DRAFT SCOPE OF WORK
for the
ENVIRONMENTAL IMPACT STATEMENT
for the proposed

EAST FORDHAM ROAD REZONING

March 28, 2013
CEQR No.: 13DCP107X
ULURP Nos.: Pending

LOCATION: Bronx, New York

LEAD AGENCY:
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City of New York
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ENVIRONMENTAL IMPACT STATEMENT

CEQR No. 13DCP107X
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INTRODUCTION

This draft scope of work outlines the technical areas to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the proposed East Fordham Road Rezoning ("the proposed action"). The proposed action includes zoning map and zoning text amendments proposed by the New York City Department of City Planning (DCP).

The rezoning area is located in Bronx Community District 6 and is 12 blocks along East Fordham Road in the Belmont neighborhood of the Bronx, Community District 6. The rezoning area is generally bounded by East 191st street to the north, East 187th street to the south, Southern Boulevard to the east and Bathgate Avenue to the west. The proposal includes mapping a medium density commercial district along East Fordham Road between Bathgate Avenue and Southern Boulevard to allow mid-density residential, commercial and community facility development where current zoning permits limited commercial and community facility uses and no residential development. Rezoning proposed for four partial blocks is intended to preserve existing neighborhood character and ensure predictability for future development on narrow streets. Rezoning for one partial block is intended to reflect the existing residential character of the area, and commercial overlays are proposed to reinforce the existing commercial character and create retail continuity. A zoning text amendment is also proposed to establish the Inclusionary Housing program in the proposed C4-5D districts within the proposed rezoning area.

This document provides a description of the proposed action and includes task categories for all technical areas to be analyzed in the EIS. After reviewing an Environmental Assessment Statement (EAS) dated on Friday, March 22, 2013, DCP, acting as lead agency on behalf of the City Planning Commission (CPC), has determined that the proposed action could have the potential for significant adverse impacts in 7 of the 20 impact categories outlined in the CEQR Technical Manual. Therefore, a detailed assessment of likely effects in those areas of concern will be prepared and disclosed in the Draft EIS (DEIS).

The EIS will be prepared in conformity with all applicable laws and regulations, including Executive Order No. 91, New York City Environmental Quality Review (CEQR) regulations, dated August 24, 1977, and will follow the guidelines of the CEQR Technical Manual. The EIS will contain:

- A description of the proposed action and its environmental setting.

- A statement of the environmental impacts of the proposed action, including its short-and long term effects, and typical associated environmental effects.

- An identification of any adverse environmental effects that cannot be avoided if the proposed action is implemented.

- A discussion of any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented.

A description of mitigation measures proposed to minimize any adverse environmental impacts identified.

The environmental analyses in the EIS will assume a development period of ten years for the reasonable worst-case development scenario (RWCDS) for the project (build year 2023), and identify the cumulative impacts of other projects in areas affected by the proposed action. The New York City Department of City Planning, as lead agency, will coordinate the review of the proposed action among the involved and interested agencies and the public.

This document provides a description of and the need and purpose for the Proposed Action, the resulting projected and potential development, and includes task categories for all technical areas to be analyzed in the EIS.

REQUIRED APPROVALS AND REVIEW PROCEDURES

The proposed action requires CPC and City Council approvals through the Uniform Land Use Review Procedure (ULURP), and includes the following actions:

- Zoning map amendment to change portions of 12 blocks along East Fordham Road from Bathgate Avenue to Southern Boulevard from C8-1, R6/C2-4 and R6/C2-3-to C4-5D

- Zoning map amendment to change a partial block on East 189th Street between Cambreleng Avenue and Crotona Avenue from C8-1 to R6

- Zoning map amendment to change 4 partial blocks from R6 to R6B along East 191st Street between Bathgate Avenue and Belmont Avenue

- Zoning map amendment to map new C2-4 commercial overlays along Arthur Avenue between East 187th Street to East Fordham Road

- Zoning text amendment to establish the Inclusionary Housing program in the C4-5D district within the proposed rezoning area in Community District 6, the Bronx.

This draft scoping document sets forth the analyses and methodologies proposed for the EIS. The public, interested agencies, Bronx Community Board 6, and elected officials are invited to comment on the draft scope, either in writing or orally, at a public scoping meeting scheduled for Monday, April 30, 2013 at 10:00 a.m. to be held at the Department of City Planning -Bronx Office, One Fordham Plaza 5th Floor, Bronx, New York, 10458. Comments received during the draft scope's public hearing, and written comments received up to 10 days after the hearing will be considered and incorporated, as appropriate,

into the DEIS. A final scoping document will be used as a framework for preparing the DEIS for the proposed action.

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

DESCRIPTION OF THE PROPOSED ACTION

The New York City Department of City Planning is proposing zoning map and zoning text amendments affecting the Belmont neighborhood in the Bronx, Community District 6. The areas affected by the proposed action include portions of approximately 12 blocks along East Fordham Road generally bounded by East 191st street to the north, East 187th street to the south, Southern Boulevard to the east and Bathgate Avenue to the west (Figure 1).

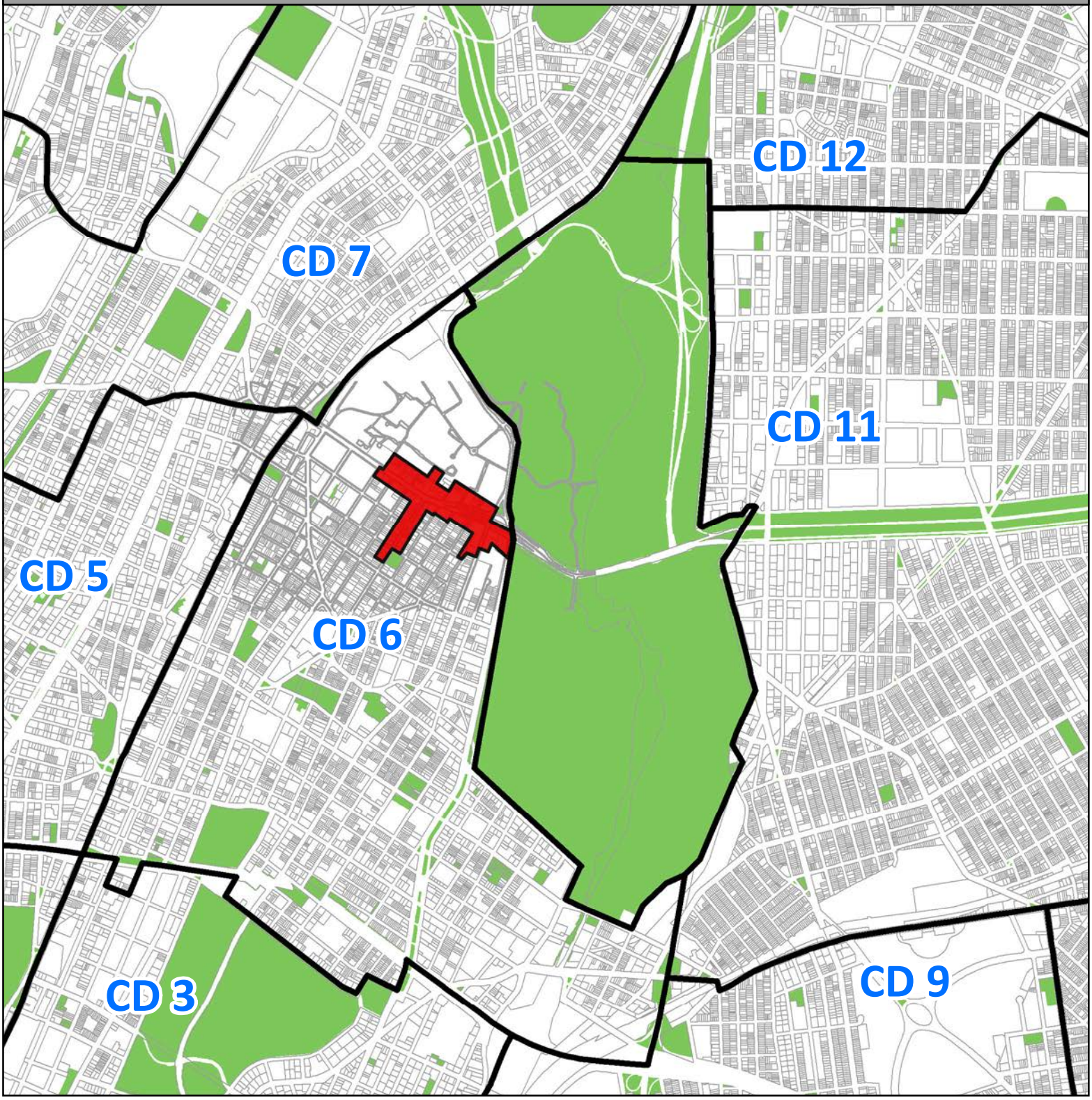
Zoning map amendments are proposed along East Fordham Road between Bathgate Avenue and Southern Boulevard to permit medium density residential, commercial and community facility development within a contextual envelope where current zoning permits low-scale auto-related and commercial uses. A contextual district is proposed to preserve neighborhood character. A residential district is proposed to reflect existing residential character. Commercial overlays are proposed to reinforce the existing commercial character and create retail continuity. A zoning text amendment is also proposed to establish the Inclusionary Housing program in the proposed C4-5D district within the proposed rezoning area. The proposed actions are as follows:

- Zoning map amendment to change portions of 12 blocks along East Fordham Road from Bathgate Avenue to Southern Boulevard from C8-1, R6/C2-4 and R6/C2-3-to C4-5D
- Zoning map amendment to change a partial block on East 189th Street between Cambreleng Avenue and Crotona Boulevard from C8-1 to R6
- Zoning map amendment to change 4 partial blocks from R6 to R6B along East 191st Street between Bathgate Avenue and Belmont Avenue
- Zoning map amendment to map new C2-4 commercial overlays along Arthur Avenue between East 187th Street to East Fordham Road
- Zoning text amendment to establish the Inclusionary Housing program in the C4-5D district within the proposed rezoning area in Community District 6, the Bronx.

Purpose and Need for the Proposed Action

Figure 1: Project Location

East Fordham Road Rezoning



Legend

East Fordham Road Rezoning Area

Bronx Community Districts

0 0.15 0.3 0.6 Miles

N

Source: US Census Bureau

NYC Department of City Planning

The proposed actions seek to achieve the following objectives:

- Create a new gateway to the Central Bronx
- Establish height and bulk limits to establish a unified look and feel of the corridor
- Stimulate revitalization through private investment
- Incentivize permanently affordable housing
- Protect neighborhood character and ensure predictable future development
- Reinforce existing commercial character

Fordham Road is a prominent east-west thoroughfare that serves as the gateway to the Central Bronx. The section of East Fordham Road from Bathgate Avenue to Southern Boulevard, which is the focal point of the rezoning area, differs greatly from the area to the west. Historically, the section of East Fordham Road which encompasses the rezoning area was characterized by auto-related uses including car dealerships, gas stations and auto repair shops. East Fordham Road west of the project area is lined with commercial businesses and thrives with activity on a daily basis. In comparison the rezoning area has limited commercial businesses and lacks the street level activity of the western portion. This lack of retail continuity produces a vastly different pedestrian experience making it feel somewhat desolate. Fordham University, the Bronx Zoo, the Botanical Gardens and the Belmont neighborhood are all impacted by these conditions.

The area is well served by mass transit. Fordham Plaza located just west of project area is the multi-modal transit nexus. Eight bus lines including New York City's first bus rapid transit line all converge at Fordham Plaza. This provides important connections to the B, D, 2, 4 and 5 subway lines and the Fordham Metro-North regional rail station. The Fordham Metro North station with 11,000 daily riders is the third busiest station system-wide for Metro-North Railroad after Grand Central Terminal and Stamford Station and has the highest ridership of any station in the Bronx with 4,509 outbound riders daily

The proposed actions seek to facilitate growth and development along the East Fordham Road corridor by increasing the capacity for commercial and community facility development, introducing residential development which is not permitted today and incentivizing permanently affordable housing. The proposed actions also seek to promote an active and vibrant streetscape through contextual building design requirements that mandate fixed streetwalls and building heights while promoting active ground floor uses which will provide a unified look and feel to the corridor.

The proposed actions seek to preserve neighborhood character through the use of zoning districts that reflect the built context along the narrow streets to the north of East Fordham Road corridor. The proposed contextual district along East 191st Street provides predictability for future development on narrow streets. The proposed residential district between Cambreleng Avenue and Crotona Boulevard reflects the residential character of the area.

Commercial overlays will reinforce the existing commercial character and create retail continuity along Arthur Avenue between the commercial core of Belmont and East Fordham Road.

Existing Zoning

The study area is predominantly zoned with either C8-1 or R6 districts (Figure 2). The C8-1 district encompasses East Fordham Road from Bathgate Avenue to Southern Boulevard and has contributed significantly to this stretch of the corridor's existing development character. R6 zoning districts are mapped north of East Fordham Road along East 191st Street between Bathgate Avenue and Crotona Avenue and along Arthur Avenue between East Fordham Road and East 187th Street. C2-3 and C2-4 commercial overlays are mapped along the north side of East Fordham Road from Hughes Avenue to Crotona Boulevard.

C8-1

The C8-1 district allows commercial and community facility uses in Use Groups 4 through 14 and 16. The most prevalent uses in C8 districts are automotive and heavy commercial uses such as auto repair and showrooms, warehouses, gas stations and car washes. Residential uses are not permitted. The maximum commercial (FAR) is 1.0. The maximum building height is determined by the sky exposure plane, which begins 30 feet above the street line. Community facility uses are permitted a maximum FAR of 2.4. Off-street parking requirements vary with the use, but generally most uses require one accessory parking space per 300 square feet of commercial space.

R6

R6 is a height factor district where residential and community facility uses are regulated by the sky exposure plane. R6 districts typically result in developments between three and twelve stories. Residential FAR ranges from 0.78 to 2.43, with the higher ratio applicable to buildings that provide more open space. Community facility uses are permitted a maximum FAR of 4.8. Residential development under the Quality Housing Program within an R6 District has a maximum FAR of 2.2 on narrow streets (defined as less than 75 feet wide) with a 55-foot building height limit and a maximum of 3.0 FAR on wide streets (defined as 75 feet wide or greater) with a height limit of 70 feet. Off-street parking is required for 70% of the dwelling units. This requirement is lowered to 50% of the units if the lot area is less than 10,000 square feet or if Quality Housing provisions are used. If fewer than five spaces are required, then the off-street parking requirement is waived.

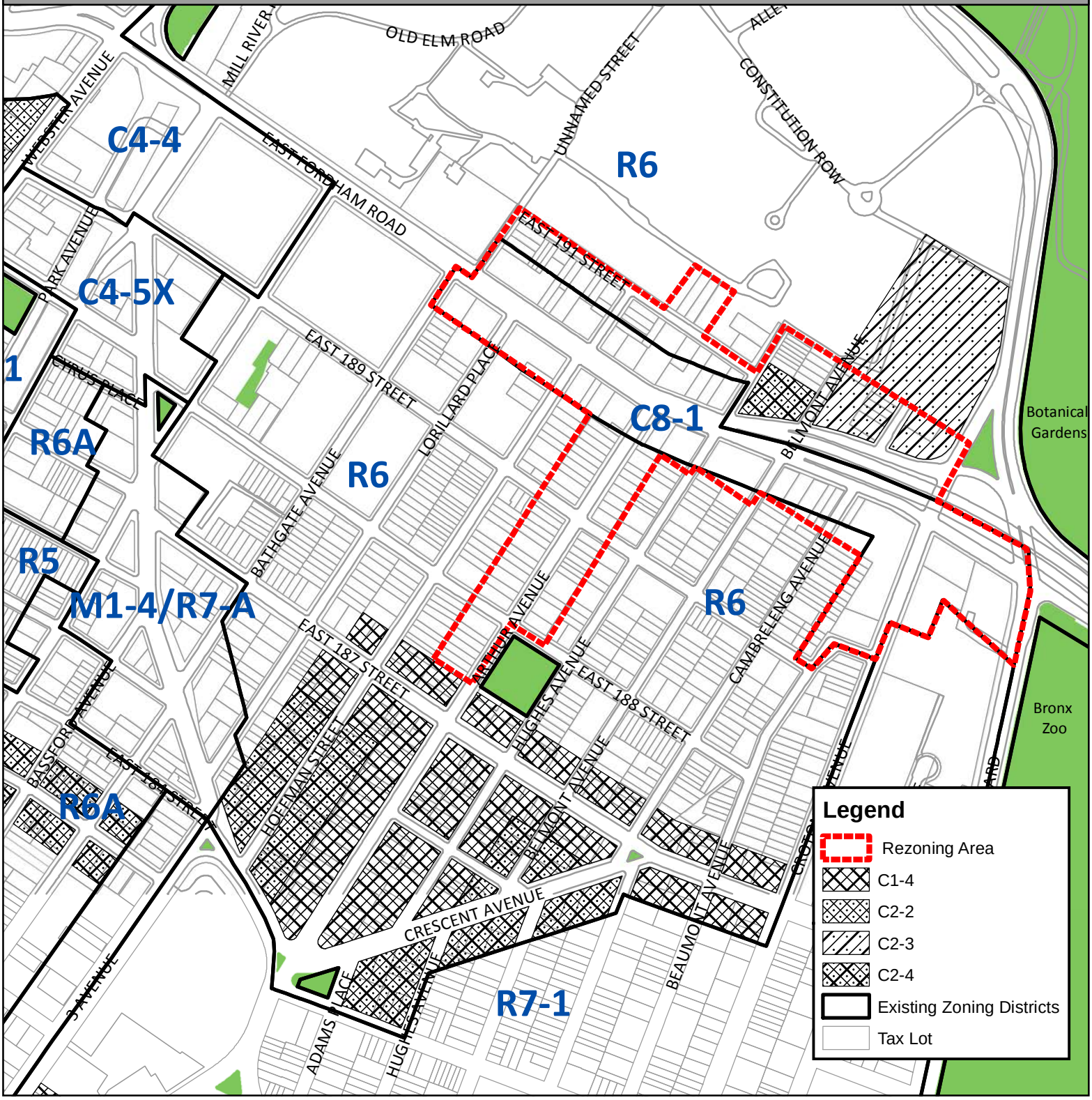
Commercial Overlays

C2-3 and C2-4 commercial overlay districts permit Use Groups 1 through 9 and 14; this includes a wide range of commercial uses frequently used by neighborhood residents including grocery stores, dry cleaners and restaurants with a maximum FAR is 2.0. Commercial uses are limited to the first two floors in a mixed use building and always located below residential uses. C2-3 districts require one accessory parking space per 400 square feet of commercial floor space. C2-4 districts require one parking space per 1,000 square feet of floor area.

