, 8th Edition*, Land Use Code (220) Apartments. The truck trip generation rates and temporal distributions were based on the *CEQR Technical Manual*.

Supermarket

The trip generation rates, temporal distributions, modal and directional in/out splits, vehicle occupancy rates for the FRESH supermarket component of the RWCDs Variant 1 were based on the New York City Department of City Planning's *The Food Retail Expansion to Support Health (FRESH)*

TABLE 2: TRANSPORTATION PLANNING ASSUMPTIONS (RWCDs VARIANT 1)

Land Use:	Local Retail		Residential		FRESH Supermarket		PS School		PS Staff		Existing Industrial	
Size/Units:	84,470 gsf		1,523 DU*		25,000 gsf		456 seats		35 staff		-194,700 gsf	
Trip Generation:	(1)		(1)		(5)		(9)		(9)		(7)	
Weekday	205		8.075		205		2		2		NA	
	per 1,000 gsf		per DU		per 1000 gsf		per student		per staff			
Temporal Distribution:	(1)		(1)		(5)		(9)		(9)		(7)	
AM	3.0%		10.0%		3.0%		50%		50%		NA	
MD	19.0%		5.0%		12.0%		0%		0%		NA	
PM	10.0%		11.0%		10.0%		5%		50%		NA	
Modal Splits:	(2)		(3)		(5)		(10)		(8)		(7)	
AM/MD/PM	AM/MD/PM		AM/MD/PM		AM/MD/PM		Outsider	Internal	AM/MD/PM		AM/MD/PM	
Auto/Auto-dropoff	2.0%		32.4%		4.0%		5.0%	0.0%	57.0%		NA	
Taxi	3.0%		0.5%		3.0%		0.0%	0.0%	1.0%		NA	
Subway/Shuttle	6.0%		55.4%		5.0%		0.0%	0.0%	18.0%		NA	
Bus	6.0%		3.2%		5.0%		0.0%	0.0%	11.0%		NA	
Schoolbus							5.0%	0.0%			NA	
Walk/Ferry/Other	83.0%		8.5%		83.0%		5.0%	85.0%	13.0%		NA	
	100.0%		100.0%		100.0%		15.0%	85.0%	100.0%		NA	
In/Out Splits:	(2)		(4)		(5)		(9)		(9)		(7)	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	50%	50%	20.0%	80.0%	45%	55%	100%	0%	100%	0%	NA	NA
MD	50%	50%	50.0%	50.0%	46%	54%	0%	0%	0%	100%	NA	NA
PM	50%	50%	65.0%	35.0%	47%	53%	0%	100%	0%	100%	NA	NA
Vehicle Occupancy:	(2)		(3)		(5)		(9)		(8)		(7)	
	Weekday		Weekday		Weekday		Weekday		Weekday		Weekday	
Auto	2.00		1.11		1.65		1.3		1.20		NA	
Taxi	2.00		1.4		1.40		1.3		1.20		NA	
Truck Trip Generation:	(1)		(1)		(5)		(6)				(7)	
	0.35		0.06		0.35		6.25				NA	
	per 1,000 sf		per DU		per 1,000 sf		students/bus					
	(1)		(1)		(5)						(7)	
AM	8.0%		12.0%		10.0%						NA	
MD	11.0%		9.0%		8.0%						NA	
PM	2.0%		2.0%		5.0%						NA	
	In	Out	In	Out	In	Out					In	Out
AM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%					NA	NA
MD	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%					NA	NA
PM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%					NA	NA

Notes :

- (1) 2012 City Environmental Quality Review (CEQR) Technical Manual.
- (2) Dutch Kills Rezoning and Related Actions FEIS, CEQR #08DCP021Q (2008).
- (3) Model split and vehicle occupancy data are based on 2007 -2011 ACS Journey to Work data(Tract 81,83,91,97,101,103,105) in Queens.
- (4) Based on ITE Trip Generation Handbook, 8th Edition , Land Use Code (220) Apartment.
- (5) The Food Retail Expansion to Support Health (FRESH) Food Store Program (2009)
- (6) Based on data from survey conducted by PHA (October 2012) on PS 35,Hollis,Queen.
- (7) Vehicular travel demand was based on counts in 2013. Credit for transit and pedestrian trips are not being taken for conservative purposes.
- (8) Model split and vehicle occupancy data are based on 2000 census reverse-journey-to-work data(Tract 87,91) in Queens.
- (9) Brownsville Ascend Charter School Assessment, 2011.
- (10) Halletts Point FEIS (2013).
- (11) Instructed by DCP to use CEQR local retail delivery truck trip generation rate.

* 166 residential units in the upland area in no build condition (1689 DU in build condition). With the net increment of 1523 units (1668 -166)

TABLE 3: TRANSPORTATION PLANNING ASSUMPTIONS (RWCDS VARIANT 2)

Land Use:	Local Retail		Residential		Supermarket			PS School		PS Staff	Existing Industrial	
Size/Units:	84,470 gsf		1,502 DU*		25,000 gsf			456 seats		35 staff	-194,700 gsf	
Trip Generation:	(1)		(1)		(1)			(9)		(9)	(7)	
Weekday	205		8.075		175			2		2	NA	
	per 1,000 gsf		per DU		per 1000 gsf			per student		per staff		
Temporal Distribution:	(1)		(1)		(5)			(9)		(9)	(7)	
AM	3.0%		10.0%		5.0%			50%		50%	NA	
MD	19.0%		5.0%		6.0%			0%		0%	NA	
PM	10.0%		11.0%		10.0%			5%		50%	NA	
Modal Splits:	(2)		(3)		(5)			(10)		(8)	(7)	
	AM/MD/PM		AM/MD/PM		AM	MD	PM	Outsider	Internal	AM/MD/PM	AM/MD/PM	
Auto/Auto-dropoff	2.0%		32.4%		61.0%	68.0%	67.0%	5.0%	0	57.0%	NA	
Taxi	3.0%		0.5%		0.0%	0.0%	0.0%	0.0%	0	1.0%	NA	
Subway/Shuttle	6.0%		55.4%		1.0%	0.0%	0.0%	0.0%	0	18.0%	NA	
Bus	6.0%		3.2%		5.0%	5.0%	3.0%	0.0%	0	11.0%	NA	
Schoolbus								5.0%	0		NA	
Walk/Ferry/Other	83.0%		8.5%		33.0%	27.0%	30.0%	5.0%	85%	13.0%	NA	
	100.0%		100.0%		100.0%	100.0%	100.0%	15.0%	85.0%	100.0%	NA	
In/Out Splits:	(2)		(4)		(5)			(9)		(9)	(7)	
	In	Out	In	Out	In	Out		In	Out	In	Out	Out
AM	50%	50%	20.0%	80.0%	57%	43%		100%	0%	100%	0%	NA NA
MD	50%	50%	50.0%	50.0%	50%	50%		0%	0%	0%	100%	NA NA
PM	50%	50%	65.0%	35.0%	52%	48%		0%	100%	0%	100%	NA NA
Vehicle Occupancy:	(2)		(3)		(5)			(9)		(8)	(7)	
	Weekday		Weekday		AM	MD	PM	Weekday		Weekday	Weekday	
Auto	2.00		1.11		1.12	1.32	1.34	1.3		1.20	NA	
Taxi	2.00		1.4					1.3		1.20	NA	
Truck Trip Generation:	(1)		(1)		(11)			(6)			(7)	
	0.35		0.06		0.35			6.25			NA	
	per 1,000 sf		per DU		per 1,000 sf			students/bus				
	(1)		(1)		(1)						(7)	
AM	8.0%		12.0%		8.0%						NA	
MD	11.0%		9.0%		11.0%						NA	
PM	2.0%		2.0%		2.0%						NA	
	In	Out	In	Out	In	Out					In	Out
AM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%					NA	NA
MD	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%					NA	NA
PM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%					NA	NA

Notes :

- (1) 2012 City Environmental Quality Review (CEQR) Technical Manual.
- (2) Dutch Kills Rezoning and Related Actions FEIS , CEQR #08DCP021Q (2008).
- (3) Model split and vehicle occupancy data are based on 2007 -2011 ACS Journey to Work data(Tract 81,83,91,97,101,103,105) in Queens.
- (4) Based on ITE Trip Generation Handbook, 8th Edition , Land Use Code (220) Apartment.
- (5) Based on 1525 Albany Avenue Pathmark Supermarket Survey, 2009.
- (6) Based on data from survey conducted by PHA (October 2012) on PS 35,Hollis,Queen.
- (7) Vehicular travel demand was based on counts in 2013. Credit for transit and pedestrian trips are not being taken for conservative purposes.
- (8) Model split and vehicle occupancy data are based on 2000 census reverse-journey-to-work data(Tract 87,91) in Queens.
- (9) Brownsville Ascend Charter School Assessment, 2011.
- (10) Halletts Point FEIS.
- (11) Instructed by DCP to use CEQR local retail delivery truck trip generation rate.

