5. ALTERNATIVES TO THE PROPOSED ACTION

INTRODUCTION

In accordance with the City Environmental Quality Review (CEQR), this chapter presents and analyzes alternatives to the Proposed Action. Alternatives selected for consideration in an EIS are generally those which are feasible and have the potential to avoid or reduce action-related significant adverse impacts but that would still allow for the achievement of some or all of the stated goals and objectives of the Proposed Action.

As discussed in the technical chapters of this EIS, the Proposed Action would result in significant adverse impacts related to public elementary schools, open space, archaeological resources, traffic, and construction traffic and noise. Of these, only the impact to public elementary schools would be fully mitigated. Unavoidable adverse impacts would occur for open space, archaeological resources, traffic, and construction traffic and noise.

This chapter considers three alternatives to the Proposed Action:

- A No-Action Alternative that assumes the Proposed Action is not implemented and existing zoning continues. The technical chapters of this Draft EIS have described the No-Action Alternative (referred to in the technical chapters as the "Future without the Proposed Action") and have used it as the basis to assess the potential impacts and associated mitigation for the Proposed Action;
- A No-Impact Alternative which considers development that would not result in any identified significant adverse impacts.
- A Lesser Density Alternative, which considers lower density zoning districts that would result in reduced residential development.

PRINCIPAL CONCLUSIONS

For each alternative, the principal conclusions of the analysis in this chapter are as follows:

No-Action (As-of-Right) Alternative

Consideration of a No-Action Alternative is required under CEQR. The No-Action Alternative examines future conditions within the proposed rezoning area but assumes the absence of the Proposed Action. Under the No-Action Alternative, only two development sites would be developed. Site 9C would be redeveloped with approximately 134 new dwelling units and about 39,000 square feet of new commercial development. A portion of Site 6B would be developed with 4,900 square feet of additional storage and accessory office space. All other development sites in the rezoning area would remain unchanged.

The No-Action Alternative would avoid the significant adverse impacts that the Proposed Action would cause with regard to public elementary schools, open space, traffic, construction traffic, and construction noise and at least three of the four development sites that would have significant adverse impacts related to archaeological resources.

Overall, there would be less development that could open pathways for exposure to hazardous materials, but compared with the Proposed Action, there would be less extensive remediation of suspected soil and groundwater contamination, and in contrast with the Proposed Action there would be the possibility that residential development could occur without such remediation. This would apply in particular to the as-of-right residential development that would occur under the alternative on one site (9C). Screening has indicated that site may be contaminated with hazardous materials. Under the Proposed Action an (E) designation would be placed on the site to require soil and groundwater testing and, if necessary, remediation.

Compared with the Proposed Action, the No-Action Alternative would introduce fewer new noise-sensitive uses at locations exposed to high existing ambient noise levels; but unlike the Proposed Action, the alternative would result in residential development at such a location without also imposing requirements for adequate window/wall noise attenuation to ensure acceptable indoor noise levels. This would also apply in particular to the as-of-right residential development that would occur under the alternative on Site 9C, which is adjacent to an elevated subway trestle above Boston Road and which is therefore exposed to noise levels in the Clearly Unacceptable category of the Noise Exposure Guidelines. Under guidelines in the *CEQR Technical Manual*, the development of new residential units at locations subject to these Clearly Unacceptable noise levels would ordinarily constitute a significant adverse impact because indoor noise levels could exceed the maximum acceptable level of 45 dBA. However, the Proposed Action would include the placement of (E) designations on Site 9C and other non-applicant-controlled projected and potential development sites exposed to high ambient noise levels, and the recording of restrictive declarations for applicant-controlled sites at such locations, that would require (1) specified levels of window-wall noise attenuation and (2) air conditioning or other alternative means of ventilation so that residents can maintain a closed window condition at all times of the year. The specified attenuation levels would ensure that indoor noise levels would be below 45 dBA, avoiding a significant adverse noise impact. Under the No-Action Alternative, approximately 134 housing units would be built at Site 9C, exposed to noise levels in the Clearly Unacceptable category, with no requirement for minimum window/wall noise attenuation or alternate source of ventilation. The No-Action Alternative would therefore result in a potential significant adverse noise impact that would be avoided under the Proposed Action.

For all other impact categories, neither the Proposed Action nor the No-Action Alternative would result in any significant adverse impacts.

The No-Action Alternative would not be a feasible alternative to the Proposed Action because it would not achieve the action's stated goals and objectives, including encouraging new affordable and market, work-force housing, improving street presence and activity within the rezoning area, reinforcing adjacent residential neighborhoods and providing new opportunities for redevelopment and economic growth. Under the No-Action Alternative, the industrial and automotive uses in the proposed rezoning area would continue to directly abut housing and public schools in predominantly residential neighborhoods, and there would not be land use changes that would further the realization of public policy objectives expressed in the adopted 197-a plan for Bronx Community District 3 (increasing the area's population, diversifying the income mix, and encouraging residential zoning changes that would promote higher density residential development). Under this alternative an estimated 923 fewer subsidized, permanently affordable housing units would be built for low and moderate income households. Unlike the Proposed Action, this alternative would not lead to the removal of existing buildings and open storage areas that are inconsistent with the built form within the surrounding neighborhoods. The existing array of blank walls, fences, and truck bays would not be replaced by residential street walls, with regular fenestration patterns and some ground floor storefronts that would create a streetscape that is more pleasing and conducive to pedestrian activity.

No-Impact Alternative

The No-Impact Alternative examines a scenario in which the density and program design of the Proposed Action is changed specifically to avoid the significant adverse impacts associated with the Proposed Action. The Proposed Action would result in significant adverse impacts related to public elementary schools, open space, archaeological resources, traffic, construction traffic, and construction noise. The mitigation measures described in Chapter 3 would fully mitigate all significant adverse impacts, except with respect to archaeological resources on non-applicant-controlled development sites, open space, traffic at two intersections construction traffic at those two intersections, and construction noise on the rear façade of one existing residential building..

