#### EXECUTIVE SUMMARY

## A. INTRODUCTION

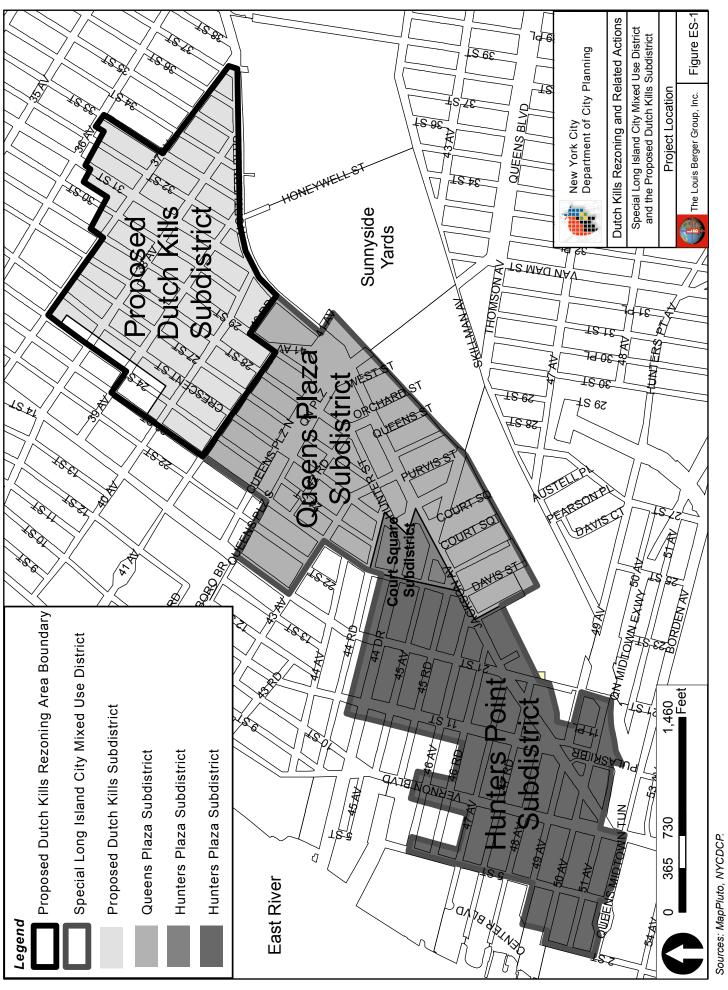
The New York City Department of City Planning (DCP) is proposing zoning map and text amendments for an area encompassing approximately 40 blocks in the Dutch Kills neighborhood of Community District 1, Queens. The area would generally be rezoned from current M1-3D and M1-1 to mixed-use districts where a Residence District would be paired with a light Manufacturing District, or for a small portion of the western side of the rezoning area, to M1-2. The area proposed for the mixed-use districts would also fall within a proposed extension of the Special Long Island City Mixed-Use District (see Figure ES-1). The proposed zoning text amendments would facilitate the creation of the Dutch Kills Subdistrict within the Special Long Island City Mixed-Use District, establish an Inclusionary Housing program in the proposed M1-3/R7X district near Northern Boulevard, and modify certain provisions of the proposed underlying districts. Together these amendments (map amendments and text amendments) comprise the "Dutch Kills Rezoning and Related Actions" or what will be referred to in this EIS as the "proposed actions." The "proposed project" is defined here as the anticipated 10-year build out that would result from the proposed actions. The general goals of the proposed actions are to protect the unique character of Dutch Kills by preventing out-of-scale developments and to encourage moderate- and higher-density development near public transportation and wide streets by removing restrictions on residential development. Moreover, the proposal would support continued economic growth in the mixeduse residential, commercial, and light industrial community by retaining the light manufacturing district in both the mixed use and predominately light industrial areas of Dutch Kills.

The rezoning area is comprised of 70 acres and is generally bound by 36<sup>th</sup> Avenue to the north, the west side of Northern Boulevard to the east, 41<sup>st</sup> Avenue to the south, and 23<sup>rd</sup> Street to the west. The rezoning area is located north and west of the Sunnyside Yard and north of the Queens Plaza Subdistrict and the Special Long Island City Mixed-Use District. The rezoning area is highly accessible by mass transit and is serviced by eight subway lines and five bus lines.

Under the proposed actions, the Dutch Kills neighborhood would be rezoned to allow as-of-right residential development as well as a general increase in the permitted residential density. Allowable densities for commercial and light industrial uses would be changed to more closely correspond to proposed residential densities, generally resulting in decreased densities for such uses, except near Northern Boulevard where higher density residential is proposed. The proposed zoning changes would work in conjunction with the proposed Dutch Kills Subdistrict provisions which are intended to encourage appropriate new development and economic growth opportunities in the subdistrict as well as accomplish the following land use policies:

- provide residential and mixed-use development in the Dutch Kills Subdistrict at appropriate scales with the contexts:
- direct new development at higher densities to wide streets with good access to transit;
- provide incentives for affordable housing in areas proposed for higher density mixed-use development;
- support existing light-industrial businesses; and,
- reinforce the mixed-use residential and light-industrial/commercial context by bringing existing nonconforming residential uses into compliance.

In order to assess the environmental impacts of the development that could occur under the proposed actions, DCP has developed a reasonable worst-case development scenario (RWCDS). This RWCDS



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This figure has been modified for the FEIS to include the correct Proposed Dutch Kills Rezoning Area Boundary.

identifies both "projected" and "potential" development sites that could be developed as the proposed project with the proposed actions implemented. As identified by DCP, projected development sites include sites that are likely to be developed as a result of the proposed actions. DCP has identified 40 projected development sites considered most likely to be developed by 2017 as a result of the proposed actions. In addition, there are 192 potential development sites considered to have less development potential and which are less likely to be developed in the foreseeable future.

Based on the RWCDS, and as a result of the proposed actions, development in the rezoning area is expected to achieve a build-out that would include 1,555 additional dwelling units than in the future condition without the proposed actions, of which approximately 187 would be affordable units provided through proposed the Inclusionary Housing program, and 410 additional accessory parking spaces. The RWCDS envisioned under the proposed actions would also result in a decrease of 197,470 square feet (sf) of commercial space; a net decrease of 180,536 sf of industrial space; and a net decrease of 41,697 sf of community facility space from the anticipated future condition without the proposed actions.

The above-described actions are subject to both City Environmental Quality Review (CEQR) and the Uniform Land Use Review Procedures (ULURP). This EIS has been prepared pursuant to SEQRA, Article 8 of the Environmental Conservation Law, and its implementing regulations (6 NYCRR Part 617) and CEQR requirements as established in Executive Order No. 90, 1977, and as set forth in its implementing Rules and Procedures, Title 62, Chapter 5, of the Rules of the City of New York.

# **B. PROJECT DESCRIPTION**

## **BACKGROUND**

Dutch Kills was so named because of the small stream (or "kill," in the original Dutch) that traversed it. This kill served as the initial attraction for development and played a major role in shaping conditions in the area. The first settlement of Dutch Kills took place in 1643 when a Dutch settler secured a grant of approximately 100 acres on the east bank of the waterway, followed shortly thereafter by another settler who was granted land on the west bank. Soon, a settler secured land near what would later be called Bridge Plaza and used the headwaters of Dutch Kills to operate a gristmill, which would run for more than a century into the mid-1800s.

The crucial period in determining the modern identity of Dutch Kills began in 1870, when it consolidated with Ravenswood and Hunter's Point to form a new city called "Long Island City." The consolidation of New York City in 1898 further changed the environment of Long Island City. Recognizing the benefits of their proximity to the central markets of Manhattan, it was in this period that Long Island City and its subsidiary of Dutch Kills shifted to an industrial economy. Several manufacturers moved their plants to Long Island City immediately after this consolidation. This location allowed them to reap the benefits of the major marketplaces just a short boat trip away, along Newtown Creek and the Dutch Kills waterways.

After construction of the Queensboro Bridge in 1909, the Queens Plaza area (directly to the south of the rezoning area) developed into a major transportation hub. The rise of truck transport facilitated by the bridge connection to Manhattan, along with new rail lines, resulted in the dominance of the industrial sector. By 1900, several large food manufacturers, such as Silvercup Bakeries, and other industrial

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<sup>&</sup>lt;sup>1</sup> In the DEIS, an error was made in calculating the projected dwelling units (DUs) under the Future Condition with the Proposed Actions that was carried through to the corresponding DUs increment. The density-based technical analyses in the FEIS have not been adjusted, as the 1,555 DUs increment represents a more conservative value for the analyses than the correct increment of 1,547 DUs.

companies took advantage of the open space and low land values unattainable in Manhattan or Brooklyn. Banks and commercial corporations built large buildings in Long Island City in the 1920s to support the commerce engendered by manufacturing. World War I and World War II brought economic prosperity to the area, as industrial facilities were integral to the war efforts and the postwar consumer booms.

In 1961, despite the presence of a substantial local population, New York City designated Dutch Kills and the surrounding area as an M1-3 zoning district; a light manufacturing district allowing light manufacturing and other industrial uses, most commercial uses, and limited community facility uses. Residential uses became non-conforming uses under the M1-3 District, leading to difficulties in obtaining mortgages and home insurance, in addition to preventing new residential development. Dutch Kills residents sought to change the zoning to better reflect the mixed character of the neighborhood and consequently the existing M1-3D District was adopted in 1989. The M1-3D District allows residential developments and enlargements through discretionary review and makes existing residences conforming for zoning purposes.

Between 1990 and 2000, the population in Dutch Kills and the surrounding vicinity (an area significantly larger than the rezoning area) increased 29 percent from 5,371 to 6,908. The area's population growth rate was greater than that of Queens County, where the population increased by 14 percent, as well as the rate for New York City as a whole, which grew by nine percent during that decade. New residential construction did not match the growth in population; housing development increased by only 8 percent in the residential districts immediately adjoining Dutch Kills to the north.

During the same time period, the number of manufacturing jobs declined in Dutch Kills by nearly 300, mostly in the larger garment and apparel factories, but jobs increased by approximately 160 in the construction trades, electrical work, commercial printing and businesses services sector. At the end of 2002, Dutch Kills had a total of approximately 260 firms employing 3,600 workers.

# **EXISTING ZONING**

The Dutch Kills community has historically been a mixed-use community including residential, light industrial and commercial land uses. The 1961 zoning of this community created several M1-1, M1-3, and M1-5 zoning districts that encouraged the further development of industrial developments while prohibiting residential development. M1 zones are considered industrial buffer zones that are often used in areas where industrial uses are adjacent to residences and other sensitive uses. These zoning districts permit only light industrial and commercial uses as-of-right with varying degrees of density and use restrictions. Existing residential uses in these zones were "grandfathered" as legal nonconforming uses.

The existing M1-1 zoning, mapped in the northern portion of the study area, was established in 1961 as a buffer to the neighboring R5 residential district to the north and west. The M1-1 district permits industrial and commercial uses at a maximum floor area ratio (FAR) of 1.0 and selected community facility uses at an FAR of 2.4.

The existing M1-3D zoning mapped in the study area was established in 1989 in acknowledgment of the presence of residential development in the area. The DCP created the M1-3D district, as well as other M1-D districts in the area, in response to concerns from residents of Dutch Kills and other mixed-use neighborhoods in New York City. Such districts have subsequently been mapped in Sunset Park, Brooklyn and Ridgewood and Maspeth, Queens. The M1-3D district permits light manufacturing, commercial and retail uses as-of-right at a maximum FAR of 5.0. New residential uses are also permitted in M1-3D districts with a maximum FAR of 1.65. Residential uses in M1-3D districts are permitted only by City Planning Commission authorization. Residential enlargements are limited to 500 square feet per dwelling unit, with no net change in the number of dwelling units permitted on a zoning lot. Residential

expansions are limited to 500 square feet per dwelling unit, with no net change in the number of dwelling units permitted on a zoning lot.

# DESCRIPTION OF THE PROPOSED ACTIONS

# **ZONING MAP AMENDMENTS**

As described previously, the DCP is proposing zoning map amendments affecting all or portions of 40 blocks in Dutch Kills neighborhood of Queens Community District 1. The proposed zoning map amendments would create the Dutch Kills Subdistrict within the Special Long Island City Mixed-Use District and establish Inclusionary Housing provisions for an area along Northern Boulevard proposed for an M1-3/R7X District.

The rezoning area is generally bound by 36<sup>th</sup> Avenue on the north, Northern Boulevard on the east, 41<sup>st</sup> Avenue on the south, and 23<sup>rd</sup> Street on the west. The rezoning area is located adjacent to the Sunnyside Yards and just north of the Queens Plaza Subdistrict and the Special Long Island City Mixed-Use district.

Under the proposed actions, approximately 70 acres of land currently zoned M1-3D and M1-1 would be rezoned to a finely tuned combination of M1-2, M1-2/R5B, M1-2/R5D, M1-2/R6A and M1-3/R7X, resulting in a net decrease in permitted light manufacturing density and a net increase in residential density. The proposed zoning changes would generally allow as-of-right residential development, encourage compatible land uses at a fine-grained range of densities, provide new opportunities for mixed use development, and bring residential uses currently located in manufacturing zoned areas into conformance.

