1752 Shore Parkway Project
Draft Scope of Work for Preparation of a
Draft Environmental Impact Statement

A. INTRODUCTION

The proposed project involves the development of an approximately 214,000 square-foot (sf) commercial building including a BJ's Wholesale Club and three other retail stores; a three-level parking garage with approximately 690 parking spaces; and approximately 97,000 square feet of publicly accessible waterfront open space on the project site. The project site is located in Brooklyn at 1752 Shore Parkway, west of the Shore Parkway access road between 24th Avenue and Bay 37th Street, east of Gravesend Bay (Lower New York Bay). It is anticipated that the proposed project would be completed by 2013.

B. PROJECT DESCRIPTION

PROPOSED ACTIONS

Development of the proposed project requires approvals from the City Planning Commission (CPC) and City Council for the following discretionary actions:

- Zoning map amendment, to change zoning on the project site from M3-1 to M1-1;
- Special permit pursuant to New York City Zoning Resolution (ZR) §74-922 to permit certain commercial establishments over 10,000 square feet;
- Special permit pursuant to ZR §62-836 to permit bulk modifications on waterfront blocks;
- Special permit pursuant to ZR §74-744 to permit modification of signage requirements in General Large-Scale Developments; and
- Chairperson certification pursuant to ZR §62-811 for public access to the waterfront and visual corridor; and
- CPC Authorization pursuant to ZR §62-822 for modification of waterfront public access area and visual corridor requirements will be sought, pursuant to paragraph (a), to modify the provisions of ZR §62-56 that require that an upland connection be provided at least every 600 feet along a shore public walkway and, due to site constraints, an Authorization may be sought pursuant to paragraph (b) to modify certain requirements of ZR §62-60 (design requirements for waterfront public access areas), in order to achieve a superior design that integrates the various elements of the waterfront public access areas.

The project would also require the following State and Federal approvals and actions:

- Joint Permit Application from the New York State Department of State Environmental Conservation (NYSDEC) and the Army Corps of Engineers (ACE) (for NYSDEC Tidal Wetlands Article 25, NYSDEC Protection of Waters Article 15, Coastal Erosion Hazard

Area, NYSDEC Water Quality Certification Section 401, ACE Nationwide Permit #13, and ACE Rivers/Harbors Section 10 Permits) to permit any in-water work, stabilization of riprap, outfalls, upland building, and esplanade coverage;

- State pollutant discharge elimination system (SPDES) Permit from NYSDEC, to permit the discharge of stormwater during and after construction;
- Beneficial Use Determination (BUD), including a Soil Management Plan (SMP) from NYSDEC to permit the on-site reuse of soil from the western half of the project site to the eastern half of the project site.

PROPOSED PROJECT

The actions described above are being requested to allow the development of a 214,000-sf commercial building containing a large retail establishment (Use Group 6 or 10) on the project site. The proposed commercial building would house a BJ's Wholesale Club and three other retail stores and would be two stories tall (up to approximately 56 feet). The proposed project also includes the development of a three-level parking garage with approximately 690 parking spaces and paved drive aisles (see **Figures 1** though **3**). The project site is located on a waterfront parcel, and would provide public access to the waterfront in the form of a landscaped shoreline public walkway with benches, additional lawn space, a terrace with movable tables and seating, and an upland connection. Approximately 97,000 square feet of public waterfront access area would be provided, including a 55,000 square foot walkway, 23,000 square feet of additional open spaces, and 19,000 square feet of upland connection.

The project site (Block 6491, Lots 207 and 292) is an approximately 363,737-square-foot[1] parcel located west of the Shore Parkway access road between 24th Avenue and Bay 37th Street. The project site, which is occupied by a bus storage company, contains a two-story building, one-story storage building, and bus parking lot in the rear of the site. There is one vehicular entrance to the property along the 24th Avenue frontage and a gated entrance along Shore Parkway at the southern end of the project site. The existing buildings on the project site would be demolished as part of the proposed project. Absent the proposed project, the bus storage operation would remain on the project site. (See **Figures 4** and **5**.)

As part of the proposed project, the fencing that currently lines the Shore Parkway street frontage adjacent to the project site would be replaced with a 14-foot tall screen wall that would extend the site's Shore Parkway East street frontage up to 24th Avenue. The Shore Parkway sidewalk adjacent to the project site would have several new curb cuts to provide private vehicular access to a loading area located on the building's east façade. Vehicular and pedestrian access to the proposed commercial building and the new waterfront park and esplanade would be provided on 24th Avenue. The street frontages of Shore Parkway East and 24th Avenue, adjacent to the project site, would be improved with new tree-lined sidewalks.

PURPOSE AND NEED

The proposed zoning map amendment would make the project site eligible for a special permit that would allow retail establishments greater than 10,000 square feet in floor area. The proposed special permit (ZR §74-922) would permit the development of a commercial building with Use Group 6 and 10 retail uses that would address a need for convenient commercial retail

[1] Lot area, includes only the land above water.

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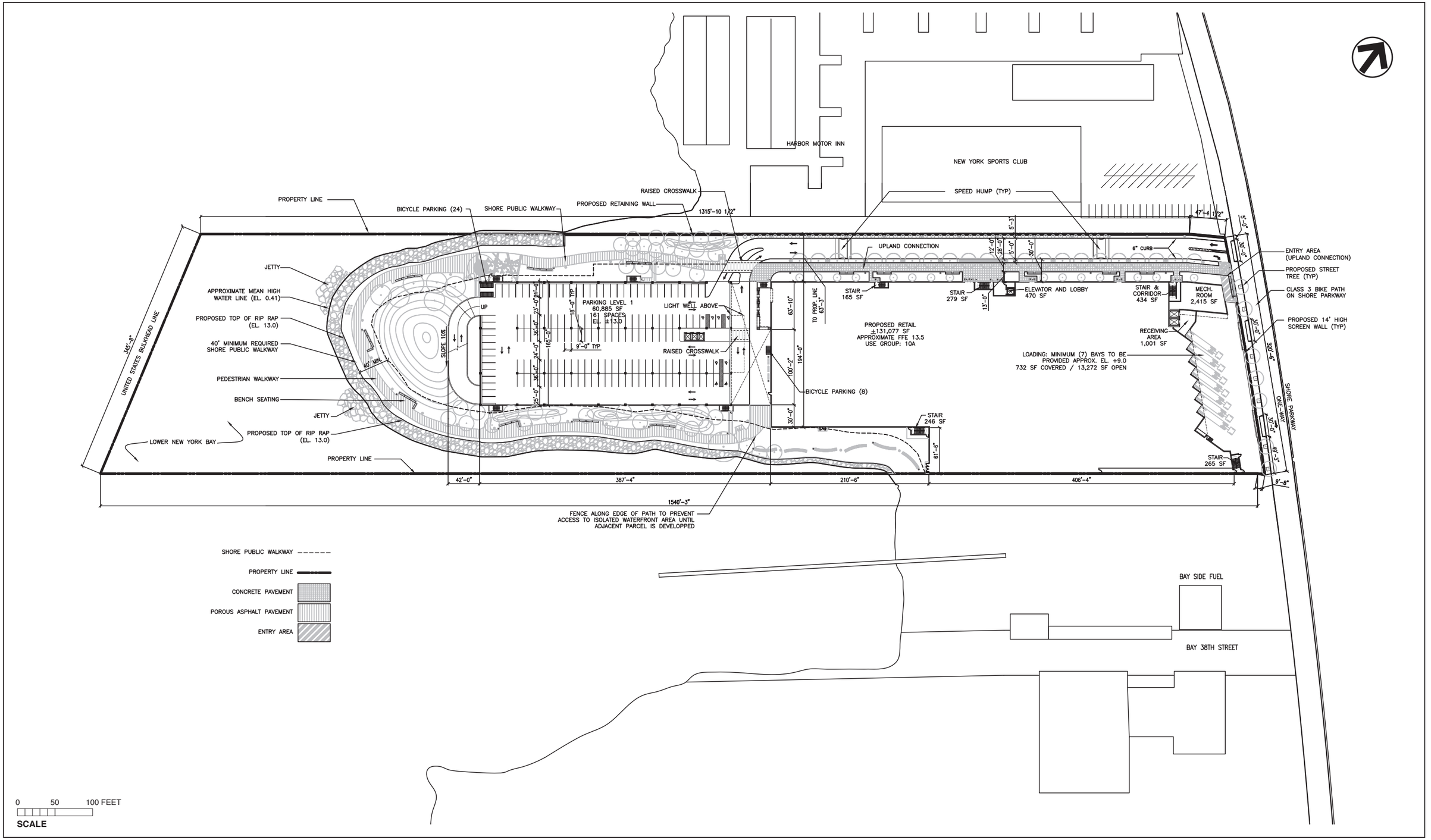

INTERIOR LAYOUTS FOR ILLUSTRATIVE PURPOSES ONLY

1752 SHORE PARKWAY

Ground Floor Plan/Landscape Site Plan

Figure 1

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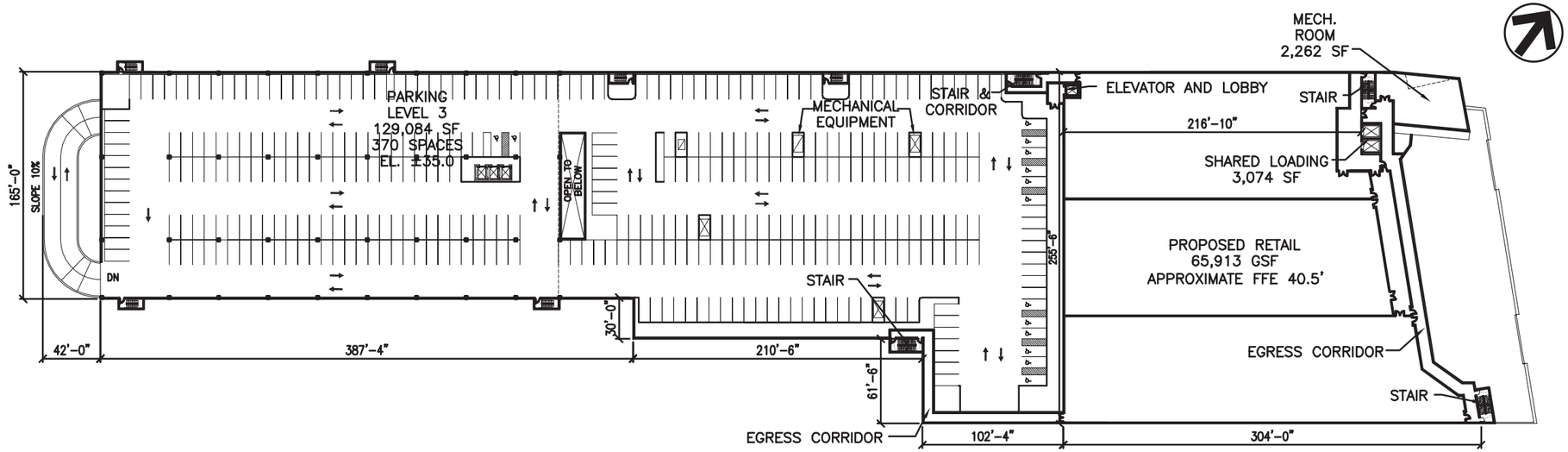
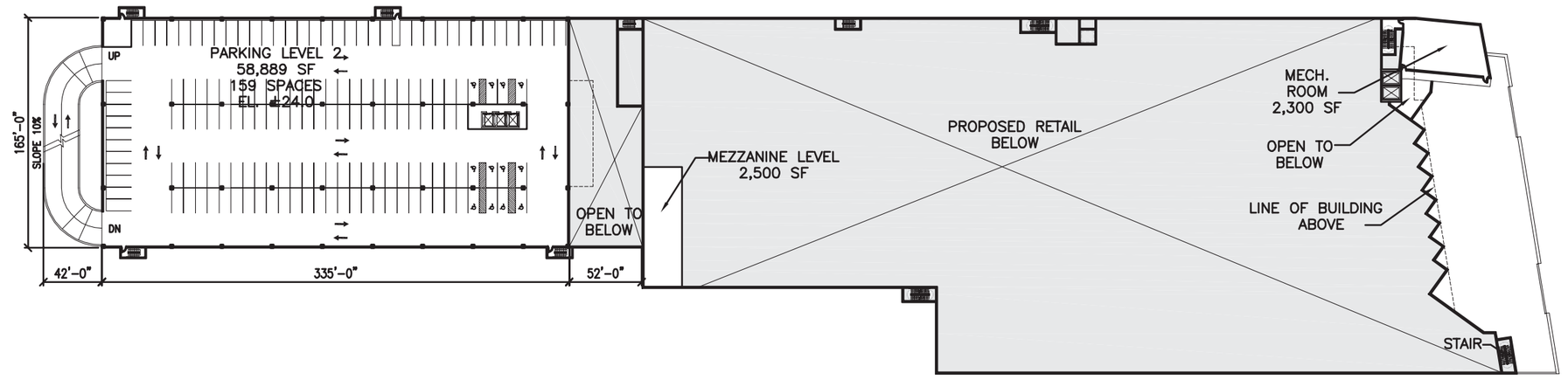


