

West Harlem Rezoning FEIS EXECUTIVE SUMMARY

A. INTRODUCTION

The Applicant, the New York City Department of City Planning (DCP), is requesting zoning map and zoning text amendments (collectively, the “Proposed Action”) affecting an approximately 90 block area within the West Harlem neighborhood of Manhattan Community District 9. The affected area is generally bounded by West 126th Street to the south, West 155th Street to the north, Edgecombe, Bradhurst and Convent avenues to the east and Riverside Drive to the west (refer to Figures ES-1). The affected area is currently zoned predominantly R7-2 and R8, medium density residential districts (refer to Figure ES-2). The Proposed Action is described as follows.

(1) Zoning map amendments to

- Replace the existing R7-2, R8, C8-3 and M1-1 zoning districts within the proposed rezoning area with R6A, R7A, R8A, C6-3X and M1-5/R7-2 districts;
- Establish Special Mixed Use District (MX 15);
- Map new commercial overlays along portions of West 155th Street, West 145th Street and Hamilton Place to promote and better support local retail development; and

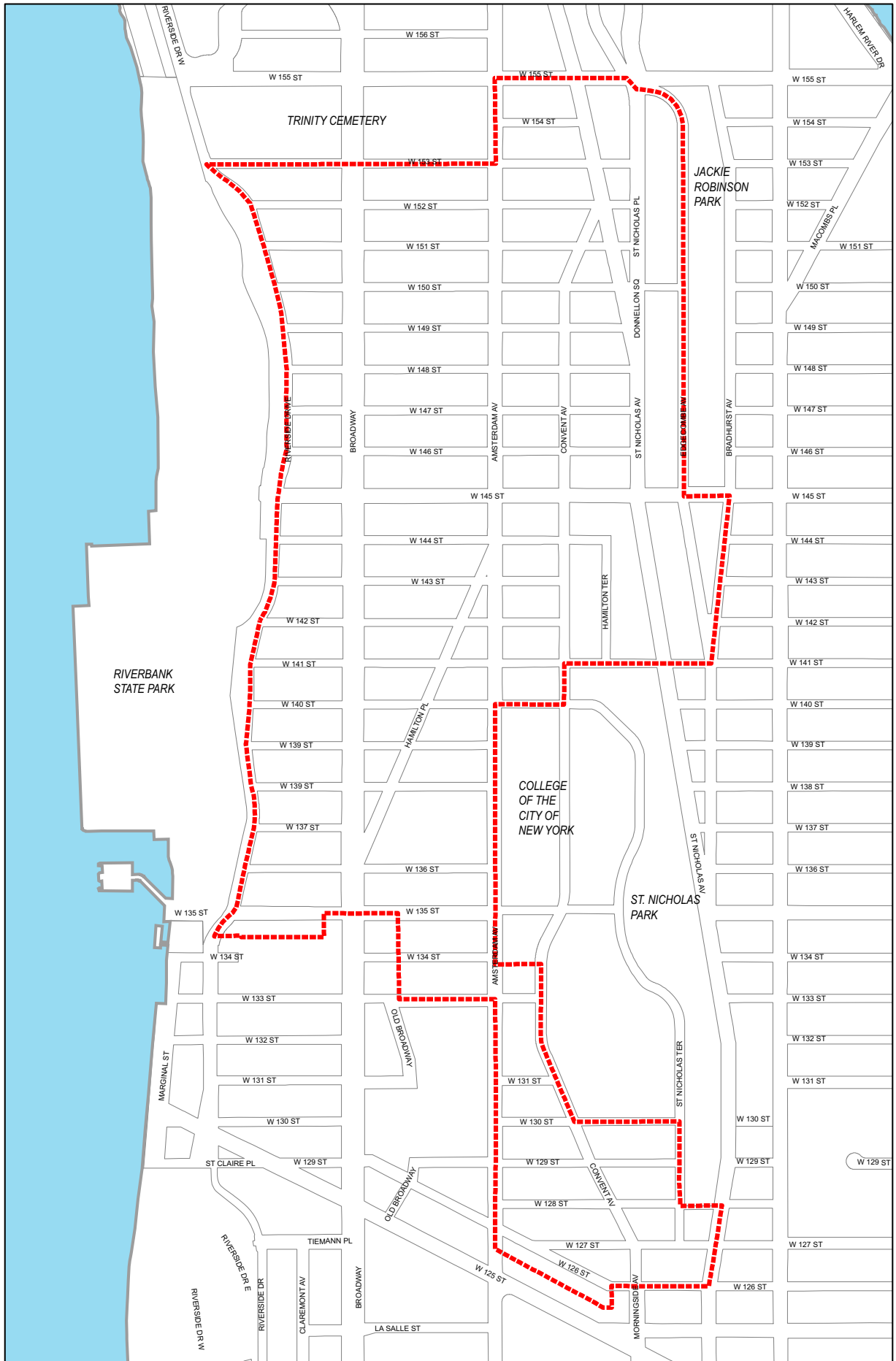
(2) Zoning text amendments to

- Apply the Inclusionary Housing Program to C6-3X (R9X equivalent zoning district) and R8A zoning districts located along West 145th Street between Broadway and Amsterdam Avenue;
- Establish Special Mixed Use District 15 (MX 15) in West Harlem;
- Require all R8 districts north of West 125th Street within Manhattan Community District 9 to be developed pursuant to the R8 Quality Housing Program.

The Proposed Action is intended to preserve the existing context and scale of the residential neighborhood while allowing modest residential growth where appropriate. The Proposed Action would also physically and economically activate an existing manufacturing area to expand and enhance future job creation and promote mixed use development. Furthermore, the Proposed Action would strengthen the West 145th Street corridor by expanding future development opportunity while providing incentives for affordable housing through the Inclusionary Housing Program.

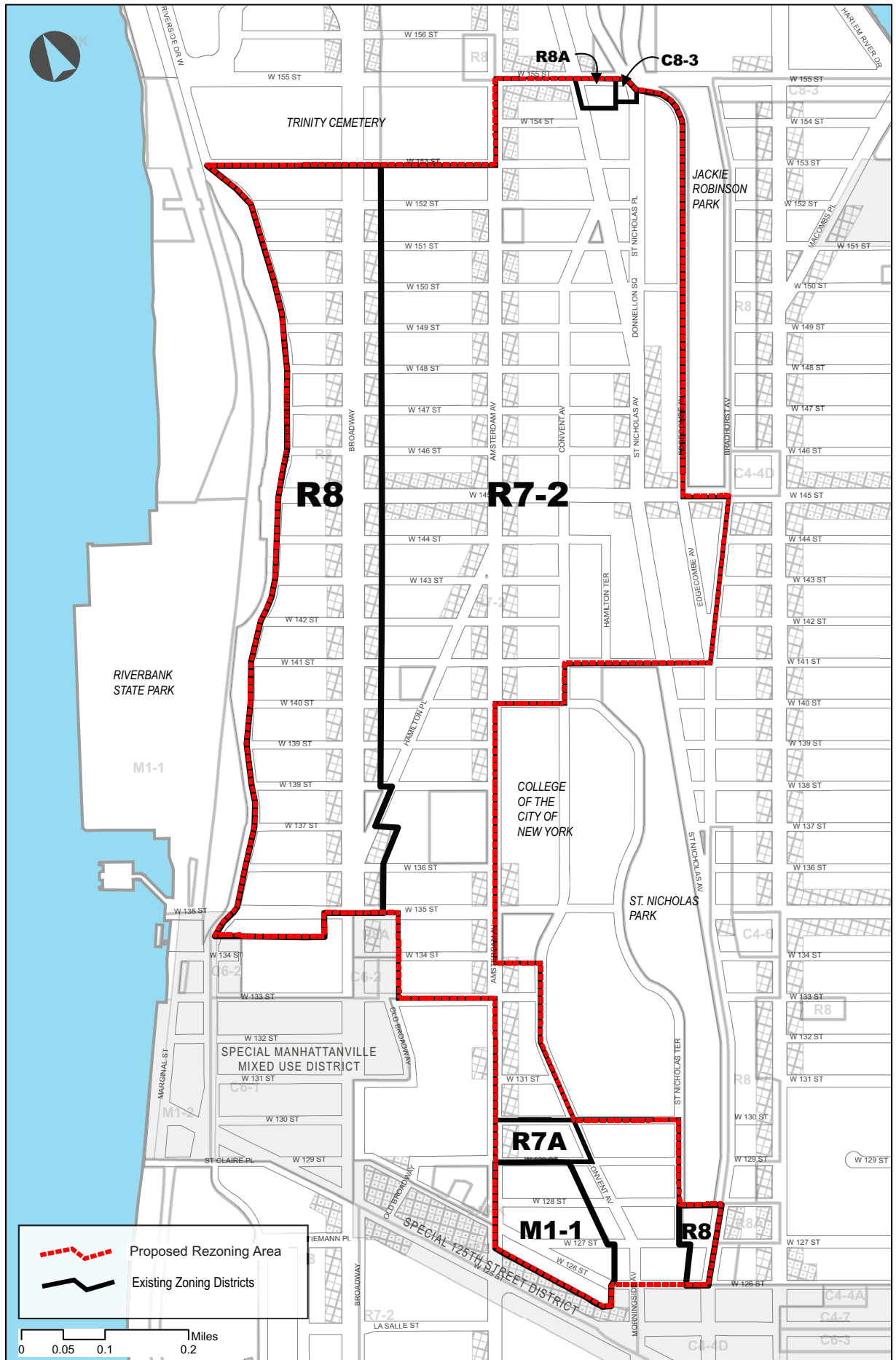
As discussed below, a reasonable worst-case development scenario (RWCDS) for development associated with the Proposed Action has been identified. For environmental assessment purposes, projected developments, considered likely to occur in the foreseeable future, i.e., an approximate ten-year period following the adoption of the Proposed Action, are expected to occur on 22 sites, and potential developments, which are considered possible but less likely, have been identified for 16 additional sites. The Proposed Action would allow for the development of new uses and higher densities at the projected and potential development sites. As the Proposed Action would rezone an area encompassing approximately 90 blocks, and an approximate ten-year period is typically believed to be the length of time over which a projection can be made on changes due to the rezoning, the analyses in this DEIS consider an analysis year of 2021.

This Environmental Impact Statement (EIS) has been prepared in conformance with applicable laws and regulations, including Executive Order No. 91, New York City Environmental Quality Review (CEQR) regulations, and follows the guidance of the *CEQR Technical Manual*, February 2012.



Source: NYC Department of City Planning

--- Rezoning Area Boundary



Source: NYC Department of City Planning

The EIS includes review and analysis of all impact categories identified in the *CEQR Technical Manual*. The EIS contains a description and analysis of the Proposed Action and its environmental setting; the environmental impacts of the Proposed Action, including its short and long term effects, and typical associated environmental effects; identification of any significant adverse environmental effects that can be avoided through incorporation of corrective measures into the Proposed Action; a discussion of alternatives to the Proposed Action; the identification of any irreversible and irretrievable commitments of resources that would be involved in the Proposed Action should it be implemented; and a description of any necessary mitigation measures proposed to minimize significant adverse environmental impacts.

B. PURPOSE AND NEED FOR THE PROPOSED ACTION

In response to future development concerns raised during the Columbia/Manhattanville ULURP review process in 2007 by Community Board 9, community residents and the Borough President, the DCP initiated the West Harlem rezoning study. This was in recognition that zoning changes were needed to provide better protection against out-of-scale development, while incentivizing opportunities for mixed-use development and affordable housing, where appropriate.

The West Harlem rezoning proposal recognizes and complements Community Board 9's recently adopted 197-a plan and the Borough President's West Harlem Plan, and focuses on a 90-block area north of West 125th Street generally bounded by West 126th and West 155th streets, Riverside Drive and Edgecombe, Bradhurst and Convent avenues (refer to Figure ES-1 above). The Special Manhattanville Mixed-Use District (MMU), New York City Housing Authority's (NYCHA) Manhattanville Houses and City College's West Harlem campus are not included in the proposed rezoning area. The proposed rezoning area includes blocks that had not been subjected to a comprehensive zoning review since adoption of the 1961 Zoning Resolution – a period of 50 years.

West Harlem has a predominantly low- to mid-rise character, with many blocks located within LPC or State-designated historic districts. West Harlem also has few vacant properties and did not go through the cycle of physical distress and disinvestment that was experienced in East and Central Harlem during the 1960-1980's period. Accordingly, the Proposed Action includes contextual zoning that would protect the existing built context of West Harlem, while promoting some future development that would blend with the existing urban fabric. It includes modest increases in density along portions of West 145th Street - a significant east-west corridor, to incentivize mixed-use development and expand opportunities for affordable housing. The proposed rezoning is also intended to direct higher densities to areas that can better accommodate future growth, such as those close to subway lines and in the area currently mapped with a M1-1 district, while mapping lower densities on predominantly residential brownstone blocks.

The Proposed Action is intended to balance preservation and growth in select areas of West Harlem's medium-density residential core and within the rezoning area's proposed new MX-district. Through zoning map and zoning text amendments, the Proposed Action would:

- ***Promote building forms that are compatible with existing neighborhood character.*** West Harlem is a unique Manhattan neighborhood with a strong rowhouse brownstone character. On mid-block and avenue frontages, current zoning regulations encourage tower-in-the park development that is inconsistent with the surrounding context. Further, existing zoning regulations also allow community facility buildings that are substantially larger than surrounding residential buildings. To address these issues, the Proposed Action would map contextual zoning districts within the proposed rezoning area's residential core, to ensure that future building forms are more compatible with the existing built character.

