# FINAL
# SCOPE OF WORK FOR AN ENVIRONMENTAL IMPACT STATEMENT
# SUGAR HILL REZONING

## CEQR NO. 10DCP031M
## ULURP NOS. N100274PPM, N100275PCM, 100277ZMM

## June 4, 2010

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## A. INTRODUCTION

This document is the Final Scope of Work ("Final Scope") for the proposed Sugar Hill Rezoning Draft Environmental Impact Statement (DEIS). This Final Scope has been prepared to describe the Proposed Action, present the proposed framework for the Environmental Impact Statement (EIS) analysis, and discuss the procedures to be followed in the preparation of the DEIS. In accordance with the State Environmental Quality Review Act (SEQRA) and the City Environmental Quality Review (CEQR) procedures, a Draft Scope of Work ("Draft Scope") was prepared in accordance with those laws and regulations and the City's CEQR Technical Manual and distributed for public review. A public hearing was held on May 11, 2010 at Spector Hall, Department of City Planning, 22 Reade Street, New York, NY 10007. The public comment period extended from issuance of the Draft Scope on April 2, 2010, through May 26, 2010. No comments were received during this period. The Final Scope will be used as a framework for preparing the DEIS for the Proposed Action.

The Proposed Action includes: (1) a zoning map change from C8-3 and R7-2 to a R8A residential zoning district for a portion of one block in the Hamilton Heights North neighborhood of West Harlem, in Manhattan Community District 9 (refer to Figure 1 for project location); (2) acquisition/disposition of City-owned property, in the form of an exchange of easements between the applicant and the NYC Department of Citywide Administrative Services (DCAS); and (3) financing from the NYC Department of Housing Preservation and Development (NYCHPD), the New York State Division of Housing & Community Renewal (DHCR), and the New York State Office of Temporary Disability Assistance for the residential component of the Proposed Development (collectively, the "Proposed Action"). The Proposed Action would facilitate construction of a mixed-use building (the "Proposed Development") on a parcel within the proposed rezoning area consisting of one privately owned lot (Block 2069, Lot 21) located at 404-414 West 155$^{th}$ Street (the "Proposed Development Site"). Broadway Housing Communities (BHC, a.k.a., "the applicant") is the applicant for the proposed rezoning and funding actions, and co-applicant for the disposition action with the NYC Department of Citywide Administrative Services (DCAS). This document provides a description of the Proposed Action and includes task categories for all technical areas to be analyzed in the EIS.

The Proposed Development Site and rezoning area are located within the State and National Register-listed (S/NR) Sugar Hill Historic District, and the existing 2-story garage building on the Proposed Development Site has been identified as a contributing building in that district. Lot 14, which falls partially within the rezoning area, also falls within the New York City Landmarks Preservation Commission (NYCLPC) designated Hamilton Heights/Sugar Hill Historic District. The Proposed Action, which affects an area located within a historic district, is a Type I action pursuant to

6 NYCRR 617.4 and NYC Executive Order 91. The EIS will be prepared in conformance 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 alternatives to the Proposed Action.
- 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 eliminate or minimize adverse environmental impacts.

The environmental analyses in the EIS will assume an analysis year of 2012 for the reasonable worst-case development scenario (RWCDS) for the Proposed Action, and identify the cumulative impacts of other projects in areas affected by the Proposed Action. The New York City Department of City Planning (NYCDCP), as lead agency, will coordinate the review of the Proposed Action among the involved and interested agencies and the public.

## B. REQUIRED APPROVALS AND REVIEW PROCEDURES

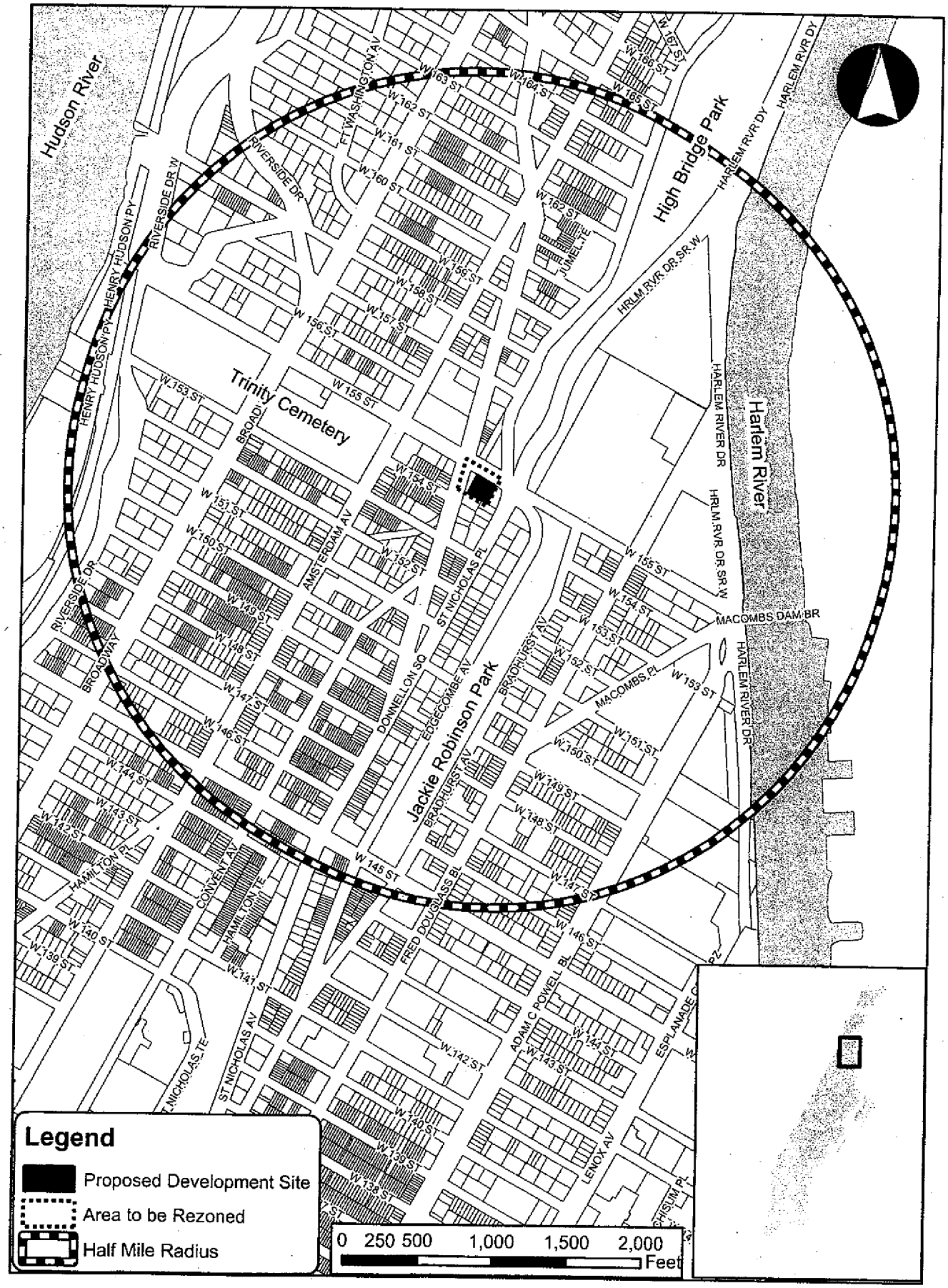
The Proposed Action requires City Planning Commission (CPC) and City Council approvals through the Uniform Land Use Review Procedure (ULURP), and consists of the following actions:

- Zoning Map Amendments to change the rezoning area from C8-3 and R7-2 to R8A.
- Property disposition and acquisition in the form of a reciprocal easement for ingress and egress with NYCDEP and/or the NYC Department of Citywide Administrative Services (DCAS).
- Financing from the NYC Department of Housing Preservation and Development (NYCHPD), NYS Division of Housing & Community Renewal (DHCR), and the New York State Office of Temporary Disability Assistance.

The above actions are subject to the City Environmental Quality Review (CEQR) procedures. An Environmental Assessment Statement (EAS) was completed on April 2, 2010. NYCDCP, acting as lead agency on behalf of the City Planning Commission, has determined that the Proposed Action would have the potential for significant adverse impacts. Therefore, a detailed assessment of likely effects in those areas of concern must be prepared and disclosed in an EIS. NYCDCP will conduct a coordinated review of the Proposed Action among the involved and interested agencies and the public.

Once the lead agency (NYCDCP) is satisfied that the Draft EIS (DEIS) is complete, the document will be made available for public review and comment. The DEIS will accompany the Uniform Land Use

**Figure 1**
**Project Location**



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

## C. DESCRIPTION OF THE PROPOSED ACTION

### Background and Existing Conditions

Sugar Hill is one of New York City's architecturally and historically rich neighborhoods. During the 1920's it was named as an epicenter of the Harlem Renaissance when African American cultural, intellectual and social prominence and wealth flourished. By the 1930s, the area became known as "Sugar Hill," a neighborhood that attracted many of the city's most prestigious African-American residents. W.E.B. Du Bois, founder of the NAACP, writers Zora Neale Hurston and Langston Hughes, Supreme Court Justice Thurgood Marshall, pioneering civil rights activists Roy Wilkins and Rev. Adam Clayton Powell, boxer Joe Louis, actress Lena Horne and musicians Paul Robeson, Cab Calloway, Count Basie and Duke Ellington all resided in Sugar Hill. Known as the foundation of the Civil Rights Movement, much of the area of Sugar Hill was named a historic district by the New York City Landmarks Preservation Commission (NYCLPC) in 2000. Today, the Hamilton Heights/Sugar Hill area remains an architecturally distinguished and culturally significant neighborhood.

### The Proposed Development Site and Area to Be Rezoned

The proposed rezoning area covers a portion of the northern end of the block bounded by West 155$^{th}$ and West 153$^{rd}$ Street, St. Nicholas Avenue and St. Nicholas Place (Block 2069), extending approximately 150 feet south from West 155$^{th}$ Street, and includes Lots 21 and 28 in their entirety, approximately 44% of Lot 26 and about 12% of Lot 14 (see Figures 2a and 2b). Lots 14 and 28 are not part of the Proposed Development Site, whereas a portion of Lot 26 will contain an access easement for the Proposed Development, as shown in Figure 2b. Current uses within the area affected by the Proposed Action are shown in Table 1 and discussed below.

The Proposed Action is intended to facilitate the redevelopment of a site in the Hamilton Heights North neighborhood of West Harlem, in Manhattan. The Proposed Development Site extends approximately 154 feet along the south side of West 155$^{th}$ Street with a maximum depth of approximately 144 feet. The Site is currently occupied by a two-story plus cellar public parking garage, with a capacity of approximately 300 spaces. Due to the hilly topography in the area, the Proposed Development Site is naturally sloped, sloping down approximately 17 feet from its western boundary to its eastern boundary. Due to this steep grade in the site, the existing garage rises three stories at the northeast corner and is one story at the northwest corner.

