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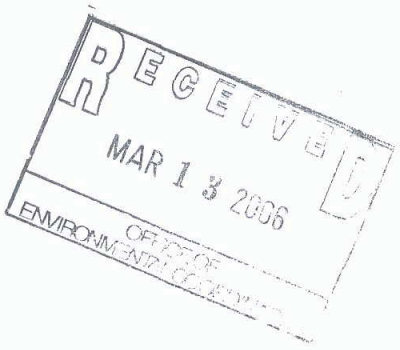
Silvercup West



Final Scoping Document for an Environmental Impact Statement

February 2006

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This Final Scoping Document for the Silvercup West Project reflects comments received on the Draft Scoping Document for the referenced project, which were received during the City Environmental Quality Review required comment period on the Draft Scoping Document ending July 28, 2005. Comments included those received at the public scoping meeting held at the Manhattan Office of City Planning at Spector Hall on June 28, 2005. Changes to the Draft Scoping Document are noted using double underline. Attached is a summary of the comments received and responses to those comments.

INTRODUCTION

Silvercup Studios, the east coast's largest television and movie production studio facility, proposes to expand and enhance its production operations in Long Island City. The expanded production studios would increase employment, enhance opportunities in one of New York City's key industries, and help to further establish New York City as the east coast's premiere location for film and television production. The Proposed Action would also provide for a mix of uses on the Queens waterfront including residential, office, cultural, and recreational uses, and improve access to the East River.

Implementation of the Proposed Action would require a number of discretionary actions by the City Planning Commission (CPC). Acting as lead environmental agency, the CPC has determined that an Environmental Impact Statement (EIS) needs to be prepared assessing the potential impacts of the Proposed Action. This Final Scoping Document outlines the intended range of environmental evaluations to be included in the EIS, based on an assessment of the potential impacts that could result from the Proposed Action.

DESCRIPTION OF PROPOSED PROJECT AND ACTIONS

Terra Cotta, LLC, the Applicant, seeks approval by the CPC of an amendment to the zoning map for the area bounded by the northern boundary of the existing M1-4 district to the north at the centerline of Queens Plaza, the midpoint of Vernon Boulevard to the east, the midpoint of 43rd Avenue to the south, and the East River to the west (the "Rezoning Area"). The Rezoning Area comprises Block 477, Lots 7, 13, 15, 20, 24, 49 and 70. In addition, the Applicant is seeking related CPC and Board of Standards and Appeals (BSA) actions to enable development of an approximately 2.77 million gross-square-feet (gsf) mixed-use development on Block 477, Lots 13, 15, 20, and 24 (the "Project Site"). The FAR of the proposed project would be approximately 8.0. The Project Site is bounded by the Queensboro Bridge to the north, Vernon Boulevard to the east, 43rd Avenue to the south, and the East River to the west. The Project Site is located within an M1-4 district, and is also located within the area covered by the Waterfront Access Plan Q-1 ("WAP") for Northern Hunters Point.

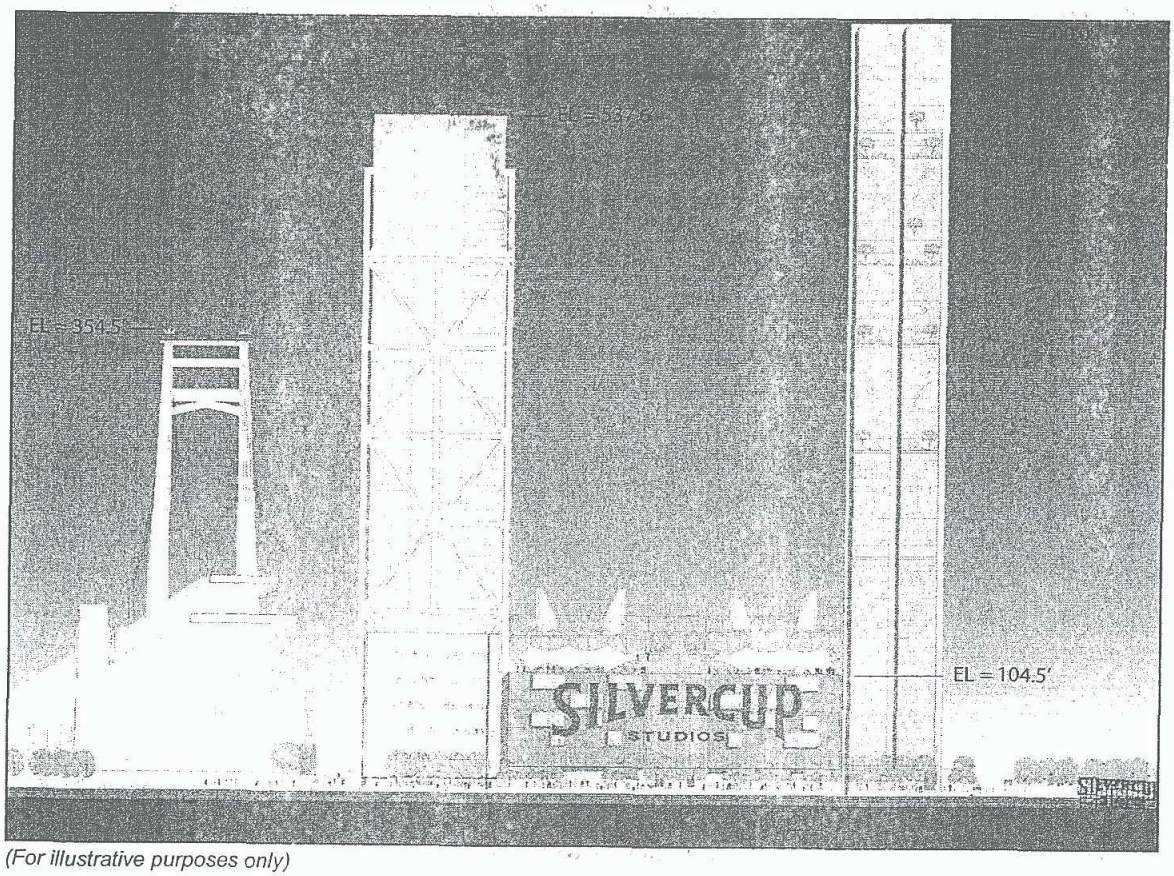

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FIGURE 1A:
PROPOSED SILVERCUP WEST – WEST ELEVATION

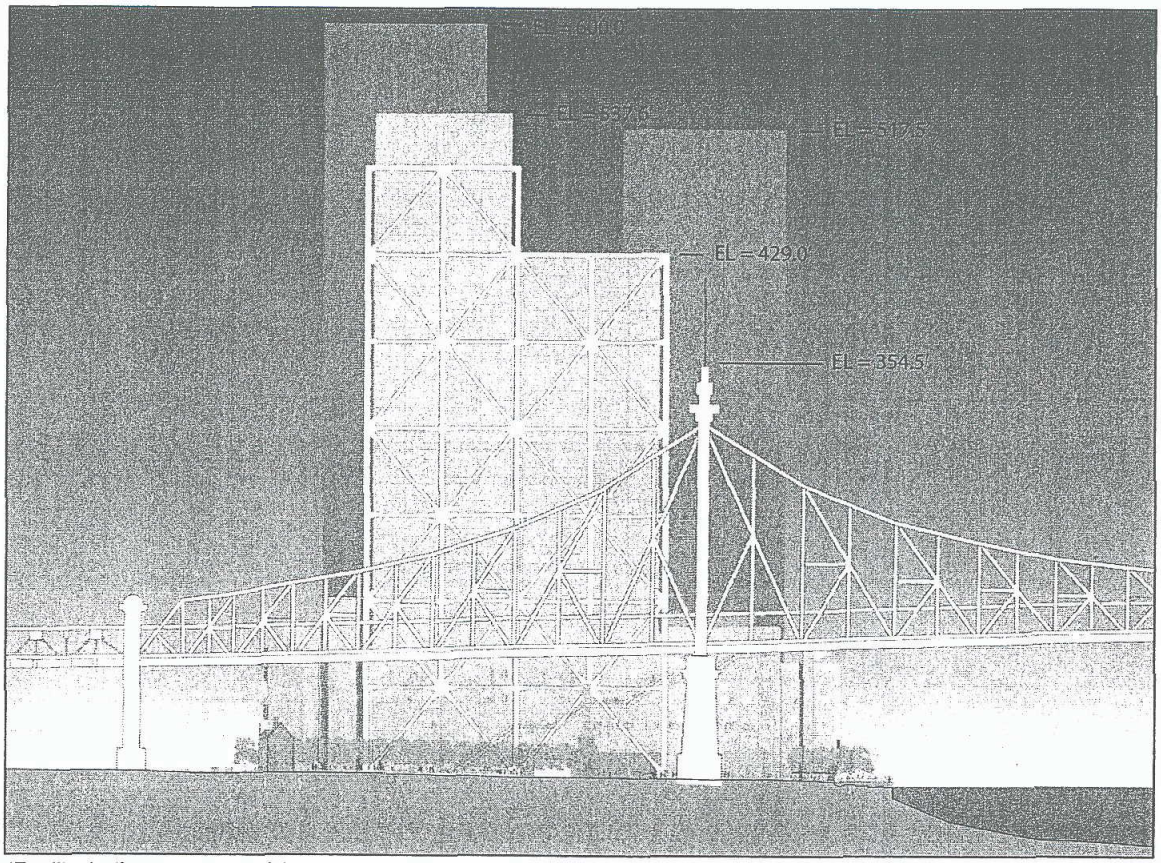

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FIGURE 1B:
PROPOSED SILVERCUP WEST – NORTH ELEVATION

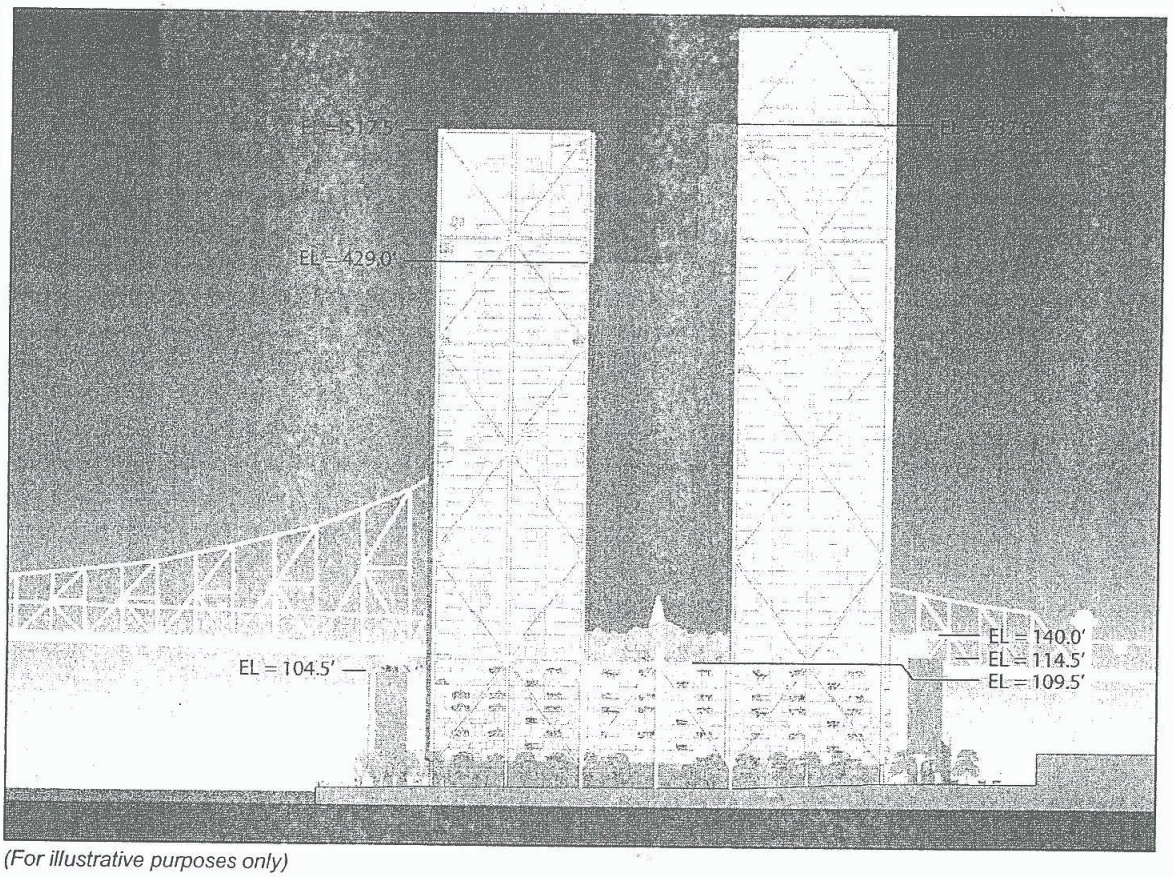

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FIGURE 1C:
PROPOSED SILVERCUP WEST – SOUTH ELEVATION

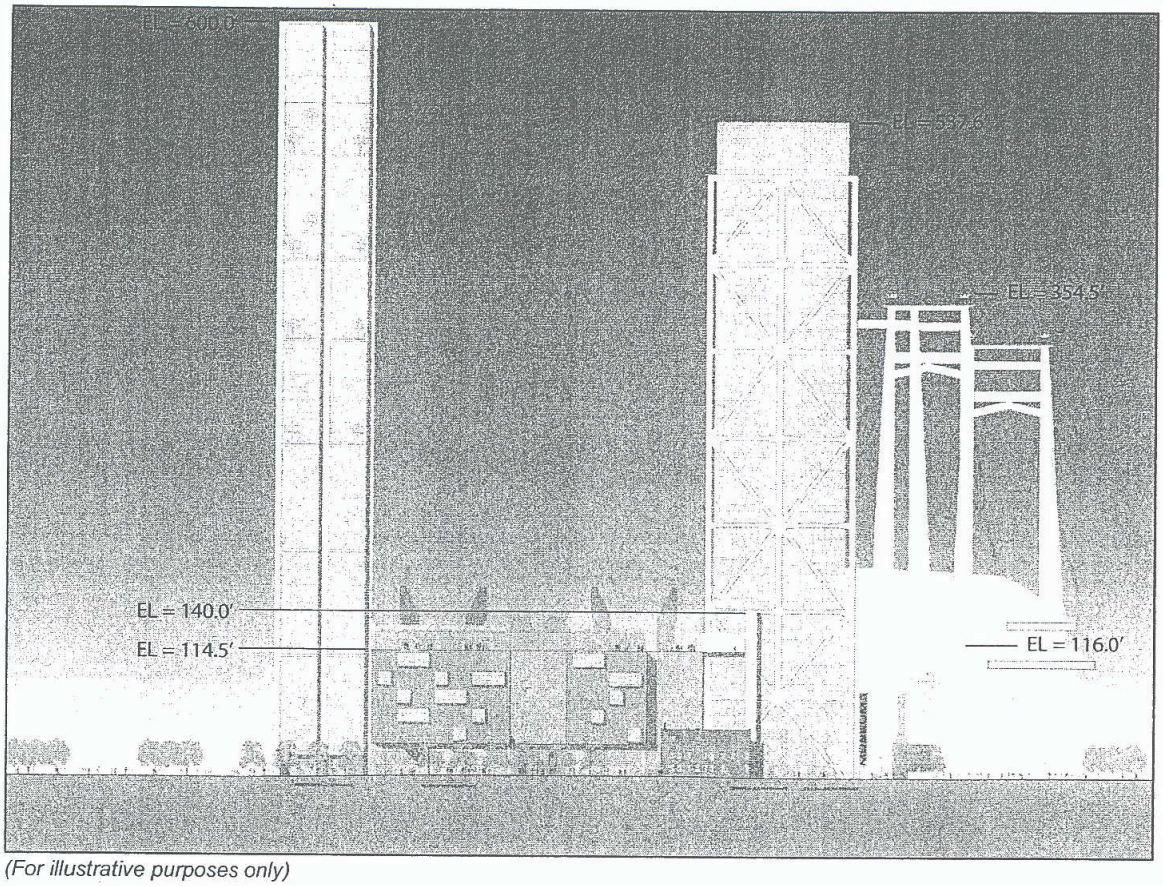

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FIGURE 1D:
PROPOSED SILVERCUP WEST – EAST ELEVATION

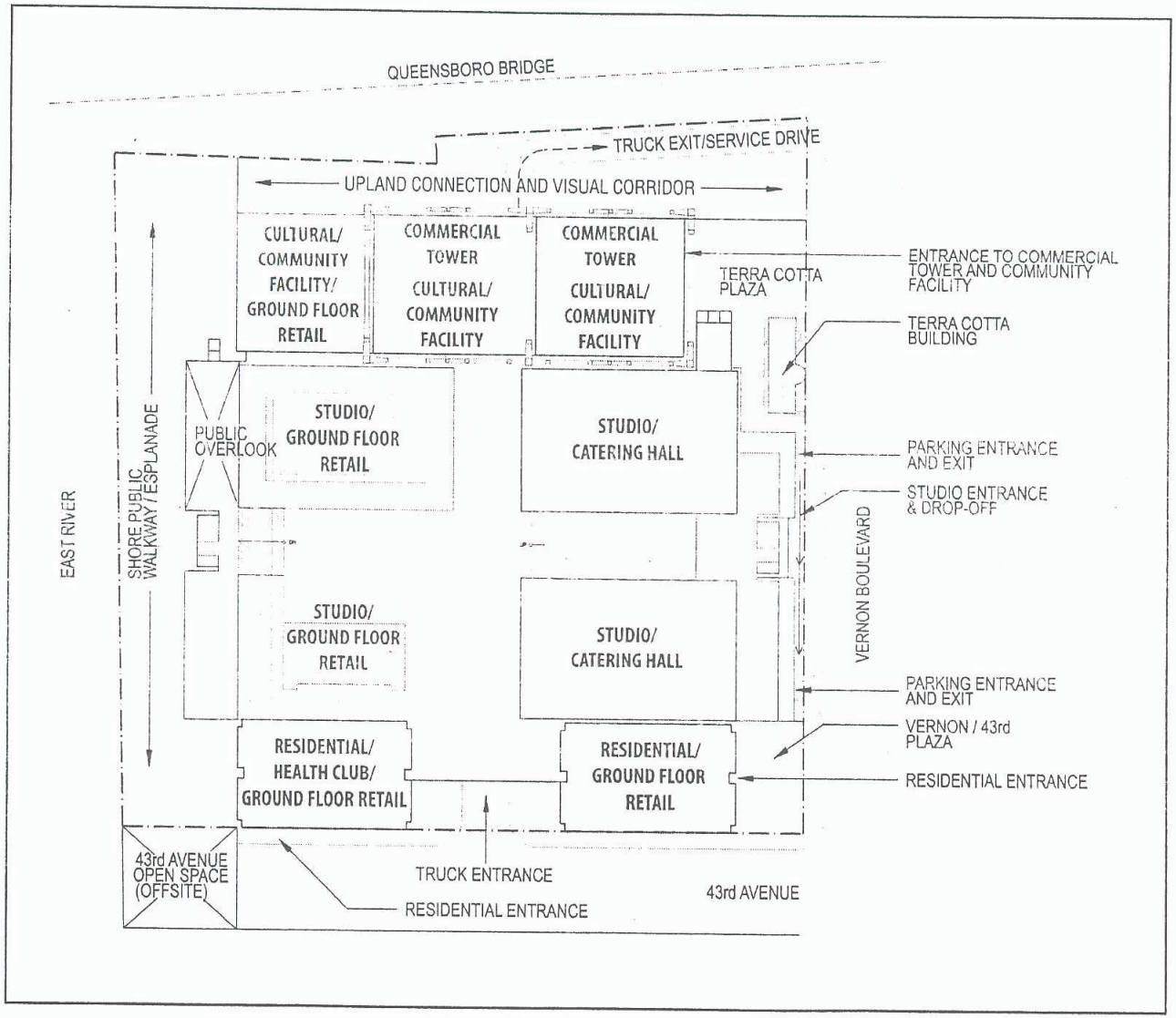


FIGURE 1E:
PROPOSED SILVERCUP WEST – SITE PLAN

The proposed mixed-use development would be comprised of a broad range of uses, including television and film production studios, residential, office, retail, museum and/or other cultural or community facilities, health club, and catering facility. Table 1 lists the approximate gsf of each of these uses in the "Preferred Development Program" for development of the Project Site. The EIS will also evaluate three variations to the Preferred Development Program, in which the office space is replaced by an equivalent amount of residential space ("Variation 1: Residential"), the cultural facilities are replaced by an equivalent amount of studio uses ("Variation 2: Studio"), and in which the office space is replaced by an equivalent amount of residential space and the cultural facilities are replaced by an equivalent amount of studio uses ("Variation 3: Residential and Studio"). In all cases, the development would be subject to a Restrictive Declaration, which would result in the same bulk and building envelope in the Preferred Development Program and the three variations. The Preferred Development Program and each of the three variations would also provide approximately 1,400 accessory parking spaces and publicly accessible open space, the reestablishment of the bulkhead along the western boundary of the Project Site (i.e., the East River), and, although not subject to any action by the CPC, the restoration of the New York Architectural Terra Cotta Company building on Lot 20 within the Project Site.