Development under the Proposed Action is expected to generate 1,028 elementary school students, which would increase the utilization rates in Sub-district 2 of Community School District (CSD) 12 by a large enough percentage to result in a significant adverse impact for elementary schools. In the absence of mitigation, to avoid a significant adverse elementary school impact, the amount of residential development would have to be reduced sufficiently so that the utilization rate would increase by less than 5 percent relative to future no-action conditions, which would require that the new development generate fewer than 356 new public elementary school students. Development would be limited to an increment of fewer than 913 housing units.

Because development under the reasonable worst case development scenario (RWCDS) would cause substantial decreases in the residential open space study area's active, passive, and overall open space ratios, compared with future no-action conditions, the Proposed Action would cause a significant adverse open space impact. The construction of a maximum of 377 new dwelling units would result in a one percent decrease in the active open space ratio, a 0.3 percent decrease in the passive open space ratio, and a 0.5 percent decrease in the overall open space ratio, which would not cause a significant adverse open space impact.

Four of the projected redevelopment sites that were determined to be archaeologically sensitive are not under the control of the applicant. No mechanism (such as a restrictive declaration or (E) designation) is available to bind the owners of the sites to redevelop them in a manner that would avoid adverse impacts to archaeological resources. Because the sites are interspersed throughout the rezoning area, it would not be feasible or desirable to reconfigure the proposed rezoning boundaries to exclude them. If that were done, the result would be a checkerboard of residential and industrial zoning devoid of any planning rationale.

An analysis was performed to determine the reduction in traffic volumes generated by the Proposed Action that would be needed to avoid significant adverse impacts. An eighty eight (88) percent reduction in the development level as a whole would be needed to avoid significant adverse impacts within the traffic study area. As the result, any more than 12 percent of the traffic generated under the Proposed Action would trigger a significant adverse traffic impact. Twelve percent of the RWCDS translates into 317 dwelling units, 11,160 square feet of commercial space, and 1,440 square feet of child care space. Limiting development to this level would substantially reduce the opportunity to provide housing (including affordable housing), and would substantially compromise the Proposed Action's stated goals and overall economic viability.

Development under the RWCDS would result in a significant adverse construction noise impact to the rear façade of a six-story residential apartment building facing Longfellow Avenue on the block between East 173rd and East 174th Streets. Construction noise attenuation measures are available that would avoid the significant adverse impact; however, because the impact would be caused by construction activities at sites not controlled by the applicant, there is no mechanism for ensuring that such measures would be implemented. The only practicable means of preventing the significant adverse construction noise impact is to exclude all or part of the west side of Boone Avenue between East 173rd and East 174th Streets from

the rezoning area. There would be no planning rationale for leaving such a small, isolated M1-1 district in the midst of a residentially zoned area.

The No-Impact Alternative would effectively be the same as the No-Action Alternative. Like the No-Action Alternative, the No-Impact Alternative would not meet the objectives of the Proposed Action and therefore would not be a feasible alternative to the Proposed Action.

Lesser Density Alternative

Comments received during the public scoping process requested analysis of an alternative that would have lower densities, especially south of the Cross Bronx Expressway and along West Farms Road. In response, a Lesser Density Alternative has been identified that would substitute an R7X district for the proposed R8X districts north of the Cross Bronx Expressway and along West Farms Road on portions of Blocks 3013 and 3014 and would extend the proposed R7A district over the adjacent area along West Farms Road where the R7X district would be mapped under the Proposed Action. The Lesser Density Alternative would be expected to result in a total of 2,210 dwelling units, which is 425 (16 percent) fewer dwelling units than the Proposed Action. The Lesser Density Alternative would result in the same commercial floor area as that under the Proposed Action. Total anticipated floor area would be 519,784 square feet less than under the Proposed Action.

The same lots are identified as projected development sites under the Proposed Action and the Lesser Density Alternative. For the sites under the applicant's control, the site plans would be identical. Permitted building heights along Boone Avenue would be the same under the alternative and the Proposed Action; but north of the Cross Bronx Expressway and along West Farms Road south of the Cross Bronx Expressway, building heights would be lower (10 stories versus 15).

From the standpoint of identified environmental impacts, the Lesser Density Alternative would have no advantages over the Proposed Action. Because the same ground disturbance would occur under the Lesser Density Alternative as under the Proposed Action, the alternative would also have the same potential for unavoidable significant adverse archaeological impacts. In addition, the reduction in the proposed development program would not be great enough to avoid the significant adverse impacts to elementary schools, open space, operational traffic, or construction traffic. Because the Lesser Density Alternative would be identical to the Proposed Action with regard to the zoning along the west side of Boone Avenue, the amount and duration of construction at projected development sites in that part of the rezoning area would be the same, so the alternative and the Proposed Action would have the same significant construction noise impact on a residential building fronting on Longfellow Avenue.

The Lesser Density Alternative would be less successful than the Proposed Action at achieving the intended objectives of the action. Fewer new housing units would be built, including fewer units that would be permanently affordable to low and moderate income households. In addition, the Lesser Density Alternative would be less successful in meeting the goals of improving street presence and activity within the rezoning area, reinforcing adjacent residential neighborhoods and providing new opportunities for redevelopment and economic growth. The extensive existing warehouse, industrial, institutional and open uses in the rezoning area inhibit pedestrian and other street activity, especially at night. The applicant believes that the greater density under the Proposed Action will be necessary, particularly for the early phases of the project, to generate street activity and a stronger sense of place, as well as to provide sufficient economic rationale to support the proposed retail uses and justify redevelopment costs.