* 166 residential units in the upland area in no build condition (1668 DU in build condition). With the net increment of 1502 units (1668 -166)

Food Store Program (2009). The truck trip generation rates and temporal distributions are also based on the NYCDP FRESH Food Store Program.

The trip generation rates, temporal distributions, modal and directional in/out splits and the vehicle occupancy rates for the supermarket component of the RWCDs Variant 2 were based on the 1525 Albany Avenue Pathmark Supermarket Survey. The truck trip generation rates and temporal distributions are based on the CEQR local retail truck trip generation rate.

It should also be noted that a twenty-five percent linked trip credit is taken for the project-generated supermarket trips.

Public School (Elementary)

For elementary public school students, the modal splits were based on the *Halletts Point FEIS*. The trip generation rates, temporal distribution, vehicle occupancy rates, and directional in/out splits were based on the *Brownsville Ascend Charter School Assessment* (2011). School bus occupancy rates were based on surveys conducted by Philip Habib and Associates at PS 35 in Hollis, Queens, in October 2012. It should also be noted that a 10 percent daily absenteeism rate was assumed for the school students.

For elementary public school staff, the trip generation rates, temporal distribution, and directional in/out splits were also based on the *Brownsville Ascend Charter School Assessment* (2011). Modal splits and vehicle occupancy were based on the *2000 Reverse Journey to Work* data for Queens Census tracts 87 and 91.

Warehouse

As vehicular trips generated by existing site businesses will not occur in the With-Action condition, these trips are not included in the With-Action condition. Vehicular demand is based on field surveys conducted at existing site business frontages. A similar trip credit by other modes is not taken.

TRIP GENERATION

Tables 4 and 5 show an estimate of the incremental net increase in peak hour person trips (versus the No-Action condition) that would occur in 2023 with implementation of the Proposed Action using the assumptions made for RWCDs Variant 1 and Variant 2, respectively. As discussed above, the transportation analyses in the EIS will be based on the transportation planning assumptions (Table 3) made for RWCDs Variant 2. The estimated increment in person, vehicle, transit, and pedestrian trips is discussed below.

As shown in Table 5, the Proposed Action, after deducting a 25% linked trip credit for travel within the site (local retail and supermarket uses) and reducing the school student trips by 10 percent to account for daily absentees, would generate a net increase of approximately 2,216 person trips in the weekday AM peak hour, 3,272 in the midday, and 3,040 in the PM peak hour.

TABLE 4: TRAVEL DEMAND FORECAST (RWCDS VARIANT 1)

Land Use:		Local Retail		Residential		FRESH Supermarket		PS School		PS Staff		Existing Industrial					
Size/Units:		84,470	gsf	1,523	DU	25,000	gsf	456	seats		35	staff	-194,700	gsf	Total		
Peak Hour Trips:																	
AM		390		1,230		115		412		35		NA		2,182			
MD		2,468		615		463		0		0		NA		3,546			
PM		1,300		1,354		385		42		35		NA		3,116			
Person Trips:																	
		In	Out	In	Out	In	Out	Off-site		On-site		In	Out	In	Out	In	Out
AM	Auto	4	4	80	319	2	2	21	0	0	0	20	0	NA	NA	127	325
	Taxi	6	6	1	5	2	2	0	0	0	0	0	0	NA	NA	9	13
	Subway	12	12	136	545	2	3	0	0	0	0	6	0	NA	NA	156	560
	Bus	12	12	8	31	2	4	0	0	0	0	4	0	NA	NA	26	47
	Schoolbus							20	0	0	0			NA	NA	20	0
	Walk/Other	161	161	21	84	43	53	21	0	350	0	5	0	NA	NA	601	298
	Total	195	195	246	984	51	64	62	0	350	0	35	0	NA	NA	939	1,243
MD		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	25	25	100	100	8	10	0	0	0	0	0	0	NA	NA	133	135
	Taxi	37	37	2	2	7	7	0	0	0	0	0	0	NA	NA	46	46
	Subway	74	74	170	170	11	13	0	0	0	0	0	0	NA	NA	255	257
	Bus	74	74	10	10	11	13	0	0	0	0	0	0	NA	NA	95	97
	Schoolbus							0	0	0	0			NA	NA	0	0
	Walk/Other	1,024	1,024	26	25	176	207	0	0	0	0	0	0	NA	NA	1,226	1,256
Total	1,234	1,234	308	307	213	250	0	0	0	0	0	0	NA	NA	1,755	1,791	
PM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	13	13	285	154	7	8	0	3	0	0	0	20	NA	NA	305	198
	Taxi	20	20	4	2	5	6	0	0	0	0	0	0	NA	NA	29	28
	Subway	39	39	488	263	9	11	0	0	0	0	0	6	NA	NA	536	319
	Bus	39	39	28	15	9	11	0	0	0	0	0	4	NA	NA	76	69
	Schoolbus							0	0	0	0			NA	NA	0	0
	Walk/Other	539	539	75	40	150	169	0	3	0	36	0	5	NA	NA	764	792
Total	650	650	880	474	180	205	0	6	0	36	0	35	NA	NA	1,710	1,406	
Vehicle Trips :																	
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	Auto (Total)	2	2	72	287	2	2	16	16	0	0	17	0	-18	-8	91	299
	Taxi	3	3	1	4	1	2	0	0	0	0	0	0	0	0	5	9
	Taxi Balanced	6	6	5	5	3	3	0	0	0	0	0	0	0	0	14	14
	Shuttle/Schoolbus			11	11			3	3	0	0			0	0	14	14
	Truck	1	1	5	5	1	1	0	0	0	0	0	0	-2	0	5	7
	Total	9	9	93	308	6	6	19	19	0	0	17	0	-20	-8	124	334
MD		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto (Total)	13	13	90	90	5	6	0	0	0	0	0	0	-11	-15	97	94
	Taxi	19	19	1	1	4	5	0	0	0	0	0	0	0	0	24	25
	Taxi Balanced	38	38	2	2	9	9	0	0	0	0	0	0	0	0	49	49
	Shuttle/Schoolbus			0	0			0	0					0	-1	0	-1
	Truck	1	1	4	4	1	1	0	0	0	0	0	0	-2	-2	4	4
Total	52	52	96	96	15	16	0	0	0	0	0	0	-13	-18	150	146	
PM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto (Total)	7	7	257	139	4	5	2	2	0	0	0	17	-5	-16	265	154
	Taxi	10	10	3	1	4	4	0	0	0	0	0	0	0	0	17	15
	Taxi Balanced	20	20	4	4	8	8	0	0	0	0	0	0	0	0	32	32
	Shuttle/Schoolbus			10	10			0	0					-3	0	7	10
	Truck	0	0	1	1	0	0	0	0	0	0	0	0	-1	0	0	1
Total	27	27	272	154	12	13	2	2	0	0	0	17	-9	-16	304	197	
		Total				Q103 Bus Demand*											
Total Vehicle		In	Out	Total								In	Out	Total			
AM		124	334	458								40	128	168			
MD		150	146	296								83	83	166			
PM		304	197	501								132	87	219			

Notes : 25% link trips applied to Retail and Supermarket Uses.