The proposed zoning map amendments would create new, as-of-right residential development opportunities. In an effort to foster housing opportunities for a diverse range of income groups, an Inclusionary Housing bonus is proposed for the M1-3/R7X District. The fine-grained range of allowable bulk provisions within the rezoning area (described below) seeks to fulfill contextual zoning objectives:

- change from M1-3D to M1-2/R5B all or a portion of 18 mid-blocks bounded by 37<sup>th</sup> Avenue, 38<sup>th</sup> Avenue, 24<sup>th</sup> Street and 30<sup>th</sup> Street; 38<sup>th</sup> Avenue, 39<sup>th</sup> Avenue, 24<sup>th</sup> Street, and 29<sup>th</sup> Street; 39<sup>th</sup> Avenue, 40<sup>th</sup> Avenue, 24<sup>th</sup> Street, 40<sup>th</sup> Avenue, 41<sup>st</sup> Avenue, 23<sup>rd</sup> Street and 29<sup>th</sup> Street; and 36<sup>th</sup> Avenue, 37<sup>th</sup> Avenue, and 32<sup>nd</sup> Street;
- change from M1-3D to M1-2/R5D all or a portion of 20 blocks bounded by a line 100 feet on both sides of 40<sup>th</sup> Avenue between 23<sup>rd</sup> Street and 29<sup>th</sup> Street; and a line 100 feet on both sides of 39<sup>th</sup> Avenue between Crescent Street and 30<sup>th</sup> Street and the east side of 29<sup>th</sup> Street between 40<sup>th</sup> Road and 39<sup>th</sup> Avenue and 100 feet on both sides of Crescent Street between 41<sup>st</sup> Avenue and 38<sup>th</sup> Avenue and 41<sup>st</sup> Avenue from 29<sup>th</sup> Street to 23<sup>rd</sup> Street;
- change from M1-3D and M1-1 to M1-2/R6A all or a portion of 22 blocks bounded by a line 100 feet north of 41<sup>st</sup> Avenue, 23<sup>rd</sup> Street and 29<sup>th</sup> Street; a line 100 feet on both sides of 38<sup>th</sup> Avenue, 24<sup>th</sup> Street, 39<sup>th</sup> Avenue, 34<sup>th</sup> Street, 32<sup>nd</sup> Street, and a line 100 feet south of 37<sup>th</sup> Avenue, 24<sup>th</sup> Street, 29<sup>th</sup> Street, 34<sup>th</sup> Street, 33<sup>rd</sup> Street and 36<sup>th</sup> Avenue;
- change from M1-3D to M1-3/R7X all or a portion of 11 blocks bounded by 40<sup>th</sup> Road, Northern Boulevard, 29<sup>th</sup> Street, 39<sup>th</sup> Avenue, a line 100 feet south of 38<sup>th</sup> Avenue, 34<sup>th</sup> Street, 37<sup>th</sup> Avenue and 37<sup>th</sup> Street.

The proposed rezoning would allow new development at higher densities along 41<sup>st</sup> Avenue, 31<sup>st</sup> Street and Northern Boulevard. These locations are near subway stops served by the G, 7, E, V, W, R and N subway lines and Northern Boulevard, a wide 100-foot primary thoroughfare, served by the 32, 60, 66,

102, 103, and 104 bus lines. The proposed zoning map amendments that would encourage moderate and high density development near public transportation and wide streets are as follows:

- change from M1-3D and M1-1 to M1-2/R6A; and
- change from M1-3D to M1-3/R7X.

The proposed zoning map amendments will support continued economic growth in a mixed-use residential, commercial and light industrial community. Each proposed Residence District will be paired with a light Manufacturing District to allow a broad range of commercial and light industrial businesses in the rezoning area, compatible with residential uses. The range of mixed-use zoning districts reflects both the use and scale of non-residential development typically found in the area today.

# **ZONING TEXT AMENDMENTS**

Creation of the Dutch Kills Subdistict is proposed in conjunction with the zoning map amendments and would extend over all or portions of 40 blocks in the Dutch Kills neighborhood except for a small sliver adjacent to 23<sup>rd</sup> and 24<sup>th</sup> Streets. The proposed Dutch Kills Subdistrict would be part of the Special Long Island City Mixed Use District, which was established in 2001 to include the Court Square, Queens Plaza, and Hunter's Point subdistricts. The overarching goal of the Special Long Island City Mixed Use District is to support the continued growth of the area's longstanding mix of residential, commercial, industrial and cultural uses by permitting their development and expansion at varying densities. The Queens Plaza and Hunter's Point subdistricts are subject to the provisions of 123-00, as modified by special provisions within each subdistrict. The Dutch Kills Subdistrict would follow the same format. The objective of the subdistrict is to achieve a strong mixed-use community, to reinforce the existing street wall, and retail community of Northern Boulevard. The proposed Dutch Kills Subdistrict is generally bound by Queens Plaza North to the south, 23<sup>rd</sup> Street to the west, 36<sup>th</sup> Avenue to the north and Northern Boulevard to the east. The proposed subdistrict would be guided by the following goals:

- to foster development in Dutch Kills and provide direction and incentives for future growth where appropriate;
- to provide transitions between the moderate/high density commercial core of Long Island City, the lower scale residential community in Dutch Kills and the higher density light industrial and retail strip at the edge;
- to encourage new development that is in character with the special mixed-use character of the area, and:
- to promote the most desirable use of land and thus conserve and enhance the value of land and buildings, and thereby protect the city's tax revenues.

Special zoning text provisions are proposed for the Dutch Kills Subdistrict primarily to modify FAR, lot coverage, and street wall height in the proposed M1-2/R5B district and to make modifications to the parking requirements. The zoning text provisions include the following:

- in the proposed subdistrict the street wall of any residential or mixed-use building or enlargement shall be located no closer to nor further from the street line than the street wall of an adjacent existing building:
- in the proposed subdistrict the floor area of a building shall not include floor space used for accessory off-street parking spaces provided it is located no more than 33 feet above curb level;
- in the proposed M1-2/R5B district the maximum FAR for residential use shall be 1.65 and the maximum lot coverage for a residential building shall be 60 percent on an interior lot and 80 percent on a corner lot.

- in the proposed M1-2/R5B district, the maximum height of a street wall shall be 33 feet or three stories, whichever is less for all residential or mixed-use buildings;
- in the proposed M1-3/R7X district the maximum base FAR for residential use is 3.75 which may be increased up to 5.0 if affordable housing is provided;
- in the proposed subdistrict permit Use Group 6A supermarkets of any size
- in the proposed subdistrict the C8-2 commercial/light manufacturing parking regulations shall apply for all commercial and community facilities except that this modification shall not apply to uses listed in Use Group 5. The parking requirements applicable to the designated M1 District shall apply to Use Group 5.
- for Use Group 5 uses, the maximum number of parking spaces shall be 10 spaces.
- in the proposed M1-3/R7X district require all new residential developments to provide 50 percent parking regardless of lot size with a maximum waiver of 5 spaces.
- in the proposed M1-2/R6A and M1-3/R7X district parking waivers would not be allowed on existing lots that are subdivided.
- in the proposed M1-2/R5B district, the prohibition of curb cuts on lots 40 feet or less shall not apply for residential or community facility uses; and
- in the proposed M1-2/R5B and M1-2/R5D districts for enlargements of existing non-residential buildings where new floor area would be used for dwelling units allow a maximum waiver of 2 spaces

DCP is proposing special parking regulations that would modify the underlying requirements throughout the Dutch Kills Subdistrict as follows.

- (1) The accessory off- street parking and loading requirements of a C8-2 District, as set forth in Article III, Chapter 6, shall apply to all commercial and community facility uses, except that this modification shall not apply to uses listed in Use Group 5. The accessory off- street parking and loading requirements applicable to the designated M1 District set forth in Section 123-70 [and Article IV, Chapter 4] shall apply to Use Group 5.
- (2) For Use Group 5 uses, the provisions of Section 44-23 (Waiver of Requirements for Spaces Below Minimum Number) shall be modified as follows: the maximum number of accessory off-street parking spaces for which requirements are waived shall be 10 spaces.

#### (b) Residential Uses

- 1. The provisions of Section 25-241 (Reduced requirements) shall not apply in the designated M1-3/R7X District.
- 2. In the applicable designated Residence Districts, the provisions of Section 25-26 (Waiver of Requirements for Small Number of Spaces) are modified as follows:
  - i) In the designated M1-2/R6A and M1-3/R7X Districts, the provisions of Section 25-26 shall only apply to zoning lots existing both on (date of amendment adoption) and on the date of application for a building permit.
  - ii) For all new residential developments or enlargements in the designated M1-3/R7X District, the maximum number of accessory off-street parking spaces for which requirements are waived shall be five spaces.
- (3) Where the designated district is a M1-2/R5B District, the provisions of Section 25-633 (Prohibition of curb cuts in certain districts) shall not apply.

## INCLUSIONARY HOUSING TEXT AMENDMENT

The text amendment to establish an Inclusionary Housing Program near Northern Boulevard would modify ZR Section 23-90. Since 1987, New York City zoning has contained the Inclusionary Housing Program, which promotes affordable housing development by providing the incentive of additional allowable floor area to developers willing to provide affordable units as part of their project. Until recently, this program was only applicable in Manhattan's high-density districts. Today, the use of the Inclusionary Housing Program (also called Inclusionary Zoning) has been expanded beyond Manhattan and is now being used in the outer boroughs in medium- and high-density residential districts. The revised Inclusionary Housing Program combines the incentive of additional floor area with a variety of housing subsidy programs to provide permanently affordable housing. Under ZR Section 23-90, the Inclusionary Housing Program is currently available in portions of Manhattan Community District 7, Brooklyn Community District 1, 2 and 7; and Queens Community District 2. Under the proposed actions, Inclusionary Housing will be available in portions of Queens Community District 1. The proposed Inclusionary Housing text amendment includes the following components:

- the Inclusionary Housing Program would apply in the M1-3/R7X District proposed to be mapped on the west side of Northern Boulevard between 40<sup>th</sup> Road and 37<sup>th</sup> Avenue (37<sup>th</sup> Street);
- the proposed text would permit the maximum FAR of 5.0 to developments within the specified M1-3/R7X districts near Northern Boulevard that provide affordable housing;
- developments not participating in the Inclusionary Housing Program would be allowed a maximum FAR of 3.75;
- developments would qualify for the maximum FAR of 5.0 by providing 20 percent of residential floor area for low-income households; such households have incomes below 80 percent of the Area Median Income (AMI), and;
- affordable units would be developed and administered pursuant to a Lower Income Housing plan with the Department of Housing Preservation and Development and would remain affordable in perpetuity.

# REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDS)

The proposed actions are subject to City Environmental Quality Review (CEQR) and as such require the analysis of both short-term and long-term impacts. For area-wide rezonings not associated with a specific development, a 10-year time horizon is utilized to assess the potential impacts of the full anticipated build out under the proposed rezoning. This is assumed to be the period of time in which real estate developers would act on the change in zoning and the effects of the proposed actions would be realized. Therefore, the future condition with the proposed actions identifies the amount, type, and location of development that is expected to occur by 2017 as a result of the proposed project. The future condition without the proposed actions identifies development projects anticipated by 2017 absent the development allowed by the proposed rezoning. The incremental difference between the future condition without the proposed action and the future condition with the proposed actions serves as the basis for the environmental impact analysis presented in this EIS.

#### GENERAL CRITERIA FOR DETERMINING DEVELOPMENT SITES

To determine the development scenarios, standard methodologies have been used following the *CEQR Technical Manual* guidelines and employing reasonable, worst-case assumptions. These methodologies have been used to identify the amount and location of future residential, commercial, and community facility growth allowed by the proposed actions. In estimating the amount and location of new residential development, several factors have been considered, including known development proposals, past development trends, and DCP's standard "soft site" criteria, described below, for identifying likely

development sites. In formulating the projections, DCP was aware that there is a large demand for new housing in the area, but that the demand has been constrained by zoning that does not permit such development as-of-right. Generally, for area-wide rezonings, which create a broad range of development opportunities, new development could be expected to occur on selected, rather than all, sites within a rezoning area. The first step in establishing the development scenarios was to identify those sites where new development could reasonably be expected to occur by the 2017 Build Year.

In identifying the RWCDS, a set of criteria were established and all sites that met the criteria were identified. Development sites were identified based on the following criteria:

- sites for which owners have expressed interest in redevelopment;
- pre-existing residential buildings with fewer than six units on lots of 3,500 sf or larger that are built to less than 50 percent of the proposed FAR;
- lots of 3,500 sf or larger developed with buildings used for industrial, manufacturing, parking, or automotive uses, including those that are built at greater than 50 percent of the proposed FAR. These sites were determined to be demolitions, expansions or conversions based on site-specific conditions of existing buildings;
- other uses on lots of 3,500 sf or larger that are built to less than 50 percent of the proposed FAR;
- sites that meet the criteria above when assembled with adjacent lots, and;
- as well as the following categories on lots of any size: Board of Standards and Appeals applications granted in the proposed action area. For analysis purposes, it is assumed that residential development of these sites would proceed as-of-right under the proposed action.

Lots meeting the above criteria are not considered soft if the following is true:

- there are known development plans for the site under the existing zoning or pending discretionary actions that would allow redevelopment;
- the lot configuration is inefficient in terms of residential development complying with the proposed contextual zoning districts;
- the lot is owned and used by the MTA for transit-related purposes, and;
- the site contains a school, cemetery, house of worship, or other public facility (unless there are known development plans for the site).