NO-ACTION ALTERNATIVE

Description

The No-Action Alternative assumes that the Proposed Action would not be implemented (i.e., none of the discretionary approvals proposed as part of the Proposed Action would be adopted). In the future without the Proposed Action, almost no new development would be expected. The only major development that would be expected would be located at the far northern end of the area to be rezoned, on Block 3016, Lots 38 and 42 (Site 9C). This site is currently zoned as R7-1 with a C2-4 commercial overlay. Based on the permitted zoning envelope and assuming an average of 1,000 gross square feet per apartment, 134 new dwelling units and about 39,000 square feet of new commercial development would be expected on this site. In addition, a portion of Site 6B (Block 3015, Lot 87) would be redeveloped with a 4,990 square feet of storage and accessory office space. The remainder of the area to be rezoned would be expected to remain as it is under existing conditions.

The current building stock would be expected to remain intact within the proposed rezoning area, except for the one site at the northern end facing West Farms Square. Plans for the development on that site are not available, but the building would fit the envelope established by the regulations governing the existing R7-1 zoning district, and it is assumed that the Quality Housing rather than the height factor regulations would be followed. The building would be approximately 80 feet tall.

As under the Proposed Action, the existing street circulation patterns and block forms would remain unchanged.

Comparison with the Proposed Action

The effects of the No-Action Alternative in comparison to those of the Proposed Action are summarized below.

Land Use, Zoning, and Public Policy

Under the No-Action Alternative, the existing land use pattern within the proposed rezoning area would remain intact, except on the northern part of the northernmost block. Whereas residential and retail uses would predominate within the proposed rezoning area in the future with the Proposed Action, light industrial and automotive uses and vacant formerly industrial space would continue to predominate under the No-Action Alternative. In comparison with the RWCDS for the Proposed Action, under the No-Action Alternative there would be 2,635 fewer dwelling units, 92,941 square feet less new commercial floor area, one less child care center, and 385,381 square feet more industrial and automotive space (of which approximately 301,000 square feet is expected to be occupied).

Unlike the Proposed Action, the No-Action Alternative would not seek zoning map amendments, designation as a Large-Scale General Development (LSGD), various special permits for the LSGD site, or zoning text amendments. The limited amount of redevelopment would be as of right under the existing zoning regulations applicable to the area. Without a zoning change, the residential and community facility uses envisioned under the Proposed Action would not be allowed in most of the proposed rezoning area.

Neither the No-Action Alternative nor the Proposed Action would be inconsistent with the 197-a plan that covers a portion of the proposed rezoning area, the Waterfront Revitalization Program (which covers only a small corner of the rezoning area), or PlaNYC's major sustainability initiatives. Unlike the Proposed Action, however, the No-Action Alternative would not promote the 197-a plan's objectives of increasing the area's population, diversifying the income mix, and encouraging residential zoning changes that would promote higher density residential development.

Like the Proposed Action, the No-Action Alternative would not cause any significant adverse impacts with respect to land use, zoning, or public policy. Under the No-Action Alternative, however, the industrial and automotive uses in the proposed rezoning area would continue to directly abut housing and public schools in predominantly residential neighborhoods, and there would not be land use changes that would further the realization of public policy objectives expressed in the adopted 197-a plan for Bronx Community District 3. Likewise, the No-Action Alternative would not further the project goals of improving street presence and activity within the rezoning area and providing new opportunities for redevelopment and economic growth.

Socioeconomic Conditions

Direct Residential Displacement

No direct residential displacement would occur under the No-Action Alternative, whereas under the RWCDS for the Proposed Action six households with an estimated 17 residents would be directly displaced. According to CEQR guidelines, a significant adverse direct residential displacement impact would not occur under either the Proposed Action or the No-Action Alternative.

Direct Business Displacement

Under the No-Action Alternative, 26 fewer businesses, employing 274 workers, would be directly displaced than under the Proposed Action. According to CEQR guidelines, however, a significant adverse direct business displacement impact would not occur under either the Proposed Action or the No-Action Alternative, since the businesses facing displacement do not provide products or services essential to the local economy that would otherwise be unavailable and no public plans or policies call for the protection of automotive or light industrial enterprises in this part of the Bronx.

Indirect Residential Displacement

Neither the Proposed Action nor the No-Action Alternative would be expected to have a significant adverse indirect residential displacement impact. Under the No-Action Alternative only 134 new housing units would be constructed, housing a new population that would be well below the *CEQR Technical Manual* threshold of 5 percent of the existing study area population, indicating that the development would not be large enough to substantially alter socioeconomic character or real estate conditions. Under the Proposed Action, although an additional 2,635 housing units are expected, which exceeds 5 percent of the estimated study area population, rents for market rate units in the new housing would not be substantially higher than those for the affordable units and less than 5 percent of the existing study area population is considered to be at risk of involuntary displacement as a result of changing real estate market conditions. Under the No-Action Alternative an estimated 923 fewer subsidized, permanently affordable housing units would be built for low and moderate income households.

Indirect Business Displacement

The No-Action Alternative, unlike the Proposed Action, would not directly displace more than one business establishment, alter the land use character of the proposed rezoning area, or introduce a concentration of new commercial development. The Proposed Action would nonetheless not be expected to have a significant indirect business displacement impact because the businesses that would be displaced do not have strong linkages to the local economy and thus are not critical to the continued viability of other nearby businesses, because the land use changes would follow existing trends rather than initiate or accelerate such trends, and because the 93,000 square feet of anticipated new commercial floor area would be below the threshold for a retail market saturation impact. The Proposed action would result in a net increase of 142 permanent jobs to the area relative to the No-Action Alternative. Neither the Proposed Action nor the No-Action Alternative would be expected to have a significant adverse indirect business displacement impact.