20% of resident subway users will be shuttled to subway station at 30th Ave and 31st Street

10% Absentee rate is applied for students of the public school.

* 20% of subway demand added to 1/3 of bus users that would utilize Q103.

TABLE 5: TRAVEL DEMAND FORECAST (RWCDS VARIANT 2)

Land Use:		Local Retail		Residential		Supermarket		PS School				PS Staff		Existing Industrial			
Size/Units:		84,470	gsf	1,502	DU	25,000	gsf	456	seats		35	staff	-194,700	gsf	Total		
Peak Hour Trips:																	
AM		390		1,214		165		412				35		NA		2,216	
MD		2,468		606		198		0				0		NA		3,272	
PM		1,300		1,334		329		42				35		NA		3,040	
Person Trips:																	
		In	Out	In	Out	In	Out	Off-site		On-site		In	Out	In	Out	In	Out
AM	Auto	4	4	79	315	57	43	21	0	0	0	20	0	NA	NA	181	362
	Taxi	6	6	1	5	0	0	0	0	0	0	0	0	NA	NA	7	11
	Subway	12	12	135	538	1	1	0	0	0	0	6	0	NA	NA	154	551
	Bus	12	12	8	31	5	5	0	0	0	0	4	0	NA	NA	29	48
	Schoolbus							20	0	0	0			NA	NA	20	0
	Walk/Other	161	161	21	81	30	23	21	0	350	0	5	0	NA	NA	588	265
	Total	195	195	244	970	93	72	62	0	350	0	35	0	NA	NA	979	1,237
MD		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	25	25	98	98	67	67	0	0	0	0	0	0	NA	NA	190	190
	Taxi	37	37	2	2	0	0	0	0	0	0	0	0	NA	NA	39	39
	Subway	74	74	168	168	0	0	0	0	0	0	0	0	NA	NA	242	242
	Bus	74	74	10	10	6	6	0	0	0	0	0	0	NA	NA	90	90
	Schoolbus							0	0	0	0			NA	NA	0	0
	Walk/Other	1,024	1,024	25	25	26	26	0	0	0	0	0	0	NA	NA	1,075	1,075
Total	1,234	1,234	303	303	99	99	0	0	0	0	0	0	NA	NA	1,636	1,636	
PM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	13	13	281	151	115	106	0	3	0	0	0	20	NA	NA	409	293
	Taxi	20	20	4	2	0	0	0	0	0	0	0	0	NA	NA	24	22
	Subway	39	39	480	259	0	0	0	0	0	0	0	6	NA	NA	519	304
	Bus	39	39	28	15	5	5	0	0	0	0	0	4	NA	NA	72	63
	Schoolbus							0	0	0	0			NA	NA	0	0
	Walk/Other	539	539	74	40	50	48	0	3	0	36	0	5	NA	NA	663	671
Total	650	650	867	467	170	159	0	6	0	36	0	35	NA	NA	1,687	1,353	
Vehicle Trips :																	
AM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto (Total)	2	2	71	284	51	39	16	16	0	0	17	0	-18	-8	139	333
	Taxi	3	3	1	4	0	0	0	0	0	0	0	0	0	0	4	7
	Taxi Balanced	6	6	5	5	0	0	0	0	0	0	0	0	0	0	11	11
	Shuttle/Schoolbus			11	11			3	3	0	0			0	0	14	14
	Truck	1	1	5	5	1	1	0	0	0	0	0	0	-2	0	5	7
Total	9	9	92	305	52	40	19	19	0	0	17	0	-20	-8	169	365	
MD		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto (Total)	13	13	88	88	51	51	0	0	0	0	0	0	-11	-15	141	137
	Taxi	19	19	1	1	0	0	0	0	0	0	0	0	0	0	20	20
	Taxi Balanced	38	38	2	2	0	0	0	0	0	0	0	0	0	0	40	40
	Shuttle/Schoolbus			0	0			0	0					0	-1	0	-1
	Truck	1	1	4	4	1	1	0	0	0	0	0	0	-2	-2	4	4
Total	52	52	94	94	52	52	0	0	0	0	0	0	-13	-18	185	180	
PM		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	Auto (Total)	7	7	253	136	85	79	2	2	0	0	0	17	-5	-16	342	225
	Taxi	10	10	3	1	0	0	0	0	0	0	0	0	0	0	13	11
	Taxi Balanced	20	20	4	4	0	0	0	0	0	0	0	0	0	0	24	24
	Shuttle/Schoolbus			10	10			0	0					-3	0	7	10
	Truck	0	0	1	1	0	0	0	0	0	0	0	0	-1	0	0	1
Total	27	27	268	151	85	79	2	2	0	0	0	17	-9	-16	373	260	
		Total										Q103 Bus Demand*					
Total Vehicle		In	Out	Total								In	Out	Total			
AM		169	365	534								40	127	167			
MD		185	180	365								78	78	156			
PM		373	260	633								127	81	208			

Notes : 25% link trips applied to Retail and Supermarket Uses.
80% of resident subway users will be shuttled to subway station at 30th Ave and 31st Street
10% Absentee rate is applied for students of the public school.
* 20% of subway demand added to 1/3 of bus users that would utilize Q103.

As shown in Table 5, the Proposed Action would generate a total net increase of approximately 534, 365 and 633 vehicle trips (in and out combined) in the weekday AM, midday and PM peak hours, respectively. (Vehicle trips include auto and truck trips, and trips by taxi, which have been balanced to reflect that some taxis arrive or depart empty.)

The Proposed Action would generate a net total of 705, 484 and 823 subway trips during the weekday AM, midday and PM peak hours, respectively. Bus trips would increase by 244, 664 and 367 riders in the weekday AM, midday and PM peak hours, respectively (these bus volumes include bus-only trips, an assignment of 20 percent of residential subway trips to the Q103 bus route, and subway-to-bus transfers for local retail and supermarket trips on all three area routes.). Walk-only trips would increase by 853, 2,150 and 1,334 trips during the weekday AM, midday and PM peak hours, respectively. (It should be noted that while the walk-only trip volumes do not include the walk trips generated by trips from the project sites to/from subway stations and bus stops; these trips are included in the pedestrian analyses). The following further discusses the modal distribution and assignment patterns.

PARKING

Parking demand from commercial (non-restaurant) uses typically peaks in the midday period and declines during the afternoon and evening. By contrast, residential demand typically peaks in the overnight period. Parking demand generated by new residential development will be forecast based on the same average vehicles per household data used in the nearby *Halletts Point Rezoning FEIS* based on ACS data from similar residential tracts (e.g., excludes census tracts that are predominantly low-income housing or single family homes with driveways/garages). Parking demand from retail and other commercial uses will be derived from the forecasts of daily auto trips from these uses. The forecast of new parking supply will assume a total of 900 accessory parking spaces, in addition to approximately 60 new on-street parking spaces that would be created on the project site.

The temporal distribution for all Astoria Cove uses are as follows: the residential temporal distribution is based on the 2005 *Brooklyn Bridge Park FEIS*, the supermarket temporal distribution is based on the 2005 *Van Courtland Center EAS*, the local retail temporal distribution is based on the 2004 *No. 7 Subway Extension – Hudson Yard Rezoning and Development Program FGEIS*, and the school staff temporal distribution is based on standard school staff work hours.

Table 6 shows the preliminary parking demand. As can be seen in Table 6, it is expected that the demand during the early morning, evening, and overnight hours would exceed the total supply of 960 accessory and on-street parking spaces on the project site. As such, the overnight on-street (existing curbside regulations and parking utilization) and off-street (utilization) parking within a ¼-mile of the project site will be analyzed. If the parking available within ¼-mile of the project site is insufficient to accommodate the peak parking demand, the study area will be extended to ½-mile.