To produce a reasonable and conservative estimate of future growth, these sites were then divided into two categories – projected development sites and potential development sites. Many sites met one or more of the above criteria. The sites most likely to undergo new development were chosen from among this group, based on size, location and degree of underutilization. These are called projected development sites. The projected sites are those sites considered most likely to be developed in the 10-year period following implementation of the proposed actions. The identification of projected sites is based on recent housing growth in the area, including adjustments to reflect possible future growth trends in the future condition with the proposed actions.

Potential sites are considered less likely to be developed over the 10-year analysis period; however, this analysis recognizes that a number of potential sites could be developed under the proposed actions in lieu of one or more of the projected sites in accommodating the development anticipated. The potential sites are therefore also addressed in the EIS to evaluate site-specific effects such as hazardous materials or archaeology. Potential development sites generally consist of smaller assemblages, and/or irregular-shaped parcels. In the future condition without the proposed actions, the identified projected and potential development sites are assumed to either remain unchanged from existing conditions, or become occupied by uses that are as-of-right under existing zoning and reflect current trends (such as hotel construction) if

they are vacant, occupied by vacant buildings, or occupied by low intensity uses and are deemed likely to support more active uses.

All projected development sites identified for the future condition with the proposed actions are analyzed for density-related and site-specific impacts in this EIS, whereas potential development sites are only analyzed for site-specific potential impacts. Density-related impacts are dependent on the amount of development projected on a site; i.e., the number of dwelling units and the resulting population's impact on areas such as traffic, mobile-source air quality, community facilities and services, and open space. Site-specific impacts relate to individual site conditions and are not dependent on the density of projected development. Site-specific impacts include analysis for historic resources, archaeological resources, shadows, urban design and visual resources, hazardous materials, stationary-source air quality, and noise. The Reasonable Worst Case Development Scenario identifies 40 projected development sites and 192 potential development sites on which new buildings could be constructed or existing buildings converted into residential uses by 2017. Currently, the 40 projected sites are developed with 24 dwelling units, 36,198 sf of commercial space and 261,451 sf of industrial floor space.

In addition to the above mentioned projects, the nine several known projects expected to be completed in the rezoning area by 2017 that will serve as the basis for the future condition without the proposed actions are presented in Table ES-1.<sup>2</sup> All of these projects are proposed as hotels and construction is either underway or currently being planned.

Table ES-1
Known Development Projects

Development Site	Block	Lot	Height	Occupancy
1	397	2	9 stories	54 rooms
2	386	27	8 stories	16 rooms
3	387	31	12 stories	128 rooms
4	398	29	9 stories	34 rooms
5	384	32	9 stories	56 rooms
6	388	23	10 stories	80 rooms
7	400	1	6 stories	44 rooms
8	399	17	13 stories	107 rooms
9	402	25	6 stories	87 rooms

Source: New York City Department of City Planning, March 2008.

# THE FUTURE CONDITION WITHOUT THE PROPOSED ACTIONS

In the future condition without the proposed actions, given the current zoning and existing land use trends, it is anticipated that the new, as-of-right development would occur on projected development sites in the rezoning area. In total, they would be developed with 22 dwelling units, 371,052 sf of commercial space, 81,470 sf of community facility space and 183,011 sf of industrial floor space. Compared with existing conditions, this represents a decrease of two dwelling units, a 334,854 sf increase in commercial

"Noise" for information regarding the (E) designation process as it relates to these sites.

<sup>&</sup>lt;sup>2</sup> Prior to publication of the FEIS, DCP learned that the following sites within the rezoning area are also being developed for hotel use: Block 386 Lot 33, Block 407 Lot 37, Block 402 L12, and Block 406 Lot 40. The density-based technical analyses in the FEIS are conservative in so far as they consider these sites as projected development sites in the RWCDS. Please see Chapter 11 "Hazardous Materials," Chapter 17 "Air Quality," and Chapter 18

floor area, an approximately 81,000 sf increase in community facility floor area and an approximately 78,440 sf increase in industrial floor area.

## THE FUTURE CONDITION WITH THE PROPOSED ACTIONS

In the future condition with the proposed actions, a sharp increase in residential development is expected to occur, with the introduction of approximately 1,555 dwelling units.<sup>3</sup> Additionally, approximately 174,000 sf of additional commercial floor area; 40,000 sf of community facility floor area; and 2,500 sf of industrial floor area are expected in the future with the proposed actions.

DCP has identified 40 projected development sites in the RWCDS that are considered most likely to be developed by 2017 as a result of the proposed actions. In addition, there are 192 potential development sites considered less likely to be developed in the same 10-year analysis period.

# C. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

# LAND USE, ZONING, AND PUBLIC POLICY

Under the proposed actions, the Dutch Kills neighborhood would be rezoned to allow as-of-right residential development and support continued mixed-use development and growth near wide streets and public transit. Allowable densities for commercial and light industrial uses would be changed to more closely correspond to proposed residential densities, generally resulting in decreased densities for such uses except near Northern Boulevard. The proposed zoning changes would create a closer balance between residential and nonresidential densities and encourage new development and economic growth opportunities in the subdistrict as well as accomplish the land use policies discussed in Chapter 1, Project description. Based on the RWCDS defined in Chapter 1, "Project Description", and as a result of the proposed actions, development in the rezoning area is expected to achieve a build-out that would include 1,555 additional dwelling units, of which approximately 187 would be affordable units provided through proposed the Inclusionary Housing Program; 173,582 sf of new commercial space; and 410 additional accessory parking spaces.

The proposed rezoning and related actions would change the density of land uses on most blocks in the rezoning area, from high-density light industrial and low-density, residential, to low density light industrial, low to moderate density residential and mixed-use development and higher-density mixed-use residential, commercial and light industrial uses along Northern Boulevard. These changes would be expected to have a positive impact on the immediate area given that the proposed actions would also create new residential development opportunities along wide streets while protecting the character of low-density residential mid-blocks. The proposed actions will support continued economic growth in the existing mixed-use residential, commercial, and light industrial community by removing restrictions on residential development. For these reasons, no significant adverse impacts on land use, zoning, or public policies would result from the proposed actions.

# LAND USE

Development resulting from the proposed actions would yield approximately 1,555 dwelling units; a net decrease of approximately 197,470 sf of commercial space; a net decrease of approximately 180,536 sf of

<sup>&</sup>lt;sup>3</sup> See footnote 1 on page ES-3

industrial space; and a net decrease of approximately 41,697 sf of community facility space from the future condition without the proposed actions.

The new development would be compatible with existing residential, commercial, community facility, and industrial land uses currently found in the rezoning area, only at varying densities. The proposed actions would provide a framework that would allow a range of residential, community facility, commercial and light industrial uses-as-of-right, consistent with adjacent areas of the Special Long Island City Mixed-Use District. The proposed zoning would accommodate existing trends by providing as-of-right residential opportunities, retain existing light industrial businesses and support the continued growth of other business opportunities in a mixed-use commercial and light industrial community. The highest density residential development would occur near Northern Boulevard within proximity to Queens Plaza and the existing Long Island City commercial core, and near various mass transit options. The proposed Inclusionary Housing zoning text amendment covering this same area (subarea D1) would provide real estate developers with strong incentives to build affordable units within their developments in this subarea. Thus, there would not be a significant adverse impact on land use.

# **ZONING**

The proposed actions would result in a rezoning of all blocks within the rezoning area. The proposed zoning designations would encourage moderate- and higher-density development within close proximity to public transportation and support continued economic growth in a mixed-use residential, commercial and light industrial community. The zoning text amendments would create the Dutch Kills Subdistrict, which would act as an extension of the existing Long Island City Mixed-Use District, and make applicable an Inclusionary Housing bonus in a portion of the study area in an effort to foster development compatible with existing neighborhood character. The zoning text amendments would also modify parking regulations to address parking needs throughout the subdistrict. A small portion of the primary study area, subarea E1, would not be included in the Dutch Kills Subdistrict yet would be rezoned to accommodate land uses that would be more compatible with surrounding light industrial only areas. The proposed rezoning would be compatible with the surrounding zoning and special purpose districts. Thus, there would not be a significant adverse impact on zoning.

## **PUBLIC POLICY**

The proposed actions would be largely consistent with current and proposed public policy initiatives and plans. It would be consistent with the overall goals of the Long Island City Vision Plan; The Plan for Long Island City: A Framework for Development; Long Island City Air Quality Project; PlaNYC; Agency Strategic Plan; Inclusionary Housing Program; Bloomberg Administration: Major Economic Initiatives; The New Housing Marketplace: Creating Housing for the Next Generation; Commercial and Industrial/Manufacturing Expansion Program; and Long Island City Links. Thus the proposed actions would be consistent with existing public policy and plans, and would not result in significant adverse impacts to public policy.

# SOCIOECONOMIC CONDITIONS

According to the CEQR Technical Manual, significant adverse socioeconomic impacts can occur when an action meets one or more of the following criteria: (1) it leads to the direct displacement of residents such that the socioeconomic profile of the neighborhood is substantially altered; (2) it leads to the displacement of substantial numbers of businesses or employees, or displaces a business that plays a critical role in the community; (3) it results in substantial new development that is markedly different from existing uses in a neighborhood; (4) it affects conditions in the real estate market not only on the site anticipated to be developed, but in a larger area; or (5) it adversely affects economic conditions in a specific industry. The

proposed actions could directly displace an estimated 57 residents, 35 businesses and 374 employees, and would introduce a substantial amount of new housing which in turn could lead to indirect (or secondary) displacement.

The analysis finds that the proposed actions would not result in significant adverse socioeconomic impacts due to direct or indirect changes in residential and economic activity. The estimated 57 residents who would be displaced represent a small fraction (less than 0.2 percent) of the approximately 34,552 persons living in the rezoning area and census tracts that are with a one-half mile distance from it that comprises the socioeconomics study area; they do not represent a substantial or unique population within the study area. The businesses that would be directly displaced do not have substantial economic value to the city or regional area as defined by CEQR, and would not have great difficulty relocating. The proposed actions would not result in significant adverse indirect displacement of residents, businesses, or institutions. The potentially at-risk population is limited (residents of up to 177 unprotected units), and will face increased rent pressures in the future with or without the proposed actions. Similarly, some businesses facing rent pressure in the study area will continue to face increased rents in the future with or without the proposed actions would not result in significant indirect displacement impacts.

#### COMMUNITY FACILITIES AND SERVICES

The proposed actions would not result in significant adverse impacts to community facilities as articulated below:

- With respect to public schools, the proposed actions would result in the addition of 239 elementary, and 115 intermediate school students to the area by 2017. With the proposed actions, utilization rates for elementary and intermediate schools within the study area would be 90 percent and 72 percent respectively and would still have the capacity to accommodate 1,056 additional students. The increased number of elementary and intermediate school students introduced into the study area is not expected to burden existing resources. No significant adverse impacts to schools within a distance of one-half mile from the rezoning area's periphery or CSD 30 would result from the additional student population created by the proposed actions.
- The proposed actions would increase the rezoning area population by 3.4 percent with respect to the evaluation of library services. This is less than the 5 percent impact threshold identified in the *CEQR Technical Manual*. No changes to the library services in the existing study area would occur due to the proposed actions, therefore, resulting in approximately 1.62 volumes per resident. No significant adverse impacts to the delivery of library services would result due to the proposed actions.
- With regard to day care facilities needed, the proposed actions would increase the affordable housing units to 187. This is significantly less than the CEQR Technical Manual threshold in Queens of 250 low-income or 278 low-mod income housing units needed to place additional demand on existing facilities. As a result, the day care population created from the proposed actions would not be expected to place a need on the City's Division for Child Care and Head Start CCHS—to increase publicly funded day care capacity in the study area. There would be no significant adverse impacts resulting from the proposed action on publicly funded day care facilities.
- With regard to health care facilities needed, the proposed actions would increase the affordable housing units to 187. This is significantly less than the CEQR Technical Manual threshold of 600

low-income to moderate-income housing units needed to place additional demand on existing health care facilities. As a result there will be no significant adverse impacts on the delivery of publicly funded health care services or facilities in the study area.

• Due to the increase in residential population in the study area created by the proposed actions, an increase in police and fire department services may be necessary. There would be no direct displacement of police or fire department facilities by 2017. No significant adverse impacts are anticipated regarding the NYPD and FDNY operations due to the proposed actions.

# **OPEN SPACE**

Per CEQR Technical Manual guidelines, 1.5 acres of open space resources per 1,000 residents is considered adequate for the residential population. As a planning goal, the DCP attempts to achieve a ratio of 2.5 acres per 1,000 residents for large-scale proposals. In the future without the proposed actions, the open space ratio would be 0.83. When compared to the future with the proposed actions, the open space ratio would decrease from 0.83 to 0.78 acres per 1,000 residents, a decrease of approximately 6.83 percent. However, like projects in so many areas of the city, the new open space ratio (0.78 acres per 1,000) is less than the DCP goal of 2.5 acres and the CEQR guideline of 1.5 acres for open space; therefore, a significant adverse impact to publicly-accessible open space would result from the proposed project.

The recreational space created under the Quality Housing Program in the future with the proposed project will contribute to alleviating some of the shortage of open space in the study area. In addition, there are several large open space resources just outside the study area which would also partially alleviate the shortage of open space for new residents of the proposed actions. However, despite these two additional open space opportunities, the proposed actions would still result in a significant adverse impact on open space.