Most of the Proposed Development Site (about 74% or approximately 16,047 sf) is currently zoned C8-3, with an R7-2 residential district mapped along an area at the southern edge of the site that

ranges from 37 to 44 feet wide (approximately 5,638 sf). The C8-3 zoning district allows uses such as automotive sales and service facilities and warehouses, with a maximum allowable Floor Area Ratio (FAR) of 2.0 for commercial uses and 6.5 for allowable community facilities. Housing is not permitted in C8-3 zoning districts. R7-2 is a general residence zoning district with a maximum allowable FAR of 3.44 for residential uses and 6.5 for allowable community facilities.

Lots 26 and 28, and a portion of Lot 14, are included in the rezoning area but do not comprise part of the Proposed Development Site. Immediately to the west of the Proposed Development Site is Lot 26, which is located partially within the rezoning area (approximately 44%, or 9,020 sf of this lot falls within the rezoning area). Lot 26 is owned by the City and under control of the New York City Department of Environmental Protection (NYCDEP), and includes a 2-story building at the southern portion of the lot, which falls entirely outside the rezoning area. The building is occupied by a NYCDEP leak detection facility and includes offices and a storage and equipment facility with a 2-truck garage. The portion of Lot 26 that falls within the proposed rezoning area, which is entirely enclosed by a brick wall with a fence above, is currently used predominantly for vehicle storage and parking and is also available for staging in the event of emergencies. It is entered through the existing NYCDEP building garage entrance. The Old Croton Aqueduct passes underneath Lot 26.

**TABLE 1**
**Existing Land Uses in Directly Affected Area (Area to be Rezoned)**

| Block/ Lot | Address | # of Stories | Estimated Height (in feet) | Existing Uses | Approx. Lot Area (1) | Estimated Floor Area (1) |
|---|---|---|---|---|---|---|
| **PROPOSED DEVELOPMENT SITE** | | | | | | |
| 2069/21 | 404-414 West 155th Street | 2 | 30 max. | 300-space attended parking garage | 21,685 | 65,070 |
| **REMAINDER OF REZONING AREA** | | | | | | |
| 2069/14 (part)* | 87 St. Nicholas Place* | 6 | 60 | Residential with ground floor retail | 692 | 2,791 |
| 2069/26 (part)** | 416 West 155th Street** | N.A. | N.A. | Surface parking area adjacent to a 2-story NYCDEP building (located on the southern portion of the lot, mostly outside the rezoning area) | 9,020 | 0 |
| 2069/28 | 89 St. Nicholas Place | N.A. | N.A. | Vacant | 12 | 0 |

(1) Lot area and floor area numbers shown in table are only for the portions of each lot that fall within the rezoning area.

* Lot 14 has a lot area of approximately 5,768 sf, and contains a 6-story residential building (23,256 sf). Approximately 12% of this lot (estimated at approximately 692 sf) falls within the rezoning area.

** Lot 26 has a lot area of approximately 20,500 sf, and contains a 2-story commercial building (approximately 16,779 sf) and a paved vehicle storage area. Only part of this lot (estimated at 44% or approximately 9,020 sf) falls within the rezoning area, and is comprised exclusively of the vehicle storage area. This portion of Lot 26 is the easement area to serve as the entry plaza portion of the Proposed Development Site.

The proposed rezoning area also includes the northern portion of Lot 14 (estimated at 12% of the lot), approximately 11 to 13 feet wide, comprising approximately 692 sf. Lot 14 is occupied by a 6-story elevator apartment building, with approximately 24 units, and it is the only lot within the rezoning area that falls within the NYC Landmarks Preservation Commission (NYCLPC) designated Hamilton Heights/Sugar Hill Northeast Historic District. The rezoning area also includes a very small triangular parcel at the corner of St. Nicholas Avenue, identified as Lot 28, which is comprised of only 12 sf (approximately 2 feet wide and less than 10 feet deep), and is currently vacant.

Figure 2a
Tax Map for Affected Block

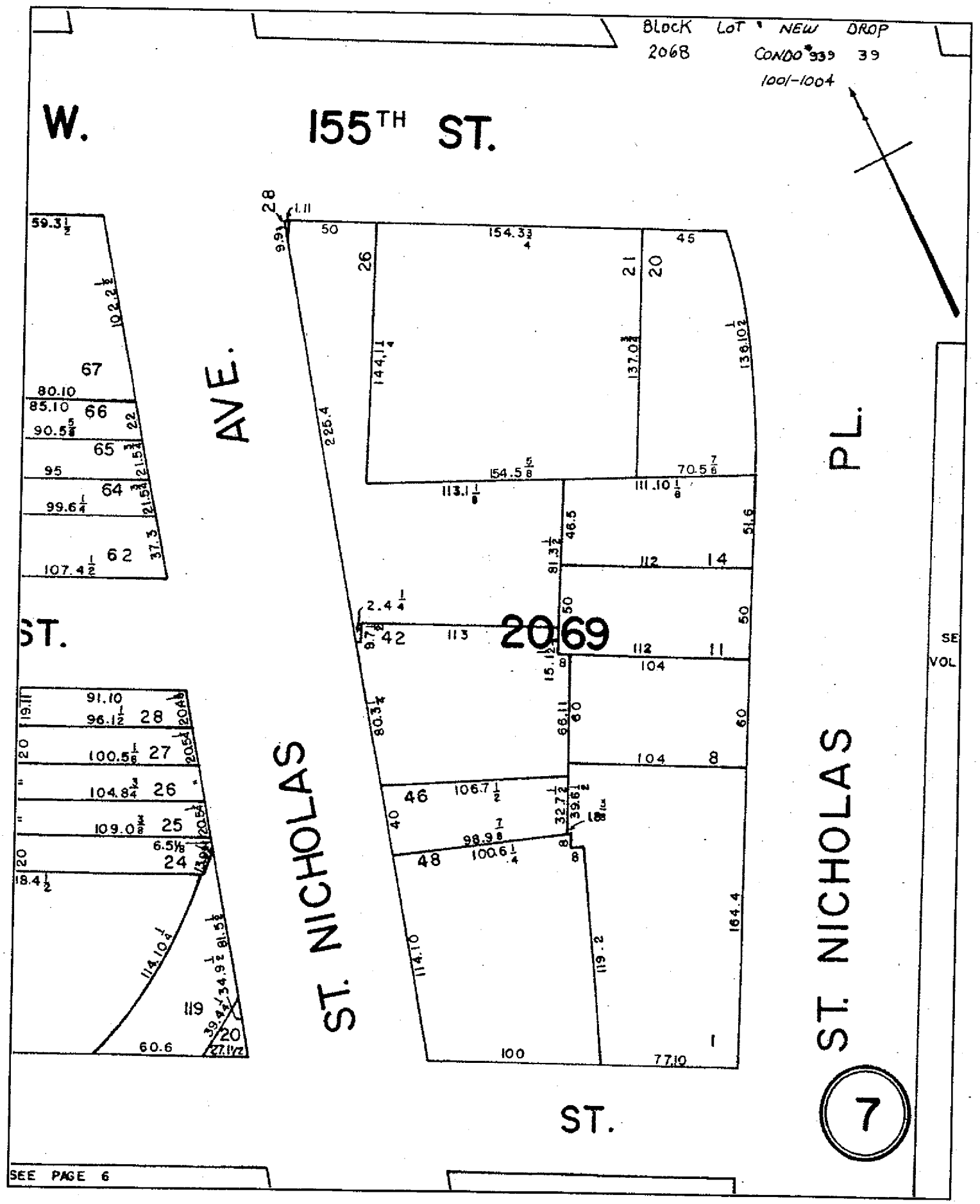
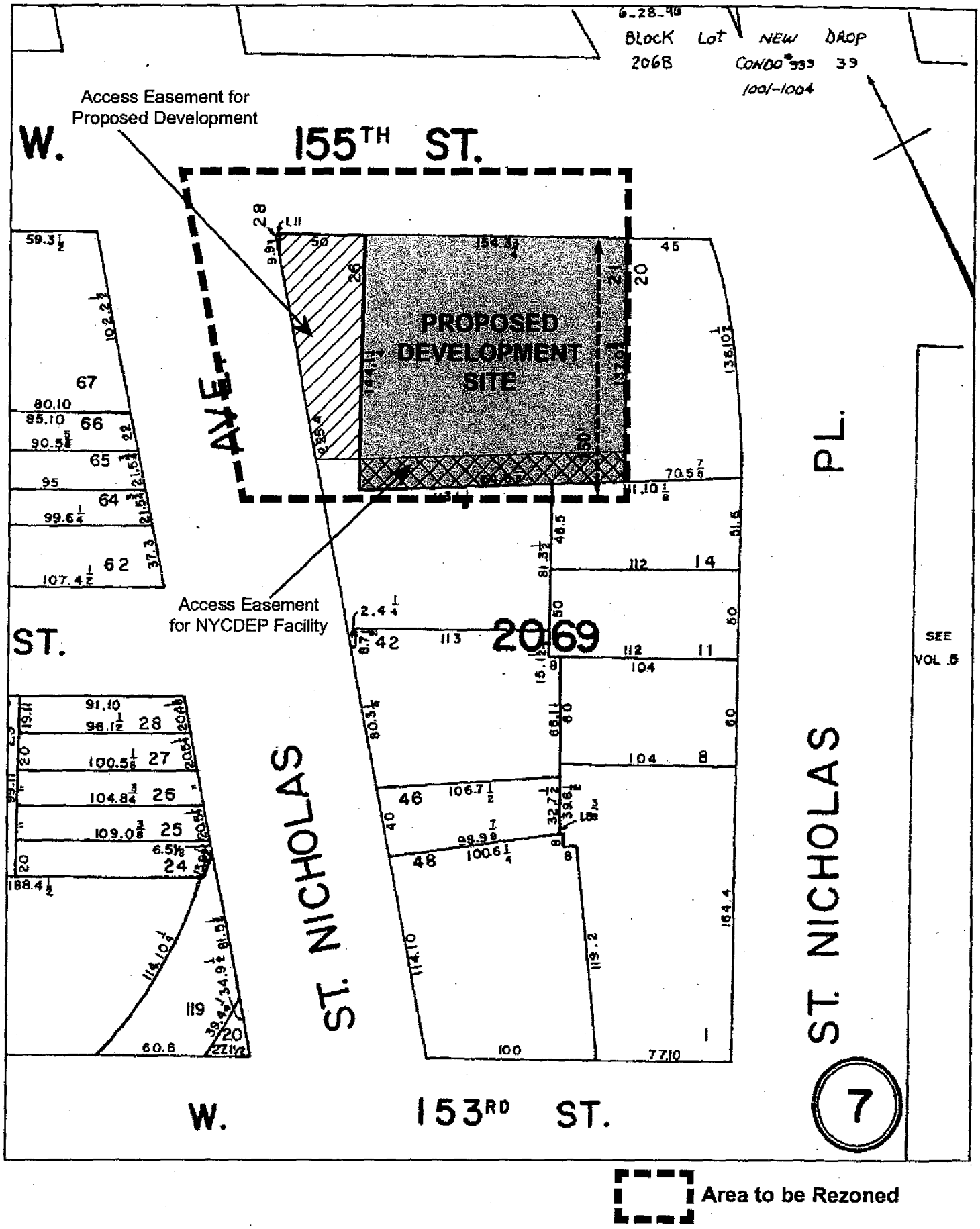


Figure 2b
Tax Lots Affected by Proposed Rezoning



## Surrounding Area

The area surrounding the proposed rezoning area encompasses the northern portion of the Hamilton Heights North neighborhood in West Harlem (Community District 9), Washington Heights South (Community District 12), and the Polo Grounds neighborhood in Central Harlem (Community District 10). Hamilton Heights North and Washington Heights South are separated by West 155th Street, a major crosstown street, and both these neighborhoods are separated from the Polo Grounds and the rest of Central Harlem by the Fordham Cliffs. The historical significance of the area dates back to the Revolutionary War, when Jumel Mansion, approximately five blocks north of the rezoning area, served as George Washington's headquarters.