TABLE 1: PROPOSED BUILDING PROGRAM

Use	Gross Floor Area (Approx. Square Feet)
Television and Film Production Studio	347,000
Residential	1,045,000
Office	655,000
Retail	77,000
Museum and/or Other Cultural or Community Facilities	131,000
Health Club	43,000
Catering Facility	45,000
Loading/Parking	434,000
Public Open space (upland connection and esplanade)	~~50~~55,000

Both a New York Power Authority (NYPA) power generating facility and a New York City Department of Sanitation (DSNY) open storage pile of de-icing salt and sand are currently located on the Project Site. The NYPA facility is located on Lot 24, while the DSNY storage pile is located within the mapped but unopened segment of 43rd Avenue on the southern edge of the Project Site. Both would be moved prior to construction of the Proposed Project.

PROPOSED BUILDING PROGRAM

The central component of the proposed building program ("Silvercup West") would consist of a 114-foot high central core structure ("Core Complex") that would cover approximately 40 percent of the Project Site (approximately 95,000 sf of surface area). The Core Complex would include television and film production studio space and a catering facility. To the north of the Core Complex, a mixed commercial office tower ("North Complex") would be constructed, with portions of the lower levels reserved for cultural/community space and a restaurant. To the south of the Core Complex, two residential towers above retail space and a health club are planned ("South Complex"). The uses contained within the three Complexes have been selected to complement each other and create a 24/7 environment. For example, proposed television and

film production studio space would be supported by studio-related office uses; the health club would serve on site and off site residents, and cultural uses would draw the community to the publicly accessible open space that would be provided along the waterfront.

Access to each Complex has been designed to encourage the mixing of uses. Certain entrances would serve joint uses, while others would provide access to one discrete use. For example, the office and cultural uses in the North Complex would share a common entrance, while the studio space in the Core Complex would have its own entrance. Each of the three Complexes would include direct access to both Vernon Boulevard and the East River Esplanade (Esplanade). The North Complex would also be accessed from the Upland Connection (along the northern border of the Project Site) and the South Complex be accessed from Vernon Boulevard and 43rd Avenue (along the southern border).

From north to south, the following summarizes the major elements of each Complex.

North Complex

The commercial and cultural uses of the Project would be located to the north of the Core Complex ("North Complex"). The intended design of the North Complex would consist of a base structure that would contain glass atriums to the west, north and east. The atriums would rise directly from the ground without providing the required setback at 110 feet on the north façade, which is the subject of one of the waivers requested. A stepped commercial tower would rise from the eastern half of the base. The multiple levels within the base structure have been interleaved in order to provide for a mix of uses and users to animate the lobby throughout the day and week.

The base of the North Complex would be approximately 340 feet by 120 feet in dimension and would have a maximum base height of 119.75 feet. The floorplate of the commercial tower above the base would be 24,215 square feet to 429.9 feet and 11,500 square feet from that point to the roof at 537.6 feet. The roof surface of the tower at 429.9 feet is intended to be treated as a green roof.

The building would contain approximately 600,000 gsf of office space (2.31 FAR). This office space, while not restricted, would be specifically marketed to users who are related to the entertainment and media industries. Entrance to the commercial tower would be at Vernon Boulevard and Queens Plaza South, at the western end of Terra Cotta Plaza. Security personnel at a central security desk would permit office users to access the elevators that would bring them directly to the skylobby located at the level of approximately 110 feet.

Community facility space ("Community Facility Portion") would be located within the western half of the lower levels of the North Complex to the west of and beneath the office tower. It would contain approximately 102,000 zoning square feet of area. Access to the Community Facility Portion would be via a dedicated escalator located in the western lobby at Vernon Boulevard. The Community Facility Portion would be located on five levels, all accessed from the multilevel northern lobby and linked by a series of open escalators.

There is as yet no tenant for this space. However, the Applicant is speaking to a number of Queens and Citywide cultural institutions, many of which have expressed interest in the space. The plan provides for maximum flexibility in fitting out the Community Facility Portion to meet the needs of one or multiple tenants. This portion of the building would contain a movie theater,

which would be accessory to the community facility uses and be approximately 30,000 zoning square feet in area.

Core Complex

The operational and physical center of Silvercup West would be the Core Complex, which would contain the expanded facilities for Silvercup Studios, the largest independent production studio on the East Coast. Eight motion picture and television studios would be located in the center of the Core Complex. The studios would be accessed by a two-story lobby located on Vernon Boulevard. A vehicular drop-off would be provided at the entrance. The four studios on the ground floor would be directly accessed by trucks entering from 43rd Avenue. The studios, each approximately 18,000 zoning square feet in area and 30 feet in height, would be stacked on two levels, each containing four studios. The studios and their accessory space would comprise approximately 271,000 zoning square feet of area (1.04 FAR).

The accessory studio support uses, such as carpentry shops, production offices, dressing rooms, and storage space, would be located on intermediate levels between the studios and to the east and west, fronting on Vernon Boulevard and the East River. The studio support space would be located on floors that would be approximately 10 feet in height.

Above the studios in the Core Complex would be an approximately 44,000 gsf catering facility. The catering facility would be accessed from a dedicated entrance adjacent to the North Complex lobby. The catering facility is designed to meet a need for event locations in Western Queens and would support the growing office and residential population in Long Island City.

The roof of the Core Complex would be stepped down from east to west providing views of the East River, the Manhattan skyline and the Bridge and private open area. The height of the eastern street wall fronting on Vernon Boulevard would be 114.5 feet in elevation, and would step down to a terrace at 109 feet in the western half of the roof and then further step down to 104.5 feet overlooking the East River. The western roof of the Core Complex would be improved with a series of private open spaces, designed for passive recreational use by residents, visitors to the cultural institutions, and customers of the catering facility. At this time, it is anticipated that the design of the rooftop gardens would include lawns and a reflecting pool. The eastern portion of the roof is intended to be a green roof in its anticipated design, and would not provide for resident or visitor access.

South Complex

The residential component of the Building is located to the south of the Core Complex ("South Complex"). Its treatment would be in keeping with high-density residential waterfront developments, with a podium containing retail uses that would serve residents, workers, and visitors.

The lower floors of the South Complex would contain the residential lobbies and storage areas, retail space, and the public health club. Ground-level retail and cafes, health club entrance, and western residential tower entrance would all be located at the lower, Esplanade level on the western side of the South Complex. The eastern half of the Esplanade level would be below-grade residential storage areas. The higher Vernon Boulevard level, which would function as the ground floor for the eastern portion of the South Complex, would contain ground-floor retail along 43rd Avenue and the eastern residential lobby and retail space on Vernon Boulevard. The base of the South Complex would be approximately 80 feet by 370 feet with a maximum base height of 119.75 feet .

Two residential towers would rise above the South Complex base. The eastern residential tower would be 600 feet in height and the western residential tower would be 517.5 feet in height. The floorplate of each residential tower above the base would be 10,175 zoning square feet (zsf). The South Complex would contain approximately 962,000 sf of residential floor area, with approximately 1,000 residential units, based upon an assumption at this time of 1,000 square feet per unit, which is typical of new construction in the area.

The two residential towers have been located at the southernmost portion of the Project Site. The placement of the towers was also selected to provide for the maximum visibility of the bridge from the surrounding community.

Accessory On-site Parking and Loading Berths

A 1,400-space (approximately 350,000 gross square foot) accessory parking garage would be located at grade and below grade on four levels ("Parking Garage"), including the Esplanade and Vernon Boulevard levels. The Parking Garage would provide accessory parking for residents; office, health club, and catering visitors; studio employees and audiences, and visitors to the cultural institutions and waterfront open space. Vehicular access to the Parking Garage would be by means of two entrances and exits on Vernon Boulevard. As required pursuant to Section 13-561 ZR, 50 reservoir spaces would be provided. The Parking Garage would be open 24 hours a day, seven days a week and would be fully attended.

Pedestrian access to the Parking Garage would be via: (i) a dedicated walkway from Vernon Boulevard; (ii) a dedicated elevator to each of the two residential towers; and (iii) a dedicated elevator to the catering hall. Studio visitors and staff would be able to walk directly up the ramps to the Studio lobby on Vernon Boulevard.

In addition, off-street loading berths for 12 trucks would be located under the Building, six more than the number required by the Zoning Resolution. Trucks servicing the retail and studio uses would enter from 43rd Avenue and would either go down a half-level ramp to the Esplanade level to serve the retail uses or go up a half level to the Vernon Boulevard level to serve the studios. An internal north-south drive would run through the Building at the Esplanade and Vernon Boulevard levels. The two levels would merge at grade within the North Complex before exiting onto the private drive located within the Upland Connection.

Open Space

Publicly accessible open space would be provided in accordance with Article VI Chapter 2 of the Zoning Resolution (Special Regulations Applying in the Waterfront Area, or "Waterfront Zoning") as modified by the Waterfront Access Plan Q-1, for Northern Hunters Point (Sect. 62-851 ZR). In addition, 4,500 square feet of publicly accessible outdoor open space would be provided in a public overlook on the northwestern area of the roof terrace of the Core structure. The Project would also provide over 10,000 square feet of private roof terrace open space for residents, workers, museum and catering facility visitors. Private open space would be located on the roof of the Core Building. The Project would also provide over 12,000 sf additional at-grade open space along Vernon Boulevard and 43rd Avenue that, although not required, would nevertheless provide a visual and passive recreational amenity to the Project and the surrounding neighborhood.

a. Public Open Space

Background: The Site is located on a waterfront block as defined by the Zoning Resolution. Development of the proposed Project must therefore provide waterfront access areas in

conformance with requirements of Waterfront Zoning, as modified by the Waterfront Access Plan Q-1 for Northern Hunters Point. The requirements include: (i) a pedestrian link ("Upland Connection") at least 30 feet in width connecting the nearest upland street to the waterfront, and (ii) a 40-foot wide shore public walkway. For this Project and Site, the shore public walkway must be improved to the level of an esplanade (Sections 62-61 and 62-631 ZR) ("Esplanade").

Upland Connection and Visual Corridor: An Upland Connection and Visual Corridor to the waterfront must be provided along the northern boundary of the Property, at the prolongation of the southern line of Queens Plaza South and running to the bulkhead (Section 62-851). The proposed Upland Connection and Visual Corridor are coterminous and are located along the northern boundary of Site. The Upland Connection would provide almost 25,000 square feet of landscaped open space between the North Complex and the Property's northern boundary. The private drive for the internal on-site loading berths would be 20 feet in width and run along the northern boundary of the eastern half of the Upland Connection. A driveway would be located north of the Building delivery egress and would be delineated from the pedestrian circulation zone by bollards and a different pavement treatment.

The proposed Upland Connection would be over 500 feet in length and would maintain a minimum of 30 feet in width at its narrowest point (at the "notch" in the Property's northern boundary). The width of the Upland Connection would range from over 90 feet at Vernon Boulevard to approximately 70 feet at the northeastern corner of the Building to over 40 feet where it meets the waterfront Esplanade. The Upland Connection would preserve a wide view corridor and physical link to the East River.

A curved 16-foot wide pedestrian path would extend along the length of the Upland Connection. Approximately 144 linear feet of seating would be provided, in backed benches that reflect the curve of the path. At the western portion of the Upland Connection, adjacent to the transition zone within which obstructions are not permitted, 18 chaise lounges would be arranged along the northern property line. A sculpture would be located just west of the driveway at the northern property line. This sculpture, which is not yet designed, would serve to link the new open space to Long Island City's industrial past while providing visual interest to the Upland Connection.

The pedestrian circulation zone would be flanked by over 6,500 square feet of low beds planted with native decorative grasses. The eastern segment of the northern boundary of the Upland Corridor would be planted with a single row of 17 black tupelo or similar trees. These trees would mask the retaining wall that would be required due to the grade change at the City-owned property under the Bridge. The plantings have been specifically chosen to provide as little visual obstruction as possible to the waterfront in the west.

Esplanade: The proposed Project would provide a shore public walkway that meets all of the dimensional requirements for an esplanade (Section 62-61 ZR) along the Property's entire riverfront. This 500-foot long Esplanade would connect the Upland Connection at the Site's north to the City-owned property at the foot of 43rd Avenue to the south. The total area of the Esplanade would be approximately 30,000 square feet (two-thirds of an acre). Consistent with the WAP, The northern end of the Esplanade is designed to permit the continuation of the public walkway in the future to the City-owned property currently under jurisdiction of the Department of Transportation under the Queensboro Bridge.

At its widest two points, the Esplanade would be 90 feet in width at the northwestern corner of the Building and 89 feet in width at the southwestern corner. At all locations, the width of the Esplanade would exceed the minimum requirement of 40 feet.

The Esplanade would provide two pedestrian circulation zones that parallel the river's edge. The upland or landward pedestrian path would be of varying widths, with a minimum of 12 feet. The width of the lower or seaward circulation path would vary from 13 to over 19 feet. The two circulation zones would encourage a variety of passive recreational experiences along the waterfront: the upland path would be more shaded, adjacent to tables and chairs, and related to the building's ground floor and cultural uses, while the seaward path would be in a more exposed, sunny location, directed more to the north-south flow of pedestrians and to water-viewing.

Three expanded areas along the upward or landward circulation path would be heavily planted with trees: one bosque each at the northern and southern corners of the building and a double row of trees at the center of the Esplanade. The northern bosque would be have a depth of over 80 feet approximately in dimension, with 17 trees, 10 movable tables and 40 movable chairs, and a backed bench. The southern bosque would have a depth of almost 90 feet, with 12 trees, 10 movable tables and 40 movable chairs, and a curved bench with a back. The central area would contain six trees. This area would be flanked to the north and south by plantings each containing 6 smaller ornamental trees and two curved benches.

In order to provide for a visually uncluttered view of the East River and Manhattan skyline beyond, the Applicant proposes to restrict the use of lighting fixtures on poles along the Esplanade, as required. Instead, illuminated bollards, uplights and building-mounted fixtures would provide for a minimum of 2-footcandles of light without impeding views with raised fixtures.

b. Additional Public Open Space

Terra Cotta Plaza: The easternmost portion of the Upland Connection would flow into Terra Cotta Plaza, a plaza area in front of and surrounding the Terra Cotta Building at Vernon Boulevard. This plaza, which would be approximately 8,200 square feet in area, would be provided in addition to the required waterfront access open space areas. It would wrap around the Terra Cotta Building, extending in front of the Core and North Complexes. Public seating, plantings of native grasses and trees, including a grove of three dawn redwoods, would frame and visually tie the charming landmarked two-and a half-story structure to the new development to its west. This plaza area would welcome pedestrians as they walk west from Queens Plaza along Queens Plaza South. It would signal, to pedestrians and drivers to the east, the presence of a great open space resource at the river.

Vernon/43 Plaza: An additional public area, approximately 4,200 square feet in area, would be located at the southeastern corner of the Project site, in front of the entrance to the eastern residential tower on Vernon Boulevard north of 43rd Avenue. This area would be improved with seating, plantings of native grasses, and flowering trees.

Foot of 43rd Avenue: Concurrent with this Project, the Applicant would create a 40-foot-wide transitional area consisting of attractively paved circulation space and plantings of native grasses on the City-owned property at the end of 43rd Avenue. The design and treatment of this transitional area would be coordinated with the treatment of the Upland Connection and Esplanade.

Public overlook: A public overlook almost 4,500 square feet in area would be located at the western façade of the Core Complex. Members of the public would be able to access this terrace by two means: from the Esplanade by means of a dedicated elevator and from the cultural space within the North Complex by means of one of the dramatic exposed escalators. The public overlook would provide an accessible sitting area with movable tables and chairs. It would

provide expansive views of the Manhattan skyline to the west. This area would be available to the public for water viewing, eating and relaxation.

c. Private Open Space

Roof terrace: The top of the Core complex would be landscaped to provide approximately 10,000 square feet of private passive open space on terraces on the western half of the roof of the Core Complex. This roof garden, which is not yet fully designed, is intended to be improved with planting beds, a reflecting pool, and sitting areas.

Vehicular Access

Multiple access points have been designed into the Proposed Project to minimize vehicular and pedestrian conflicts, and accommodate the vehicular demands of separate uses. Vehicular access to the Project Site would be provided via Vernon Boulevard and a redesigned 43rd Avenue, offering access from Queens Plaza, the Queensboro Bridge, Long Island City to the north, and Hunters Point to the south.

Three drop-off/pick-up locations have been included in the site design. One drop-off/pick-up would be located along the eastern side of the Core Complex, which would provide access for the studio space and the catering hall. This area could also be used for the cultural and office space in the North Complex. Two drop-off/pick-up sites would be located along 43rd Avenue serving the South Complex: one on the east providing access to the Retail Lobby and one on the west providing access to the residential health club, and western retail uses. The drop-off/pick-up area at the Core Complex would also serve as the entrance and exit to the on-site parking levels (below).

As part of the Proposed Action, 43rd Avenue would be re-graded and constructed to provide access to the South Complex. The street would provide a second publicly accessible link to the Esplanade.