Adverse Effects on Specific Industries

A significant adverse impact on a specific industry would generally occur only in the case of a regulatory change affecting the city as a whole or in the case of a local action that affects an area in which a substantial portion of that sector is concentrated, relative to the city as a whole. Neither the Proposed Action nor the No-Action Alternative would affect citywide policy or regulatory mechanisms, and the businesses in the proposed rezoning area are mainly small warehouses and automotive repair shops of the sort that are common throughout the city. Neither the Proposed Action nor the alternative would have a significant adverse impact on any of the city's economic sectors.

Community Facilities and Services

With the No-Action Alternative, unlike the Proposed Action, there would be only a very modest increase in the area's residential population, which would fall below most of the thresholds requiring review for potential impacts to community facilities and services. With 134 dwelling units, a review of the impact of the No-Action Alternative on public schools is required. This alternative, however, would not result in the significant adverse impacts predicted to occur as a result of the Proposed Action on elementary schools within Sub-district 2 of Community School District (CSD) 12. As in the case of the Proposed Action, the No-Action Alternative would not result in any significant adverse impacts to libraries, intermediate or high schools, child care services, health care facilities, and police and fire protection services.

Because of projected increases in elementary school enrollment and anticipated reductions in elementary level classroom space in CSD 12, the elementary schools in Sub-district 2 is expected to have a collective utilization rate of 122 percent under the No-Action Alternative, as compared to 94 percent under Existing Conditions. Development under the Proposed Action is expected to generate 1,028 elementary school students, which, without mitigation, would increase the utilization rates in the sub-district study area to 136 percent. As discussed in Chapter 3, Mitigation, the FEIS proposes measures that would fully mitigate the impact: construction by the School Construction Authority (SCA) of a new elementary school on a site provided by the applicant. The No-Action Alternative would not add to the elementary school seat shortfall projected under future baseline conditions, and development within the proposed rezoning area would contribute only 52 of the students under those baseline conditions, so the No-Action Alternative would not give rise to the need for mitigation. (See Table 5-1 below.) Nevertheless, sizeable elementary school seat shortfalls are anticipated in the future with this alternative, so corrective measures would have to be implemented. Under the No-Action Alternative, the costs and uncertainty of such corrective measures would increase, as the applicant would not be donating the school site requiring another appropriate site to be located and acquired.

Table 5-1: 2022 Sub-district 2 Elementary School Enrollment, Capacity, and Utilization Data

Study Area	Future No-Action Enrollment	Students Generated by Action-Generated Development	Total Future Enrollment	Target Capacity	Available Seats	Utilization Rate
No-Action Alternative						
Sub-district 2	8,676	0	8,676	7,123	-1,553	121.8%
Proposed Action (RWCDS)						
Sub-district 2	8,676	1,028	9,704	7,123	-2,581	136.2%

Open Space

The No-Action Alternative would result in net increases of 7,879 fewer residents and 142 fewer workers than the Proposed Action, thus resulting in less demand for recreational open space, and would also not increase the area's open space inventory by close to half an acre with a new children's playground and two landscaped open areas. For the non-residential study area addressed in Chapter 2.D, Open Space, the ratio of passive open space acreage to one thousand daytime users (workers and residents) would be somewhat lower under the Proposed Action (0.51 rather than 0.62 under the No-Action Alternative), but both exceed the *CEQR Technical Manual* target of 0.15. For the larger residential study area, the ratios for passive, active, and overall open space would all be higher under the No-Action Alternative (0.50, 0.26, and 0.76 respectively versus 0.47, 0.24, and 0.71 with the Proposed Action). The Proposed Action's reduction in open space ratios would constitute a significant adverse impact. Partial mitigation measures are discussed in Chapter 3, Mitigation, but they would be insufficient to fully mitigate the impact. The No-Action Alternative would therefore avoid an unmitigated significant adverse open space impact that would result from the Proposed Action.

Shadows

Neither the Proposed Action nor the No-Action Alternative would result in a significant adverse shadows impact. The current low-rise character of the proposed rezoning area would generally be retained under the No-Action Alternative, unlike under the Proposed Action; only one site would be redeveloped, and under the Proposed Action that site would also be redeveloped, probably with a taller building with similar massing. Despite extensive resulting redevelopment, the Proposed Action would not result in significant new shadows being cast on any nearby open space during any of the CEQR seasonal analysis periods, with the exception of Boone Slope Park; however, Boone Slope Park, which measures 0.03 acres and is steeply sloped, is not publicly accessible, and there are no current plans for its improvement to make it publicly accessible.

Historic and Cultural Resources

Architectural Resources

Neither the Proposed Action nor the No-Action Alternative would result in a significant adverse impact on architectural resources since no such resources have been identified within the proposed rezoning area or within 400 feet of its boundaries.

Archaeological Resources

The No-Action Alternative would result in the redevelopment of two sites, one consisting of two adjacent tax lots, which has been deemed not to be archaeologically sensitive, and one for which a building permit was issued for a 4,960 square foot contractor's storage building with accessory office space. As of the date of this FEIS, construction of that building had not commenced. This latter site (Block 3015, Lot 87) is considered as archaeologically sensitive. If the owner decides to move ahead with construction, the No-Action Alternative would result in an unavoidable adverse impact on archaeological resources. In contrast, the Proposed Action would result in ground disturbance on 49 tax lots.Eight of the tax lots as configured today (i.e., "modern lots") (comprising 15 lots, historically) may contain potentially sensitivesubsurface archaeological artifacts. Four of the modern lots (11 of the historical lots) are under the control of the project applicant; potential adverse impacts would be avoided at these locations because the applicant has agreed to enter into a restrictive declaration to follow a testing and recovery protocol approved by the New York City Landmarks Preservation Commission. The other four modern (and historic) lots, two of which may contain human remains from a former cemetery and two of which may contain former privies (shafts) in which artifacts may have subsequently been disposed, are not under the applicant's control. No mechanism (such as a restrictive declaration or (E) designation) is available to ensure that the redevelopment of these sites would not result in unavoidable adverse impacts to

archaeological resources. In the instance of Block 3015, Lot 87, the No-Action Alternative would not avoid the unavoidable significant adverse archaeological impact, but the alternative would avoid the unavoidable significant archaeological impacts for the other three lots.