The area is predominantly residential, and includes two major parks. To the north of the rezoning area, across West 155th Street, is Highbridge Park, which extends north to Dyckman Street, between Edgecombe and Amsterdam Avenues. This 118.75-acre park is widely known for its important landmarks, the Highbridge tower and the High Bridge (the city's oldest standing bridge), and also offers natural beauty and recreational fun, including a recreation center with pool, open vistas and an unusual geologic makeup. The proposed rezoning area is also located approximately two blocks to the west of Jackie Robinson Park, a 12.77-acre park that extends from West 155th Street south to 145th Street, between Bradhurst and Edgecombe Avenues, which provides ten blocks of recreational resources. It includes a pool and recreation center, as well as baseball diamonds, basketball courts, volleyball courts, and two playgrounds, as well as a bandshell that hosts concerts throughout the warm season.

The area is largely comprised of prewar buildings up to six stories in height. Newer mid-century buildings, especially those owned by the New York City Housing Authority, are taller, with the Polo Grounds Towers reaching a maximum of 30 stories. Driven in part by the existing infrastructure and housing stock, the area surrounding the proposed rezoning area has experienced greater construction activity in recent years. Within the immediately surrounding area, this has been limited mostly to rehabilitation of residential prewar buildings. However, some new construction projects are in progress or planned near the rezoning area.

The area is well connected by the transit system and regional road network. West 155th Street connects the area to the Westside Highway (Route 9A), FDR Drive, and Major Deegan Expressway/New York State Thruway (Interstate Route 87). The C subway line stops adjacent to the rezoning area at the intersection of West 155th Street and St. Nicholas Avenue, and the number 1 subway line stops at West 157th Street and Broadway. Bus routes connect the area to the Bronx, Harlem, and Midtown Manhattan. Yankee Stadium is located directly across the Harlem River, just over a ½-mile from the rezoning area, and is connected to the area by McCombs Dam Bridge.

## Project Purpose and Need

The Proposed Development Site, located at the northern boundary of Harlem's Sugar Hill, was acquired by Broadway Housing Communities in January, 2008. Broadway Housing Communities (BHC) is a not for profit organization with a 25 year track record of developing and managing nationally recognized, innovative community-based housing and programs to redress poverty and homelessness. The current C8-3 zoning which covers most of the Development Site does not allow residential uses. The Proposed Action would enable BHC to develop this property with a new 13-story mixed-income mixed-use development that is intended to serve the needs of the surrounding

community, by providing a range of affordable housing options, an early childhood day care center, the Faith Ringgold Children's Museum, community not-for profit office space, and accessory parking.

Harlem's booming real estate market and influx of prosperous professionals that began at the turn of this century is commonly described as Harlem's Second Renaissance. This rapid force of gentrification in West Harlem and Washington Heights makes low income families especially vulnerable. In this context, the Proposed Development seeks to demonstrate that housing opportunities for households in poverty buttressed by educational and cultural resources can affirmatively contribute to the revitalization of West Harlem. The Proposed Development is expected to provide 124 units of housing of varying sizes, which would serve 51 single adults and 73 families ranging in income from homelessness to 80% of the Area Median Income. Thus the Proposed Development seeks to advance BHC's mission to provide quality housing and services to the City's struggling families, and expand the supply of affordable housing in the City. The proposed Faith Ringgold Children's Museum of Art & Storytelling is intended to serve as a cultural asset that would help revitalize the neighborhood by providing cultural resources and new, healthy opportunities for children and families. The museum is intended to teach children and families from the neighborhood and afar to take pride in themselves and their communities through art and storytelling. The Proposed Development is also expected to include an Early Childhood day care center serving 100 children, which would serve the surrounding community, and allow low- and moderate-income mothers to secure employment.

By combining a permanent affordable place to live with comprehensive educational, family and cultural resources, the Proposed Development seeks to provide much needed services for New York's low-income children and families. In addition, the Proposed Development seeks to transform an underutilized commercial site into a green model of urban community revitalization that integrates affordable housing, education and cultural resources to enrich the neighborhood for generations to come. Best practices at the highest standard of affordable housing, museum based early childhood education, and nonprofit resources for families would also be provided.

Finally, the proposed acquisition/disposition of City-owned property, in the form of an easement exchange, which is described in detail below, would enable the main entrance to the Proposed Development to be located on St. Nicholas Avenue through a landscaped plaza. Currently, this area accommodates NYCDEP vehicle storage, and is restricted in its development potential due to its irregular shape and the presence of the Old Croton Aqueduct running beneath it. NYCDEP would benefit by exchanging use of this parcel for use of the easement from BHC which is more conveniently located to the building on the NYCDEP site. This easement would provide an automobile egress to the NYCDEP site from St. Nicholas Avenue, and would fulfill NYCDEP's need for vehicle storage and parking as well as emergency staging.

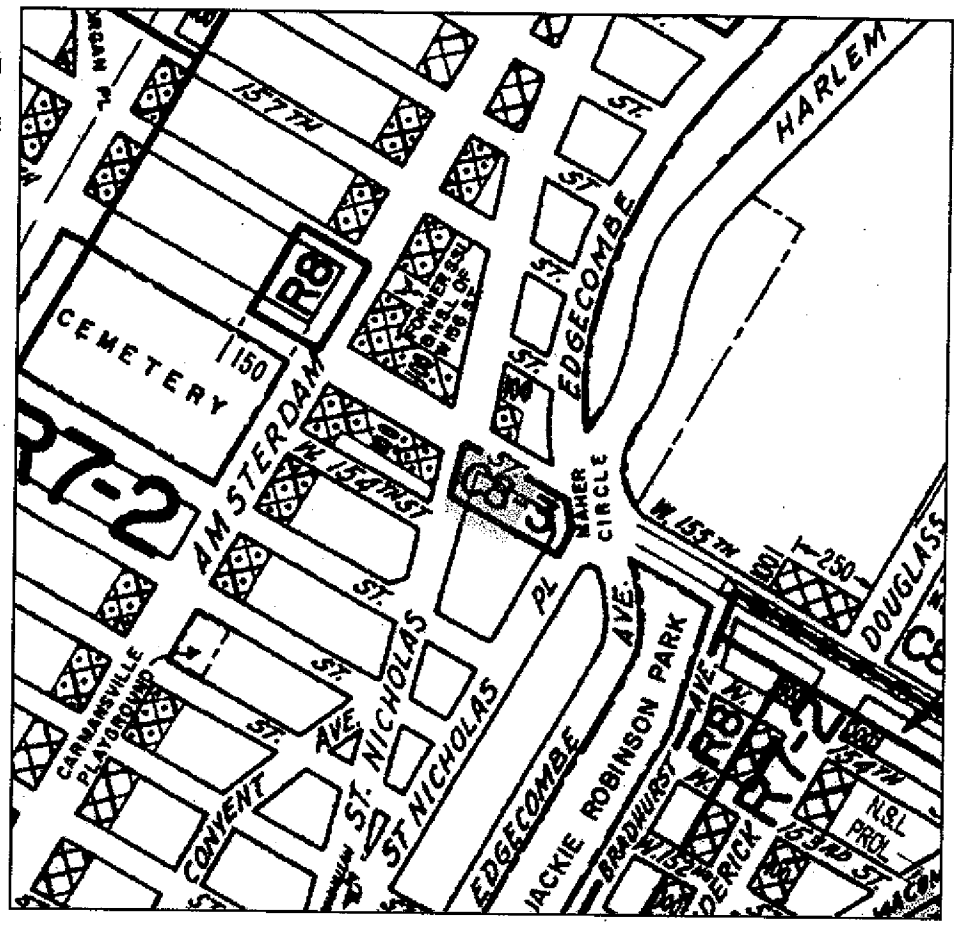
## The Proposed Action

### *Zoning Map Change*

The Proposed Action includes an amendment of the City's zoning map for a portion of the northern end of the block bounded by West 155th and West 153rd Streets, St. Nicholas Avenue, and St. Nicholas Place, changing the zoning from C8-3 and R7-2 to a R8A residential district, as illustrated in Figure 3. The proposed R8A zoning district would allow residential uses in the entire rezoning area, which are prohibited under the existing C8-3 zoning on the northern portion of the block. It would also allow a wider range of community facility uses, including museums, schools, and libraries. R8A zoning

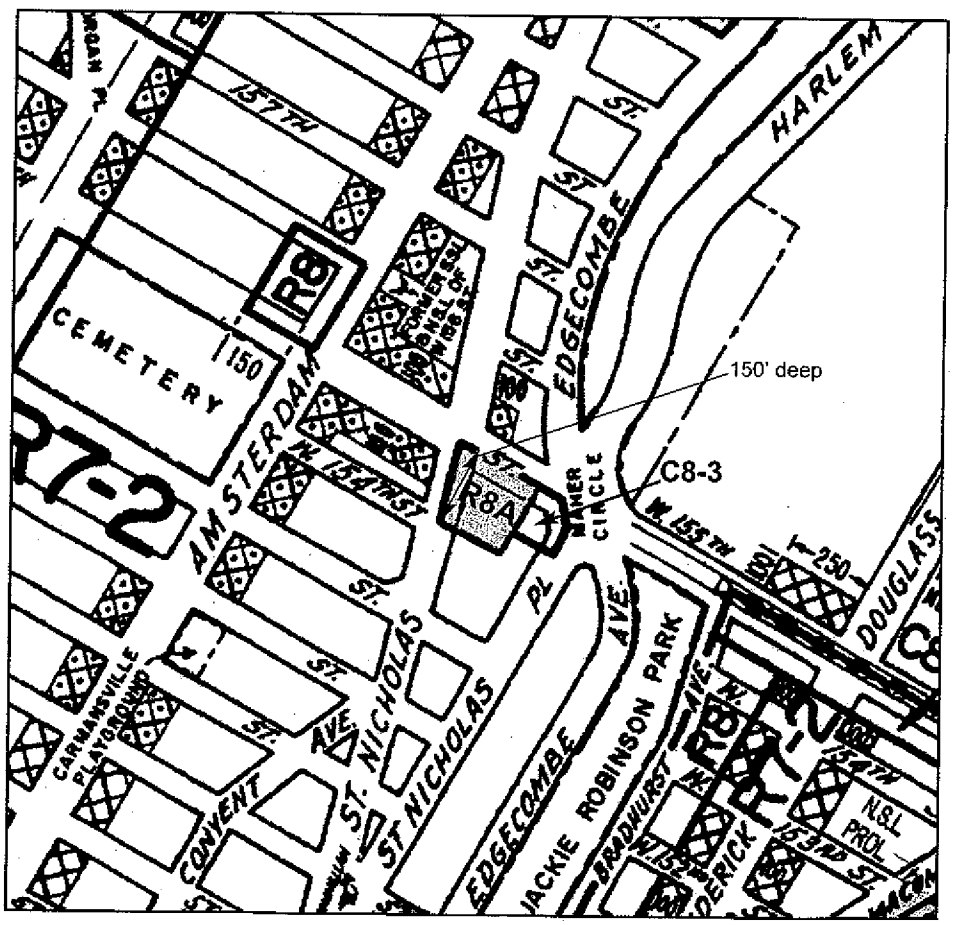
Figure 3
Existing and Proposed Zoning

## EXISTING ZONING




Area to be Rezoned

## PROPOSED ZONING




Area to be Rezoned

districts permit residential and community facility uses, and in general allow for a more diverse group of residential and community facility uses than those allowed by the existing C8-3 and R7-2 zoning districts.