- ***Preserve the low and mid-rise scale of mid-blocks and avenue frontages with strong built contexts.*** Many mid-blocks in the area to be rezoned are characterized by low-rise brownstones and rowhouse buildings with consistent street walls and cornice lines. To preserve these characteristics, the Proposed Action would create modest decreases and modest increases in density with contextual zoning districts targeted to these areas. For Broadway, Riverside Drive and their respective mid-blocks, the proposed rezoning would retain the existing residential density within a contextual envelope.
- ***Enhance and expand future development opportunities for West 145th Street.*** West 145th Street serves as a major east-west corridor that is well-served by mass transit. The current zoning allows residential development up to 4.0 FAR under the Quality Housing option, which constrains future development options. The Proposed Action would result in modest increases in density to facilitate future mixed-use transit-oriented development in this area. The Proposed Action would also map commercial overlays along portions of West 145th Street that have active non-conforming ground floor retail uses, to better serve current and future local retail needs.
- ***Support and enhance mixed-use development opportunities in the M-district.*** West Harlem is strongly built-out, having fully occupied residential buildings and limited vacant sites; therefore, there are limited areas that could provide potential for new development. The existing West Harlem M1-1 district, generally bounded by West 126th and West 129th streets, Amsterdam and Convent avenues, is zoned for commercial and light manufacturing uses up to 1.0 FAR, which limits new development and constrains the ability of existing property owners to enlarge or expand. This M1-1 district is one of few places that could provide an opportunity for additional commercial and community facility development, especially supporting activities that complement arts production and exhibition, as stated in the community board's 197-a Plan. Accordingly, the Proposed Action includes the mapping of an MX mixed-use district in this area. The proposed MX district, the first one mapped in Manhattan, would pair an M1-5 district with an R7-2 district, thus expanding the range of allowable uses, while increasing density within a contextual building envelope.
- ***Foster new opportunities for affordable housing development.*** Although West Harlem is a predominantly built-out neighborhood that did not undergo the same degree of property distress experienced elsewhere, affordable housing is still needed to accommodate this community's growing population. To encourage new residential development for all income levels, the Proposed Action would create increased densities through use of the Inclusionary Housing Program (IHP) in appropriate locations to expand and enhance future affordable housing development opportunities.
- ***Provide support for existing ground floor retail uses.*** In the proposed rezoning area, ground floor commercial uses are found along portions of West 145th Street between Riverside Drive and Broadway and between Amsterdam and St. Nicholas avenues, and along a portion of Hamilton Place. However, no commercial overlay exists in these areas. In an effort to accommodate existing ground floor retail uses and meet the need for future ground floor commercial space, the Proposed Action includes the mapping of new commercial overlays for these areas to better serve current and future local retail needs.

C. DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action includes zoning map and zoning text amendments introducing contextual zoning districts. The primary component of the Proposed Action would affect zoning rules governing building bulk, including the permitted densities (i.e., FAR's), building heights, and streetwalls. The Proposed Action also recommends some changes in permitted uses in specific locations within the rezoning area.

Proposed Zoning Map Changes

The Proposed Action includes zoning map amendments to: replace the existing R7-2 and R8 zoning districts within the proposed rezoning area with R6A, R7A, and R8A districts; designate a C6-3X-zoning district to be mapped at the intersection of West 145th Street and Broadway; replace the existing M1-1 zoning district within the proposed rezoning area with a M1-5/R7-2 zoning district; and map new commercial overlays along portions of West 155th Street, West 145th Street and Hamilton Place to promote and better support local retail development. Figure ES-3 illustrates the proposed zoning designations, and Table ES-1 provides a summary of the changes proposed to zoning districts in the proposed rezoning area.

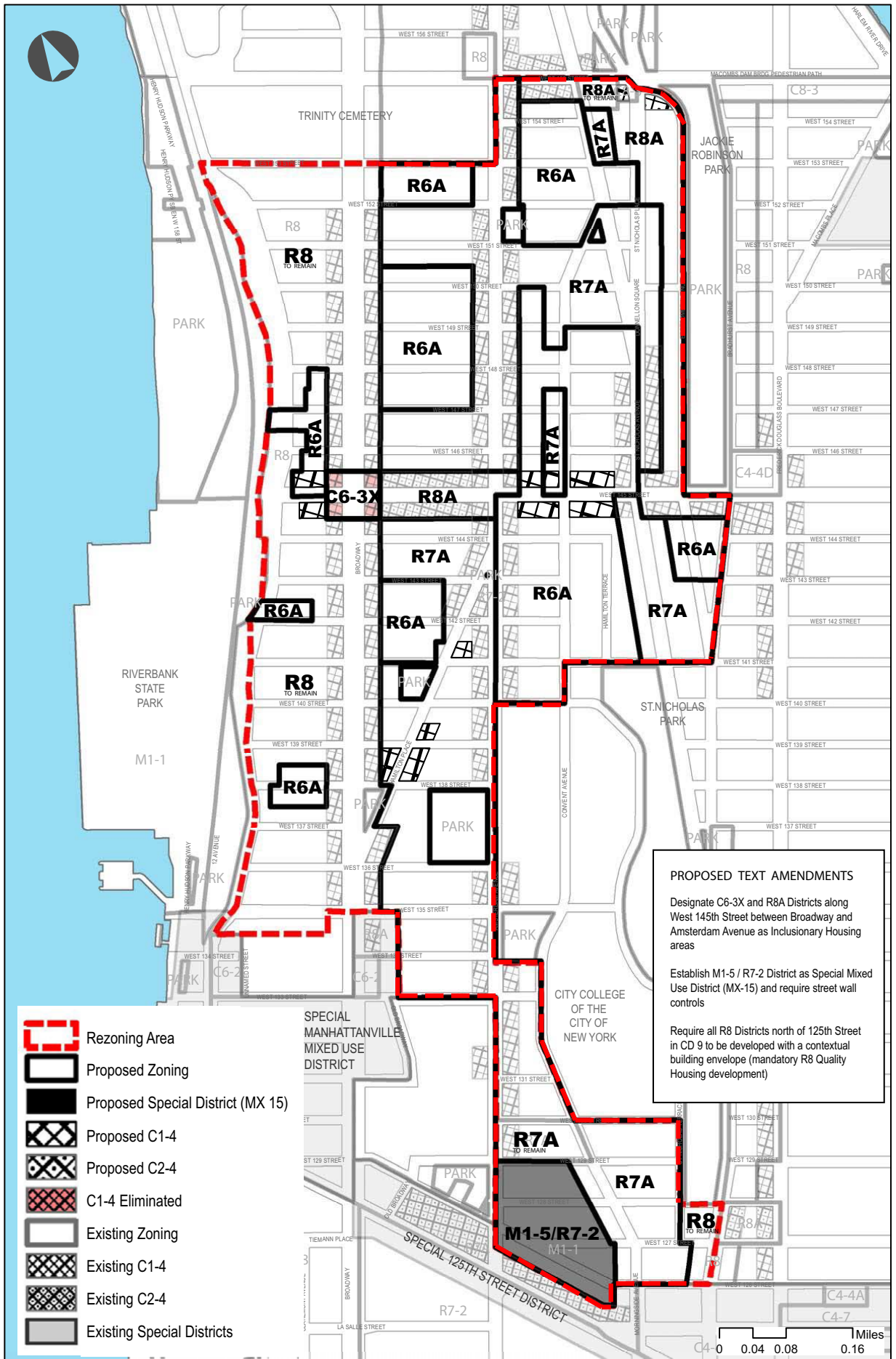
TABLE ES-1
Summary of Proposed Zoning Changes

Existing Zoning District	Proposed Zoning District
R7-2	R6A R7A R8A R8A Inclusionary Housing
R8	R6A C6-3X Inclusionary Housing
M1-1	M1-5/R7-2 (MX)

As shown in Figure ES-3, R6A zoning districts would be mapped on mid-blocks generally bounded by the north side of West 142nd Street between Riverside Drive and Broadway; West 147th to West 150th streets between Broadway and Amsterdam Avenue; West 145th to West 150th streets between Amsterdam and St. Nicholas avenues; West 151st to West 154th streets between Amsterdam, Convent and St. Nicholas avenues; West 140th to West 145th streets between Amsterdam Avenue and Hamilton Terrace; and along the north side of West 152nd Street between Broadway and Amsterdam Avenue. The proposed R6A district, with lower bulk, height and street wall requirements would provide consistency between the existing built context of low-scale areas and its underlying zoning.

R7A zoning districts would replace existing R7-2 zoning districts located along portions of St. Nicholas Place, Amsterdam, Convent and St. Nicholas avenues and on select mid-blocks between Broadway and St. Nicholas Avenue (see Figure ES-3). The density allowed under R7A is equivalent to the maximum residential density that is currently allowed on St. Nicholas Place and along Amsterdam, Convent and St. Nicholas avenues under the Quality Housing option. The mid-blocks proposed for R7A are characterized by mid-rise multi-family buildings interspersed with low-rise residential buildings. The building form encouraged by R7A regulations would result in residential buildings that are consistent with the scale, streetwall and density of the existing mid-block buildings.

R8A zoning would replace the existing R7-2 district located on both sides of West 145th Street from a point 100 feet east of Broadway to Amsterdam Avenue (see Figure ES-3). The Proposed Action would designate the R8A zoning district proposed for West 145th Street between Broadway and Amsterdam Avenue with the Inclusionary Housing Program. Where R8A IH is designated, the Proposed Action would allow a base residential density of 5.4 FAR bonusable up to 7.2 FAR pursuant to the Inclusionary Housing Program. For the purposes of this analysis, all development scenarios assume that the maximum



bonusable FAR would be achieved. The proposed R8A district is intended to provide a useful incentive to develop affordable housing and enhance future development opportunities for the West 145th Street corridor. R8A zoning would also replace existing R7-2 zoning districts along Edgecombe Avenue, West 155th Street and West 145th Street between St. Nicholas and Bradhurst avenues (see Figure ES-3), in order to maintain the scale and street wall with the existing dense, mid-rise multi-family buildings within the area.

A C6-3X zoning district would be mapped at the intersection of West 145th Street and Broadway on the four corners to a depth of 100 feet (see Figure ES-3), an area currently zoned R8/C1-4. As part of the Proposed Action, the Inclusionary Housing designation would be made applicable to the C6-3X zoning district through a zoning text amendment. Where C6-3X IH is designated, the Proposed Action would allow a base residential density of 7.3 FAR bonusable up to 9.7 FAR pursuant to the Inclusionary Housing Program. The proposed C6-3X zoning district expands future development opportunity at the West 145th Street/Broadway intersection, which is well-served by mass transit.

The Proposed Action would rezone the existing manufacturing area located on portions of four blocks generally bounded by West 126th and West 129th streets, and Amsterdam and Convent avenues, zoned M1-1, to a M1-5/R7-2 mixed use zoning district and a zoning text amendment would establish it as Special Mixed Use District 15 (MX 15). The MX district would allow for new residential uses and non-residential uses to be permitted as-of-right. The proposed MX district would pair a M1-5 manufacturing district with a R7-2 residential district. Since the proposed rezoning area is strongly built-out, the existing M1-1 district is one of few places that could provide an opportunity for additional commercial and light manufacturing development, especially supporting activities that complement arts production and exhibition. Ultimately, the market determines whether development would occur; however, if it does occur in this area, the MX district would provide more flexibility than the current M1-1 zoning, to incentivize the development of new businesses and better support the expansion of existing businesses.

Finally, as shown in Figure ES-3, C1-4 and C2-4 commercial overlays are proposed to be mapped on the south side of West 155th Street between St. Nicholas and Bradhurst avenues (C2-4); on both sides of the West 145th Street mid-block between Riverside Drive and Broadway; both sides of the West 145th Street mid-block between Amsterdam and St. Nicholas avenues (C2-4), and Hamilton Place between West 138th and West 139th streets, a portion of the east side of Hamilton Place between West 139th and West 140th streets and a portion of the east side of Hamilton Place between West 141st and West 142nd streets (C1-4). The proposed commercial overlays would be mapped within R6A, R7A and R8A districts and would bring existing ground floor commercial uses into conformance. They would also support future ground floor commercial uses to serve the neighborhood.

Proposed Zoning Text Amendments

Inclusionary Housing Program

As part of the City's ongoing effort to provide new housing opportunities in West Harlem, the Proposed Action identifies areas that are appropriate for the Inclusionary Housing designation. The Inclusionary Housing designation, which can be applied in areas being rezoned to allow medium- and high-density residential development, combines a zoning floor area bonus with a variety of housing subsidy programs to create powerful incentives for the development and preservation of affordable housing.

The proposed zoning text amendment would make the Inclusionary Housing Program (IHP) zoning regulations applicable in the C6-3X zoning district (R9X residential zoning district equivalent) and the R8A district along West 145th Street between Broadway and Amsterdam Avenue. In the areas where the IHP would be applicable, new residential developments that provide on- or off- site housing that will

remain permanently affordable for low- and moderate-income families would receive increased floor area. The IHP provides 33% bonus in exchange for 20% of floor area set aside as affordable units. The additional floor area must be accommodated within the bulk regulations of the underlying zoning districts. Affordable units could be financed through city, state, and federal affordable housing subsidy programs. Within the proposed rezoning area, portions of approximately five blocks would be subject to the IHP.

The affordable housing requirement of the Inclusionary Housing zoning bonus could be met through the development of affordable units, on-site, or off-site either through new construction or preservation of existing affordable units. Off-site affordable units must be located within the same community district, within a half-mile of the bonused development or anywhere within Community District 9. The availability of on-site and off-site options provides maximum flexibility to ensure the broadest possible utilization of the program under various market conditions

Special Mixed Use District – MX 15

The Proposed Action would establish the M1-5/R7-2 zoning district as a Special Mixed Use District - MX 15 in West Harlem, thereby making the Special Mixed Use District's general provisions applicable. As described above in the discussion of the zoning map amendment for M1-5/R7-2, when the MX district contains an R7-2 designation, the Special Mixed Use District prescribes a maximum base height of 60 feet and a maximum building height of 135 feet with the option to achieve a height of up to 175 feet through the use of the 'penthouse rule'. The current Special Mixed Use District regulations applicable to M1-5/R7-2 do not require both a minimum base height provision and street wall location provision. In order to retain the street wall character of the area, the Proposed Action would amend the base height requirements by requiring a street wall of 60 to 85 feet in height. Additionally, street wall location requirements would ensure that 70% of the aggregate building walls would be located on the street line with the remaining 30% to be located within 8 feet of the street line to encourage consistency with the location of street walls within the area.