Table 1 below provides a summary of the existing allowable density in the rezoning area.

Figure 2: Existing Zoning

East Fordham Road Rezoning



Major Zoning Classifications

R - Residential District
C - Commercial District
M - Manufacturing District

0 0.035 0.07 0.14 Miles

N

Source: NYC Department of City Planning 2012

NYC Department of city Planning

Table 1:

Summary of the Existing Allowable Density in the

East Fordham Road Rezoning Area

Allowed Density (FAR):				Building Form:		
USE	RESIDENTIAL	COMMERCIAL	COMM. FAC.	EXISTING BULK CONTROLS		
ZONING DISTRICT	MAX. FAR	MAX. FAR	MAX. FAR	BUILDING BASE (STREET WALL) MIN.	MAX.	BUILDING HEIGHT MAX
C8-1	1.0	1	2.4	-	60'	SKY EXPOSURE PLANE
R6	2.43/3.0*	-	-	-	-	SKY EXPOSURE PLANE
C2-3 OVERLAY	2.0	-	-	-	-	-
C2-4 OVERLAY	2.0	-	-	-	-	-

* with Quality Housing Program

Source: New York City Department of City Planning, 2013.

Proposed Zoning

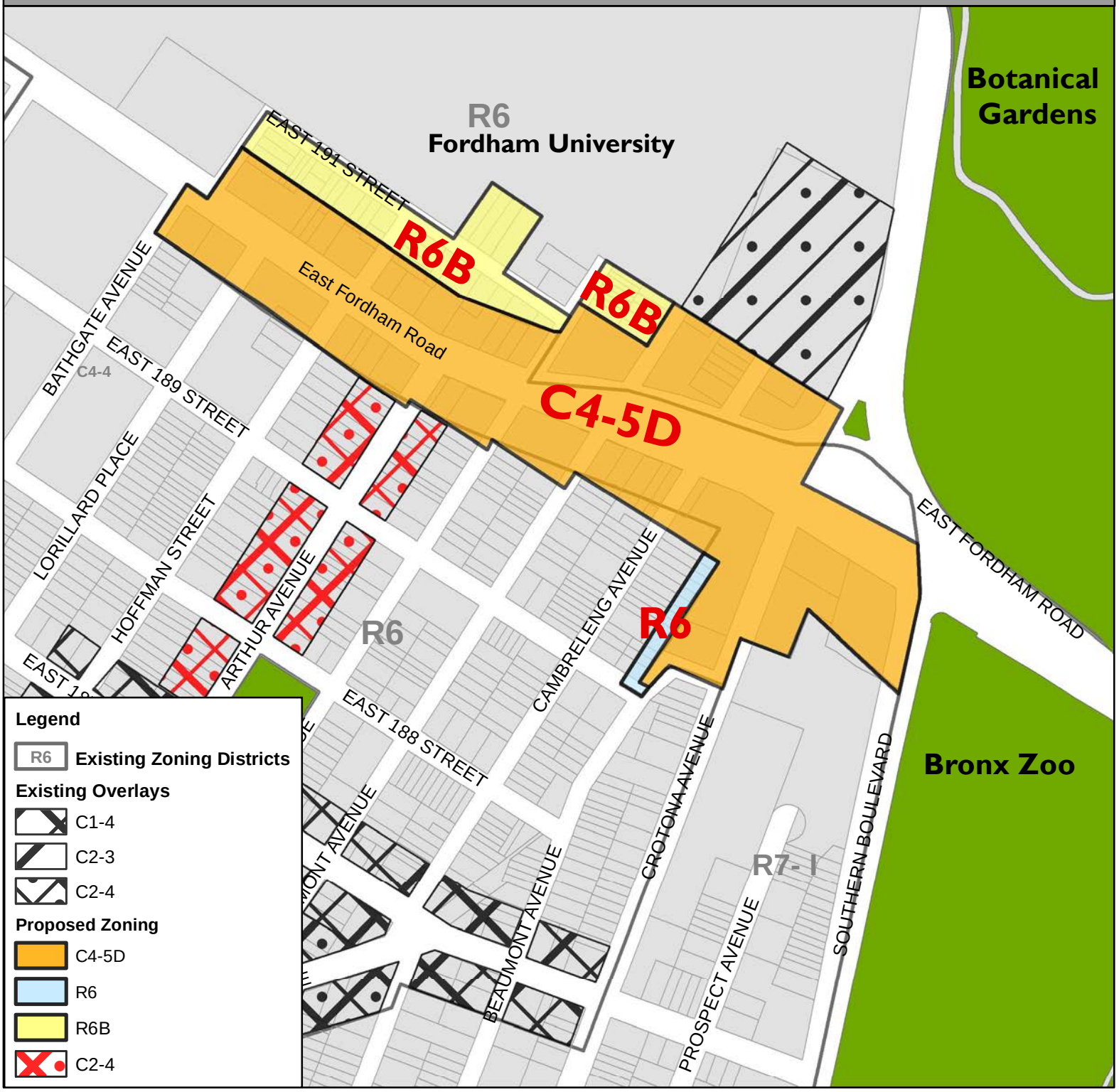
The proposed actions will affect approximately 157 lots on 12 blocks. The proposed zoning map change and text amendment will transform this section of East Fordham Road into a vibrant mixed use area with a strong street wall and active vibrant streetscape. The zoning text amendment makes the Inclusionary Housing Program applicable in the proposed C4-5D zoning district incentivizing the creation of affordable housing. In addition the actions recognize existing uses and built forms, preserving neighborhood character on narrow streets and reinforce the existing commercial character of the area. The proposed zoning changes are as follows (see Figure 3 and Table 2a below):

Proposed C4-5D
Existing C8-1, R6, R6/C2-3 and R6/C2-4

The proposed actions would change the existing C8-1, R6, R6/C2-3 and R6/C2-4 to a C4-5D zoning district for portions of 12 blocks along East Fordham Road from Bathgate Avenue to Southern Boulevard. This area is characterized by a variety of building types and uses including single-story auto-related uses, two-story commercial and community facility buildings and gas stations. There is currently no street wall requirement and the streetscape is haphazard.

Figure 3: Proposed Zoning

East Fordham Road Rezoning



Major Zoning Classifications

R - Residential District
C - Commercial District
M - Manufacturing District

N

0 0.03 0.06 0.12 Miles

Source: NYC Department of City Planning, 2013

NYC Department of City Planning

The C4-5D district permits residential, commercial, and community facility development at a maximum FAR of 4.20. The C4-5D will limit the commercial use types, precluding the auto-related uses that commonly exist along the corridor. The Inclusionary Housing program would be applied to this area, increasing the maximum permitted residential FAR to 5.60, given that the affordable housing requirements are met by the developer. New development must be built within a contextual envelope, requiring a 60- to -85-foot street wall before an allowable setback and having a maximum building height of 100 ft. The proposed C4-5D requires mandatory active ground floor uses and glazing for fifty percent of the building frontage on the ground floor between a height of 2 and 12 feet above curb level with transparent materials.

Proposed R6B
Existing R6

The proposed actions would change the existing R6 district to an R6B district for 4 partial blocks along 191st Street between Bathgate Avenue and Belmont Avenue. This area is predominantly characterized by 2-3 story row houses.

This zoning change would not result in a change to permitted uses. However, changes to the permitted bulk and scale of development and a change to parking requirements would take effect. The R6 districts permit residential and community facility development with a maximum FAR of 2.2 on a narrow street (under Quality Housing rules) and 4.8, respectively. There are no set maximum building heights in R6 districts, although no building can penetrate the designated sky exposure plane.

The R6B districts require that development adhere to contextual regulations. The R6B district permits development with a maximum residential and community facility FAR of 2.0. The maximum allowable building height is 50 ft, with a mandatory 30-to-40-foot street wall before a setback is allowed. New development in the proposed R6B district would be required to line up with adjacent structures to maintain the continuous street wall character. New multifamily residences must provide one off-street parking space for 50% of dwelling units, which may be waived if 5 or fewer spaces would be required.

Proposed R6
Existing C8-1

The proposed actions would change the existing C8-1 to an R6 district is proposed for a partial block on East 189th Street between Cambreleng Avenue and Beaumont Avenue. This area is characterized by a mix of 4-6 story apartment buildings and row houses.

The zoning change would result only affect the rear portions of lots currently split between C8-1 and R6 zoning districts. The change would not result in any new development potential. The C8-1 district allows commercial and community facility uses in Use Groups 4 through 14 and 16. The maximum commercial (FAR) is 1.0. The maximum building height is determined by the sky exposure plane, which begins 30 feet above the street line.

Community facility uses are permitted a maximum FAR of 2.4. R6 districts typically result in developments between three and twelve stories. Residential FAR ranges from 0.78 to 2.43, with the higher ratio applicable to buildings that provide more open space. Community facility FAR is 4.8. Residential development under the Quality Housing Program within an R6 District has a maximum FAR of 2.2 on narrow streets (defined as less than 75 feet wide) with a 55-foot building height limit and a

maximum of 3.0 FAR on wide streets (defined as 75 feet wide or greater) with a height limit of 70 feet. Off-street parking is required for 70% of the dwelling units. This requirement is lowered to 50% of the units if the lot area is less than 10,000 square feet or if Quality Housing provisions are used. If fewer than five spaces are required, then the off-street parking requirement is waived.

Commercial Overlays

New C2-4 commercial overlays are proposed along Arthur Avenue East 187th Street to East Fordham Road. No commercial overlays are mapped along at this location. The commercial overlays will recognize the existing commercial character, facilitate expansion of existing businesses where appropriate and provide retail continuity from the Belmont neighborhood to East Fordham Road. Parking requirements vary by use, however most retail uses require one accessory parking space per 1,000 square feet of commercial floor area.

Table 2a: Summary of Proposed Zoning Bulk and Scale Requirements - East Fordham Road Rezoning

Source: New York City Department of City Planning, 2013.

Allowed Density (FAR):						Building Form:		
Use	RESIDENTIAL			COMMERCIAL	COMM. FAC	Bulk Controls		
Underlying Zoning District	Base FAR	Inclusionary Housing Bonus	Max. FAR	Max. FAR	Max. FAR	Building base (street wall): min.	max.	Building height: max.
C4-5D *	4.2	1.4	5.6	4.2	4.2	60’	85’	100’
R6B	-	-	2.0	-	2.0	30’	40’	50’
R6	-	-	2.43/3.0**	-	4.8	-	-	-
C2-4 overlay	-	-	-	2.0	-	-	-	-
* would require active ground floor uses and glazing	** with Quality Housing Program							

Source: New York City Department of City Planning, 2013.

Zoning Text Amendment: Establish Inclusionary Zoning along East Fordham Road

The proposed zoning text amendment would apply the Inclusionary Housing program within the proposed C4-5D districts along East Fordham Road in Bronx Community District 6. C4-5D allows medium-density

mixed use buildings, with a base FAR of up to 4.2 for residential, commercial and community facility uses. The C4-5D district would be subject to the Inclusionary Housing program, where developers could receive a 33% floor area bonus, allowing a maximum FAR of 5.6, if 20% of the floor area is developed as affordable housing. Base FAR and bonus levels are as follows:

Table 3:
Inclusionary Housing Base and Bonus Floor Area Ratios in C4-5D Districts

Zoning District	Inclusionary Housing Base Residential FAR	FAR Bonus	Inclusionary Housing Max. Residential FAR
C4-5D	4.2	1.4	5.6

Source: New York City Department of City Planning, 2013.

Blocks and lots affected by the proposed East Fordham Road Rezoning are listed in Table 4.

Table 4:
List of Blocks and Lots Affected by the Proposed East Fordham Road Rezoning

Affected Blocks	Affected Lots
3273	175,184,203,204,205,206,207,208,209,225,231,232,233,234,235,236,237,238, 239,240,252,254,256,257,261,265,269,272,273,274,276,278,283,287,293,297,2 99,300,301,310,311,312,313,315,316,317,318,319,320,321323,324,325,327,34 1,343,345,347,635,637,638,672
3115	25, 28, 30
3091	17, 20, 22, 24, 26, 31, p/o 52, p/o 54, p/o 55,p/o 56,p/o 57,p/o 58, p/o 59, p/o 60, p/o 61,65,73, 87,p/o 95, p/o 96, p/o 97,p/o 98, p/o 119
3078	1, 3,5, 6, 7, 8, 9, 10, 12,13,14,16,48
3077	29, 31, 33, 34, 37, 38, 39, 40, 41, 42, 43
3067	12, 22, 37,48,51,52,54,58,59,60,61,62,63,64,65,66,69
3066	18, 20, 21, 22, 23, 24, 25, 46, 47, 48, 49, 50,51, 53, 54, 55, 56, 57,59
3059	32,36

Source: New York City Department of City Planning, 2013.

Projected Development Scenario

CEQR considers the long term and short term effects of actions. For area-wide rezonings not associated with a specific development, the foreseeable future is generally considered to be a ten-year build-out

period. This is assumed to be the length of time over which developers would act on the change in zoning and the effects of the proposed action would be felt.

In order to assess the possible effects of the Proposed Action, a reasonable worst-case development scenario was established for both the current zoning (Future No-Action) and proposed zoning (Future With-Action) conditions projected to the build year of 2023. The future with the action (with-action or build) scenario therefore identifies the amount, type, and location of development that is expected to occur by 2023 as a result of the proposed action. The future without the action (no-action or no-build) scenario identifies similar development projections for 2023 absent the proposed action. The incremental difference between the build and no-build scenarios serves as the basis for the impact analyses.

To determine the development scenarios, standard methodologies have been used following 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. In projecting the amount and location of new development, several factors have been considered, including known development proposals, current market demands, past development trends, and DCP soft site criteria, described below, for identifying likely development sites. Generally, for area-wide rezonings, which create a broad range of development opportunities, new development can 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.

In identifying the Reasonable Worst Case Development Scenario (RWCDS), a general set of criteria was established and all sites that met the criteria were identified. In projecting the amount and location of new development, several factors have been considered in identifying likely development sites. These include known development proposals, past development trends, and the development site criteria described below. Area specific criteria were also developed to further identify projected and potential development sites. The first step in establishing the development scenario was to identify those sites where new development could reasonably occur.

General Criteria for Development Sites

- Lots utilizing less than half in permitted Floor Area Ratio (FAR) is proposed
- Lots with a total size greater than or equal to 5,000 square feet (including potential assemblages totaling 5,000 square feet or more if assemblage seems probable*)
- Underutilized lots – defined as vacant lots or surface parking lots
- Properties with existing auto-related uses

Projected development sites meet the aforementioned criteria and are not hampered by additional limitations, which will be explained next. Development of projected sites is expected in the foreseeable future.

The following criteria were used to further categorize soft sites as potential development sites, which are seen as less-likely to develop in the foreseeable future:

- Lots upon which the majority of floor area is occupied by active businesses
- Lots which contain businesses that provide valuable and/or unique services to the community
- Highly irregular lots or otherwise encumbered parcels that would make development difficult
- Sites in need of extensive environmental remediation

The following uses and types of buildings that meet these criteria were not included in the development scenario because they are very unlikely to be redeveloped as a result of the proposed rezoning:

- New York City parkland
- New York City- or New York State-owned or -leased properties
- Schools (public and private), municipal libraries, government offices, and houses of worship
- Lots containing active businesses which have recently undergone extensive investment within the last 5 years
- Lots with proposed buildings or buildings currently undergoing construction that conform to the proposed zoning district use standards
- Lots utilized for public transportation and/or public utilities
- Lots containing multi-family (6 or more dwelling unit) residential buildings; due to required relocation of rent-stabilized units

Additional assumptions were made in developing the RWCDS:

- The average dwelling unit size is assumed to be 1,000 sf, reflecting the type of units currently being constructed in this area
- Ground floor commercial totals assume that 15 percent of the floor area is reserved for circulation and mechanical space
- All new required accessory parking is assumed to be located below grade level

The Future Without The Proposed Action Conditions (No-Build Scenario)

In the future without the proposed action, given the current zoning and land use trends in the area, it is anticipated that the proposed project area would experience modest but limited growth in commercial and medical-related uses along East Fordham Road. This includes an increase of 104,057 square feet of commercial retail space, 538 square feet of office space, 86,179 square feet of community facility space and a decrease of 12 dwelling units. A total of 9 sites were identified to be projected development sites (see Figure 4).