The proposed R8A district would allow residential and community facility uses within Use Groups 1-4, and establish envelope controls within the new district. Residential Use Groups 1 and 2 and community facilities Use Groups 3 and 4 would be allowed as-of-right under the proposed zoning, while commercial Use Groups 5 through 14, and 16 (automotive and semi-industrial uses) would no longer be permitted. The proposed R8A zoning district is a contextual zoning district, which regulates the height, bulk, and setback of new buildings. The maximum allowable FAR for the proposed R8A district is 6.02 for residential uses, and 6.50 for community facilities. The maximum allowable lot coverage is 70 percent for an interior lot, such as the Proposed Development Site. The minimum building base height is 60 feet, the maximum building base height is 85 feet, and the maximum building height is limited to 120 feet. Compliance with the Quality Housing Program is mandatory for residential buildings in R8A districts. Quality Housing buildings must include amenities relating to the planting of trees, landscaping and recreational space.

***Acquisition and Disposition of City-Owned Property***

The Proposed Action includes an easement for pedestrian ingress and egress from NYCDEP and the NYC Department of Citywide Administrative Services (DCAS). As noted above, the Proposed Development Site's frontage along West 155$^{th}$ Street is quite steep, with a difference in elevation of approximately 17 feet between the eastern and western edges of the site. This makes access to the site very challenging, particularly for the museum and day care uses, which require drop-offs and pick-ups at the curb.

As shown in Figure 4, the Proposed Development Site is bounded on its western side by a roughly triangular 4,597 square foot paved portion of the City-owned NYCDEP property on Lot 26 that has frontage along St. Nicholas Avenue. BHC would acquire an easement over this area (shown in Figure 4 as the "Easement from DEP for Broadway Housing") for use as a plaza, which BHC would pave and landscape, to provide access to the primary entrances for the museum, day care and residential spaces of the Proposed Development, and the existing NYCDEP uses would be relocated to the proposed NYCDEP easement area as described below. In exchange, as shown in Figure 4 as the "Easement from Broadway Housing for DEP Use," the roughly rectangular, 4,321 square foot southern portion of the Proposed Development Site would be the subject of an easement from BHC to NYCDEP for vehicle parking and storage and for emergency staging. BHC would pave this area and construct a curb cut leading to it in connection with the construction of the Proposed Development. In both instances, the easements would be surface easements and would exclude the below grade volumes that encompass the Old Croton Aqueduct on the NYCDEP Site and the future garage on the Proposed Development Site. Other than as described above, permanent above-grade construction would not be permitted on either easement.

The proposed access easement for NYCDEP would not result in any increase in traffic, as this easement would not alter the operation of the existing NYCDEP facility. NYCDEP would benefit from the use of the proposed NYCDEP easement, which is more conveniently located to the building on the NYCDEP site, which would provide an automobile egress to the NYCDEP site from St. Nicholas Avenue, and which would fulfill NYCDEP's need for vehicle storage and parking as well as emergency staging. In connection with the City's acquisition of the proposed NYCDEP easement, NYCDEP will

request a Mayoral zoning override to permit NYCDEP vehicle parking, storage and emergency staging uses on the proposed NYCDEP easement area, which will be located in the R8A zoning district.

***Funding/Financing***

The Proposed Action includes financing from the NYC Department of Housing Preservation and Development (NYCHPD) for the residential component of the Proposed Development. NYCHPD, which will be the lead financing agency, has issued a commitment for an $8.7 million loan through their Low Income Rental Program, which is funded primarily with HOME funds from the U.S. Department of Housing and Urban Development (HUD). In addition, an allocation of federal Low Income Housing Tax Credits expected to yield $24.9 million is anticipated to be made by NYCHPD in September 2010.

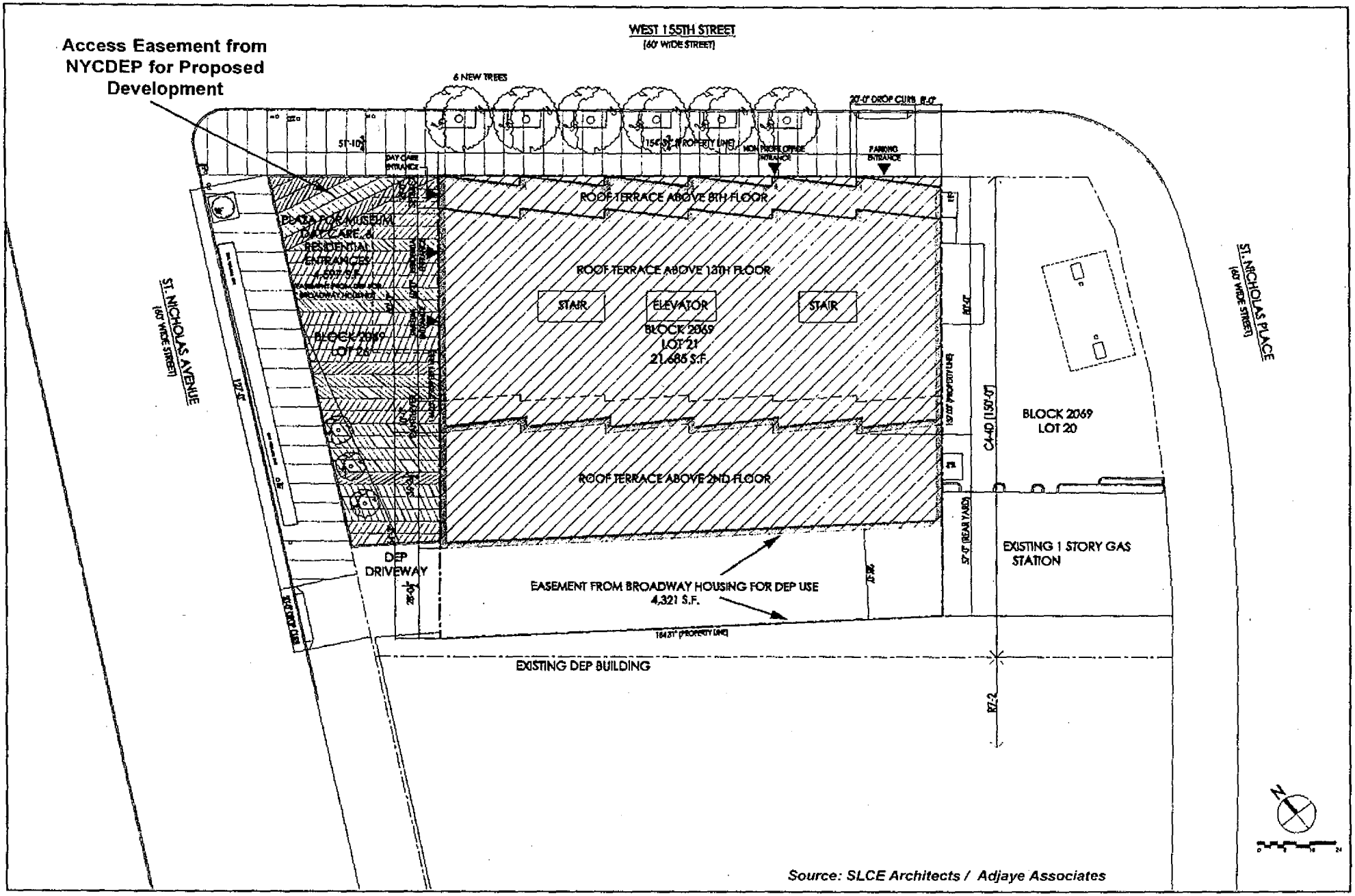
In addition, State funding is also being sought for the subsidized housing, day care center and/or children's museum. At this time, State funding is expected to include approximately $3.9 million in NYS Low Income Housing Tax Credits allocated by the NYC Division of Housing Community Renewal (DHCR), as well as approximately $3.0 million in funding from the NYS Office of Temporary Disability Assistance under their Homeless Assistance Program.

## Reasonable Worst Case Development Scenario (RWCDS)

In order to assess the potential effects of the Proposed Action, a reasonable worst-case development scenario (RWCDS) for both "future No-Action" (No-Build) and "future with the Proposed Action" (Build) conditions will be analyzed for an analysis year, or Build year, of 2012. Only one site (Lot 21) would be affected in its entirety by the proposed rezoning, and that site is owned by the applicant, who intends for the site to be redeveloped and fully occupied by 2012. Therefore, 2012 is the Build year for environmental analysis purposes. As such, a RWCDS for both "future No-Action" and "future With-Action" conditions will be analyzed for an analysis year of 2012.

The future With-Action (Build) scenario identifies the amount, type and location of development that is expected to occur by the end of 2012 as a result of the Proposed Action. The future without the action (No-Build) scenario identifies similar development projections for 2012 absent the Proposed Action. The effect of the Proposed Action would be the incremental change in conditions between the No-Build and Build scenarios.