Urban Design and Visual Resources

Urban Design

Neither the Proposed Action nor the No-Action Alternative would result in a significant adverse urban design impact. Unlike the No-Action Alternative, however, the Proposed Action would lead to the removal of existing buildings and open storage areas that are inconsistent with the built form within the surrounding neighborhoods. Residential street walls, with regular fenestration patterns and some ground floor storefronts, would create a streetscape that is more pleasing and conducive to pedestrian activity, and more consistent with the residential neighborhoods, than the existing array of blank walls, fences, and truck bays. These positive effects would not occur under the No-Action Alternative, since most of the existing conditions would remain.

Pedestrian Wind Conditions

Neither the Proposed Action nor the No-Action Alternative would result in a significant adverse wind impact. The proposed rezoning area is not subject to unusual wind conditions. It is not an exposed area on or near the waterfront, and it is not on high ground or on the upper portion of an exposed slope. Indeed, it is a low area at the base of a slope rising to the west, facing another ridge to the east on the other side of the Bronx River, and as such it is sheltered from high winds. Under the alternative only one new building is anticipated, of only about eight stories. Under the Proposed Action, none of the proposed buildings would be taller than 15 stories, and the contextual zoning regulations that would be put in place mandate street walls and high lot coverage. There would therefore not be freestanding towers that could cause pedestrian level vortex effects. Under the Proposed Action buildings would be oriented to the existing streets, and the only anticipated breaks in the street wall in the areas zoned for the largest buildings would be midblock passages that, at 60 feet in width, would be as broad as streets.

Visual Resources

Neither the Proposed Action nor the No-Action Alternative would result in a significant adverse impact to visual resources. Under both, the anticipated redevelopment would not obstruct existing views to or from the Bronx River or Starlight Park, which will be the area's principal visual resources in the 2022 analysis year (after Starlight Park is completed), and would not diminish any valuable aspects of their visual setting. Under the Proposed Action, however, two new view corridors, in the form of the landscaped mid-block open areas on the LSGD site, would open views from Boone Avenue to the Bronx River or Starlight Park.

Natural Resources

The proposed rezoning area is substantially devoid of natural resources and contains no built resource that is known to contain or may be used as a habitat by a protected species. It is separated from the nearest important natural resources, the Bronx River and its adjacent wetlands, by a multilane, limited access highway and the drainage systems for the highway and for West Farms Road. Neither the Proposed Action nor the No-Action Alternative would result in a significant adverse impact to natural resources.

Hazardous Materials

Overall, under the No-Action Alternative, there would be less development that could open pathways for exposure to hazardous materials, but compared with the Proposed Action, there would be less extensive remediation of suspected soil and groundwater contamination and in contrast with the Proposed Action, there would be the possibility that residential development could occur without such remediation. This

would apply in particular to the as-of-right residential development that would occur under the alternative on one site (9C). The screening assessment summarized in Chapter 2.I, Hazardous Materials, has indicated that site may be contaminated with hazardous materials. Under the Proposed Action an (E) designation would be placed on the site to require soil and groundwater testing and, if necessary, remediation.

Under the Proposed Action, all of the 45 lots that would be rezoned and have been identified as projected or potential development sites but that are not under the applicant's control will receive (E) designations. The (E) designation would require that, prior to the issuance of construction-related permits for redevelopment, the property owner conduct a Phase I environmental site assessment in accordance with the American Society of Testing Materials (ASTM) E1527-05, prepare and implement a soil and groundwater testing protocol, and perform such remediation activities as are deemed appropriate by the New York City Mayor's Office of Environmental Remediation (OER), to the satisfaction of OER. For those lots under the applicant's control, DEP has reviewed the Phase I and Phase II reports that have been prepared to date and has determined that additional investigation and/or remediation will be required. For each lot under the applicant's control, a restrictive declaration will be recorded against the property, binding the applicant to perform all investigative or remedial activities required by DEP, in accordance with protocols devised by the agency, and to the agency's satisfaction, before submitting any permit applications to the New York City Department of Buildings. The placement of (E) designations on the 45 tax lots not controlled by the applicant and the recording of restrictive declarations against all of the 15 lots controlled by the applicant would ensure that no significant impacts related to hazardous materials would occur as a result of the Proposed Action.

Water and Sewer Infrastructure

Neither the Proposed Action nor the No-Action Alternative would result in any significant adverse impacts related to infrastructure in terms of water supply, sanitary sewage, or storm water runoff. The No-Action Alternative would result in 0.66 million gallons per day (mgd) less water usage and 0.70 mgd less sanitary sewage flow than the Proposed Action, but this difference would not be significant with regard to the city's water supply and delivery system, the sewer system, or the Hunts Point Water Pollution Control Plant. Because the amount of impervious surfaces (roof, pavement, etc.) within the proposed rezoning area would be substantially the same under the Proposed Action and the No-Action Alternative, the volume of storm water runoff would also be substantially the same. Under the methodology used by DEP to estimate future flow volumes through the combined sewer system during rainfall events (when storm water and sanitary sewage combine), a single set of volumes for future no-action/action conditions is compared with existing volumes, so there is no way to compare the volumes under this alternative with those under Proposed Action conditions. However, a best management practices (BMP) concept plan for the applicant properties has been submitted to DEP, illustrating the opportunities for the Proposed Project to incorporate onsite stormwater source controls during planning and building design phases of project development. At the time of detailed design, the applicant will work with DEP to determine which of the BMPs will be incorporated into the project design to achieve a target stormwater release rate of 0.25 cfs or 10% of the allowable flow per the drainage plan, whichever is greater. These measures would be implemented under the Proposed Action but not under the No-Action Alternative.