As discussed in Chapter 21, "Mitigation," potential measures to mitigate the significant adverse impact on open space resources will be explored between the Draft and Final EIS

# **SHADOWS**

The Proposed Project will not result in significant adverse shadow impacts to the noted resources of The RWCDS would cast incremental shadows on the southern portion of Dutch Kills Playground, a publicly accessible open space located immediately north of the rezoning area. However, no sunlight sensitive uses were identified at the playground within the potential shadow radius of the Proposed Project. Triangle Forty-One, a publicly accessible open space which does contain sunlight sensitive uses, was determined to be outside the shadow radius of the projected and potential development sites under the Future Condition with the Proposed Actions. The RWCDS would cast incremental shadows across Triangle Thirty-Seven, a publicly accessible open space located at the southwest corner of 37<sup>th</sup> Avenue and Northern Boulevard. However, these shadows are negligible in comparison to those found under the Future Condition without the Proposed Actions. Specifically, the RWCDS would result in an increase of 20 to 40 minutes in the duration of shadows over the Future Condition without the Proposed Actions in three analysis periods—March 21st, May 6th and June 21st. The exception to this modest increase in the duration of shadows resulting from the RWCDS occurs during the December 21st analysis period wherein shadows from both the RWCDS and the Future Condition without the Proposed Actions do not enter Triangle Thirty-Seven segment one or segment two at all. During this analysis period, both segments are significantly affected by shadows resulting from the existing eastward buildings

atop Block 214, lots 40 and 21. Here shadows are present from the earliest analysis time on December 21<sup>st</sup> to the latest analysis time; that is, from 8:45 a.m. to 3:00 p.m.

The slight increase in the duration of shadows over the Future Condition without the Proposed Actions does not deem shadow impacts of the Proposed Project to be significantly adverse. The difference in shadow impacts under the RWCDS and the Future Condition without the Proposed Actions is negligible given that shadows cover Triangle Thirty-Seven at or near 100% during significant portions of the shadow analysis periods. As such, the preceding shadow analysis results indicate that the incremental shadows resulting from the Proposed Project would not have a significant adverse effect as defined by CEQR guidelines for the following reasons: no significant reduction in sunlight has been found where a sensitive use is already subject to substandard sunlight; sunlight reaching the affected sensitive sites would not be reduced to less than the amount of time necessary for plant survival and the usability of the affected sensitive sites would not be substantially compromised.

## HISTORICAL RESOURCES

# ARCHEOLOGICAL RESOURCES

The New York City Landmarks Preservation Commission (LPC) identified five lots located on either projected or potential development sites within the rezoning area possessing potential for intact archaeological deposits. Development of these sites could result in adverse physical impacts to potential archaeological resources through construction; these potential impacts would be unmitigatable adverse impacts. If potential archaeological resources exist on these five lots, and they would be excavated as the result of private development (which would not require further discretionary approvals), the impacts would be unavoidable adverse impacts. There are no mechanisms available to require that subsequent private as-of-right development undertake archaeological field tests to determine the presence of archaeological resources or mitigation for any identified significant resources through avoidance or excavation and data recovery.

The extent to which each lot has been previously filled and/or graded would have direct implications for the potential archaeological sensitivity of these areas. Therefore, if such data becomes available, these borings should be reviewed and the conclusions regarding the sensitivity of each lot for prehistoric and historic period archaeological deposits should be reevaluated.

#### ARCHITECTURAL RESOURSES

The proposed project may create a potential effect on two historic properties determined eligible for listing on the State and National Registers. These properties are currently privately owned and have the potential for future private development. State and National Register eligibility does not provide restrictions to private property use and development and no mechanism exists under CEQR that requires further environmental or historic review for private development. In addition to the two above-mentioned properties, two additional resources could experience accidental damage from adjacent construction and could be offered some limited protection through DOB controls governing the protection of adjacent properties from construction activities. Although additional protections could be provided through the implementation of construction protection plans that follow the *New York City Department of Buildings (DOB) Technical Policy and Procedure Notice (TPPN) #10/88* (Procedures for the Avoidance of Damage to Historic Structures) there are no mechanisms for requiring the implementation of such plans for private as-of-right development. The significant adverse impact to the A. Garside & Sons Shoe Factory located at 35-02 37<sup>th</sup> Street would result in an unmitigated impact. Likewise, potential impacts to the Pierce-Arrow Building at 34-01 38<sup>th</sup> Avenue would also result in unmitigated impacts.

## URBAN DESIGN AND VISUAL RESOURCES

The proposed actions are not expected to result in significant adverse impacts to the urban design and visual resources within the study area. One of the principal goals of the proposed actions is to protect the unique character of Dutch Kills by preventing out-of-scale development. Under the new zoning regulations, residential development would be encouraged and industrial, commercial and community facilities would become better balanced in terms of street wall height and building bulk so as to complement residential development and to reflect the existing context. Street walls and setbacks within the study area would generally undergo some unification and would benefit the urban design of the Dutch Kills neighborhood. As visual resources within the study area include views west and southwest towards Manhattan, there is a potential for some partial blocking and interruption of these view corridors from taller, new developments. However, these views are not unique or rare, thus partial interruption would not pose a significant impact.

Primary and secondary study areas were established to facilitate the evaluation of urban design. Both the primary and secondary study areas were further broken down into subareas. As the type and size of new development would be uniquely influenced and limited by the terms of each zoning designation across the subareas, effects of the proposed project vary by location. New developments in subarea B as well as the southern portion of subarea A under the proposed M1-3/R7X zoning designation could be relatively tall, gaining a street wall height of up to 85 feet. These developments could partially impact view corridors toward Manhattan, but they would be in keeping with existing conditions and would not pose a significant adverse impact. Throughout subareas C, D and E street wall heights under the proposed project would generally become more unified and slightly increased. Setbacks would be generally unified and changes in the maximum and minimum FAR for all building types and uses would not significantly impact the urban design and visual resources of the study area. With new developments, general street conditions would likely improve and street furniture enhanced to reflect the larger goals of the proposed project to create transit-oriented mixed-use and residential neighborhoods. Under the guidance of the proposed zoning designations, the future build condition would enhance the general urban design and visual resources of the Dutch Kills neighborhood.

# NEIGHBORHOOD CHARACTER

The development of the RWCDS is not expected to cause a significant adverse impact to the neighborhood character of the primary and secondary study areas.

As the proposed actions will influence the build characteristics of development projects largely through changes in the zoning requirements of the primary study area, the majority of anticipated affects are limited to the size and type of future buildings, and do not significantly affect other components of the built environment. As future development projects will be influenced by the larger project goal of creating transit oriented mixed-use and residential neighborhoods, the future build condition would enhance the general neighborhood character of the Dutch Kills neighborhood.

## NATURAL RESOURCES

In the rezoning area, 40 projected and 192 potential development sites have been identified. The rezoning area is a long developed area and all of the development sites are essentially built and devoid of natural resources. The sites contain no landscaped features with natural resource values, have no subsurface conditions, the disruption of which might affect the function or value of an adjacent or nearby natural resource, and are neither near nor contiguous to any natural resources. Any vegetation on these sites in the existing condition would be typical urban invasive vegetation with no vegetation or wildlife habitat value. Wildlife in the area is also urban mammals and transitory avian wildlife. There are no streams,

ponds, or lakes that would provide any habitat for aquatic-related wildlife. The proposed project would not result in significant adverse impacts to natural resources.

#### HAZARDOUS MATERIALS

DCP has identified 40 projected development sites and 192 potential development sites distributed throughout the rezoning area. All projected and potential development sites could reasonably be expected to be affected by hazardous materials due to historical and/or contemporary land use. For these sites, the predominant source of potential contamination stems from automobile repair facilities. Other potential sources of contamination include machine shops and metal fabrication shops, petroleum storage tanks, dry cleaning establishments and printing shops. Consequently, with the exception of city-owned sites (for which other mechanisms are in place to ensure that hazardous materials are not released to the environment), the proposed project should include (E) designations for all projected and potential development sites. Development of a site with an (E) designation would require that a Phase I Environmental Site Assessment be conducted, and if necessary, a sampling and remediation protocol be developed and implemented to the satisfaction of NYCDEP prior to issuance of a building permit. Such designation would eliminate the potential for significant adverse impacts from hazardous materials due to implementation of the proposed project.<sup>4</sup>

There are several development sites that are owned by the city that have been identified as having the potential for hazardous materials contamination. Because these sites are under city ownership, they are not subject to the regulations governing (E) designation. The agencies that own and control these sites will enter into a Memorandum of Understanding (or some other agreement) with DEP to ensure that, prior to any development on these sites, testing and, if necessary, remediation is performed in compliance with DEP regulations

# **INFRASTRUCTURE**

The proposed project would not adversely impact the city's infrastructure. Development on the 40 projected development sites would produce an additional 799,698 gallons per day (gpd) demand on the city's water supply system, representing a 0.042 percent increase. Because this is less than one-tenth of one percent of the city's water supply, the proposed project would not result in a significant adverse impact to the city's water supply or water pressure. The Bowery Bay WPCP would receive approximately 491,980 gpd of additional wastewater as a result of the proposed project, which represents approximately 0.33 percent of the plant's treatment capacity. Consequently, the proposed project would not result in a significant adverse impact to the city's wastewater treatment system. Because the proposed project would not appreciably increase the amount of impervious surfaces in the rezoning area, the proposed project would not adversely impact the city's stormwater management system.

# **SOLID WASTE**

The proposed project is expected to result in a net increase of approximately 62,504 pounds per week (4.5 tons per day) of solid waste from residences and community facilities. This figure amounts to approximately 0.04 percent of the solid waste collected by DSNY each day. Based on the assumption that the average DSNY collection truck has a capacity of 12.5 tons, the proposed project would require an additional 3 trucks to service the rezoning area each week. The proposed project would not result in a

<sup>&</sup>lt;sup>4</sup> Prior to publication of the FEIS, DCP learned that certain development sites within the rezoning area are being developed for hotel use (see footnote 3 on page ES-10). Therefore, these sites have been removed from the list of sites receiving E-designations (see Appendix D, "Hazardous Materials E-Designations").

significant adverse impact on solid waste and sanitation services and would not conflict with the city's SWMP.

## **ENERGY**

The proposed project would result in energy consumption of approximately 244,801 million BTUs on the projected development sites. This total represents approximately 0.06 percent of the city's forecast 2017 peak load of 13,360 MW, which is not considered to be a significant adverse impact.

#### TRAFFIC AND PARKING

## **TRAFFIC**

Vehicle trips generated under the reasonable worst case development scenario would be most concentrated at intersections along the principal arterials providing access to, from and within the rezoning area – primarily Northern Boulevard, 31<sup>st</sup> Street and 38<sup>th</sup> Avenue. A total of nine signalized intersections along these corridors were selected for analysis based on the assignment of project-generated traffic. The traffic impact analysis examines conditions during three weekday peak hours (7:30-8:30 AM, 12-1 PM and 4:30-5:30 PM), and one Saturday peak hour (12:30-1:30 PM).

## TRAVEL DEMAND

In the future with the proposed actions, the RWCDS would result in a net reduction of 61 inbound vehicle trips and a net increase of 111 outbound vehicle trips in the weekday AM peak hour (auto, taxi and truck combined), 47 new inbound and 43 new outbound vehicle trips in the weekday midday, 143 new inbound and six new outbound vehicle trips in the weekday PM peak hour, and 114 new inbound and 87 new outbound vehicle trips in the Saturday midday peak hour.

## IMPACT ANALYSIS

As shown in Table ES-2, a total of four signalized intersections (all along Northern Boulevard) would have significant adverse impacts as a result of project-generated traffic during one or more peak hours. The weekday PM peak hour would have the highest number of impacted intersections with four, followed by the weekday midday with three, and the weekday AM and Saturday midday with two each. Measures to mitigate significant adverse impacts are discussed below in the "Mitigation" section.