Mandatory Quality Housing for R8 Districts within West Harlem

The Proposed Action would make mandatory the current provisions of the Quality Housing Program for R8 districts in the West Harlem Rezoning area. The proposed text amendment would encourage building forms that are consistent with the existing scale and character of the 6- to 8-story apartment buildings generally found within existing R8 districts located from West 135th Street to West 153rd Street between Riverside Drive and Broadway and along the west side of St. Nicholas Avenue and the east side of St. Nicholas Terrace between West 126th Street to West 128th Street. The Quality Housing Program for R8 districts allows a maximum residential density of 6.02 FAR on narrow streets and a maximum of 7.2 FAR for wide streets. Community facility FAR may be developed up to 6.5 FAR. For sites on narrow streets, the required building envelope would provide for a street wall of 60 to 85 feet in height, with a maximum building height of 105 feet. For sites on wide streets, the street wall must rise between 60 to 85 feet in height with a maximum allowable building height of 120 feet.

E-Designations

As described in greater detail in the Hazardous Materials chapter of this document (Chapter 9), the Proposed Action includes the mapping of (E) designations for hazardous materials on all 38 of the projected and potential development sites. In addition, as described in the Air Quality chapter (Chapter 12), an (E) designation would be mapped on seven of the 22 projected and three of the 16 potential development sites to ensure that there would be no significant adverse air quality impacts. Furthermore, as described in the Noise chapter (Chapter 14), an (E) designation would be mapped on three of the 22

projected development sites to ensure that there would be no significant adverse noise impacts. The (E) designation is a mechanism that ensures no significant adverse impacts would result from a proposed action because of steps that would be undertaken prior to the development of a rezoned site. The (E) designation would ensure that these identified sites would not be developed unless necessary remedial measures are implemented.

D. REASONABLE WORST-CASE DEVELOPMENT SCENARIO (RWCDS)

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 2021. The incremental difference between the Future No-Action and Future With-Action conditions are the basis of the impact category analyses of this Environmental Impact Statement. For area-wide rezonings not associated with a specific development, where the build-out depends on market conditions and other variables, the build year cannot be determined with precision. A build year ten years in the future is generally considered reasonable for these projects as it captures a typical cycle of market conditions and generally represents the outer timeframe within which predictions of future development may usually be made without speculation.

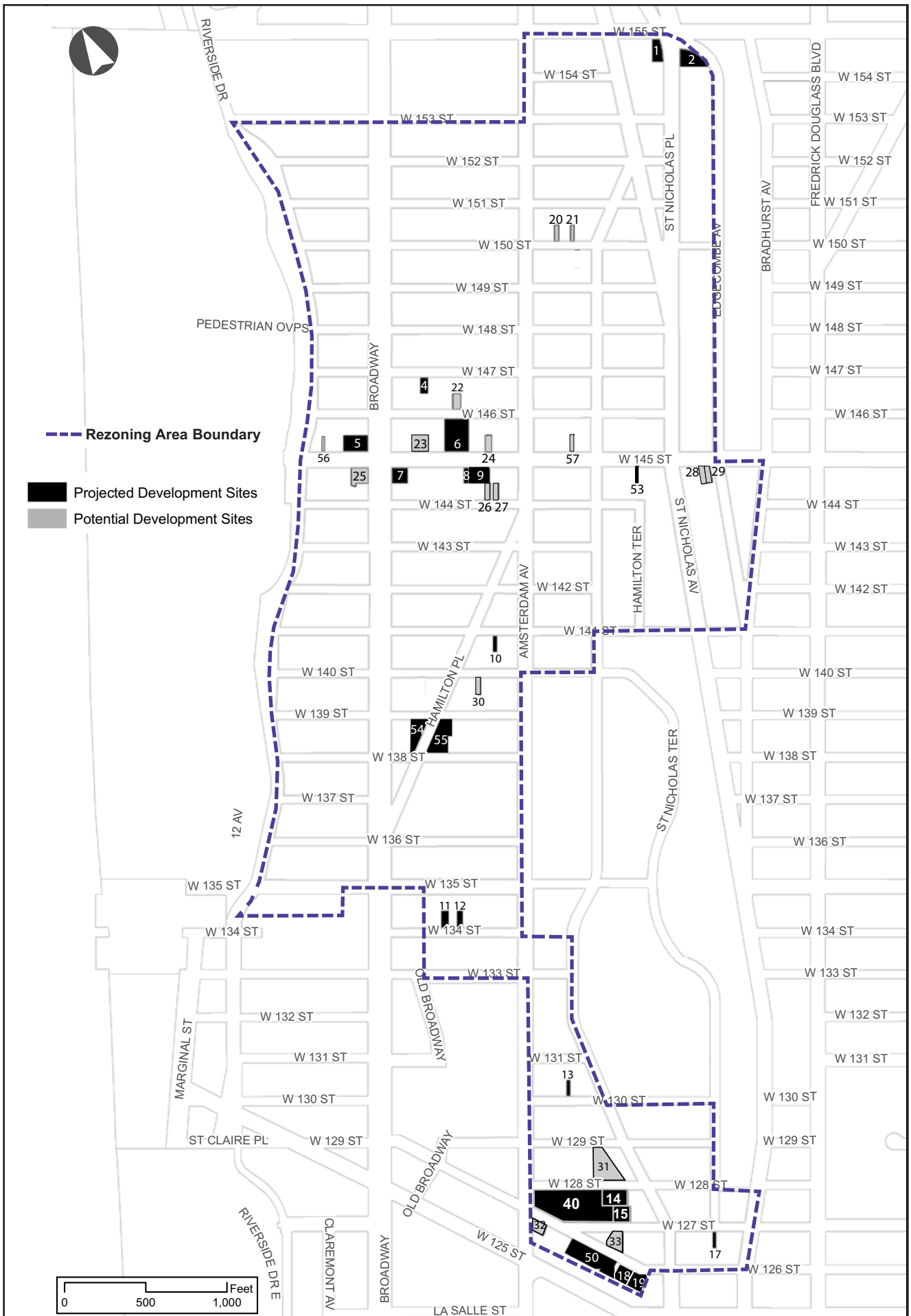
To determine the With-Action and No-Action conditions, standard methodologies have been used to identify the amount and location of future development, following the *CEQR Technical Manual* guidelines and employing reasonable assumptions. In projecting the amount and location of new development, several factors have been considered in identifying likely development sites. These include known development proposals, past development trends, and the development site criteria described below. Generally, for area-wide rezoning, new development can be expected to occur on selected, rather than all, sites within the rezoning area. The first step in establishing the development scenario was to identify those sites where new development could reasonably occur.

To produce a reasonable, conservative estimate of future growth, the development sites were further divided into two categories - projected development sites and potential development sites. The projected development sites are considered more likely to be developed within the ten-year analysis period (build year 2021) because of known development plans for such sites, their relatively low FAR and current utilization, and relatively large size. Potential sites are considered less likely to be developed over the same period because of their relatively higher FARs, existing utilization, and generally more cumbersome means of development.

This Environmental Impact Statement assesses both density-related and site specific potential impacts from the development on all projected development sites. Density-related impacts are dependent on the amount and type of development projected on a site and the resulting impact on traffic, air quality, community facilities, and open space. Site specific impacts relate to individual site conditions and are not dependent on the density of projected development. Site specific impacts include potential noise and shadows impacts from development, the effects on historic resources, and the possible presence of hazardous materials. Development is not anticipated on the potential development sites within the next decade; therefore, these sites have not been included in the density-related impact assessments. However, specific review of site specific impacts for these sites has been conducted in order to ensure a conservative analysis.

Thirty eight development sites (22 projected and 16 potential) have been identified in the rezoning area. Figure ES-4 shows these projected and potential development sites, and Table ES-2 below provides a summary of the RWCDS for each analysis scenario.

RWCDS Projected and Potential Development Sites



The Future Without the Proposed Action (No-Action Conditions)

In the future without the Proposed Action (No-Action), given the existing zoning and land use trends in the area, it is anticipated that the rezoning area would experience moderate growth in commercial and community facility uses and modest growth in residential uses over the next 10-year period. The RWCDs projects that sites currently zoned to permit residential use would develop pursuant to current zoning in the No-Action condition. While existing conditions would generally remain for sites zoned M1-1, given the limited amount of density allowed, and demolition of buildings would therefore generally not be expected, alterations of and a limited amount of partial demolition to existing buildings on site 40 could be expected to continue in the future without the Proposed Action. As shown in Table ES-2, it is anticipated that, in the future without the Proposed Action, there would be a total of approximately 465 residential units, 399,655 sf of office space, 301,490 sf of community facility space, and 45,888 sf of retail space on the 22 projected development sites.

**TABLE ES-2
RWCDs and Population Summary for Development Scenarios 1 to 4, Compared to No-Action Conditions**

USE	Existing Condition (GSF)	No-Action Condition (GSF)	RWCDs 1 (Deed Restriction + Conversion) (2)	RWCDs 2 (Deed Restriction + New Development) (2)	RWCDs 3 (No Deed Restriction + Conversion) (2)	RWCDs 4 (No Deed Restriction + New Development) (2)
Residential	93 units (110,334 GSF)	465 units (454,199 GSF)	809 units incl. 61 affordable (772,226 GSF)	879 units incl. 61 affordable (837,196 GSF)	964 units incl. 82 affordable (915,933 GSF)	1,034 units incl. 82 affordable (980,903 GSF)
Retail	58,129 GSF	45,888 GSF	151,924 GSF	176,408 GSF	151,924 GSF	176,408 GSF
Other Commercial (Office)	344,091 GSF	399,655 GSF	480,509 GSF	415,540 GSF	480,509 GSF	415,540 GSF
Community Facility (CF)	96,705 GSF	301,490 GSF	596,650 GSF	566,625 GSF	477,187 GSF	447,162 GSF
Parking	-	-	129 spaces (35,800 SF)	164 spaces (42,800 SF)	45,000 SF (175 spaces)	52,000 SF (210 spaces)
No-Action to With-Action Increment			344 Units (incl. 61 affordable) 106,036 gsf Retail 80,854 gsf Office 295,160 gsf CF 129 parking spc.	414 Units (incl. 61 affordable) 130,520 gsf Retail 15,885 gsf Office 265,135 gsf CF 164 parking spc.	499 Units (incl. 82 affordable) 106,036 gsf Retail 80,854 gsf Office 175,697 gsf CF 175 parking spc.	569 Units (incl. 82 affordable) 130,520 gsf Retail 15,885 gsf Office 145,672 gsf CF 210 parking spc.
POPULATION/ EMPLOYMENT (1)	Existing Condition	No-Action Condition	RWCDs 1 (Deed Restriction + Conversion)	RWCDs 2 (Deed Restriction + New Development)	RWCDs 3 (No Deed Restriction + Conversion)	RWCDs 4 (No Deed Restriction + New Development)
Residents	239 residents	1,195 residents	2,079 residents	2,259 residents	2,477 residents	2,657 residents
Workers	1,877 workers	2,760 workers	4,403 workers	4,120 workers	4,011 workers	3,728 workers
No-Action to With-Action Increment			884 Residents 1,643 Workers	1,064 Residents 1,360 Workers	1,282 Residents 1,251 Workers	1,462 Residents 968 Workers
<p>NOTE: Two reasonable worst-case development scenarios (RWCDs) have been identified for projected development sites 6 and 40. The With-Deed Restriction scenario for projected development site 6 (the former P.S. 186 site) refers to an existing deed restriction on the property that requires any new development on the site to contain 85% community facility use. The deed restriction would expire upon a sale to an unrelated third party. However, prior to such a sale, completion of the development of the property in accordance with the deed restriction is required. The Conversion scenario for projected development site 40 exists because the site contains existing buildings of various height, density and character and lend themselves to wide range of redevelopment options including alteration, conversion and partial demolition.</p> <p>(1) Assume 2.57 persons per DU (based on census data for 1/4-mile), 1 employee per 250 SF of office, 3 employees per 1000 SF of retail, as well as 1 employee per 25 DUs. For community facility uses, assume 1 employee per 300 sf of community facility/institutional space and for parking assume 1 employee per 10,000 sf of parking floor area.</p> <p>(2) Assume 900 sf size DUs for new residential development and residential conversions.</p>						

The Future With the Proposed Action (With-Action Conditions)

Defining the Reasonable Worst Case Development Scenario for Environmental Analysis

The Proposed Action would allow for the development of new uses and higher densities at the projected and potential development sites. Under the proposed zoning changes and other controls, a range of new

development could occur within projected development sites 6 and 40. For analysis purposes, two reasonable worst-case development scenarios have been identified for these two sites – a With-Deed Restriction scenario and a No-Deed Restriction scenario for projected development site 6; and a Conversion scenario and a New Development scenario for projected development site 40.

The With-Deed Restriction scenario for projected development site 6 (the former P.S. 186 site) refers to an existing deed restriction on the property that requires any new development on the site to contain 85% community facility use. The deed restriction would expire upon a sale to an unrelated third party. However, prior to such a sale, completion of the development of the property in accordance with the deed restriction is required. This scenario would include 7,421 gsf of retail and 141,724 gsf of community facility uses. The No-Deed Restriction scenario for projected development site 6 would include 155 dwelling units (21 affordable units pursuant to the Inclusionary Housing Program), 7,421 gsf of retail uses, 22,261 gsf of community facilities uses and a 46-space accessory parking garage.