Solid Waste and Sanitation Services

Compared with the Proposed Action, the No-Action Alternative would generate 80,294 fewer pounds (40.3 fewer tons) per week of residential and community facility solid waste, which would be carted away by the Department of Sanitation (DSNY). This volume, averaging approximately 11,470 pounds (5.7 tons) per day of solid waste, is significantly below the 50 tons per week identified in the *CEQR Technical Manual* as a "substantial amount" of solid waste. The amount is also significantly less than the

approximately 15,500 tons per day of solid waste that is managed by DSNY. Likewise, collection of this amount of solid waste would require fewer than four DSNY collection truck trips per week, as compared to the nearly 5,000 DSNY collection truck trips made per day. Accordingly, neither the Proposed Action nor the No-Action Alternative would have a significant adverse impact on the city's solid waste and sanitation services.

Energy

Neither the Proposed Action nor the No-Action Alternative would have a significant adverse impact on energy consumption. Under the No-Action Alternative the area's annual energy consumption would be an estimated 211.36 billion British thermal units (BTUs) less than under the Proposed Action, which is not significant in the context of the city's energy use as a whole.

Transportation

Traffic

As described above, the No-Action Alternative would consist primarily of industrial uses, with only two sites expected to redevelop absent approval of the Proposed Action, as compared to the expected, primarily residential and retail nature of development under the Proposed Action. This alternative would result in 2,469, 4,482, and 4,143 fewer person trips during the weekday AM, weekday midday, and weekday PM peak hours, respectively. It would also result in 273, 220, and 406 fewer vehicle trips during the weekday AM, weekday midday, and weekday PM peak hours, respectively.

Changes in the Transportation Environment[1]

Between the 2009 existing conditions and the future 2022 No Action year a few changes to the transportation environment are scheduled to take place. These changes are from the street reconstruction taking place due to the Bronx River Greenway Project, two separate NYCDOT intersection improvements, several NYCDOT updates to their signal timing program and a Neighborhood Slow Zone Pilot Project.

Bronx River Greenway Project

The Bronx River Greenway project, which is expected to begin construction in the summer of 2012, involves creating a pedestrian and bicycle trail along to the Bronx River. In order to construct this pedestrian trail and bike path, reconstruction of the roadways at 3 intersections in the study area is planned. These intersections include:

- East 177th Street at the Sheridan Expressway
- East 177th Street, Devoe Avenue at East Tremont Avenue
- West Farms Road, Boston Road at East Tremont Avenue

These improvements are designed for pedestrian enhancements and will significantly worsen traffic situations at the three intersections. Changes to intersection geometry are described below.

[1] This section has been added to the FEIS to present information from Chapter 2.M, Transportation, that was not included in this chapter in the DEIS, plus updated information received from NYCDOT subsequent to the issuance of the DEIS.

East 177th Street at the Sheridan Expressway

At this intersection, a pedestrian crossing and bike path are added to the eastbound approach on the Sheridan Expressway On/Off Ramp. Currently there is no crosswalk on this approach.

To make room for the pedestrians and bicycles north of the intersection, a sidewalk/pedestrian path to the west of East 177th Street will be constructed. This will cause East 177th street to narrow. Currently the northbound direction of East 177th Street just north of the intersection is 35 feet wide (consisting of 2 travel lanes and a parking lane). This width will reduce to approximately 30 feet, but will still contain 2 travel lanes and a parking lane.

East of this intersection, eastbound travel lanes on East 177th Street, will be striped as one 11 foot lane and one 15 foot lane. These travel lanes are 10 feet and 20 feet wide in existing conditions. The westbound approach on East 177th Street will increase lane width to three 11 foot wide lanes from the existing two 10 feet wide lanes and one 11 feet wide lane.

The signal timings will also be altered between the 2009 existing and 2022 No Action conditions. For this intersection there are three phases. Phase A consists of all eastbound movements and southbound right turns. Phase B consists of all eastbound and westbound movements. Phase C consists of all northbound and southbound movements. There are different signal timing plans for the AM, MD, and PM peak periods.

Table 5-2: East 177th Street at the Sheridan Expressway Signal Timing Changes - AM

		2009 Existing			2022 No Action			Change (No Action - Ex.)		
Phase	Movement	Green	Yellow	Red	Green	Yellow	Red	Green	Yellow	Red
A	EB Sheridan Expr Off-Ramp SB East 177th Street Rights Only	18	3	3	22	3	3	4	0	0
B	EB Sheridan Expr Off-Ramp WB East 177th Street	64	3	3	59	3	3	-5	0	0
C	NB Bus Depot Exit, SB East 177th Street	21	3	2	22	3	2	1	0	0

In the 2009 existing condition for the AM peak period, phase A has a green time of 18 seconds, a yellow time of 3 seconds, and an all red time of 3 seconds. Phase B has a green time of 64 seconds, a yellow time of 3 seconds and an all red time of 3 seconds. Phase C has a green time of 21 seconds, a yellow time of 3 seconds and an all red time of 2 seconds.

In the 2022 No Action condition for the AM peak period, phase A has a green time of 22 seconds, a yellow time of 3 seconds, and an all red time of 3 seconds. Phase B has a green time of 59 seconds, a yellow time of 3 seconds and an all red time of 3 seconds. Phase C has a green time of 22 seconds, a yellow time of 3 seconds and an all red time of 2 seconds.