SECOND FLOOR / PARKING LEVEL 3



PARKING LEVEL 2

0 100 200 FEET

SCALE

INTERIOR LAYOUTS FOR ILLUSTRATIVE PURPOSES ONLY

1752 SHORE PARKWAY

Parking Levels and 2nd Floor Tenants

Figure 2

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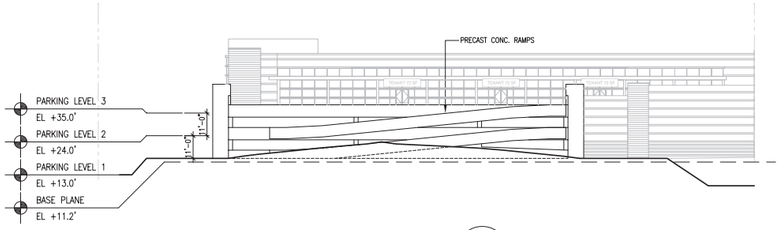
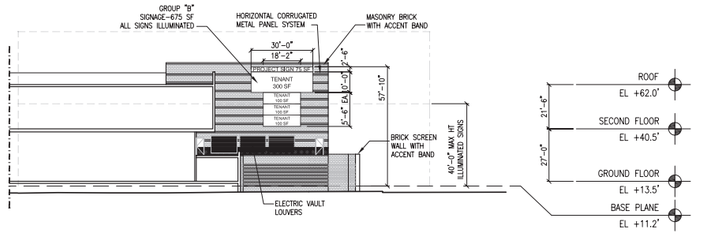
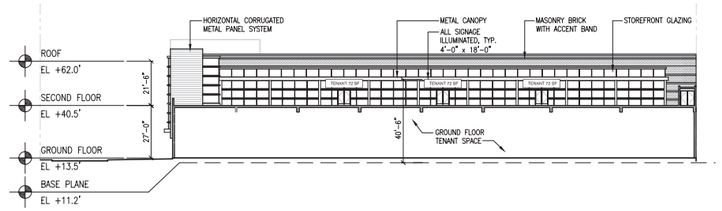


5 – WEST ELEVATION
SCALE: 1/32" = 1'-0"



1 – SOUTH ELEVATION
SCALE: 1/32" = 1'-0"



2 – WEST ELEVATION
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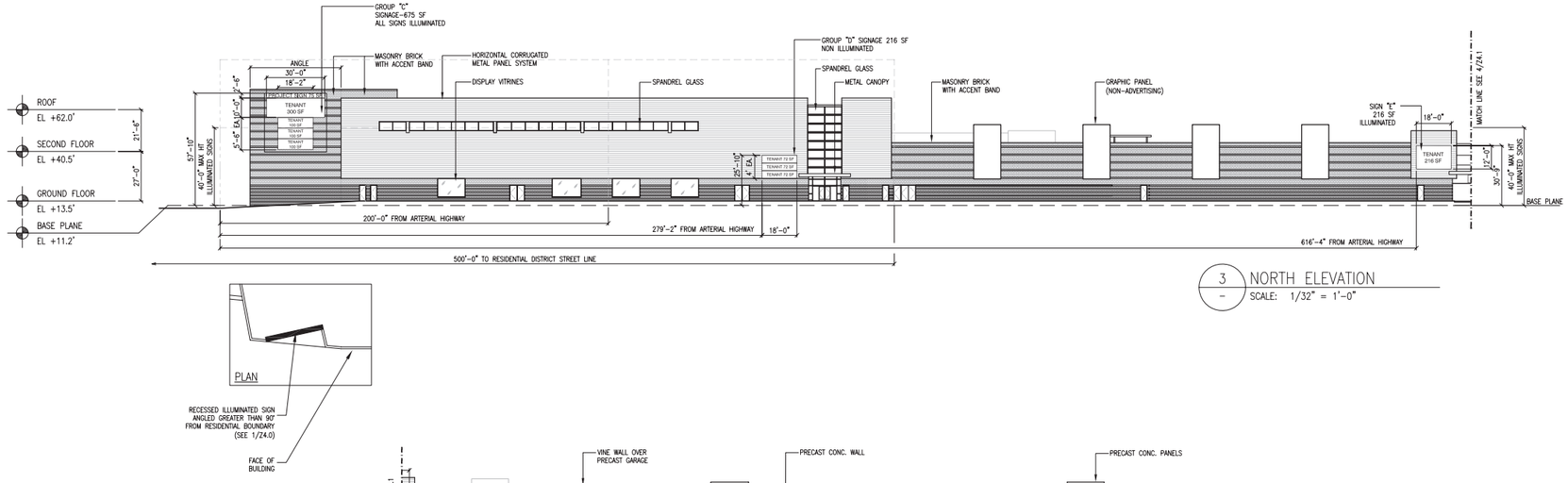
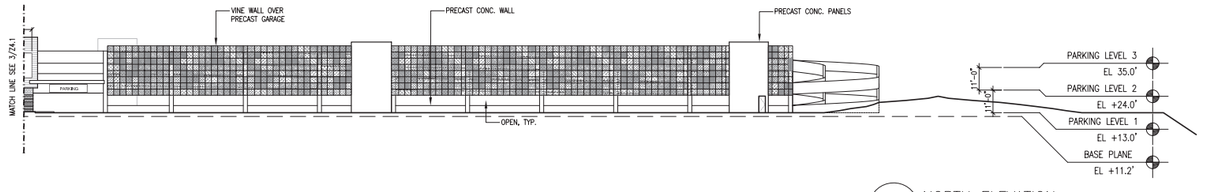


3 – NORTH ELEVATION
SCALE: 1/32" = 1'-0"



4 – NORTH ELEVATION
SCALE: 1/32" = 1'-0"

FOR ILLUSTRATIVE PURPOSES ONLY

1752 SHORE PARKWAY

Building Elevations and Signage
Figure 3a

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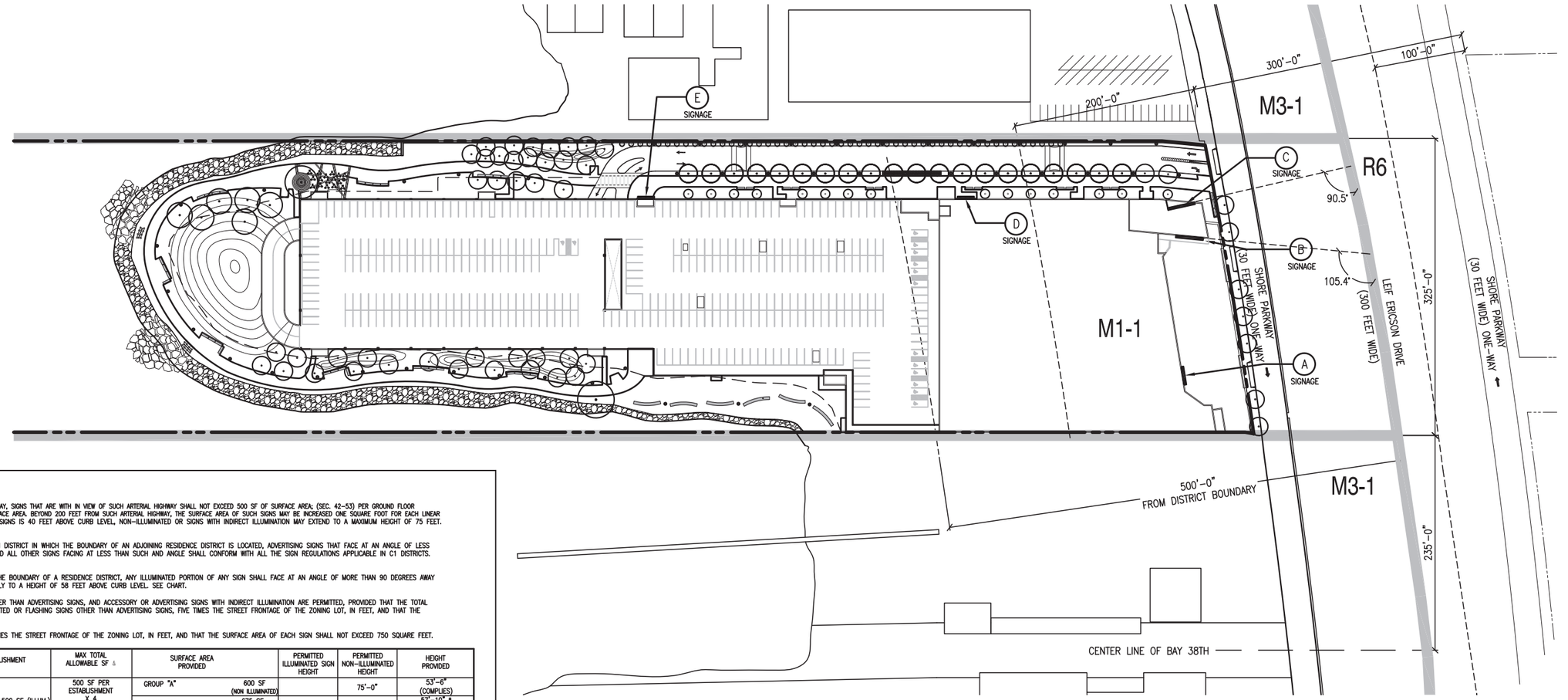


1 KEY PLAN
– SCALE: 1/64" = 1'-0"

SIGNAGE REGULATIONS
PER NYC ZONING RESOLUTION SEC. 42-543 & 42-55 WITHIN 200 FEET OF AN ARTERIAL HIGHWAY, SIGNS THAT ARE WITH IN VIEW OF SUCH ARTERIAL HIGHWAY SHALL NOT EXCEED 500 SF OF SURFACE AREA; (SEC. 42-53) PER GROUND FLOOR ESTABLISHMENT. 4 ESTABLISHMENTS x 500 SF FOR A MAXIMUM OF 2000 SF OF SIGNAGE SURFACE AREA. BEYOND 200 FEET FROM SUCH ARTERIAL HIGHWAY, THE SURFACE AREA OF SUCH SIGNS MAY BE INCREASED ONE SQUARE FOOT FOR EACH LINEAR FOOT SUCH SIGN IS LOCATED FROM THE ARTERIAL HIGHWAY. MAXIMUM HEIGHT FOR ILLUMINATED SIGNS IS 40 FEET ABOVE CURB LEVEL, NON-ILLUMINATED OR SIGNS WITH INDIRECT ILLUMINATION MAY EXTEND TO A MAXIMUM HEIGHT OF 75 FEET. SEE CHART.