The Conversion scenario for projected development site 40 exists because the site contains existing buildings of various height, density and character and lend themselves to a wide range of redevelopment options including alteration, conversion and partial demolition. In this scenario, existing buildings would be converted to multiple uses including 158 dwelling units (0 affordable units), 33,182 gsf of retail, 235,754 gsf of commercial uses, 170,510 gsf of community facility uses and a 79-space accessory parking garage. Under the New Development scenario, projected development site 40 would be developed with 228 dwelling units (0 affordable units), 57,665 gsf of retail, 170,786 gsf of commercial uses, 140,485 gsf of community facility uses and a 114-space accessory parking garage.

Table ES-2 below provides a summary of each of the four RWCDs for projected development sites, as well as the development increment compared to the No-Action condition for each scenario. The reasonable worst-case development scenarios defined above (and identified as scenarios 1 through 4) represent the upper bounds of residential, retail commercial and/or community facility and parking uses for the purposes of impact analysis. The proportional requirements for affordable housing would be the same in all scenarios. The analyses in this DEIS document examine the scenario with the greater potential environmental impact for each impact area.

Based on 2010 Census data, the census tracts comprising an approximate ¼-mile radius from the proposed rezoning area have an average of 2.57 persons per household. Based on this ratio, and other standard ratios for estimating employment for commercial and community facility uses, Table ES-2 also provides an estimate of the number of residents and workers generated by each of the four RWCDs.

A total of 16 sites were considered less likely to be developed within the foreseeable future, and were thus considered potential development sites. The potential sites are deemed less likely to be developed because they did not closely meet the criteria listed above. However, as discussed above, the analysis recognizes that a number of potential sites could be developed under the Proposed Action in lieu of one or more of the projected sites in accommodating the development anticipated in the RWCDs. The potential sites are therefore also addressed in the DEIS for site-specific effects.

As such, this environmental impact statement document analyzes the projected developments for all technical areas of concern and also evaluate the effects of the potential developments for site-specific effects such as historic and cultural resources, shadows, hazardous materials, air quality, and noise.

E. APPROVALS REQUIRED

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

(1) Zoning map amendments to

- Replace the existing R7-2, R8, C8-3 and M1-1 zoning districts within the proposed rezoning area with R6A, R7A, R8A, C6-3X and M1-5/R7-2 districts;
- Establish Special Mixed Use District (MX 15);
- Map new commercial overlays along portions of West 155th Street, West 145th Street and Hamilton Place to promote and better support local retail development; and

(2) Zoning text amendments to

- Apply the Inclusionary Housing Program to C6-3X (R9X equivalent zoning district) and R8A zoning districts located along West 145th Street between Broadway and Amsterdam Avenue;
- Establish Special Mixed Use District 15 (MX 15) in West Harlem;
- Require all R8 districts north of West 125th Street within Manhattan Community District 9 to be developed pursuant to the R8 Quality Housing Program.

All of the above actions are also subject to the City Environmental Quality Review (CEQR) procedures.

F. THE FUTURE WITH THE PROPOSED ACTION

Land Use, Zoning and Public Policy

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidelines for determining impact significance set forth in the *CEQR Technical Manual*, are anticipated in the future with the Proposed Action in the primary and secondary study areas. The Proposed Action would not directly displace any land uses so as to adversely affect surrounding land uses, nor would it generate land uses that would be incompatible with land uses, zoning, or public policy in the secondary study area. The Proposed Action would not create land uses or structures that would be incompatible with the underlying zoning, nor would it cause a substantial number of existing structures to become non-conforming. The Proposed Action would not result in land uses that conflict with public policies applicable to the primary or secondary study areas.

The Proposed Action would result in an overall increase in residential, commercial, and community facility use throughout the primary study area, when compared to conditions in the future without the Proposed Action. The Proposed Action would change zoning designations within the primary study area in a manner that is intended to balance preservation and growth in select areas of West Harlem's medium-density residential core and within the rezoning area's proposed new MX-district. The Proposed Action includes mapping contextual zoning that would protect the existing built context of West Harlem, while promoting some future development that would blend with the existing urban fabric, as well as be compatible with the existing zoning designations in the surrounding areas. It also includes modest increases in density along portions of West 145th Street – a significant east-west corridor, to incentivize mixed-use development and expand opportunities for affordable housing, as well as directs higher densities to areas that can better accommodate future growth, such as those close to subway lines and in the area currently mapped with a M1-1 district, while mapping lower densities on predominantly residential brownstone blocks to preserve the low-to mid-rise character. The Proposed Action also expands development opportunities for several blocks currently zoned only for light manufacturing use

allowing residential and community facility uses. Finally, the Proposed Action directly addresses the community's request for contextual rezoning and provides incentives for much needed affordable housing.

Socioeconomic Conditions

Direct Residential Displacement

The Proposed Action would not result in significant adverse direct residential displacement impacts. All of the projected development sites that include residential units would undergo partial conversions and/or enlargements in the future without the Proposed Action to allow community facility space to occupy the existing buildings' lower floors, and therefore, none of the existing residential units would be directly displaced as a result of the Proposed Action. The Proposed Action would allow retail space to occupy the existing building's lower floors. Therefore, no direct residential displacement is anticipated as a result of the Proposed Action.

Direct Business and Institutional Displacement

A preliminary assessment found that the Proposed Action would not result in significant adverse impacts due to direct business and institutional displacement. Direct displacement would be limited to 12 businesses and institutions located on four of the 22 projected development sites, subject to lease terms and agreements between private firms and property owners existing at the time of redevelopment in the With-Action condition. These 12 businesses/institutions that could be directly displaced conduct a variety of business activities, including automotive and transportation-related service, wholesale, educational, health and social service, warehousing, and insurance sales. They occupy a total of approximately 133,006 gsf of commercial space and employ an estimated 165 workers. The 12 businesses/institutions that are expected to be displaced in the study area do not represent a substantial amount of study area employment and would likely be able to find alternative properties that are appropriately zoned in the surrounding area, Manhattan and in greater New York City.

The Proposed Action would not result in the direct displacement of any businesses that provide products or services essential to the local economy that would no longer be available in its trade area, nor would it result in the displacement of any business that is the subject of regulations in the publicly adopted plans to preserve, enhance or otherwise protect it. It is the intent of the Proposed Action to expand development opportunities for several blocks currently zoned only for light manufacturing use. The proposed MX district would allow a wider range of uses and increase the allowable FAR that would further the community's officially adopted goal of creating a stable climate for investment, employment retention and new job creation.

Indirect Residential Displacement

A preliminary assessment found that the Proposed Action would not result in significant adverse impacts due to indirect residential displacement. According to the *CEQR Technical Manual*, a population increase of less than 5 percent of the total study area population would generally not be expected to change real estate market conditions in a study area. The RWCDs associated with the Proposed Action would result in a maximum net increase of approximately 569 residential units, of which 82 housing units are expected

to be affordable units, compared to the No-Action condition.¹ Assuming that the units would be fully occupied and would have the same average household size as the ¼-mile study area in 2010 (2.57 persons per household), this is expected to increase the residential population by 1,462 people over the No-Action condition. This equates to an approximately 1.1 percent increase as compared to the study area population in the future without the Proposed Action. Therefore, the Proposed Action would not introduce a substantial new population that could substantially affect residential real estate market conditions in the study area, and no further analysis is required.

Indirect Business and Institutional Displacement

The Proposed Action would not result in significant adverse impacts due to indirect business and institutional displacement. The Proposed Action would not introduce a new economic activity that would alter existing economic patterns in the study area. The study area already has a well-established residential market and a critical mass of non-residential uses, including retail, office and community facility uses.

Adverse Effects on Specific Industries

The Proposed Action would not result in significant adverse impacts on specific industries within the study area or in the city more broadly. The 12 businesses and institutional uses that could be potentially directly displaced from projected development sites conduct a variety of business activities and are not concentrated within a business sector. Nor are the businesses subject to displacement essential to the survival of other industries outside of the study area, as they do not serve as the sole provider of goods and services to an entire industry or category of business in the City. Collectively, these 12 businesses and institutional uses account for only a small fraction of the total employment and economic activities in the secondary study area and their products and services would continue to be available in the trade area to local residents and businesses. Furthermore, while the Proposed Action is not expected to cause indirect displacement, any indirect displacement that may occur would not be concentrated in a particular industry. Therefore, the Proposed Action would not result in an adverse impact on a particular industry or category of businesses within or outside the study area, and would not substantially reduce employment or impair the economic viability in an industry or category of business.

Community Facilities and Services

The Proposed Action was assessed for the effects of its projected development on community facilities and services. Based on the *CEQR Technical Manual* screening methodology, detailed analysis of public high schools, libraries, outpatient health care facilities, publicly-funded child care facilities, libraries and police and fire protection services are not warranted for the Proposed Action. The Proposed Action would not result in any significant adverse impacts on these facilities. A screening analysis found that the Proposed Action would exceed the threshold for a detailed analysis of elementary and intermediate schools. Based on a detailed analysis of public elementary and intermediate schools, no significant adverse impacts for elementary and intermediate schools in sub-district 1 of CSD 5 and sub-district 2 of CSD 6 were found as a result of the Proposed Action by 2021.

¹ Two reasonable worst-case development scenarios (RWCDs) have been identified for projected development sites 6 and 40. RWCD 4 assumes that projected development site 6 would be redeveloped under a No-Deed restriction scenario, and projected development site 40 would redeveloped as a new development scenario, in which all of the existing buildings would be demolished and the site would undergo new development.

Open Space

According to the *CEQR Technical Manual*, a Proposed Action may result in a significant impact on open space resources if (a) there would be direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing users; or (b) it would reduce the open space ratio and consequently result in the overburdening of existing facilities or further exacerbates a deficiency in open space. The *CEQR Technical Manual* also states that “if the area exhibits a low open space ratio indicating a shortfall of open space, even a small decrease in the ratio as a result of the action may cause an adverse effect.” A five percent or greater decrease in the open space ratio is considered to be “substantial,” and a decrease of less than one percent is generally considered to be insignificant unless open space resources are extremely limited.

The Proposed Action would not have a direct impact on any open space resource in the study area. No open space would be displaced and no significant shadows would be cast on any publically accessible open spaces. The Proposed Action would not affect any particular user group, nor would it introduce a population with any unusual characteristics. The Proposed Action would not increase the amount of publicly accessible open space in the study area, although the proposed contextual zoning districts to be mapped as part of the Proposed Action require that new residential developments provide on-site recreation space for building residents in accordance with the provisions of the Quality Housing program. This on-site recreation space would help to partially offset the increased residential population’s additional demand on the study area’s open space resources.

As shown in Table ES-3, with the Proposed Action, the percentage changes in open space ratios range from a 1.22% reduction to a 6.37% reduction. The greatest change is seen in the nonresidential study area, where there would be a reduction of 6.37% in the passive open space ratio compared to No-Action conditions; however, as noted in the Open Space chapter, the recommended NYCDCP open space ratio guideline is exceeded, so this decline is not considered significant. Similarly, the passive open space ratio for the combined total population in the nonresidential study area would also decline, but would be higher than the recommended weighted average for residents and nonresidents, and therefore this decline is also not considered significant. As such, daytime users of passive open space will be well-served by the resources available, and there would be no significant adverse open space impacts in the nonresidential study area as a result of the Proposed Action.

With respect to the reductions in open space within the residential study area, the total and active open space ratios would remain below NYCDCP guidelines in the future with the Proposed Action. The decline in the total open space ratio for the residential study area would be 1.24%; and the reduction in the active open space ratio would be 1.22%. It is recognized that the shortage of active open space within the residential study area results in an active open space ratio (0.482) that is significantly below NYCDCP’s guideline of 2.0 acres of active space per 1,000 residents. However, several large regional open space resources lie partially or completely outside the study area and have active open space amenities that are accessible to residents within the study area. Although the passive open space ratio for residents would decline by 1.25%, and the combined passive open space ratio for residents and nonresidents would decline by 1.81%, both ratios would remain above the NYCDCP guidelines (refer to Table ES-3), indicating that the study area would be well-served by passive open space.

Although the residential study area is not adequately served by total or active open spaces, the decrease of 1.24% in the total open space ratio and 1.22% in the active open space ratio is not considered significant. According to *CEQR Technical Manual* guidelines, a significant adverse open space 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 ratio of 1.5 acres per 1,000 residents. There is a shortfall of total and active open space within the defined residential study area under existing, No-

TABLE ES-3

2021 Future With the Proposed Action: Open Space Ratios Summary

RATIO	DCP Open Space Guideline	Open Space Ratios Per 1,000			Percent Change
		Existing	No-Action	With-Action	Future No-Action to Future With Action
Non-Residential Study Area					
Passive - Nonresidents	0.15	1.794	<u>1.461</u>	<u>1.368</u>	<u>-6.37%</u>
Passive - Total Population	Weighted 0.398 / 0.384 / <u>0.380</u> * Existing / No-Action / With Action	0.523	0.483	<u>0.468</u>	<u>-3.11%</u>
Residential Study Area					
Total - Residents	2.5	1.239	<u>1.210</u>	<u>1.195</u>	<u>-1.24%</u>
Passive - Residents	0.5	0.735	<u>0.721</u>	<u>0.712</u>	<u>-1.25%</u>
Passive - Total Population	Weighted 0.371 / 0.365 / 0.364* Existing / No-Action / With Action	0.464	0.443	<u>0.435</u>	<u>-1.81%</u>
Active - Residents	2.0	0.504	<u>0.490</u>	<u>0.484</u>	<u>-1.22%</u>
<p>* Based on a target open space ratio established by creating a weighted average of the amount of open space necessary to meet the City guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents is considered in this analysis. Non-residents typically use passive spaces; therefore, for the nonresidential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated. Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents.</p> <p>Because this guideline depends on the proportion of non-residents and residents in the study area's population, it is different for existing, No Build, and Build conditions. Each of these ratios is listed in this table.</p>					

Action, and With-Action conditions. However, as described in the Open Space chapter, the combination of the availability of a variety of open spaces such as recreational areas, spaces for walking and biking, pools, and school playgrounds, and the large regional open space resources in the vicinity of the open space study area all add to the open space conditions under existing, No-Action and With-Action scenarios. Therefore, the increased demand resulting from the Proposed Action would not result in any significant adverse open space impacts.