Loading berths would be located within the structure of the Core Complex, and would not be visible from the street or from any other uses on site. The vehicular ingress to the loading space would be via 43rd Avenue, with a driveway located between the eastern and western portions of the South Complex. The driveway would divide into two ramps; the upper ramp would lead directly to berths between the four studios on the lower studio space, allowing for direct servicing of the studio space. The downward ramp would lead to berths on the western side of the Core Complex, which would provide direct loading and unloading services for the retail, catering, and health club space. One separate loading berth would provide service for the Cultural Space and be located on this lower level, at the base of the North Complex. By separating the loading space for the different uses, conflicts of time and frequency of deliveries would be avoided.

Vehicles leaving the studio loading space would drive down a ramp, while vehicles leaving the lower level loading space would drive up. Both ramps would exit via a combined driveway separating the east and west portions of the North Complex. Vehicles would cross over the Upland Connection to a truck egress route along the northern border of the Project Site. This route would lead to Vernon Boulevard, where vehicles could access the local street network.

Parking

Approximately 1,400 parking spaces would be provided for the proposed Silvercup West development in one combined parking garage, which would provide accessory parking for residents; office, health club, and catering visitors; studio employees and audiences, and visitors

to the cultural institutions and waterfront open space. The parking garage would be located in the Core Complex beneath the studio space, with two half levels and two complete levels.

Access to the parking garage would be provided from Vernon Boulevard, with two shared driveways which also provide access to the drop-off/pick-up for the Core Complex. Pedestrian access to the parking garage would be via: (i) a dedicated walkway from Vernon Boulevard; (ii) a dedicated elevator to each of the two residential towers; and (iii) a dedicated elevator to the catering hall. Studio visitors and staff would be able to walk directly up the ramps to the studio lobby on Vernon Boulevard.

Associated Project Elements

In addition to the approximately 2.77 million gsf of new construction described above, the Proposed Action would also include retaining and restoring the vacant landmark New York Architectural Terra Cotta Company building on Lot 20 of the Project Site; and reestablishment of the bulkhead along the East River. The Proposed Action would also necessitate the removal and relocation of the DSNY de-icing salt and sand pile located within a mapped but unopened segment of 43rd Avenue on the southern boundary of the Project Site. Since a site for its relocation has not been identified, the DEIS will include a generic analysis of the impacts associated with its relocation. This generic analysis will be based on parameters utilized by DSNY for locating storage piles.

REQUIRED ACTIONS AND APPROVALS

The following discretionary approvals are required to implement the Proposed Action:

- **Amendment to the Zoning Map Changing from an M1-4 District to an M1-5/R10 Special Mixed Use District:** The Project Site's current zoning designation of M1-4 would be changed to an M1-5/R10 Special Mixed Use District. Zoning map 9b would be amended within the area bounded by the northern boundary of the existing M1-4 district to the north, the midpoint of Vernon Boulevard to the east, the midpoint of 43rd Avenue to the south and the pierhead line of the East River to the west. The change would permit the development of the project, an approximately 2.77 million gsf (2.1 million zsf) building surrounded by public open spaces and a waterfront esplanade.

  The purpose of Special Mixed Use zoning districts is to foster a vital and compatible mix of housing, light industry, commercial enterprises and cultural activities. The Special Mixed Use zoning provisions are applied to both the Queens Plaza and Hunters Point subdistricts within the Special Long Island City Mixed Use District to encourage this mix of uses.

  The proposed Zoning Map amendment would pair a light manufacturing district (M1-5) and a residence district (R10) to regulate uses and building size within the rezoning area. Regulations for this paired mixed use district would generally allow a broad range of residential, community facility, commercial and most light industrial uses as a matter of right. Residential and community facility uses would be permitted, as would certain commercial, retail, general service, and manufacturing uses allowed under the existing zoning. Department stores, as well as food and destination retail stores having a floor area of greater than 10,000 square feet, are not permitted as a matter of right and can be located in an M1 zone only pursuant to a special permit or variance. Pursuant to Section 74-922 of the Zoning Resolution, the following uses with no limitation on floor area are permitted by CPC special permit in M1 districts: department stores; carpet, rug, linoleum or other floor covering stores;

clothing or clothing accessory stores; dry goods or fabric stores; food stores; furniture stores; television, radio or photography or household appliance stores; and variety stores.

Within the proposed MX district, the maximum floor area ratio permitted for manufacturing or commercial uses would be 5 FAR. The maximum FAR permitted for residential and community facility uses would be 10 FAR.

- **Zoning Text Amendment to Section 123-90 to Create a Special Mixed Use District and to Permit an Accessory Sign:** Amend Section 123-90 of the Zoning Resolution to establish MX (number to be assigned later by DCP) and create a CPC special permit to allow signs with a greater surface area and height than that allowed by Section 123-90 of the Zoning Resolution. The special permit will be limited to this proposed MX district. The proposed MX District would allow the proposed mix of studio, office, cultural, retail, and residential uses and acknowledge and long-standing industrial precinct across Vernon Boulevard from the proposed Project Site.

- **Special Permit Pursuant to Section 13-561 for an Accessory Off-Street Parking Garage**: A special permit pursuant to Sections 13-134 and 13-561 of the Zoning Resolution is required in order to facilitate construction of an accessory parking garage on the Project Site. Within Long Island City, accessory parking for a mixed-use development is limited to 225 parking spaces. Parking facilities that exceed that number are permitted by special permit pursuant to Sections 13-364 and 13-561 of the Zoning Resolution. The proposed parking garage would contain approximately 1,400 accessory parking spaces on four levels within the building. The facility would be fully attended and open 24 hours a day, seven days a week. The parking garage would be accessed by two entrance/exits on Vernon Boulevard.

- **Special Permit Pursuant to Section 62-736 to Modify Sections 62-341 (C) 1, 2, 4, 5 and 6 on Waterfront Blocks:** A special permit is needed to facilitate construction of a building that that does not comply with the bulk regulations contained within Article VI, Chapter 2 (Special Regulations Applying in the Waterfront Area) of the Zoning Resolution. The Building as proposed has been designed to provide for the density and mix of uses that create the critical mass of activity necessary to enliven this site. The Building was also configured and placed to better relate to the physical characteristics of the site, existing upland conditions, proximity to the East River, and two structures of historic and architectural significance that are located adjacent to it: the Terra Cotta Building and the Queensboro Bridge. The envelope of the Core Complex is directly related to the large volumes required for production studios. In order to be competitive with other new studio spaces, these studios need high ceilings and wide, unencumbered internal spaces.

  Because the Project as designed would not conform to certain design requirements of Section 62-431 ZR, a series of bulk modifications pursuant to Section 62-736 ZR as listed below are required. The following waivers to Section 62-431 (c) would be requested to permit the construction of the Building in conformance with the proposed Building plans:

  - *An initial setback distance of 15 feet from a narrow street line, 10 feet from a wide street line, and 30 feet from a shore public walkway (Section 62-341 (a) (2)):* The North Complex would not provide the required 15-foot setbacks at its northern wall nor would the South Complex provide the 10-foot setback at its southern wall, but would instead rise directly up from the ground for the full height of the Building without setbacks. The eastern and western facades of the Core, North and South Complexes of the Building would comply with the setback requirements of Section 62-341. This modification is needed to permit the proposed design of the Building.

- *The Building does not provide for a 30-foot initial setback distance on the shore public walkway (Section 62-341 (a) 2):* At the western faces of the North and South complexes, the Building will not provide for the required 30-deep setback at a maximum base height of 100 feet. At the South Complex, the west residential tower will rise without a setback for its entire height. The western façade of the glass atrium that will enclose the Cultural/Community Facility space will rise to approximately 130 feet before setting back over 102 feet from the street wall. Both of these street walls are located on the widest portions of the Esplanade—portions that are almost 90 feet in width, or more than twice the required minimum width for a shore public walkway. The extraordinary depth of the Esplanade at these two locations, plus the wide East River beyond, will create a visually open public space that will enjoy light and air despite the lack of building setbacks. The façade of the Core Complex will fully comply with the height and setback requirement, by providing an initial setback of over 45 feet at a height of 101 feet above the Esplanade below.

- *There is not initial setback distance at the maximum base height (Section 62-341)*: The Building will not provide the required setbacks at its northern and southern walls, but will instead rise directly up from the ground for the full height of the Building without setbacks. The western façade of the Building will not comply with the required setback regulations at the northern portion of the façade (the community facility/office tower) and the southern portion of the façade (the residential tower). The northern portion of the façade will rise to a height of 129 feet and then set back 102.5 feet. The southern portion of the façade will rise without any setback. In addition, the 121.36-foot-high elevator that will provide public access to the rooftop will exceed the 110-foot setback. The central portion of the façade (at the Cove complex) will comply. The eastern façade of the Building will comply with the setback requirements of Section 62-341.

- *The Building's base exceeds the maximum base height of 110 feet as (Section 62-341(c)(1):* The Building's northern and southern faces, which will not have any setbacks but will instead rise directly up from the ground, will exceed the maximum base height of 110 feet. The eastern and western facades of the Building will comply with the maximum base height requirements of Section 62-341 (c) 1 ZR.

- *The Building exceeds the maximum building height of 350 feet (Section 62-341 (c)(2):* The Building will contain three towers, all of which will exceed the maximum building height of 350 feet. The residential towers on the South Complex will be 517.5 and 600 feet in height; the commercial tower on North Complex will be stepped at 429.9 and 537.6 feet in height. The height and configuration of the towers was developed by Richard Rogers Partnership as part of a balanced and carefully designed architectural composition that would provide for sufficient intensity of uses to enliven this stretch of the East River while respecting the presence of the Queensboro Bridge and Terra Cotta Building.

- *The residential floor sizes above the maximum base height to exceed 8,100 zoning square feet (Section 62-341 (c)(4):* The residential floor plates of both towers above the maximum base height will each be 10,175 zoning square feet in area. This will provide for marketable and efficient apartment layouts in the residential towers. The towers will be slender (79 x 130 feet in dimension) and will be placed so as to maximize views of the Manhattan skyline, East River, and Queensboro Bridge from off-site locations and the upland Long Island City community.

- *The floorplates above 150 feet are greater than 85 percent of the floorplates below 150 feet (Section 62-341 (c)(5):* The Building will not provide setbacks at 150 feet in any of

the three towers. Floors above 150 feet in both the residential towers will be of the same area and configuration as that of the floors directly below 150 feet. The commercial tower will have a floor plate of 24,150 zoning square feet from an elevation of 149 feet to 429.9 feet. At that level, the tower floor plate will be reduced in area to 11,550 zoning square feet and will rise to 557.6 feet. These tower proportions and configuration will provide for efficient office floors whose bulk will be visually pulled back from the towers of the Queensboro Bridge.

- *The length of the building wall facing the shore line exceeds 100 feet (Section 62-341 (c)(6):* The length of the western building wall (facing the East River) of the commercial tower will be 120 feet in length. The architect's design for the commercial tower strives to (i) compress the Building bulk so as to draw it way from the Terra Cotta Building to the east and the Queensboro Bridge to the north; and (ii) provide for a slender tower that allows maximum visual penetration of the site and continued wide views of the East River to the west and the Queensboro Bridge to the north. The proposed configuration will do so while also providing a floor plate for the commercial tower that is commercially marketable and economically and structurally feasible to construct.

- **Authorization Pursuant to Section 62-722 to Modify Waterfront Public Access and Visual Corridor Design Requirements of Section 62-60:** In order to facilitate development of a shore public walkway and upland connection, substantially in conformance with the proposed landscape plan modifications would be requested from the requirements regarding buffers and tree within upland connections and tree plantings in the Esplanade as follow:
  - ***Upland Connection:***
    - *An upland connection shall consist of a single pedestrian circulation zone bordered continuously on both sides by a buffer zone; the minimum width of the pedestrian circulation zone is 16 feet and the minimum width of buffers is 7 feet (Section 62-622):* On the western portion of the upland connection (west of the drive), one pedestrian zone, which is 20 feet to 40 feet in width, would be provided. Buffers would be provided to the north and south of the pedestrian zone. The southern buffer would range in depth from 12 feet 4 inches to 12 feet 6 inches in depth. However, the northern buffer would vary in width from 10 feet at its western end to 2 feet at its eastern end. The northern buffer would abut the retaining wall at the Project Site's border with City-owned property to the north. The Upland Connection is designed to permit its integration with the City property if and when it is improved as parkland.
    - *No buffer zone shall be required when an upland connection or portion thereof is located within a private drive. In such case the minimum required width if the pedestrian circulation zone is 12 feet on each side of the drive (Section 62-622).* In order to visually and physically separate the driveway from pedestrian waterfront access routes and the building, the drive would be located close to the Upland Connection's northern boundary. This would create a wide pedestrian circulation zone adjacent to the building that would connect from the Vernon Boulevard sidewalk, Terra Cotta Plaza, and the crosswalk from Queens Plaza South. A 7-foot-wide buffer planted with 17 shade trees would be located to the north of the drive. A buffer consisting of a planted berm would be located to the south of the drive. The width of the berm would vary from 2.5 feet at its western end to 20 feet at its eastern end. At its widest point, the berm would be 25 feet in width.

      One pedestrian circulation path would be provided between the Building and the southern buffer or berm. The width of the pedestrian circulation zone would be 16 feet at its narrowest point; at its widest point, at the eastern edge of the building, it

would be 40 feet in width. Along most of its length, the pedestrian circulation path would be 20 feet in width.

- *Permitted obstructions in buffer zones include trees and planting materials; arbors and trellises; paved entrances to buildings fronting on the buffer zone and awnings and canopies over such entrances; fences and gates, lights and lighting stanchions; planting areas and retailing walls.* The sculpture that is proposed to be located within the northern buffer would not be a permitted obstruction. The sculpture is intended to be a symbolic link to the site's former industrial uses as well as a visual wayfinding sign to announce to pedestrians the waterfront open space to the east.

- ***Esplanade:***
  - *A continuous tree pit planted with one row of shade trees is required between the seaward and landward circulation paths (Section 62-631 (a) (1) and (2).* A continuous tree pit planted with shade trees would not be provided. Instead, two bosques of trees are proposed at the widened northern and southern ends of the Esplanade. The northern bosque would contain 17 shade trees and the southern would contain 12. Six shade trees would be planted in two rows in the center of the building's Esplanade façade. Curved benches that are flanked informally with lower flowering ornamental trees would be placed between the central tree planting and each of the two bosques. The intent of the design is to provide for a wide range of waterfront experiences, visual interest, and sitting areas.

- **Authorization Pursuant to Section 13-553 to Permit Curb Cuts on a Wide Street:** To facilitate location of two curb cuts on Vernon Boulevard serving the parking garage. The Project Site is bounded on the east by Vernon Boulevard, which is mapped at 75 feet in width, and is, therefore, defined as a wide street (Section 12-10 of the Zoning Resolution). The two curb cuts required for the ingress and egress to the proposed parking garage, therefore, require authorization pursuant to Section 13-553.

- **Special Permit Pursuant to Section 123-90 to Modify Sign Regulations.**

- **Amendment to the City Map for 43rd Avenue between Vernon Boulevard and the East River:** Modify the elevation of this mapped but unimproved portion of 43rd Avenue so as to provide for better site design and drainage. The existing mapped elevation at the intersection of Vernon Boulevard and 43rd Avenue would remain unchanged at 12.33 feet. However, the mapped elevation at the foot of 43rd Avenue at the water's edge would be raised from 5.5 feet to 7.5 feet. The modification in elevation would more accurately reflect the actual topography of the street bed and adjacent properties. It would also reflect the actual elevation of the bulkhead at the end of the street.

- **Certification Pursuant to Section 62-711 that a Site Plan has been Submitted Showing Compliance with the Provisions of Section 62-80:** By the chairperson of the City Planning Commission that a site plan has been submitted showing compliance with the provisions of Section 62-40 and Section 62-60.

- **Special Permit by the Board of Standards and Appeals for a Physical Culture or Health Establishment:** A public health club is defined by the zoning resolution as a physical culture or health establishment and requires a special permit by the Board of Standards and Appeals pursuant to Section 73-36 ZR. There is no operator identified at this time for the health club.

- **New York State Department of Environmental Conservation (NYSDEC): Wetlands Permit (6NYCRR Part 661) and potential Protection of Waters Permit (6NYCRR Part 608) and US Army Corps of Engineers Section 10 Permit (Rivers and Harbors Act of 1899):** These permits would be to reestablish the bulkhead along the site's western boundary

where the temporary NYPA power generating facility is located and for activities within the adjacent area jurisdiction of the NYSDEC.

The environmental issues to be addressed and the methodologies and approach to be used in completing the EIS are identified below.

DRAFT ENVIRONMENTAL IMPACT STATEMENT

An Environmental Assessment Statement prepared for the project was reviewed by the Department of City Planning (DCP), and it was determined that the project may have a significant effect on the environment. The Draft Environmental Impact Statement (DEIS) would assess the environmental impacts of the project, using the approved methodologies defined in the *CEQR Technical Manual (2001)*. The analysis year used to project these impacts would be 2009 ("Build Year"), which is when the project is anticipated to be completed based on a three-year construction period. Development in the project's Study Area expected to occur in the intervening years would be accounted for so that the cumulative effect of the proposed development, other anticipated developments, and background growth is considered in the DEIS and so that the effects of the Proposed Action can be compared with future Build Year conditions without the Proposed Action ("No-Action condition").

The DEIS would be prepared for the project in conformance with the New York City Environmental Quality Review (CEQR), consistent with technical guidance for preparing environmental documents, as detailed in the *CEQR Technical Manual*. The EIS would contain:

- A description of the Proposed Action and its environmental setting;
- An assessment of the short-term (construction-related) and long-term effects of the Proposed Action on the technical areas described in the following pages. The analyses would include future known, and reasonably anticipated development that may occur as a result of the Proposed Action. The analysis would be prepared for the year 2009.
- Identification of any potential significant adverse environmental impacts that could not be avoided with implementation of the Proposed Action;
- A discussion of reasonable alternatives to the Proposed Action, including the No-Action alternative (future 2009 conditions without implementation of the Proposed Action);
- Identification of any irreversible and irretrievable commitments of resources that would be involved in the Proposed Action should it be implemented; and
- A description and evaluation of the measures proposed to mitigate any anticipated environmental impacts of the Proposed Action.

Task 1: Project Description

The first chapter of the EIS would introduce the reader to the project and set the context for assessing impacts. In this chapter the project would be described in sufficient detail to provide the public and decision-makers with a clear understanding of the full range of governmental actions required. The project description would encompass:

- A description of the Proposed Action;
- A detailed description of the proposed development (Preferred Development Program and three variations) for which the actions are proposed; and
- A description of the planning rationale, as well as purpose and need for the action, including market conditions, and overall City planning goals.

Table 2 provides a summary of the Preferred Development Program and the three variations. All three variations can be accommodated within the building envelope that has been designed for the Preferred Development Program and would, therefore, require the same land use-related approvals as those for the Preferred Development Program.