Table 6 - Weekday Parking Accumulation

	Neighbourhood Retail		Supermarket		Residential		School Staff		Overnight Demand
	84,470 In	gsf Out	25,000 In	gsf Out	1,668 In	du Out	35 In	staff Out	1001 Accumulation
12-1 AM	0	0	0	0	7	7	0	0	1001
1-2	0	0	0	0	7	7	0	0	1001
2-3	0	0	0	0	7	7	0	0	1001
3-4	0	0	0	0	7	7	0	0	1001
4-5	0	0	0	0	7	7	0	0	1001
5-6	0	0	13	9	14	41	0	0	978
6-7	0	0	27	9	34	118	0	0	912
7-8	0	0	36	22	41	122	0	0	845
8-9	2	2	51	39	79	315	17	0	638
9-10	2	1	67	36	71	107	0	0	634
10-11	5	3	72	54	71	123	0	0	602
11-12	5	5	72	72	75	103	0	0	574
12-1 PM	13	13	51	51	98	98	0	0	574
1-2	6	5	80	98	100	102	0	0	555
2-3	6	4	89	107	105	100	0	0	544
3-4	5	5	80	107	150	90	0	0	577
4-5	5	5	89	85	254	147	0	0	688
5-6	7	7	85	79	281	151	0	17	807
6-7	3	6	44	45	198	99	0	0	902
7-8	3	5	18	27	179	79	0	0	991
8-9	2	2	9	18	106	61	0	0	1027
9-10	1	1	0	18	34	39	0	0	1004
10-11	0	0	0	10	23	23	0	0	994
11-12	0	0	0	0	20	13	0	0	1001

Notes : 25% link trip credit applied to Retail and Supermarket land use.

SELECTION OF PEAK HOURS FOR ANALYSIS

As discussed above, the Proposed Action would result in a net increase of 534, 365 and 633 vehicle trips in the weekday AM, midday, and PM peak periods, respectively. Under *CEQR Technical Manual* criteria, if a proposed action in any area of the City would generate greater than 50 peak hour vehicle trip ends, there is likely a need for further analysis. The EIS traffic analyses will therefore quantitatively examine conditions in these peak hours.

Transit (subway and bus) analyses generally examine conditions during the weekday 8-9 AM and 5-6 PM peak commuter periods, as it is during these times that overall transit demand (and the potential for significant adverse impacts) is typically greatest. The analyses of transit conditions will therefore focus on these two periods.

Pedestrian analyses will examine conditions when future pedestrian volumes are expected to be greatest, during the AM, midday, and PM peak hours. The net increment in pedestrian trips, as a result of the proposed action, would exceed the *CEQR Technical Manual* criteria of 200 or more peak hour pedestrian trips, during all peak hours.

VEHICLE TRIP ASSIGNMENT

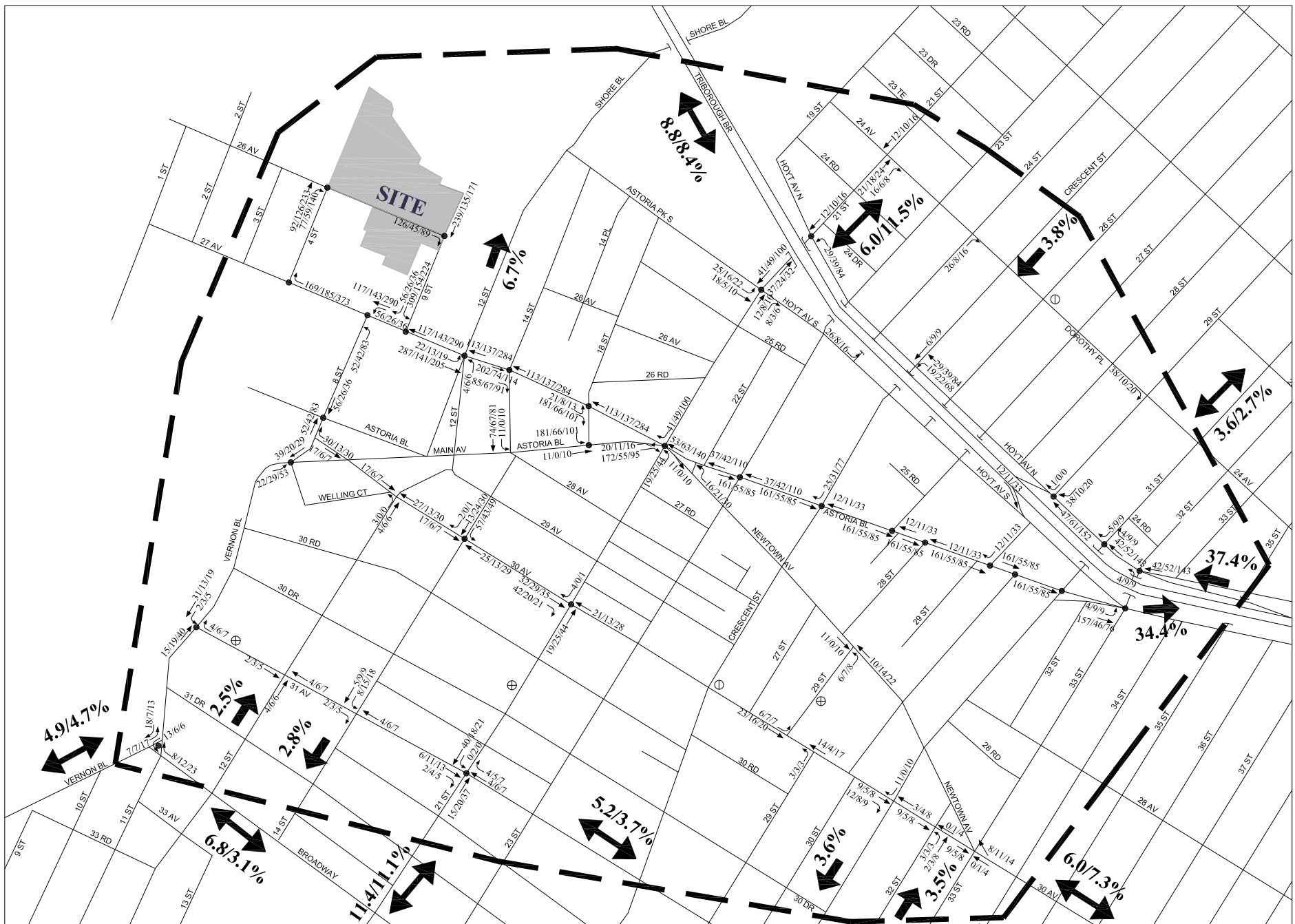
Auto/Taxi

The street network in the vicinity of the project site is an irregular and discontinuous grid system of one-way and two-way streets and avenues along this edge of Queens. Principal arterials within and in the immediate vicinity of the rezoning area include east-west 27th Avenue/Astoria Boulevard and north-south Vernon Boulevard. The project site is also served by the Grand Central Parkway to the east. 26th Avenue will be the main distribution roadway from the site to the external network.