PER NYC ZONING RESOLUTION SEC. 42-561 WITHIN 100 FEET OF THE STREET LINE IN M1 DISTRICT IN WHICH THE BOUNDARY OF AN ADJOINING RESIDENCE DISTRICT IS LOCATED, ADVERTISING SIGNS THAT FACE AT AN ANGLE OF LESS THAN 165 DEGREES AWAY FROM SUCH RESIDENCE DISTRICT SHALL NOT BE PERMITTED AND ALL OTHER SIGNS FACING AT LESS THAN SUCH AND ANGLE SHALL CONFORM WITH ALL THE SIGN REGULATIONS APPLICABLE IN C1 DISTRICTS. COMPLIES.

PER NYC ZONING RESOLUTION SEC. 42-562 IN DISTRICT M1 AND WITHIN 500 FEET OF THE BOUNDARY OF A RESIDENCE DISTRICT, ANY ILLUMINATED PORTION OF ANY SIGN SHALL FACE AT AN ANGLE OF MORE THAN 90 DEGREES AWAY FROM SUCH A BOUNDARY LINE AND A SIGN WITH INDIRECT ILLUMINATION MAY EXTEND ONLY TO A HEIGHT OF 58 FEET ABOVE CURB LEVEL. SEE CHART.

PER NYC ZONING RESOLUTION SEC. 42-533 a) – ILLUMINATED OR FLASHING SIGNS, OTHER THAN ADVERTISING SIGNS, AND ACCESSORY OR ADVERTISING SIGNS WITH INDIRECT ILLUMINATION ARE PERMITTED, PROVIDED THAT THE TOTAL SURFACE AREA OF ALL SUCH SIGNS, IN SQUARE FEET, SHALL NOT EXCEED: FOR ILLUMINATED OR FLASHING SIGNS OTHER THAN ADVERTISING SIGNS, FIVE TIMES THE STREET FRONTAGE OF THE ZONING LOT, IN FEET, AND THAT THE SURFACE AREA OF EACH SIGN SHALL NOT EXCEED 500 SQUARE FEET, SEE CHART.

PER NYC ZONING RESOLUTION SEC. 42-533 b) – INDIRECT ILLUMINATION SIGNS, FIVE TIMES THE STREET FRONTAGE OF THE ZONING LOT, IN FEET, AND THAT THE SURFACE AREA OF EACH SIGN SHALL NOT EXCEED 750 SQUARE FEET.

BUILDING SIGNAGE	BUILDING FRONTAGE	ALLOWABLE SF PER ESTABLISHMENT		MAX TOTAL ALLOWABLE SF △	SURFACE AREA PROVIDED		PERMITTED ILLUMINATED SIGN HEIGHT	PERMITTED NON-ILLUMINATED HEIGHT	HEIGHT PROVIDED
SHORE PARKWAY (SIGNS WITHIN 200' OF ARTERIAL HWY) ZR 42-55	268'-9"	5 x STREET FRONTAGE (ZR 42-533) 5 x (268'-9") = 1344 SF	MAX 500 SF (ILLUM.) PER SIGN	500 SF PER ESTABLISHMENT X 4 ESTABLISHMENTS 500 x 4 = 2000 SF	GROUP "A"	600 SF (NON ILLUMINATED)		75'-0"	53'-6" (COMPLIES)
					GROUP "B"	675 SF (ILLUMINATED)	40'-0"		57'-10" * (NON-COMPLIANT)
					GROUP "C"	675 SF (ILLUMINATED)			57'-10" * (NON-COMPLIANT)
					TOTAL	1950 SF (COMPLIES)			

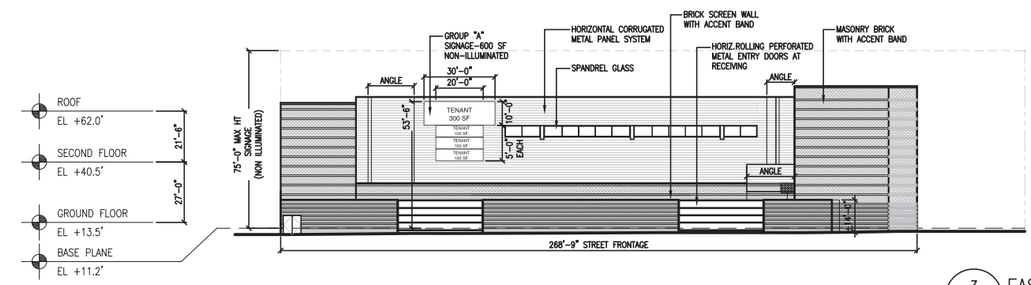
△ ALLOWABLE SQ FT ASSUMES FOUR (4) ESTABLISHMENTS

BUILDING SIGNAGE	MAX TOTAL ALLOWABLE SF 500 SF + ADDITIONAL	SURFACE AREA PROVIDED		PERMITTED ILLUMINATED HT	PERMITTED NON ILLUMINATED HEIGHT	HEIGHT PROVIDED
SHORE PARKWAY (SIGNS BEYOND 200' OF ARTERIAL HWY) ZR 42-55	ADDITIONAL 1 x (279'-2") = 279 SF 500 + 279 = 779 SF	GROUP "D"	216 SF (NON ILLUMINATED)		75'-0"	25'-10" (COMPLIES)
	ADDITIONAL 1 x (614'-4) = 614 SF 500 + 614 = 1114 SF	SIGN "E"	216 SF (ILLUMINATED)	40'-0"		30'-9" (COMPLIES)
		TOTAL (NON ILLUMINATED)	216 SF (COMPLIES)			
		TOTAL (ILLUM.)	216 SF (COMPLIES)			

BUILDING SIGNAGE	SURFACE AREA PROVIDED	ALL PERMITTED ILLUMINATED SIGNS MUST FACE AT ≥90°	PERMITTED ILLUMINATED SIGN HEIGHT	PERMITTED NON ILLUMINATED HEIGHT	HEIGHT PROVIDED
SIGNS WITHIN 500' OF A RESIDENTIAL BOUNDARY ZR 42-562	GROUP "A" (NON ILLUMINATED)	(COMPLIES)		75'-0"	53'-6" (COMPLIES)
	GROUP "B" (ILLUMINATED)	> 90° (COMPLIES)	40'-0"		57'-10" * (NON-COMPLIANT)
	GROUP "C" (ILLUMINATED)	> 90° (COMPLIES)	40'-0"		57'-10" (NON-COMPLIANT)
	GROUP "D" (NON-ILLUMINATED)	(COMPLIES)		75'-0"	25'-10" (COMPLIES)

* 74-744(c) SPECIAL PERMIT REQUESTED TO MODIFY THE SIGN REGULATIONS.

2 SIGNAGE CALCULATIONS
– SCALE: 1/32" = 1'-0"



3 EAST ELEVATION
– SCALE: 1/32" = 1'-0"

FOR ILLUSTRATIVE PURPOSES ONLY

1752 SHORE PARKWAY

Building Elevation and Signage
Figure 3b

6.10.09

FOR ILLUSTRATIVE PURPOSES ONLY

Aerial View - No Build Conditions

Figure 4

1752 SHORE PARKWAY

6.9.09

FOR ILLUSTRATIVE PURPOSES ONLY

Aerial View - Proposed Project

Figure 5

1752 SHORE PARKWAY

goods and services in the area. This use would be consistent with the concentration of commercial retail buildings along Shore Parkway.

The proposed special permit (ZR §62-836) to permit bulk modifications on waterfront blocks is being sought because the proposed approximately 56-foot building does not comply with the maximum building height of 30 feet, as well as the front wall height requirements and the sky exposure plane. This waiver would enhance the relationship between the proposed project and adjacent streets, surrounding development, and adjacent open areas and shoreline.

The proposed special permit (ZR §74-744) to permit modification of signage requirements will be sought, pursuant to paragraph (c), to modify the provisions of ZR §42-54 to allow portions of the proposed illuminated signage to reach approximately 58 feet, which exceeds the 40-foot maximum height requirement; this waiver is being sought to allow for an improved site plan.

The proposed CPC Authorization (ZR §62-822) for modification of waterfront public access area and visual corridor requirements will be sought, pursuant to paragraph (a), to modify the provisions of ZR §62-56 that require that an upland connection be provided at least every 600 feet along a shore public walkway and, due to site constraints, an Authorization may be sought pursuant to paragraph (b) to modify certain requirements of ZR §62-60 (design requirements for waterfront public access areas), in order to achieve a superior design that integrates the various elements of the waterfront public access areas.

The currently underdeveloped project site would be a suitable parcel of land for the siting of a large retail building. The site is highly accessible to major roadways, including the Belt Parkway and the Brooklyn-Queens Expressway. It is also conveniently located near the residential neighborhoods of Bensonhurst and Gravesend to the northeast. A retail establishment on the project site would fulfill the surrounding community's demand for additional commercial goods and services.

C. ANALYSIS FRAMEWORK FOR ENVIRONMENTAL REVIEW

The *City Environmental Quality Review (CEQR) Technical Manual* will serve as the general guide on the methodologies and impact criteria for evaluating the proposed project's potential effects on the various environmental areas of analysis.

In disclosing impacts, the EIS considers the proposed project's potential adverse impacts on the environmental setting. Because the proposed project would be operational in 2013, its environmental setting is not the current environment, but the future environment. Therefore, the technical analyses and consideration of alternatives assess current conditions and forecast these conditions to 2013 for the purposes of determining potential impacts. The EIS will provide a description of "Existing Conditions" for the 2009 analysis year and assessments of future conditions without the proposed project ("Future Without the Proposed Project") and with the proposed project ("Probable Impacts of the Proposed Project").

The future without the proposed project—also known as the "No Build scenario"—in all technical areas assumes that none of the discretionary actions are approved. In this case, absent the proposed actions, the existing bus parking facility will remain on the site.

The proposed actions would allow for the development of a 214,000 square foot commercial building containing a large retail establishment (Use Group 6 or 10, including a BJ's Wholesale Club and three other retail stores) and a three-level parking garage with approximately 690

parking spaces. The project site is located on a waterfront parcel, and would provide approximately 97,000 square feet of public waterfront access area.

In each of the technical areas of the EIS, the proposed project will be compared to the No Build scenario.