TABLE 2: PREFERRED DEVELOPMENT PROGRAM AND VARIATIONS

Use	Preferred Development Program (gsf)	Variation 1 *(Residential)* (gsf)	Variation 2 *(Studio)* (gsf)	Variation 3 *(Residential and Studio)* (gsf)
Residential	1,044,970	1,700,018	1,044,970	1,700,018
Commercial	819,431	164,383	819,431	164,383
Office	*655,048*	*0*	*655,048*	*0*
Retail	*76,581*	*76,581*	*76,581*	*76,581*
Health Club	*42,906*	*42,906*	*42,906*	*42,906*
Catering	*44,896*	*44,896*	*44,896*	*44,896*
Cultural/Community Facility	130,564	130,564	0	0
Studio/Studio Support	346,574	346,574	477,138	477,138
Loading/Parking	433,761	433,761	433,761	433,761
TOTAL Floor Area	2,778,300	2,778,300	2,778,300	2,778,300
Public Open Space (Upland Connection and Esplanade)	55,000	55,000	55,000	55,000

Some aspects of the program would stay the same in all the variations. These include the retail and restaurant space, the catering facility and the health club. However, the variations include changes to the amounts of residential space, office use and support space, and the cultural facility. Specifically:

- One variation ("Variation 1: Residential") replaces the 655,048 gsf of office space with an equivalent amount of residential space containing 655 apartments.
- A second variation ("Variation 2: Studio") replaces the 130,564 gsf cultural facility with an equivalent amount of studio and studio support space, including two additional studios.
- A third variation ("Variation 3: Residential and Studio") replaces the 655,048 gsf of office space with an equivalent amount of residential space containing 655 apartments and replaces the 130,564 gsf cultural facility with an equivalent amount of studio and studio support space, including two additional studios.

The Maximum Building Envelope diagram (Figure 2) and as shown in a three-dimensional configuration in Figure 3 illustrate the maximum bulk of the proposed building under either the Preferred Development Program or any of the three variations outlined in Table 2. Under any of these four scenarios, the maximum gsf of the building would be 2,778,300 gsf and the maximum floor area would be 2,067,788.

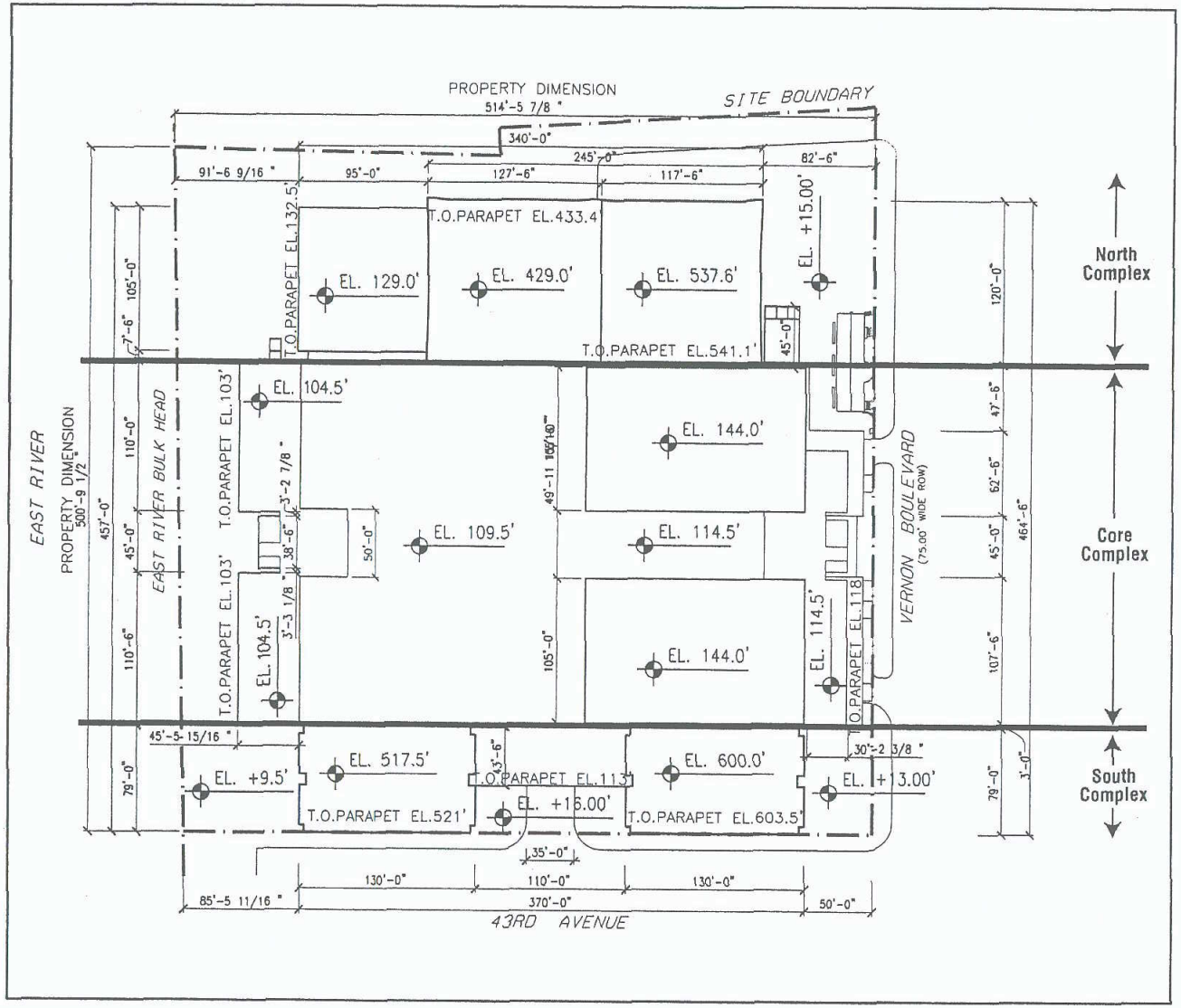


FIGURE 2:
MAXIMUM BUILDING ENVELOPE

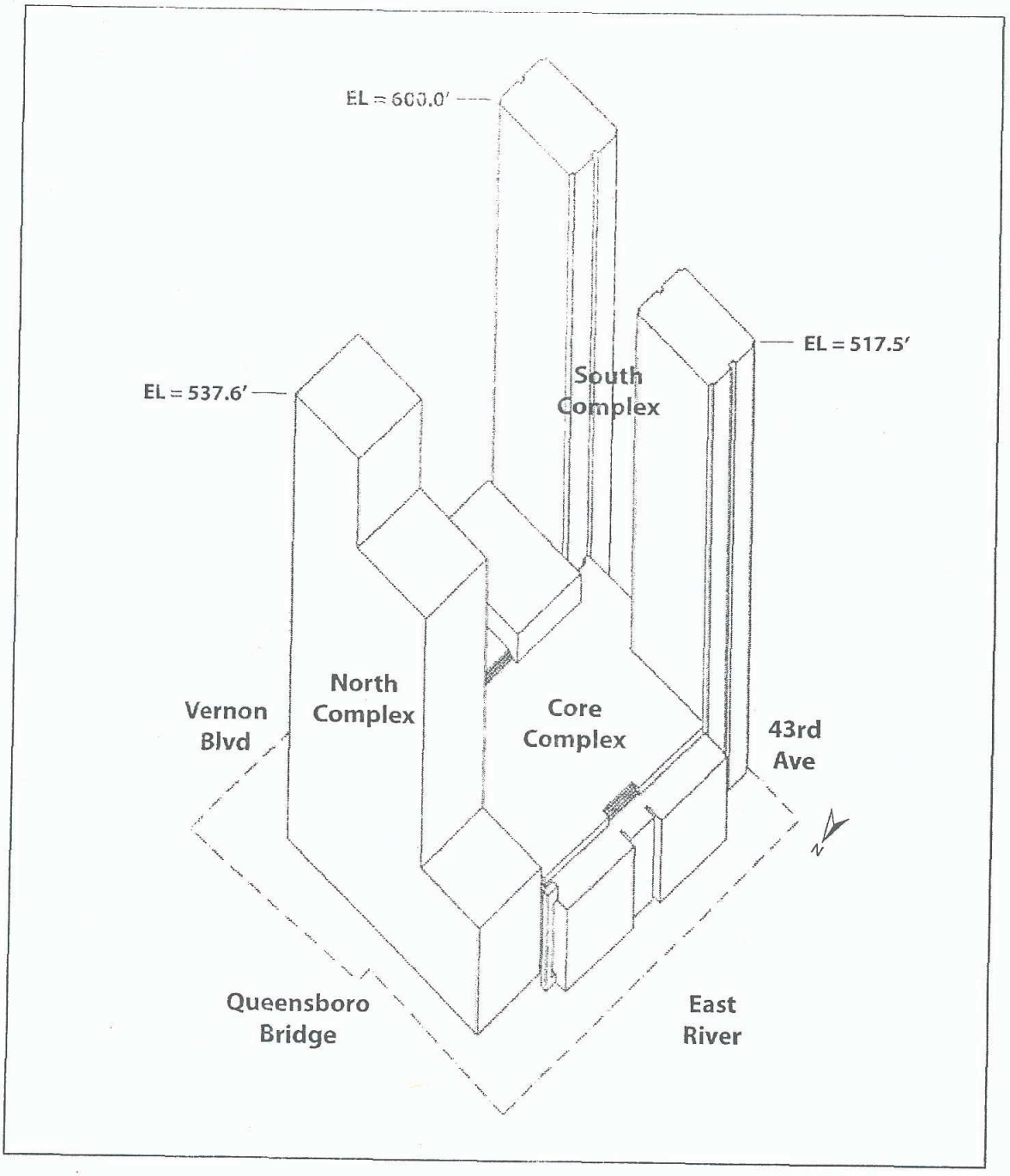


FIGURE 3:
AXONOMETRIC (3 DIMENSIONAL) SITE PLAN

Special Permits

As discussed under Required Actions and Approvals, the Proposed Action will require Special Permits from the CPC and other discretionary public actions. The Special Permits will delineate, among other things, the two items listed below, which will also be included within a Restrictive Declaration, described below, against the Project Site. The difference would be that the Restrictive Declaration will apply with or without use of the Special Permits. The Special Permits would only govern if they are used to:

- Provide an envelope within which the project's bulk could be arranged. The envelope, which is shown as Figure 2, will define (a) the maximum heights (inclusive of permitted obstructions) of each portion of the main roof and the towers, (b) the maximum outside dimensions in plan at each height, (c) and the minimum dimensions between the exterior walls of the building and the lot lines of its zoning lot.
- Delineate zones within which pedestrian and vehicular ingress to and egress from the building could be located and zones within which curb cuts or drop-off lanes could be located.

In addition, the Special Permits will contain a generalized layout of the ground floor levels of the building, including uses in the building fronting on the streets, the Esplanade, and the Upland Connection, and a roof plan, indicating areas of public access. The Special Permits will contain drawings of the accessory garage, showing reservoir spaces, attendant's booth location, and zones of ingress and egress; and zoning calculations including plans, sections, and elevations. The Special Permits will not contain the landscaping or treatment of private open spaces on the roof.

Restrictive Declaration

To ensure that the Project as constructed is within the building envelope shown on the drawings approved by the CPC and the City Council pursuant to ULURP, that access to the project is essentially at the locations analyzed in the EIS, and that the mix of uses in the project is substantially consistent with either the Preferred Development Program or one of the three variations described, the project sponsor will, at the time all land use-related actions required to authorize the project's development are approved, execute and record against the Project Site a Restrictive Declaration that would:

- Provide design standards and requirements, and an envelope within which the Project's bulk would be arranged, regardless of whether the Project is developed pursuant to the Special Permits. The envelope, which is shown as Figure 2, will define (a) the maximum heights (inclusive of permitted obstructions) of each portion of the main roof and the towers, (b) the maximum outside dimensions in plan at each height, (c) and the minimum dimensions between the exterior walls of the building and the lot lines of its zoning lot.
- Delineate zones within which pedestrian and vehicular ingress to and egress from the building could be located and zones within which curb cuts or drop-off lanes could be located.
- Require that the Project be developed substantially in accordance with the Preferred Development Program or one of the three variations studied in this EIS.
- Describe for each variation any required mitigation measures for which the project sponsor will be responsible and the time by which those measures are required to be implemented.

Assessment of Preferred Development Program and Variations

The EIS would qualitatively assess each of the three variations for each relevant environmental impact area and would compare the impacts of each variation with those of the Preferred Development Program. In any instance where any of the three variations may have the potential for significant adverse environmental impacts not identified for the Preferred Development

Program, such impacts would be quantified or detailed, as would any mitigation measures respecting such impacts. The impacts of each alternative evaluated in Task 21 would be compared against those of the Preferred Development Program and the three variations.

Task 2: Land Use, Zoning, and Public Policy

The proposed rezoning would allow for a change in land use on the subject site from industrial use to mixed residential, commercial, and cultural uses.

The EIS analysis would include:

- A description of existing land use, zoning, and public policy in the area proposed for rezoning (the Project Site) as well as the primary land use study area (within a 400-foot radius) and secondary land use study area (within a ½-mile radius) of the Project Site.
- A description of land use trends and the identification of anticipated future projects in the study areas, and a description of future land use and zoning as of 2009 in both Build and No-Action conditions, based on discussions with DCP and other relevant public agencies, developers and media sources
- An assessment of the effects of the Proposed Action on existing land use, land use trends, zoning, and public policy (including consistency with waterfront land use and zoning policies) at the proposed Project Site, and in the primary and secondary study areas

The study areas proposed for this evaluation are depicted in Figure 4.

Task 3: Socioeconomic Conditions

A preliminary assessment would be conducted to determine the potential for any direct or indirect displacement impacts, including direct residential, business, or institutional displacement from the Project Site as a result of the Proposed Action; of these, the EIS assessment would focus on:

- Indirect residential displacement;
- Indirect business and institutional displacement; and
- Adverse effects on specific industries.

The study area for socioeconomic conditions would include properties generally within a ½-mile radius of the Project Site, as adjusted to incorporate the boundaries of affected census tract block groups, pursuant to the recommended procedures of the *CEQR Technical Manual* (Figure 8). Sources of data used in the analysis would include US Census Data for 2000; New York State Department of Labor employment data for 2003 (for the Zip Code that includes the Project Site), community district profiles prepared by the DCP, other studies of the area and reports of local and interests groups, media sources, and interviews with real estate brokers.

Preliminary assessments of the areas of concern listed above would be conducted to determine if detailed analyses are required, pursuant to the *CEQR Technical Manual*. If applicable, detailed analysis would include:

- **Population Characteristics:**
  - Based on the U.S. Census of Population and Housing, describe the 2000 population and housing characteristics of the Study Area.
  - Discuss population trends in the future without the Proposed Action (No-Action condition).
  - Estimate future population in the study area as a result of the other anticipated projects and with the proposed rezoning and development of the Project Site, and assess effects on study area population.