Apart from the applicant-owned Proposed Development Site, the proposed rezoning area includes portions of two other tax lots (Lots 26 and 14) and a small 12 sf lot. Table 2 lists each of the four lots on Block 2069 that would be affected by the proposed rezoning action, including the Proposed Development Site. For each lot, the table provides a brief description of the existing use and development on the lot, the approximate lot area, the existing FAR, and the percent of the lot's maximum allowable floor area under the proposed R8A zoning. As shown in Table 2, apart from the Proposed Development Site, none of the other parcels are likely to be redeveloped as a result of the proposed zoning change. Lot 14 was eliminated from further consideration because it would be built to 92% of its allowable floor area with the proposed rezoning, it includes more than 6 rent stabilized residential units, and falls within the NYCLPC-designated Hamilton Heights/Sugar Hill Northeast Historic District. Lot 26 is a City-owned parcel that is occupied by a public facility (a NYC Department of Environmental Protection leak detection facility) and is also located above the Old Croton




**Sugar Hill Rezoning**

**Figure 4**

**Preliminary Site Plan for Proposed Development - Illustrating Reciprocal Easements**

**TABLE 2**
**Lots within the Proposed Rezoning Area and their Existing FAR and Percent of Proposed R8A Floor Area**

| Block | Lot | Lot Area (sf) | Owner | Existing Use | # of Stories | Approx. Building FA [1] | Existing Zoning | Proposed Zoning | Max. Allowable FAR [R/C/CF] [1] | | Existing Built FAR | % of Maximum FA with Proposed R8A Zoning [1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Existing | Proposed | | |
| 2069 | p/o 14 | 5,768 | 79 S N Ltd | Residential | 6 | 23,256 | R7-2 | R7-2 & R8A | 3.44/---/6.5 | 3.75/---/6.5 [2] | 4.03 | 107.5% [R] |
| | ***21*** | ***21,685*** | ***Broadway Housing Development Fund Co.*** | ***Parking*** | ***2*** | ***65,070*** | ***C8-3 & R7-2*** | ***R8A*** | ***0.89/1.48/6.5*** [2] | ***6.02/—/6.5*** | ***3*** | ***46% [CF]*** |
| | p/o 26 | 20,500 | NYC Dept. of Environmental Protection | Parking and Utility | 2 | 16,779 | C8-3 & R7-2 | R7-2 & R8A | 2.51/0.54/6.5 [2] | 4.58/---/6.5 [2] | 0.82 | 12.6% [CF] |
| | 28 | 12 | Leemilts Petroleum Inc | Vacant | N.A. | 0 | C8-3 | R8A | ---/2.0/6.5 | 6.02/---/6.5 | 0.00 | N.A. |

**Notes:**

Highlighted bold, italicized text indicates the Proposed Development Site under the control of the applicant.

[1] FA: Floor area. R/C/CF: Residential/Commercial/Community Facility.

[2] Pursuant to ZR Section 77-22, the maximum FAR of the zoning district shall be applied to each portion of the zoning lot within the respective district, and the sum of the product shall be the adjusted maximum FAR applicable to the zoning lot. The following breakdowns were applied:

Lot 14: Existing Condition: 100% of lot in R7-2 district; With Proposed Rezoning: 88% in R7-2 and 12% in R8A

Lot 21: Existing Condition: 74% of lot in C8-3 district and 26% in R7-2; With Proposed Rezoning: 100% in R8A

Lot 26: Existing Condition: 27% of lot in C8-3 district and 73% in R7-2; With Proposed Rezoning: 56% in R7-2 and 44% in R8A

Aqueduct, and is therefore unlikely to be redeveloped as a result of the Proposed Action. Finally, Lot 28 is a very tiny parcel consisting of 12 sf, which cannot be feasibly developed.

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

In the absence of the Proposed Action, the rezoning area would continue to be zoned C8-3 and R7-2. None of the properties within the proposed rezoning area would be expected to be redeveloped, and the existing land uses would remain. The Proposed Development Site would continue to be occupied by a public parking garage (Lot 21). Therefore, for CEQR analysis purposes, the No-Action condition would be identical to the existing conditions.

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

In the future with the Proposed Action, the rezoning area would be rezoned from C8-3 and R7-2 to R8A. The new land uses that are expected to result from the Proposed Action would represent a continuation of general land use trends in a manner compatible with surrounding land uses. The Proposed Action would allow for the construction of residential development that is consistent with the built character of the area. New development that is projected to result from the Proposed Action would occur on one underutilized site, namely the Proposed Development Site. As discussed above, apart from the Proposed Development Site, no other lots are expected to be developed as a result of the Proposed Action. Therefore, the Proposed Development as described below is the only incremental development expected as a result of the Proposed Action, and represents the reasonable worst case development scenario for analysis purposes. Planned development on the Proposed Development Site is described below.

Proposed Development

The Proposed Action would facilitate construction of an approximately 169,333 gsf 13-story mixed-use building (140,934 zsf, excluding parking and mechanical deductions) on the Proposed Development Site. The existing garage structure currently on the site would be demolished to allow construction of the new building. The proposed new building would include approximately 121,683 gsf (114,878 zsf) of residential floor area, with approximately 124 residential rental units. All 124 units would be affordable to individuals or households earning up to 80% of the Area Median Income (AMI). Although the specific unit mix has not been determined at this time, it is expected that there would be a mix of studios, one-, two-, and three-bedroom units. The Proposed Development would also include an approximately 18,036 sf Faith Ringgold Children's Museum of Art and Storytelling; a 12,196 sf day care facility and early childhood center; 2,350 sf of non-profit program and office space; and a 114-space below-grade accessory parking garage. The new development is scheduled to be completed by late 2012.

The site's gradient/slope along West 155$^{th}$ Street would be used to create separate access points for the Proposed Development's users, with a separate entrance for residents and children at the St. Nicholas Avenue level, a mid-block entrance for the museum, also off of St. Nicholas Avenue, and an entrance for the proposed garage at the lowest level of the Proposed Development, along West 155$^{th}$ Street (refer to site plan in Figure 4). As discussed above and illustrated in Figure 4, the Proposed Action includes the acquisition of an access easement on the northern triangular portion of adjacent Lot 26 (which is owned by the City). This easement area would be converted into an entry plaza for the Proposed Development, with entrances for the museum, day care and residential components. In

return, the applicant would provide an access easement to NYCDEP along the southern 28 feet of the Proposed Development Site, which would be utilized for parking and vehicular access to NYCDEP's building.

As shown in the illustrative building section in Figure 5, the Proposed Development would consist of 13 stories plus one cellar, with a height of approximately 120 feet from the average curb level to the roof line. As shown in the figure, the preliminary design of the Proposed Development includes a setback at approximately 76 feet, with the upper portion of the building sliding back from the base with a 10-foot cantilever. The cellar level would be occupied mostly by the accessory parking garage, which would accommodate up to 114 spaces utilizing stackers. The first floor would be occupied mostly by the museum, as well as the non-profit office space and the lobbies for the residential and day care uses. As shown in Figure 5, residential uses would occupy the third through thirteenth floors. The Proposed Development would be developed in accordance with the Quality Housing regulations, which are mandatory in the proposed R8A zoning district. Quality Housing buildings must include amenities relating to the planting of trees, landscaping and recreational space. The Proposed Development fulfills this requirement by providing a total of approximately 8,026 sf of accessory recreation space, which consists of roof terraces above the second, eight and thirteenth floors of the building (refer to illustrative building section in Figure 5).

The proposed landscaped entry plaza on St. Nicholas Avenue would be a publicly accessible community resource that highlights the presence of the Old Croton Aqueduct underneath that lot (Lot 26). The entry plaza is expected to draw attention to the path of the Old Croton Aqueduct, one of the great engineering feats of the 19th century. Although the plans for the plaza have not yet been finalized, at this time it is expected that the entry plaza would be landscaped with indigenous plantings, and may include a linear configuration of concrete pavers to locate the Aqueduct, distinguishing it from the surrounding paved open space.

The proposed R8A zoning district requires accessory parking spaces for 12% of the proposed residential units, whereas no accessory parking is required for community facility or museum uses. Therefore, the Proposed Development requires approximately 15 parking spaces. The proposed 114-space accessory garage would serve the Proposed Development's residents and employees. In addition, as the Proposed Development would displace a 300-space public parking garage, any unutilized spaces in the proposed accessory garage may be rented to area residents on a monthly basis, as permitted by Zoning Resolution section 25-412.

As noted above, the 124 residential units within the Proposed Development are anticipated to serve 51 single adults and 73 families. 2000 Census data for Manhattan Community District 9, where the Proposed Development Site is located, indicate that the average household size for this area is approximately 2.54 persons per household. Conservatively applying this average to the 124 units, the Proposed Development would add a total of approximately 315 new residents to the area. In addition, the Proposed Development would also add a total of approximately 74 employees (33 day care employees, an estimated 24 museum employees, 9 non-profit office employees, up to 3 parking attendants, and an estimated 5 employees associated with the residential component, i.e., maintenance workers, etc..

In the event that the proposed rezoning is approved but the planned funding for the Proposed Development does not materialize, the Proposed Development described above would not be constructed. In addition, as the acquisition and disposition of City-owned property described above is

contingent upon the construction of the Proposed Development planned by BHC, this easement exchange would also not take effect in absence of the Proposed Development. Thus, for environmental analysis purposes, under the proposed zoning it can be assumed that instead of the Proposed Development described above, the development site may be developed with an as-of-right market-rate residential building with ground floor community facility uses, and an accessory garage. Without the easement exchange, such an as-of-right development will be accessible only from West 155th Street. Given the maximum allowable FAR and height limits for R8A districts, such an as-of-right development would be similar in height and bulk to the Proposed Development, and would also contain a similar number of units (or a smaller number of units, if unit sizes are larger), with no museum or day care uses.