Preliminary Assignment

Figure 2 provides the preliminary traffic assignment of vehicle trips (including auto, taxi and trucks) during the peak weekday AM, midday and PM hours. As shown in Figure 2, traffic flows are concentrated in the vicinity of the site and are disbursed along Astoria Boulevard (east-west) and along Vernon Boulevard (north-south) to reach the highways and bridges serving Queens. Based on the preliminary assignments shown in Figure 2, the following intersections are expected to exceed the 50 vehicle per hour increment during one or more of the weekday AM, midday and PM peak hours:

1. 26th Avenue @ 4th Street
- A. 26th Avenue @ 9th Street
2. 27th Avenue @ 4th Street
3. 27th Avenue @ 8th Street
4. 27th Avenue @ 12th Street



Legend :
 (AM/ MD/ PM)
 ● Analysis Locations
 ⊕ Source/Sink
 Study Area
 In/Out% (Portal Assignment)

5. Astoria Boulevard @ 8th Street
6. Astoria Boulevard @ 18th Street
7. Astoria Boulevard @ 21st Street
8. Astoria Boulevard @ Crescent Ave
9. Astoria Boulevard @ 29th St
10. Astoria Boulevard @ 31st St
11. 30th Ave @14th St
12. 30th Ave @21st St
13. Vernon Boulevard/Main Avenue @ 8th St/Welling Court
14. 27th Avenue @ 14th St
15. 27th Avenue @ 18th St
16. Hoyt Avenue North @ 21st St
17. Hoyt Avenue North @ 29th St
18. Astoria Park South/Hoyt Avenue South @ 21st St
19. Astoria Boulevard @23rd St
20. Astoria Boulevard @ 27th St
21. Astoria Boulevard @28th St
22. Astoria Boulevard @ 30th St
23. Hoyt Avenue North @ 31st St
24. Hoyt Avenue South/Astoria Blvd @ 33rd St
25. Hoyt Avenue North/Astoria Blvd @ 32nd St
26. 27th Avenue @ 9th Street
27. Vernon Boulevard @ 31st Avenue
28. Vernon Boulevard @ Broadway
29. 31st Avenue @ 21st Street

PROPOSED TRAFFIC DATA COLLECTION PROGRAM

According to the *CEQR Technical Manual*, generally, except for intersections in the immediate vicinity of the directly affected area, intersections with fewer than 50 vehicles per hour of project traffic can be screened out. All of the 30 intersections proposed for analysis (see Figure 2) are expected to experience an increment exceeding 50 vehicles.

It should be noted that there is currently another proposed project (*Halletts Point Rezoning*) in the vicinity of the project site described above. Because of the similarities in both location and land use, NYCDCP has recommended to analyze essentially the same study network and peak periods as the *Halletts Point Rezoning* and already documented in that project's FEIS. Therefore, the existing conditions traffic network presented as part of the Halletts Point FEIS traffic analysis will be used as the base for this EIS. At analysis intersections where data is not included in the Halletts Point FEIS, ATR data collection and manual turning movement counts would be conducted during the weekday AM, midday, and PM periods.

TRANSIT

Subway

As discussed above and shown in Table 5, the proposed action would generate a net total of 705, 484 and 823 subway trips during the weekday AM, midday and PM peak hours, respectively. The 30th Avenue station on the N and Q lines would be the closest facility to the project site and would be the assumed destination for the majority of the subway trips. Because of the distance between the project site and this station, a shuttle service is anticipated between the 30th Avenue Station and the project site (discussed in detail below).

Additionally, it is assumed that approximately 20 percent of residents making subway trips would utilize the 21st Street – Queensbridge station on the F line which can be accessed by the Q103 bus route. However, this would result in less than 200 peak hour subway trips at this station and therefore analysis of this station would not be warranted.

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) specified in the *CEQR Technical Manual*, detailed transit analyses are required if the Proposed Action is projected to result in more than 200 peak hour rail transit riders. The Proposed Action would exceed the CEQR threshold only at the 30th Avenue Station during the peak weekday AM and PM commuter periods. Although the Proposed Action is projected to result in more than 200 peak hour subway trips in the weekday midday peak period, these trips would be off-peak when the subway system typically has ample capacity. As such, this off-peak period is not analyzed in this EIS, as no impacts are expected. Therefore, the EIS will provide a detailed subway transit analysis for the weekday AM and PM peak hours only, for the 30th Avenue station. This analysis will focus on the following 30th Avenue station key stairways and entrance control areas of the station during one or more peak hour:

- Street-to-station stair S3-M3 (at the northwest corner at the intersection of 31st Street and 30th Avenue) (AM and PM peak hours)
- Fare array R513-SG1 (AM and PM peak hours)
- Fare array R513-SG2 (AM and PM peak hour)
- Platform stair P5-P6 (Manhattan-bound platform) (AM peak hour)
- Platform stair P1-P2 (Manhattan-bound platform) (AM peak hour)
- Platform stair P7-P8 (Queens-bound platform) (PM peak hour)
- Platform stair P3-P4 (Queens-bound platform) (AM peak hour)

In addition to the detailed analysis of station elements at the 30th Avenue N & Q subway station, an analysis of line haul conditions on each of the subway routes serving the project site (N, Q, and F) will also be provided for the weekday AM and PM peak hours.

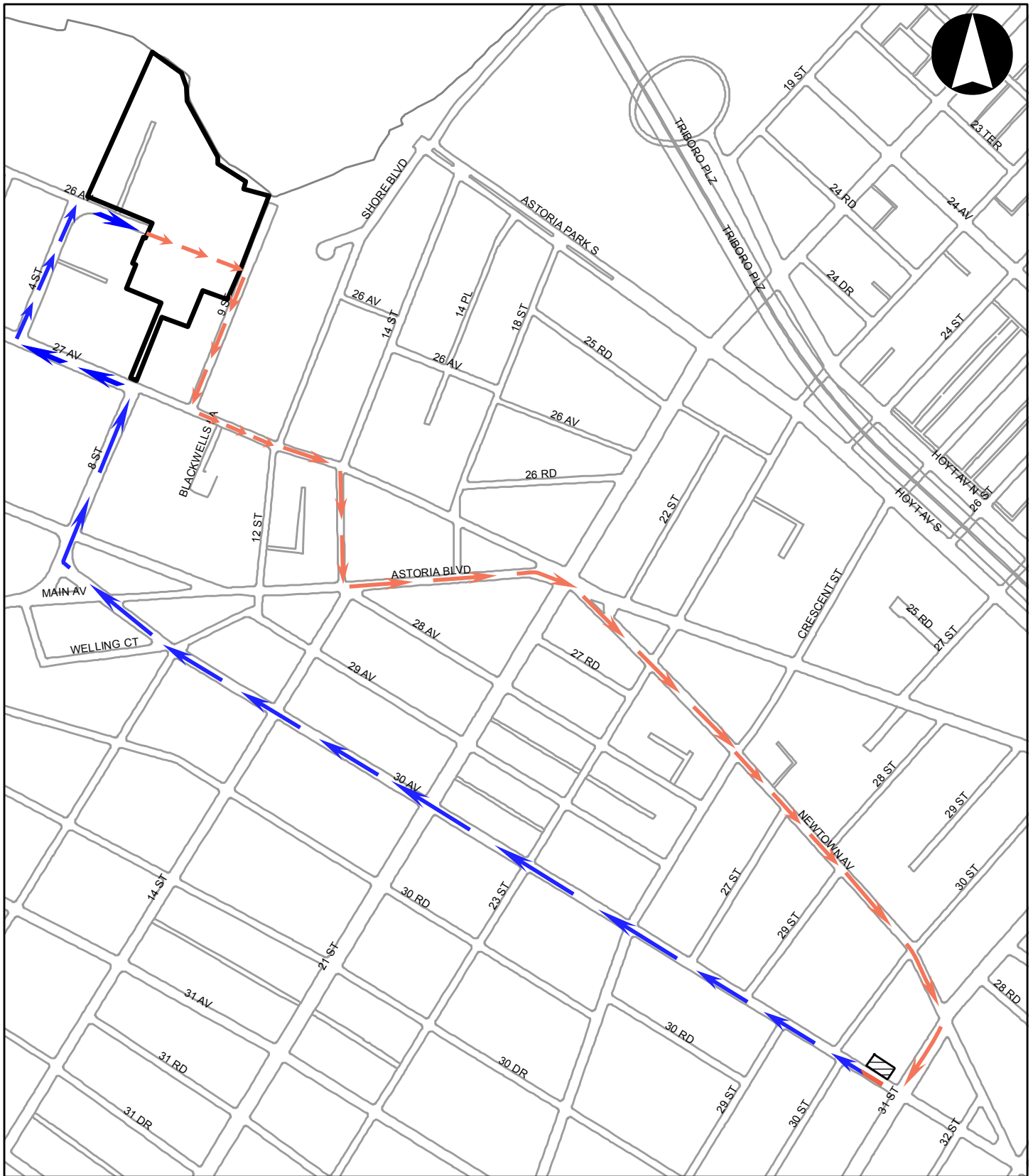
Bus

The project site is also served by three NYC Transit local bus routes that connect the site with other parts of Queens, namely the Q18, Q102 and Q103 routes. The Q18 and Q102 routes service the 30th Avenue subway station.