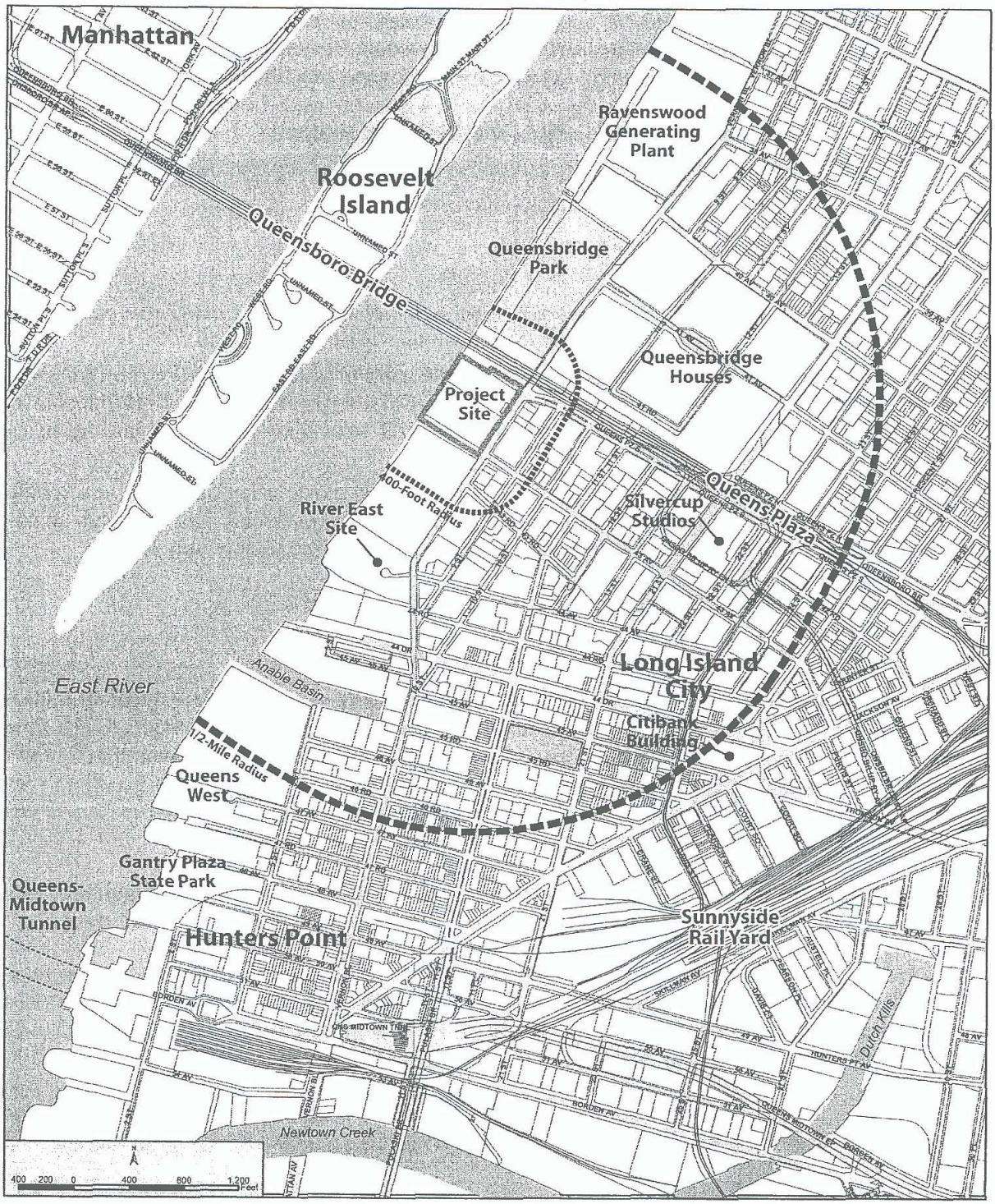


FIGURE 4:
LAND USE STUDY AREAS

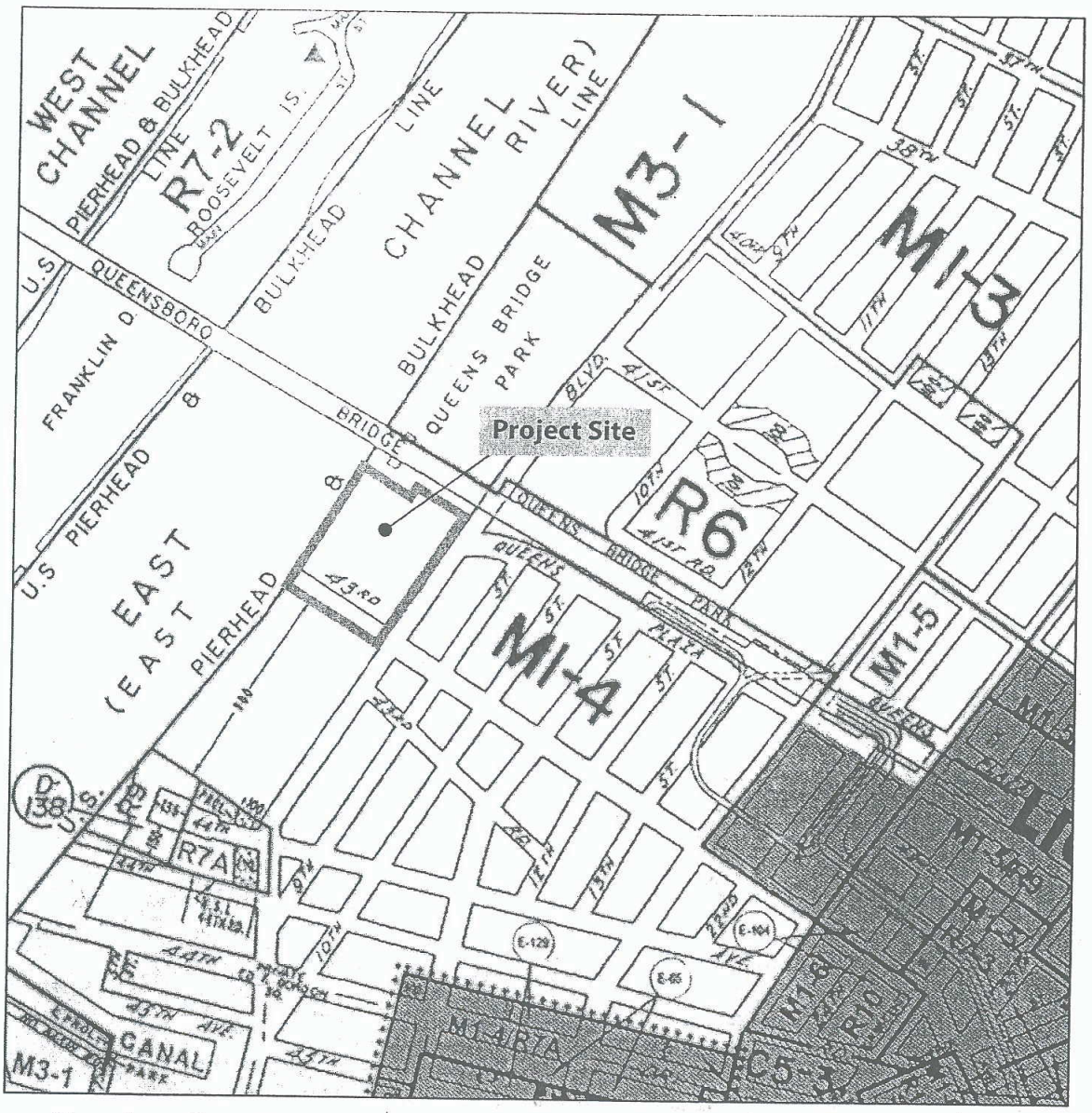
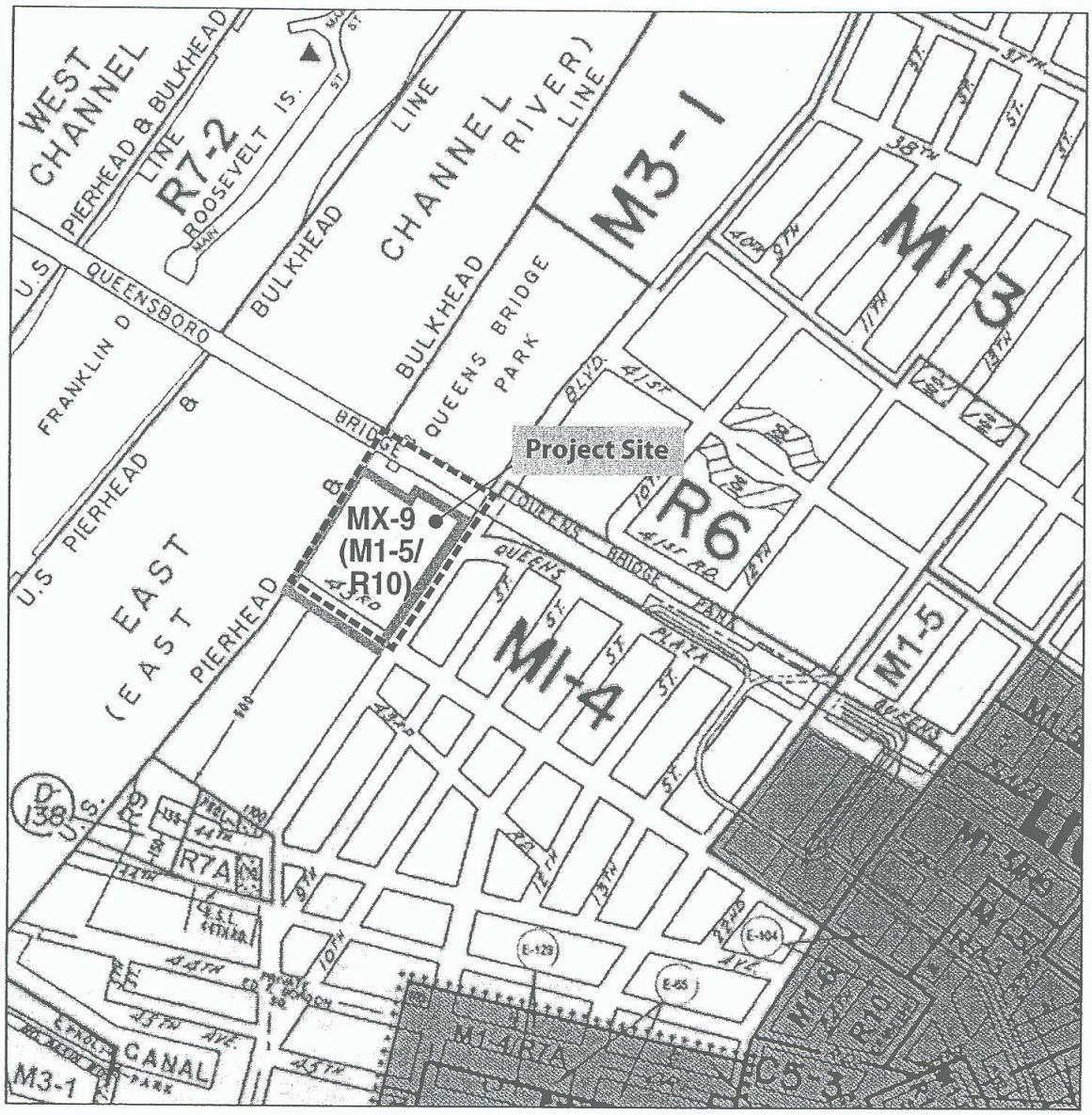


FIGURE 5:
EXISTING ZONING



300 0 300 600 900 FEET

N

Source: NYC Zoning Resolution, available online at www.nyc.gov/html/dcp/pdf/zone/map9b.pdf, July 2005

Commercial Overlay Districts

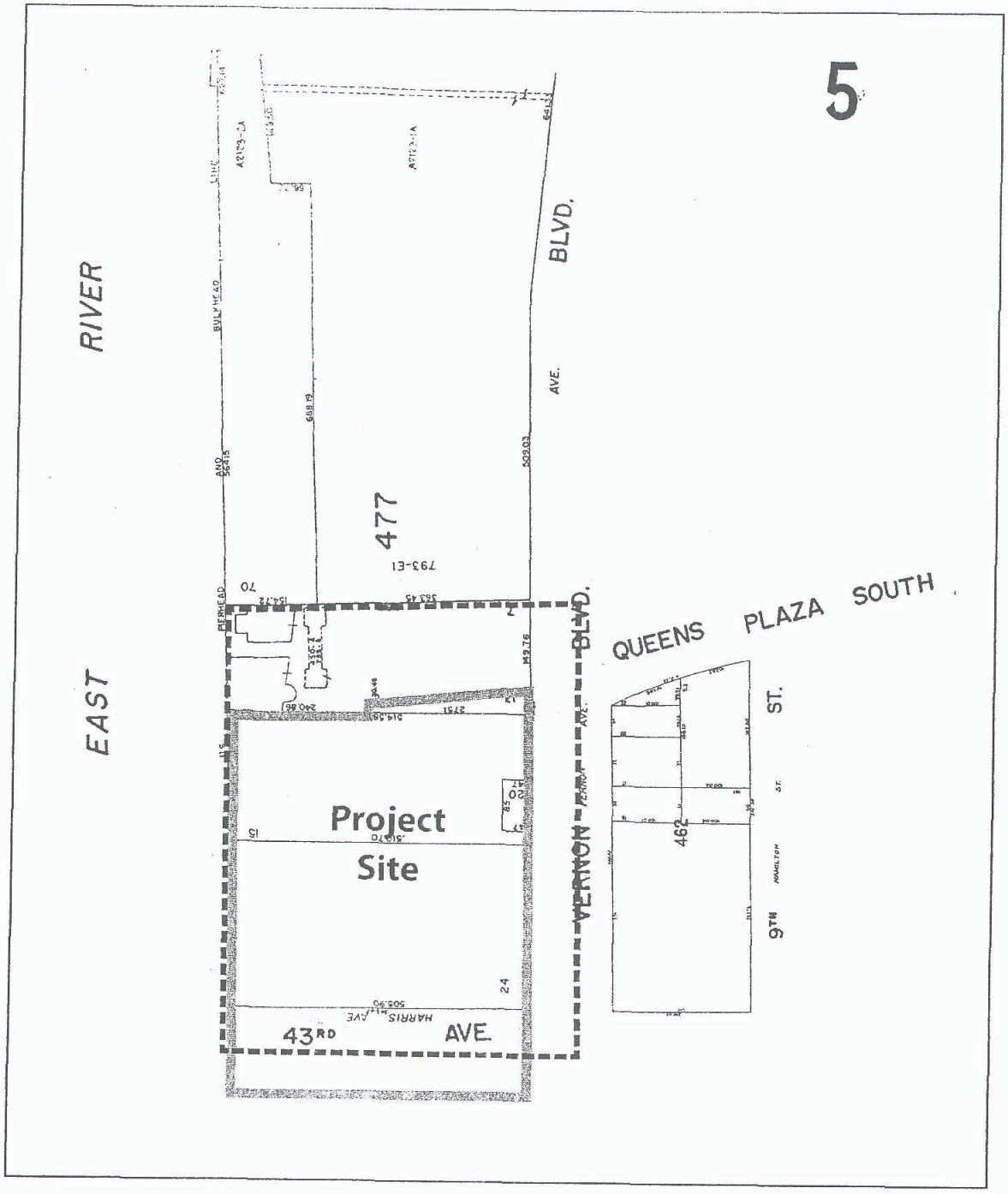
C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5

Project Site

Proposed Zoning District Boundary

Special Long Island City Mixed Use District

FIGURE 6: PROPOSED ZONING



Project Site

Proposed Zoning District Boundary

FIGURE 7:
TAX MAP

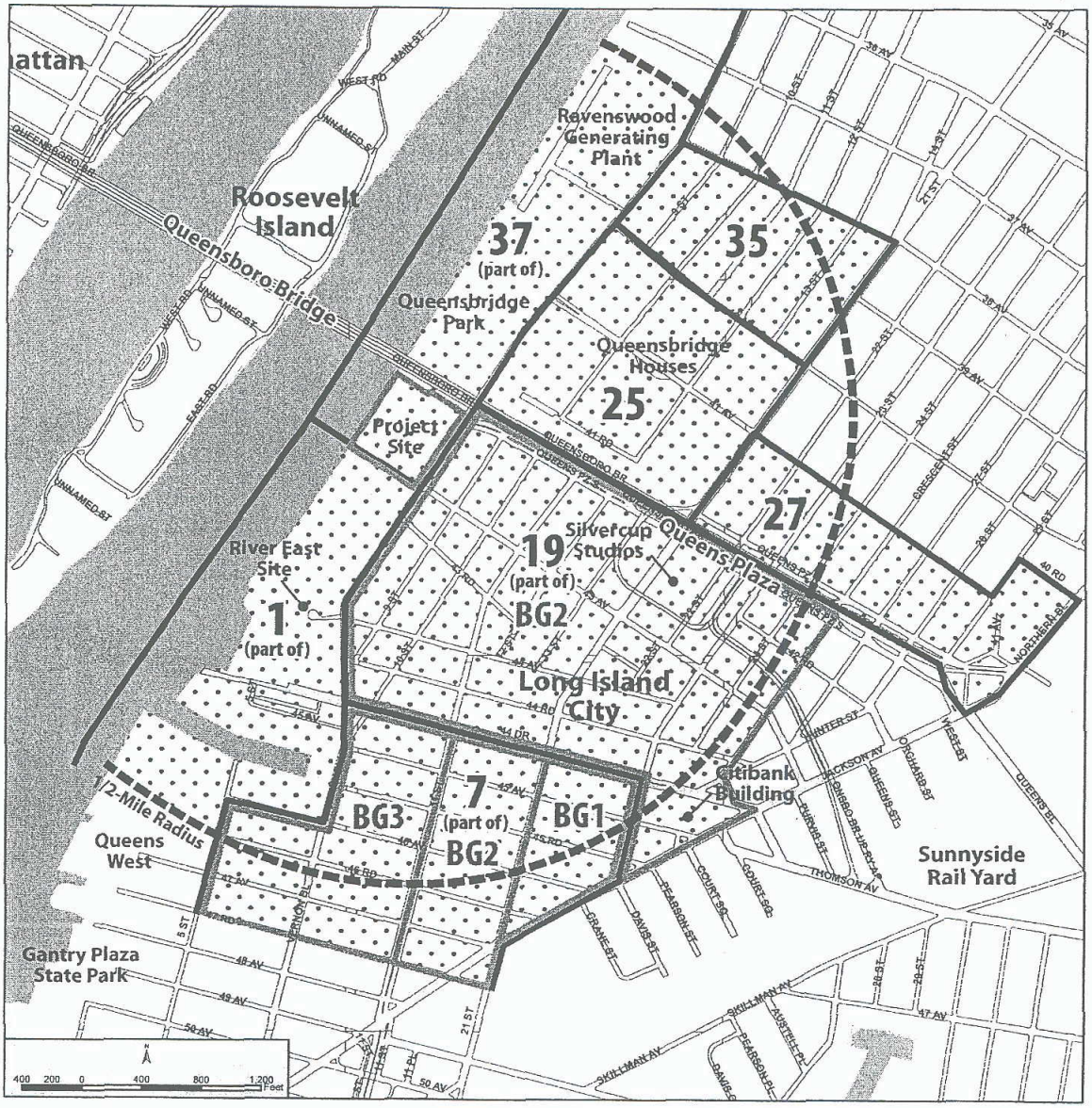


FIGURE 8:
SOCIOECONOMIC STUDY AREA

- **Economic Characteristics:**
  - Describe existing economic activity in the immediate area by undertaking a business inventory in the four blocks immediately inland from the Project Site, including the number and types of businesses and employment. Describe the physical characteristics of existing manufacturing buildings, including the general size of the structures and condition.
  - Describe existing economic activity in the larger Zip Code area that includes the Project Site, including the number and types of businesses, employment, and payroll by key sectors, compared with New York City as a whole.
  - Determine the approximate vacancy rate and rent levels and sales prices for buildings in the study areas, based on discussions with real estate brokers, local interest groups, media sources, and previous studies and reports.
  - Describe trends in manufacturing use in the future without the project and City policy regarding land use in Long Island City over the past two decades.
  - Describe development trends and economic activity in the study area with and without the Proposed Action.
  - Assess the impact of indirect displacement, if any.
- **Housing Characteristics:**
  - Assessment of the potential effects of indirect residential displacement, pursuant to methodologies presented in the *CEQR Technical Manual*. Using Census data and other information such as reports on housing value and median rents, describe the 2000 housing characteristics of the study area.
  - Assemble and discuss information on housing market conditions, including identification of presence of any unique or predominant population groups or present of populations particularly vulnerable to economic changes, using Census data and other sources.
  - Estimate housing changes associated with the proposed action and assess impact on housing, if any.

Task 4: Community Facilities and Services

Community facilities are defined as schools, hospitals, libraries, day care centers, and fire and police protection services. Since the Proposed Action would result in a net increase of more than 100 residential units, an assessment of community facilities is required. Based upon the thresholds provided in Table 3C-1 of the *CEQR Technical Manual*, preliminary analyses for the following community facilities and services are required:

- Public Schools (More than 50 elementary/middle school students are anticipated);
- Libraries (More than 621 housing units proposed); and
- Fire protection and police protection. (Note: An analysis of potential impacts would only be undertaken if there are anticipated direct impacts on fire and police facilities.)

The EIS would inventory the above community facilities and services within the study area, indicating the level to which the project may increase demand and the ability of these services to meet the additional demand relative to future conditions without the Proposed Action. The analysis would include the following:

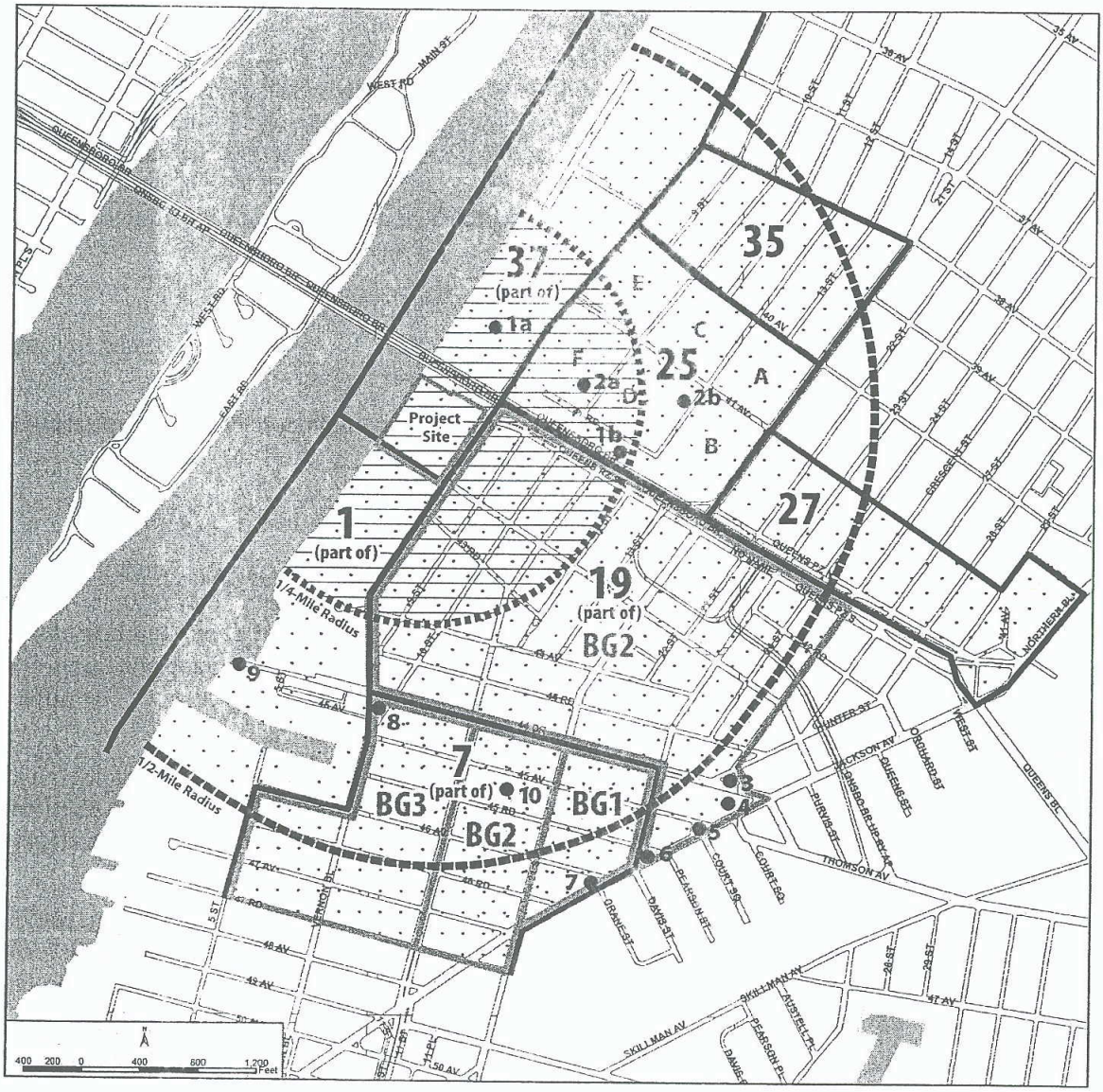
- An inventory and evaluation of community facilities and services serving the Project Site and a description of any planned changes in facilities and services by 2009; and
- Changes to demand which would result from the Proposed Action, relative to future conditions without the Proposed Action.