Shadows

As discussed in detail in Chapter 6, projected and potential developments resulting from the Proposed Action would cast new shadows at times throughout the year on some of the existing open space and historic resources in the study area. The incremental shadows from the RWCDs would have significant adverse impacts on one historic resource on only one of the four analysis days: St. Mary's Protestant Episcopal Church, located at 517 West 126th Street. The incremental shadows would be cast on the eastern (side) façade of the church, which contains large stained and leaded glass windows that are considered a sunlight-sensitive feature, for a duration of approximately 1 hour and 33 minutes on the December 21 analysis day.

The Department of City Planning, in accordance with Chapter 9, "Historic and Cultural Resources", Sections 520 through 521.2 of the CEOR Technical Manual (2012), has determined that there are no feasible or practicable mitigation measures that can be implemented to mitigate this impact, and the Proposed Action's significant adverse shadows impact on St. Mary's Protestant Episcopal Church therefore remains unmitigated.

The remaining open spaces and historic resources in the study area would not be significantly affected or affected at all. No incremental shadows would be cast on the Manhattanville Houses Open Space, St. Nicholas Park, Alexander Hamilton Playground, Mo' Pals Community Garden, Carmansville Playground,

or RC Church of the Annunciation on any of the analysis days. Although the remaining open spaces (including Jackie Robinson Park, Maher Circle greenstreet, Highbridge Park, Riverside Park North, Broadway Malls, Serenity Gardens, Sheltering Arms Park, and General Grant Houses I) and sunlight-sensitive historic resources would be subject to varying amounts of incremental shadows as a result of the Proposed Action, these increments would not be significant due to their limited extent and/or duration, and other site specific factors.

Historic and Cultural Resources

The Proposed Action would not result in any significant adverse impacts to archaeological resources, but has the potential to result in significant adverse impacts to architectural resources.

LPC reviewed the identified projected and potential development sites that could experience new/additional in-ground disturbance as a result of the Proposed Action, and concluded that none of the lots comprising those sites have any archaeological significance. As such, the Proposed Action is not expected to result in any significant adverse impacts to archaeological resources.

Although one projected development site falls within a LPC-designated historic district, and one potential development site falls within an LPC-eligible historic district, those sites are identified in the RWCDs as conversion sites, and would therefore not result in significant adverse impacts to those historic districts. In addition, existing structures located on four potential development sites located within the S/NR-listed Sugar Hill Historic District are projected to be demolished and redeveloped in the With-Action condition. However, two of those sites are described as non-contributing buildings in the S/NR nomination report, and therefore projected redevelopment of those two sites would not be considered a significant adverse direct impact. For the remaining two sites, as both sites are expected to be redeveloped in the future without the Proposed Action, any redevelopment of those two sites under the Proposed Action would not result in significant adverse impacts to historic architectural resources. The Proposed Action and subsequent developments are also not expected to have any direct physical impacts on any designated individual landmarks in the study area, as they would not result in any physical destruction, demolition, damage or alteration to any designated historic property that is an individual landmark.

However, the Proposed Action could result in a significant adverse historic resources impact to one resource that is eligible for LPC-designation and S/NR-listing (the former Bernheimer & Schwartz Pilsener Brewing Company complex (a.k.a. Yuengling) that encompasses projected development sites 14 and 40, within the area proposed for MX zoning), which could be demolished, either partially or entirely, as a consequence of the Proposed Action. As discussed further in the “Mitigation” section below, the identified significant adverse direct impact to this eligible architectural resource could be partially mitigated through photographic documentation and similar measures; however, unlike in the case of a site-specific approval, such as a Special Permit with accompanying restrictive declaration, there is no mechanism available to ensure implementation and compliance. In the event that the complex were designated as a landmark, the significant adverse impact would not occur. However, as the potential for use and results of any designation process cannot be assumed or predicted with certainty, the availability of designation is considered herein as a partial mitigation only. Accordingly, the impact would not be completely eliminated and would constitute an unavoidable significant adverse impact on this eligible historic resource.

As discussed above, the Proposed Action would also result in incremental shadows being cast on sunlight-sensitive features of one historic resource, namely St. Mary’s Protestant Episcopal Church. The incremental shadows would be cast on the eastern (side) façade of the church, which contains large leaded and stained glass windows that are considered a sunlight-sensitive feature, for a duration of approximately

1 hour and 33 minutes on the December 21 analysis day. The Department of City Planning, in accordance with Chapter 9, “Historic and Cultural Resources”, Sections 520 through 521.2 of the *CEQR Technical Manual* (2012), has determined that there are no feasible or practicable mitigation measures that can be implemented to mitigate this impact, and the Proposed Action’s significant adverse shadows impact on St. Mary’s Protestant Episcopal Church therefore remains unmitigated.

The projected and potential developments to be constructed following implementation of the Proposed Action are not expected to have significant adverse visual/contextual impacts on existing historic resources in the area. The Proposed Action would change the zoning on all projected and potential development sites to a mix of contextual districts in order to ensure that new development would be sensitive to the established height and scale in the West Harlem neighborhood. As the resultant buildings would be similar in bulk to existing developments in the area, they would have minimal effects on the visual context of the historic resources within and in the vicinity of the rezoning area. The developments resulting from the Proposed Action would not alter the setting or visual context of any historic resources in the area, nor would they eliminate or screen publicly accessible views of any resources.

Any designated NYC Landmarks and S/NR-listed historic buildings located within 90 linear feet of a projected or potential new construction site would be subject to the protections of DOB’s TPPN #10/88, which would ensure that such development resulting from the Proposed Action would not cause any significant adverse construction-related impacts to historic resources. This would apply to all new construction sites within historic districts, as well as to projected development sites 2, 4, and 17, and potential development site 24, which are located less than 90 feet away from designated historic resources (409 Edgecombe Avenue, the LPC-designated Hamilton Heights/Sugar Hill Northeast and S/NR-listed Sugar Hill historic districts, the former Hamilton Theater, the Former P.S. 157, and the Hamilton Grange Branch of the NYPL).

Finally, for sites 15, 18, 19, 30, and 56, construction under the Proposed Action could potentially result in construction-related impacts to four non-designated resources (the S/NR-eligible residences at 2-14 Convent Avenue, the S/NR-eligible St. Joseph’s Roman Catholic Church complex, the LPC-eligible Engine Co. 23 building, and the LPC-eligible Upper Riverside Drive historic district). The resources would be afforded standard protection under DOB regulations applicable to all buildings located adjacent to construction sites; however, since the resources are not S/NR-listed or LPC-designated, they are not afforded the added special protections under DOB’s TPPN 10/88. Additional protective measures afforded under DOB TPPN 10/88, which include a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or S/NR-listed resources, would only become applicable if the eligible resources are designated in the future prior to the initiation of construction. If the eligible resources listed above are not designated, however, they would not be subject to TPPN 10/88, and may therefore be adversely impacted by construction of adjacent development resulting from the Proposed Action.

Urban Design and Visual Resources

The Proposed Action will not result in significant adverse impacts on urban design and visual resources, as defined by the guidelines for determining impact significance set forth in the *CEQR Technical Manual*. The proposed zoning map changes would replace the existing R7-2 and R8 zoning districts within the proposed rezoning area with R6A, R7A, and R8A contextual zoning districts; designate a C6-3X contextual zoning district to be mapped at the intersection of West 145th Street and Broadway; replace the existing M1-1 zoning district within the proposed rezoning area with a M1-5/R7-2 mixed-use zoning district; and map new C1-4 and C2-4 commercial overlays along portions of West 155th Street, West 145th Street and Hamilton Place to promote and better support local retail development.

The Proposed Action is anticipated to result in new development exhibiting a built form that is congruous to the distinctive and characteristic existing building types prevalent throughout the rezoning area. Generally, the Proposed Action would establish contextual zoning districts for residential and mixed-use buildings that would maintain the scale and character of the existing West Harlem communities while providing appropriate development opportunities. The Proposed Action would preserve the low and mid-rise scale of mid-blocks and avenue frontages with strong built contexts, by creating modest decreases and modest increases in density with contextual zoning districts targeted to these areas. The Proposed Action would further enhance the neighborhood's built form and establish traditional urban design distinctions by allowing moderately higher density contextual development on principal corridors and lower density contextual development on midblocks along narrow streets. The proposed zoning changes would also replace an existing manufacturing district in the southeastern portion of the rezoning area with a mixed use district to encourage new mixed use, residential, institutional, and commercial uses, as well as retain high performance manufacturing and industrial uses. Finally, the Proposed Action would provide support for existing ground floor retail uses by mapping commercial overlays along streets where existing ground floor retail uses exist to encourage the growth of local-scale commercial activity. The Proposed Action would not result in any changes to street pattern, block form, or building arrangement. Therefore, the Proposed Action is not expected to result in any significant adverse impacts to urban design.

Hazardous Materials

The hazardous materials assessment in Chapter 9 identified that each of the 22 projected and 16 potential development sites has some associated concern regarding environmental conditions. As a result, the proposed zoning map actions include (E) designations for all projected and potential development sites. Therefore the Proposed Action is not expected to result in significant adverse impacts for hazardous materials.

The (E) designation requirements related to hazardous materials would apply to the following development sites:

Projected Development Sites:

- Block 2069, Lot 20 (Projected Development Site 1)
- Block 2054, Lot 69 (Projected Development Site 2)
- Block 2078, Lot 55 (Projected Development Site 4)
- Block 2092, Lot 26 (Projected Development Site 5)
- Block 2077, Lot 14 (Projected Development Site 6)
- Block 2076, Lot 61 (Projected Development Site 7)
- Block 2076, Lot 45 (Projected Development Site 8)
- Block 2076, Lots 40, 41 (Projected Development Site 9)
- Block 2072, Lot 38 (Projected Development Site 10)
- Block 1988, Lot 14 (Projected Development Site 11)
- Block 1988, Lot 18 (Projected Development Site 12)
- Block 1970, Lot 9 (Projected Development Site 13)
- Block 1967, Lot 85 (Projected Development Site 14)
- Block 1967, Lot 66 (Projected Development Site 15)
- Block 1953, Lot 54 (Projected Development Site 17)
- Block 1966, Lots 78, 80, 81, 82, 83 (Projected Development Site 18)
- Block 1966, Lot 77 (Projected Development Site 19)
- Block 1967, Lots 89, 40, 45, 50, 60 (Projected Development Site 40)
- Block 1966, Lots 41, 95 (Projected Development Site 50)
- Block 2050, Lot 150 (Projected Development Site 53)

Block 2070, Lot 8 (Projected Development Site 54)
Block 2070, Lot 12 (Projected Development Site 55)

Potential Development Sites:

Block 2065, Lot 6 (Potential Development Site 20)
Block 2065, Lot 10 (Potential Development Site 21)
Block 2078, Lot 17 (Potential Development Site 22)
Block 2077, Lot 6 (Potential Development Site 23)
Block 2077, Lot 24 (Potential Development Site 24)
Block 2091, Lot 36 (Potential Development Site 25)
Block 2076, Lots 25, 125 (Potential Development Site 26)
Block 2076, Lots 27, 127 (Potential Development Site 27)
Block 2051, Lots 56, 57 (Potential Development Site 28)
Block 2051, Lots 58, 59 (Potential Development Site 29)
Block 2071, Lots 42, 141 (Potential Development Site 30)
Block 1968, Lot 16 (Potential Development Site 31)
Block 1966, Lots 107, 108 (Potential Development Site 32)
Block 1967, Lots 9, 10, 12 (Potential Development Site 33)
Block 2092, Lot 21 (Potential Development Site 56)
Block 2060, Lot 10 (Potential Development Site 57)

The (E) designation text related to hazardous materials is as follows:

Task 1

The applicant must submit to the New York City Office of Environmental Remediation (OER), for review and approval, a Phase 1 Environmental Site Assessment (ESA) of the site along with a soil and groundwater testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented.

If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2

A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is indicated from the test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

An OER-approved construction-related health and safety plan (CHASP) would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.

All demolition or rehabilitation would be conducted in accordance with applicable requirements for disturbance, handling and disposal of suspect lead-paint and asbestos-containing materials. For all projected and potential development sites where no (E) designation is recommended, in addition to the requirements for lead-based paint and asbestos, requirements (including those of the New York State Department of Environmental Conservation (NYSDEC)) should petroleum tanks and/or spills be identified and for off-site disposal of soil/fill would need to be followed.

With the requirements of the (E) designation on projected and potential development sites, there would be no impact from the potential presence of contaminated materials. The implementation of the preventative and remedial measures outlined above would reduce or avoid the potential that significant adverse hazardous materials impacts would result from potential construction in the rezoning area resulting from the Proposed Action. Following such construction, there would be no potential for significant adverse impacts.

Water and Sewer Infrastructure

Based on the analysis pursuant to the *CEQR Technical Manual*, with the Best Management Practices (BMPs) described in Chapter 10, “Water and Sewer Infrastructure,” implemented by the developer of each projected development site, it is concluded that the Proposed Action would not result in significant adverse impacts on the water supply, wastewater or stormwater conveyance and treatment infrastructure.

Water Supply

The incremental additional water usage as a result of the Proposed Action is expected to total 243,367 gpd. This incremental demand would represent less than one-tenth of one percent of the overall water supply and less than half of one percent of Manhattan’s water supply. Changes of this magnitude would not be large enough to have a significant adverse impact on the city’s water system.