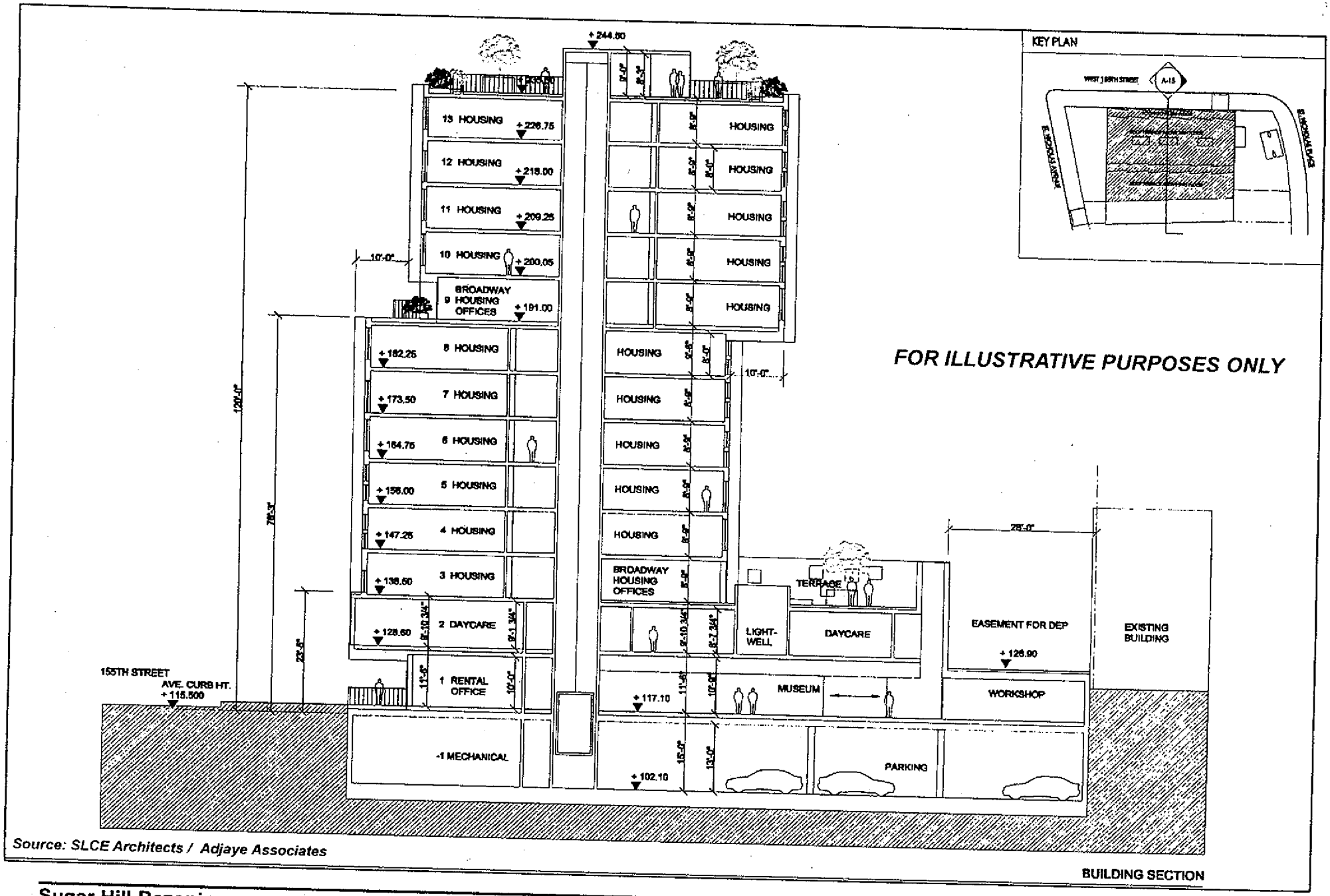
With a lot area of 21,685 sf and a maximum allowable FAR of 6.02 for residential uses and 6.5 for community facility or mixed uses, up to approximately 140,953 zsf can be developed on the site on an as-of-right basis under the proposed R8A zoning. Assuming 21,685 sf (one floor) of community facility uses, the site could accommodate up 119,268 sf of residential use, or approximately 119 market rate residential units (based on 1,000 sf per unit). Such a market-rate development would require approximately 24 accessory parking spaces (at 0.2 spaces per unit), which is slightly higher than the requirement for the Proposed Development. However, as the garage capacity would be the same under either scenario, this would not affect the results of traffic or parking analysis for the Proposed Development (refer to traffic and parking section in Attachment B of the EAS document). It should also be noted that without the easement exchange, such an as-of-right development would not provide the public plaza along St. Nicholas Avenue planned with the Proposed Development, and as such the open space analysis to be conducted for the Proposed Action conservatively excludes that plaza from the quantitative analysis. Therefore, for environmental analysis purposes, the Proposed Development described previously represents the reasonable worst-case development scenario for the EIS, and an analysis of an alternate development scenario is not warranted.

### Environmental Impact Statement

As the RWCDS associated with the Proposed Action was found to have the potential for significant adverse impacts in two areas, pursuant to the EAS and Positive Declaration, a targeted Environmental Impact Statement pursuant to CEQR will be prepared for the Proposed Action. The EIS will analyze the Proposed Development for all technical areas of concern.

## D. SCOPE OF WORK FOR AN EIS

As detailed in Attachment B, "Screening Analyses" of the EAS for the Proposed Action, dated April 2, 2010, the Proposed Action does not trigger a detailed analysis of Socioeconomic Conditions, Community Facilities, Natural Resources, Waterfront Revitalization Program, Infrastructure, Solid Waste and Sanitation Services, Energy, Traffic and Parking, or Transit and Pedestrians. In addition, the EAS screening analysis concluded that the Proposed Action would not result in any significant adverse impacts in the areas of Urban Design, or Public Health. It is also not expected that the Proposed Action would result in significant adverse impacts to Land Use, Zoning and Public Policy; Open Space; Shadows; Air Quality; or Noise. However, this scope of work assumes that those five areas will be examined further to determine whether there is the potential for impacts.




Source: SLCE Architects / Adjaye Associates

BUILDING SECTION

Sugar Hill Rezoning

Figure 5
Proposed Development - Illustrative Building Section

The Proposed Action was determined to have the potential for significant adverse impact in the areas of Historic (architectural) Resources and Hazardous Materials, and may therefore have the potential for significant adverse construction-related impacts, as well as potential impacts to Visual Resources and Neighborhood Character with respect to historic resources.

## TASK 1. PROJECT DESCRIPTION

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 its impact, and gives the public and decision-makers a base from which to evaluate the project against both With-Action and No-Action scenarios.

The project description chapter will present the planning background and rationale for the proposed rezoning and zoning text amendments. In addition, the project description will summarize the reasonable worst-case development scenario for analysis in the EIS and present its rationale (refer to "Reasonable Worst Case Development Scenario" in Section C 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.

## TASK 2. LAND USE, ZONING, AND PUBLIC POLICY

This chapter will analyze the potential impacts of the Proposed Action on land use, zoning, and public policy. The primary land use study area will consist of the rezoning area, where the potential effects of the Proposed Action will be directly experienced (reflecting the RWCDS). The secondary land use study area would include the neighboring areas within a ¼-mile boundary from the rezoning area, as shown in Figure 6, which could experience indirect impacts. As noted in the EAS document, no significant adverse impacts are anticipated in this technical area. However, in order to provide context for other analyses, a discussion of Land Use, Zoning and Public Policy will be included in the EIS, as per the following sub-tasks:

- Provide a brief development history of the rezoning area and surrounding study area.
- Provide a description and map of existing land uses and zoning in the project area and the surrounding study area. Other public policies that apply to the study area will also be described, including the Hamilton Heights/Sugar Hill Historic District, and the Manhattan Community District 9 197-a Plan. Recent development trends in the land use study areas will also be noted.
- Based on field surveys and prior studies, identify, describe, and graphically portray predominant land use patterns for the balance of the study areas. Describe recent land use trends in the study areas and identify major factors influencing land use trends.

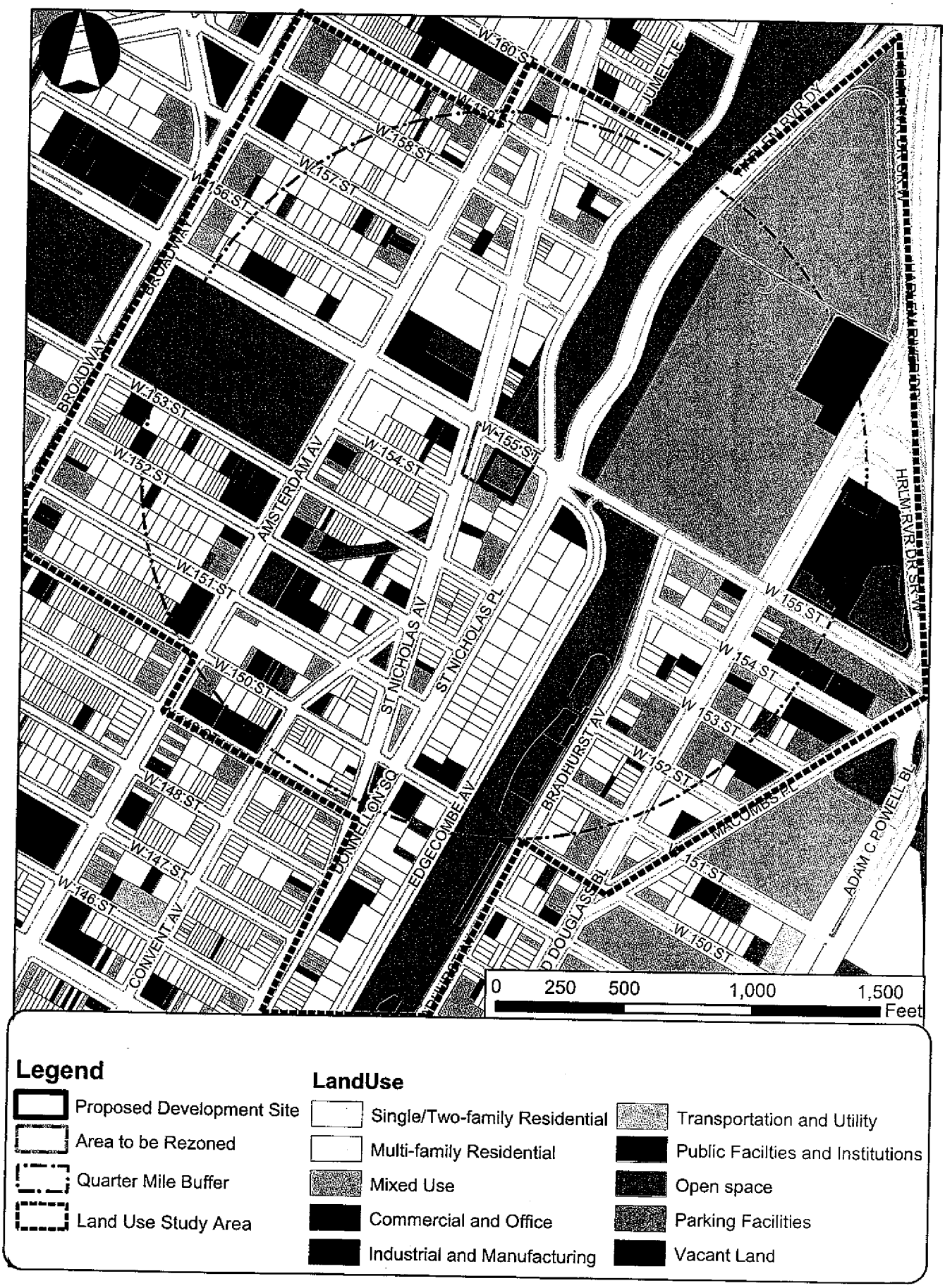
- Describe and map existing zoning and recent zoning actions in the study area, in addition to any recent BSA actions.
- Prepare a list of future development projects in the study areas that are expected to be constructed by the Build Year and may influence future land use trends. Also, identify pending zoning actions or other public policy actions that could affect land use patterns and trends in the study areas. Based on these planned projects and initiatives, assess future land use and zoning conditions without the Proposed Action.
- Describe and assess the potential land use changes in the rezoning area based on the reasonable worst-case development scenario.
- Discuss the Proposed Action' potential effects related to issues of compatibility with surrounding land use, the consistency with zoning and other public policies, the effect of the loss of manufacturing zoning, and the effect of the Proposed Action on ongoing development trends and conditions in the study areas.