D. CITY ENVIRONMENTAL QUALITY REVIEW

CEQR OVERVIEW

New York City has formulated an environmental review process, City Environmental Quality Review (CEQR), pursuant to the State Environmental Quality Review Act (SEQRA) and its implementing regulations (Part 617 of 6 New York Codes, Rules and Regulations). The City's CEQR rules are found in Executive Order 91 of 1977 and subsequent rules and procedures adopted in 1991 (62 Rules of the City of New York, Chapter 5). CEQR's mandate is to assure that governmental agencies undertaking actions within their discretion take a "hard look" at the environmental consequences of each of those actions so that all potential significant environmental impacts of each action are fully disclosed, alternatives that reduce or eliminate such impacts are considered, and appropriate, practicable measures to reduce or eliminate such impacts are adopted.

The CEQR process begins with selection of a "lead agency" for the review. The lead agency is generally the governmental agency which is most responsible for the decisions to be made on a proposed action and which is also capable of conducting the environmental review. For the 1752 Shore Parkway proposal, the Department of City Planning (DCP) is the CEQR lead agency. Because the proposed actions require review and approvals from another agency, the proposed actions will undergo a coordinated environmental review with the New York State Department of Environmental Conservation (NYSDEC).

The lead agency, after reviewing the Environmental Assessment Statement (EAS), has determined that this proposed action has the potential for significant adverse environmental impacts and that an EIS must be prepared. A public scoping of the content and technical analysis of the EIS is the first step in its preparation, as described below. Following completion of scoping, the lead agency oversees preparation of a draft EIS (DEIS) for public review. This review is coordinated with the public review required as part of Uniform Land Use Review Procedure (ULURP). The ULURP application for the proposed project must contain a completed DEIS, so that public review of the DEIS begins with public review under ULURP.

The lead agency and the City Planning Commission hold a joint ULURP/CEQR hearing during the Commission's period for consideration of the application. That hearing record is held open for 10 days following the open public session, at which time the public review of the DEIS ends. The lead agency then oversees preparation of a final EIS (FEIS), which incorporates all relevant comments made during public review of the DEIS. The FEIS is the document that forms the basis of CEQR Findings, which the lead agency and each involved agency (if applicable) must make before taking any action within its discretion on the proposed action.

SCOPING

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. During the period for scoping those interested in reviewing the

draft EIS scope may do so and give their comments in writing to the lead agency or at the public scoping meeting. The period for comments on the Draft Scope of Work will remain open for 10 days following the meeting, at which point the scope review process will be closed. The lead agency will then oversee preparation of a Final Scope of Work, which incorporates all relevant comments made on the scope and revises the extent or methodologies of the studies, as appropriate, in response to comments made during scoping. The DEIS will be prepared in accordance with the Final Scope of Work.

E. PROPOSED SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT

The scope of the EIS will conform to all applicable laws and regulations and will follow the guidance of the 2001 *City Environmental Quality Review (CEQR) Technical Manual*.

The EIS 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 alternatives to the proposed action;
- An identification of any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented; and
- A description of mitigation measures proposed to minimize adverse environmental impacts.

The analyses for the proposed action will be performed for the expected year of completion of construction of the proposed project (2013). The "No Build" future baseline condition to be analyzed under "The Future Without the Proposed Action" in all technical chapters will assume that absent the proposed action, the bus storage facility and the existing buildings on the project site will remain.

Based on the preliminary screening assessments outlined in the *CEQR Technical Manual* and as described below and in the EAS, the following environmental areas would not require detailed analysis for the proposed project in the EIS: community facilities; open space; historic resources; and transit and pedestrians. The specific areas to be included in the EIS, as well as their respective tasks, are described below.

PROJECT DESCRIPTION

The first chapter of the EIS introduces the reader to the action and sets the context in which to assess impacts. The chapter may contain a project identification (brief description and location of the action); the background and/or history of the action, a statement of purpose and need for the proposed action; a detailed description of the proposed action and development program and project siting and design; and discussion of 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 gives the public and decision-makers a base from which to evaluate the action against both No Build and alternative options.

The project description will include appropriate items from the ULURP application and will include a discussion of key project elements, such as site plans and elevations, access and circulation, and other project features. The section on required approvals will describe all public actions required to develop the project. The role, if any, of any other public agency in the approval process will also be described. The role of the EIS as a full disclosure document to aid in decision-making will be identified and its relationship to any other approval procedures will be described.

LAND USE, ZONING, AND PUBLIC POLICY

The proposed project includes a number of actions to allow for a retail development consisting of a Use Group 6 or 10 large retail use. Therefore, the EIS will include a detailed land use assessment of the proposed action's consistency with land use, zoning, and public policy, in accordance with the *CEQR Technical Manual.* Further, information on existing land use now and in the future without the proposed action is important to set the context in which many of the other technical tasks are understood. The land use tasks are as follows:

1. Define study area. The land use study area will extend to approximately 400 feet beyond the project site, which is the area where the proposed project has the potential to affect existing land use, land use trends, and overall neighborhood character.
2. Describe existing land uses on the project site and in the study area. A land use survey will be conducted to determine predominant land uses in the study area. The land use survey will focus on issues of compatibility of the proposed project with surrounding uses. Any recent development activity in the area will be described.
3. Map and analyze the existing zoning and other land-use-related public policy in the study area and provide a clear discussion of the existing zoning regulations and any other zoning or public policy actions pending in the area of the development.
4. Prepare a list of future projects in the study area and describe how these projects might affect land use patterns and development trends in the study area in the future without the project. Also identify any public policy actions that could affect land use patterns and trends in the study area as they relate to the proposed action.
5. Assess impacts of the proposed project on land use and land use trends, zoning, and public policy. Project impacts relate to issues of compatibility with surrounding land use, zoning and other public policy, and the effect of the action on ongoing development trends and conditions in the area.

SOCIOECONOMIC CONDITIONS

The proposed project would result in the development of approximately 214,000 square feet of commercial space. According to the *CEQR Technical Manual*, commercial development of 200,000 square feet or more can potentially result in significant socioeconomic impacts. Since the potential development exceeds this threshold, a socioeconomic analysis is required under CEQR.

The analysis will follow the guidelines of the *CEQR Technical Manual* in assessing the proposed actions' effects on socioeconomic conditions within a ¼-mile study area (see **Figure 6**) and within a broader primary trade area. According to the *CEQR Technical Manual*, the five principal issues of concern with respect to socioeconomic conditions are whether a proposed

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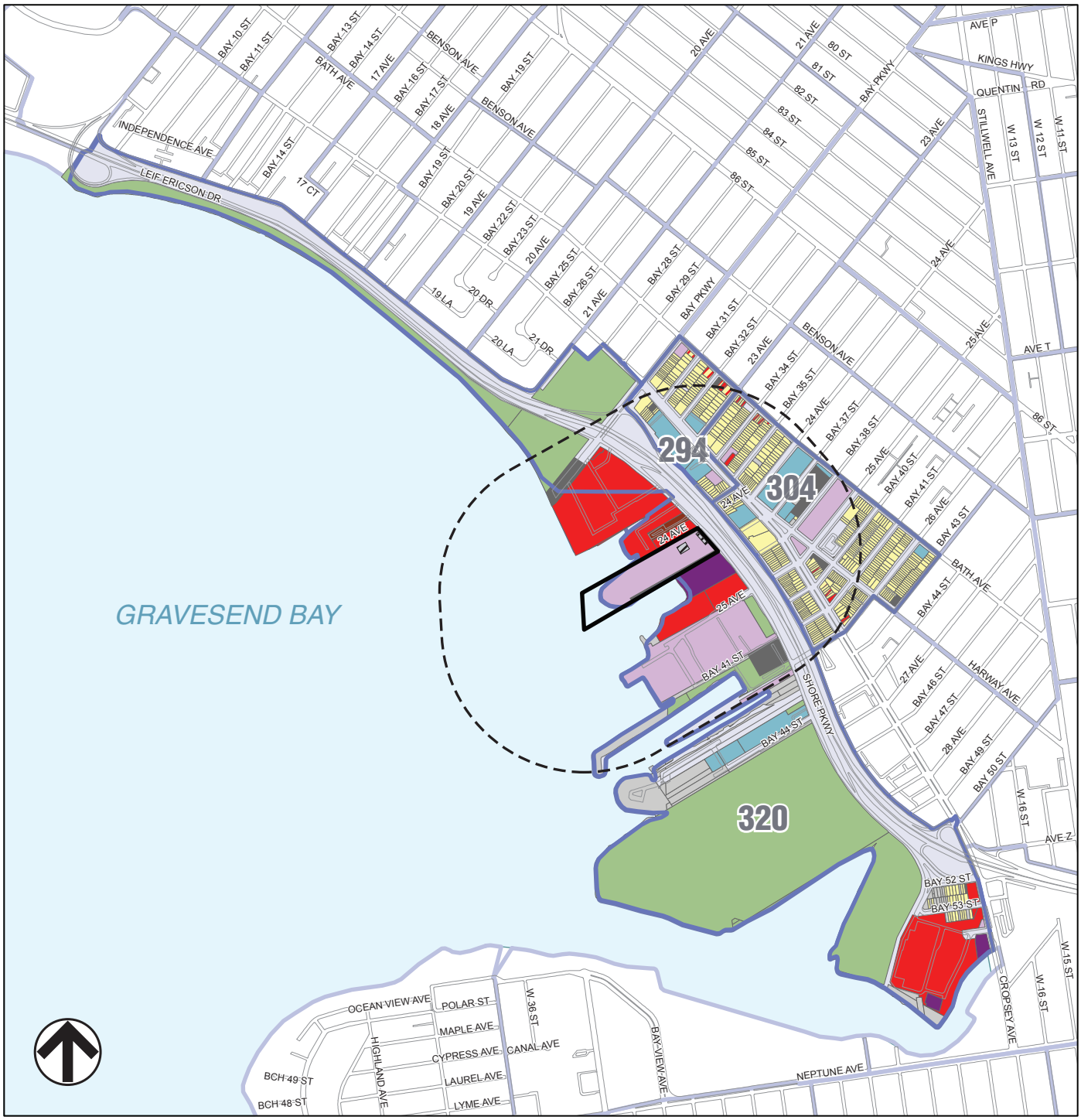


- *Project Site Boundary*
- *Study Area Boundary (1/4-Mile Perimeter)*
- *Study Area Census Tracts*
- 320 *Census Tract*
- *Residential*
- *Commercial and Office Buildings*
- *Industrial and Manufacturing*
- *Transportation and Utility*
- *Public Facilities and Institutions*
- *Open Space and Outdoor Recreation*
- *Parking Facilities*
- *Vacant Land*
- *Existing Building on Project Site*

1752 SHORE PARKWAY

Socioeconomic Conditions Study Area

Figure 6

project would result in significant impacts due to: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement; and (5) adverse effects on a specific industry. In conformance with *CEQR Technical Manual* guidelines, the analysis of these five areas of concern will begin with a preliminary assessment. Detailed analyses will be conducted for those areas in which the preliminary assessment can not definitively rule out the potential for significant adverse impacts.

Detailed analyses, if necessary, will describe existing socioeconomic conditions and then will compare conditions anticipated in the future without and with the proposed actions. The task work required to address each CEQR issue of concern is described below.

DIRECT RESIDENTIAL DISPLACEMENT

The project site does not contain any residences. Therefore, the preliminary assessment will state that no direct residential displacement would occur with the proposed action, and no further analysis of this issue will be required under CEQR.