According to general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, a detailed bus-line haul analysis is generally not required if the project generated increase in passengers assigned to a single bus line (in one direction) is fewer than 50 passengers. Bus-only trips are assigned evenly between the Q18, Q102, and Q103. As the project site is located at significant distances from the nearest subway stations, project generated subway trips are expected to use bus-to-subway connections. As a shuttle bus service to and from the 30th Avenue N & Q subway line station will be provided for the project's future residents, the majority of project generated subway trips to this station will use the shuttle bus service. Local retail and supermarket patrons making subway trips at the 30th Avenue Station (N & Q lines) are expected to take the Q18 or Q102 bus. All subway riders using the F subway line are assigned to the Q103 bus route as it provides access to the 21st Street-Queensbridge Station (F line).

The project would generate an increase in bus trips (bus-only and subway-bus transfer trips) of 244, 664, and 365 trips during the AM, midday, and PM peak hours. The *CEQR Technical Manual* threshold would be exceeded on only the Q103 bus route, therefore a detailed bus-line haul analysis for the Q103 bus route will be performed for the AM and PM peak hours in both directions. Although the Proposed Action is projected to result in more than 50 trips on the Q103 in a given direction during the weekday midday peak period, these trips would be off-peak when the bus system typically has ample capacity. As such, this off-peak period is not analyzed in this EIS, as no impacts are expected. It is not expected that any other route would experience 50 or more trips in one direction in any of the peak hours. Therefore, the EIS will provide a detailed bus analysis for the weekday AM and PM peak hours only, for the Q103 bus route.

As mentioned above, because of the distance of the project site to the subway, it is anticipated that a shuttle service would be implemented by the applicant for residents of the proposed project. It is anticipated that the shuttle service would carry approximately 40 passengers per bus and would operate between the project site and the 30th Avenue station on the N and Q line during the AM and PM weekday peak periods. Based on the subway demand generated by the proposed project, it is anticipated that three 40 passenger buses would be used for the shuttle service. It is estimated that each shuttle bus would make up to four roundtrips per hour during the AM and PM peak periods. It is anticipated that the shuttle bus stop at the project site would be located along 26th Avenue. The drop-off/pick-up location at the subway is proposed along the north side of 30th Avenue at 31st Street at an existing NYCT bus stop. Because of the activity at this Q18/Q102 bus stop, it is assumed that the existing bus stop would be lengthened west to accommodate the shuttle bus, potentially with a second berth for the shuttle bus. Figure 3 illustrates a preliminary shuttle bus route to and from the project site.



- Project Site
- Shuttle Route to Station
- Shuttle Route from Station
- Shuttle Pick up/ Drop off at 30th Avenue Station

PEDESTRIANS

According to the *CEQR Technical Manual*, projected pedestrian volume increases of less than 200 pedestrians per hour at any pedestrian element analyzed would not require further analysis since that level of increase would not generally be noticeable nor would it typically cause a significant impact. Based on the travel demand forecast provided in Table 5 there would likely be substantial pedestrian trips along the to-be developed 26th Avenue corridor adjacent to the new retail frontages.