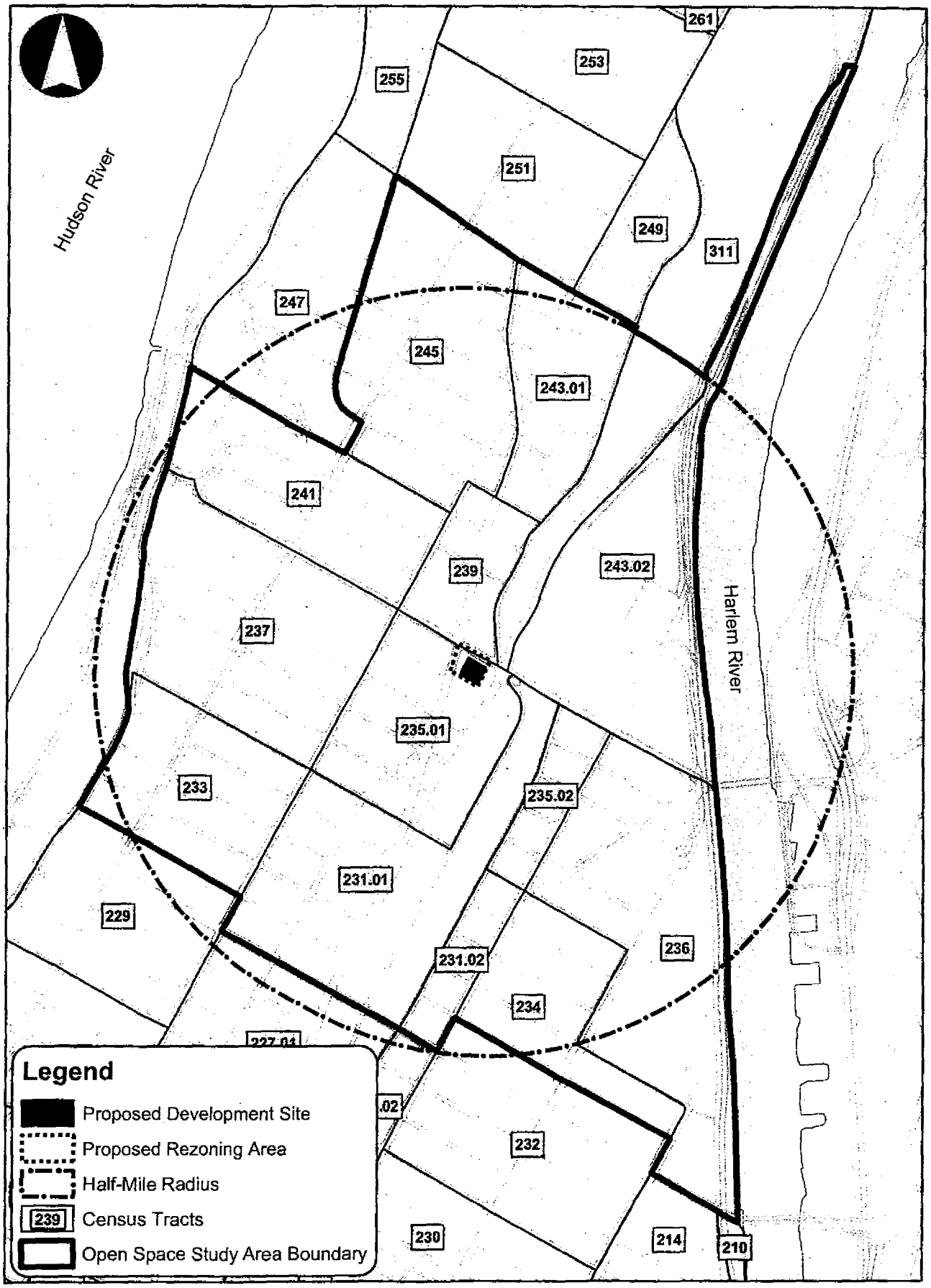
## TASK 3. OPEN SPACE

New residents and workers generated by the Proposed Development would place added demands on existing open space and recreational facilities. The Proposed Action would generate more than the CEQR threshold of 200 residents, but is not expected to exceed the CEQR threshold of 500 workers. Therefore, a detailed open space analysis is warranted for the residential population only, which would be included in the EIS pursuant to the following sub-tasks.

- Using 2000 Census data, calculate the total residential population of the open space study area. As per CEQR guidelines and as shown in Figure 7, the open space study area is defined as the area within a ½-mile boundary from the proposed rezoning area, adjusted to include all census tracts with at least 50 percent of their land area within the ½-mile radius.
- Inventory existing active and passive open spaces within the residential open space study area. The condition and usage of existing facilities will be described based on the inventory and field visits. Jurisdiction, features, user groups, quality/condition, factors affecting usage, hours of operation, and access will be included in the description of facilities. Acreage of these facilities will be determined and total study area acreage calculated. The percentage of active and passive open space also will be calculated. A map showing the locations of open spaces keyed to the inventory will be provided.
- Based on the inventory of facilities and residential study area populations, open space ratios will be calculated for the residential population in the relevant study areas, 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 2012 analysis year, based on other planned development projects within the open space study area. Any new open space or recreational facilities that are anticipated to be operational by the analysis year will also be accounted for. Open space ratios will be developed for future No-Action conditions and compared with existing ratios to determine changes in future levels of adequacy.

**Figure 6**
**Land Use and Zoning Study Area**




Hudson River
Harlem River
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235.02
231.01
229
231.02
236
234
232
230
214
210
Legend
Proposed Development Site
Proposed Rezoning Area
Half-Mile Radius
239 Census Tracts
Open Space Study Area Boundary

- Assess the effects on open space supply and demand resulting from increased residential populations added by the Proposed Action. The assessment of the Proposed Action's impacts will be based on a comparison of open space ratios for the future No-Action versus future With-Action conditions. In addition to the quantitative analysis, qualitative analysis will be performed to determine if the changes resulting from the Proposed Action constitute a substantial change (positive or negative) or an adverse effect to open space conditions.
- If the results of the impact analysis identify a potential for a significant adverse impact, discuss potential mitigation measures.

## TASK 4. SHADOWS

This chapter will examine the Proposed Action's potential for significant and adverse shadow impacts pursuant to *CEQR Technical Manual* criteria. Generally, the potential for shadow impacts exists if an action would result in new structures, or additions to buildings resulting in structures, over 50 feet in height that could cast shadows on important natural features, publicly accessible open space, or on historic features that are dependent on sunlight. The Proposed Action would facilitate the construction of a new mixed-use building, with a height of approximately 120 feet. As there are open space resources in the vicinity of the Proposed Development Site, an analysis of shadows is appropriate, and will be included in the EIS pursuant to the following sub-tasks.

- Identify sun-sensitive landscapes and historic resources within the path of the Proposed Development's shadows. In coordination with a survey for the open space and historic analyses, map and describe any sun-sensitive areas. This task will be coordinated with Task 3, "Open Space" and Task 5, "Historic Resources."
- Prepare shadow diagrams for time periods when shadows from the new building could fall onto existing open spaces. The analysis will also take into account any historic resources identified in the area that may have significant sunlight dependent features such as stained glass windows. These diagrams will be prepared for up to four representative analysis days (March 21/September 21, May 6, June 21, December 21) if shadows from the proposed building would fall onto any of the open spaces or sun-sensitive historic resources on that day.
- Map the shadows from the existing buildings and the Proposed Development. Describe the effect of the incremental shadows from the Proposed Development on publicly accessible open spaces and natural features, as well as any historic resources with significant sunlight dependent features based on the shadow diagrams for each of the analysis dates.
- Create a duration table that will show the entering and exiting times when an incremental shadow would fall on each affected open space or when an historic feature would be affected by a project-generated incremental shadow.

## TASK 5. HISTORIC RESOURCES

The *CEQR Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated NYC Landmarks; properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed on the State/National Register of Historic Places (S/NR) or contained within a district listed on or formally determined eligible for S/NR listing;

properties recommended by the NY State Board for listing on the S/NR; National Historic Landmarks; and properties not identified by one of the programs listed above, but that meet their eligibility requirements.

The Proposed Development Site and rezoning area are located within the State and National Register-listed (S/NR) Sugar Hill Historic District, and Lot 14, which falls partially within the rezoning area, also falls within the New York City Landmarks Preservation Commission (NYCLPC) designated Hamilton Heights/Sugar Hill Historic District. In addition, the western edge of the 155th Street Viaduct (NYCLPC designated), as well as 409 Edgecombe Avenue and Jackie Robinson Pool and Park (NYCLPC-designated resources) are located within a 400-foot radius of the rezoning area. Because the Proposed Action would result in new in-ground disturbance and the demolition of an existing building within a S/NR-listed historic district, it has the potential to result in impacts to architectural resources.

Impacts on historic resources are considered on the Proposed Development Site and in the area surrounding it. The historic resources study area is therefore defined as the area to be rezoned plus a 400-foot radius, as per the guidance provided in the *CEQR Technical Manual*. Archaeological resources are considered only in those areas where new in-ground disturbance is likely to occur; these are limited to sites that may be developed in the rezoning area, and include only the Proposed Development Site. Subtasks will include:

### Architectural Resources

- Map and briefly describe known architectural resources within an approximate 400-foot radius of the rezoning area.
- Describe the Proposed Development and the impact it would have on the building on the site. This could include the demolition of existing buildings and the preservation of buildings and other features. Assess the project's potential for indirect impacts on any architectural resources in the study area, including visual and contextual impacts.
- Because the Proposed Development may involve state funding or subsidies, potential impacts to historic resources will be evaluated in accordance with state procedures.
- If applicable, develop mitigation measures to avoid any adverse impacts on architectural resources in consultation with LPC and, as appropriate, the New York State Office of Parks, Recreation and Historic Preservation (OPRHP).

## TASK 6. VISUAL RESOURCES

An area's visual resources are its unique or important public view corridors, vistas, or natural or built features. For CEQR analysis purposes, this includes only views from public and publicly accessible locations and does not include private residences or places of business. Visual resources could include views of the waterfront, public parks, landmark structures and districts, or natural resources. As the Proposed Action would result in new development within or adjacent to a designated historic district, as well as the demolition of an existing building within a S/NR-listed historic district, an assessment of visual resources, particularly relative to historic resources, will be presented in the EIS, as described in the following subtasks:

- Describe the Proposed Development's visual character.

- Assess the anticipated changes in the area's visual resources that would result from the Proposed Development and evaluate the significance of that change. This evaluation would focus on public view corridors to the historic districts in the vicinity of the site.

## TASK 7. NEIGHBORHOOD CHARACTER

Under CEQR, the neighborhood character assessment considers the results of the land use, socioeconomic, urban design, historic, traffic and noise assessments to arrive at a conclusion as to the potential overall effects of the Proposed Action on the character of an area. As noted in the EAS document, while the Proposed Action is not expected to result in significant adverse impacts in most of the areas listed above, it has the potential to result in significant adverse impacts to architectural resources, which is one of the components that contribute to neighborhood character. The analysis will therefore focus on this area. The neighborhood character analysis will draw from other impact analyses to formulate conclusions regarding the Proposed Action's potential effects on neighborhood character.