Sanitary Sewage

The North River WWTP handled an average of 123.75 mgd of sewage flow over the 12 month period that was analyzed and it is designed to treat a dry weather flow of 170 mgd. The Ward’s Island WWTP handled an average of 200.67 mgd of sewage flow over the 12 month period that was analyzed and it is designed to treat a dry weather flow of 275 mgd. Based on rates in the *CEQR Technical Manual*, the proposed rezoning has the potential to result in an incremental sanitary sewage discharge of approximately 193,713 gpd over the existing condition. This incremental increase in sanitary flow would not result in significant adverse impacts to the sewage system within the catchment area or to the North River and Ward’s Island WWTPs as it is approximately 0.1 percent of the dry weather capacity. As described above, the projected increase in sanitary sewage would not result in new impacts within the catchment area or cause the North River or the Ward’s Island WWTPs to exceed their operational capacity or their SPDES-permitted capacities.

Stormwater Drainage and Management

As also described above, there would be increases of combined sewer volumes in the subcatchment areas affected by the Proposed Action as compared to existing conditions. Due to NYCDEP's new stormwater management requirements, stormwater runoff from new developments is expected to decrease as compared to existing conditions.

Transportation

Traffic

Weekday AM, midday and PM and Saturday midday peak hour traffic conditions under Scenario 3 (the RWCDS for the transportation analyses) were evaluated at a total of eleven intersections generally located in proximity to the West 125th Street, West 126th Street, West 127th Street and West 128th Street corridors at the southern edge of the rezoning area where development density (and therefore travel demand) associated with the Proposed Action would be most concentrated.

The traffic impact analysis indicates that there would be the potential for significant adverse impacts at four intersections in each of the weekday AM and PM peak hours, and two in each of the weekday midday and Saturday midday peak hours, as outlined below. The "Mitigation," section below discusses measures that would fully mitigate all of these significant adverse traffic impacts.

Weekday AM Peak Hour

- West 125th Street and Amsterdam Avenue – southbound through-right movement;
- West 126th Street and Amsterdam Avenue – westbound through-right movement;
- West 126th Street and Morningside Avenue – westbound approach; and
- West 127th Street and Morningside/Convent Avenues – westbound approach.

Weekday Midday Peak Hour

- West 126th Street and Morningside Avenue – westbound approach; and
- West 127th Street and Morningside/Convent Avenues – westbound approach.

Weekday PM Peak Hour

- West 125th Street and St. Nicholas Avenue – northbound through movement;
- West 126th Street and Amsterdam Avenue – westbound through-right movement;
- West 126th Street and Morningside Avenue – westbound approach; and
- West 127th Street and Morningside/Convent Avenues – westbound approach.

Saturday Midday Peak Hour

- West 125th Street and St. Nicholas Avenue – northbound and southbound left-through movement;
- West 126th Street and Morningside Avenue – westbound approach.

Transit

The Proposed Action would not result in any significant adverse transit impacts with respect to subways and buses.

Subway

Based on the locations and development densities of projected development sites under RWCDs 3, only the 125th Street IND station on St. Nicholas Avenue is expected to experience more than 200 project-generated trips in either of the weekday AM or PM commuter peak hours and would therefore have the potential to experience significant adverse impacts under *CEQR Technical Manual* criteria. The results of the analysis of future conditions with the Proposed Action indicate that all stairways and fare arrays at this station that are likely to be used by project-generated demand would continue to operate at acceptable levels of service in both the AM and PM peak hours in the With-Action condition. The Proposed Action would therefore not result in significant adverse impacts at the 125th Street IND subway station.

Bus

The proposed rezoning area is served by nine NYC Transit local bus routes that connect the area with other parts of Manhattan and three routes that connect Manhattan with the Bronx. It is estimated that all of the projected development sites within the proposed rezoning area would generate a combined total of 155 and 304 new bus trips in the weekday AM and PM peak hours, respectively. As these trips would be widely dispersed throughout the study area and distributed among a total of 13 bus routes, it is unlikely that any one route would experience 50 or more trips in one direction in any peak hour. Therefore, the Proposed Action is not expected to result in any significant adverse impacts to bus transit services based on *CEQR Technical Manual* criteria.

Pedestrians

The Proposed Action would not result in any significant adverse impacts to sidewalks, corner reservoir areas or crosswalks. Pedestrian trips generated by the Proposed Action are expected to be widely distributed due to the dispersed locations of the projected development sites within the proposed rezoning area. It is anticipated, however, that pedestrian trips would be most concentrated along corridors connecting projected development sites in the southern portion of the rezoning area to nearby subway station entrances, bus stops and outlying parking garages. A total of seven sidewalks, 14 corner reservoir areas and seven crosswalks along the West 126th Street and West 127th Street corridors, as well as on West 125th Street at Broadway, were selected for analysis as they would experience 200 or more project-generated trips in one or more peak hours. The results of the analysis of future conditions with the Proposed Action indicate that all analyzed sidewalks, corner reservoir areas and crosswalks would continue to operate at acceptable levels of service in the weekday AM, midday, PM and Saturday midday peak hours in the With-Action condition.

Vehicular and Pedestrian Safety Evaluation

Three intersections in proximity to projected development sites along the West 126th Street/West 128th Street corridors (where most project-generated demand would be concentrated) experienced five or more pedestrian and/or bicyclist injury crashes in one or more years from 2008 through 2010 and are therefore considered high accident locations. These locations, all of which are along West 125th Street, include the intersections with Adam Clayton Powell Jr. Boulevard, St. Nicholas Avenue, and Amsterdam Avenue. None of these intersections (nor any within ½-mile of projected development sites along West 126th

Street/West 128th Street) are located within a designated Senior Pedestrian Focus Area, and all three have been equipped with high-visibility crosswalks on some or all approaches.

Under Scenario 3 (the RWCDs for the transportation analyses), the Proposed Action would increase vehicle trips through these high accident locations by one to four percent in each peak hour. New pedestrians using crosswalks at each intersection would total from 45 to 249 per hour (an average of one to four pedestrians per minute).

All three high accident intersections have already been equipped with high visibility crosswalks on some or all approaches. In addition, it is anticipated that the eastbound and westbound left-turn movements on West 125th Street will be prohibited (except for buses) at all three high accident locations in the No-Action condition as mitigation for the 125th Street Rezoning and Related Actions project. As crashes involving pedestrians often involve conflicts with turning vehicles, this measure will substantially reduce the numbers of turning vehicles at each location, thereby reducing the potential for vehicle/pedestrian and vehicle/bicycle conflicts.

Parking

The Proposed Action would not result in significant adverse parking impacts during the peak weekday midday and overnight periods for parking demand. The greatest increases in new parking demand under the Proposed Action would occur in the vicinity of projected development site Cluster 1, which would generate a demand for 121 parking spaces during the weekday overnight period and 347 spaces in the weekday midday. It is anticipated that the development at Cluster 1 would include a total of approximately 129 spaces of accessory parking on-site, sufficient to accommodate all project-generated parking demand during the weekday overnight period. In the weekday midday period, approximately 218 spaces of project-generated parking demand would need to be accommodated at off-street public parking facilities in the vicinity. As sufficient parking capacity to accommodate this demand would be available at facilities within a ½-mile radius, the Proposed Action would not result in a parking shortfall, and there would be no significant adverse parking impacts under *CEQR Technical Manual* criteria. However, off-street public parking facilities in the vicinity of Cluster 1 would be operating near capacity (97 percent utilization) in the weekday midday in the future with the Proposed Action.

Air Quality

The result of the analyses conducted is that the Proposed Action would not have any significant air quality impacts. This is based on the following findings:

- Emissions from project-related vehicle trips would not cause a significant air quality impact;
- With the specified (E) designations, emissions from the heating, ventilation and air conditioning systems of the projected and potential developments would not significantly impact other projected/potential development sites or existing sensitive land uses;
- Emissions from “major” existing emission sources would not significantly impact the projected/potential development sites; and
- Air toxic emissions generated by nearby existing industrial sources would not significantly impact the projected/potential development sites.

As noted above, the heating, ventilation, and air conditioning (HVAC) analysis determined that certain sites would require (E) designations that would specify the type of fuel to be used or the distance that the vent stack on the building roof must be from the edge of a lot line. As discussed above, two development

scenarios, a “Conversion Scenario” and a “New Development Scenario,” were analyzed for Projected Development Site 40. The New Development Scenario analyzed a complete demolition and redevelopment of all of the lots comprising Site 40. Because the site contains existing buildings of various height, density, and character that lend themselves to a wide range of development options including alteration, conversion, and partial demolition, a Conversion Scenario was also analyzed.

(E) designation requirements that apply to Projected Development Site 40 and the lots therein may vary depending on the scenario under which development occurs. The (E) designation requirements for the Proposed Action are as follows:

Block 1967, Lot 40 (Projected Development Site 40):

- Conversion Scenario only:

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 52 feet from the lot line facing W 127th Street and at least 56 feet from the lot line facing Morningside Avenue for fuel oil No. 2 or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 1967, Lot 45 (Projected Development Site 40):

- Conversion Scenario only:

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 44 feet from the lot line facing Amsterdam Avenue, at least 46 feet from the lot line facing Morningside Avenue, and at least 52 feet from the lot line facing W 128th Street for fuel oil No. 2 or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 1967, Lot 50 (Projected Development Site 40):

- New Development Scenario:

Any new residential and/or commercial development on the above-referenced property must ensure that the heating, ventilating and air conditioning stack(s) are located at least 55 feet from the lot line facing Amsterdam Avenue and at least 62 feet from the lot line facing W 128th Street for fuel oil No. 2 or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

- Conversion Scenario:

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 45 feet from the lot line facing W 128th Street and Amsterdam Avenue, at least 39 feet from the lot line facing Morningside Avenue for fuel oil No. 2 or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 1967, Lot 60 (Projected Development Site 40):

- New Development Scenario:

Any new residential and/or commercial development on the above-referenced property must ensure that the heating, ventilating and air conditioning stack(s) are located at least 55 feet from the lot line facing Amsterdam Avenue and at least 62 feet from the lot line facing W 128th Street for fuel oil No. 2 or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

- Conversion Scenario:

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 53 feet from the lot line

facing W 128th Street for fuel oil No. 2 or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 1967, Lot 89 (Projected Development Site 40):

• New Development Scenario:

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 59 feet from the lot line facing W 127th Street and at least 63 feet from the lot line facing W 128th Street, for fuel oil No. 2 or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

• Conversion Scenario:

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 43 feet from the lot line facing W 127th Street for fuel oil No. 2 or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 2054, Lot 69 (Projected Development Site 2):

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 43 feet for oil No.2 from the lot line facing Edgecombe Avenue and West 150th Street for fuel oil or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 2076, Lot 45 (Projected Development Site 8):

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 20 feet for oil No.2 from the lot line facing Amsterdam Avenue for fuel oil or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 1967, Lot 85 (Projected Development Site 14):

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 47 feet for oil No.2 from the lot line facing Amsterdam Avenue and W 127th Street for fuel oil or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 1967, Lot 66 (Projected Development Site 15):

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 46 feet for oil No.2 from the lot line facing 128th Street and 36 feet from the lot line facing Amsterdam Avenue for fuel oil or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 1966, Lot 77 (Projected Development Site 19):

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 13 feet for oil No.2 from the lot line facing Amsterdam Avenue for fuel oil or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 1966, Lot 41, 95 (Projected Development Site 50):

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 64 feet for oil No. 2 from the lot line facing Morningside Avenue for fuel oil or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 2076, Lots 25, 125 (Potential Development Site 26):

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 15 feet for oil No. 2 from the lot line facing West 145th Street for fuel oil or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 2051, Lot 56, 37 (Potential Development Site 28):

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 13 feet for oil No.2 from the lot line facing Edgecombe Avenue for fuel oil or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

Block 2051, Lot 58, 59 (Potential Development Site 29):

Any new residential and/or commercial development on the above-referenced properties must ensure that the heating, ventilating and air conditioning stack(s) are located at least 15 feet for oil No.2 from the lot line facing St. Nicholas Avenue for fuel oil or use natural gas as the type of fuel for space heating and hot water (HVAC) systems, to avoid any potential significant adverse air quality impacts.

With the above (E) designations, the potential impacts from the projected and potential development sites heating systems would not exceed the applicable NAAQS and would therefore not have potential significant adverse environmental impacts on air quality.

Greenhouse Gas Emissions

Following the methodology provided in the *CEQR Technical Manual*, it is estimated that the Proposed Action would annually result in approximately 7,100 metric tons of GHG emissions from its operations and 4,900 metric tons of GHG emissions from mobile sources—for an annual total of approximately 12,000 metric tons of GHG emissions as compared to New York City’s 2011 annual total of 54.3 million metric tons. In addition, according to the PlaNYC document *Inventory of New York City Greenhouse Gas Emissions* (September 2011), the total for supplying energy to buildings (residential, commercial, industrial, and institutional) was 40.6 million metric tons.

Noise

The Proposed Action would not result in significant, adverse noise impacts. The analysis concludes that the traffic generated by the Proposed Action would not have the potential to produce significant increases to noise levels at any sensitive receptors within the project study area. Existing and future With-Action noise levels for the majority of the project study area shows little to no change with most noise levels within the CEQR “marginally unacceptable” limits. The largest No-Action to With-Action noise level increase is projected to be less than one-half dBA, therefore the Proposed Action would not generate sufficient new traffic to cause a significant noise impact. With the incorporation of the attenuation levels specified in Table ES-4 below, noise levels within the proposed buildings would comply with all applicable requirements. To implement the specified attenuation requirements, an (E) designation for noise would be required for Projected Development Sites 1, 6, and 54, specifying the appropriate

minimum amount of window/wall attenuation required for each projected and potential development site building (refer to Table ES-4 below).