The evaluation would follow the methodologies outlined in the *CEQR Technical Manual*; pursuant to those methodologies, the size of the study areas for each type of community facility would differ. Correspondence confirming coordination with applicable service providers would also be included in the EIS. Since the proposed action would not displace or alter any community facility, the analysis would focus on the indirect potential impact of increased demand on each facility and service.

Task 5: Open Space

The Proposed Action would enable construction of approximately 2.77 million gsf of mixed-use development that would include publicly accessible open space and a new waterfront esplanade available to residents, employees, visitors, and the community. The new residential and worker populations may increase demand on existing open space resources, such as Queensbridge Park. To evaluate potential effects on open space relative to future conditions without the Proposed Action, the EIS would include the following detailed analysis:

- The *CEQR Technical Manual* recommends that two study areas are appropriate for the assessment of potential indirect impacts from a mixed-use development: a study area for residential population (residential study area) encompassing parks and other open space resources within approximately ½ mile of the Project Site, and a smaller study area (employment study area) for worker population within ¼ mile of the Project Site. The Open Space Study Area is consistent with the Socioeconomic Study Area.
- Using 2000 Census data, calculate the total residential population within the residential study area (Figure 9). Population data would be presented by age category, as indicated in Table 3D-1 of the *CEQR Technical Manual*. Using data provided by NYMTC, calculate future (2009) total residential population within in the residential study area.
- Using data provided by the NYCDCP, calculate the total worker population within the employment open space study area.
- Inventory existing open space and recreational facilities within the residential and employment study area. The condition and usage (e.g., active or passive) of existing facilities would be described based on the inventory within each of these two geographic parameters. Acreage of these facilities would be determined and total acreage calculated.
- Based on the inventory of facilities and residential population and employment in the study area, calculate the open space ratio for the residential population and worker population within the respective study areas and compare to city guidelines to assess adequacy. This is expressed as the amount of open space acreage per 1,000 user population.
- Assess expected changes in future levels of open space supply and demand in the 2009 Build Year. Open space ratios would be developed for future conditions without the Proposed Action and compared with existing ratios to determine changes in future levels of adequacy.
- Based on the facilities, and residential and worker populations added by the Proposed Action, assess its potential for any significant adverse environmental impacts on open space supply and demand. The assessment of project impacts would be based on a comparison of open space ratios with the project and open space ratios in the future without the project.



- Residential Study Area
- Employment Study Area
- 1 Open Space Resources
- Census Tract Boundary
- 25 Census Tract
- Block Group Boundary
- BG1 Block Group

1a *Queensbridge Park and Ballfields (including Vernon Playground)* and **1b** *Queensbridge Baby Park (part of Queensbridge Park)*
2a *Queensbridge Houses (D and F)* and **2b** *Queensbridge Houses (A, B, C, and E)*
3 *Rafferty Triangle*
4 *Citicorp Plaza (publicly accessible private space)*
5 *McKenna Triangle*
6 *Albert Short Triangle*
7 *Greenstreet*
8 *Gordan Triangle*
9 *44th Drive Public Pier*
10 *Murray Playground*

FIGURE 9:
OPEN SPACE RESOURCES WITHIN RESIDENTIAL AND EMPLOYMENT STUDY AREAS

Task 6: Shadows

The potential effects of the project on surrounding shadow-sensitive land uses—such as the Queensbridge Park—would be evaluated using shadow studies. These would be developed for four days of the year (May 6 June 21, September 21, and December 21). The assessment of Shadows would entail:

- An inventory of open space, natural, or sunlight-dependent historic resources within the study area;
- Definition of the extent and duration of existing shadows on the above resources;
- Definition of the extent and duration of incremental shadows which would be cast by the proposed Silvercup West Development on any of the above resources;
- Determination whether significant adverse shadow impacts would occur due to the substantial reduction of sunlight on sensitive uses to unacceptable levels.

Task 7: Historic Resources

Architectural and historic resources within ½-mile of the Project Site (Figure 10) include:

- The New York Architectural Terra Cotta Company Building, located at 42-10 to 42-16 Vernon Boulevard, is a designated New York City landmark located on a small portion of the Project Site. It was built in 1892 and was the office for the firm that produced much of the terra cotta ornament popular in New York architecture at the turn of the century. The office building has been vacant for many years and is boarded up.
- The Queensboro Bridge, built in 1909, is an ornate cantilevered bridge spanning the East River between 59th Street in Manhattan and Queens Plaza in Long Island City. A prime catalyst for the development of Queens in the early 20th century, it is a New York City landmark located adjacent to the Project Site.
- The Hunters Point Historic District, designated by the New York City Landmarks Preservation Commission and listed on the National Register of Historic Places, consists of two blockfronts on 45th Avenue between 21st and 23rd Streets and five houses on 23rd Street. The houses on this tree-lined street retain most of their original detail and character.
- Chapel of the Good Shepherd (now Good Shepherd Community Ecumenical Center) is located on Roosevelt Island and like many of the other 19th century structures on the island, was built to serve the inmates and patients of nearby city institutions. It is a designated New York City Landmark and also listed on the State and National Registers. Its late Victorian Gothic design combines traditional English parish church elements with the needs of its unique parishioners.
- James Blackwell House, another New York City Landmark also listed on the National Register, is the oldest building on Roosevelt Island. It was built by descendants of the island's first European settlers, between 1796 and 1804.
- Strecker Laboratory on Roosevelt Island, originally built in 1892 with a third floor added in 1905, is also a New York City Landmark and listed on the National Register. This small Romanesque Revival masonry building originally housed a pathology laboratory serving the Charity Hospital, but all that remains today is a seriously deteriorated ruin.
- Smallpox Hospital, originally built in 1896, designed by James Renwick, Jr., is now a Gothic Revival ruin at the southern tip of Roosevelt Island. It was expanded over the years and stabilized in the 1970s.

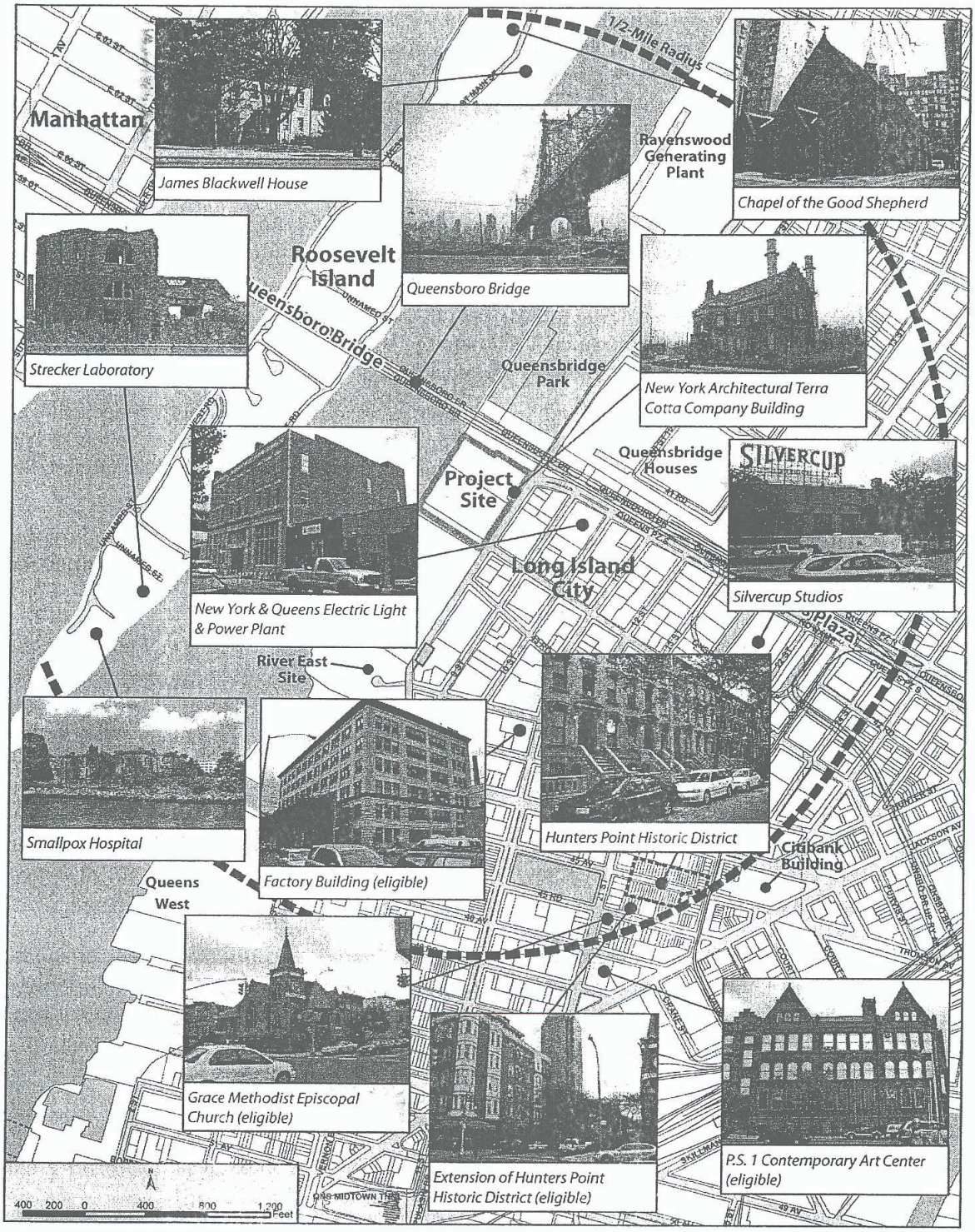


FIGURE 10:
DESIGNATED HISTORIC (ARCHITECTURAL) RESOURCES

- P.S. 1 Contemporary Art Center is located at the southeastern edge of the Study Area at 46-01 21st Street (between 46th Road and 46th Avenue). Built between 1890 and 1900, this Romanesque Revival school building houses art collections and holds shows in affiliation with the Museum of Modern Art. The building once supported a clock tower, which has been removed. The NYCLPC has determined that this building has been determined eligible for New York City Landmark designation as well as eligible for listing on in the State and National Registers.
- Potential Hunter's Point Historic District Extension. This area, which is considered eligible by NYCLPC for New York City Landmark designation and eligible for listing on in the State and National Register, consists of four brownstone rowhouses built circa 1890, located at 21-33, 21-35, 21-37, and 21-49 45th Road. These Romanesque and classical houses are local examples of late 19th century residential buildings, located about one-half mile southeast of the Project Site, near the Hunters Point Historic District.
- Grace Methodist Episcopal Church is located approximately ½ mile from the Project Site, at 45-27 to- 33 21st Street. It was built in 1900 in a late Victorian style and the NYCLPC has determined that it is eligible for New York City Landmark designation as well as eligible for listing on in the State and National Registers.

  Silvercup Studios and garage, located at 42-01 21st Street and 42-42 22nd Street, has also been identified by NYCLPC as eligible for New York City Landmark designation as well as for listing in the State and National Registers.

As a result of their "Long Island City Survey of Historic Sites", the NYCLPC has also determined that the following three properties in the Study Area are eligible for the State and National Registers of Historic Places:

- The Sterling Gum Factory at 23-10 43rd Avenue
- Factory Building at 44-02 11th Street
- New York and Queens Power Plant at 42-24 9th Street

The study area includes other noteworthy buildings or structures that would be documented (as applicable) in the EIS, including Pepsi Cola Bottling Company sign (recently moved), Silvercup Studios sign, P.S. 1 Contemporary Arts Center, and brownstone rowhouses along 45th Road.

The EIS would consider potential impacts to both archaeological and architectural resources, through Stage IA (and if necessary, Stage IB) studies, and coordination with the New York State Historic Preservation Officer (SHPO) and New York City Landmarks Preservation Commission. Particular attention would be given to the methods of construction, and the means of protecting existing historic structures such as the Terra Cotta Company building.

Task 8: Urban Design and Visual Resources

Based on the study area for the Land Use assessment (Figure 4), the assessment of Urban Design and Visual Resources would entail:

- A description of the site and study area's urban design character and visual resources in terms of building height, bulk, designated view corridors, streetscape elements, street hierarchy, and natural features;
- An account of significant views within the primary study area (including pertinent views of Queensboro Bridge and East River) to determine any potential obstruction of the views by the proposed new development, as well as the potential new views provided by enhancement of the site and waterfront and the removal of existing salt/sand pile along 43rd Avenue;

- Photographs and architectural renderings to illustrate views and other visual aspects of the project; and
- Relative to the existing conditions and Future No-Action conditions, the Proposed Action would be evaluated for the potential to significantly alter the above urban design elements and visual resources in form and land use, and result in significant changes to the urban design character and visual resources of the study area.

Task 9: Neighborhood Character

An assessment will be completed of the impact of the Proposed Action on neighborhood character, which is defined in the *CEQR Technical Manual* as an amalgam of various elements studied elsewhere in the DEIS. These include land use, urban design features, visual and historic resources, socioeconomic conditions, and traffic and noise conditions. Using information developed in Tasks 2, 3, 7, 8, 16, and 18, an evaluation would be completed as to whether the Proposed Action would result in significant adverse impacts on neighborhood character. As discussed in the *CEQR Technical Manual*, a significant adverse impact on neighborhood character would occur if one of the defining features of neighborhood character would be significantly affected, or when there are moderate impacts on a number of defining features that cumulatively may result in a significant impact. Measures to mitigate an identified significant impact would be evaluated, as appropriate.

Task 10: Natural Resources

The EIS would characterize existing terrestrial ecology at the site based on field surveys; according to the United States Fish and Wildlife Service (USFWS) and the New York State Department of Environmental Conservation (NYSDEC) Natural Heritage Program, and field observations, there are no known special status species associated with the upland zones of the site.

Water resources include below-ground aquifers and the East River, which forms the western boundary of the site. No stormwater drains are located on-site and no ground water supply wells are known to be near the site. The EIS would include analysis of potential impacts of new stormwater discharge(s) and physical improvements required to reestablish the bulkhead.

An assessment would be completed of the potential for impacts on water quality as a consequence of changes in the number of combined sewer overflow (CSO) events that would occur with the Proposed Action (Task 13: Infrastructure).

The Proposed Action envisions restoration of the historical bulkhead along the western edge of the site. If such restoration is not fully permitted, the Applicant would undertake to secure the permits for that restoration. To address this contingency, the EIS would include an assessment of the effect of re-establishment of the bulkhead.

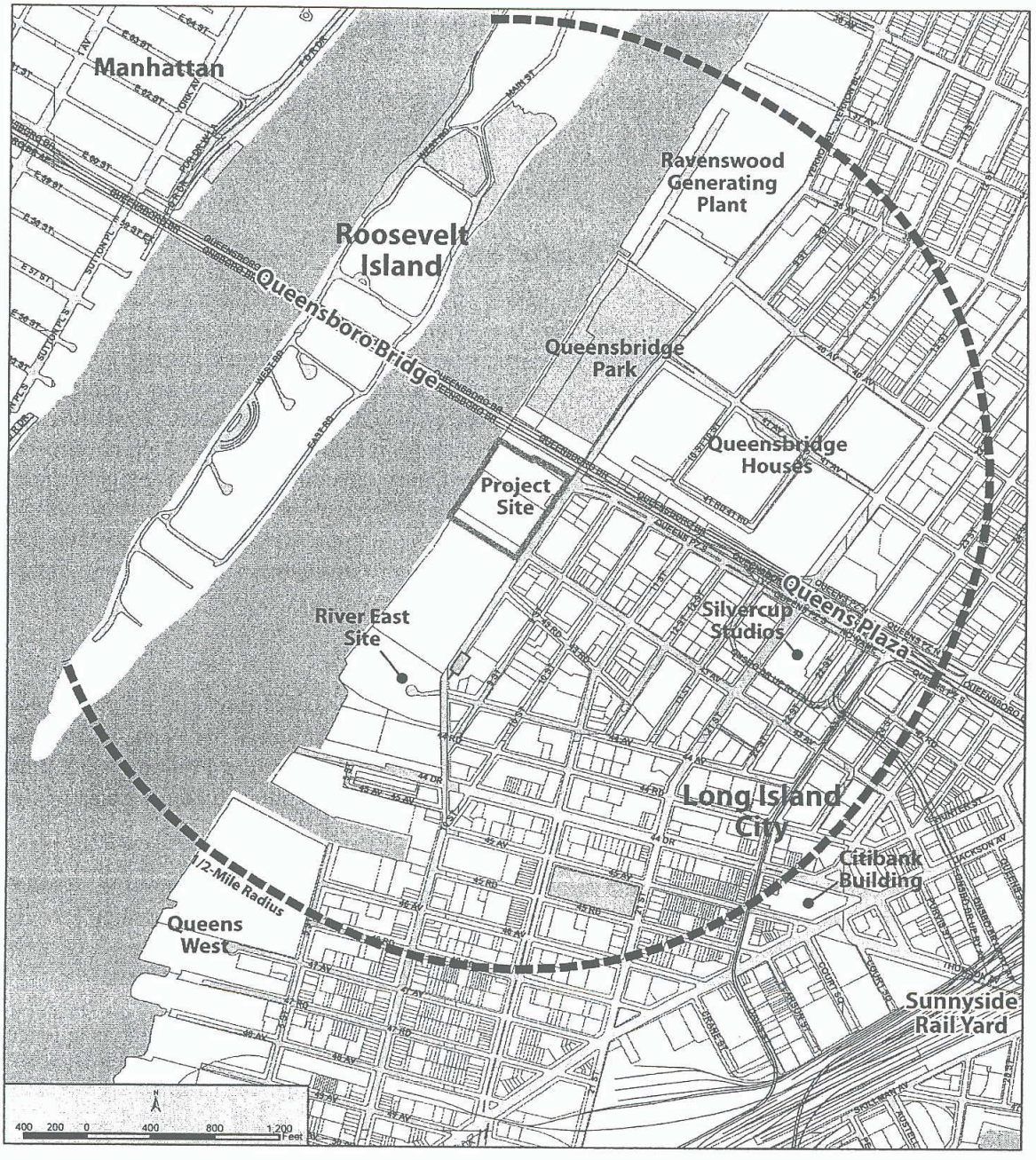


FIGURE 11:
NEIGHBORHOOD CHARACTER STUDY AREA

Task 11: Hazardous Materials

The EIS would assess the potential for the Proposed Action to result in short-term exposure to hazardous materials during construction and longer-term exposure after development on the Project Site is completed. The study area is limited to the Project Site; the EIS would describe the extent and nature of the contamination and the project management measures which would be implemented to avoid any potential significant impacts. Analysis of hazardous materials would be based upon Phase I and Phase II Environmental Site Assessments for the Project Site, and any remediation measures included in those reports. Note: The Applicant has submitted an application for the site to be included in the New York State Brownfield Cleanup Program.