## TASK 8. HAZARDOUS MATERIALS

This section will examine the potential for impacts related to subsurface contamination, including an evaluation of the existing soil and groundwater conditions in areas that would be affected by the Proposed Development. It will summarize conditions on the site based on a review of existing Environmental Site Assessments and reports on subsurface investigations, where applicable. As noted in the EAS document, a Phase I Environmental Site Assessment (ESA) was conducted by ATC Associates for the Proposed Development Site, which identified some Recognized Environmental Conditions ("RECs") that could affect the property. The Phase I ESA recommended that a Phase II Environmental Site Investigation (ESI) be conducted to assess potential impacts to the soil and groundwater as a result of potential releases from the identified RECs. Subsequently, a Phase II ESI Work Plan was prepared in January 2009, which included the Phase II ESI Subsurface Testing Scope of Work for the Proposed Development Site. Both the Phase I and Phase II ESI Work Plan will be submitted to the New York City Department of Environmental Projection (NYCDEP) for review and approval. This chapter of the EIS would include the following tasks:

- Summarize the findings and recommendations of the Phase I Environmental Site Assessment (ESA) prepared for the Proposed Development Site by ATC Associates in 2008.
- If there is the potential for significant impacts under the Proposed Action, the need to perform soil or groundwater sampling as mitigation will be described in the mitigation chapter as well as the need for any restrictive declaration to implement the mitigation.

## TASK 9. AIR QUALITY

The Proposed Action will permit residential uses on a site that previously allowed only automotive or commercial uses, and would therefore alter land uses in the study area. Air quality, which is a general term used to describe pollutant levels in the atmosphere, would be affected by these changes. The key issues that are addressed in an air quality analysis of the potential impacts of the Proposed Action are: (1) The potential for emissions from the heating, ventilation and air conditioning (HVAC)

systems of the proposed development building(s) to significantly impact existing land uses; (2) The potential for significant air quality impacts from the HVAC systems of existing large emission sources with 2.8 or more Btu/hr heat input on the proposed (new) sensitive land uses; (3) The potential for significant air quality impacts on the proposed (new) sensitive land uses (e.g., residences, day care center, museum) from air toxic emissions generated by nearby existing industrial sources, and (4) The potential impacts of the emissions associated with the proposed garage to impact the ambient air quality levels. The stationary source air quality analysis would be undertaken pursuant to the tasks presented below.

## Stationary Source Analyses

### *HVAC Analysis*

HVAC emissions of the projected/potential and existing buildings are a function of fuel type, stack height, building size (gross floor area), and location of each emission source relative to sensitive land uses. The following information and assumptions would apply for this analysis:

- Potential impacts of emissions from the HVAC systems of the proposed development building(s) to significantly impact existing land uses would be conducted. Impacts would be initially analyzed using the CEQR Technical Manual nomographic procedures. If results exceed established threshold values, a detailed analysis would be conducted using the EPA's AERMOD dispersion model. Using New York City building code, the set-back distance that would not cause exceedances of the NAAQS at nearby taller buildings would be estimated, if necessary.
- Potential cumulative impacts of emissions from large emission sources within 1,000 feet of the Project Site on the proposed development would be estimated. A detailed analysis would be conducted using EPA's AERMOD dispersion model.
- NO2, SO2, and PM10 pollutants would be considered for the detailed analyses.
- Emission factors for the pollutants of concern for HVAC emissions would be obtained from EPA's "Compilation of Air Pollutant Emission Factors" (AP-42) based on building fuel types and fuel consumption rate. Fuel consumption rates will be estimated using factors presented in NYCDEP's Report T.S. #12.
- Stack parameters for the analysis of HVAC system emissions (i.e., temperature, stack diameter, exit velocity, etc.) will be obtained using conservative CEQR Technical Manual default values. Analyses will be conducted with and without building downwash using latest five consecutive years of meteorological data from LaGuardia Airport (2002-2006).
- Estimated short-term and annual pollutant concentrations would be added to appropriate background levels, and total pollutant concentrations would be compared with NAAQS to determine whether there would be the potential for a violation of these standards.
- Should the analysis determine that restrictions regarding fuel type or stack location are necessary, they would be incorporated in an (E) designation to be mapped on the Proposed Development Site as part of the rezoning action.

### *Air Toxics Analysis*

In addition to criteria pollutants, the non-criteria air pollutants, known as toxic air pollutants, which are being emitted from nearby industrial facilities would be analyzed. Toxics include hundreds of

pollutants, ranging from high to low toxicity. No federal standards have been promulgated for toxic air pollutants. However, the USEPA and the New York State Department of Environmental Conservation (NYSDEC) have issued guidelines that establish acceptable ambient levels for these pollutants based on human exposure criteria. Potential impacts of toxic air emissions from existing industrial sources located within 400 feet of the proposed new residential site (i.e., the air quality study area) would be estimated.

- An analysis area with a radius of approximately 400 feet around the Project Site would be identified;
- Air permits for all facilities within this analysis area on NYSDEC and NYCDEP would be acquired and reviewed; and
- Dispersion analyses would be conducted to determine the potential of the toxic emissions released from the permitted emission sources to adversely affect the new residential area, as follows:
  - The dispersion modeling analysis would initially be conducted using NYSDEC's DAR-1 model to determine whether the existing currently operating permitted facilities within the air toxics study area would have the potential to adversely affect the sensitive analysis sites. DAR-1 software (SCREEN and more refined ISCLT2 subroutine model) would be used to determine whether facilities have the potential to exceed short-term and annual health-related guideline values (i.e., SGCs or AGCs), including EPA's Hazard Index, and/or EPA's cancer risk incremental threshold value of one per million.
  - A more refined analysis the AERMOD model would be conducted to estimate potential impacts for facilities that fail the screening level analysis with DAR-1 software.

### *Garage Analysis*

An air quality analysis will be conducted to estimate the potential impacts of the proposed parking garage. Because the garage would be used almost exclusively by gasoline-powered automobiles and not diesel-fueled trucks, carbon monoxide (CO) will be the only pollutant considered for this analysis. Potential PM10 and PM2.5 impact will not be considered because the concentrations of these pollutants would not be materially affected by the operation of this facility.

Analysis will follows the CEQR guidelines for a mechanically ventilated, enclosed garage. CO concentrations will be estimated near the exhaust vents of the facilities at receptors located at 5 and 50 feet from the exhaust vents, as well as at an appropriate receptor within the Proposed Development, if applicable. Contributions from emissions generated by street traffic will be added to project-generated impacts and appropriate background levels to estimate the total concentration.

Maximum hourly CO emission rates within the facility will be calculated for the time period with the maximum number of departing autos in an hour, since departing autos are assumed to be "cold" and arriving cars are assumed to be "hot" ("cold" autos emit CO at considerably higher rates than "hot" autos). Maximum hourly CO emission rates over a consecutive 8-hour period were computed for the 8-hour time period that averages the largest number of departing autos per hour. Maximum 8-hour average CO emission rates will be determined based on the ins/outs for the 8-hour time period and the mean traveling distance within the garages. The analysis will assume that all departing autos would idle for one minute before traveling to the exits of the garage, and all arriving and departing autos would travel at 5 mph within the garages.

The maximum total 8-hour CO concentration (i.e., including garage impact, street traffic contributions, and background concentration) will be estimated and compared to the CO NAAQS of 9.0 ppm.

## TASK 10. NOISE

This chapter will evaluate whether noise impacts would occur within the study area and whether standard window wall attenuation would be sufficient or if portions of the proposed sensitive developments would require additional noise attenuation to ensure acceptable indoor noise conditions. The following sub-tasks will be undertaken in compliance with guidelines contained in the *CEQR Technical Manual*.

- Site Selection: Up to four representative locations would be selected for evaluation of window wall attenuation requirements.
- Data Collection: At the identified representative locations, existing noise exposure conditions would be determined by monitoring one-hour equivalent continuous noise levels (Leq) and statistical tenth percentile (L10) noise levels. The existing noise levels would be measured in units of "A" weighted decibels (dBA) with a calibrated noise meter conforming to National and International standards. These measurements would also be converted to Ldn, in order to determine appropriate levels of attenuation pursuant to federal guidance. The monitoring periods would coincide with the peak traffic noise periods under dry road surface conditions. Receptor sites would include sites where proposed new residential or community facility uses would require specification of window/wall attenuation that would ensure acceptable indoor noise conditions as prescribed in regulations.
- Build Year Noise Impacts: Noise impacts would be determined by following the CEQR Technical Manual methodology. The criteria would take into consideration the indoor and outdoor areas of the Proposed Development, and the ability to meet indoor criteria with standard window wall noise attenuation.
- Noise Abatement Analysis: At locations where significant impacts are identified, if any, appropriate mitigation measures would be considered following the CEQR guidelines, and recommendations for their implementation would be made. Window/wall attenuation requirements, if any, at potential future sensitive buildings would be identified. Should the analysis determine that specifications regarding noise attenuation are necessary, they would be incorporated in an (E) designation to be mapped on the Proposed Development Site as part of the rezoning action.

## TASK 11. CONSTRUCTION IMPACTS

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity has the potential to affect traffic conditions, archaeological resources and the integrity of historic resources, community noise patterns, air quality conditions, and mitigation of hazardous materials. This impact assessment will be an analysis of potential impacts based on the *CEQR Technical Manual* with an analysis of the effects of construction activities, including the

demolition of buildings, excavation and foundation work, construction of new buildings, and landscaping.

This chapter would describe the construction schedule for the Proposed Development and estimate on-site activity. The analysis will be based on the peak construction period of the project. The historical uses and conditions of the Proposed Development Site and the surrounding area indicate the potential for adverse impacts related to historic architectural resources and hazardous materials; thus, the Proposed Action could have hazardous materials-related and architectural resources-related construction impacts. The potential construction impacts in these areas will be assessed in the EIS, as described below.

**Hazardous Materials**. In coordination with the hazardous materials task described above, summarize actions to be taken during construction to limit exposure of construction workers, residents, and the environment to potential contaminants.

**Historic Resources.** In coordination with the work performed for historic resources above, summarize actions to be taken during project construction to protect any adjacent historic resources from potential construction impacts.

This chapter would also provide a qualitative assessment of the effects of construction activities on other areas as applicable, including: physical changes to the project site, economic effects of construction, transportation-related effects during the construction process, air quality, and noise.

## TASK 12. MITIGATION

Where significant adverse project impacts have been identified in Tasks 2 through 10, measures to mitigate those impacts will be described. These measures will be developed and coordinated with the responsible City/State agencies as necessary, including NYCLPC, OPRHP, NYCDPR, NYCDOT, and NYCDEP. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

## TASK 13. 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 are usually defined when the full extent of the Proposed Action's impacts are identified. This scope assumes that a No-Action Alternative will be analyzed in the EIS, which assumes the continuation of the existing zoning and uses on the Proposed Development Site. In addition, this chapter of the EIS will also evaluate the feasibility of a No Impacts or a Reduced Impacts Alternative. For technical areas where impacts have been identified, the alternatives analysis will determine whether these impacts would still occur under each alternative, and also determine the level of mitigation needed when compared to the Proposed Action.

## TASK 14. 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 rezoning is implemented regardless of the mitigation employed (or if mitigation is impossible).
- **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 15. 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 the drafting of a Notice of Completion by the lead agency.