DIRECT BUSINESS AND INSTITUTIONAL DISPLACEMENT

The proposed action would result in the direct displacement of the existing bus storage facility on the project site. The analysis of direct business and institutional displacement will identify the number of employees and the number and types of businesses that would be displaced by the proposed action and will determine the potential for significant adverse impacts by responding to the following CEQR assessment criteria:

- If the businesses or institutions in question have substantial economic value to the City or region and can only be relocated with great difficulty or not at all;
- If a category of businesses or institutions is the subject of regulations or publicly adopted plans to preserve, enhance, or otherwise protect it;
- If the businesses or institutions define or contribute substantially to a defining element of neighborhood character; and
- If a substantial number of businesses or employees would be displaced that collectively define the character of the neighborhood.

It is anticipated that a preliminary assessment will adequately demonstrate that the proposed action would not cause significant adverse impacts due to direct business displacement.

INDIRECT RESIDENTIAL DISPLACEMENT

The concern with respect to indirect residential displacement is whether a proposed action could lead to increases in residential property values, and thus rents, making it difficult for existing residents to remain in the area. The indirect residential displacement analysis will identify demographic characteristics of the population in the study area through Census data and evaluate whether the proposed actions would introduce uses that would substantially alter the existing residential real estate market. Specifically, the assessment will respond to the following criteria outlined in the *CEQR Technical Manual*:

- If the actions would directly displace uses or properties that have a "blighting" effect on property values in the area;

- If the actions would introduce a "critical mass" of non-residential uses such that the surrounding area becomes more attractive as a residential neighborhood complex; and
- If the actions would introduce a use that offsets positive trends in the study area or impedes efforts to attract investment.

INDIRECT BUSINESS DISPLACEMENT DUE TO INCREASED RENTS

One concern with respect to business displacement is whether a proposed action could lead to increases in property values, and thus rents, making it difficult for some businesses to remain in the area. The indirect business and institutional displacement analysis will identify employment and business trends in the study area through Census and/or Department of Labor data as well as discussions with real estate brokers, and evaluate whether the proposed actions would introduce uses that would substantially alter existing trends. Specifically, the assessment will respond to the following criteria outlined in the *CEQR Technical Manual:*

- If the action introduces enough of a new economic activity to alter existing economic patterns;
- If the action adds to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing economic patterns;
- If the action directly displaces uses or properties that have had a "blighting" effect on commercial property values in the area, leading to rises in commercial rents;
- If the action directly displaces uses of any type that directly support businesses in the area or bring people to the area that form a customer base for local businesses;
- If the action directly or indirectly displaces residents, workers, or visitors who form the customer base of existing businesses in the area; and
- If the action introduces a land use that could have a similar indirect effect, through the lowering of property values if it is large enough or combines with other like uses to offset positive trends in the study area, impede efforts to attract investment to the area, or create a climate for disinvestment.

INDIRECT BUSINESS DISPLACEMENT DUE TO COMPETITION

As described in the *CEQR Technical Manual*, competition can generate environmental concerns when it has the potential to affect neighborhood character. A significant adverse impact on neighborhood character can occur if a proposed project threatens the competitive condition of one or more anchor retailers in a neighborhood retail shopping street or shopping center, or of a group of stores that, in turn, undermines the overall competitive condition of a neighborhood shopping street or shopping center.

The approach to analyzing the potential for indirect business displacement due to competition is based on an assessment of the demand for retail space by retail sector, comparing it to the available and future supply of retail space by retail sector, and presenting a quantitative analysis of existing versus potential expenditures. The assessment will entail the following steps:

- Describe the existing retail market. Present general data on the retail environment in New York City and Kings County, including trends in overall retail and department store sales, retail trade employment, and comparisons with other general retail statistics.
- Provide a description of the project's anticipated retail use. This description will be based on mix of retail goods offered at existing BJ's Warehouse Clubs.

- Establish a trade area for the proposed project. Based on the nature and size of the proposed retail use, establish a reasonable primary trade area for the project.
- Develop a demographic profile of the trade area to estimate retail demand. Conduct a demographic analysis of the population within the study area using Census Data. This analysis will include a delineation of population, household, income, auto-ownership, and other characteristics for 1990 and 2000. Income data will be adjusted to current dollars using the consumer price index for the New York City area. Research household spending expenditure potential found in the trade area for the range of goods likely to be offered at the proposed retail center. Based on these data, estimate retail demand by retail sector for the study area population.
- Assess the retail environment of the trade area in terms of the proportion of retail expenditure potential being captured by the current retail supply.
- Develop a profile of the retail uses in the trade area. Within the trade area, conduct land use inventories of retail uses and concentrations of such uses, categorized by the retail sectors they currently serve. Supplement retail surveys with discussions with local merchants, business groups, and/or planning and economic development officials to obtain a more complete picture of the retail market conditions and trends. Retail sales in the trade area will be estimated from online national planning data services, such as ESRI Business Analyst or Claritas, Inc.
- Estimate sales of comparable goods at existing retail facilities in the trade area, and estimate the percentage of trade area expenditures captured by the existing retail inventory.
- Identify changes that may be expected in the future without the proposed project. Specifically, AKRF will identify any large-scale projects within the trade area that could be expected to increase the population and expenditure potential of the trade area or any proposals for other large-scale retail developments. This information will be developed in conjunction with the Brooklyn office of DCP and with other relevant public agencies.
- Establish the future with the proposed action conditions by applying relevant sales per square foot from published sources, such as BJ's Wholesale Club annual reports and/or published AKRF competition analyses that include a wholesale club component. This scenario will be presented in the same format as that for the No Build condition.
- Assess the potential for impacts. Conduct an analysis of the demand (expenditures) versus the supply (sales) within appropriate retail sectors, and assess impacts on major existing retail anchors or groups of stores that serve as an anchor for neighborhood shopping. If, in the future with the proposed project, the retail supply is significantly greater than the analyzed demand, the analysis would then assess the potential for the proposed project to affect neighborhood character in the vicinity of major retail concentrations.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

Based on *CEQR Technical Manual* guidelines, the assessment of effects on specific industries will respond to the following issues: 1) whether the proposed actions would significantly affect business conditions in any industry or category of businesses within or outside the study area; and 2) whether the proposed actions would substantially reduce employment or impair viability in a specific industry or category of businesses.

COMMUNITY FACILITIES AND SERVICES

Community facilities are public or publicly-funded facilities, such as schools, hospitals, libraries, day care centers, and fire and police protection. Because the proposed project would neither physically alter any community facility nor directly affect the delivery of services, there would be no direct effects on community facilities due to the proposed project. The proposed project is not expected to result in significant adverse impacts on public schools, libraries, day care centers, public health facilities or police and fire protection, as described below:

- **Public Schools.** The *CEQR Technical Manual* requires a detailed analysis of public school facilities if a proposed action would generate 50 or more elementary/middle school children or 150 high school children. The proposed project would not include any residential development; therefore, no further analysis is warranted.
- **Libraries.** The proposed project would not result in an increase in residential units; thus, it would not result in more than a 5 percent increase in the ratio of residential units to libraries in the borough. Therefore, and no further analysis is warranted.
- **Daycare.** The *CEQR Technical Manual* requires a detailed analysis of daycare facilities if a proposed action would generate 50 or more children that are eligible for public day care. The proposed project would not introduce any low- or low-moderate income residential units; therefore, the proposed project would not generate any children that are eligible for public day care, and no further analysis is warranted.
- **Healthcare Facilities.** The CEQR threshold for conducting an analysis of healthcare facilities is 600 low- to moderate-income units. The proposed project would not result in an increase in residential units, and no further analysis is warranted.
- **Police and Fire Protection.** The New York City Police Department (NYPD) regularly reviews its operations at each of its precincts and—based on geographic area, population and crime levels—will adjust its staffing levels to maintain adequate community protection. The New York Fire Department (FDNY) similarly adjusts its operations as needed. The proposed project is not expected to affect the ability of the local police and fire department to provide protection services; therefore, no further analysis is warranted.

OPEN SPACE AND RECREATIONAL FACILITIES

As described in the *CEQR Technical Manual*, a quantified assessment of potential impacts on open space is considered appropriate for actions that would 1) directly alter or remove an open space resource; 2) result in more than 200 new residents; or 3) result in more than 500 new employees. The proposed action would not directly displace or alter existing open space resources. The proposed project would not introduce any new residents, and would add approximately 323 additional workers[1] to the area. Therefore, the proposed action would not result in significant adverse impacts on open space, and no further analysis is warranted.

SHADOWS

The CEQR criteria for a shadows assessment state that actions that result in developments with shadows long enough to reach a publicly accessible open space (except within an hour and a half of sunrise or sunset), a historic landscape, a historic resource with sunlight dependent features,

[1] Based on 1 employee per 900 square feet for ±137,500 sf BJ's Wholesale Club use, and 1 employee per 450 retail square feet for ±76,500 sf retail use.

or an important natural feature would require an analysis of shadows. The longest shadow that a structure would cause can be calculated by multiplying the building height times a factor of 4.3. The proposed project is up to approximately 56 feet high, and could result in a shadow of up to 241 feet. There are currently no parks, publicly accessible open spaces, or sunlight-dependent architectural resources located within approximately 241 feet of the project site. However, the proposed project would create a waterfront access area, including a walkway, additional open spaces, and upland connections. If it is determined that the proposed project would cast shadows on any sunlight-dependent natural features or the proposed waterfront open space, an assessment of shadows will be included in the EIS.

HISTORIC RESOURCES

According to the *CEQR Technical Manual*, a historic resources assessment is undertaken if there is the potential to affect either archaeological or architectural resources. Actions that could affect archaeological resources and that typically require an assessment are those that involve above-ground construction resulting in ground disturbance or below-ground construction, such as excavation. Actions that trigger an architectural resources assessment include new construction, demolition, or significant alteration to any building, structure, or object; a change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature; construction, including but not limited to, excavation, vibration, subsidence, dewatering, and the possibility of falling objects; additions to or significant removal, grading, or replanting of significant historic landscape features; screening or elimination of publicly accessible views; and the introduction of significant new shadows or significant lengthening of the duration of existing shadows over a historic landscape or on a historic structure with sunlight dependent features (see "Shadows," above).

ARCHAEOLOGICAL RESOURCES

As described in the *CEQR Technical Manual*, a detailed assessment of archaeological resources is required for actions that would result in in-ground disturbance. Since the proposed action would result in subsurface disturbance on portions of the site, an assessment of potential archaeological resources is warranted. In a comment letter dated January 15, 2009, the New York City Landmarks Preservation Commission (LPC) concluded that the project site has no archaeological significance. In a comment letter dated April 14, 2008, the New York State Office Parks, Recreation and Historic Preservation (OPRHP) concluded that the project site has no archaeological significance. Therefore, further analysis is not warranted, and the proposed project would have no adverse impacts on archaeological resources.

ARCHITECTURAL RESOURCES

There are no known architectural resources—properties listed on or determined eligible for listing on the State and National Registers of Historic Places (S/NR), National Historic Landmarks, New York City Landmarks and Historic Districts (NYCL), or properties pending such designation—on or within 400 feet of the project site. Furthermore, there are no properties on or within the 400 feet of the project site that appear to meet the eligibility criteria for S/NR listing or for NYCL designation. The three buildings on the project site, which would be demolished to construct the new development, are not architecturally distinguished. In addition, in a letter dated April 14, 2008, the New York State Office of Parks, Recreation, and Historic Preservation determined that project would have no effect on cultural resources in or eligible for inclusion in the National Register of Historic Places.