# **PARKING**

As no new off-street public parking is proposed for development under the RWCDS, the net effect of the RWCDS would be a 200-space reduction in the overall supply of off-street public parking capacity compared to the No-Action condition. The off-street public parking supply in the study area is expected to be 61 percent utilized in the weekday AM and 55 percent utilized in the Saturday midday, compared to utilization rates of 55 percent and 50 percent, respectively, in the No-Action. In the weekday midday, however, parking demand in the study area is expected to exceed capacity by approximately 1,283 spaces (a 157 percent utilization rate) compared to 1,083 spaces (a 144 percent utilization rate) under No-Action conditions. It is anticipated that all parking demand from development of the RWCDS under with-action conditions would be accommodated in accessory parking facilities, and would not contribute to the projected deficit of off-street public parking in the weekday midday. The displacement of one existing off-street public parking facility under the RWCDS would, however, reduce available capacity in the study area by 200 spaces. As the proposed actions would not increase the demand for off-street public

Table S-2 Comparison of 2017 Future No-Action and With-Action Conditions Levels of Service at Signalized Intersections

				AM PEAK HOUR	HOUR				×	MIDDAY PEAK HOUR	1K HOUR					PM PE	PM PEAK HOUR			_	SAT	URDAY N	SATURDAY MIDDAY PEAK HOUR	AK HOUR		
		2017	2017 No-Action	c	2017 \	2017 With-Actio	uc	2017	2017 No-Action	c	2017	2017 With-Action	ion	201	2017 No-Action	ion	20	2017 With-Action	ction	2,	2017 No-Action	ction	_	2017 With-Action	h-Action	
SIGNALIZED INTERSECTION	Lane Group	WC Ratio	Delay (sec/veh)	SOT	V/C Ratio (	Delay (sec/veh)	SOT	V/C Ratio	Delay (sec/veh)	SOT	V/C Ratio	Delay (sec/veh)	SOT	V/C Ratio	Delay (sec/veh)	SOT	V/C Ratio	S Delay io (sec/veh)	y LOS	V/C Ratio	Delay (sec/veh)	ly LOS		V/C De Ratio (sec	Delay (sec/veh) LC	SOT
Northern Boulevard (E-W) @ 40th Avenue (W)/ 31st Street (SB)	EB-L EB-T WB-T SB-LTR	1.30 0.58 0.73 0.94	184.4 9.8 12.0 78.8	r < a m	1.22 0.58 0.72 0.98	155.3 9.8 11.9 89.3	*	1.35 0.63 0.66 0.85	205.0 10.7 11.3 65.4	гаап	1.37 0.63 0.66 0.86	215.9 10.7 11.3 67.2	*	2.35 0.68 0.79 1.05	649.3 10.9 14.8 105.4	наан	2.67 0.68 0.80 1.04	7 790.8 8 10.9 0 15.1 4 104.7	8 - 8 - 7 - 8 - 7	* 1.27 0.56 0.60 0.71	170.8 9.5 10.1 54.8	8 - E	- 0 0 0	1.37 20 0.56 9 0.60 10 0.73 55	209.9 F 9.5 / 10.2 E 55.7 E	*
Northern Boulevard (E-W) @ 39th Avenue (N)/ Honeywell (N-S)	EB-L EB-TR WB-LTR NB-LTR	0.57 0.57 0.80 0.64	42.0 9.7 14.1 48.3	Q ≪ ® Q	0.53 0.57 0.85 0.62	38.2 9.7 16.2 47.6		0.23 0.63 1.01 0.64	9.1 10.7 42.9 48.6	< ∞ □ □	0.23 0.63 1.08 0.65	9.3 10.7 65.5 49.1	< ₪ Ш □ *	0.25 0.67 1.31 0.86	10.6 10.9 161.9 60.6	ФФГП	0.26 0.68 1.36 0.90	6 11.4 8 10.9 6 184.3 0 65.2	м m г m	0.09 0.55 * 0.72 * 0.48	6.2 9.4 13.1 44.5	< 4 M D	0000	0.09 6 0.55 9 0.84 17 0.52 45	6.4 / 9.4 / 17.8 E 45.4 [	4 4 M D
Northern Boulevard (E-W) @ 38th Avenue (N-S)/ 35th Street (N)	EB-L EB-T WB-TR SB-LTR	0.98 0.46 0.76 0.67	128.3 8.3 12.7 53.8	r < a ∪	0.87 0.47 0.74 0.70	95.5 8.4 12.4 55.8	ш∢шш	0.59 0.52 0.70 0.82	24.0 9.1 12.2 64.5	O K B H	0.59 0.53 0.70 0.83	23.9 9.2 12.2 65.8	ОКВШ	0.95 0.58 0.82 1.13	90.5 9.4 15.7 133.6	г∢вг	1.01 0.59 0.83 1.12	1 108.8 9 9.5 3 16.4 2 128.2	* FB - 2	* 0.30 0.50 0.61 0.60	10.1 8.7 10.4 50.7	8 4 8 O	0000	0.31 10 0.51 8 0.63 10 0.61 51	10.6 8.9 7.01 51.3	0 4 B D
Northern Boulevard (E-W) @ Steinway Street (N-S)	EB-L EB-TR WB-L WB-TR NB-L NB-TR SB-LTR	0.40 0.80 1.36 0.88 1.13 1.21	33.3 25.1 229.2 27.2 148.1 176.0	00 11 0 11 11 11	0.40 0.83 1.46 0.87 1.12 0.92	33.3 26.3 271.7 26.4 145.3 174.5	ОО Т О Т Т П *	1.00 0.93 1.54 0.87 0.68 1.19	129.0 39.3 328.5 32.4 54.2 157.0	r0r00rr	1.01 0.94 1.61 0.87 0.70 1.18	133.1 40.3 357.3 32.7 55.3 155.9 98.3	* *	0.65 0.99 1.00 0.83 0.85 1.22	47.4 40.0 112.6 26.2 78.0 176.3	ООГОШГГ	0.69 0.98 1.00 0.85 0.89 1.21 1.03	9 55.0 8 39.0 0 112.6 5 27.2 9 83.0 1 174.9 3 102.8		* 0.70 1.00 1.80 0.78 0.78 1.02	52.3 52.6 447.1 27.4 46.0 102.3 113.3	00 T O O T T	0++00++	0.74 56 1.02 56 1.80 44 0.80 28 0.52 47 1.02 10	59.0 E 58.2 E 28.1 C 28.1 C 47.4 E 1100.7 E 112.6 E	* *
39th Avenue (E-W) @ 31st Street (N-S)	EB-LR WB-LR NB-T SB-T	0.31 0.20 0.23 0.35	17.7 16.3 16.3 17.8	0000	0.31 0.23 0.27 0.37	17.8 16.7 16.8 18.0	0 0 0 0	0.31 0.21 0.26 0.31	17.8 16.4 16.6 17.3	8888	0.30 0.27 0.31 0.32	17.6 17.1 17.3 17.5	8888	0.50 0.17 0.29 0.36	21.3 15.9 17.0 18.0	0 8 8 8 0	0.49 0.22 0.36 0.37	9 20.9 2 16.5 6 17.9 7 18.1	Ommm	0.28 0.16 0.27 0.24	17.3 15.8 16.8	B B B B	0000	0.27 17 0.24 16 0.36 17 0.26 16	17.1 E 16.8 E 17.9 E 16.7 E	
38th Avenue (E-W) @ 31st Street (N-S)	EB-LTR WB-LTR NB-LTR SB-LTR	0.37 0.50 0.57 0.51	18.6 20.9 22.0 20.7	m O O O	0.42 0.47 0.61 0.52	19.4 20.2 23.2 20.7	mooo	0.50 0.36 0.59 0.41	21.1 18.3 22.4 18.8	Omom	0.53 0.31 0.65 0.41	21.7 17.6 24.0 18.8	0 0 0 0	0.81 0.40 0.67 0.41	33.0 19.2 24.6 18.7	Omom	0.81 0.37 0.73 0.42	1 32.8 7 18.7 3 26.8 2 18.9	Omom	0.38 0.23 0.53 0.28	18.7 16.6 21.0 17.0	B C B	0000	0.41 18 0.21 16 0.62 23 0.30 17	19.1 E 16.3 E 23.0 C 17.2 E	a a o a
37th Avenue (E-W) @ 31st Street (N-S)	EB-LTR WB-LTR NB-LTR SB-LTR	0.51 0.66 0.44 0.59	21.3 25.3 19.4 22.2	OBOO	0.51 0.66 0.49 0.59	21.4 25.1 20.3 22.4	0000	0.42 0.54 0.48 0.48	19.7 22.1 20.0 20.1	CBCB	0.41 0.55 0.55 0.50	19.4 22.1 21.4 20.4	m U U U	0.93 0.50 0.54 0.47	47.8 21.1 21.1 19.9	псср	0.91 0.51 0.60 0.50	1 44.6 1 21.2 0 22.5 0 20.5	٥٥٥٥	0.56 0.33 0.44 0.34	22.3 18.0 19.2 17.8	BBBC		0.55 22 0.32 17 0.53 20 0.36 18	22.2 17.8 20.8 18.1	Omom
38th Avenue (E-W) @ Crescent Street (SB)	EB-LR WB-LT SB-L SB-TR	0.39 0.73 0.11 0.83	13.5 21.8 10.6 27.3	m U m U	0.38 0.70 0.14 0.83	13.4 20.7 10.9 27.3	m () m ()	0.31 0.55 0.12 0.76	12.6 16.3 10.7 22.3	m m m U	0.33 0.52 0.15 0.76	12.7 15.8 11.0 22.3	ш ш ш U	0.53 0.42 0.16 0.98	15.8 14.3 11.1 46.7	0000	0.56 0.41 0.97	6 16.3 1 14.2 7 11.2 7 46.0	0000	0.23 0.27 0.09 0.83	11.6 12.2 10.4 26.4	0 0 0 0	0000	0.24 11 0.26 12 0.10 10 0.83 26	11.7 E 12.0 E 10.5 E 26.4 (	m m m O
38th Avenue (E-W) @ 29th Street (NB)	EB-LT WB-TR NB-LTR	0.42 0.66 0.28	14.3 19.1 12.2	<b>000</b>	0.43 0.62 0.28	14.4 17.8 12.3	000	0.39 0.63 0.36	13.6 13.3	<b>888</b>	0.40 0.60 0.37	13.7 17.4 13.4	<b>888</b>	0.71 0.41 0.41	21.0 13.9 14.0	Omm	0.71 0.42 0.44	1 21.0 2 13.9 4 14.4	Omm	0.33 0.28 0.26	12.7 12.1 12.0	B B B		0.34 12 0.27 12 0.27 13	12.8 12.0 12.1	m m m
Notes:																										

Notes:

EB - eastbound, WB - westbound, NB - northbound, SB - southbound

EB - eastbound, WB - westbound, NB - northbound, SB - southbound

EW. Ratio - Volume to capacity ratio, sec/veh - seconds per vehicle

Sec/veh - seconds per vehicle

Sec/veh - seconds per vehicle

- Denotes a significant adverse impact based on CEQR Technical Manual criteria.

Analysis is based on the 2000 Highway Capacity Manual methodology (HCS 2000 4.1f).

2017 With-Action Off-Street Public Parking Conditions Table S-3

		No-Action Conditions	onditions				With-	With-Action Conditions	ions		
Period	Total Capacity <sup>(a)</sup>	Estimated Demand <sup>(b)</sup>	Spaces Available	Utilization	Public Spaces Displaced <sup>(c)</sup>	New Public Spaces Provided <sup>(d)</sup>	Total Capacity	With Action Increment Demand <sup>(e)</sup>	Total Estimated N Demand	Net Spaces Available	Utilization
Weekday AM	1,996	1,097	868	25%	200	0	1,796	0	1,097	669	61%
Weekday Midday	2,458	3,541	-1,083	144%	200	0	2,258	0	3,541	-1,283	157%
Saturday Midday	2,158	1,075	1,083	%09	200	0	1,958	0	1,075	883	25%

Notes:

(a) Reflects existing parking facilities displaced by new development, and new public parking facilities planned by 2017.

(b) Includes 0.5 percent/year background growth for the 2008 through 2017 period.
(c) Reflects displacement of 200-space public parking facility on Projected Development Site 4.
(d) No new public parking is projected in the With Action condition.
(e) All incremental demand from projected development sites is expected to be accommodated in accessory parking facilities.

parking in the study area, and as the displacement of 200 parking spaces would represent a change of less than 10 percent compared to the capacity in the study area under No-Action conditions, the proposed actions would not result in a significant adverse impact to off-street public parking under *CEQR Technical Manual* criteria. The reduction in capacity may, however, result in additional vehicles parking on-street at metered parking spaces and non-metered parking spaces regulated by street cleaning rules in the weekday midday period, and motorists walking greater distances to their destinations.

The supply of on-street parking within the study area is expected to remain relatively unchanged in the future with the proposed actions. The 416 metered parking spaces located within the study area are expected to remain at capacity, as are the non-metered curbside parking spaces. There would be minimal curbside capacity available to relieve the projected over-capacity conditions on the off-street public parking system in the weekday midday.

## TRANSIT AND PEDESTRIANS

As shown in Table ES-4, the RWCDS would result in a net reduction of 259 inbound subway trips and a net increase of 489 outbound subway trips in the weekday AM peak hour, an increase of 153 inbound and 146 outbound subway trips in the midday peak hour, and an increase of 475 inbound subway trips and a net reduction of 139 outbound subway trips in the weekday PM peak hour. There would be 44 fewer inbound trips by bus and 19 more outbound trips by bus in the weekday AM peak hour, one fewer inbound and six fewer outbound bus trips in the midday, and 29 more inbound and 26 fewer outbound bus trips in the weekday PM peak hour. Trips by walking-only, bicycle or other non-vehicular modes would increase by 40 inbound and 222 outbound in the weekday AM peak hour, 152 inbound and 95 outbound in the midday and 332 inbound and 200 outbound in the weekday PM peak hour. Given the rezoning area's distance from commuter rail stations in Long Island City, (both existing and planned), most if not all project-generated commuter rail trips are expected to arrive or depart the area via other modes (primarily subway and bus).

Table ES-4
Transit and Pedestrian Travel Demand Forecast for the Proposed Actions (Person Trips)

	AM	Peak F	lour	Midd	ay Pea	k Hour	PN	l Peak F	lour
	In	Out	Total	ln	Out	Total	In	Out	Total
Subway	-259	489	230	153	146	299	475	-139	336
Local Bus	-44	19	-25	-1	-6	-7	29	-26	3
Walk	40	222	262	152	95	247	332	200	532

# **SUBWAY**

The greatest incremental increase in subway trips as a result of the proposed actions would occur at the 39<sup>th</sup> Avenue (N, W) station and the Queens Plaza (E, G, R, V) station. The proposed actions would generate an estimated 159 and 203 new subway trips in the AM and PM peak hours, respectively, at the 39<sup>th</sup> Avenue station, and an estimated 106 and 153 new trips during these periods, respectively, at the Queens Plaza station. All other subway stations serving the rezoning area would experience a net increase of 22 or fewer trips in each peak hour or, in the case of the 36<sup>th</sup> Street station, a net decrease in peak hour trips. *CEQR Technical Manual* criteria typically require a detailed analysis of a subway station when the incremental increase in peak hour trips totals 200 persons per hour or more. As new subway trips generated by

the proposed actions in 2017 would exceed this threshold in the weekday PM peak hour at the 39<sup>th</sup> Avenue (N, W) subway station, this station is analyzed quantitatively in this EIS. The results of the analysis of future 2017 conditions with the proposed actions show that the station's fare array and both street stairways would continue to operate below capacity at an acceptable LOS A or B in both the AM and PM peak hours. The proposed actions would therefore not result in significant adverse impacts at the 39<sup>th</sup> Avenue (N, W) subway station in 2017.