Task 12: Coastal Zone Management/Waterfront Revitalization Program

As the Project Site is located within New York City's Coastal Zone, the Proposed Action would be reviewed for compliance with the City's Waterfront Revitalization Program (incorporating New York State's Coastal Management Program). Each of the waterfront program's policies would be considered, and where relevant, the Project's conformance with the policies would be addressed.

Since the Proposed Action would also require New York State and Federal permits, the EIS would include a review for consistency with the New York State Waterfront Revitalization of Coastal Areas and Inland Waterways Act (19 NYCRR Part 600.5) and the federal Coastal Zone Management Act (15CFR Part 930).

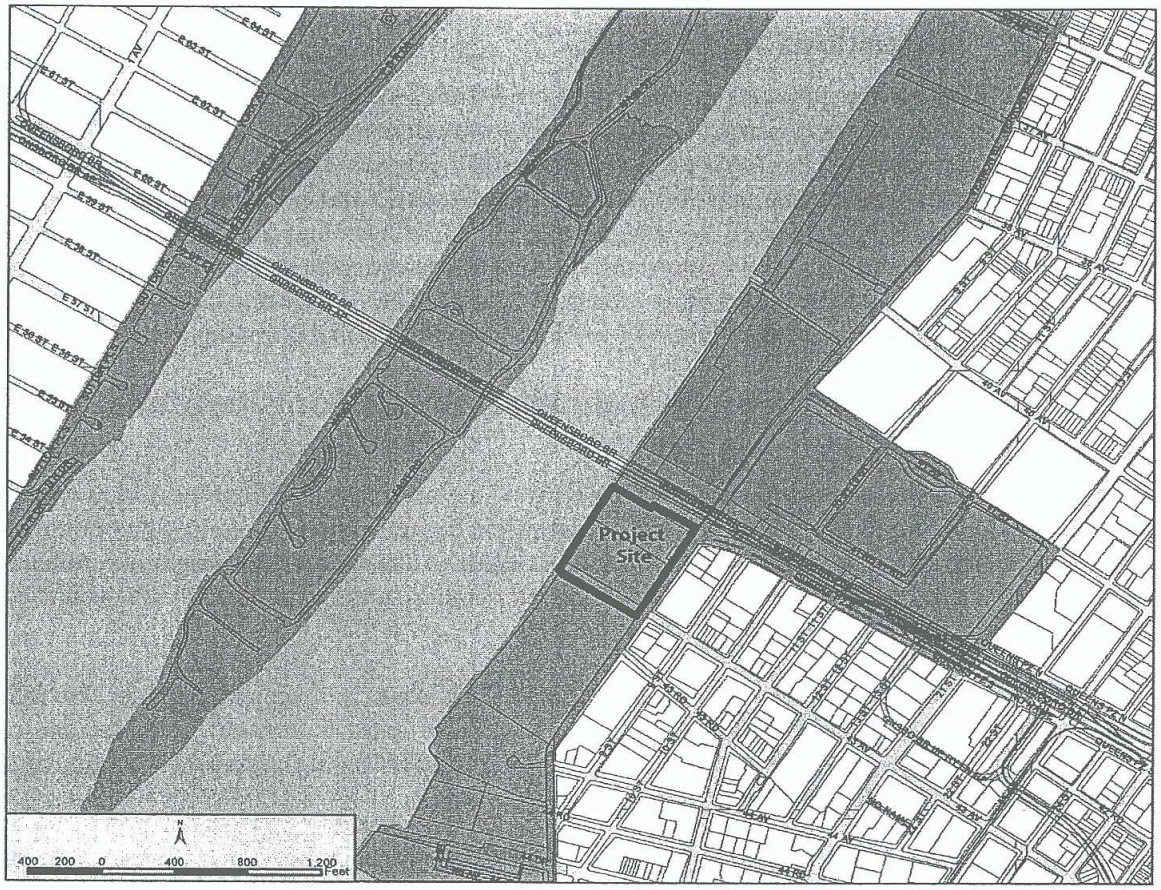
The Proposed Action envisions restoration of the historical bulkhead along the western edge of the site. If such restoration is not fully permitted, the Applicant would undertake to secure the permits for that restoration. To address this contingency, the EIS would include an assessment of coastal zone policies as they related to the re-establishment of the bulkhead.

Task 13: Infrastructure

The City's infrastructure is comprised of the physical systems that support its population, including water supply, wastewater collection and treatment, solid waste collection and management, energy supply, and transportation services. Solid waste and sanitation, energy, and transportation would be addressed in other sections of the DEIS. This section would focus on water supply, sewage treatment, and stormwater management. The Infrastructure section would include analyses of water supply, sewage and stormwater runoff, as described below.

a. Water Supply

- Estimate the existing water use in the Project Area and the capacity of the distribution system serving the area based on information obtained from the DEP.
- Water usage for the new development would be estimated using water usage rates provided in the *CEQR Technical Manual.*
- Assess the effects of the incremental demand of the Proposed Action on the water supply system to determine if there would be sufficient capacity to maintain adequate supply and pressure and identify mitigation strategies, where appropriate and feasible.



Source: New York City Department of City Planning

New York City Coastal Zone Boundary and
New York State Landward Coastal Boundary

FIGURE 12:
COASTAL ZONE

b. Sewage

- Describe the existing sewer system serving the Project Area, including existing flows to the Bowery Bay Water Pollution Control Plant for the latest 12-month period and present the average annual and maximum monthly flow.
- Based on water usage estimates calculated above, estimate sanitary sewage generation for the Future Without the Proposed Action and the Future With the Proposed Action.
- Assess the effects of the incremental demand of the Proposed Action on the sewer system to determine if there would be a significant adverse impact on operations of the relevant WPCP and identify mitigation strategies, where appropriate and feasible.
- Assess the potential impact on the combined sewer overflow (CSO) events.

c. Stormwater Runoff

- Describe the stormwater system in the Project Area, including an estimation of the amount of stormwater that currently enters the City's sewer system.
- Describe any planned future modifications to the existing system.
- Describe changes that would result because of the Proposed Action, including a discussion of how stormwater would be managed within the Project Area in the Future Without the Proposed Action and the Future With the Proposed Action.

Task 14: Solid Waste and Sanitation Services

The DSNY is responsible for the collection and disposal of municipal solid waste and recyclable materials generated by residences, some nonprofit institutions, tax-exempt properties, and City agencies. An assessment would be completed on the impact of the Proposed Action on municipal solid waste management services. The assessment would describe the existing and proposed solid waste management systems, and the amounts and composition of waste generated for each type of generator included in the Proposed Action.

The Proposed Action is not expected to directly displace or physically alter an existing solid waste facility (the displacement of the DSNY salt and sand storage pile is assessed in Task 22). However, the Proposed Action would generate increased demand for solid waste services. The *CEQR Technical Manual* guidelines would be used to estimate increases in the demand for municipal solid waste and sanitation services.

Task 15: Energy

The EIS would document the anticipated demand for energy consumption generated by the Proposed Action. A detailed energy analysis is not necessary, as project buildings constructed would be built in accordance with the New York State Energy Conservation Code, which is reflective of State and City energy policies.

Task 16: Traffic and Transportation

The Proposed Action would enable development on the Project Site that would encompass a variety of land uses: film and television production studios, office, retail, residential, health club, catering facility, and museum or other cultural uses – that collectively are expected to generate a significant volume of traffic. Therefore, the assessment of transportation impacts would be a major focus of the EIS, encompassing potential traffic, parking, transit, and pedestrian impacts in the study area.

a. Traffic and Parking

- The proposed primary traffic study area includes key intersections near the Project Site (generally bounded by 41st Avenue to the north, 23rd Street to the east, 44th Drive to the south, and the East River to the west), and along major routes leading to the site within a secondary traffic study area that would extend outward along Vernon Boulevard, Queens Plaza/Queens Boulevard, Northern Boulevard, Thomson Avenue, Jackson Avenue, and Borden Avenue (Figure 13):
  - **Primary Traffic Study Area (15 intersections):**
    - Vernon Boulevard at 41st Avenue, Queens Plaza South, 43rd Avenue, and 44th Drive
    - Queens Plaza South at 11th Street, 21st Street, 23rd Street, and at 27th Street
    - Queens Plaza North at 21st Street and at Crescent Street
    - 21st Street and 41st Avenue
    - 43rd Avenue at 11th Street and at 21st Street
    - 44th Drive at 11th Street and at 21st Street
  - **Secondary Traffic Study Area (12 intersections):**
    - Vernon Boulevard at Borden Avenue, at Jackson Avenue, and at 51st Avenue
    - Jackson Avenue at 11th Street, 44th Drive, 43rd Avenue/Purves Street, and Queens Boulevard
    - 11th Street at 49th Avenue
    - Northern Boulevard at Queens Plaza East/41st Avenue and at 31st Street
    - Queens Boulevard and Thomson Avenue/Van Dam Street
    - LIE Exit Ramp at Van Dam Street
- Conduct weekday AM, Midday, and PM peak hour traffic counts for the analysis locations identified above. These counts would be conducted via a combination of manual counts at intersections to determine through and turn movements and vehicle classifications. 24-hour Automatic Traffic Recorder (ATR) machine counts would also be conducted at four locations in the area in order to determine "average day" conditions, as per CEQR procedures. Saturday Midday peak hour counts would also be conducted at intersections identified in conjunction with DCP staff.
- Conduct travel speed and delay runs along arterials needed to provide information needed for the conduct of the air quality analyses.
- Determine existing traffic conditions, including intersection capacities, volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service using the 2000 Highway Capacity Manual (HCM) procedures. Determine existing signal timings based on field-verified conditions.
- Determine expected traffic growth including annual background traffic growth of 0.5 percent per year as per *CEQR Technical Manual* procedures, plus traffic generated by major proposed development projects within the traffic study area, as determined by DCP (Table 3). This would include the expected development in Queens West by 2009, as well as additional development that would be expected to occur in the area.
- Determine projected future No-Action traffic volumes and level of service conditions in the Build Year, including the background growth cited above.

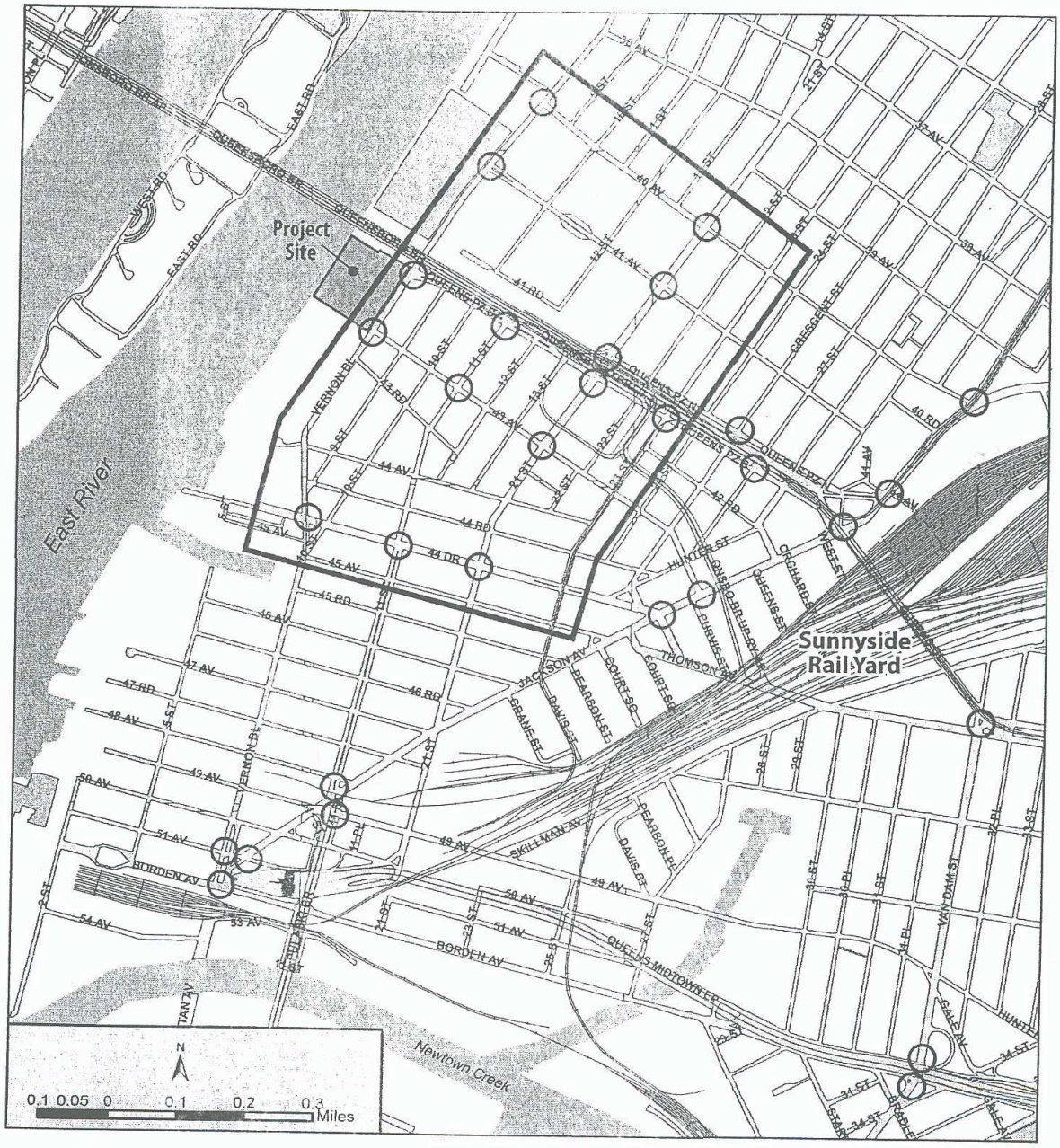


FIGURE 13:
TRAFFIC STUDY AREA

TABLE 3: NO-ACTION DEVELOPMENT PROJECTS, 2009 BUILD YEAR

Map No.	Development Project	Floor Area (sf)
	Commercial Development	**2,163,000**
1	Municipal Garage site office	700,000
2	Block 422 office	713,000 (includes 20,000 retail)
3	UN Federal Credit Union (Block 428)	250,000
4	Citibank office (Block 435)	500,000
	Residential Development	**4,138,000**
5	Eagle residential conversion (45-31 Court Square)	385,000
6	River East Development	900,000 (includes 12,500 retail)
7	Queens West Parcels 3-9	2,538,000
8	Miscellaneous residential development north of Queens Plaza	15,000
9	Queens West Parcels 17-20	300,000
	TOTAL	**6,301,000**

Sources: Based upon conversations with private developers, staff of Department of City Planning, Office of the Queens Borough President, Economic Development Corporation, and Queens West Development Corporation. This list does not include developments that have been completed since the approval of the Final Environmental Impact Statement for the Long Island City rezoning, such as Met Life at Queens Plaza or the approximately 1,000,000 s.f. of development already completed at Queens West on Parcels 10 and 11.

- Utilize trip generation estimates for each of the project's land use components using trip generation rates previously established under CEQR, modal split assumptions from EISs for this geographic area, or comparable sites or from U.S. Census journey-to-work data, and temporal distributions and average auto occupancies (Table 4). This would produce the volume of person trips and vehicle trips generated by the development program for the weekday morning (8:00–9:00 AM), Midday (1:00–2:00 PM) and evening (5:00–6:00 PM) peak periods and for the Saturday Midday (1:00–2:00 PM) peak period.