Overall, the proposed project is not expected to adversely affect architectural resources. Therefore, no further assessment of potential impacts on architectural resources is necessary.

URBAN DESIGN AND VISUAL RESOURCES

The *CEQR Technical Manual* requires a detailed assessment of urban design and visual resources when a proposed action would result in a building or structure substantially different in height, bulk, form, setbacks, size, scale, use, or arrangement than exists; when an action would change block form, demap an active street, map a new street, or would affect the street hierarchy, street wall, curb cuts, pedestrian activity, or other streetscape elements; or when an action would result in above-ground development or would change the bulk of new above-ground development and is proposed in an area that includes significant visual resources. The proposed project would change the appearance of the project site by developing an underutilized parcel with new approximately 56-foot-tall, 214,000-square-foot commercial building and a three-level parking garage, as well as creating approximately 97,000 square feet of publicly accessible waterfront open space. Therefore, the EIS will examine the proposed project's effects on urban design and visual resources. The scope of work for this task is as follows:

1. Through field visits, collect relevant information on the urban design characteristics of the site and surrounding area, including building bulk, height, setbacks, and density; building use and arrangement; and block form and street pattern. Using photographs and text as appropriate, assess the existing urban design character of the project site and its relationship to the surrounding study area (within 400 feet of the project site).
2. In conjunction with the urban design analysis, identify and describe in text and photographs the area's visual resources, including important views and natural resources.
3. Qualitatively discuss anticipated changes to the urban design and visual resources that are expected in the future without the proposed project.
4. Assess the changes in urban design characteristics and visual resources that are expected to result from the action on the project site and in the study area and evaluate the significance of the change.

NEIGHBORHOOD CHARACTER

The character of a neighborhood is established by numerous factors, including land use patterns, residential, worker, and visitor population, 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. According to CEQR criteria, a neighborhood character assessment is conducted if the action would result in a significant impact in the areas of land use, zoning, and public policy; urban design; visual resources; historic resources; socioeconomic conditions; traffic; or noise. In addition, if the action falls below these thresholds but would result in moderate changes in the elements that contribute to neighborhood character, thereby resulting in a significant impact, an analysis of neighborhood character is required. Since most of these elements will already be covered in other EIS sections, this section will essentially represent a summary of the key thoughts of these other analyses.

1. Drawing on other EIS sections, describe the predominant factors that contribute to defining the character of the neighborhood, focusing primarily on the area within 400-feet of the project site.

2. Based on planned development projects, public policy initiatives, and planned public improvements, summarize changes that can be expected in the character of the neighborhood in the future without the action.
3. The analysis of impacts on various EIS sections will serve as the basis for assessing and summarizing the action's impacts on neighborhood character.

NATURAL RESOURCES

A natural resources assessment is conducted when a natural resource is present on or near the project site and when an action involves the disturbance of that resource. The *CEQR Technical Manual* defines natural resources as water resources, including surface water bodies and groundwater; wetland resources, including freshwater and tidal wetlands; upland resources, including beaches, dunes, and bluffs, thickets, grasslands, meadows and old fields, woodlands and forests, and gardens and other ornamental landscaping; and built resources, including piers and other waterfront structures.

The project site is located on the waterfront. Although most of the site consists of the parking facility and associated structures, upland vegetation, tidal wetlands and New York State Department of Environmental Conservation (NYSDEC)-regulated tidal wetland adjacent areas are also located on site. Construction activities may affect natural resources, including the excavation and grading activities, vegetation clearing and grubbing, and work along the waterfront. In addition, waterfront construction activities may affect water quality. This section will assess the degree to which water quality and natural resources could be affected during project construction and operation.

HAZARDOUS MATERIALS

The EIS will summarize the existing hazardous materials studies conducted for the project site, and consider the potential for significant adverse impacts to occur as a result of the proposed project. Conditions at the project site (resulting from previous and existing uses of the site and the surrounding areas) have been studied extensively including: a prior Phase I Environmental Site Assessment (looking at site history, geology, hydrology, and usage) and Remedial Investigation Reports (including geophysical investigations to locate abandoned and active underground storage tanks, and collection and analysis of soil and groundwater samples). Historic uses of the project site are known to have included solid waste disposal, coal storage, an asphalt plant, auto dealership/rentals, and numerous underground and aboveground storage tanks. In addition to the potential for subsurface contamination, the EIS will also summarize the potential for hazardous materials (e.g., asbestos and lead-based paint) to be present within existing structures.

If, based on these existing studies, it is determined that the proposed project has the potential to result in significant adverse hazardous materials impacts either during or following construction at the project site, the assessment will include a detailed description of measures that would be taken to ensure that the potential for any such impacts would be avoided and describe the mechanism, e.g., NYSDEC approvals and/or Restrictive Declarations. Typical measures include those to address erosion and sedimentation control during construction; procedures for excavation and regrading; procedures for petroleum tank removal; procedures for segregating, stockpiling, testing, transporting and disposing of contaminated soil encountered during excavation activities; procedures for dewatering; procedures for importing soils; procedures to ensure appropriate health and safety procedures (to protect workers and the community) are followed; and procedures to ensure continued implementation of any necessary engineering or institutional measures.

WATERFRONT REVITALIZATION PROGRAM

The project site is located within the State and City's Coastal Zone, and therefore must be assessed for its consistency with the Local Waterfront Revitalization Program (LWRP). A new WRP consisting of 10 policies was approved by the New York State Department of State (NYSDOS) in August 2002. These policies are used as the basis for evaluation of discretionary actions within the City's designated Coastal Zone. This analysis will review the 10 policies and assess where applicable, the general consistency of the project with the policies.

INFRASTRUCTURE

According to the *CEQR Technical Manual*, an analysis of an action's impact on the New York City water supply system should be conducted only for actions that would have exceptionally large demand for water, such as power plants, very large cooling systems, or large developments (e.g., those that use more than 1 million gallons per day). In addition, actions located at the extremities of the water distribution system should be analyzed.

According to the *CEQR Technical Manual*, the City is committed to adequately treating all wastewater generated in the City and to maintaining its wastewater treatment plants at or below the capacity permitted by applicable state and federal permits, orders, and decrees. Therefore, only unusual actions with very large flows could have the potential for significant impacts on sewage treatment.

The proposed development is not large enough and not located in a water or sewer service area with the capacity deficiencies to require a full infrastructure analysis. Therefore, in accordance with the *CEQR Technical Manual*, the EIS will disclose the water demands and wastewater generation from the proposed action.

SOLID WASTE AND SANITATION SERVICES

According to CEQR criteria, a detailed solid waste and sanitation services assessment is appropriate if an action enacts regulatory changes affecting the generation or management of the City's waste of if the action involves the construction, operation, or closing of any type of solid waste management facility. The *CEQR Technical Manual* also states that actions involving construction of housing or other developments (including retail) generally do not require evaluation for solid waste impacts unless they are unusually large. Therefore, in accordance with the *CEQR Technical Manual*, the EIS will simply disclose the action's sewage and solid waste generation.

ENERGY

According to the *CEQR Technical Manual*, a detailed assessment of energy impacts would be limited to actions that could significantly affect the transmission or generation of energy or that generate substantial indirect consumption of energy (such as a new roadway). Therefore, in accordance with CEQR guidelines, the EIS will simply disclose the action's energy consumption.

TRAFFIC AND TRANSPORTATION

The proposed retail store and waterfront open space would generate a substantial amount of trips during several critical time periods (i.e., weekday midday and evening, and Saturday midday/afternoon) as shown by the preliminary trip generation estimates presented in Tables 1 to 3. The *CEQR Technical Manual* states that a quantified transportation analysis may be warranted if the proposed action results in more than 50 vehicle-trips and/or 200 transit/pedestrian trips during a given peak hour. Since parking will be provided on-site and transit and walk only trips to the

proposed store would be minimal, there would not be a need to quantitatively address these transportation elements. The transportation impact assessment would focus only on the evaluation of vehicular access and circulation, and the potential impacts project-generated trips may have on key area intersections. As part of the operational analyses, an assessment of traffic and pedestrian safety based on recent accident data would also be prepared.

Table 1
1752 Shore Parkway
Destination Retail Trip Generation

214,000	SF									
214	kgsf									
Daily Trip Rates (1):										
		Weekday MD		**Weekday PM**		**SAT-PM**				
Person Trips:		**5.03**		**4.89**		**11.38**		Trip per 1,000 SF		
Delivery Trips:		**0.35**		**0.35**		**0.02**		Trip per 1,000 SF		
Linked Trip Credit		**25%**		**25%**		**25%**				
Modal Split (2,3):										
		MD		**PM**		**SAT-PM**				
Auto		**95.0%**		**95.0%**		**93.0%**				
Taxi		**3.0%**		**3.0%**		**5.0%**				
Bus		**2.0%**		**2.0%**		**2.0%**				
Total		**100%**		**100%**		**100%**				
Vehicle Occupancy (1):										
		MD		**PM**		**SAT-PM**				
Auto Occupancy:		**1.40**		**1.40**		**1.72**				
Taxi Occupancy:		**1.64**		**1.64**		**1.75**				
Temporal and Directional Trip Distribution (1):										
		MD		**PM**		**SAT-PM**				
Percent of Daily		**NA**		**NA**		**NA**				
Percent of Applicable Peak Hour		**100.0%**		**100.0%**		**100.0%**				
Percent In		**53.6%**		**51.8%**		**47.5%**				
Percent Out		**46.4%**		**48.2%**		**52.5%**				
Delivery In/Out		9.0%		0.0%		2.0%				
Person Trips by Mode and Distribution										
		Auto		**Taxi**		**Bus**		**Total**		**Total**
		In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In + Out**
Midday Peak Hour		411	356	13	11	9	8	433	375	808
PM Peak Hour		387	359	12	11	8	8	407	378	785
Saturday Peak Hour		807	892	43	48	18	19	868	959	1827
Taxi Trips										
		Demand		**Shared Trips**		**Inbound Only**		**Outbound Only**		**Total Trips**
		In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**
Midday Peak Hour		8	7	4	4	4	4	3	3	11	11
PM Peak Hour		7	7	4	4	4	4	3	3	10	10
Saturday Peak Hour		25	27	13	13	12	12	14	14	39	39
Vehicle Trips by Mode and Distribution										
		Auto		**Taxi**		**Delivery**		**Total**		**Total**
		In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In + Out**
Midday Peak Hour		294	254	11	11	7	7	312	272	584
PM Peak Hour		276	256	10	10	0	0	286	266	552
Saturday Peak Hour		469	519	39	39	0	0	508	558	1066

Notes:
(1) Gateway Estates II, Brooklyn, CEQR # 93-HPD-014K
(2) BJ's Bruckner Boulevard (900 Brush Avenue, Bronx) CEQR # 00DCP027X
(3) Modal split adjusted to account for bus services available near the project site.