Table 5-3: East 177th Street at the Sheridan Expressway Signal Timing Changes - Midday

Phase	Movement	2009 Existing			2022 No Action			Change (No Action - Ex.)		
		Green	Yellow	Red	Green	Yellow	Red	Green	Yellow	Red
A	EB Sheridan Expr Off-Ramp SB East 177th Street Rights Only	26	3	3	26	3	3	0	0	0
B	EB Sheridan Expr Off-Ramp WB East 177th Street	56	3	3	55	3	3	-1	0	0
C	NB Bus Depot Exit, SB East 177th Street	21	3	2	22	3	2	1	0	0

In the 2009 existing condition for the MD peak period, phase A has a green time of 26 seconds, a yellow time of 3 seconds, and an all red time of 3 seconds. Phase B has a green time of 56 seconds, a yellow time of 3 seconds and an all red time of 3 seconds. Phase C has a green time of 21 seconds, a yellow time of 3 seconds and an all red time of 2 seconds.

In the 2022 No Action condition for the MD peak period, phase A has a green time of 26 seconds, a yellow time of 3 seconds, and an all red time of 3 seconds. Phase B has a green time of 55 seconds, a yellow time of 3 seconds and an all red time of 3 seconds. Phase C has a green time of 22 seconds, a yellow time of 3 seconds and an all red time of 2 seconds.

Table 5-4: East 177th Street at the Sheridan Expressway Signal Timing Changes - PM

Phase	Movement	2009 Existing			2022 No Action			Change (No Action - Ex.)		
		Green	Yellow	Red	Green	Yellow	Red	Green	Yellow	Red
A	EB Sheridan Expr Off-Ramp SB East 177th Street Rights Only	30	3	3	30	3	3	0	0	0
B	EB Sheridan Expr Off-Ramp WB East 177th Street	52	3	3	51	3	3	-1	0	0
C	NB Bus Depot Exit, SB East 177th Street	21	3	2	22	3	2	1	0	0

In the 2009 existing condition for the PM peak period, phase A has a green time of 30 seconds, a yellow time of 3 seconds, and an all red time of 3 seconds. Phase B has a green time of 52 seconds, a yellow time of 3 seconds and an all red time of 3 seconds. Phase C has a green time of 21 seconds, a yellow time of 3 seconds and an all red time of 2 seconds.

In the 2022 No Action condition for the PM peak period, phase A has a green time of 30 seconds, a yellow time of 3 seconds, and an all red time of 3 seconds. Phase B has a green time of 51 seconds, a yellow time of 3 seconds and an all red time of 3 seconds. Phase C has a green time of 22 seconds, a yellow time of 3 seconds and an all red time of 2 seconds.

West Farms Road, Boston Road at East Tremont Avenue

No changes will made to the northbound West Farms Road approach, northeast bound Boston Road approach, southbound Boston Road approach, or the eastbound East Tremont Avenue approach. However, numerous changes occur east of the intersection, along East Tremont Avenue.

The westbound approach on East Tremont Avenue is 43.5 feet wide in existing conditions. It has no lane markings and observations have yielded that three effective 14.5 foot wide lanes are utilized. In the future No Action condition, a 10 foot wide westbound bus lane and a 5 foot wide westbound bike lane will be created. Two travel lanes will be available to general traffic and they will each be 11 feet wide. The reduction in number of lanes in this intersection greatly contributes to drastically increased delays on this approach between the 2009 existing and 2022 No Action scenarios. The westbound delay increases from 75.9 seconds to 387.4 seconds, 52.4 seconds to 262.6 seconds and 58.9 seconds to 310.3 seconds in the AM, MD, and PM peak periods, respectively.

The eastbound travel direction on the east side of East Tremont Avenue (between West Farms Road and East 177th Street) is currently 32 feet wide. It also has no markings and operates with two 16 foot receiving lanes of traffic. In the future No Action condition, a 10 foot wide eastbound bus lane and a 5 foot wide eastbound bike lane will be created. Two travel lanes will be available to general traffic and they will each be 11 feet wide.

East 177th Street, Devoe Avenue at East Tremont Avenue

East 177th Street at East Tremont Avenue will have the most significant changes of the three intersections being redone. Currently, there are three approaches to the intersection; eastbound on East Tremont Avenue, westbound on East Tremont Avenue, and northbound on East 177th Street. The existing southbound movements are simply an exit from a car wash, and not a street approach. In the future, reconstruction of this intersection will incorporate the intersection of Devoe Avenue at East Tremont Avenue which lies directly to the east of East 177th Street. In the future No Action condition, there will be four approaches to the intersection; eastbound on East Tremont Avenue, westbound on East Tremont Avenue, northbound on East 177th Street, and southbound on Devoe Avenue.

In order to account for this combination of two intersections, existing movements were studied and reassigned to the network under the assumption of one intersection.

Northbound East 177th Street currently has two 12 foot lanes of travel and Devoe Avenue has one lane in the northbound direction. These two approaches will be combined to make one northbound approach with two lanes, one 12 foot wide left turn only lane and one 11 foot wide lane allowing through movements and right turns. The southbound approach on Devoe Avenue will have one 11 foot lane with will allow through movements and left turns and one 11 foot lane that will allow through movements and left turns. This differs from the existing turn regulations where southbound trips have no movement prohibitions.

The eastbound approach on East Tremont Avenue currently is 57 feet wide with three effective 16 foot wide through lanes and one channelized right turn lane. Under the proposed intersection reconstruction, the channelized right turn lane will remain and there will be two 11 foot through lanes with left turns permitted.

In existing conditions the westbound approach has 3 lanes that are each 11 feet wide. The intersection reconstruction proposes to drop this approach to two 11 foot wide lanes and an 8 foot wide bus stop.

The signal phases and timings will also change for this intersection. In the existing 2009 conditions, at all times, there are two signal phases. One phase allows all movements for eastbound and westbound traffic and has a green time of 74 seconds, a yellow time of 3 seconds and an all red time of 2.5 seconds. The other phase allows movements for northbound and southbound traffic and has a green time of 35 seconds, a yellow time of 3 seconds and an all red time of 2.5 seconds. In the 2022 No Action condition, there are one phasing and timing plan used for the AM peak hour and one phasing and timing plan used for the MD and PM peak hours.