The Future With the Proposed Action Conditions (Build Scenario)

Figure 4: Projected and Potential Development Sites

East Fordham Road Rezoning



Legend

- East Fordham Road Rezoning Area
- Projected Development Sites
- Potential Development Sites

0 0.0225 0.045 0.09 Miles

N

Source: NYC Department of City Planning MapPLUTO 2010

NYC Department of City Planning

In the future with the proposed action, medium density mixed-use development is expected to occur along East Fordham Road, with an increase in bulk and density permitted for commercial and community facility uses and the introduction of residential development as a permitted use.

The proposed action could result in the development of approximately 352 additional dwelling units under the build scenario as compared to the no-build scenario. Approximately 73 of these units are expected to be affordable units, resulting from the application of Inclusionary Housing Program. These estimates are based on the above soft-site criteria and the available sites within the rezoning area.

DCP identified 9 projected development sites likely to be developed by 2023 (see Table 5). In addition, there are 7 potential development sites that are considered less likely to be developed than the projected sites over the ten-year analysis period.

In the future without the proposed action (no-build), limited as-of-right development is expected to occur on these sites. The no-build program is expected to consist of 538 square feet of office space, 84,057 square feet of local retail, 17,322 square feet of medical office space and 68,857 square feet of educational classroom space.

In the future with the proposed action (build), the total development expected to occur on the projected development sites would consist of 364 dwelling units, 56,972 square feet of office space 115,590 square feet of local retail; 56,101 square feet of destination retail, a 40,000 square foot supermarket, 11,318 square feet for a restaurant, 49,490 square feet of medical office and 62,194 square feet of educational classroom space.

New residential construction is projected in the C4-5D districts along East Fordham Road. Commercial development would be distributed along the East Fordham Road corridor and would consist primarily of local retail. A sit-down restaurant and FRESH food store are projected at the intersection of East Fordham Road between Cambreleng Avenue and Southern Boulevard.

Key factors in anticipating a significant increase in new residential development include the introduction of residential uses in the areas along East Fordham Road currently zoned C8-1, where residential development is currently not permitted, through the introduction of the C4-5D district, which permits medium- to high- density residential, commercial and community facility development. Other factors include this area's proximity to mass transit, especially at the Fordham Road transit hub, and the existence of large institutions in the area, including Fordham University, the New York Botanical Garden, and Montefiore Medical Center.

The development projected in the No-Action and With-Action scenarios is described in Table 5.

Environmental Impact Statement

As the RWCDS associated with the proposed action would affect various areas of environmental concern and was found to have the potential for significant adverse impacts, pursuant to the EAS and Positive Declaration, an Environmental Impact Statement pursuant to CEQR will be prepared for the proposed action. The EIS will be targeted to the analysis of the projected developments for technical areas of concern including Open Space, Shadows, Neighborhood Character, Transportation, Air Quality, Noise, and Public Health. The remaining CEQR impact categories have undergone analysis

Table 5 - Projected Development Sites

Site Description													FUTURE NO-ACTION							WITH ACTION							INCREMENT						
Development Sites	Tax Block	Tax Lot	Lot Area (SF)	Existing Zoning	Max. FAR	Res Area	Comm Area	Office	FRESH	CF Area	Units Res	Prop Zoning	Res Area	Comm Area	Office	FRESH	CF Area	Total DU's	Market Rate Units	Res Area	Comm Area	Office	FRESH	CF Area	Total DU's	Market Rate Units	Affordable Units	Res Area	Comm Area	Office	FRESH	CF Area	Total DU's	Market Rate Units	Affordable Units
A	3273	301	19,954	C8-1	2.0	0	8,300	0	0	0	0	C4-5D/R6B	0	15,963	0	0	0	0	0	88,522	15,026	0	0	0	89	71	18	88,522	(937)	0	0	0	89	71	18
B	3273	261	13,750	C8-1	2.0	0	5,280	0	0	0	0	C4-5D/R6B	0	5,280	0	0	0	0	0	49,794	6,891	0	0	0	50	40	10	49,794	1,611	0	0	0	50	40	10
C	3273	203-207	14,808	R6	4.8	11,688	0	0	0	0	12	C4-5D	0	0	0	0	68,857	(12)	(12)	0	0	0	0	62,194	0	0	0	(11,688)	0	0	0	(6,663)	(12)	(12)	0
D	3059	32,36	18,086	C8-1	2.0	0	27,640	0	0	0	0	C4-5D	0	27,640	0	0	0	0	0	67,823	15,373	18,086	0	0	68	54	14	67,823	(12,267)	18,086	0	0	68	54	14
E	3091	17,20, 22,24, 26	24,745	C8-1	2.0	0	11,400	0	0	0	0	C4-5D	0	21,033	0	0	17,322	0	0	43,304	45,778	24,745	0	24,745	43	35	9	43,304	24,745	24,745	0	7,424	43	35	9
F	3091	87	11,160	C8-1	2.0	0	2,800	0	0	0	0	C4-5D	0	9,486	0	0	0	0	0	0	9,486	37,386	0	0	0	0	0	0	0	37,386	0	0	0	0	0
G	3115	25	23,581	C8-1	2.0	0	20,000	0	0	0	0	C4-5D	0	20,000	0	0	0	0	0	78,953	33,101	0	40,000	0	79	63	16	78,953	13,101	0	40,000	0	79	63	16
H	3115	28	14,900	C8-1	2.0	0	750	0	0	0	0	C4-5D	0	1,863	0	0	0	0	0	35,760	47,680	0	0	0	36	29	7	35,760	45,818			0	36	29	7
I	3066	53,54	5,586	R6/C2-4	4.8	0	2,792	538	0	0	0	R6/C2-4	0	2,792	538	0	0	0	0	0	9,672	1,500		0	0	0	0	0	6,880	962	0	0	0	0	0
TOTALS			146,570			11,688	78,962	538	0	0	12		0	104,057	538	0	86,179	(12)	(12)	364,155	183,008	81,717	40,000	86,939	364	291	73	352,467	78,951	81,179	40,000	761	352	279	73

Potential Development Sites

Site Description														FUTURE NO-ACTION							WITH ACTION								INCREMENT						
Development Sites	Tax Block	Tax Lot	Lot Area (SF)	Existing Zoning	Max. FAR	Res Area	Comm Area	Office	FRESH	CF Area	Units Res	Prop Zoning	Res Area	Comm Area	Office	FRESH	CF Area	Total DU's	Market Rate Units	Res Area	Comm Area	Office	FRESH	CF Area	Total DU's	Market Rate Units	Affordable Units	Res Area	Comm Area	Office	FRESH	CF Area	Total DU's	Market Rate Units	Affordable Units
1	3273	293	8,800	C8-1	2.0	0	13,450	0	0	0	0	C4-5D	0	13,450	0	0	0	0		0	0	0	0	36,960	0	0	0	0	(13,450)	0	0	36,960	0	0	0
2	3273	265	6,475	C8-1	2.0	0	0	14,483	0	0	0	C4-5D	0	0	14,483	0	0	0		0	0	0	0	27,195	0	0	0	0	0	(14,483)	0	27,195	0	0	0
3	3273	257	12,200	C8-1	2.0	0	2,400	0	0	0	0	C4-5D/R6B	0	2,400	0	0	0	0		30,748	28,392	0	0	0	31	25	6	30,748	25,992	0	0	0	31	25	6
4	3273	252	6,758	C8-1	2.0	0	5,000	0	0	0	0	C4-5D/R6B	0	5,000	0	0	0	0		28,610	4,666	0	0	0	29	23	6	25,231	(334)	0	0	(3,379)	29	23	6
5	3067	52	5,400	C8-1	2.0	0	3,001	0	0	0	0	C4-5D	0	3,001	0	0	0	0		25,650	4,590	0	0	0	26	21	5	22,410	1,589	0	0	(3,240)	26	21	5
6	3067	54	9,000	C8-1	2.0	0	1,352	0	0	0	0	C4-5D	0	1,352	0	0	0	0		42,750	7,650	0	0	0	43	34	9	42,750	6,298	0	0	0	43	34	9
7	3078	14,16	17,156	C8-1	2.0	0	14,617	0	0	0	0	C4-5D	0	14,617	0	0	0	0		81,491	14,583	0	0	0	81	65	16	81,491	(34)	0	0	0	81	65	16
TOTALS			**65,789**				39,820	14,483	0	0	0		0	39,820	14,483	0	0	0	0	209,249	59,880	0	0	64,155	209	167	42	202,630	20,060	(14,483)	0	57,536	209	167	42

as part of an EAS for the proposed action, which is attached to this scoping document. Under guidelines specified in the CEQR Technical Manual, it has been determined that for these categories, no significant adverse impacts are anticipated and a detailed analysis is not required. The EAS prepared for the proposed action will be included as an Appendix of the EIS report. Consequently, these environmental categories will not be assessed in the EIS. These categories include: Land Use, Zoning and Public Policy, Socioeconomic Conditions, Community Facilities, Historic and Cultural Resources, Urban Design and Visual Resources, Natural Resources, Hazardous Materials, Infrastructure, Solid Waste and Sanitation Services, Energy, Green House Gases, and Construction.

SCOPE OF WORK FOR THE EIS

TASK 1—PROJECT DESCRIPTION (INCLUDING REASONABLE WORST CASE DEVELOPMENT SCENARIO)

The first chapter of the EIS introduces the reader to the project and sets the context in which to assess impacts. The chapter contains a project identification (brief description and location of the project); the background and/or history of the project; a statement of the public purpose and need for the project; key planning considerations that have shaped the current proposal; a detailed description of the project; and discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the proposed action and gives the public and decision-makers a base from which to evaluate the project against both Build and No Build scenarios. In addition, the description of No Build conditions will discuss other expected actions and developments that could affect technical categories considered under CEQR.

The project description will present the planning background and rationale for the proposed rezoning. In addition, the project description will summarize the reasonable worst-case development scenario for analysis in the EIS and present its rationale (refer to “Projected Development Scenario” of this document).

The section on approval procedures will explain the Uniform Land Use Review Procedure (ULURP) process, its timing, and hearings before the Community Board, the Borough President's office, the City Planning Commission (CPC), and the New York City Council. The role of the EIS as a full-disclosure document to aid in decision-making will be identified and its relationship to ULURP and the public hearings described.

Finally, the project description chapter will describe, in detail, the Reasonable Worst Case Development Scenario. The chapter will provide a breakdown of the existing, no-action and with-action conditions for every development site. The chapter will also discuss the assumptions behind the Reasonable Worst Case Development Scenario.

TASK 2—OPEN SPACE

New residents and workers introduced to the rezoning area under the Proposed Action would create added demands on local open space and recreational facilities. An open space analysis is generally conducted if a proposed project would generate more than 200 residents or 500 employees. The proposed action would generate more than 200 residents, and more than 500 workers placing added demands on existing open space and recreational facilities, thereby requiring an assessment of residential open space resources.

Shadows cast by projected new development may also have the potential to affect some open space resources.

The open space analysis will consider both passive and active open space resources. Passive open space ratios will be assessed within a non-residential (¼-mile radius) study area and a residential (½-mile radius) study area. Active open space ratios will be assessed for the ½-mile residential study area. As recommended in the *CEQR Technical Manual*, both study areas comprise all census tracts that have 50 percent of their area located within ¼-mile radius and ½-mile radius from the boundary of all sites that would be developed as a result of the proposed project (see Figure 5). The detailed open space analysis will include the following sub-tasks:

- Determine characteristics of the two open space user groups: residents and workers/daytime users. Using 2010 Census data, calculate the total residential population of the open space study area, which as per CEQR guidelines, would be defined as the area within a half- mile radius from the rezoning area with the study area boundary adjusted to include all census tracts with at least 50 percent of their area within the half-mile radius. Refer to Figure 5.

- Inventory existing active and passive open spaces within the two open space study areas. The condition and usage of existing facilities will be described based on the inventory and field visits. Jurisdiction, features, user groups, quality/condition, factors affecting usage, hours of operation, and access will be included in the description of facilities. Acreage of these facilities will be determined and total study area acreage calculated. The percentage of active and passive open space will also be calculated. A map showing the locations of open spaces keyed to the inventory will be provided.

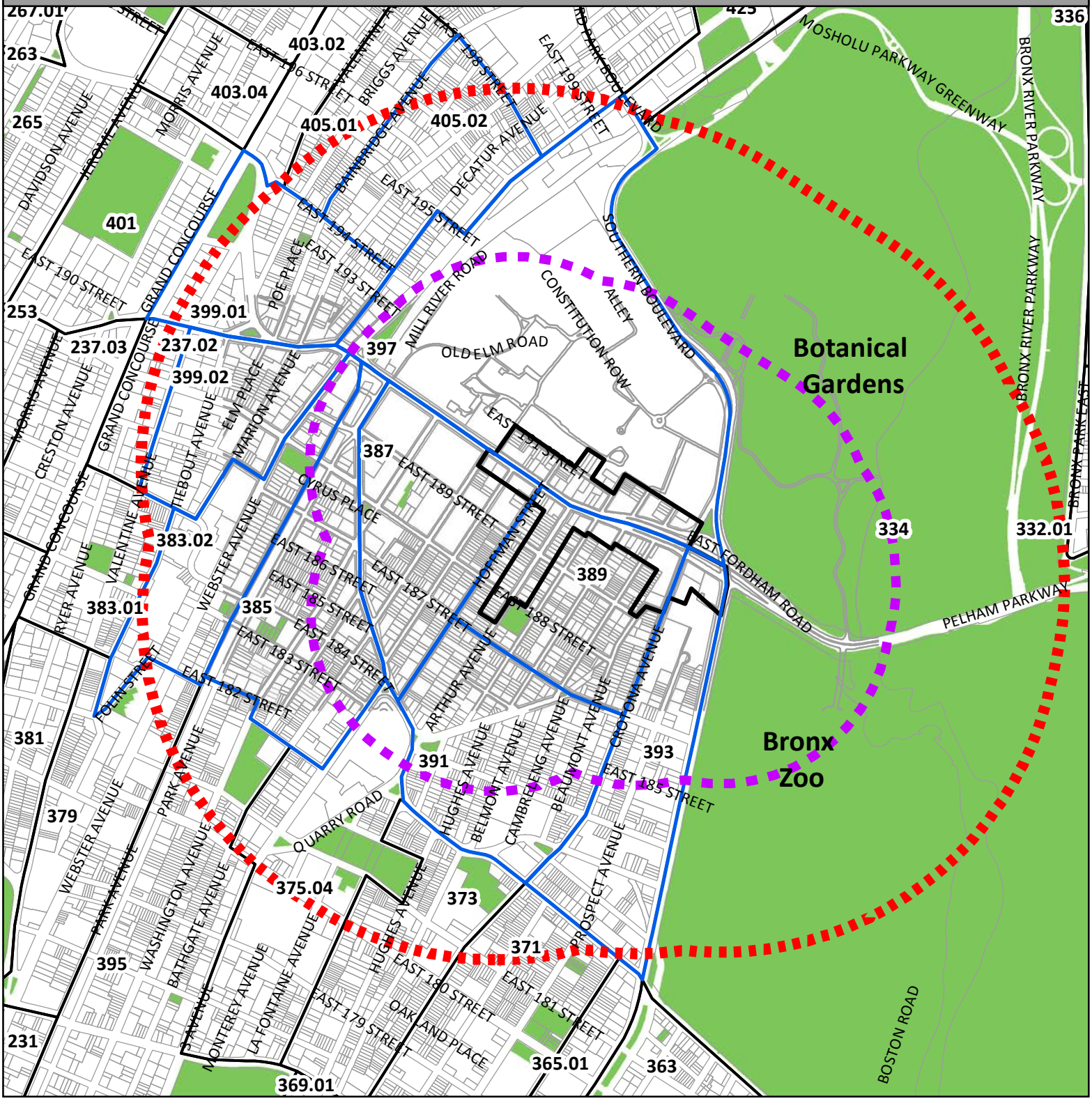
- Based on the inventory of facilities and study area populations, open space ratios will be calculated for the residential and daytime populations, and compared to City guidelines to assess adequacy. As per the *CEQR Technical Manual*, open space ratios are expressed as the amount of open space acreage per 1,000 user population, and will be calculated for active and passive open space, as well as the ratio for the aggregate open space.

- Assess expected changes in future levels of open space supply and demand in the 2016 analysis year, based on other planned development projects within the open space study areas. Any new open space or recreational facilities that are anticipated to be operational by the analysis year will also be accounted for. Open space ratios will be calculated for future No-Action conditions and compared with existing ratios to determine changes in future levels of adequacy.