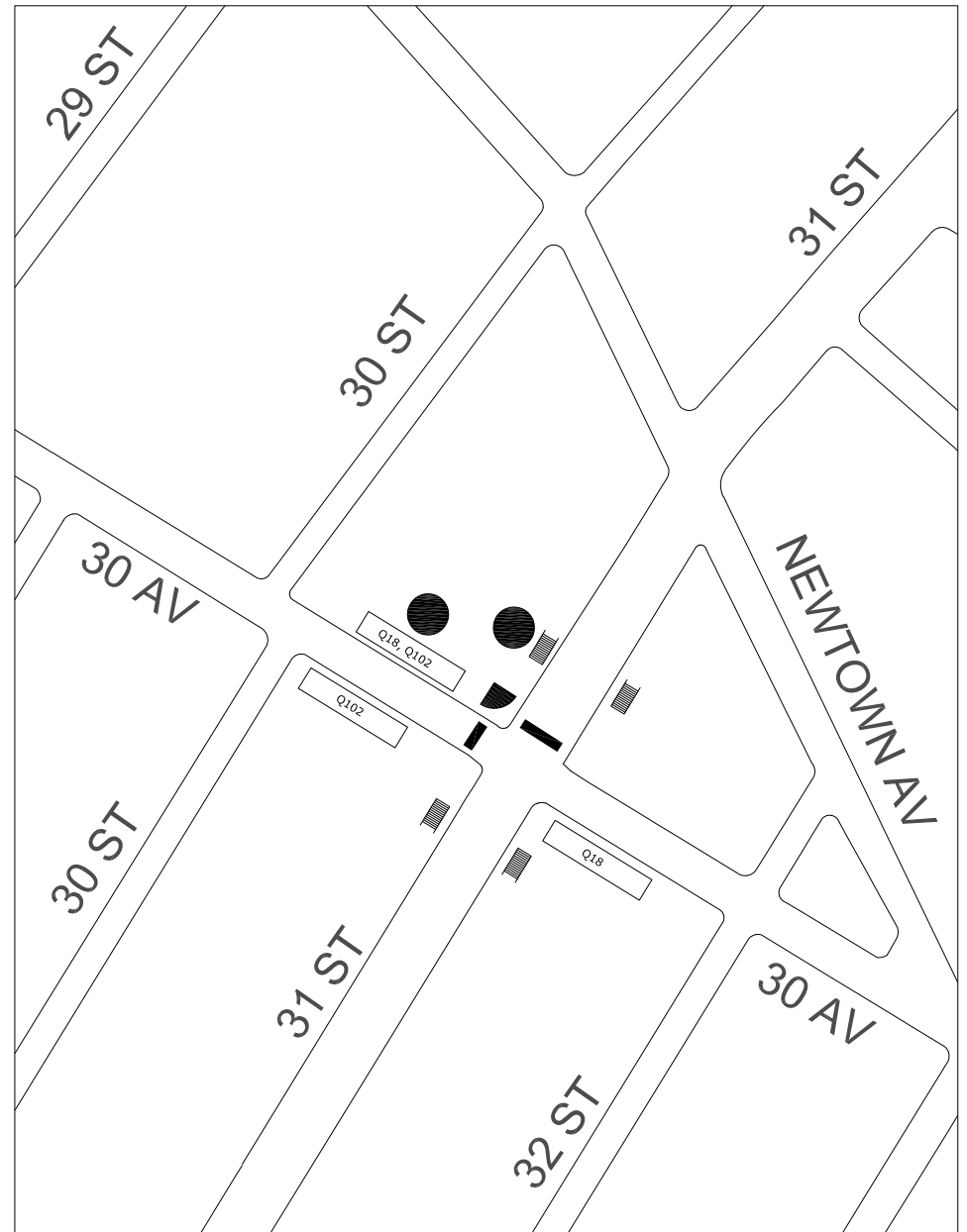
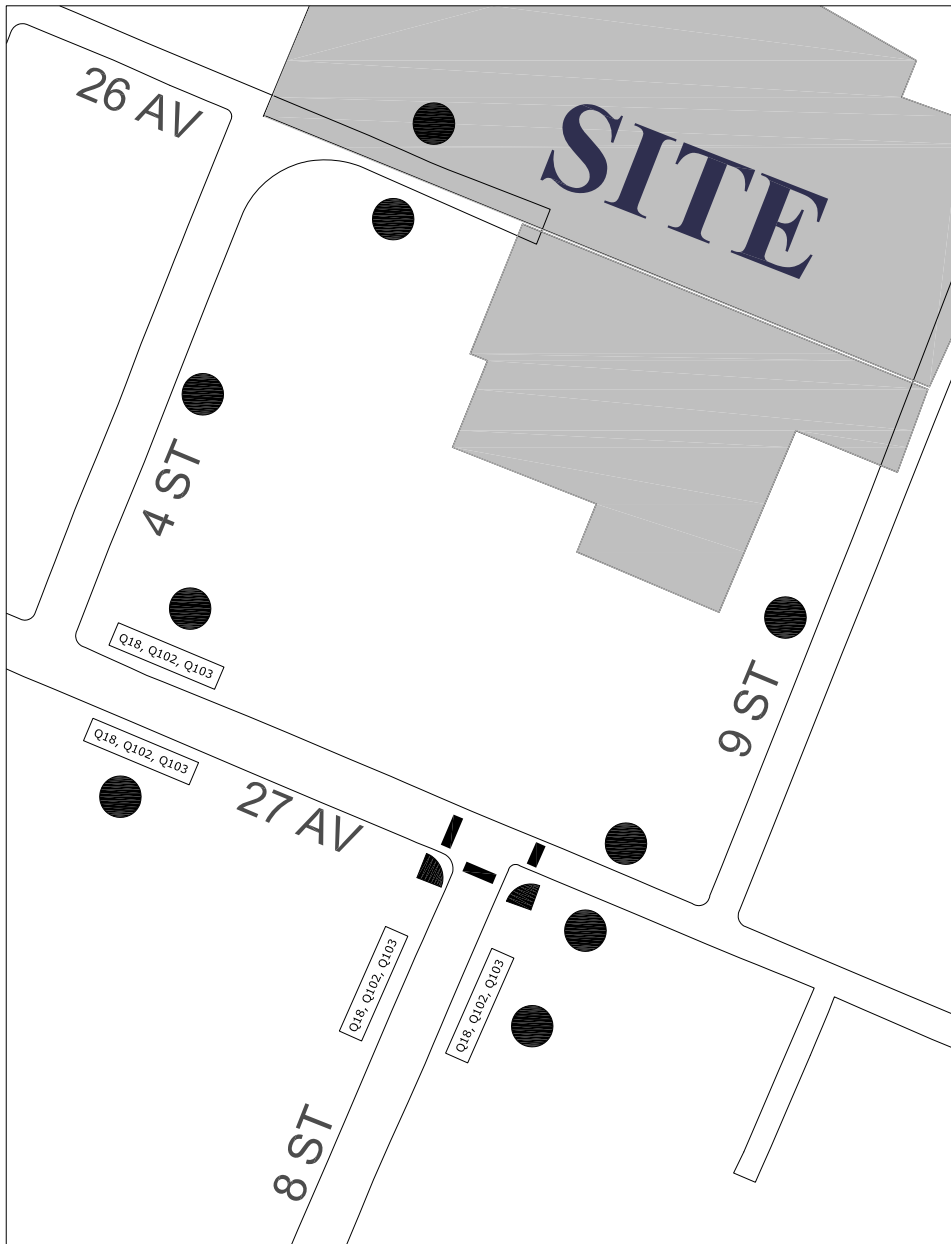
Therefore, the pedestrian analysis will provide detailed pedestrian analysis for the pedestrian facilities in the immediate vicinity of the project site, with a focus on 26th Avenue contiguous to the project site. In addition, as the proposed project includes a shuttle service to the 30th Avenue subway station with a drop-off/pick-up location proposed along the north side of 30th Avenue at 31st Street, the northwest corner of 31st Street and 30th Avenue, the north sidewalk on 30th Avenue between 30th and 31st Streets, and the west sidewalk on 31st Street between Newton and 30th Avenues would also be assessed in the pedestrian analysis. Figure 4 shows the proposed sidewalk, corner and crosswalk data collection locations where counts would be conducted during the weekday AM, midday and PM peak periods, which are also listed below. It should be noted that the sidewalk elements 12 through 15 are only included in the With-Action analysis as they would be created as part of the Proposed Action, and are therefore not indicated in Figure 4. No new signalized corners or crosswalks would be introduced on the project site as part of the Proposed Action, and therefore a detailed analysis of new crosswalk and/or corner elements on the project site is unwarranted pursuant to CEQR.

Sidewalks

1. 26th Avenue between 4th Street and dead-end (North)
2. 26th Avenue between 4th Street and dead-end (South)
3. 27th Avenue between 4th Street and 8th Street (North)
4. 27th Avenue between 4th Street and 8th Street (South)
5. 27th Avenue between 8th Street and 9th Street (North)
6. 27th Avenue between 8th Street and 9th Street (South)
7. 30th Avenue between 30th Street and 31st Street (North)
8. 4th Street between 26th Avenue and 27th Avenue (East)
9. 8th Street between 27th Avenue and Astoria Boulevard (East)
10. 9th Street between dead-end and 27th Avenue (West)
11. 31st Street between Newtown Avenue and 30th Avenue (West)
12. 4th Street between 26th Avenue and the public access easement (west)
13. Public access easement between 4th Street and the 8th Street Mews (south)
14. 8th Street Mews south of 26th Avenue
15. Waterfront esplanade walkway/public access easement (north)

Corners

1. 27th Avenue and 8th Street (southeast)
2. 27th Avenue and 8th Street (southwest)



- Sidewalk
- ◐ Corner
- Crosswalk

Figure 4

3. 30th Avenue and 31st Street (northwest)

Crosswalks

1. 27th Avenue and 8th Street (East)
2. 27th Avenue and 8th Street (West)
3. 27th Avenue and 8th Street (South)
4. 30th Avenue and 31st Street (North)
5. 30th Avenue and 31st Street (West)

It should be noted that the last four crosswalks (two through five) will not be included in the detailed analyses since the project generated pedestrian increments at these locations would be less than the *CEQR Technical Manual* prescribed threshold of 200 pedestrian trips. However, this data will be collected in order to appropriately analyze the corner area pedestrian conditions at these locations.

APPENDIX 2

**RESPONSE TO COMMENTS ON THE DRAFT SCOPE OF
WORK**

Astoria Cove

RESPONSE TO COMMENTS ON THE DRAFT SCOPE OF WORK

A. INTRODUCTION

A Draft Scope of Work (Draft Scope) for the Astoria Cove project was issued on April 26, 2013, which presented the proposed framework for the environmental analysis and procedures to be followed in the preparation of the Draft Environmental Impact Statement (EIS) for the proposed project. This chapter summarizes and responds to all substantive comments on the Draft Scope made during the public review period. Oral and/or written comments were received during the public scoping meeting held by the New York City Planning Commission (CPC) on May 28, 2013, at the Goodwill Astoria Headquarters located at 4-21 27th Avenue in Astoria. Written comments on the Draft Scope were accepted through the public comment period, which extended until June 7, 2013. Written comments received on the Draft Scope are included in Appendix 3. A Final Scope of Work (Final Scope) was issued on March 18, 2014, incorporating comments received on the Draft Scope where relevant and appropriate as well as other background and project updates that were made subsequent to publication of the Draft Scope.

Section B lists the elected officials, community boards, organizations, or individuals who commented on the Draft Scope. The organization and/or individual that commented are identified for each comment in the following section (Section C). These summaries convey the substance of the comments by may not necessarily quote the comments verbatim. Comments are organized by subject matter and generally parallel the task structure of the Draft Scope. Where more than one commenter expressed a similar view, the comments have been grouped and addressed together.