TABLE 4: TRIP GENERATION SUMMARY TABLE

	Projected Peak Hour Vehicle Trips							
	AM Peak Vehicle Trips		Midday Peak Vehicle Trips		PM Peak Vehicle Trips		Sat. Midday Peak Vehicle Trips	
	Inbound	*Outbound*	*Inbound*	*Outbound*	*Inbound*	*Outbound*	*Inbound*	*Outbound*
Office	181	31	38	42	17	143	7	7
Health Club	8	14	12	13	20	13	7	8
Residential	16	60	11	9	44	17	37	37
Studio	45	7	18	18	5	38	9	9
Catering Hall (1,000 Seats)	0	0	45	5	89	10	133	14
Local Retail	1	1	35	35	32	32	45	45
Museum	0	0	61	54	94	81	63	91
Subtotal	*252*	*113*	*220*	*176*	*301*	*334*	*301*	*211*
TOTAL	**365**		**396**		**635**		**511**	

- Assign vehicular trips to the street network and the intersections being analyzed. Trip origin/destination patterns would be based on information from other EISs or studies for other projects in the area. Determine projected Build traffic volumes and level of service conditions in the project's Build year. NYCDOT signal timing data will be used in this analysis, except where field inspection indicates otherwise. Intersections where volumes are projected to increase by more than 50 vehicles would be analyzed for future conditions. Significant traffic impacts would be identified as per *CEQR Technical Manual* criteria.
- Identify and evaluate traffic capacity improvements needed to mitigate significant impacts including, for example, signal phasing and timing changes, parking prohibitions, lane re-striping and geometric changes, and enforcement measures.
- Determine the location, capacity, and utilization of parking facilities situated within one-quarter mile and one-half mile of the Project Site, and changes anticipated under No-Action conditions. Determine hour-by-hour utilization of parking facilities proposed for the site. Should a parking shortfall be generated, it would be identified.
- The EIS will identify the on-street regulations for the parking study area, in accordance with the *CEQR Technical Manual.*
- Evaluate traffic conditions anticipated during the construction phase of the proposed project. This analysis would be qualitative; potential lane closures needed during construction would be identified.

b. Transit and Pedestrians

- Identify the subway lines, stations, and bus routes serving the site, their frequency of service, and overall utilization levels. For subway lines, this would include their peak hour line-haul volume-to-capacity ratios and daily and peak period ridership (turnstile registrations) at stations within up to a 10-15 minute walk of the site. For buses, this would include ridership levels at their peak load points or within the immediate study area (see Figure 14: Transit Study Area).
- Quantify the volume of person trips that would be generated by the project and use each of the transit services in the area – i.e., the volume of person trips that would use each of the subway lines and subway stations in the area, as well as each of the bus routes.
- Determine whether any of the above transit services would have the potential to be significantly impacted. It is anticipated that the number of transit trips generated would not exceed the CEQR threshold and quantitative analysis would not be needed.
- Observe pedestrian conditions at the most critical pedestrian locations near the Project Site and crosswalks leading to it (Vernon Boulevard at Queens Plaza South and at 43rd Avenue), conduct sample peak period counts, and conduct existing pedestrian level of service analyses for critical elements of these intersections closest to the Project Site. Quantitative analyses of pedestrian conditions would only be needed for locations where the potential exists for significant impacts.
- A determination will be made in accordance with the *CEQR Technical Manual* of whether a pedestrian safety analysis will be required. If it is determined that it is required, a pedestrian safety analysis will be included in accordance with the *CEQR Technical Manual.*

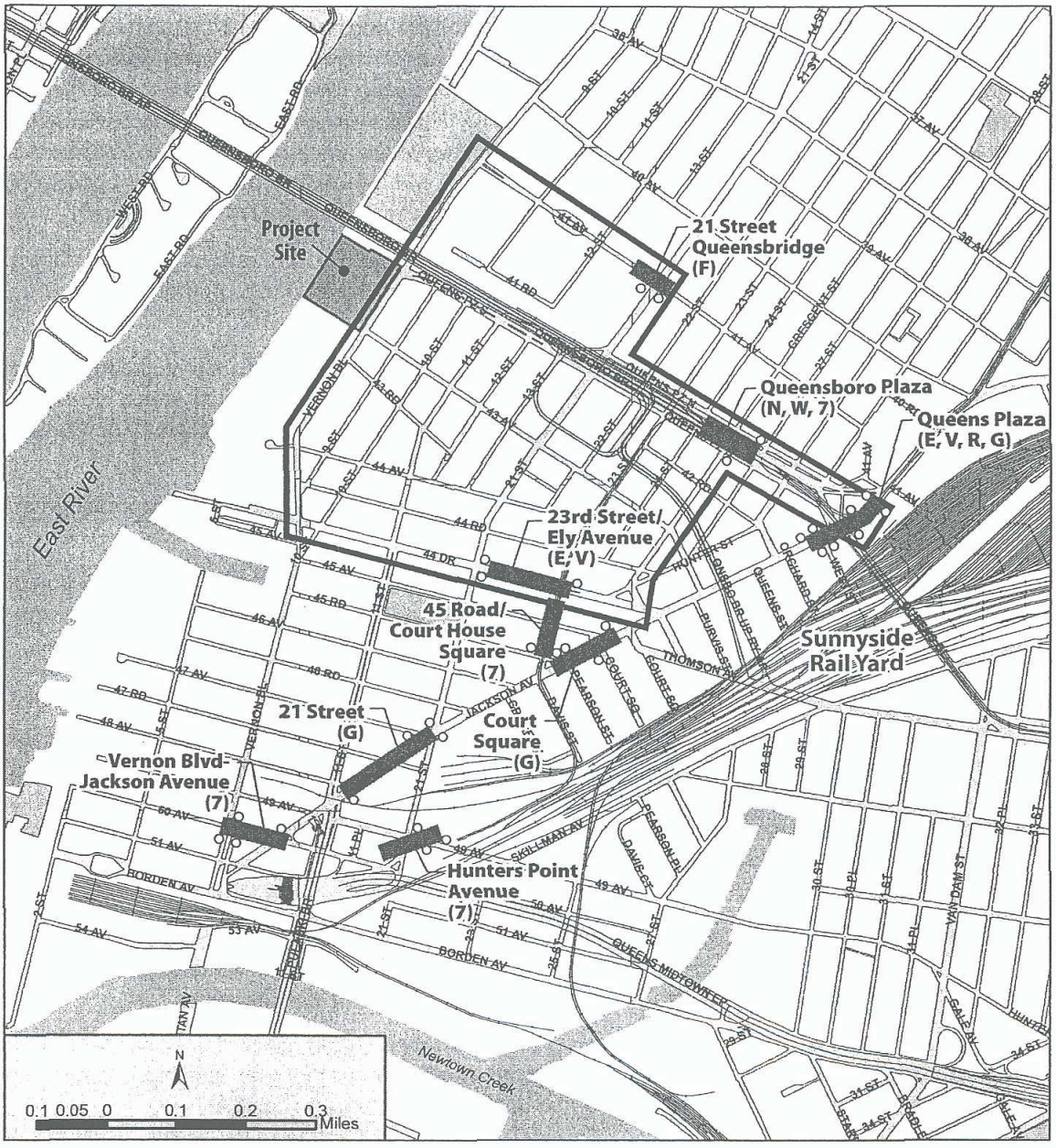


FIGURE 14:
EXISTING SUBWAY LINES AND STATIONS

Task 17: Air Quality

National Ambient Air Quality Standards (NAAQS) were promulgated by EPA for the protection of public health and welfare, allowing for an adequate margin of safety. The EPA has set NAAQS for the following criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), ozone, particulates (PM_{10} and $PM_{2.5}$), and lead.

The key issues that would be addressed in the air quality study regarding the potential impacts of the proposed project are:

- The potential for significant air quality impacts from increases in the number of project-generated vehicles on the local traffic network, and the accompanying reduction in vehicular speeds;
- The potential for significant air quality impacts on the proposed residential buildings from air toxic emissions of nearby existing manufacturing uses; and
- The potential for significant air quality impacts from emissions of the Ravenswood power generating plant on the proposed development.

Other air quality issues that would be considered include:

- The potential for emissions from the heating, ventilation and air conditioning (HVAC) systems of the proposed development buildings to significantly impact existing land uses and other proposed development buildings (project-on-project impacts);
- The potential for significant air quality impacts from the HVAC systems of existing commercial, institutional, manufacturing, or large scale residential buildings on the proposed residential development;
- The potential for significant air quality impacts from vehicular emissions associated with traffic on the Queensboro Bridge on the operable windows of the upper floors of the proposed development.; and
- The cumulative impacts from mobile and stationary source emissions.
- Potential impacts associated with proposed parking facilities.

a. Mobile Source Analysis

Based on trip generation estimates it is likely that a number of intersections within the study area would exceed the 50 vehicle threshold requiring a detailed microscale analysis. Of the intersections that would exceed this threshold, a detailed microscale mobile source analysis would be conducted at up to the six intersections with the greatest increase in vehicular volumes and or changes in traffic levels of service. The analysis process would be conducted as follows:

- The *CEQR Technical Manual* procedures to estimate potential impacts near congested locations would be used. This analysis would employ EPA's refined dispersion algorithm (CAL3QHC) and the latest EPA emission factor algorithm (currently MOBILE 6.2.03). Intersection geometries would be developed for each analysis site;
- Receptor site would be located at mid-sidewalk locations following *CEQR Technical Manual* guidelines;
- Inputs appropriate for the study area, as well as background levels, obtained from the New York State Department of Environmental Conservation (NYSDEC) and NYCDEP would be included;

- Appropriate credits to account for the State's inspection and maintenance and anti-tampering programs, the recently revised vehicles registration data, and other inputs would be applied;
- Peak hour conditions, in accordance with CEQR-recommended procedures for peak hour selection (i.e., total volumes and level of service) would be considered;
- The highest CO levels near each analysis site for existing conditions and the project's first year of operation would be estimated. No-Action and Action conditions would be considered for this future year. Maximum one- and eight-hour CO concentrations would be calculated for each condition; and
- The potential to significantly increase $PM_{2.5}$ concentrations at the intersection with the highest number of project-generated vehicular trips would be estimated.

A separate analysis would be conducted to determine whether the project's parking facilities have the potential to cause exceedances of the NAAQS at nearby sensitive land uses. Ground-level receptors for the cumulative analysis would be placed at sidewalk locations adjacent to proposed garage vents. If appropriate, based on the proposed garage vent location, additional receptor sites would be located near operable windows within the proposed development.

Estimated eight-hour CO levels would be compared with federal NAAQS, and project-generated impacts would be compared with the NYCDEP *de minimis* criteria levels. Estimated 24-hour and annual incremental $PM_{2.5}$ levels would be compared with NYCDEP's Significant Threshold Values (STVs). Mitigation measures for potential impacts would be incorporated, where necessary, to ensure conformance with the most recent New York City guidance. In addition, the potential for CO, PM_{10} and $PM_{2.5}$ emissions from traffic on the Queensboro Bridge to affect air quality levels on the proposed residential building would be evaluated.

b. Stationary Source Analysis

HVAC Analysis

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

- Potential impacts of HVAC emissions from existing industrial, manufacturing, commercial, processing facilities and large scale residential developments located within 400 feet of the proposed new residential sites (i.e., the air quality study area) would be estimated. Impacts would be initially analyzed using the *CEQR Technical Manual* nomographic (i.e., screening) procedures. If results exceed established threshold values, a detailed analysis would be conducted with the EPA's Industrial Source Complex (ISC3) or ISC PRIME dispersion model.
- Potential impacts of emissions from the heating (HVAC) systems of the proposed development buildings to significantly impact existing land uses and other proposed development buildings (project-on-project impacts) would be conducted. Impacts would be initially analyzed using the *CEQR Technical Manual* nomographic procedures. If results exceed established threshold values, a detailed analysis would be conducted with the EPA's Industrial Source Complex (ISC3) or ISC PRIME dispersion model.
- Potential impacts of emissions from major emission sources within 1000 feet of the Project Site on the proposed development, including the Ravenswood power generating plant, would be estimated. A detailed analysis would be conducted using EPA's Industrial Source Complex (ISC3) or ISC PRIME dispersion model
- NO_2, SO_2, PM_{10}, and $PM_{2.5}$ pollutants would be considered for all detailed analyses.

- Emission factors for the pollutants of concern for HVAC emissions would be obtained from EPA's AP-42 and based on building fuel types. Emission data for the Ravenswood power generating plant would be obtained from NYSDEC permits.
- Estimated short-term and annual pollutant concentrations would be added to appropriate background levels, and total pollutant concentrations would be compared with NAAQS to determine whether there would be the potential for a violation of these standards. Mitigation measures would be identified, where necessary, to ensure compliancy with the NAAQS.

Air Toxics Analysis

The analysis process would be conducted as follows:

- A circular analysis area with a radius of approximately 1,000 feet around the Project Site would be selected;
- Air permits for all facilities within this analysis area on NYSDEC, NYCDEP, and EPA Environfacts databases would be acquired and reviewed; and
- Dispersion analyses would be conducted to determine the potential of the toxic emissions released from the permitted emission sources to adversely affect the new residential areas, as follows:
  - The dispersion modeling analysis would initially be conducted using NYSDEC's Air Guide-1 model to determine whether the existing currently operating permitted facilities within the air toxics study area would have the potential to adversely affect the sensitive analysis sites. (In addition to containing a database, AG-1 includes software that would be used to determine whether facilities have the potential to exceed short-term or annual health-related guideline values (i.e., SGCs or AGCs)). AG-1 also includes unit risk factors for inhalation (IRIS and EPA Health Assessment summary tables) and health-related guideline values (GVs) for EPA's Hazard Index Approach.
  - A more refined analysis, using the ISCLT2 subroutine within the Air Guide-1 model, would be conducted to estimate potential impacts for facilities, if any, that fail the screening analysis.

Cumulative Analysis

An analysis of potential cumulative air quality impacts of the project would be undertaken as follows:

- The combined estimated impacts of the proposed project resulting from HVAC system emissions from the proposed development, mobile source impacts from both ground level and Queensboro Bridge traffic, stationary source impacts from the Ravenswood power plant, and emissions released from the proposed parking garage would be evaluated. Emissions from the garage would include contributions, if appropriate, from truck and automobile activities.
- Elevated receptors would be placed on the proposed development at heights approximating the both the Queensboro Bridge traffic and the Ravenswood exhaust plume.

Task 18: Noise

The proposed rezoning would enable construction of a mixed-use development with residential uses an area now zoned for manufacturing. The proposed MX district zoning regulations would require 35 dBA of windows/wall attenuation for new developments. Noise studies will be completed to determine if that level of attenuation would be sufficient or if portions of the proposed development would require additional noise attenuation. Since the Proposed Action would place sensitive receptors adjacent to a manufacturing district and adjacent to the

Queensboro Bridge, the EIS would analyze the effect of potentially high ambient noise levels on new residents.

In addition, the potential for project-induced traffic to affect sensitive land use would be evaluated. As part of the DEIS future vehicular traffic-induced noise levels in L10 (1) would be compared to the values contained in the Noise Exposure Guidelines for residential land uses (*CEQR Technical Manual* Table 3R-3).

To analyze these effects the following noise-related issues would be addressed:

- Changes in traffic noise levels as a result of the Proposed Action.
- Noise levels from stationary noise sources of at the proposed residential locations.
- Impacts from Bridge noise at potential elevated residential units in the north building.
- Achievement of acceptable interior noise levels in the proposed residential buildings.
- Short-term construction phase noise and vibration impacts.
- Mixed-use noise regulation.

The following tasks would be performed in compliance with guidelines contained in the *CEQR Technical Manual*:

- **Site Selection:** Based on the trip assignment in the traffic task, representative sensitive sites (residents, schools, houses of worship, parks, etc.) and land uses would be selected for evaluation based on exposure to projected travel routes. Also, the elevated portion of the residential building closest to the bridge deck would be analyzed.

- **Data Collection:** At the identified locations, existing noise exposure conditions would be determined by monitoring one-hour equivalent continuous noise levels (Leq) and statistical percentile noise levels. The noise levels would be measured in units of "A" weighted decibels (dBA). The monitoring periods would coincide with the peak traffic noise periods and quiet nighttime hours. Two types of receptor sites would be selected: 1) sites where the Proposed Action would have the potential for significant impacts due to project-generated traffic, and 2) sites that are used to determine building attenuation to comply with noise regulations. Data would be collected on the bridge, along streets serving the facility, and on the Project Site.

- **Build Year Noise Level Estimates:** Following procedures outlined in the *CEQR Technical Manual* for assessing stationary and mobile source noise impact, future No-Action and project noise levels would be estimated at the proposed sensitive land uses. Existing noise levels calibrated to the TNM based on acoustic fundamentals would be used to determine the future No-Action and project noise levels.

- **Noise Criteria:** CEQR air-borne noise criteria would be followed while determining project impacts at the future sensitive sites in the project area. The criteria would take into consideration the indoor and outdoor areas of the proposed project, and the ability to meet indoor criteria with the 35dB(A) window wall noise attenuation, required in this ambient noise quality zone.

- **Build Year Noise Impacts:** Noise impacts would be determined by comparing future project noise levels with No Action noise levels for the year 2009 following the CEQR methodology. Also, since the Proposed Action provides for the locating of sensitive receptors near a manufacturing district, future noise levels would be compared with CEQR noise exposure guidelines and Zoning Resolution performance standards. Both methodologies would be used in impact determination. Noise from nearby stationary sources would also be assessed.

- **Noise Abatement Analysis:** At locations where abatement may be required, appropriate mitigation measures would be considered following the CEQR guidelines, and recommendations for their implementation would be made. Window/wall attenuation requirements, if any, at future residential buildings would be identified.
- **Construction Impacts:** Construction phase noise impacts would be qualitatively assessed, and recommendations would be made to comply with NYCDEP guidelines contained in DNA Report #CON-79-001. Noise and ground-borne vibration impacts during construction would be addressed at vulnerable sites, and, if necessary, appropriate recommendations would be made for their control.

Task 19: Construction Impacts

Construction impacts, though usually temporary, can include disruptive and noticeable effects of the proposed project. The determination of their significance—and, therefore, whether mitigation is required—is generally based on the duration and magnitude of the impact. Construction of the proposed mixed-use development would generally be contained within the Project Site, thereby minimizing potential impacts. The EIS would describe construction measures to be employed to protect the landmark Terra Cotta Company building and Queensboro Bridge.

Due to the anticipated three year construction period of the Proposed Action, the construction impact assessment for the project would generally be qualitative, focusing on areas where construction activities may pose specific environmental problems. These areas may include traffic conditions, displaced parking, archaeological resources, integrity of historic resources, community noise, air quality ($PM_{2.5}$ concentrations), and hazardous materials. Potential mitigation measures regarding construction impacts would be recommended, as needed.

Task 20: Mitigation

Where significant adverse project impacts have been identified, available measures that would mitigate these impacts, either partially or fully, would be identified. Mitigation measures would be designed to minimize or avoid to the fullest extent practicable, given costs and other factors, any significant adverse project impact. Where impacts cannot be mitigated, they would be described as unavoidable adverse impacts.

Task 21: Alternatives

The purpose of an alternatives analysis is to examine reasonable and practicable options that avoid or reduce project-related significant adverse impacts and achieve the stated goals and objectives of the proposed action. The specific alternatives to be analyzed include a Reduced Density Alternative and a No Action Alternative. In addition, the potential to reconfigure project bulk will be considered. An assessment will be completed of the impacts of each alternative compared to those of the Preferred Development Program and each of the three variations.

The analysis would be primarily qualitative, except where specific significant adverse project impacts have been identified (e.g., traffic intersections with significant impacts). However, the qualitative analysis would be of sufficient detail to allow comparisons of associated environmental impacts and attainment of project goals and objectives.

Task 22: Public Health

CEQR guidance requires that Public Health be addressed when an aspect of the proposed project may relate to an urban public health issue. Indicators of such concerns include the establishment

of a sensitive (residential) land use in a manufacturing zone where exposure to hazardous contaminants may occur. Accordingly, this chapter will summarize the findings of hazardous materials and air toxics evaluations and other analyses, as they may be related to public health.

Task 23: Relocation of the Salt Storage Facility from 43rd Avenue

An assessment will be completed of the proposed removal and relocation of the DSNY open storage of de-icing salt and sand located on 43rd Avenue on the southern edge of the Project Site. Since a site to which the salt pile would be relocated has not been identified, the assessment will be completed for a prototypical site based on the size and operational characteristics of the existing salt site. Necessary facility siting and design requirements will be obtained through coordination with DSNY. It is assumed that the new site generally would need to meet the following criteria:

- It would need to be approximately 1 acre in size to ensure that all activities, including truck queuing would occur on-site;
- It would be located within the same service area as the existing facility, being north of Newtown Creek and west of the Brooklyn-Queens Expressway (BQE);
- Appropriate zoning would be necessary to allow the use, such as a manufacturing district or certain commercial district;
- Surrounding land uses would be compatible, and the new site would be located an appropriate distance from sensitive uses such as residences, schools, or other institutional uses to ensure that they would not experience potential adverse effects associated with the operation of the facility;
- Proximity to truck routes and access to highways (e.g., BQE on-ramps), and bridges—which are priorities for salting—would also be considered.

Included will be an assessment of the potential effects on water quality, traffic, noise, air quality, visual quality, and construction based on guidance in the *CEQR Technical Manual*.

Task 24: Other EIS Summary Chapters

a. Unavoidable Adverse Impacts

If the implementation of the project would result in significant adverse impacts, regardless of the mitigation employed or where mitigation is impossible, such impacts would be summarized.

b. Growth-Inducing Aspects of the Proposed Action

The potential for the Proposed Action to induce growth would be assessed and summarized per the guidance of the *CEQR Technical Manual*.

c. Irreversible and Irretrievable Commitments of Resources

The extent to which the Proposed Action would foreclose future options to utilize resources or the extent to which it would involve trade-offs between short-term environmental gains and long-term losses would be addressed, would be addressed per the guidance of CEQR, as would potential short-term losses be compared to long-term benefits.