- Assess the effects on open space supply and demand resulting from increased residential and worker populations added by the RWCDS. The assessment of the Proposed Action's impacts will be based on a comparison of open space ratios for the future No-Action versus future With-Action conditions. As per the *CEQR Technical Manual*, a quantitative significant adverse impact may occur if a proposed action would reduce the open space ratio by more than 5 percent in areas that are currently below the City's median community district open space ration of 1.5 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction as small as 1 percent may be considered significant, depending on the area of the City. In addition to the quantitative analysis, qualitative analysis will be performed to determine if the changes resulting

Figure 5: Open Space Study Area

East Fordham Road Rezoning



Legend

- East Fordham Road Rezoning Area
- 1/2 Mile Study Area
- 1/4 Mile Study Area
- 391 2010 Census Tracts

0 0.075 0.15 0.3 Miles

N

Source: US Census Bureau

NYC Department of City Planning

from the Proposed Action constitute a substantial change (positive or negative) or an adverse effect to open space conditions. The qualitative analysis will assess whether or not the study area is sufficiently served by open spaces, given the type (active vs. passive), capacity, condition, and distribution of open space, and the profile of the study area population.

- If the results of the impact analysis identify a potential for a significant impact, discuss potential mitigation measures.

TASK 3—SHADOWS

This chapter will examine the proposed action's potential for significant and adverse shadow impacts pursuant to CEQR Technical Manual criteria. The *CEQR Technical Manual* requires a shadow analysis for proposed actions that have the potential to cast new shadows on a publicly-accessible open space or historic resource with sun-sensitive features. Generally, shadow impacts could occur if an action would result in new structures or additions to buildings resulting in structures over 50 ft in height that could cast shadows on natural features, publicly accessible open space, or on historic features that are dependent on sunlight.

The proposed action would permit development of buildings of greater than 50 ft in height, and therefore has the potential to result in shadow impacts in the areas to be rezoned. The EIS will assess the RWCDS on a site-specific basis for potential shadowing effects of new developments or enlargements at both the projected and potential development sites on light-sensitive uses, and disclose the range of shadow impacts, if any, which are likely to result from the action, further identifying:

- Projected and potential development sites adjacent to parks, publicly-accessible open space, important natural resources, and sunlight-sensitive historic resources. Figure 6 illustrates the locations of the projected and potential developments in relation to the existing sunlight-sensitive resources.

- Projected and potential development sites located in areas which are not susceptible to shadow impacts.

- The EIS will provide a preliminary shadows screening assessment to ascertain whether the projected and potential developments' shadows may potentially reach any sunlight-sensitive resources at any time of year.

- Pursuant to CEQR, a Tier 1 Screening Assessment will be conducted to determine the longest shadow study area for the projected and potential developments, which is defined as 4.3 times the height of any new structures including building enlargements (the longest shadow that would occur on December 21, the winter solstice).

- A Tier 2 Screening Assessment will be conducted if any portion of a sunlight-sensitive resource lies within the longest shadow study area. The Tier 2 assessment will determine the triangular area that cannot be shaded by the projected and potential developments, which in New York City is the area that lies between -108 and +108 degrees from true north.

2/25/2013



Projected Development Sites
Potential Development Sites
Public parks and open spaces
Longest shadow study area boundary

0 200 400 600 800 1,000 Feet

*The New York Botanical Garden and Bronx Zoo are not considered public open spaces since they charge a fee for entrance

Shadows Screening Analysis
Figure 6

- If any portion of a sunlight-sensitive resource is within the area that could be potentially shaded by the projected or potential developments, a Tier 3 Screening Assessment will be conducted. The Tier 3 Screening Assessment will determine if shadows resulting from the projected and potential developments can reach a sunlight-sensitive resource through the use of three-dimensional computer modeling software with the capacity to accurately calculate shadow patterns. The model will include a three-dimensional representation of the sunlight-sensitive resource(s), a three dimensional representation of the projected and potential development sites identified in the RWCDS, and a three-dimensional representation of the topographical information within the area being analyzed. Shadow analyses will be conducted for four representative days of the year to determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Action.

    - If the screening analysis does not rule out the possibility that action-generated shadows would reach any sunlight-sensitive resources, a detailed analysis of potential shadow impacts on publicly-accessible open spaces or sunlight-sensitive historic resources resulting from new construction or enlargement identified in the RWCDS (both projected and potential development sites) will be provided in the EIS. The detailed shadow analysis will establish a baseline condition (future No-Action) which will be compared to the future condition resulting from the Proposed Action (future With-Action) to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow cast by the projected and potential developments. The detailed analysis will include the following tasks:

        - Document the analysis with graphics comparing shadows resulting from the No-Action condition with shadows resulting from the Proposed Action, with incremental shadow highlighted in a contrasting color.

        - Provide a summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource.

        - Assess the significance of any shadow impacts on sunlight-sensitive resources.

        - If the results of the detailed analysis identify a potential for a significant impact, discuss potential mitigation measures.

TASK 4— TRANSPORTATION

As detailed in the Transportation Planning Factors (TPF) technical memorandum included in Appendix 1, there are a total of 9 projected development sites in the proposed rezoning area. The Proposed Action is expected to induce new residential and commercial development at these sites, which would generate additional vehicular travel and demand for parking, as well as additional subway and bus riders and pedestrian traffic. These new trips have the potential to affect the area's transportation systems. Therefore, the transportation studies will be a critical focus of the EIS, including four key issues: (1) the size of the traffic study area and the number of intersections to be analyzed both within the rezoning area and along major access routes; (2) the likelihood that the Proposed Action and the amount of projected

development envisioned in the RWCDS would generate significant traffic impacts requiring mitigation; (3) the potential increase in the parking demand; and (4) an increased level of transit use and pedestrian demand, and the possible need for mitigation to accommodate transit passengers.

Traffic

The RWCDS exceeds the minimum development density screening thresholds specified in Table 16-1 of the *2012 CEQR Technical Manual*. Therefore, a trip generation forecast is required to determine if the Proposed Action would generate 50 or more vehicle trips in any peak hour. As detailed in the TPF technical memorandum included in Appendix 1, based on a preliminary travel demand forecast and trip assignment for the RWCDS, the Proposed Action is expected to generate more than 50 additional (net) vehicular trips in the project study area. Therefore, the EIS will provide a detailed traffic analysis that focuses on those peak hours and street network intersections where the highest concentrations of action-generated demand would occur. The peak hours for analysis will be selected upon completion of the traffic data collection program.

Based on the preliminary travel demand forecast made for the proposed action (as shown in Appendix 1), it was determined that the following intersections would be analyzed in detail for potential traffic impacts for the weekday AM, Midday, and PM peak hours:

1. East Fordham Road and Webster Avenue;
2. East Fordham Road and Third Avenue;
3. East Fordham Road and Bathgate Avenue;
4. East Fordham Road and Lorillard Place;
5. East Fordham Road and Arthur Avenue;
6. East Fordham Road and Hoffman Street;
7. East Fordham Road and Hughes Avenue;
8. East Fordham Road and Cambreleng Avenue;
9. East Fordham Road (Eastbound & Westbound) and Crotona Avenue;
10. East Fordham Road (Eastbound & Westbound) and Southern Boulevard;
11. Crotona Avenue and East 187th Street; and
12. Crotona Avenue and East 189th Street.

Based on preliminary discussions with DOT, one additional intersection will be analyzed in detail for potential traffic impacts for the weekday AM, Midday, and PM peak hours:

13. East Fordham Road and Washington Avenue.

This intersection was not included in the TPF memo in Appendix 1 but will be included in the Transportation section in the EIS.

The following outlines the anticipated scope of work for conducting a traffic impact analysis for the Proposed Action's RWCDS:

- Inventory physical data at each of the analysis intersections needed for capacity analyses, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, typical parking regulations, and NYCDOT signal phasing and timing data.

- Determine traffic operating characteristics at each analysis intersection within the focused study area including capacities, volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service (LOS) per traffic movement, per intersection approach, and per overall intersection.

- Based on available sources, 2010 US Census data, 2007-2011 American Community Survey 5-Year Estimates, and standard references, estimate the travel demand characteristics of the Existing/No Action uses on the projected development sites as well as the planned developments at other sites in the study area. This will include daily and hourly person trips, and a modal distribution to estimate trips by auto, taxi, and other modes. An estimate of truck trip generation will also be prepared.

- Using the same transportation planning assumptions as for No Action conditions, estimate the travel demand characteristics of the projected developments associated with the proposed action and for the net change in uses as defined in the project development scenario.

- Compute future No Action traffic volumes based on an approved background traffic growth rate for the study area and the volume of traffic expected to be generated for significant development projects anticipated to be in place by the proposed analysis year for the rezoning action. Funded traffic improvements and mitigation measures from other projects that would be implemented in the No Action condition will be incorporated into this No Action analysis.

- Determine the volume of vehicle traffic expected to be generated by the rezoning action, assign that volume of traffic in each analysis period to the approach and departure routes likely to be used, and prepare traffic volume networks for the future With Action condition for each analysis period. It is assumed that this traffic assignment process will be completed for the projected development sites in the study area.

- Determine the resulting v/c ratios, delays, and LOS for the future With Action condition, and identify significant traffic impacts in accordance with CEQR Technical Manual criteria.

- Identify and evaluate traffic improvements needed to mitigate significant traffic impacts. The mitigation analysis will frame the full set of measures required in the EIS development scenario built by 2023.

Parking

Collect existing parking regulations within the study area. Develop parking accumulation profiles for each of the projected development sites expected to occur as a result of the proposed action by the analysis year of 2023. It will be assumed that each identified new development would provide parking in accordance with applicable zoning requirements. Based on these assumptions, an assessment will be provided to determine whether there would be excess parking demand, and whether there are a sufficient number of other parking spaces available in each area to accommodate that excess demand.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *2012 CEQR Technical Manual,* detailed transit analyses are generally not required if a Proposed Action is projected to result in fewer than 200 peak hour rail or bus transit trips. If a proposed action would result in 50 or more bus trips being assigned to a single bus line (in one direction), or if it would result in an increase of 200 or more trips at a single subway station or on a single subway line, a detailed bus or subway analysis would be warranted. As detailed in the TPF technical memorandum included in Appendix 1, the Proposed Action's RWCDS is expected to generate a net increase of more than 200 additional subway and bus trips in one or more peak hours. The following outlines the anticipated scope of work for conducting a transit impact analysis for the Proposed Action's RWCDS:

Subway

There are three subway stations serving a total of five subway lines located within a half a mile from the study area; including the Fordham Road station on the B and D lines, the Fordham Road station on the 4 line, and the Pelham Parkway station on the 2 and 5 lines. Project-generated peak hour subway trips would exceed the CEQR Technical Manual analysis threshold in the PM peak hour. Based on CEQR guidelines, a subway line-haul analysis is required if more than 200 additional trips per subway line are expected as a result of a proposed action. Since the study area is accessible via five available subway lines, it is unlikely that a single subway line would experience more than 200 additional trips as a result of the proposed action. Therefore, a detailed analysis of subway line-haul conditions is not warranted. According to the general thresholds used by the MTA and specified in the CEQR Technical Manual, a detailed analysis of subway conditions is generally not required if a proposed project would not result in an increase in passengers at a single subway station of 200 or more, as this level of new demand is considered unlikely to result in significant adverse impacts. Based on a preliminary analysis, the project generated subway trips would generally be evenly distributed to the various subway lines serving the area, resulting in an increment of fewer than 200 peak hour trips at each of the three nearest subway stations. Therefore, a detailed analysis of the nearest stairways and control elements is also not warranted.

Bus

There are eight bus routes located within a half a mile of the study area that would most likely be used by the project sites; including the Bx9, Bx12, Bx15, Bx17, Bx19, Bx22, Bx41, and Bx55. Project-generated

peak hour bus trips would exceed the CEQR Technical Manual analysis threshold in the Midday and PM peak hours. As part of a preliminary analysis, the project generated bus trips were assigned to the closest local bus routes using US Census Data (2007-2011 American Community Survey population estimates and 2000 Journey to Work statistics) for this area, resulting in an increment of fewer than 50 peak hour trips on a single bus line (in one direction). However, as the project sites are located at significant distances from the nearest subway stations, the majority of the estimated project-generated subway trips would also use the Bx12 local bus route, which stops at the nearest subway stations, to connect with the B, D, 2, 4 and 5 subway lines. Therefore, a detailed bus-line haul analysis is warranted for this bus route and will be included in the EIS. Bus peak load point data will be obtained from NYC Transit to evaluate bus line-haul capacity on the Bx12 route. The analysis of existing and No Action conditions during AM, Midday, and PM peak hour conditions with the proposed project in place will be conducted per CEQR guidelines. Where appropriate, feasible mitigation measures will be explored to alleviate any potential significant adverse transit impacts.

Pedestrians

According to *2012 CEQR Technical Manual* criteria, projected pedestrian volume increases of less than 200 persons per hour at any pedestrian element (sidewalks, corner areas and crosswalks) would not typically be considered a significant impact, since that level of increase would not generally be noticeable and therefore would not require further analysis. Although the new pedestrian trips generated by the RWCDS would be dispersed throughout the rezoning area, some concentrations of new pedestrian trips are expected during peak periods along corridors connecting the projected development sites to area subway stations. Based on the level of new pedestrian demand generated by the RWCDS, it is anticipated that project-generated pedestrian trips would potentially exceed the 200-trip *CEQR Technical Manual* analysis threshold at one or more locations listed below in one or more peak hours.

It is therefore anticipated that the EIS will include a quantitative pedestrian impact analysis focusing on those sidewalks, corner areas and crosswalks along these corridors that would experience more than 200 additional pedestrian trips as well as exceed impact thresholds in the *2012 CEQR Technical Manual*. Pedestrian counts will be conducted for the locations described in Appendix 1, and levels of service determined for the existing, No-Action and With-Action conditions. The specific pedestrian facilities to be analyzed will be determined once the assignment of project-generated pedestrian trips has been finalized.

Vehicular and Pedestrian Safety

Traffic accidents involving pedestrians as well as bicycles at key study area intersections will be researched and documented. The potential for the Proposed Action to have significant pedestrian and/or bicycle impacts will be identified through a comparison of the future No-Action and future With-Action conditions.

TASK 5—AIR QUALITY

The Proposed Action, under the RWCDS, would affect 9 projected and 7 potential development sites, and include new buildings. Air quality, which is a general term used to describe pollutant levels in the atmosphere, would be affected by these changes. Air quality analyses will be conducted, following the

procedures outlined in the 2012 *New York City Environmental Quality Review (CEQR) Technical Manual*, to determine whether the Proposed Action under the RWCDS would result in exceedances of ambient air quality standards or health-related guideline values. The air quality studies for the Proposed Action will include both mobile and stationary source analyses. The methodologies and procedures utilized in these analyses are described below.

The key issues that would be addressed are:

- The potential impact from the exhaust of parking garages associated with the proposed developments;
- The potential for emissions from the heating, ventilation and air conditioning (HVAC) systems of the proposed development buildings to significantly impact other proposed development buildings (project-on-project impacts);
- The potential for emissions from the HVAC systems of the proposed development buildings to significantly impact existing land uses (project-on-existing impacts);
- The potential for combined impacts from clusters of HVAC emissions (i.e., HVAC emissions from proposed development buildings of approximately the same height that are located in close proximity to one another) to significantly impact existing land uses and other proposed development sites (cumulative impacts);
- The potential for significant air quality impacts from the HVAC systems of existing "major" emission sources with 20 or more millions Btu/hr heat input or any "large" combustion source (e.g., power plants) on the proposed developments (within 1000 feet of development sites); and
- The potential for significant air quality impacts on the proposed development sites from air toxic emissions generated by nearby existing industrial/commercial sources (within 400 feet from development sites).

As described in the TPF in Appendix 1, the project trip generation estimates are expected to be below the *CEQR* threshold (170 or more peak hour vehicle trips for air quality per intersection), and it is also unlikely that the number of vehicle trips will exceed the City's current interim guidance criteria for requiring an analysis of particulate matter (PM10, $PM_{2.5}$). Therefore, it is anticipated that a detailed analysis of mobile source air quality impacts is not warranted. However, if traffic is found to be higher than anticipated, a mobile source analysis will be conducted per the CEQR Technical Manual standards. As noted above, the Proposed Action would result in new parking facilities; therefore, the mobile source analysis will account for the impacts from these sources.

Subtasks for the air quality analysis include the following:

Mobile Source Analyses (Parking Facility Analysis)

Gather existing air quality data. Collect and summarize existing ambient air quality data for the study area. Specifically, ambient air quality monitoring data published by the NYSDEC and DEP will be used for the analysis of future conditions.

Assess the potential CO impacts associated with proposed parking facilities. Information on the conceptual design of the parking facilities will be employed to identify the worst-case facility for analysis and determine potential worst-case impacts from emissions. An analysis following the procedures suggested in the 2012 *CEQR Technical Manual* for parking facilities will be used to determine maximum potential worst-case impacts. Impacts from on-street source emissions and emissions from the proposed parking facilities will be calculated as per CTM guidelines.

Future CO pollutant levels with the Proposed Action will be compared with the National Ambient Air Quality Standards (NAAQS) and the City's CO *de minimis criteria* to determine compliance with standards.

Mobile Source Analyses (Roadways Analyses)

If the net estimated number of equivalent heavy duty trucks from the Proposed Action is greater than the City's current screening thresholds for determining whether a PM2.5 analysis is warranted, an analysis will be conducted using the CAL3QHCR model. Mobile source PM2.5 impacts will be evaluated against currently available NYCDEP and NYSDEC guidance criteria and, where necessary, combined with stationary source PM2.5 impacts to determine whether potential significant adverse air quality impacts could occur with the Proposed Action.