Table 2
1752 Shore Parkway
Open Space Trip Generation

2.23	acres								
Daily Trip Rates (1):									
Person Trips:		**139**	Trip per acre						
Delivery Trips:		**0**	Trip per acre						
Linked Trip Credit		**25%**	(to proposed retail)						
Modal Split (2):									
		MD	**PM**	**SAT-PM**					
Auto		**95.0%**	**95.0%**	**93.0%**					
Taxi		**3.0%**	**3.0%**	**5.0%**					
Bus		**2.0%**	**2.0%**	**2.0%**					
Total		**100%**	**100%**	**100%**					
Vehicle Occupancy (2):									
		MD	**PM**	**SAT-PM**					
Auto Occupancy:		**2.00**	**2.00**	**2.00**					
Taxi Occupancy:		**2.00**	**2.00**	**2.00**					
Temporal and Directional Trip Distribution (1,2):									
		MD	**PM**	**SAT-PM**					
Percent of Daily		**17%**	**14%**	**14%**					
Percent of Applicable Peak Hour		**NA**	**NA**	**NA**					
Percent In		**50%**	**50%**	**50%**					
Percent Out		**50%**	**50%**	**50%**					
Delivery In/Out		**NA**	**NA**	**NA**					
Person Trips by Mode and Distribution									
		Auto		**Taxi**		**Bus**		**Total**	**Total**
		In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In + Out**
Midday Peak Hour		19	19	1	1	0	0	20	20	40
PM Peak Hour		15	15	0	0	0	0	15	15	30
Saturday Peak Hour		15	15	0	0	0	0	15	15	30
Taxi Trips										
		Demand		**Shared Trips**		**Inbound Only**		**Outbound Only**		**Total Trips**	
		In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**
Midday Peak Hour		1	1	1	1	0	0	0	0	1	1
PM Peak Hour		0	0	0	0	0	0	0	0	0	0
Saturday Peak Hour		0	0	0	0	0	0	0	0	0	0
Vehicle Trips by Mode and Distribution										
		Auto		**Taxi**		**Delivery**		**Total**	**Total**
		In	**Out**	**In**	**Out**	**In**	**Out**	**In**	**Out**	**In + Out**
Midday Peak Hour		10	10	1	1	0	0	11	11	22
PM Peak Hour		8	8	0	0	0	0	8	8	16
Saturday Peak Hour		8	8	0	0	0	0	8	8	16

Notes:
The shore public walkway was assumed to have the same mode split as the proposed retail project.
(1) *CEQR Technical Manual* (2001)
(2) AKRF assumption

Table 3
1752 Shore Parkway
Total Trip Generation

Person Trips by Mode and Distribution									
	Auto		Taxi		Bus		Total		Total
	In	Out	In	Out	In	Out	In	Out	In + Out
Midday Peak Hour	430	375	14	12	9	8	453	395	848
PM Peak Hour	402	374	12	11	8	8	422	393	815
Saturday Peak Hour	822	907	43	48	18	19	883	974	1857

Taxi Trips										
	Demand		Shared Trips		Inbound Only		Outbound Only		Total Trips	
	In	Out	In	Out	In	Out	In	Out	In	Out
Midday Peak Hour	9	8	5	5	4	4	3	3	12	12
PM Peak Hour	7	7	4	4	3	3	3	3	10	10
Saturday Peak Hour	25	27	13	13	12	12	14	14	39	39

Vehicle Trips by Mode and Distribution									
	Auto		Taxi		Delivery		Total		Total
	In	Out	In	Out	In	Out	In	Out	In + Out
Midday Peak Hour	304	264	12	12	7	7	323	283	606
PM Peak Hour	284	264	10	10	0	0	294	274	568
Saturday Peak Hour	477	527	39	39	0	0	516	566	1082

The traffic and transportation scope would include the tasks described below.

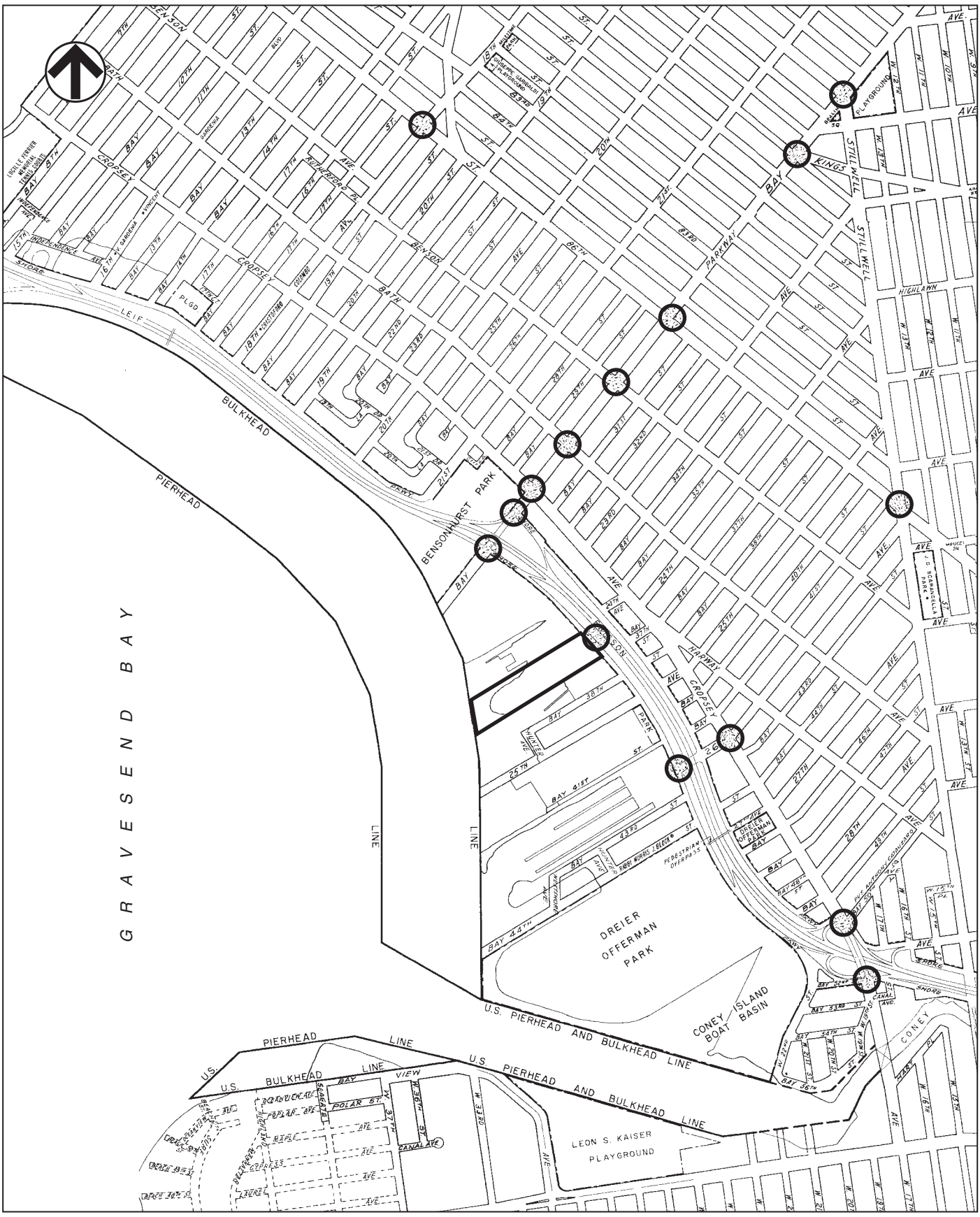
TRAFFIC AND PARKING

1. Develop travel demand estimates. Peak hour trips by travel mode for the proposed project will be developed through discussions with the developer and a review of standard references and approved studies. The travel demand estimates will also include the number of deliveries that are anticipated to service the new development. The new trips will be distributed to the various modes of transportation available within the study area. In coordination with the land use task, transportation demand for other proposed developments in the area will be estimated or summarized from approved studies.

2. Define the study area. The traffic study area will include key intersections along the travel corridors that provide access to and egress from the project site. Based on preliminary trip estimates, a study area containing 15 intersections has been identified for detailed analysis. These intersections, where project-generated trips are most expected to traverse, are listed below and illustrated in **Figure 7**.

   (1) 18th Avenue and 86th Street;
   (2) Bay Parkway and Bay Ridge Parkway;
   (3) Bay Parkway and 78th Street-Kings Highway;
   (4) Bay Parkway and 86th Street;
   (5) Bay Parkway and Benson Avenue;
   (6) Bay Parkway and Bath Avenue;
   (7) Bay Parkway and Cropsey Avenue;
   (8) Bay Parkway and Belt Parkway WB Ramps;
   (9) Bay Parkway and Belt Parkway EB Service Road;
   (10) Stillwell Avenue and 86th Street;

8.12.09



Project Site Boundary

Analysis Intersection

Traffic Study Area

Figure 7

1752 SHORE PARKWAY

(11) 26th Avenue and Cropsey Avenue;
(12) 26th Avenue and Belt Parkway EB Service Road;
(13) Avenue Z and Bay 50th Street;
(14) Cropsey Avenue and Bay 50th Street; and
(15) Cropsey Avenue and Belt Parkway EB Ramps.

3. Perform traffic data collection. Traffic volumes and relevant data will be collected as per *CEQR* guidelines via a combination of manual and machine counts. Information pertaining to street widths, traffic flow directions, lane markings, parking regulations, and bus stop locations at study area intersections will be inventoried. Traffic control devices (including signal timings) in the study area will be recorded and verified with official signal timing data from the New York City Department of Transportation (NYCDOT). Travel time and delay surveys will also be conducted to provide data for mobile source air quality analyses.

4. Conduct existing conditions analysis. Balanced peak hour traffic volumes will be prepared for the capacity analysis of study area intersections. This analysis will be conducted using the *2000 Highway Capacity Manual* (*HCM*) methodology with the latest approved *Highway Capacity Software* (*HCS*). The existing volume-to-capacity (v/c) ratios, delays, and levels of service (LOS) for the weekday midday and PM peak hours, as well as the Saturday midday or afternoon peak hour will be determined.

5. Develop the future No Build condition. Future No Build traffic volumes will be estimated by adding a 1.0-percent background growth, in accordance with CEQR guidelines, to existing traffic volumes, and incorporating incremental changes in traffic resulting from other projects in the area. Trip estimates generated for future projects and the modes of transportation for these trips will be determined for the three peak analysis hours using standard sources, census data, and information from other environmental studies, where available. Physical and operational changes that are expected to be implemented independent of the proposed project, if any, would also be incorporated into the future traffic analysis network. The No Build v/c ratios, delays, and LOS at the study area intersections will be determined.

6. Perform traffic impact assessment for the proposed project. Project-generated trips will be assigned to the traffic network. The potential impact on v/c ratios, delays, and LOS will then be evaluated in accordance with *CEQR Technical Manual* criteria. Where significant impacts are identified, potential measures, including new signals, signal retiming, phasing modifications, roadway restriping, addition of turn lanes, and revision of curbside regulations, etc., will be explored to mitigate these impacts.

7. Analyze current and future parking conditions. Because on-site parking will be provided to accommodate the project's own demand, an off-site parking analysis is not warranted. Based on the travel demand estimates, a parking accumulation analysis will be prepared to demonstrate the adequacy of the planned on-site parking. Where proposed improvements and/or traffic mitigation measures are expected to displace on-street parking spaces, they will also be addressed.

8. Examine pedestrian safety issues. Accident data from the most recent three-year period will be obtained from the New York State Department of Transportation (NYSDOT). Based on the detailed review of the accident data, high pedestrian accident locations will be identified and, where feasible, safety improvement measures will be recommended.