The text for the (E) designation for sites requiring 31 dBA attenuation is as follows:

In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 31 dBA window-wall attenuation in all façades in order to maintain an interior noise level of 45 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation include, but are not limited to, central air conditioning or air conditioning sleeves containing air conditioners.

**TABLE ES-4
Building Attenuation Requirements for Projected Development Sites Requiring (E) Designations**

Site	Block	Lot(s)	Proposed Zoning	Projected Use	Nearest Noise Measurement Location	Minimum Required Building Attenuation
Projected Development Sites						
1	2069	20	R8A/C2-4	Mix Use	7	31
6a (85% CF in Build)	2077	14	R8A IH/C2-4/R7A	Mix Use	5	31
6b (Remove deed rest. In Build)	2077	14	R8A IH/C2-4/R7A	Mix Use	5	31
54	2070	8	R7A / C1-4	Mix Use	5	31

The design for all buildings proposed to be located on the (E)-designated projected or potential development sites would be designed to provide a composite Outdoor-Indoor Transmission Class (OITC) rating greater than or equal to the attenuation requirements listed in Tables F-1 and F-2 listed in Appendix F. The OITC classification is defined by the American Society of Testing and Materials (ASTM E1332-90, Re-approved 2003) and provides a single-number rating that is used for designing a building façade including walls, doors, glazing and the combination thereof. The OITC rating is designed to evaluate building elements by their ability to reduce noise the overall loudness of ground and air transportation noise. Proposed development with an OITC rating of 30 or greater would require incorporating the following minimum building design elements to achieve these rating levels:

- To achieve a composite OITC rating of 30, a building façade would likely include well sealed insulating glass, as well as alternate means of ventilation such as well sealed through-the-wall air conditioning, package-terminal air conditioners (PTACs), or central air conditioning.
- To achieve a composite OITC rating of 35, a building façade would likely include a well sealed laminated insulating glass, as well as alternate means of ventilation such as central air conditioning.
- To achieve a composite OITC rating of 40, a building façade would likely include special design features, such as specially designed windows (i.e., windows with small sizes, windows with large air gaps, windows with thicker glazing, windows with several layers of laminate, etc.) and alternate means of ventilation such as central air conditioning.

By using these design guidelines and adhering to the (E) designations described in Appendix F, the buildings on projected and potential development sites will be designed to provide sufficient attenuation to achieve the CEQR interior noise level guidelines of 45 dBA L₁₀ for residential uses and 50 dBA L₁₀ for commercial uses.

Public Health

The Proposed Action would not result in unmitigated significant adverse impacts in technical areas such as hazardous materials, air quality, and noise. Furthermore, the Proposed Action would not result in any significant adverse impacts related to construction noise levels. Therefore, the Proposed Action would not result in significant adverse public health impact, and an analysis of public health is not warranted.

Neighborhood Character

The rezoning area and surrounding study area include parts of the Hamilton Heights, Manhattanville, Morningside Heights, Central Harlem, and Washington Heights neighborhoods. As described elsewhere in this EIS, the Proposed Action would not cause significant adverse impacts regarding land use, zoning, and public policy; socioeconomic conditions; open space; urban design and visual resources, or noise. The scale of significant adverse impacts to shadows, historic and cultural resources, and transportation would not affect any defining feature of neighborhood character, nor would a combination of moderately adverse effects affect a neighborhood's defining features. The Proposed Action would therefore not have a significant adverse neighborhood character impact.

Construction

Construction of the development sites identified in the RWCDs for the Proposed Action has the potential to result in construction-period impacts related to traffic and historic architectural resources.

The inconvenience and disruption arising from the construction of projected development sites could likely include temporary diversions of pedestrians, vehicles, and construction truck traffic to other streets. Given that the 22 projected development sites are distributed over 90 blocks, no one location within the rezoning area would be under construction for the full nine years. As construction activity associated with the RCWDS would occur on multiple development sites within the same geographic area, such that there is the potential for several construction timelines to overlap, a preliminary assessment of potential construction impacts was prepared in accordance with the guidelines of the *CEQR Technical Manual*, and is presented in Chapter 17.

Throughout the construction period, access to surrounding residences, businesses, institutions, and open spaces in the area would be maintained (see discussions below in "Socioeconomic Conditions," and "Transportation"). In addition, throughout the construction period, measures would be implemented to control noise, vibration, and dust on the construction sites and minimize impacts on the surrounding areas in conformance with the City's building code. These measures would include the erection of construction fencing and, in some areas, fencing incorporating sound-reducing measures. Even with these measures in place, temporary impacts, and in some cases significant traffic impacts, are predicted to occur. However, because none of these impacts would be continuous in any one location or permanent, they would not create significant impacts on land use patterns or neighborhood character in the area. In addition to the activity associated with construction, some part of the parcels not yet in construction would be used for construction staging. These uses would not conflict with or significantly affect neighborhood character in the surrounding areas.

As discussed below, the combination of peak construction and operational traffic in 2016 (peak cumulative year for construction analysis purposes) would result in 51 to 58 percent less traffic than the fully built-out project during the 8-9 AM and 5-6 PM peak hours, no new intersections are expected to experience significant adverse traffic impacts in these periods during the 2016 construction analysis year. It is likely, however, that some or all of the five intersections impacted under the Proposed Action in 2021 would also potentially be impacted in the 2016 construction analysis year. As such, it is anticipated that implementation of the mitigation measures required to address potential significant adverse traffic impacts in proximity to the West 126th/West 128th Street Cluster with full build-out of the Proposed Action in 2021 (as described in Chapter 18, “Mitigation”) would also be effective at mitigating potential impacts from the combination of construction and operational traffic generated at this cluster in the 2016 interim year.

Inadvertent construction-related damage could potentially occur to four eligible resources as a result of the Proposed Action (refer to discussion in “Historic and Cultural Resources” section above). If these eligible resources are designated in the future prior to the initiation of construction, TPPN 10/88 would apply and indirect significant adverse impacts resulting from construction would be avoided. Should they remain undesignated however, the additional protective measures of TPPN 10/88 would not apply, and significant adverse construction-related impacts would not be mitigated.

Construction-related activities resulting from the Proposed Action are not expected to have any significant adverse impacts on transit or pedestrian conditions, air quality, noise, archaeological resources, or hazardous materials conditions,. Moreover, the construction process in New York City is highly regulated to ensure that construction period impacts are eliminated or minimized.

G. MITIGATION

Historic and Cultural Resources

The Proposed Action could result in significant adverse impacts due to potential partial or complete demolition of one eligible resource on projected development sites 14 and 40 (the former Bernheimer & Schwartz Pilsener Brewing Company complex), which is calendared for consideration by LPC for designation as a landmark, and was heard previously on 7/15/91 and 10/29/91. With implementation of measures such as HABS documentation and an interpretive exhibit, the identified significant adverse direct impact to historic architectural resources would be partially mitigated. In order to adopt these measures in the absence of a site-specific approval, such as a Special Permit with accompanying restrictive declaration, a mechanism would have to be developed to ensure implementation and compliance. Discussions with the owner of the complex have not, however, resulted in the development of such a mechanism.

In addition, LPC could elect to conduct a hearing and designate the structures, either in whole or in part, as landmark buildings. Should the Department of Buildings issue a notice of pending demolition to LPC, LPC then has 40 days to decide to designate. During this period, the owners of the property may work with LPC to modify their plans to make them appropriate. In the event that landmark designation was approved, LPC approval would be required for any alteration or demolition of the designated structures. As the potential for use and results of any designation process cannot be assumed or predicted with certainty, the availability of designation is considered herein as a partial mitigation only.

Accordingly, as the potential for this impact would not be completely eliminated, it would constitute an unavoidable significant adverse impact on this historic resource as a result of the Proposed Action.

In addition, as discussed below under Construction Impacts, inadvertent construction-related damage could potentially occur to four eligible resources as a result of the Proposed Action. As the potential for this impact would not be completely eliminated, it would constitute an unavoidable significant adverse impact related to construction as a result of the Proposed Action.

Shadows

The Proposed Action would result in a significant shadows impact on St. Mary's Episcopal Protestant Church. The Department of City Planning, in accordance with Chapter 9, "Historic and Cultural Resources", Sections 520 through 521.2 of the *CEQR Technical Manual* (2012), has determined that there are no feasible or practicable mitigation measures that can be implemented to mitigate this impact, and the Proposed Action's significant adverse shadows impact on St. Mary's Protestant Episcopal Church therefore remains unmitigated.

Transportation

The traffic impact analysis indicates that there would be the potential for significant adverse impacts at four intersections in each of the weekday AM and PM peak hours, and two in each of the weekday midday and Saturday midday peak hours. Table ES-5 summarizes the recommended mitigation measures to address these impacts, which are subject to review and approval by NYCDOT. As shown in Table ES-5, these measures consist of standard signal timing changes and parking regulation modifications, which are considered low-cost, readily implementable measures as per Table 16-18 in the *CEQR Technical Manual*, and conform to the guidance in NYCDOT's 2009 *Street Design Manual*.

The traffic mitigation plan shown in Table ES-5 would fully mitigate all of the identified significant adverse traffic impacts without any additional significant adverse impacts to pedestrian or parking conditions.

In addition, as discussed below, under Construction Impacts, inadvertent construction-related traffic impacts could result from the Proposed Action. Through the implementation of standard mitigation measures described in Chapter 17, "Construction Impacts," the potential for this impact would be completely eliminated.

Construction

Historic and Cultural Resources

Inadvertent construction-related damage could potentially occur to four eligible historic resources including: the residences at 2-14 Convent Avenue (S/NR-eligible), as a result of construction on projected development site 15; the S/NR-eligible St. Joseph's Roman Catholic Church complex, as a result of construction on projected development site 19 and part of projected development site 18; the LPC-eligible Engine Co. 23 building, as a result of construction on potential development site 30; and the LPC-eligible Upper Riverside Drive historic district, as a result of construction on potential development site 56 and projected development site 5. If these eligible resources are designated in the future prior to the initiation of construction, TPPN 10/88 would apply and indirect significant adverse impacts resulting from construction would be avoided. Should they remain undesignated however, the additional protective measures of TPPN 10/88 would not apply, and significant adverse construction-related impacts would not be mitigated.

TABLE ES-5
Recommended Traffic Mitigation Measures

Intersection	Approach (1)	No-Action Signal Timing (seconds) (2)	Proposed Signal Timing (seconds) (2)				Recommended Mitigation
		All Times	AM	MD	PM	SAT MD	
W.125 th Street @ Amsterdam Ave (3)	EB/WB	33	33	33	33	33	Shift 2 seconds of green time from the NB-L/SB-L phase to the NB/SB phase in the AM.
	NB/SB	40	42	40	40	40	
	NB-L/SB-L	17	15	17	17	17	
W.125 th Street @ St. Nicholas Ave	EB/WB	50	50	50	49	49	Shift 1 second of green time from the EB/WB phase to the NB/SB phase in the PM and Saturday MD.
	NB/SB	40	40	40	41	41	
W.126 th Street @ Amsterdam Ave	WB	40	42	40	40	40	Shift 2 seconds of green time from the NB/SB phase to the WB phase in the AM; install no standing 4PM-7PM, Monday-Friday regulation for 100' along south curb on W.126 th Street approach.
	NB/SB	50	48	50	50	50	
W.126 th Street @ Morningside Ave	WB	31	34	34	34	33	Shift 3 seconds of green time from the NB/SB phase to the WB phase in the AM, MD and PM, and 2 seconds in the Saturday MD.
	NB/SB	59	56	56	56	57	
W.127 th Street @ Morningside/Convent Aves	WB	31	34	34	34	31	Shift 3 seconds of green time from the NB/SB phase to the WB phase in the AM, MD and PM.
	NB/SB	59	56	56	56	59	
Notes:							
(1) EB – eastbound, WB – westbound, NB – northbound, SB – southbound, NB-L – northbound left-turn, SB-L – southbound left-turn.							
(2) Signal timings shown are total seconds of green plus yellow and all-red.							
(3) Assumes elimination of exclusive EB/WB left-turn phase in all analyzed peak hours in the No-Action condition in conjunction with the implementation of turn prohibitions as mitigation for the 125 th Street Corridor and Related Actions project.							

Transportation

The travel demand forecast provided in Chapter 11, “Transportation,” projected that when fully built-out in 2021, the West 126th/West 128th Street Cluster (referred to in Chapter 11 as “Cluster 1”) would generate a net traffic increment of 268 vph (278 PCEs) in the 8-9 AM peak hour, and 370 vph (370 PCEs) in the 5-6 PM peak hour, substantially more than the combined construction/operational traffic for the 2016 construction period described in Chapter 17, “Construction” (see see Table ES-6). As discussed in Chapter 11, with full build-out of the project in 2021, one or more movements at a total of five intersections in proximity to the West 126th/West 128th Street Cluster would be significantly adversely impacted in one or more peak hours. These intersections are:

- West 125th Street and Amsterdam Avenue
- West 125th Street and St. Nicholas Avenue
- West 126th Street and Amsterdam Avenue
- West 126th Street and Morningside Avenue
- West 127th Street and Morningside/Convent Avenues

TABLE ES-6
Comparison of Peak Project-Generated Traffic Volumes in 2016 and 2021
For the West 126th Street/West 128th Street Cluster

	Peak Hour	Passenger Car Equivalents (PCEs)			Percent Difference
		2021 (Full Build-Out)	2016 (Construction/Operational)	Net Difference	
W.126 th Street/ W.128 th Street Cluster	8-9 AM	278	136	-142	-51%
	5-6 PM	370	161	-209	-57%

As the combination of peak construction and operational traffic in 2016 would result in 51 to 58 percent less traffic than the fully built-out project during the 8-9 AM and 5-6 PM peak hours (refer to Table ES-6), no new intersections are expected to experience significant adverse traffic impacts in these periods during the 2016 construction analysis year. It is likely, however, that some or all of the five intersections impacted under the Proposed Action in 2021 would also potentially be impacted in the 2016 construction analysis year.