Stationary Source Analyses

Heat and Hot Water Systems

There will be an analysis of the potential for the emissions from the fossil fuel-fired heating, ventilation and air conditioning systems (HVAC) of the Proposed Action development sites to significantly impact existing land uses or any of the other proposed development sites. The HVAC stationary source analysis will be conducted as follows:

- Assumptions regarding building sizes and heights, stack locations and parameters, and distances to nearest receptors will be determined based on the RWCDS.
- The HVAC analyses will be performed for individual development sites and for development buildings of approximately the same height that are located in close proximity to one another (a cumulative or cluster analysis).
- Screening analyses will be performed in accordance with the methods presented in Section 322 of the 2012 *CEQR Technical Manual* using stationary source screen figures for No. 2 fuel oil and Natural Gas.
- In the event of predicted exceedances associated with individual development sites, a detailed dispersion modeling analysis using the U.S. Environmental Protection Agency (EPA)

AERSCREEN and/or AERMOD dispersion model will be performed. Concentrations of nitrogen dioxide, sulfur dioxide, and particulate matter (PM10 and PM2.5) will be determined at sensitive receptor sites. Five years of meteorological will be used for these simulation analyses. Predicted concentrations will be added to ambient background concentrations and compared with NAAQS and interim guidance criteria for PM2.5..

- In the event that violations of standards are predicted, examine impact avoidance measures.

An analysis will be conducted to determine the potential for air quality impacts on the Proposed Action development sites from existing or proposed sources in the surrounding area. The analysis will be performed as follows:

- Large sources within 1,000 feet of the rezoning area as well as commercial, institutional and residential sources within 400 feet of any of the development sites will be identified.

- Information from the New York City Department of Buildings (NYCDOB) database and NYCDEP's permit records will be used to determine specific equipment information, emission rates and stack exhaust parameters. In cases where the type of use and/or the fuel type are unclear or unknown, conservative assumptions will be made.

- The analysis will be performed as a screening analysis first for individual sources in accordance with the methods presented in Section 322 of the 2012 *CEQR Technical Manual*

- In the event of predicted exceedances associated with individual sites, a detailed dispersion modeling analysis using the EPA AERSCREEN and/or AERMOD dispersion model will be performed. Concentrations of nitrogen dioxide, sulfur dioxide, and particulate matter (PM10 and PM2.5) will be determined at sensitive receptor sites. Predicted values will be compared with NAAQS and interim guidance criteria for PM2.5.

- In the event that violations of standards are predicted, initial assumptions will be refined based on additional information. If necessary, mitigation measures would be identified.

Industrial Source Analyses

- A list of potential emission sources within the air quality study area will be compiled based on EPA, NYSDEC, and NYCDEP, and Geographic Information System databases and field observations. For facilities identified as having a NYCDEP permit, processing information for these facilities will be requested from NYCDEP's Bureau of Environmental Compliance (BEC). Pollutant data contained in BEC processing permits will then be used to estimate any potential for these sources to result in air quality levels at the proposed development sites that exceed applicable air quality standards. Field surveys and consultation with DCP will be used to determine which, if any, of these permits are associated with businesses that are no longer in operation. No analysis would be conducted for such facilities.

- For business for which no permits are available from NYSDEC or NYCDEP where air toxic emissions are expected, material safety data sheets and/or permits with similar processes would be utilized to conservatively estimate the concentrations from these sources.

- Following collection of data on emission sources, an industrial source screening analysis as detailed in Section 322 of the 2012 *CEQR Technical Manual* will be performed. The screening analysis will be used to estimate the short-term and annual concentrations of critical pollutants at the development sites. Predicted worst-case impacts on the Proposed Action development sites will be compared with the short-term guideline concentrations (SGC) and annual guideline concentrations (AGC) reported in the NYSDEC's *DAR-1 AGC/SGC Tables* (October 18, 2010) to determine the potential for significant impacts.

- If predicted concentrations from industrial sources on a future development site exceed significant impact criteria, more detailed stationary source analyses will be performed with the AERSCREEN and/or AERMOD model. Predicted values will be compared with NYSDEC SGCs and AGCs.

- In the event that violations of standards are predicted, examine design measures to reduce pollutant levels to within standards.

TASK 6—NOISE

The Proposed Action would result in new residential and commercial developments, and also alter traffic conditions and land uses in the study area. Noise, which is a general term used to describe unwanted sound, will likely be affected by these development changes. This chapter will examine potential impacts due to mobile and stationary sources of noise. The noise analysis will examine potential impacts due to vehicular noise from project-generated traffic (mobile sources) on sensitive receptors in the community, and the effects of both stationary and mobile sources of noise on proposed residential/commercial uses in the project study area.

The amount of traffic generated as a result of the Proposed Action is not anticipated to result in a mobile source noise impact. The high ambient noise levels in the study area, including noise generated by stationary sources, may affect the new sensitive uses introduced by the Proposed Action. Consequently, this chapter will examine the necessary level of building attenuation for development resulting from the Proposed Action, including analyses of the following:

- Changes in traffic noise levels with the Proposed Action;

- Stationary source noise impacts at or near the projected and potential residential and commercial uses;

- The potential for noise from heavily trafficked roadways to impact proposed development buildings; and

- Achievement of acceptable interior noise levels in the projected and potential residential buildings.

Analysis Methodology

Existing noise levels will be determined by noise level measurements at future residential/commercial and other sensitive locations. Future noise levels will be estimated based on the proportionate change in

traffic volume between existing and future conditions (Future Noise Level (dBA) = Existing Noise Level (dBA) + 10Log (Future PCE/Existing PCE)) for both no-build and build conditions. The L_{eq} and L_{10} levels will be the primary noise descriptors used for the EIS analysis. Other noise descriptors including the L_1, L_{50}, L_{90}, L_{min}, L_{max} and 1/3 octave band frequency levels will also be examined as describe in the CTM.

The tasks below will be performed following the guidelines contained in the CEQR Technical Manual:

- Site Selection: Selected sites will be representative of the future sensitive land uses subject to the rezoning. The proposed noise monitoring sites are listed below:
    - Site 1 is located on East 191st Street between Hoffman Street and Hughes Avenue. This site represents conditions along East 191st Street between Bathgate Avenue and Hughes Avenue.
    - Site 2 is located at the northwest corner of Hughes Avenue and East Fordham Road. This site represents conditions along East Fordham Road near Hughes Avenue.
    - Site 3 is located at the northeast corner of East Fordham Road and Bathgate Avenue. This site represents conditions along East Fordham Road west of Hughes Avenue where East Fordham Road operates as a four lane two-way road.
    - Site 4 is located on Hughes Avenue between East Fordham Road and East 189th Street. This site represents conditions along Bathgate Avenue, Hoffman Street, Hughes Avenue, and Cambreleng Avenue between East Fordham Road and East 189th Street that are close enough to East Fordham Road to experience noise from East Fordham Road traffic.
    - Site 5 is located on Crotona Avenue between East Fordham Road and Beaumont Avenue. This site represents conditions along Crotona Avenue.
    - Site 6 is located on Belmont Avenue between East Fordham Road and East 189th Street. This site represents conditions along Lorillard Place, Arthur Avenue, and Belmont Avenue between East Fordham Road and East 189th Street that are close enough to East Fordham Road to experience noise from East Fordham Road traffic.
    - Site 7 is located on Arthur Avenue between East 189th Street and East 188th Street. This site represents conditions along Arthur Avenue between East 189th Street and East 188th Street.
    - Site 8 is located at the southeast corner of East Fordham Road and Crotona Avenue. This site represents conditions along East Fordham Road between Hughes Avenue and Southern Boulevard where East Fordham Road has one northernmost west-bound late at grade, two west-bound lanes and one east-bound lane below grade in the center, and two southernmost east-bound lanes at grade.

- Data Collection: At the identified locations existing noise readings will be determined by performing twenty minute readings with one-hour equivalent continuous noise levels (L_{eq}) and statistical percentile noise levels, L_{max}, L_{min}, L_1, L_{10}, L_{50}, L_{90}.
    - Noise measurements will be recorded in conformance with procedures contained in the 2012 NYC *CEQR Technical Manual*.
    - The noise levels will be measured in units of "A" weighted decibels (dBA).
    - All measurements will be performed during the weekday peak periods—AM (7:30 to 9:30 AM), midday (MD) (12:00 to 2:00 PM), and PM (4:30 to 6:30 PM).
    - The noise meter instrument used for the collection of ambient noise readings will be a calibrated Type I noise level meter conforming to the ANSI 1.4 Standard.
    - A porous windscreen will be used during all measurement periods. All of the noise measurements will be taken by mounting the meter approximately five feet above the ground surface at that location. This height is generally considered representative of the ear level of an average person.
    - Noise monitoring will be conducted under dry weather conditions with wind speeds below 15 mph and limited to non-holiday weekday Tuesdays, Wednesday and Thursdays.
- A summary table of existing measured noise levels for all time periods will be provided as part of the noise study documentation.
- At each of the noise measurement sites a PCE noise analysis, in accordance with CEQR requirements, will be completed to determine noise levels under future No Action and Proposed Action conditions. All projections will be made with L_{eq} noise descriptor.
- Estimated window-wall attenuation requirements under future Proposed Action conditions will be determined based on the highest L_{10} noise level estimated at each monitoring site.
- Window wall attenuation requirements will be based on the proposed land use of each of the potential and projected development site based on CEQR interior noise exposure level limits.
- A summary of the noise measurement findings and window wall attenuation requirements will be summarized in a table format acceptable to DCP for inclusion in the environmental documentation prepared for the project effort.

TASK 7—NEIGHBORHOOD CHARACTER

The character of a neighborhood is established by numerous factors, including land use pat- terns, the scale of its development, the design of its buildings, the presence of notable land- marks, and a variety of other physical features that include traffic and pedestrian patterns, noise, etc. The proposed action would permit new development that has the potential to alter certain constituent elements of the affected area's neighborhood character, including traffic and noise levels. An amalgam of impact categories, a

neighborhood character analysis considers the combined impacts of land use, urban design, visual resources, historic resources, socioeconomics, and traffic and noise issues. Subtasks will include:

- Drawing on other EIS and EAS sections, describe the predominant factors that con- tribute to defining the character of the neighborhood.
- Based on planned development projects, public policy initiatives, and planned public improvements, summarize changes that can be expected in the character of the neighborhood in the future without the action.
- The analysis of project impacts presented in various EIS and EAS sections will serve as the basis for assessing and summarizing the project's impacts on neighborhood character.

TASK 8—PUBLIC HEALTH

The CEQR Technical Manual states that a public health assessment may not be necessary for many proposed actions, but a thorough consideration of health issues should be documented. In determining whether a public health assessment is appropriate, the following impact categories are considered in the assessment below: air quality, hazardous materials, solid waste and sanitation, and noise. For hazardous materials, the analysis shows that with (E) designations in place for all 16 development sites of the 19 lots, there would be no significant adverse impacts. Similarly, for solid waste and sanitation, significant adverse impacts are not predicted, in accordance with the screening procedures of the CEQR Technical Manual. However, for noise, while no intersection meets or exceeds the CEQR Technical Manual screening of a doubling of passenger-car equivalents, and significant adverse impacts are not expected, the Draft EIS will present an analysis of need and levels of interior noise attenuation; this will also be reported in the Public Health Chapter. Further, as noted above, a detailed air quality analysis for the proposed action will be conducted; this analysis will also be reflected in the Public Health analysis.

TASK 9—MITIGATION

Where significant adverse project impacts have been identified, measures to mitigate those impacts will be described. These measures will be developed and coordinated with the responsible City/State agencies as necessary, including NYCDRP, LPC, NYCDOT, and NYCDEP. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

TASK 10—ALTERNATIVES

The purpose of an alternatives section in an EIS is to examine development options that would tend to reduce project-related impacts. The alternatives will be defined once the full extent of the Proposed Action’s impacts has been identified. The alternatives will include the No Build Alternative and an alternative that reduces any identified significant adverse impacts. The alternatives analysis will be qualitative, except where significant adverse impacts of the Proposed Action have been identified. The level of analysis provided will depend on an assessment of project impacts determined by the analysis connected with the appropriate tasks.

TASK 11—SUMMARY EIS CHAPTERS

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

- **Unavoidable Adverse Impacts** - which summarizes any significant adverse impacts that are unavoidable if the Proposed Action is implemented regardless of the mitigation employed (or if mitigation is not feasible).

- **Growth-Inducing Aspects of the Proposed Action** - which generally refer to "secondary" impacts of a Proposed Action that trigger further development.

- **Irreversible and Irretrievable Commitments of Resources** - which summarizes the Proposed Action and its impacts in terms of the loss of environmental resources (loss of vegetation, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.

TASK 12—EXECUTIVE SUMMARY

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

APPENDIX 1

TRANSPORTATION PLANNING FACTORS MEMORANDUM

AKRF

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Draft Memorandum

To: Glen Price, III (NYCDCP)

From: Cornelius Armentrout, Lee Kim, and Adnan Pasha, P.E.

Date: March 14, 2013

Re: East Fordham Road Rezoning — Travel Demand Factors

cc: Robert White (AKRF)

A. INTRODUCTION

This memorandum details the trip generation assumptions and travel demand estimates for the proposed action which involves rezoning along East Fordham Road in the Bronx. The proposed rezoning would facilitate the development of new residential and commercial uses by replacing the existing C8-1 and R6 zoning districts (with C2-3 and C2-4 overlays) with a proposed C4-5D district and a R6B contextual district, and mapping a C2-4 overlay along several blocks. It is expected that the proposed action would result in redevelopment of 9 projected development sites that would include new residential units, commercial retail space, office space, and community facility space.

In the Future Without the Proposed Action, the projected development sites could be redeveloped As-of-Right (AOR) to include approximately 538 gross-square feet (gsf) of commercial office space, approximately 84,057 gsf of local retail space, approximately 20,000 gsf of destination retail space, approximately 17,322 gsf of medical office space, and approximately 68,857 gsf of Fordham University science classroom space. The proposed rezoning would increase residential use by approximately 352 dwelling units, office use by approximately 56,434 gsf, commercial use by approximately 119,000 gsf, and community facility use by approximately 32,168 gsf. Overall, in the future with the proposed action, the projected development sites would be redeveloped to include 352 residential units, approximately 56,972 gsf of office space, approximately 115,590 gsf of local retail space, approximately 56,101 gsf of destination retail space, a 40,000 gsf supermarket, an approximately 11,318 gsf restaurant, approximately 49,940 gsf of medical office use, and approximately 62,194 gsf of university classroom space. **Table 1** provides a comparison of the future without and with the proposed action.

As part of the transportation analysis for the proposed rezoning, as an initial step, travel demand factors were identified for each of the development components discussed above (see **Table 2**).

Table 1
Comparison of the Future Without and With the Proposed Action

Development Components	Future Without the Proposed Action (AOR Development)	Future With the Proposed Action	Incremental Difference
Residential (dwelling units)	--	352	352
Office (gsf)	538	56,972	56,434
Local Retail (gsf)	84,057	115,590	31,533
Destination Retail (gsf)	20,000	56,101	36,101
FRESH Market (gsf)	--	40,000	40,000
Restaurant (gsf)	--	11,318	11,318
Medical Office (gsf)	17,322	49,490	32,168
Fordham University Classroom (gsf)	68,857	62,194	-6,663

B. ANALYSIS FRAMEWORK

The *2012 CEQR Technical Manual* describes a two-tier screening procedure to assess the travel demand characteristics of a project. The preliminary assessment begins with a trip generation analysis (Level-1) to estimate the volume of person and vehicle trips attributable to a project. Based on CEQR guidelines, if a project is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Level-2) are performed to estimate the incremental trips that could be incurred at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that a project would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a pedestrian element, then further quantified analyses are warranted to assess the potential for significant adverse impacts.

In accordance with the CEQR criteria discussed above, a transportation screening assessment was prepared to identify the needs for detailed analysis of potential project-related impacts. This assessment is discussed in detail in the proceeding section.

C. TRAVEL DEMAND FACTORS

The transportation screening assessment begins with the identification of travel demand factors for each of the proposed development components for the critical peak periods. These periods—including the weekday AM, weekday midday, and weekday PM peak hours—were selected based on the proposed mix of uses and their typical travel characteristics.

The travel demand factors used in estimating the trip generation for each of the proposed development components were obtained from the *2012 CEQR Technical Manual*, the *2011 Webster Avenue Rezoning FEIS* and the *2012 West Harlem Rezoning FEIS.* Furthermore, where applicable, in-out distributions, modal splits, and vehicle occupancies were obtained from the 2007-2011 American Community Survey (ACS) and 2000 U.S. Census databases.