TRANSIT AND PEDESTRIANS

1. Conduct screening analyses. Based on the results of the travel demand estimates, screening analyses will be prepared for transit use and pedestrian operations. These estimates are expected to show that incremental transit and pedestrian trips associated with the proposed project would be below the CEQR thresholds to warrant the need for any detailed analyses.

AIR QUALITY

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

MOBILE SOURCE ANALYSIS

The primary constituents of vehicle emissions include carbon monoxide (CO), particulate matter (PM), hydrocarbons (HC), and nitrogen oxides (NO_X). Studies of traffic-related air quality impacts typically focus on CO because it is a major component of vehicle emissions and can cause adverse health effects over short-term exposure periods. CO is also accepted as the primary target compound for mobile source studies by the Environmental Protection Agency (EPA). PM is typically a concern when diesel vehicles are a significant component of the project generated vehicles or when project generated volumes are high.

Since project-generated vehicle trips are expected to exceed the *CEQR Technical Manual* (2001) screening threshold of 100 peak hour vehicle trips, an analysis of mobile source air quality impacts is proposed. Locations would be selected where the incremental increase of project-generated traffic over background conditions is highest and the potential for impact is greatest. The mobile source modeling analysis will consist of the following:

Mobile Source Modeling Analysis

1. Calculate of vehicle emission rates: CO and PM emission rates will be computed using EPA's MOBILE6 emission factor model. Information regarding credits supplied by the New York City Department of Environmental Protection (NYCDEP) will be used to account for the state vehicle inspection and maintenance program, and the state anti-tampering program.
2. Select worst-case meteorological conditions: The worst-case conditions to be assumed for the CO modeling analysis are a wind speed of 1.0 meter/second, Class D stability, an ambient temperature of 43^{o} Fahrenheit, a 0.7 persistence factor (for 8-hour averages) and a mixing height of 1,000 meters.
3. Perform air quality modeling: Micro-scale modeling of traffic-related emissions will be conducted to predict concentrations of CO at key nearby intersections using EPA's CAL3QHC dispersion model. An analysis of PM using the CAL3QHCR version of the model may also be undertaken. Existing conditions, future without the project (no build) and future with the project (build) scenarios will be analyzed for the applicable averaging periods.

4. Present pollutant levels for the proposed project: Pollutant levels will be determined for each modeling scenario by combining model predicted concentrations with background concentrations.
5. Compare CO and PM concentrations to ambient air standards and local impact criteria: Predicted concentrations of CO and PM will be compared (where applicable) with the National Ambient Air Quality Standard (NAAQS) and NYCDEP *de minimis* criteria to determine project impacts.
6. If a predicted violation of the CO standards were to occur, EPA's refined mobile source model, CAL3QHCR, would be implemented for that receptor site. The CAL3QHCR model utilizes actual meteorological data instead of worst-case assumptions concerning wind speeds, wind direction frequencies, and atmospheric stabilities. Five years of meteorological data (2003-2007) with surface data from LaGuardia Airport and concurrent upper air data from Brookhaven, NY, would be used for the modeling study.
7. Examine mitigation measures, as necessary.

Parking Garage Modeling Analysis

An air quality analysis of potential impacts from the proposed parking facilities will be conducted since emissions from vehicles parking onsite could potentially affect ambient levels of carbon monoxide (CO) at sensitive receptors in the project area. An analysis of the emissions from the parking facilities and the dispersion of CO emissions in the environment will be performed using the methodology set forth in the *CEQR Technical Manual* (2001). The CO concentrations will be determined for the time periods when overall parking demand would be the greatest, considering the hours when the greatest number of vehicles would exit the site. Background and on–street CO concentrations will also be added to the modeling results to obtain the total ambient levels.

STATIONARY SOURCE ANALYSIS

The stationary air quality analysis will examine potential stationary source impacts from the proposed project's HVAC system on surrounding land uses and the impacts of nearby industrial sources on sensitive uses associated with the project development.

HVAC Screening

A screening analysis will be performed to determine whether emissions from any on-site fuel-fired HVAC equipment (e.g., boilers/hot water heaters) are significant. The screening analysis will use the procedures outlined in the 2001 *CEQR Technical Manual*. The procedure involves determining the distance (from the exhaust point) within which potential significant impacts may occur, on elevated receptors (such as operable windows) that are of an equal or greater height when compared to the height of the proposed project's HVAC exhaust. The distance within which a significant impact may occur is dependent on a number of factors, including the height of the discharge, type(s) of fuel burned and development size.

Industrial Source Screening

As currently contemplated, the project would include waterfront access for the public; therefore, an industrial source air quality analysis, as detailed in the 2001 *CEQR Technical Manual,* would be required. A survey of land uses surrounding the project site will be conducted to determine the potential for impacts from industrial emissions. The survey will determine if there are any processing or manufacturing facilities within 400 feet of the proposed project. A copy of the air

permits for each of these facilities (if any) will be requested from the NYCDEP Bureau of Environmental Compliance. A review of New York State Department of Environmental Conservation (NYSDEC) Title V permits and the EPA Envirofacts database will also be performed to identify any federal or state-permitted facilities within 1,000 feet of the proposed project. If permit information on any emissions from processing or manufacturing facilities are identified, potential impacts on the proposed public waterfront will be determined.

NOISE

For the proposed project, there are three major areas of concern regarding noise:

- Effects of the proposed project on noise levels in the adjacent community;
- Noise levels that would occur in the proposed building; and
- Noise levels in the proposed project's newly-created open space.

Existing noise levels in the area immediately adjacent to the project site are relatively high and reflect the level of activity (particularly vehicular activity) in the area. Autos, taxis, and trucks along with noise generated by aircraft flyovers, mechanical equipment, and people going about their normal business all contribute to the total ambient noise levels. Existing and future noise levels, both with and without the proposed project, will be examined to determine conformance with CEQR criteria.

In conformance with the *CEQR Technical Manual* requirements, aircraft noise will be separated from vehicular and other noise sources for purposes of determining project impacts and attenuation requirements in building design. In addition, the *CEQR Technical Manual* requires the use of the L_{eq} and L_{10} noise descriptors for vehicular noise analyses. In terms of the effects of the proposed project on community noise levels, the CEQR noise criteria considers a 3-5 dBA increase in noise a significant impact. To achieve a 3 dBA increase in noise level from traffic, there would have to be approximately a doubling of traffic (and/or a significant increase in the number of trucks).

In terms of noise levels in the proposed building, CEQR criteria require that any new or reconditioned buildings that fall within their review jurisdiction have sufficient acoustical treatment to provide interior L_{10} noise levels that do not exceed 45 dBA (50 dBA for commercial buildings).

The proposed work program would include the following tasks:

- Select appropriate noise descriptors. Appropriate noise descriptors to describe the noise environment and the impact of the proposed project would be selected. The L_{10}, and L_{eq} levels will be examined.
- Select receptor locations for detailed analysis. These sites would include sensitive locations or representative locations in the study area. Receptor sites will be selected on each of the streets adjacent to the project site, at nearby sensitive receptor locations, and along major feeder streets to and from the project site.
- Determine existing noise levels. Existing noise levels will be determined primarily by field measurements. Measurements will be made during three time periods—the weekday midday peak, the weekday PM peak, and the Saturday midday peak. Measurements will be made using a Type I sound level meter and include measurements of L_{eq}, L_1, , L_{10}, L_{50}, and L_{90}

noise levels. Where necessary, measurements will be supplemented by mathematical model results to determine an appropriate base of existing noise levels.

- Determine future noise levels without the proposed project for the future analysis year. At each receptor location, noise levels without the proposed action would be determined using existing noise levels, and either proportional modeling techniques or the FHWA Traffic Noise Model (TNM). The methodology used will allow for variations in vehicle/truck mix.
- Determine future noise levels with the proposed project for the future analysis year. At each receptor location identified above, noise levels with the proposed project for the analysis year would be determined using existing noise levels, the Federal Transit Administration (FTA) May 2006 guidance manual, *Transit Noise and Vibration Impact Assessment*, and either proportional modeling techniques or the FHWA TNM. The methodology used will allow for variations in vehicle/truck mix.
- Compare noise levels with standards, guidelines, and other criteria, and impact evaluation. Existing noise levels and future noise levels with and without the proposed action will be compared with various noise standards, guidelines, and other noise criteria, including CEQR noise impact criteria.
- Examine mitigation measures. As warranted, recommendations of measures to attain acceptable interior noise levels and to reduce noise to within acceptable levels will be made.

CONSTRUCTION IMPACTS

The likely construction schedule for development at the project site and an estimate of activity on-site will be described. In addition, a qualitative analysis of the effects of construction activities will be performed. Technical areas to be analyzed include:

1. *Transportation Systems*. This qualitative assessment will consider the extent and duration of any street, roadway, or sidewalk closure; any impacts on the parking supply, and any loss in other transportation services during the various phases of construction. In addition, the assessment will identify the increase in vehicle trips from construction workers and equipment. No roadway closure or traffic rerouting is anticipated during construction of the proposed project; therefore, a quantified traffic analysis during construction phase is not required.
2. *Air Quality*. The construction air quality impact section will contain a qualitative discussion of both mobile source emissions from construction equipment and worker and delivery vehicles, and fugitive dust emissions. It will discuss measures to reduce impacts.
3. *Noise*. The construction noise impact section will contain a qualitative discussion of noise from each phase of construction activity.
4. *Hazardous Materials*. In coordination with the work performed for hazardous materials, above, summarize actions to be taken during project construction to limit exposure of construction workers to potential contaminants.
5. *Other Technical Areas*. As appropriate, discuss the other areas of environmental assessment for potential construction-related impacts.

PUBLIC HEALTH

Following the guidelines presented in the *CEQR Technical Manual*, this task will examine the project's potential to significantly impact public health concerns related to air quality, noise,

hazardous materials, and construction. Drawing on other EIS sections, this task will assess and summarize the potential for significant adverse impacts on public health from project activities.

MITIGATION

Where significant project impacts have been identified in the analyses discussed above, measures will be assessed to mitigate those impacts. This task summarizes the findings and prepares the mitigation chapter for the EIS. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

ALTERNATIVES

The purpose of an alternatives section in an EIS is to provide a comparison of conditions under alternative scenarios that are then compared with conditions under the proposed action. Part of this analysis is to examine alternatives that may reduce project-related significant impacts while substantively meeting the goals and objectives of the proposed action. For this reason, the full range of alternatives is not typically defined until the extent of project impacts have been identified during EIS preparation. At this time, it is anticipated that, at a minimum, a No Build alternative will be analyzed that describes the conditions that would exist if the proposed actions were not implemented.

SUMMARY CHAPTERS

Several summary chapters will be prepared, focusing on various aspects of the EIS, as set forth in the regulations and the *CEQR Technical Manual*. They are as follows:

1. *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 action, its environmental impacts, measures to mitigate those impacts, and alternatives to the proposed action.
2. *Unavoidable Adverse Impacts*. Those impacts, if any, that could not be avoided and could not be practicably mitigated will be described in this chapter.
3. *Growth-Inducing Aspects of the Proposed Action*. This chapter will focus on whether the proposed action would have the potential to induce new development within the surrounding area.
4. *Irreversible and Irretrievable Commitments of Resources*. This chapter focuses on those resources, such as energy and construction materials, that would be irretrievably committed should the proposed project be built. ✷