B. LIST OF ELECTED OFFICIALS, ORGANIZATIONS, AND INDIVIDUALS WHO COMMENTED ON THE DRAFT SCOPE OF WORK

Elected Officials and Community Board

Lucille Hartmann, Queens Community Board 1 (oral testimony at May 28, 2013 public scoping hearing—evening session)

Joanne Asselin, Queens Community Board 1 (oral testimony at May 28, 2013 public scoping hearing—evening session)

Organizations and Interested Public

Richard Kitormi, Astoria resident (oral testimony at May 28, 2013 public scoping hearing—afternoon session)

Claudia Coger, Astoria Houses Resident Association President (oral testimony at May 28, 2013 public scoping hearing—afternoon session)

Joseph Tecarr, Service Employees International Union, Local 32BJ (oral testimony at May 28, 2013 public scoping hearing—evening session; written statement dated May 28, 2013)

Ronnie Minor, Astoria Houses/Reality Houses, Inc. (oral testimony at May 28, 2013 public scoping hearing—evening session)

James Taylor, Service Employees International Union, Local 32BJ (oral testimony at May 28, 2013 public scoping hearing—evening session)

Bishop Taylor, Community Representative (oral testimony at May 28, 2013 public scoping hearing—evening session)

C. COMMENTS AND RESPONSES ON THE DRAFT SCOPE OF WORK

Description of the Proposed Action

Comment 1: I would like to see this developer create an anchor at the site, whether it is a cultural facility or a sports facility. A cultural facility would encourage people to come to the area and the community facility requirement should be utilized for a cultural facility. We do not have any cultural facilities south of 21st Street and we need a facility would supply entertainment as well as social activities to the people that already live in the area. [Kitormi, Cogger, Minor]

Response: Comment noted.

Comment 2: There's another development in the area and that other development is talking about building a supermarket and so is this one. Are we talking about the same supermarket or are we talking about two? Will there be a supermarket included as part of this development? [Hartman]

Response: As stated in the Draft Scope, the Applicant intends to develop a 25,000 gsf supermarket as part of the commercial retail space proposed for the project site. It would occupy, as described in the Final Scope, the ground floor of Astoria Cove's Building 2 with frontage along 26th Avenue.

Comment 3: I really like the project. [Minor]

Response: Comment noted.

Comment 4: I look forward to this and all developments on Halletts Point. [Kitormi]

Response: Comment noted.

Analysis Framework and Process

Comment 5: The developments will be adding population to an area that is already overpopulated. [Cogger]

Response: The environmental review's density-based analyses will assess the potential impact of the increased residential and nonresidential population that would be introduced on the project site under the Proposed Action.

Comment 6: We want to ensure that the environmental impact statement is correct. [Minor]

Response: As noted above, the Draft Scope presented the proposed framework for the environmental analysis and procedures to be followed in the preparation of the Draft EIS. Many of the analyses will follow the methodologies as set forth in the *CEQR Technical Manual*. The Final Scope revised certain methodologies where relevant and appropriate in response to public comments and/or where relevant information came to light subsequent to publication of the Draft Scope.

Urban Design and Visual Resources

Comment 7: The buildings will block existing views. [Minor]

Response: As stated in the Draft Scope, a detailed assessment of the potential impacts of the proposed project on urban design, visual resources, and view corridors will be provided in the Draft EIS.

Energy

Comment 8: How will the buildings be heated? Will it be electric heat or is going to be a central system? [Asselin]

Response: According to the Applicant, the Astoria Cove project would be utilizing natural gas for its heating, ventilation and air conditioning (HVAC) systems.

Alternatives

Comment 9: The possibility of ferry service at Halletts Cove or Pot Cove is interesting. If ferry service was provided here, there would need to be parking facilities. If this could be considered as part of this development or the other development, it might be advantageous. [Kitormi]

Response: The Draft Scope under Task 21, "Alternatives," includes a Ferry Alternative that will be analyzed as part of the Draft EIS. The analysis will address all areas of potential environmental impacts, including an assessment of transportation and related systems.

Miscellaneous Comments

Comment 10: 2030 Astoria Developers is headed, we believe, by Alma Realty. Alma's record as a landlord includes many tenant and HPD complaints. We believe Astoria can do a lot better than Alma. We strongly urge that the environmental review of this project considers Alma Realty's potentially negative impact on this community if they do not address those outstanding issues. [Tecarr]

Response: The purpose of the environmental review is to assess the potential impacts resulting from the Proposed Action; the Applicant is not the focus of the assessment as the requested actions are not tied to the Applicant, but rather to the project site.

Comment 11: The developers here need to address the concerns of these 32BJ union members and why they feel the way they feel. [B. Taylor, Minor]

Response: Comment noted.

Comment 12: The bottom line that we're trying to say here this evening is that Alma Realty cannot be trusted. They come in with these beautiful designs and all the propaganda of what they're going to do. But once they come in, what are they going to do for the hard working individuals who are trying to put food on the table and health benefits for their family? [J. Taylor]

Response: Comment noted.

Comment 13: This developer has a long way to go with community and people relations. Unless there will be a sit down conversation, I don't really see this project going anywhere. [B. Taylor]

Response: Comment noted.

Comment 14: If you don't secure it, take it into consideration and secure what people do, then you're not protecting your investment because people are a part of the investment. [Coger]

Response: Comment noted.

APPENDIX 3

WRITTEN COMMENTS ON THE DRAFT SCOPE OF WORK

**Astoria Cove Development Scoping Meeting
(CEQR No. 13DCP127Q)
SEIU Local 32BJ Testimony
Tuesday, May 28, 2013**



My name is Joseph Tecarr and I am here to testify on behalf of the Service Employees International Union Local 32BJ ("32BJ") regarding "2030 Astoria Developers LLC" proposed Astoria Cove Development project along 26th Avenue between 4th and 9th Streets here in Astoria.

32BJ represents approximately 120,000 property service workers across eight states, including 71,000 in New York City and nearly 2,300 of whom live right here in Astoria. All of them rely on good jobs and good wages to support their families.

2030 Astoria Developers is headed by Efsthios (Steve) Valiotis, CEO of Alma Realty which has a record of union busting and undercutting labor standards in the building services industry of New York City real estate. For example, in 2009, Mr. Valiotis and Alma Realty took over a residential property in the Bronx where the hard-working building employees were members of 32BJ and had family-sustaining jobs with decent wages, health and pension benefits. Alma's first order of business was to slash wages and eliminate health and pension benefits for the work force. After failing to hire several long-term union members working there, Alma ultimately busted Local 32BJ as the building workers' union at that property.

At another large residential property in Far Rockaway where 32BJ has long represented the work force, since 2010 Mr. Valiotis and Alma Realty have been refusing to sign the standard industry labor agreement which covers 30,000 other residential building workers in the City. Alma's conduct, which jeopardizes the employees' health and pension benefits, even included an unsuccessful effort to get 32BJ decertified as the workers' union. Steve Valiotis is an irresponsible real estate employer and not the type of developer the City should grant a significant rezoning to for more Alma-style development in our City.

Mr. Valiotis's conduct not only jeopardizes the welfare of the working people who maintain his properties, but also diminishes his tenants' quality of life. Now Mr. Valiotis wants bring his way of doing business to Queens's working families with his proposed Astoria Cove development. With Mr. Valiotis and Alma's track record of attacking working people, it is important to prevent him from doing so.

As a member of 32BJ, I have been able to count on steady wages and benefits like affordable healthcare and access to training classes. By guaranteeing the creation of good jobs like my own, and by addressing the housing needs of the community, new development done safely can help the city grow for all New Yorkers, not just for the wealthy. But rest assured Alma Realty shows no sign of being a good partner in this way.

Alma Realty and Steve Valiotis have made a habit of undercutting industry standards for their building service workers, and Alma's record as a landlord includes many tenant and HPD complaints. We believe Astoria can do a lot better than Alma, and we strongly urge that the environmental review of this project considers Alma Realty's potential negative impact on this community if they do not address these outstanding issues.

Thank you.