Table 2
Travel Demand Factors

Use	Residential			Local Retail			Destination Retail			Fresh Market			Restaurant			Community Facility(Medical Office) Staff			Community Facility(Medical Office) Visitors			Community Facility (Science Classroom)			Office		
Daily Person Trip Generation Rate	(1) Weekday 8.075 Trips / Unit			(1) Weekday 205 Trips / KSF			(1) Weekday 78.2 Trips / KSF			(2) Weekday 205 Trips / KSF			(2) Weekday 173.0 Trips / KSF			(2) Weekday 10.0 Trips / KSF			(2) Weekday 33.6 Trips / KSF			(1) Weekday 26.6 Trips / KSF			(1) Weekday 18.0 Trips / KSF		
Trip Linkage	0%			25%			25%			25%			25%			0%			0%			0%			0%		
Net Daily Person trip Generation Rate	Weekday 8.1 Trips / Unit			Weekday 153.8 Trips / KSF			Weekday 58.7 Trips / KSF			Weekday 153.8 Trips / KSF			Weekday 129.8 Trips / KSF			Weekday 10.0 Trips / KSF			Weekday 33.6 Trips / KSF			Weekday 26.6 Trips / KSF			Weekday 18.0 Trips / KSF		
	AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM
Temporal	(1)			(1)			(1)			(2)			(2)			(2)			(2)			(1,6)			(1)		
	10%	5%	11%	3%	19%	10%	3%	9%	9%	3.1%	12.0%	9.6%	1.0%	17.2%	7.7%	24.0%	17.0%	24.0%	6.0%	9.0%	5.0%	16.0%	10.7%	26.0%	12%	15%	14%
Direction	(2)			(2)			(4)			(2)			(2)			(2)			(2)			(6)			(2)		
In	15%	50%	70%	50%	50%	50%	51.8%	51.8%	51.8%	45%	46%	47%	94%	65%	65%	100%	50%	0%	92%	50%	31%	100%	52%	66%	96%	39%	5%
Out	85%	50%	30%	50%	50%	50%	48.2%	48.2%	48.2%	55%	54%	53%	6%	35%	35%	0%	50%	100%	8%	50%	69%	0%	48%	34%	4%	61%	95%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(3)			(2)			(5)			(2)			(2)			(5)			(2)			(6)			(5)		
Auto	18.0%	18.0%	18.0%	3%	3%	3%	51.0%	51.0%	51.0%	4%	4%	4%	40%	40%	40%	51.0%	51.0%	51.0%	25.0%	25.0%	25.0%	20.0%	20.0%	20.0%	51.0%	51.0%	51.0%
Taxi	3.0%	3.0%	3.0%	2%	2%	2%	2.0%	2.0%	2.0%	3%	3%	3%	5%	5%	5%	2.0%	2.0%	2.0%	15.0%	15.0%	15.0%	1.0%	1.0%	1.0%	2.0%	2.0%	2.0%
Subway	31.0%	31.0%	31.0%	5%	5%	5%	12.0%	12.0%	12.0%	5%	5%	5%	4%	4%	4%	12.0%	12.0%	12.0%	19.0%	19.0%	19.0%	24.0%	24.0%	24.0%	12.0%	12.0%	12.0%
Railroad	4.0%	4.0%	4.0%	0%	0%	0%	2.0%	2.0%	2.0%	0%	0%	0%	1%	1%	1%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%	2.0%	2.0%	2.0%
Bus	20.0%	20.0%	20.0%	10%	10%	10%	17.0%	17.0%	17.0%	5%	5%	5%	5%	5%	5%	17.0%	17.0%	17.0%	19.0%	19.0%	19.0%	47.0%	47.0%	47.0%	17.0%	17.0%	17.0%
Walk	24.0%	24.0%	24.0%	80%	80%	80%	16.0%	16.0%	16.0%	83%	83%	83%	45%	45%	45%	16.0%	16.0%	16.0%	20.0%	20.0%	20.0%	8.0%	8.0%	8.0%	16.0%	16.0%	16.0%
Work at Home	0.0%	0.0%	0.0%	0%	0%	0%	0.0%	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	(2)(3)			(2)			(2,4)			(2)			(2)			(2,5)			(2)			(6)			(2,5)		
Auto	1.19	1.19	1.19	1.60	1.60	1.60	2.20	2.20	2.20	1.65	1.65	1.65	2.20	2.20	2.20	1.14	1.14	1.14	1.65	1.65	1.65	1.10	1.10	1.10	1.14	1.14	1.14
Taxi	1.40	1.40	1.40	1.20	1.20	1.20	2.00	2.00	2.00	1.40	1.40	1.40	2.30	2.30	2.30	1.40	1.40	1.40	1.40	1.40	1.40	1.10	1.10	1.10	1.40	1.40	1.40
Daily Delivery Trip Generation Rate	(1) Weekday 0.06 Delivery Trips / Unit			(1) Weekday 0.35 Delivery Trips / KSF			(1) Weekday 0.35 Delivery Trips / KSF			(2) Weekday 0.35 Delivery Trips / KSF			(2) Weekday 3.60 Delivery Trips / KSF			(2) Weekday 0.45 Delivery Trips / KSF						(6) Weekday 0.03 Delivery Trips / KSF			(1) Weekday 0.35 Delivery Trips / KSF		
	AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM				AM	MD	PM	AM	MD	PM
Delivery Temporal	(1)			(1)			(1)			(2)			(2)			(2)						(6)			(1)		
	12%	9%	2%	8%	11%	2%	8%	11%	2%	9.7%	7.8%	5.1%	6.0%	6.0%	1.0%	9.6%	1.0%	9.6%				9.7%	7.8%	7.8%	10%	11%	2%
Delivery Direction	(1)			(1)			(1)			(2)			(2)			(2)						(6)			(1)		
In	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%				50%	50%	50%	50%	50%	50%
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%				50%	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%				100%	100%	100%	100%	100%	100%

Source
(1) 2012 CEQR Technical Manual
(2) Webster Avenue Rezoning FEIS, 2011. Subway and rail modal splits for restaurant and community facility visitor uses adjusted to account for local travel characteristics. Destination retail auto occupancy same as restaurant, as per DCP guidance.
(3) ACS 2007-2011 5-year Journey To Work estimates for Bronx Tracts 387, 389, 393, and 397
(4) Gateway Center at Bronx Terminal Market FEIS (2005), with adjusted subway and rail modal splits to account for local travel characteristics.
(5) 2000 Census Reverse Journey To Work for Bronx Tracts 387, 389, 393, and 397. Destination retail uses the same modal splits as per DCP guidance
(6) Lower Concourse Rezoning and Related Actions EIS (2009)

RESIDENTIAL

For the residential component, the person and delivery trip generation rates and temporal distributions were obtained from the 2012 *CEQR Technical Manual.* The latest U.S. Census American Community Survey (ACS) 2007-2011 journey-to-work data were used to develop the modal splits for all peak periods based on the information for census tracts 387, 389, 393, and 397, as illustrated in **Figure 1**. Auto occupancy rates from the journey-to-work data were used for all analysis time periods. The vehicle occupancy for taxi trips was obtained from the *Webster Avenue Rezoning FEIS* (2011).

The directional distributions for the residential component were based on the information from *Webster Avenue Rezoning FEIS* (2011). The temporal and directional distributions for delivery trip for all peak periods were based on the information from the 2012 *CEQR Technical Manual*.



Figure 1: Study Area Census Tracts

OFFICE

For the office component, the person and delivery trip generation rates were obtained from the 2012 *CEQR Technical Manual.* The temporal and directional distributions for all peak periods were obtained from the 2012 *CEQR Technical Manual* and the *Webster Avenue Rezoning FEIS* (2011), respectively.

The modal splits and vehicle occupancies for the all peak periods were based on the reverse journey-to-work data from the 2000 U.S. Census database for the census tracts in the study area including tracts 387,

389, 393, and 397. The vehicle occupancy for taxi trips was obtained from the *Webster Avenue Rezoning FEIS* (2011).

DESTINATION RETAIL

The person and delivery trip generation rates and for the destination retail components were obtained from the 2012 *CEQR Technical Manual*. The temporal and directional distributions were obtained from the 2012 *CEQR Technical Manual* and *Gateway Center at Bronx Terminal Market FEIS* (2005), respectively. A 25-percent linked trip credit was also applied to the destination retail trip generation estimates.

The modal splits for the destination retail component were based on the reverse journey-to-work data from the 2000 U.S. Census database for the census tracts in the study area including tracts 387, 389, 393, and 397. The auto occupancy was assumed to be the same as that for the restaurant use, and was obtained from the *Webster Avenue Rezoning FEIS* (2011). The occupancy for taxi trips was also obtained from the *Webster Avenue Rezoning FEIS* (2011).

The temporal distributions for the delivery trips for all peak periods were obtained from the 2012 *CEQR Technical Manual*.

LOCAL RETAIL

The daily trip generation and delivery vehicle trip generation rates for the project's local neighborhood retail component were obtained from the 2012 *CEQR Technical Manual*. A 25-percent linked trip credit was applied to the local retail trip generation estimates. The modal splits and vehicle occupancies were obtained from the *Webster Avenue Rezoning FEIS* (2011).

The temporal and directional distributions for all peak periods were obtained from the 2012 *CEQR Technical Manual* and the *Webster Avenue Rezoning FEIS* (2011), respectively.

The temporal distributions for the delivery trips were obtained from the 2012 *CEQR Technical Manual.*

FRESH MARKET

The travel demand factors for the proposed FRESH market component were obtained from the *Webster Avenue Rezoning FEIS* (2011). Likewise local and destination retail components, a 25-percent linked trip credit were applied to the FRESH market trip generation estimates.

RESTAURANT

The travel demand factors for the proposed restaurant component were obtained from the *Webster Avenue Rezoning FEIS* (2011). A 25-percent linked trip credit was also applied to the restaurant trip generation estimates. .

COMMUNITY FACILITY (MEDICAL OFFICE USES)

Medical office staff modal splits were based on the reverse journey-to-work data from the 2000 U.S. Census database for tracts 387, 389, 393, and 397. All other travel demand factors for the project's community facility component were obtained from the *Webster Avenue Rezoning FEIS* (2011).

UNIVERSITY CLASSROOM

The person trip generation rates for the university classroom components were obtained from the 2012 *CEQR Technical Manual*. The temporal and directional distributions were obtained from the 2012 *CEQR Technical Manual* and *Lower Concourse Rezoning and Related Actions EIS* (2009).

Delivery trip rates, delivery temporal and directional distributions, modal splits, and vehicle occupancies were also obtained from the *Lower Concourse Rezoning and Related Actions EIS* (2009).

D. LEVEL-1 SCREENING

As per the criteria established in the 2012 *CEQR Technical Manual*, a quantified transportation analysis may be warranted if the proposed action is expected to result in 50 or more vehicle trips, 200 or more transit trips (200 or more peak hour transit riders at any given subway station or 50 or more peak hour bus trips on a particular route in one direction), and/or 200 or more pedestrian trips during a given peak hour.

THE FUTURE WITHOUT THE PROPOSED ACTION (AS-OF-RIGHT)

In the future without the proposed action, the projected development sites could be redeveloped As-of-Right (AOR) to include approximately 538 gross-square feet (gsf) of commercial office space, approximately 84,057 gsf of local retail space, approximately 20,000 gsf of destination retail space, approximately 17,322 gsf of medical office space, and approximately 68,857 gsf of Fordham University science classroom space.

As shown in **Table 3**, the AOR scenario would generate approximately 794, 2,841, and 1,945 person trips including 105, 196, and 202 subway trips, and 197, 371, and 383 bus trips during the weekday AM, midday, and PM peak hours, respectively. The AOR scenario would also result in approximately 125, 232, and 223 vehicle trips including 93, 128, and 159 auto trips, 28, 100, and 62 taxi trips, and 4, 4, and 2 delivery trips during the weekday AM, midday, and PM peak hours, respectively.

Table 3
Trip Generation Summary: As-of-Right Scenario

Peak Hour	AM			Midday			PM		
Person Trip	In	Out	Total	In	Out	Total	In	Out	Total
Auto	104	15	119	99	96	195	112	105	217
Taxi	13	5	18	31	31	62	19	19	38
Subway	93	12	105	99	97	196	116	86	202
Bus	174	23	197	188	183	371	223	160	383
Railroad	2	0	2	2	2	4	1	2	3
Walk	195	158	353	1,007	1,006	2,013	553	549	1,102
Total	**581**	**213**	**794**	**1,426**	**1,415**	**2,841**	**1,024**	**921**	**1,945**
Peak Hour	**AM**			**Midday**			**PM**		
Vehicle Trip	In	Out	Total	In	Out	Total	In	Out	Total
Auto	85	8	93	65	63	128	83	76	159
Taxi	14	14	28	50	50	100	31	31	62
Delivery	2	2	4	2	2	4	1	1	2
Total	**101**	**24**	**125**	**117**	**115**	**232**	**115**	**108**	**223**

THE FUTURE WITH THE PROPOSED ACTION

In the future with the proposed action, the projected development sites would be redeveloped to include 352 residential dwelling units, approximately 56,972 gsf of office space, approximately 115,590 gsf of local retail space, approximately 56,101 gsf of destination retail space, a 40,000 gsf supermarket, an approximately 11,318 gsf restaurant, approximately 49,490 gsf of medical office use, and approximately 62,194 gsf of university classroom use.

As shown in **Table 4**, the With-Action scenario would generate approximately 1,730, 5,374, and 3,866 person trips including 248, 395, and 405 subway trips, and 324, 620, and 591 bus trips during the weekday AM, midday, and PM peak hours, respectively. The With-Action scenario would also result in approximately 345, 601, and 540 vehicle trips including 255, 379, and 392 auto trips, 74, 208, and 142 taxi trips, and 16, 14, and 6 delivery trips during the weekday AM, midday, and PM peak hours, respectively.

Table 4
Trip Generation Summary: With-Action Scenario

Peak Hour	AM			Midday			PM		
Person Trip	In	Out	Total	In	Out	Total	In	Out	Total
Auto	247	85	332	310	293	603	252	318	570
Taxi	32	18	50	72	70	142	46	50	96
Subway	147	101	248	197	198	395	221	184	405
Bus	231	93	324	310	310	620	318	273	591
Railroad	9	11	20	11	11	22	13	13	26
Walk	387	369	756	1,787	1,805	3,592	1,080	1,098	2,178
Total	**1,053**	**677**	**1,730**	**2,687**	**2,687**	**5,374**	**1,930**	**1,936**	**3,866**
Peak Hour	**AM**			**Midday**			**PM**		
Vehicle Trip	In	Out	Total	In	Out	Total	In	Out	Total
Auto	196	59	255	190	189	379	164	228	392
Taxi	37	37	74	104	104	208	71	71	142
Delivery	8	8	16	7	7	14	3	3	6
Total	**241**	**104**	**345**	**301**	**300**	**601**	**238**	**302**	**540**

NET INCREMENTAL TRIPS

TRAFFIC

As shown in **Table 5**, the net difference in trips generated in the future without and with the proposed action would total 222, 369, and 318 vehicle trips during the weekday AM, midday, and PM peak hours, respectively. Since the net incremental vehicle trips would be greater than 50 during all three peak hours, a Level-2 screening assessment was conducted to determine the need for undertaking additional quantified analysis.

Table 5
Trip Generation Summary: Project Increments

Peak Hour	AM			Midday			PM		
Person Trip	In	Out	Total	In	Out	Total	In	Out	Total
Auto	144	70	214	211	196	407	139	214	353
Taxi	19	13	32	41	39	80	28	31	59
Subway	53	89	142	98	101	199	105	98	203
Bus	58	70	128	122	126	248	95	113	208
Railroad	8	10	18	9	9	18	12	11	23
Walk	192	210	402	780	799	1,579	528	549	1,077
Total	**474**	**462**	**936**	**1,261**	**1,270**	**2,531**	**907**	**1,016**	**1,923**
Peak Hour	**AM**			**Midday**			**PM**		
Vehicle Trip	In	Out	Total	In	Out	Total	In	Out	Total
Auto	111	51	162	125	126	251	81	153	234
Taxi	24	24	48	54	54	108	40	40	80
Delivery	6	6	12	5	5	10	2	2	4
Total	**141**	**81**	**222**	**184**	**185**	**369**	**123**	**195**	**318**

TRANSIT

As shown in **Table 5**, compared to the future without the proposed action, the proposed project would result in net increments of 142, 199, and 203 person trips by subway and 128, 248, and 208 person trips by bus during the weekday AM, midday, and PM peak hours, respectively. Since the project area is served by various transit options—including the No. 4, B and D subway lines at the two Fordham Road subway stations, the No.2 and No.5 subway service at the Pelham Parkway Station, and the Bx1, Bx2, Bx9, Bx12, Bx12-Select, Bx15, Bx17, Bx19, Bx22, Bx34, Bx41, and Bx55 bus routes—it is anticipated that no single subway station would experience trips in excess of CEQR recommended thresholds to undertake quantified transit analyses. However, since the subway stations are located approximately one-half mile to a mile from the rezoning area, a majority of the subway riders would be expected to take the Bx12 or Bx12-Select Bus Service (SBS) to and from the subway stations. The Bx12-SBS makes limited stops; within the rezoning area, the only Bx12-SBS stops (eastbound and westbound) are at East Fordham

Road and Southern Boulevard. However, it is anticipated that the Bx12, which serves local stops along East Fordham Road, would experience more than 50 riders per direction and, therefore a quantitative bus line-haul analysis for the Bx12 route would be conducted for the weekday AM and PM peak hours.

PEDESTRIANS

All the person trips generated by the proposed action would traverse the pedestrian elements surrounding the projected development sites. A Level-2 screening assessment was conducted to select pedestrian elements (including corner reservoirs, sidewalks and crosswalks) which would experience 200 or more peak hour pedestrian trips during the critical peak periods for quantified analysis.