#### BUS

As shown in Table ES-4, compared to No-Action conditions, the proposed actions would generate a net reduction of 25 bus trips in the weekday AM peak hour and a net increase of three bus trips in the weekday PM peak hour. The net change in bus trips in each peak hour would be distributed among the ten bus routes operating within one quarter-mile of projected development sites. As the proposed actions would result in a net reduction of 25 bus trips in the weekday AM peak hour, and a net increase of only three bus trips in the weekday PM peak hour (less than the *CEQR Technical Manual* analysis threshold of 200 trips below which significant bus impacts are considered unlikely), and as the net increase in bus trips in the PM peak hour would be distributed among the multiple bus routes serving the proposed rezoning area, no significant adverse impacts to local bus services are anticipated to result from implementation of the proposed actions.

## **PEDESTRIAN**

The proposed actions would generate new pedestrian demand on analyzed sidewalks, corner areas and crosswalks by 2017. This new demand would include trips made solely by walking, as well as pedestrian trips en route to and from subway station entrances and bus stops. As shown in Table ES-4, the proposed actions are expected to generate a net total of 262 walk-only trips in the weekday AM peak hour, 247 in the midday and 532 in the weekday PM peak hour. Trips en route to and from area subway stations and bus stops would account for an additional 205, 292 and 333 new pedestrian trips during the weekday AM, midday and PM peak hours, respectively.

For sidewalks outside of the Manhattan CBD (the area of Manhattan below 60<sup>th</sup> Street) and downtown Brooklyn, *CEQR Technical Manual* criteria define a significant adverse impact to have occurred when the flow rate increases by two or more pedestrians per foot per minute (PFM) over No-Action conditions characterized by flow rates over 13 PFM (mid-LOS D). Increments of one PFM may be perceptible, but not necessarily significant impacts.

In the future with the proposed actions, all analyzed sidewalks would continue to operate at an acceptable LOS A or B under platoon conditions in all peak hours. As all analyzed sidewalks would continue to operate with flow rates of less than 13 PFM in all analyzed peak hours, no significant adverse sidewalk impacts are anticipated to result from the proposed actions.

For crosswalk and corner areas outside of the Manhattan CBD and downtown Brooklyn, *CEQR Technical Manual* criteria define a significant adverse impact as a decrease in pedestrian space of one or more square feet per pedestrian when the No-Action condition has an average occupancy under 20 square feet per pedestrian (mid-LOS D). Increments of one square foot or more applied to No-Action conditions within LOS D or any deterioration from LOS C or better to LOS D may be perceptible, but not necessarily significant impacts. With the implementation of the proposed actions, all analyzed corners and crosswalks would continue to operate at an acceptable LOS A or B in the weekday AM, midday and PM peak hours. As all analyzed corners and crosswalks would continue to operate with an average occupancy of more than 20 square feet per pedestrian in all analyzed peak hours, no significant adverse impacts to corner areas or crosswalks are anticipated.

# **AIR QUALITY**

#### **MOBILE SOURCE ANALYSIS**

In the future with the proposed actions, there would be no significant adverse mobile source air quality impacts (i.e., *de minimis* criteria were not exceeded). In addition, with or without the proposed actions in 2017, maximum predicted CO concentrations in the rezoning area would be less than the corresponding ambient air quality standards (Table ES-5).

Table ES-5
Build (2017) Maximum Predicted 8-Hour
Carbon Monoxide Concentrations (parts per million)

Site	Location	Time Period	Project Build 8-Hour Concentration (ppm)	Not-To-Exceed  De minimis  Criteria  (ppm)
1	31 <sup>st</sup> Street and 39th Avenue	Weekday PM	2.7	5.9
1	31 Succe and 37th Avenue	Saturday MD	2.5	5.7
2	39 <sup>th</sup> Avenue and Northern Boulevard	Weekday PM	3.6	6.3
2	39 Avenue and Normern Boulevard	Saturday MD	3.0	6.0
2	31 <sup>st</sup> Street and 38th Avenue	Weekday PM	2.7	5.8
3	31 Succi and 38th Avenue	Saturday MD	2.4	5.6

#### **Notes:**

8-hour CO standard is 9 ppm.

An adjusted ambient background concentration of 2.0 ppm is included in the project build values presented above.

## STATIONARY SOURCE ANALYSES

The stationary source analyses determined that there would be no potential significant adverse air quality impacts from HVAC systems of the projected and potential development sites. At certain sites, an (E) designation would be mapped as part of the zoning proposal to ensure the developments would not result in any significant air quality impacts from HVAC emissions due to individual or groups of development sites.<sup>5</sup>

An analysis of the cumulative impacts of industrial sources on projected and potential development sites was performed. At most of the development sites, the maximum concentrations of each pollutant were below the NYSDEC guideline concentrations and health risk criteria established by regulatory agencies, and below the NAAQS. However, at certain projected and potential development sites in the vicinity of existing sources of sodium hydroxide and tetrachloroethylene, ambient levels of these pollutants were

<sup>&</sup>lt;sup>5</sup> Prior to publication of the FEIS, DCP learned that certain development sites within the rezoning area are being developed for hotel use (see footnote 3 on page ES-10). Therefore, these sites have been removed from the list of sites receiving E-designations (see Appendix F, "Air Quality E-Designations").

found to result in elevated concentrations. Therefore, at these projected and potential development sites an (E) designation for air quality will be mapped as part of the zoning proposal to ensure that there would not be any significant adverse air quality impacts associated with the rezoning. The industrial source analysis determined that there would be no potential significant adverse air quality impacts from industrial sources on the projected and potential development sites, since the maximum concentrations of each pollutant were below the NYSDEC guideline concentrations and health risk criteria established by regulatory agencies, and below the NAAQS. Therefore, the E-designations proposed in the DEIS to avoid such impacts from industrial source air emissions would not be needed.

## **NOISE**

In the future with the proposed actions, the maximum increase in sound would be less than 1 dBA. Increases of this magnitude would be imperceptible and, according to CEQR criteria, insignificant (Table ES-8). To maintain acceptable interior noise levels, E-designations for noise will be mapped on the necessary development sites as part of the rezoning action to ensure that there would not be any significant adverse noise impacts. As a result, there is no potential for the proposed actions to result in a significant adverse noise impact. At some locations during certain time periods the noise levels would be less in the future with the proposed actions. This is due to changes that would occur in truck routes that would occur with the proposed actions.

Table ES-<u>8</u> Noise Impact Screening Analysis Results

				dB	A		
Site	Time	Existing L <sub>eq</sub>	No Build $L_{eq}$	No Build Increment	$\begin{array}{c} \textbf{Build} \\ \textbf{L}_{\textbf{eq}} \end{array}$	Build Increment	Build L <sub>10</sub>
	AM	71.7	72.4	0.7	72.3	-0.1	75.3
1	MD	68.9	69.8	0.9	69.8	0.0	72.2
	PM	69.0	69.7	0.7	69.8	0.1	71.9
	AM	64.6	65.0	0.4	65.0	0.0	67.4
2	MD	66.7	67.2	0.5	67.3	0.1	70.4
	PM	64.0	64.6	0.6	64.6	0.0	66.6
	AM	66.8	67.3	0.5	67.3	0.0	69.9
3	MD	63.9	64.5	0.6	64.5	0.0	67.7
	PM	61.4	62.0	0.6	62.0	0.0	65.6
	AM	73.3	74.3	1.0	74.2	-0.1	76.6
4	MD	70.7	71.6	0.9	71.5	-0.1	74.2
	PM	71.2	72.3	1.1	72.3	0.0	74.8
	AM	64.0	65.1	1.1	64.6	-0.5	65.4
5	MD	65.2	66.3	1.1	66.2	-0.1	69.0
	PM	65.4	66.4	1.0	66.5	0.1	68.1
	AM	70.1	71.9	1.8	71.9	0.0	74.9
6	MD	70.0	72.6	2.6	72.6	0.0	76.4
	PM	68.3	69.7	1.4	69.8	0.1	74.9
	AM	71.9	72.2	0.3	72.3	0.1	74.4
7	MD	69.7	70.0	0.3	70.1	0.1	71.1
	PM	68.6	68.9	0.3	68.9	0.0	71.4

Appendix G, "Noise E-Designations").

<sup>&</sup>lt;sup>6</sup> Prior to publication of the FEIS, DCP learned that certain development sites within the rezoning area are being developed for hotel use (see footnote 3 on page ES-10). Therefore, these sites have been removed from the list of sites receiving E-designations (see

# MECHANICAL EQUIPMENT

No detailed designs of the mechanical systems (i.e., heating, ventilation, and air conditioning systems) for buildings on the projected or potential development sites are available at this time. However, it is assumed that those systems would be designed to meet all applicable noise regulations and requirements, and designed to produce noise levels that would not result in any significant increases in ambient noise levels.

## CONSTRUCTION IMPACTS

Construction-related activities resulting from the proposed project are not expected to have any significant adverse impacts on land-use, socioeconomic conditions, community facilities and services, open-space, natural resources, traffic and parking, air quality, noise and vibration, infrastructure, or hazardous materials conditions. Both direct and indirect construction-related impacts could potentially occur to several eligible historic resources. These significant adverse impacts would be unmitigated because development activity on development sites nearby or adjacent to these eligible resources would occur within the limitations of the area's new zoning. Since the resources are not NR-listed or NYLPC-designated, they would not be afforded special protections under NYCDOB's *Technical Policy and Procedure Notice 10/88*. The resources would be provided a measure of protection from construction under Building Code Section 27-166 (C26-112.4), which requires that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the requirements of Building Construction Subchapter 7 and Building Code Subchapters 11 and 19.

# **PUBLIC HEALTH**

The CEQR Technical Manual states that an EIS public health assessment should provide a thorough consideration of potential public health issues. Implementation of the proposed project could potentially raise the following public health issues.

## HAZARDOUS MATERIALS

New York State solid waste regulations control how contaminated demolition debris and contaminated materials associated with construction are handled and disposed. Adherence to these and other applicable regulations, as well as the assignment of an (E) designation to each of the projected development sites will minimize impacts from the potential presence of contaminated materials.

# AIR QUALITY

Cumulative impacts were also determined for the combined effects of air contaminants affecting a proposed development site. The maximum hazard index and total cancer risk were determined using the AERMOD model results with the applicable reference concentrations and unit risk factors discussed in Chapter 17, "Air Quality". As presented in Chapter 17, for non-carcinogenic compounds, EPA's Hazard Index Approach resulted in a calculated value of 0.548, which is less than 1.0, which is considered to be insignificant. For carcinogenic compounds, the maximum total estimated cancer risk is 9.03 E-06 or 9.03 per million. While the maximum cancer risk is above the level considered by USEPA to be potentially significant (i.e., 1 per million), it should be noted that the concentrations are compared against EPA unit risk factors and NYSDEC AGC's (each of which was developed by these agencies based on a factor of safety above which health effects may potentially occur), whereas the health risk analysis is based upon a lifetime exposure at the predicted concentrations for a single location, which is a very conservative approach. Therefore, based upon the cumulative air toxics analysis, the proposed project would not result in a significant cancer risk.

# Stationary Source Analyses

The stationary source analysis determined that there would be no potential significant adverse air quality impacts from HVAC systems of the projected and potential development sites. At certain sites, an (E) designation would be mapped as part of the zoning proposal to ensure the developments would not result in any significant air quality impacts from HVAC emissions due to individual or groups of development sites.

An analysis of the cumulative impacts of industrial sources on projected and potential development sites was performed. The industrial source analysis determined that there would be no potential significant adverse air quality impacts from industrial sources on the projected and potential development sites, since the maximum concentrations of each pollutant were below the NYSDEC guideline concentrations and health risk criteria established by regulatory agencies, and below the NAAQS.

At most of the development sites, the maximum concentrations of each pollutant were below the NYSDEC guideline concentrations and health risk criteria established by regulatory agencies, and below the NAAQS. However, at certain projected and potential development sites in the vicinity of existing sources of sodium hydroxide and tetrachloroethylene, ambient levels of these pollutants were found to result in elevated concentrations. Therefore, at these projected and potential development sites an (E) designation for air quality will be mapped as part of the zoning proposal to ensure that there would not be any significant adverse air quality impacts associated with the rezoning.

#### **CONSTRUCTION NOISE**

Construction noise associated with the projected development sites is expected to be typical of other similar construction projects in the city. No significant impacts are expected to result from the proposed actions.

Based on the above, a full assessment of potential impacts on public health is not necessary. No significant adverse impacts are expected as a result of the proposed project.