As discussed in Chapter 18, “Mitigation,” implementation of mitigation measures in 2016 would also be effective at mitigating potential impacts from the combination of construction and operational traffic generated at the West 126th/West 128th Street Cluster in that interim year.

H. ALTERNATIVES

No-Action Alternative

The No-Action Alternative examines future conditions within the proposed rezoning area, but assumes the absence of the Proposed Action (i.e., none of the discretionary approvals proposed as part of the Proposed Action would be adopted). Under the No-Action Alternative, existing zoning would remain in the area affected by the Proposed Action. It is anticipated that this area would experience moderate growth in commercial, community facility, and residential uses by 2021. Seventeen of the 22 projected development sites would be redeveloped, or undergo conversion and/or enlargement in this Alternative. There would be a total of approximately 465 residential units, 399,655 sf of office, 301,490 gsf of community facility space, and 45,888 sf of retail space on the 22 projected development sites under the No-Action Alternative. New construction or conversion can also occur on 15 of the 16 potential development sites under this Alternative.

The technical chapters of the EIS have described the No-Action Alternative as “the Future Without the Proposed Action.” The significant adverse impacts anticipated for the Proposed Action would not occur with the No-Action Alternative. However, the No-Action Alternative would not meet the goals of the Proposed Action. The benefits expected from the Proposed Action on land use, urban design, and neighborhood character would not be realized under this alternative. In addition, the No-Action Alternative would fall short of the objectives of the Proposed Action in promoting building forms that are compatible with existing neighborhood character, fostering new opportunities for developing affordable housing, supporting and enhancing mixed-use development opportunities in the M1-1 district at the southern edge of the rezoning area, and enhancing ground-floor uses.

No Unmitigated Significant Adverse Impacts Alternative

The No Unmitigated Significant Adverse Impact Alternative examines a scenario in which the density and other components of the Proposed Action are changed specifically to avoid the unmitigated significant adverse impacts associated with the Proposed Action.

The Proposed Action has the potential to result in unmitigated significant adverse impacts related to historic resources and shadows. In order to avoid the potential unmitigable impact on historic resources, LPC would need to make a determination regarding the status of former Bernheimer & Schwartz Pilsener Brewing Company complex. If the resource was deemed to be a landmark, then protection for redevelopment of the sites comprising this resource would be afforded. If the resource was not found to meet the criteria to be designated as a New York City Landmark, then its demolition would not be a significant adverse impact.

For shadows, given the location of projected development site 40 relative to St. Mary's Protestant Episcopal Church and the limited number of intervening buildings, and the fact that these shadows would be cast on December 21 (when shadows are at their longest) any increase in height of the structures on site 40 would result in incremental shadows being cast on the sunlight-sensitive features on the western façade of this church. Thus, to entirely avoid the identified unmitigated shadows impacts, this alternative would require that sites 14, and 40 be excluded from the proposed rezoning area. However, these two sites cannot be excluded on their own, as carving them out of the proposed zoning map would result in not a practical solution from a zoning standpoint.

However, the mapping of the MX district is a critical component of the revitalization effort planned for the area currently zoned M1-1, and constitutes a key planning goal of the Proposed Action. Thus, while this alternative would avoid the Proposed Action's identified unmitigated significant adverse impacts in the areas of historic architectural resources and shadows, it would modify the proposed rezoning to a point where it would not realize the City's principal goals and objectives with respect to the M1-1 district.

Lower Density Alternative

The Lower Density Alternative would also map contextual zoning districts throughout much of the 90-block rezoning area in West Harlem and result in the same mix of uses as the Proposed Action, but would result in a lesser amount of development along West 145th Street. The only difference from the Proposed Action is that the Lower Density Alternative would map an R7A zoning district with C2-4 commercial overlays on portions of three blocks along the West 145th Street corridor, extending from a point 100 feet east of Broadway to Amsterdam Avenue, replacing the proposed R8A IH/C2-4 zoning district in the Proposed Action. The R7A zoning district would reduce the maximum permitted residential and community facility density along West 145th Street between Broadway and Amsterdam Avenue, as compared to the Proposed Action.

Under the Lower Density Alternative, the R7A zoning district would allow the same residential FAR of 4.0 (and total FAR of 4.6 with the inclusionary housing bonus) that is allowed per the No-Action scenario on two projected and two potential development sites. Therefore, under this Alternative, development would not occur on two of the 22 projected development sites and two of the 16 potential development sites considered under the Proposed Action. Thus, the RWCDS for this Alternative would comprise a total of 34 development sites, compared to 38 total sites under the Proposed Action. As under the Proposed Action, a range of new development could occur within two of the 20 projected development sites (site 6 and 40) and two reasonable worst-case development scenarios (RWCDS) have been identified for each of these two sites, resulting in a total of four different reasonable worst-case development scenarios (RWCDS 1 through 4) for this alternative.

The Lower Density Alternative would result in the same mix of uses as the Proposed Action, and the same amount of commercial development in all four RWCDs. This alternative would also result in the same amount of community facility development as the Proposed Action in RWCDs 3 and 4, although the amount of community facility space provided in RWCDs 1 and 2 would be slightly less (by about 6.3% and 7.0%, respectively) compared to the Proposed Action. The total amount of residential development as well as the number of affordable housing units would be reduced in all four RWCDs under the Lower Density Alternative. The Lower Density Alternative would result in a slight increase in the number of accessory parking spaces in RWCDs 3 and 4.

Like the Proposed Action, the Lower Density Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; open space; urban design and visual resources; hazardous materials; water and sewer infrastructure; air quality; greenhouse gas emissions; noise; public health; and neighborhood character. In areas where the Proposed Action is anticipated to result in significant adverse impacts, the Lower Density Alternative would reduce but not entirely eliminate those impacts. Like the Proposed Action, the Lower Density Alternative would result in significant adverse impacts related to: shadows, historic resources, traffic, and construction.

The Lower Density Alternative would meet the goals and objectives of the Proposed Action to a lesser extent than the Proposed Action in that it would add fewer housing units, including fewer affordable housing units. The Lower Density Alternative would provide approximately 41 fewer dwelling units in RWCDs 1 and 2, and 93 fewer dwelling units in RWCDs 3 and 4, as compared to the Proposed Action. Under the assumptions of the Lower Density Alternative, all RWCDs would introduce 41 affordable housing units as compared to the Proposed Action, which would result in a maximum increase of 82 affording housing units in RWCDs 3 and 4, and 61 affordable housing units in RWCDs 1 and 2.

I. UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

Unavoidable significant adverse impacts occur when significant adverse impacts would be unavoidable if a project is implemented regardless of the mitigation employed (or if mitigation is impossible).

Shadows

As discussed in Chapter 6, “Shadows,” the Proposed Action would result in a significant adverse shadows impact on St. Mary’s Episcopal Protestant Church. Incremental shadows cast by development identified in the RWCDs, portions of projected development sites 14 and 40, would be cast on stained glass features on the western façade of this resource on December 21 (when shadows are at their longest), for a duration of approximately 1 hour and 33 minutes. Given the location of projected development sites 14 and 40 relative to St. Mary’s Protestant Episcopal Church and the limited number of intervening buildings, and the fact that these shadows would be cast when shadows are at their longest, any increase in height of the structures on sites 14 and 40 would produce incremental shadows cast on the sunlight-sensitive features on the western façade of the church, and result in a significant adverse shadows impact.

The Proposed Action was assessed for possible mitigation measures in accordance with CEQR guidelines. Several ways in which impacts on potential architectural resources can be mitigated were identified by the Department of City Planning, including:

- Redesigning and/or relocating the action, (i.e. avoiding the incremental shadows cast on the sunlight-sensitive features altogether by moving the proposed project away from the features), as analyzed in Chapter 19, “Alternatives.”
- Providing indirectly mounted artificial lighting on St. Mary’s Episcopal Protestant Church.

Redesigning or relocating the action so that it does not cast an incremental shadow on the western façade of St. Mary's Episcopal Protestant Church (e.g. by removing portions of the projected development sites from the rezoning proposal) is not a practical solution from a zoning standpoint. Further, removal of the entirety of the development sites would be inconsistent with the overall purpose and need of the proposal and is considered infeasible and impracticable. Together projected development sites 14 and 40 comprise a significant proportion of the proposed MX district's lot area. As noted in Chapter 1, "Project Description," and described in section "C. Historic and Cultural Resources" below, the proposed MX district is mapped on one of the few portions of the proposed rezoning area that would provide an opportunity for development of commercial and light manufacturing uses. Accordingly, the proposed MX district is critical to new commercial and light manufacturing development activity. Provision of indirectly mounted lighting is not available as a mitigation measure, given the nature of the proposed action as an area-wide rezoning. Accordingly, as the potential for this impact would not be completely eliminated it would constitute an unavoidable significant adverse shadows impact on St. Mary's Episcopal Protestant Church as a result of the Proposed Action.

Historic and Cultural Resources

As noted above, the Proposed Action could result in significant adverse impacts due to potential partial or complete demolition of one eligible resource on projected development sites 14 and 40 (the former Bernheimer & Schwartz Pilsener Brewing Company complex), which was calendared by the LPC on 7/15/91 and 10/29/91 for consideration for landmark status. As the RWCDS for the Proposed Action anticipates that the existing structures on sites 14 and 40 would be demolished, either partially or entirely, as a consequence of the Proposed Action, this would result in a significant adverse direct impact to this LPC- and S/NR-eligible resource.

Mitigation measures that could minimize or reduce this impact may include photographically documenting the eligible structures in accordance with HABS level II, as per National Park Service standards. Further, an interpretive exhibit could be produced within the lobby of new construction, using the completed HABS documentation as a starting point. With implementation of such measures, the identified significant adverse direct impact to historic architectural resources would be partially mitigated, but would not be completely eliminated.

However, in order to adopt these measures in the absence of a site-specific approval, such as a Special Permit with accompanying restrictive declaration, a mechanism would have to developed to ensure implementation and compliance. Discussions with the owner of the complex have not, however, resulted in the development of such a mechanism.

In addition, LPC could elect to conduct a hearing and designate the structures, either in whole or in part, as landmark buildings, and, in the event that landmark designation were approved, LPC approval would be required for any alteration or demolition of the designated structures. As the potential for use and results of any designation process cannot be assumed or predicted with certainty, the availability of designation is considered herein as a partial mitigation only.

Accordingly, as the potential for this impact would not be completely eliminated it would constitute an unavoidable significant adverse impact on this historic resource as a result of the Proposed Action.

Construction

Inadvertent construction-related damage could potentially occur to four eligible resources including: the residences at 2-14 Convent Avenue (S/NR-eligible), as a result of construction on projected development site 15; the S/NR-eligible St. Joseph's Roman Catholic Church complex, as a result of construction on

projected development site 19 and part of projected development site 18; the LPC-eligible Engine Co. 23 building, as a result of construction on potential development site 30; and the LPC-eligible Upper Riverside Drive historic district, as a result of construction on potential development site 56 and projected development site 5. For these four non-designated resources, construction under the Proposed Action could potentially result in construction-related impacts to the resource, as the additional construction protections of *TPPN 10/88* would not apply (they only apply to designated landmarks). If these eligible resources are designated in the future prior to the initiation of construction, *TPPN 10/88* would apply and potential indirect significant adverse impacts resulting from construction would be avoided.

The City has procedures for avoidance of damage to structures from adjacent construction with added protection for designated historic resources, which would be afforded to the historic resources. Building Code section C26-112.4 serves to protect buildings by requiring that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported. In addition, the New York City Department of Buildings' *Technical Policy and Procedure Notice (PPN) #10/88*, supplements these procedures by requiring a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or S/NR-listed resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed. In the case of the four eligible resources listed above, any significant adverse impacts would be unmitigated, as none of these resources are designated New York City landmarks, have been calendared for designation or are S/NR-listed resources. Without the protective measures described above, significant adverse construction-related impacts would not be mitigated.

J. GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTION

Growth-inducing aspects of a proposed action generally refer to "secondary" impacts of a proposed action that trigger further development. Proposals that add substantial new land use, new residents, or new employment could induce additional development of a similar kind or of support uses (e.g., stores to serve new residential uses). Actions that introduce or greatly expand infrastructure capacity (e.g., sewers, central water supply) might also induce growth.

The Proposed Action would result in more intensive land uses within the rezoning area. However, it is not anticipated that the Proposed Action would generate significant secondary impacts resulting in substantial new development in nearby areas. The Proposed Action would not introduce a new economic activity that would alter existing economic patterns in the study area. As the study area already has a well-established residential market and a critical mass of non-residential uses, including retail, office and community facility uses, the Proposed Action would not create the critical mass of uses or populations that would induce additional development. Moreover, the Proposed Action does not include the introduction of new infrastructure or an expansion of infrastructure capacity that would result in indirect development. Therefore, the Proposed Action would not induce significant new growth in the surrounding area.

K. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Resources, both natural and man-made, would be expended in the construction, renovation, reuse and operation of developments projected to occur as a result of the Proposed Action. These resources include the building materials used during construction or renovation; energy in the form of gas and electricity consumed during construction and operation of buildings by various mechanical and processing systems; and the human effort required to develop, construct, renovate, and operate various elements of projected

and potential developments. These are considered irretrievably committed because their reuse for some other purpose would be highly unlikely.

The land use changes associated with the proposed rezoning action may also be considered a resource loss. Projected and potential development under the Proposed Action constitutes a long-term commitment of sites as land resources, thereby rendering land use for other purposes infeasible. Further, funds committed to the design, construction/renovation, and operation of projected or potential developments under the Proposed Action are not available for other projects.

The public services provided in connection with the projected and potential developments under the Proposed Action (e.g., police and fire protection and public school seats) also constitute resource commitments that might otherwise be used for other programs or projects, although the Proposed Action would also generate tax revenues to provide additional public funds for such activities.