E. LEVEL-2 SCREENING

For the Level-2 screening assessment, projected trips were assigned to specific intersections, transit facilities, and pedestrian elements in the study area. Further quantified analyses to assess the potential impacts of the Proposed Action on the transportation system would be warranted if the trip assignments were to identify intersections incurring 50 or more peak hour vehicles trips or pedestrian elements incurring 200 or more peak hour pedestrian trips. Similarly, for transit elements, the projected trips were considered in determining the likely transit facilities requiring detailed analysis.

TRAFFIC

As shown above, incremental vehicle trips resulting from the Proposed Action would exceed the *CEQR* Level-1 screening threshold during all peak hours. These vehicle trips were assigned to area intersections based on the most likely travel routes to and from the projected development sites, prevailing travel patterns, commuter origin-destination summaries from the census data, the configuration of the roadway network, and the anticipated locations of site access and egress. For a conservative analysis, all auto trips were assigned directly to the projected development sites. Taxi trips were assigned to the block faces bordering the projected development sites. All delivery trips were assigned to the projected development sites via the New York City Department of Transportation (DOT) designated truck routes.

Traffic assignments for autos, taxis, and deliveries for individual components are discussed as follows:

Autos

Residential

Residential auto assignments were based on the journey-to-work origin-destination information from the 2000 U.S. Census database. Based on this information, majority of residential trips would occur within the Bronx (approximately 70 percent) with the remaining trips being made to Brooklyn and Manhattan.

Overall, the vehicle trips generated by the residential component were distributed to the study area streets/roadways in the following manner: approximately 30 percent of project-generated vehicle trips were assumed to approach the projected development sites from southeast Bronx, 33 percent from southwest Bronx, 7 percent from northwest Bronx, 20 percent from Manhattan, and 10 percent from Brooklyn. Reverse auto trips are expected to return along the same general routes on which they departed.

Office

Auto trips generated by the office use were based on the 2000 U.S. Census reverse journey-to-work data. Most of the office trips would originate from within the Bronx (63 percent) and from upstate New York counties outside of the five boroughs (20 percent). The remaining trips would originate from Queens (12 percent) and Manhattan (5 percent).

Of the trips within the Bronx, approximately 41 percent were assigned from points southeast of the projected development sites, 22 percent were assigned from points northeast of the sites, 19 percent from southwest of the sites, and the remaining 18 percent were assigned from points northwest of the sites. The majority of trips traveling from Queens were assigned to the projected development sites via the Robert F. Kennedy Triborough Bridge and the Bronx-Whitestone Bridge, and subsequently along the Bruckner Expressway and the Bronx River Parkway. Trips from Manhattan are expected to use Harlem River crossings to enter the Bronx and will

than approach the projected development sites via the most direct routes available, primarily along the Major Deegan Expressway. Trips traveling from upstate New York were assigned to the projected development sites via the Bronx River Parkway or the Major Deegan Expressway.

Destination Retail

The destination retail component is expected to draw customers from within a three-mile radius of the projected development sites; therefore, a majority of the auto trips are expected to come from within the Bronx (65 percent) with some trips expected to come from Manhattan (25 percent) and Queens (10 percent).

Overall, the vehicle trips generated by the destination retail component were distributed to the study area streets/roadways in the following manner: approximately 50 percent of project generated trips were assumed to approach the projected development sites from the east, 25 percent from the north and west, and the remaining 25 percent from the south. Departing trips were assigned along the same routes as arrivals.

Local Retail

The local retail uses are expected to serve the immediate surrounding area. Therefore, auto trips were generally assigned from local origins within the neighborhood and adjacent residential areas.

Overall, the vehicle trips generated by the local retail component were distributed to the study area streets/roadways in the following manner: approximately 82 percent of project generated trips were assumed to approach the projected development sites from the south, 16 percent from the north and west, and the remaining 2 percent from the east. Departing trips were assigned along the same routes as arrivals.

Medical Office - Staff

Auto trips generated by the medical office use for staff were based on U.S. Census 2000 reverse journey-to-work data and will follow the same pattern as identified for the general office use above.

Medical Office - Visitors

For medical office visitor trips, half of the trips were assigned locally to reflect neighborhood medical facilities (for e.g., neighborhood physician's office or local medical clinic), and the remaining half were assigned more regionally—similar to destination retail—to account for specialist offices or other facilities that would draw trips from beyond the local area.

Overall, the vehicle trips generated by the medical office visitors were distributed to the study area streets/roadways in the following manner: approximately 50 percent of project generated trips were assumed to approach the projected development sites from the east, 25 percent from the north and west, and the remaining 25 percent from the south.

FRESH Market and Restaurant

The FRESH market and restaurant components are expected to draw customers from within a three-mile radius of the projected development sites; therefore, a majority of the auto trips are expected to come from within the Bronx (65 percent) with some trips expected to come from Manhattan (25 percent) and Queens (10 percent).

Overall, the vehicle trips generated by these components were distributed to the study area streets/roadways in the following manner: approximately 57 percent of project generated trips were assumed to approach the projected development sites from the south, 40 percent of project generated trips were assumed to approach the projected development sites from the north and west, and the remaining 3 percent from the south. Departing trips were assigned along the same routes as arrivals.

University Classroom

The university classroom component is expected to draw patrons from within a three-mile radius of the projected development sites; therefore, a majority of the auto trips are expected to come from within the

Bronx (65 percent) with some trips expected to come from Manhattan (25 percent) and Queens (10 percent).

Overall, the vehicle trips generated by the university classroom component were distributed to the study area streets/roadways in the following manner: approximately 50 percent of project generated trips were assumed to approach the projected development sites from the east, 25 percent from the north and west, and the remaining 25 percent from the south. Departing trips were assigned along the same routes as arrivals.

Taxis

Taxi pick-ups and drop-offs for all development components were assigned to pick up and drop off along the projected development site frontages.

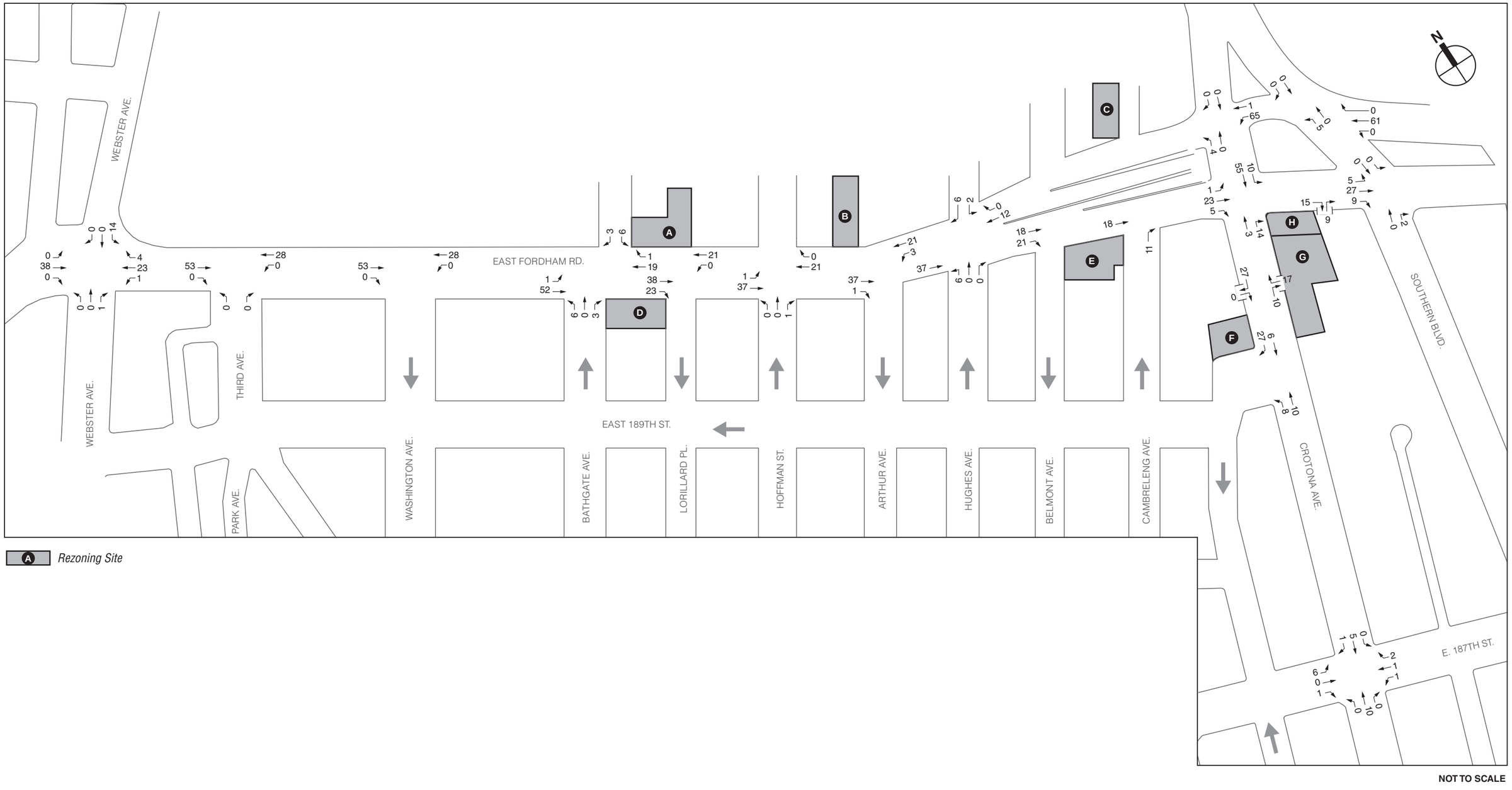
Deliveries

Truck delivery trips for all land uses were assigned to NYCDOT-designated truck routes. Trucks were assigned to the study area from regional origins via Webster Avenue, East Fordham Road, Third Avenue, and Southern Boulevard. Trucks were assigned along regional and local truck routes as long as possible until reaching the projected development sites.

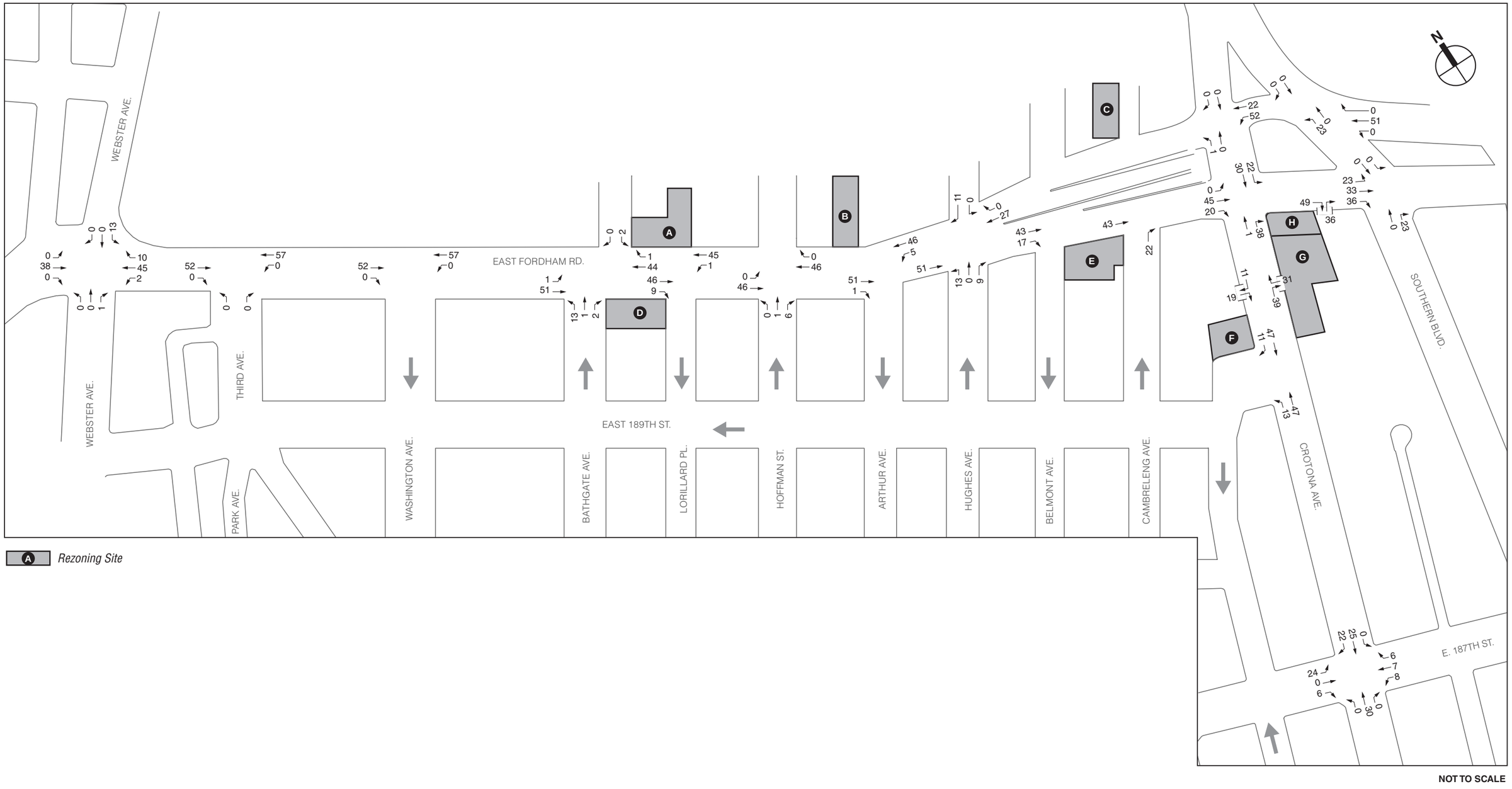
The total weekday AM, midday, and PM peak hour vehicle trip increments are presented in **Figures 2, 3, and 4**, respectively.

According to the *CEQR Technical Manual*, intersections expected to incur 50 or more incremental peak hour vehicle trips as a result of a proposed action would have the potential for significant adverse traffic impacts and should be assessed in a quantified traffic impact analysis. As summarized in **Table 6** and depicted in **Figure 5**, the following 12 intersections, together comprising the traffic study area, would be included for the weekday AM, midday, and PM peak hour traffic impact analysis.

- East Fordham Road and Webster Avenue;
- East Fordham Road and Third Avenue;
- East Fordham Road and Bathgate Avenue;
- East Fordham Road and Lorillard Place;
- East Fordham Road and Arthur Avenue;
- East Fordham Road and Hoffman Street;
- East Fordham Road and Hughes Avenue;
- East Fordham Road and Cambreleng Avenue;
- East Fordham Road (Eastbound & Westbound) and Crotona Avenue;
- East Fordham Road (Eastbound & Westbound) and Southern Boulevard;
- Crotona Avenue and East 187th Street; and
- Crotona Avenue and East 189th Street.