#### **MITIGATION**

#### **OPEN SPACE**

As described in Chapter 5, "Open Space", the proposed actions would result in a significant adverse impact to open space as a result of an introduction of a substantial number of new residents. As described in Chapter 3D, Section 500 of the *CEQR Technical Manual*, measures to mitigate open space impacts can include: 1) creation of new public space of the type needed to serve the proposed action's new population either on the project site or in the study area; 2) improving existing open spaces in the study area; and, 3) in the case of alienation or conversion of parkland, replacement of the parkland. Only the first and second potential mitigation measures apply in the case of the proposed actions since no alienation of parkland is proposed. Potential options available for off-setting the impact on study area open space include:

Between DEIS and FEIS potential measures to mitigate the significant adverse impact on passive open space resources were explored in coordination with the city's Department of Parks and Recreation (DPR). As was noted in the DEIS, there is limited City-owned vacant property that is available and suitable for open space creation, so options explored included improvements to existing open spaces, such as the Dutch Kills Playground and Queensbridge Park. These improvements could include:

- Overhaul the tennis courts at the Dutch Kills Playground at P.S. 112 by replacing the asphalt, reconstructing the perimeter walls, repainting the lines, and adding nets. Also rehab the basketball courts at the Playground by replacing the asphalt and reconstruct the backboards.
- <u>Integrate the Queensbridge Park allee into the Queens East River and North Shore Greenway by adding new pavement, benches for seating, bike racks, and greenway signage.</u>

However, funding for these improvements has not been programmed although both DPR and DCP are committed to pursue funding opportunities. Further, these would not constitute sufficient mitigation for the proposed actions significant adverse open space impact. DPR will continue to work with other city agencies to identify sites for long term opportunities for open space improvements in the Dutch Kills area. But, in the absence of the implementation of mitigation measures, unmitigated conditions would remain for the open space impacts of the proposed actions.

- 1. Funding portions or all of the unfunded improvements proposed by DCP/EDC to the currently underutilized Queensbridge Baby Park as part of the Queens Plaza project. Possible improvements include a handball court renovation. The total park acreage is approximately 2.10 acres.
- 2. Providing a new street plaza at 12<sup>th</sup> Street between 43<sup>rd</sup> Road and 44<sup>th</sup> Avenue. This space is approximately 0.22 acre.
- 3. Improvements to the space adjacent to Queensbridge Baby Park to integrate this space into the proposed Queens East River and North Shore Greenway. Acreage unknown.
- 4. Adding a comfort station to the playground 35 at Steinway Street, 35<sup>th</sup> Avenue. This feature would lead to an increase in community usage. Acreage unknown.
- 5. Provide improvements to the large asphalt yard at the Dutch Kills Playground at P.S. 112 at Crescent Street between 36<sup>th</sup> and 37<sup>th</sup> Avenues which would increase its utilization. Approximate asphalt yard acreage: 0.8 acre.

These open spaces all fall within both the ¼-mile and ½-mile study areas. These and other potential measures to mitigate the significant adverse impact on open space resources will be explored between the Draft and Final EIS. Further coordination between NYCDCP, NYCDPR, and potentially developers would be required to mitigate open space impacts associated with the proposed actions.

## **TRAFFIC**

The effectiveness of the proposed traffic mitigation plan, in terms of addressing significant adverse impacts that would result from the proposed project, is shown in Table ES-9. As discussed below, the proposed traffic mitigation measures would fully mitigate most of the traffic impacts that would occur as a result of the proposed actions in each peak hour. However, two impacts at the intersection of Northern Boulevard and Steinway Street/39<sup>th</sup> Street would remain unmitigated in the weekday PM peak hour.

# **PARKING**

As discussed in Chapter 15, "Traffic and Parking," it is anticipated that all parking demand from development of the reasonable worst case development scenario (RWCDS) under with-action conditions would be accommodated in accessory parking facilities, and would not contribute to a projected deficit of 1,283 off-street public parking spaces in the parking study area in the weekday midday. The displacement of one existing off-street public parking facility under the RWCDS would, however, reduce available capacity in the study area by 200 spaces, although this would not be considered a significant adverse impact under *CEQR Technical Manual* criteria.

There are presently a total of approximately 416 metered curbside parking spaces within one quarter-mile of projected development sites. The changes to curbside parking regulations proposed as part of the traffic mitigation plan would result in the displacement of approximately eight metered spaces along Northern Boulevard (four at 39<sup>th</sup> Avenue and four at Steinway Street/39<sup>th</sup> Street), and restrict parking at an additional four spaces at 38<sup>th</sup> Avenue during the weekday PM peak period. The elimination of eight metered parking spaces would represent a change of less than two percent in the total on-street parking capacity available at metered parking spaces within one quarter-mile of projected development sites, and would not constitute a new significant adverse impact.

Table ES-<u>9</u>
2017 Future With-Action w/Mitigation Conditions
Levels of Service at Signalized Intersections

						AM PEAK	HOUR					
			2017 No-Actio	on		2017 With-Ac	tion			2017 With-	Action w/Mitig	gation
SIGNALIZED INTERSECTION	Lane Group	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio	1	Delay (sec/veh)	LOS
Northern Boulevard (E-W) @	EB-L	1.30	184.4	F	1.22	155.3	F			1.12	147.3	F
40th Avenue (W)/	EB-T	0.58	9.8	Α	0.58	9.8	Α			0.59	10.9	В
31st Street (SB)	WB-T	0.73	12.0	В	0.72	11.9	В			0.85	23.4	С
	SB-LTR	0.94	78.8	Е	0.98	89.3	F	*		0.91	71.9	E
Northern Boulevard (E-W) @	EB-L	0.40	33.3	С	0.40	33.3	С			0.40	33.3	С
Steinway Street (SB)/	EB-TR	0.80	25.1	С	0.83	26.3	С		EB-T	0.61	18.9	В
39th Street Bridge (NB)									EB-R	0.30	14.6	В
	WB-L	1.36	229.2	F	1.46	271.7	F	*		0.98	86.1	F
	WB-TR	0.88	27.2	С	0.87	26.4	С			0.87	26.4	С
	NB-L	1.13	148.1	F	1.12	145.3	F			1.12	145.3	F
	NB-TR	1.21	176.0	F	1.21	174.5	F			1.21	174.5	F
	SB-LTR	0.92	78.2	E	0.92	77.8	E			0.92	77.8	E

						MIDDAY PE	AK HOUR					
			2017 No-Acti	on			ith-Action		2017 With	-Action w/Mit	igation	
	Lane	V/C Ratio	Delay (sec/veh)		V/C Ratio	Delay (sec/veh)		V/C Ratio	)	Delay (sec/veh)		
Northern Boulevard (E-W) @	Group EB-L	1.35	205.0	LOS F	1.37	215.9	LOS F	*	0.91	72.7	LOS E	
40th Avenue (W)/	EB-T	0.63	10.7	В	0.63	10.7	В		0.63	10.7	В	
31st Street (SB)	WB-T	0.66	11.3	В	0.66	11.3	В		0.76	19.7	В	
	SB-LTR	0.85	65.4	E	0.86	67.2	E		0.86	67.2	E	
Northern Boulevard (E-W) @	EB-L	0.23	9.1	А	0.23	9.3	Α		0.23	9.3	Α	
39th Avenue (N)/	EB-TR	0.63	10.7	В	0.63	10.7	В		0.63	10.7	В	
Honeywell Street Bridge (N-S)	WB-LTR NB-LTR	1.01 0.64	42.9 48.6	D D	1.08 0.65	65.5 49.1	E D	*	1.00 0.65	39.9 49.1	D D	
					1			*				
Northern Boulevard (E-W) @ Steinway Street (SB)/	EB-L EB-TR	1.00 0.93	129.0 39.3	F D	1.01 0.94	133.1 40.3	F D	EB-T	1.00 0.70	129.0 24.5	F C	
	LB-IK	0.93	39.3	D	0.94	40.3	Ь					
39th Street Bridge (NB)								EB-R	0.33	18.1	В	
	WB-L	1.54	328.5	F	1.61	357.3	F	*	0.91	86.1	F	
	WB-TR	0.87	32.4	С	0.87	32.7	С	WB-T	0.80	28.2	С	
								WB-R	0.01	14.1	В	
	NB-L	0.68	54.2	D	0.70	55.3	E		0.70	55.3	Е	
	NB-TR	1.19	157.0	F	1.18	155.9	F		1.18	155.9	F	
	SB-LTR	1.01	98.3	F	1.01	98.3	F		1.01	98.3	F	
						PM PEAK H	IOUR	<u> </u>				
			2017 No-Acti	on			ith-Action		2017 With	-Action w/Mit	igation	
	Lane Group	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	)	Delay (sec/veh)	LOS	
Northern Boulevard (E-W) @ 40th Avenue (W)/	EB-L EB-T	2.35 0.68	649.3 10.9	F B	2.67 0.68	790.8 10.9	F B	*	1.37 0.69	240.6 11.6	F B	
31st Street (SB)	WB-T	0.79	14.8	В	0.80	15.1	В		0.05	34.2	С	
STAL SILECT (SD)												
	SB-LTR	1.05	105.4	F	1.04	104.7	F		1.00	92.2	F	
Northern Boulevard (E-W) @	EB-L	0.25	10.6	В	0.26	11.4	В		0.28	12.3	В	
39th Avenue (N)/	EB-TR	0.67	10.9	В	0.68	10.9	В		0.68	11.5	В	
Honeywell Street Bridge (N-S)	WB-LTR NB-LTR	1.31 0.86	161.9 60.6	F E	1.36 0.90	184.3 65.2	F E	*	1.28 0.87	148.6 59.8	F E	
Northern Boulevard (E-W) @	EB-L	0.95	90.5	F	1.01	108.8	F	*	0.72	37.2	D	
38th Avenue (NS)/	EB-TR	0.58	9.4	Α	0.59	9.5	Α		0.59	9.5	A	
35th Street (NB)	WB-TR	0.82	15.7	В	0.83	16.4	В	WB-T	0.66	11.1	В	
, ,								WB-R	0.21	6.5	Α	
	NB-LTR	1.13	133.6	F	1.12	128.2	F		1.12	128.2	F	
Northern Boulevard (E-W) @	EB-L	0.65	47.4	D	0.69	55.0	D	*	0.66	49.7	D	**
Steinway Street (SB)/	EB-TR	0.99	40.0	D	0.98	39.0	D		0.98	39.0	D	- 1
39th Street Bridge (NB)	WB-L	1.00	112.6	F	1.00	112.6	F	WB-L	1.00	112.6	F	
	WB-T	0.83	26.2	С	0.85	27.2	С	WB-T	0.77	23.3	С	
	WB-R							WB-R	0.02	11.5	В	
	NB-L	0.85	78.0	E	0.89	83.0	F	*	0.89	83.0	F	**
	1	I			1			1				- '
	NB-TR	1.22	176.3	F	1.21	174.9	F		1.21	174.9	F	
	NB-TR SB-LTR	1.22 1.03	176.3 102.8	F F	1.21	174.9 102.8	F F		1.21	174.9 102.8	F F	

						SATU	RDAY MIDDA	Y PEA	K HOUR			
			2017 No-Action	on		2017 With-Ac	tion			2017 Wi	th-Action w/N	litigation
	Lane Group	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio		Delay (sec/veh)	LOS
Northern Boulevard (E-W) @	EB-L	1.27	170.8	F	1.37	209.9	F	*		0.95	76.4	E
40th Avenue (W)/	EB-T	0.56	9.5	Α	0.56	9.5	Α			0.56	9.5	Α
31st Street (SB)	WB-T	0.60	10.1	В	0.60	10.2	В			0.69	17.5	В
	SB-LTR	0.71	54.8	D	0.73	55.7	Е			0.73	55.7	E
Northern Boulevard (E-W) @	EB-L	0.70	52.3	D	0.74	59.0	E	*		0.66	46.2	D
Steinway Street (SB)/	EB-TR	1.00	52.6	D	1.02	58.2	E	*	EB-T	0.77	26.8	С
39th Street Bridge (NB)									EB-R	0.40	19.6	В
	WB-L	1.80	447.1	F	1.80	447.1	F			1.19	182.1	F
	WB-TR	0.78	27.4	С	0.80	28.1	С		WB-T	0.70	24.4	С
									WB-R	0.09	15.0	В
	NB-L	0.48	46.0	D	0.52	47.4	D			0.52	47.4	D
	NB-TR	1.02	102.3	F	1.02	100.7	F			1.02	100.7	F
	SB-LTR	1.06	113.3	F	1.06	112.6	F			1.06	112.6	F

#### **Notes:**

EB - eastbound, WB - westbound, NB - northbound, SB - southbound

L-left, T-through, R-right, DfL-analysis considers a defacto left lane on this approach.

V/C Ratio - Volume to capacity ratio, sec/veh - seconds per vehicle

Sec/veh - seconds per vehicle

LOS - Level of service

Analysis is based on the 2000 Highway Capacity Manual methodology (HCS 2000 4.1f).

## **ALTERNATIVES**

As presented in Chapters 2 through 20, the proposed actions are expected to result in significant adverse impacts in the following technical areas: open space, historical resources (site disturbance) and traffic. Alternatives to the proposed actions were considered to reduce or eliminate the significant adverse impacts anticipated to result from the proposed actions. The Alternatives analysis considered a No Action Alternative, a Lower Density Alternative, and a 3.0 FAR Alternative for Light Industrial Uses. A summary of these technical areas as considered under the alternative scenarios is presented in the sections below.