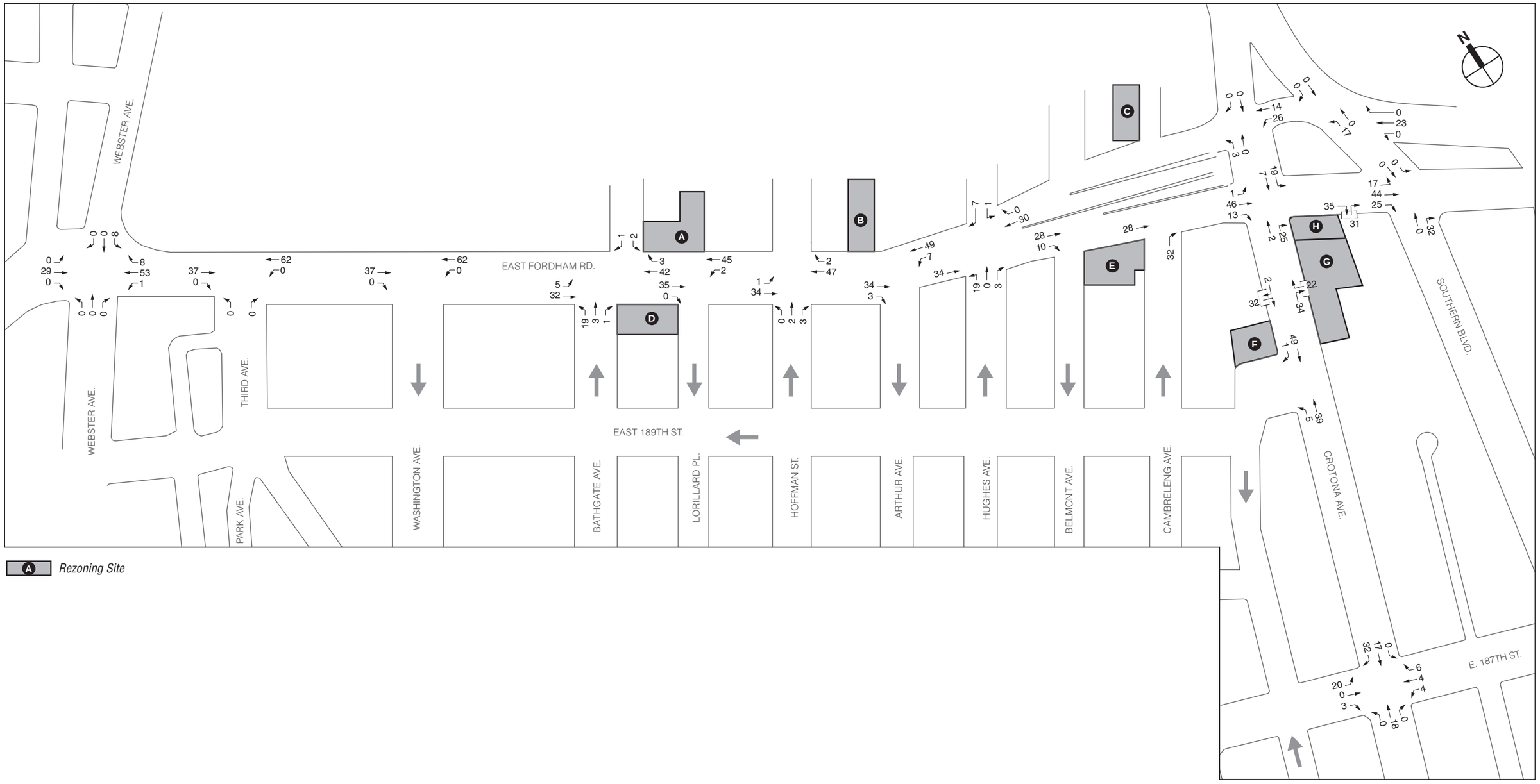


Incremental Traffic Volumes
Weekday AM Peak Hour
Figure 2



Incremental Traffic Volumes
Weekday Midday Peak Hour
Figure 3

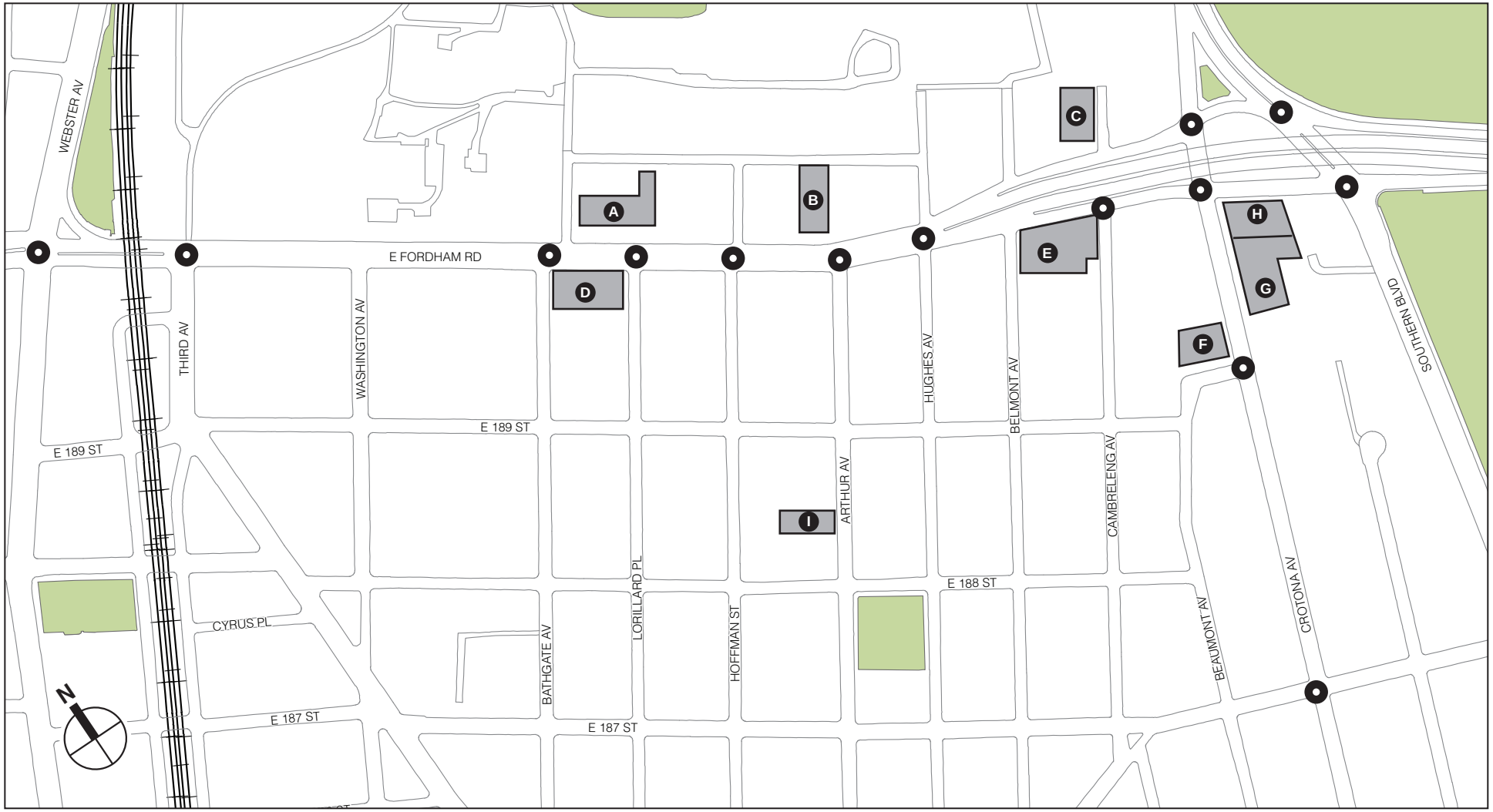
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NOT TO SCALE

Incremental Traffic Volumes
Weekday PM Peak Hour
Figure 4

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A *Projected Development Sites*

Recommended Traffic Analysis Locations

Traffic Analysis Locations
Figure 5

Table 6
Summary of Incremental Vehicle Trips

Intersection	AM	MD	PM	Recommended Analysis Location
East Fordham Rd North and Southern Blvd	**66**	**74**	40	✓
East Fordham Rd South and Southern Blvd	43	**115**	**118**	✓
East Fordham Rd North and Crotona Ave	**70**	**75**	43	✓
East Fordham Rd South and Crotona Ave	**111**	**156**	**113**	✓
East 189th St and Crotona Ave	**51**	**118**	**94**	✓
East 187th St and Crotona Ave	27	**128**	**104**	✓
East Fordham Rd and Cambreleng Ave	29	**65**	**60**	✓
East Fordham Rd and Belmont Ave	39	**60**	38	
East Fordham Rd and Hughes Ave	**63**	**111**	**94**	✓
East Fordham Rd and Arthur Ave	**62**	**103**	**93**	✓
East Fordham Rd and Hoffman St	**60**	**99**	**89**	✓
East Fordham Rd and Lorillard Pl	**82**	**101**	**82**	✓
East Fordham Rd and Bathgate Ave	**91**	**115**	**108**	✓
East Fordham Rd and Washington Ave	**81**	**109**	**99**	
East Fordham Rd and 3rd Ave	**81**	**109**	**99**	✓
East Fordham Rd and Webster Ave	**81**	**109**	**99**	✓

Note: Trip estimates shown above that are 50 or greater are bolded and highlighted.

TRANSIT

Subway

As summarized in **Table 5**, the Proposed Action is expected to generate 142, 199, and 203 person trips by subway during the weekday AM, midday, and PM peak hours, respectively. These trips were assigned to the Fordham Road Station at Jerome Avenue (No. 4 line), the Fordham Road Station at Grand Concourse (B and D lines), and the Pelham Parkway Station (No. 2 and No. 5 lines). Based on a preliminary distribution of subway trips, the project-generated peak hour subway trips are not expected to add 200 or more riders per line per direction or to a station during the weekday morning and evening peak hours; therefore, detailed subway line-haul and station analyses would not be required.

Bus

As presented in **Table 5**, the Proposed Action is expected to generate 128, 248, and 208 person trips by bus during the AM, midday, and PM peak hours, respectively. There are twelve bus routes (Bx1, Bx2, Bx9, Bx12, Bx12-SBS, Bx15, Bx17, Bx19, Bx22, Bx34, Bx41 and Bx55) with stops adjacent to or near the projected development sites. In addition, there are expected to be subway-to-bus transfer trips from the above mentioned subway stations. Allocation of these trips to the bus routes serving the stops near the subway stations (i.e., Bx12 and Bx12-SBS) shows that the Bx12 route would incur 50 or more peak hour riders in a single direction. Therefore, quantified bus line-haul analysis of the Bx12 will be performed for potential bus impacts for the weekday AM and PM peak hours.

PEDESTRIANS

As shown in **Table 5**, the projected peak hour pedestrian trips would exceed the CEQR analysis threshold of 200 pedestrians during all peak hours. Level 2 pedestrian trip assignments were individually developed for all the proposed development components and are discussed as follows:

- Auto Trips –Motorists would park at on-site parking facilities or at the nearest available public parking facilities and would walk to-and-from the projected development sites.
- Taxi Trips – Taxi patrons would get dropped off and picked up along East Fordham Road, Crotona Avenue, and Arthur Avenue.
- Bus Trips – Bus riders would use the Bx1, Bx2, Bx9, Bx12, Bx12-SBS, Bx15, Bx17, Bx19, Bx22, Bx34, Bx41, and Bx55 bus routes and would get on and off at the bus stops nearest to the projected development sites. It is anticipated that the riders on the north-south bus routes such as Bx1, Bx2,

Bx15, Bx34, Bx41, and Bx55 would transfer to the bus routes serving stops along East Fordham Road and get off near the projected development sites.

- Subway Trips – Subway riders were assigned to the Fordham Road Station at Jerome Avenue (No. 4 line), the Fordham Road Station at Grand Concourse (B and D lines), and the Pelham Parkway Station (No. 2 and No. 5 lines.) It is anticipated that a majority of the subway riders would transfer to the Bx12 or Bx12-SBS to reach the projected development sites.
- Walk-Only Trips – Pedestrian walk-only trip assignments were developed by distributing project-generated person trips to surrounding pedestrian facilities (i.e., sidewalks, corner reservoirs, and crosswalks) based on the origin and destination (OD) data as well as the land use characteristics of the surrounding neighborhood.

The pedestrian trip assignments are shown in **Figures 6 through 8**. Based on the above assignment of pedestrian trips and the Level 2 assessment criteria, 13 sidewalks, 6 crosswalks, and 12 corners are recommended for detailed analysis, as shown in **Figure 9** and summarized in **Table 7.**

Table 7
Pedestrian Level 2 Screening Analysis Results
Recommended Analysis Locations

Pedestrian Elements	AM	MD	PM	Recommended Analysis Locations
E. Fordham Rd and Southern Blvd				
South Sidewalk between Southern Blvd and Crotona Ave	91	**277**	**218**	✓
E. Fordham Rd and Crotona Ave				
South Crosswalk	130	**456**	**319**	✓
Southeast Corner	188	**729**	**491**	✓
Southwest Corner	183	**571**	**403**	✓
East Sidewalk between E. Fordham Road and E.189th Street (North of Bx17 Bus Stop)	131	**436**	**326**	✓
South Sidewalk between Crotona Ave and Southern Blvd.	120	**588**	**352**	✓
East Sidewalk between E. Fordham Road and E.189th Street (South of Bus Stop)	**204**	**815**	**619**	✓
E. Fordham Rd and Cambreleng Ave				
South Crosswalk	108	**249**	**206**	✓
Southeast Corner	131	**385**	**279**	✓
Southwest Corner	163	**433**	**317**	✓
South Sidewalk between Cambreleng Ave and Crotona Ave	127	**385**	**278**	✓
South Sidewalk between Cambreleng Ave and Belmont Ave	**212**	**585**	**414**	✓
E. Fordham Road and Belmont Ave				
South Crosswalk	101	**370**	**248**	✓
Southeast Corner	**227**	**741**	**491**	✓
Southwest Corner	177	**662**	**428**	✓
South Sidewalk between Belmont Ave and Cambreleng Ave	**239**	**764**	**505**	✓
E. Fordham Rd and Hughes Ave				
South Crosswalk	77	**283**	**182**	✓
Southeast Corner	164	**622**	**401**	✓
Southwest Corner	158	**617**	**392**	✓
South Sidewalk between Hughes Ave and Belmont Ave	171	**624**	**409**	✓
E. Fordham Rd and Arthur Ave				
South Crosswalk	99	**371**	**235**	✓
Southeast Corner	103	**382**	**242**	✓
Southwest Corner	101	**406**	**250**	✓
South Sidewalk between Hughes Ave and Arthur Ave	107	**383**	**247**	✓
South sidewalk between Arthur Ave and Hoffman St	90	**380**	**231**	✓
E. Fordham Rd and Hoffman St				
South Crosswalk	87	**321**	**206**	✓
Southeast Corner	101	**316**	**227**	✓
Southwest Corner	89	**308**	**206**	✓
E. Fordham Rd and Lorillard Pl				
South Sidewalk between Lolillard Pl and Hoffman St	79	**300**	188	✓
E.189th Street and Cambreleng Ave				
North Sidewalk between Cambereleng Ae and Beaumont Ave	80	**401**	**264**	✓
North Sidewalk between Crotona Ave and Beaumont Ave	188	**599**	**455**	✓

Notes:
✓ denotes pedestrian elements recommended for detailed analysis.
Pedestrian trip estimates shown above that are 200 or greater are bolded and highlighted.



A *Rezoning Site*

◆ *Bus Stops*

NOT TO SCALE

Incremental Pedestrian Volumes
Weekday AM Peak Hour
Figure 6



A *Rezoning Site*

◆ *Bus Stops*

NOT TO SCALE

Incremental Pedestrian Volumes
Weekday MD Peak Hour
Figure 7



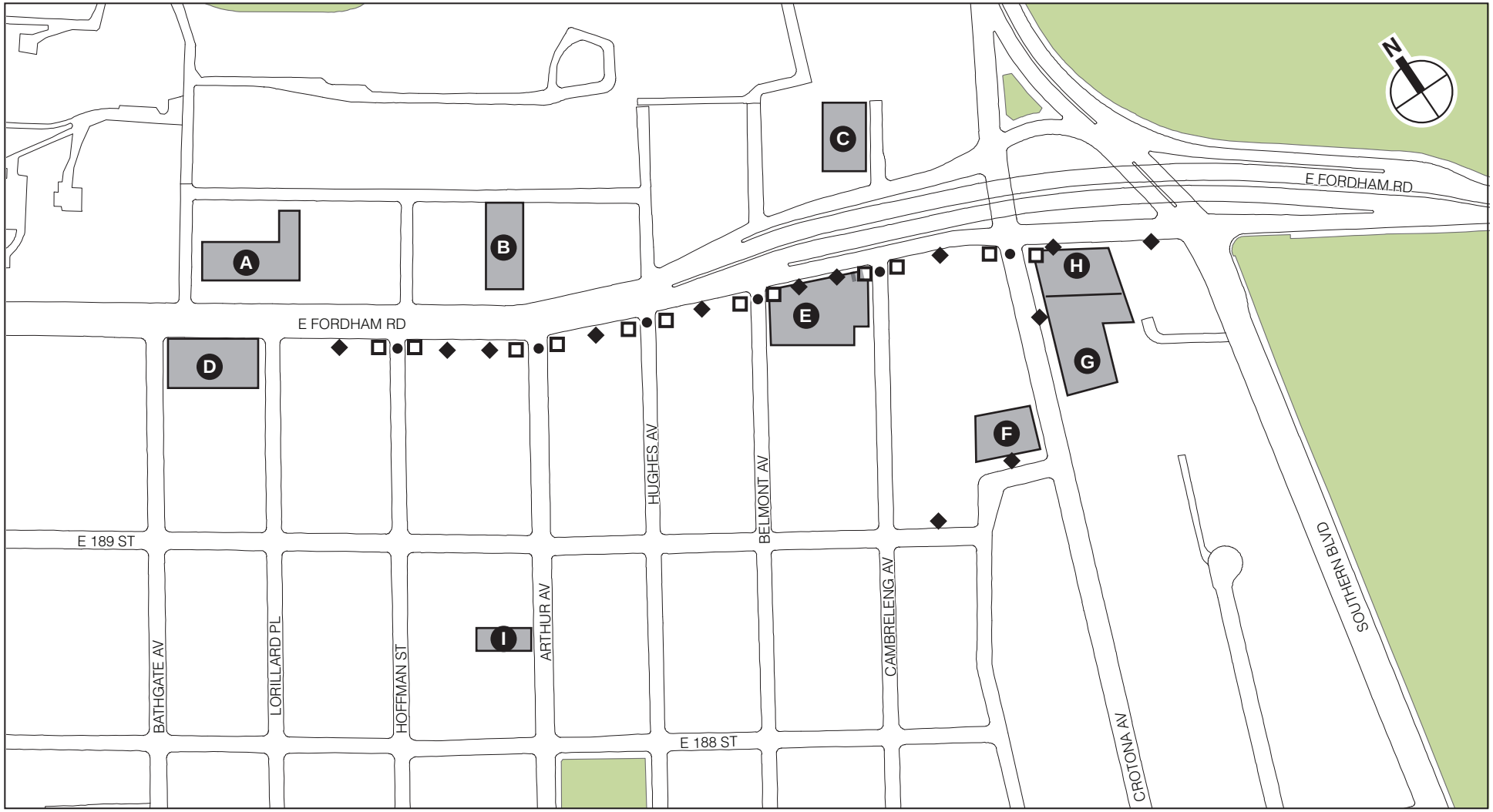
A *Rezoning Site*

◆ *Bus Stops*

NOT TO SCALE

Incremental Pedestrian Volumes
Weekday AM Peak Hour
Figure 8

3.14.13



A *Project Development Sites*

Sidewalk

Corner

Crosswalk

Pedestrian Analysis Locations
Figure 9