The No Action Alternative assumes that the proposed zoning changes would not be implemented. This alternative is discussed and analyzed in Chapters 2 through 20 as the "Future Condition Without the Proposed Actions". The No Action Alternative assumes no zoning map amendments and zoning text amendments that would establish the Dutch Kills Subdistrict and Inclusionary Housing Program. The No Action Alternative would not require any discretionary actions.

The Lower Density Alternative considers a zoning proposal with less density for a portion of the proposed rezoning area than that found under the proposed actions. Under the Lower Density Alternative, development would occur on the same projected development sites as the proposed actions, but with lower bulk. However, nine potential development sites (and single lots on three other potential development sites) would be eliminated because they would no longer meet the criteria for inclusion in the RWCDS. Specifically, these nine sites would have FARs at greater than 50 percent of the maximum development potential and therefore would not meet the RWCDS soft site criteria, as discussed in Chapter

<sup>\*</sup> Denotes a significant adverse impact in the with-action condition based on CEQR Technical Manual criteria.

<sup>\*\*</sup> Denotes an unmitigated significant adverse impact based on CEQR Technical Manual criteria.

1 "Project Description". In addition, the affordable housing component of the proposed actions would not apply under the Lower Density Alternative.

The 3.0 FAR Alternative for Light Industrial Uses has been developed in response to comments received during the public review process. This alternative examines increasing the maximum light industrial/commercial floor area ratio (FAR) from 2.0 to 3.0 for selected primarily light industrial uses in the proposed M1-2, M1-2/R5B, M1-2/R5D, and M1-2/R6A zoning districts.

The No Impact Alternative considers a scenario that seeks to avoid, without the need for mitigation, all significant environmental impacts of the proposed actions. This alternative would require a reduction in the net development program considered for projected development sites.

## **TRAFFIC**

Under the No-Action Alternative, traffic demand levels in the study area would increase as a result of general background growth and future developments in the area. Of the nine signalized intersections analyzed, three would have one or more movements experiencing congestion (i.e., operating at LOS E or F or a v/c ratio of 0.90 or above) in the weekday AM peak hour, four in the midday, six in the PM peak hour and two in the Saturday midday peak hour. By comparison, the proposed actions would increase traffic congestion and result in significant adverse impacts at two analyzed intersections in the weekday AM peak hour, three in the midday, four in the PM peak hour and two in the Saturday midday peak hour.

As the Lower Density Alternative would generate fewer vehicle trips than the proposed actions' RWCDS, it would result in fewer significant traffic impacts compared to the proposed actions. In the AM peak hour, two intersections would have one significant impact each, the same as with the proposed actions. In the midday, however, there would be no significant adverse traffic impacts under the Lower Density Alternative compared to a total of four impacted movements at three intersections with the proposed actions. In the PM peak hour, this alternative would result in a total of three impacted movements at three intersections compared to six impacted movements at four intersections with the proposed actions. Lastly, in the Saturday midday peak hour there would be one significant impact at one intersection under the Lower Density Alternative compared to a total of three impacts at two intersections with the proposed actions. The unmitigable impacts to the eastbound and northbound left-turn movements at the intersection of Northern Boulevard and Steinway Street/39<sup>th</sup> Street in the weekday PM peak hour would not occur under the Lower Density Alternative.

To eliminate all significant adverse traffic impacts under a No Impact Alternative, the development program would need to be reduced to approximately 451 additional residential units and 42,364 square feet of destination retail space. This is compared to 1,555 dwelling units and 70,606 square feet of destination retail space under the proposed actions. In order to avoid significant adverse traffic impact, a No Impact Alternative would have to be reduced the total incremental residential development by approximately 70 percent and the total incremental destination retail development approximately 40 percent. Therefore, a No Impact Alternative for traffic is not feasible as it would not result in a development density required to meet the goals and objectives of the proposed actions.

Under the 3.0 FAR Alternative, traffic impacts would be identical to those of the proposed actions.

## **OPEN SPACE**

The open space ratio under the No Action Alternative would be 0.83 acres per 1,000 residents, 0.79 acres per 1,000 residents under the Lower Density Alternative, and 0.78 acres per 1,000 residents as a result of the proposed actions. Under all three scenarios, the open space ratios are below the citywide median

community district open space ratio of 1.5 acres per 1,000 residents and the NYCDCP planning goal of 2.5 acres per 1,000 residents. Any appreciable increase in residential development is likely to result in an increase demand on open space resources resulting in significant adverse impacts on those resources. Therefore, a No Impact Alternative for open space is not feasible as it would not result in sufficient residential development required to meet the goals and objectives of the proposed actions.

Under the 3.0 FAR Alternative, open space impacts would be identical to those of the proposed actions.

As discussed in Chapter 21, "Mitigation," potential measures to mitigate the significant adverse impact on open space resources will be were explored between the Draft and Final EIS (see the discussion on Open Space in the Mitigation section above). It was concluded that the significant adverse impacts would remain unmitigated.

#### HISTORIC RESOURCES

Unavoidable adverse impacts to archaeological resources could potentially occur under the No Action Alternative, Lower Density Alternative, <u>3.0 FAR Alternative</u>, and as a result of the proposed actions. If potential archaeological resources exist on the five lots identified by LPC (Block 367, Lot 23; Block 368, Lot 11; Block 371, Lot 38; Block 398, Lot 1; Block 398, Lot 39), they could potentially be excavated and impacted as the result of private as-of-right development (which would not require further discretionary approvals). These impacts would thus be unavoidable adverse impacts as there are no mechanisms available to require that subsequent private as-of-right development undertake archaeological field tests to determine the presence of archaeological resources or mitigation for any identified significant resources through avoidance or excavation and data recovery.

Adverse impacts to architectural resources could also occur under the Lower Density Alternative and as a result of the proposed actions. Changes to the architectural resources or to their settings could occur as a result of all three scenarios. For instance, indirect impacts from future projects could include blocking public views of a resource, isolating a resource from its setting or relationship to the streetscape, altering the setting of a resource, introducing incompatible visual, audible, or atmospheric elements to a resource's settings or introducing shadows over an architectural resource with sun-sensitive features. It is also possible that some architectural resources in the project area could deteriorate or experience direct impacts through alteration or demolition, while others could be restored. In addition, the status of architectural resources could change under the No Action Alternative. State and National Register (S/NR)-eligible resources could be listed on the Registers, NYCL-eligible properties could be calendared for a designation hearing, and properties pending designation as Landmarks could be designated.

To avoid the proposed action's direct impacts and potential construction-related impacts to historic resources, construction under a No Impact Alternative would have to be avoided on the following development sites:

- Projected Development Site 15 southeast corner of 37<sup>th</sup> Avenue and 24<sup>th</sup> Street;
- Projected Development Site 32 east side of Crescent Street, midblock between 37<sup>th</sup> and 38<sup>th</sup> Avenues;
- Projected Development Site 14 southwest corner of 38<sup>th</sup> Avenue and 30<sup>th</sup> Street;
- Projected Development Site 24 southeast corner of 40<sup>th</sup> Avenue and 28<sup>th</sup> Street;
- Part of Potential Development Site 47 west side of 29<sup>th</sup> Street just north of 40<sup>th</sup> Avenue;
- Projected Development Site 7 south side of 37<sup>th</sup> Avenue between 35<sup>th</sup> and 36<sup>th</sup> Streets, and;
- Potential Development Lot 155 south side of 37<sup>th</sup> Avenue between 34<sup>th</sup> and 35<sup>th</sup> Streets.
- Potential Development Sites #69, #70, #121, and #233 east side of 32<sup>nd</sup> Street between 36<sup>th</sup> and 37<sup>th</sup> Avenues

■ Projected Development Site #34 and Potential Development Sites #42 and #185 – midblock between 28<sup>th</sup> and 29<sup>th</sup> Streets and between 37<sup>th</sup> and 38<sup>th</sup> Avenues

Removal of these development sites would result in a noncontiguous rezoning area. Therefore, a No Impact Alternative for historic resources is not feasible as it would not result in a cohesive rezoning area with uniform regulations consistent with the Special District and would be in conflict with the goals and objectives of the proposed actions.

#### UNAVOIDABLE ADVERSE IMPACTS

#### OPEN SPACE

As described in Chapter 5, "Open Space," the proposed project would result in a significant adverse impact to open space. In the future condition without the proposed actions, the open space ratio would be 0.83 acres per 1,000 residents. As a result of the future condition with the proposed actions, the open space ratio would decrease to 0.78 acres per 1,000 residents, a decrease of approximately 6.83 percent. Like projects in so many areas of the city, the new open space ratio (0.63 acres per 1,000) is less than the DCP goal of 2.5 acres and the CEQR guideline of 1.5 acres for open space; therefore, a significant adverse impact to publicly-accessible open space would result from the proposed project.

The recreational space created under the Quality Housing Program in the future with the proposed actions would contribute to alleviating some of the shortage of open space in the study area. However, because the proposed project would introduce a substantial residential population to a growing area with an existing deficiency of open space, the proposed project would have a significant adverse <a href="effect\_impact">effect\_impact</a> on open space in the study area.

As discussed in Chapter 21, "Mitigation," potential measures to mitigate the significant adverse impact on open space resources were will be explored between the Draft and Final EIS. Depending on the availability of publicly owned vacant land for the creation of new open space and the availability of feasible measures to improve the usability of existing open space resources, the significant adverse open space impact may remain unmitigated. As a result of the limited availability of publicly owned vacant land for the creation of new open space and the availability of feasible measures to improve the usability of existing open space resources, the significant adverse open space impact may remains unmitigated. Potential mitigation measures were explored in coordination with the city's Department of Parks and Recreation (DPR). As was noted Chapter 5, "Open Space," there is limited City-owned vacant property that is available and suitable for open space creation, so options explored included improvements to existing open spaces, such as the Dutch Kills Playground and Queensbridge Park. Measures which could improve overall open space conditions were identified, but these would not constitute sufficient mitigation for the proposed actions significant adverse open space impact. Therefore the significant adverse open space impact may would remain unmitigated. Nonetheless, DPR has demonstrated its commitment to improve existing open space resources and to work with other city agencies to identify sites for long term opportunities for open space uses in the Dutch Kills area.

# HISTORIC RESOURCES

# **Archeological Resources**

As described in Chapter 7, "Historic Resources", five lots were identified within the proposed rezoning area that could potentially experience new in-ground disturbance and possess the potential for intact

archaeological deposits. Resources within portions of the development sites where new construction could occur, absent prior disturbance, would be adversely impacted by new construction. This would constitute a significant adverse impact. The proposed project was assessed for possible mitigation measures in accordance with the guidelines contained in the *CEQR Technical Manual*.

The proposed project is an areawide rezoning and related actions. None of the mitigation options discussed in Chapter 7 would be applicable for the proposed actions, because the affected lots are privately owned. Under the current zoning, or in the future with the proposed actions, the sites could be developed as-of-right and private ownership of the land prevents the city from requiring any archaeological research or testing program, or mandating the preservation or documentation of such remains, should they exist. Since there is no implementation technique, the impacts at the four projected development sites and one potential development site are considered to be an unmitigated and unavoidable adverse impact of the proposed actions.

## **Architectural Resources**

As described in Chapter 7, "Historic Resources", the proposed project could result in a significant adverse impact to up to four historic properties determined eligible for listing on the State and National Registers. No mitigation measures would be applicable because the sites identified for projected and potential development are privately-owned. In the future, if the sites are developed as-of-right in accordance with the new zoning, private ownership of the land would prevent the city from requiring any mitigation. As such, the architectural impacts identified in Chapter 7 are considered to be unmitigated adverse impacts of the proposed action.

## TRAFFIC AND PARKING

As discussed in Chapter 15, "Traffic and Parking," and Chapter 21, "Mitigation," the proposed traffic mitigation measures would mitigate all significant adverse impacts in the AM peak hour, midday peak hour, and the Saturday midday peak hour. Four of the six significant adverse traffic impacts in the weekday PM peak hour would also be mitigated. No reasonable mitigation would be available to mitigate the two remaining significant adverse impacts at the intersection of Northern Boulevard and Steinway Street/39<sup>th</sup> Street in the weekday PM peak hour.

## GROWTH INDUCING ASPECTS OF THE PROPOSED ACTIONS

According to the *CEQR Technical Manual*, a proposed action's growth-inducing aspects chiefly refer to secondary or indirect impacts that could result in additional development. Projects or actions that result in substantially different land use in an area, or substantial new residents or employees coming to an area could induce additional similar development or of support uses.

This EIS evaluates the potential environmental effects of the anticipated changes in land use. While the proposed project would result in more intensive land uses in the areas around public transit and Northern Boulevard and generate new residents, employees and visitors; it is not anticipated that this growth would spill over into adjacent neighborhoods or cause indirect effects in nearby areas that would result in substantial new development.

## IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Under the proposed actions, both natural and man-made resources would be expended in the construction, renovation, reuse, and operation on the 40 projected development sites that is anticipated to occur. These are considered irretrievably committed because once used they can not be recovered. These resources, however, are not considered to be in limited supply, and their use by the proposed project would not adversely impact the availability of such resources for other projects in the city, both now and in the future.

The construction projected under the proposed actions would also require the irreversible and irretrievable commitment of energy, construction materials, human effort, and monetary funds. The proposed actions would also result in the increased consumption of energy. These, however, are not considered significant adverse impacts.