In the AM peak hour there are 3 phases. Phase A will allow all northbound and southbound movements and has a green time of 38 seconds, a yellow time of 3 seconds, and an all red time of 2 seconds. Phase B will allow only westbound movements and has a green time of 27 seconds, a yellow time of 3 seconds, and an all red time of 2 seconds. Phase C will allow all eastbound and westbound movements and will have a green time of 40 seconds, a yellow time of 3 seconds, and an all red time of 2 seconds.

In the MD and PM peak hours there are 3 phases. Phase A will allow all northbound and southbound movements and has a green time of 39 seconds, a yellow time of 3 seconds, and an all red time of 2 seconds. Phase B will allow only westbound movements and has a green time of 26 seconds, a yellow time of 3 seconds, and an all red time of 2 seconds. Phase C will allow all eastbound and westbound movements and will have a green time of 40 seconds, a yellow time of 3 seconds, and an all red time of 2 seconds.

Updated NYC Signal Timings

Westchester Avenue at Sheridan Expressway Service Road and Whitlock Avenue

In an effort to continually improve signal timings, NYCDOT has updated the signal timing at Westchester Avenue at Sheridan Expressway Service Road and Whitlock Avenue. This change simplifies the signal timing at this intersection by making the fractional seconds in the existing signal timings whole seconds. This change was implemented March 1, 2010.

This intersection consists of three phases. Phase A allows all eastbound and westbound movements along Westchester Avenue. Phase B allows all southbound movements on the Sheridan Expressway Service Road. Phase C allows all westbound movements on Westchester Avenue.

Table 5-5: Westchester Avenue at Sheridan Expressway Service Road and Whitlock Avenue Signal Timing Changes

Phase	Movement	2009 Existing			2022 No Action			Change (No Action - Ex.)		
		Green	Yellow	Red	Green	Yellow	Red	Green	Yellow	Red
A	EB + WB Westchester Avenue	30.6	3.6	1.8	31	3	2	0.4	-0.6	0.2
B	SB Sheridan Express. Serv. Road	32.4	3.6	1.8	33	3	2	0.6	-0.6	0.2
C	WB Westchester Avenue	10.8	3.6	1.8	11	3	2	0.2	-0.6	0.2

In the existing 2009 condition at all times, phase A has 30.6 seconds of green time, 3.6 seconds of yellow time, and 1.8 seconds of all red time. Phase B has 32.4 seconds of green time, 3.6 seconds of yellow time, and 1.8 seconds of all red time. Phase C has 10.8 seconds of green time, 3.6 seconds of yellow time and 1.8 seconds of red time.

In the No Action 2022 condition at all times, phase A has 31 seconds of green time, 3 seconds of yellow time, and 2 seconds of all red time. Phase B has 33 seconds of green time, 3 seconds of yellow time, and 2 seconds of all red time. Phase C has 11 seconds of green time, 3 seconds of yellow time and 2 seconds of red time.

Westchester Avenue at Sheridan Expressway Service Road and Northbound Off-Ramp

In an effort to continually improve signal timings, NYCDOT has updated the signal timing at Westchester Avenue at Sheridan Expressway Service Road and Northbound Off-Ramp. This change simplifies the

signal timing at this intersection by making the fractional seconds in the existing signal timings whole seconds. This change was implemented April 29, 2010.

This intersection consists of three phases. Phase A allows all eastbound and westbound movements along Westchester Avenue. Phase B allows all eastbound movements on Westchester Avenue. Phase C allows all northbound movements on the Sheridan Expressway Northbound Off-ramp and all southbound movements on the Sheridan Expressway Service Road.

Table 5-6: Westchester Avenue at Sheridan Expressway Service Road and Sheridan Off-Ramp Signal Timing Changes

Phase	Movement	2009 Existing			2022 No Action			Change (No Action - Ex.)		
		Green	Yellow	Red	Green	Yellow	Red	Green	Yellow	Red
A	EB + WB Westchester Avenue	30.6	3.6	1.8	30	3	2	-0.6	-0.6	0.2
B	EB Westchester Avenue	12.6	3.6	1.8	13	3	2	0.4	-0.6	0.2
C	NB Sheridan Express. Off-Ramp SB Sheridan Express. Serv. Road	30.6	3.6	1.8	32	3	2	1.4	-0.6	0.2

In the existing 2009 condition at all times, phase A has 30.6 seconds of green time, 3.6 seconds of yellow time, and 1.8 seconds of all red time. Phase B has 12.6 seconds of green time, 3.6 seconds of yellow time, and 1.8 seconds of all red time. Phase C has 30.6 seconds of green time, 3.6 seconds of yellow time and 1.8 seconds of red time.

In the No Action 2022 condition at all times, phase A has 30 seconds of green time, 3 seconds of yellow time, and 2 seconds of all red time. Phase B has 13 seconds of green time, 3 seconds of yellow time, and 2 seconds of all red time. Phase C has 32 seconds of green time, 3 seconds of yellow time and 2 seconds of red time.

West Farms Road at Home Street and Longfellow Avenue

In an effort to continually improve signal timings, NYCDOT has updated the signal timing at West Farms Road at Home Street and Longfellow Avenue. This change slightly increased the signal timing along Home Street which in existing conditions had the worst level of service out of any of the approaches. This change was received on December 7, 2010.

This intersection consists of three phases. Phase A allows all northeast-bound and southwest-bound movements along West Farms Road. Phase B allows all northbound movements on Longfellow Avenue. Phase C allows all northwest-bound movements on Home Street.

Table 5-7: West Farms Road at Longfellow Avenue and Home Street Signal Timing Changes

Phase	Movement	2009 Existing			2022 No Action			Change (No Action - Ex.)		
		Green	Yellow	Red	Green	Yellow	Red	Green	Yellow	Red
A	NE-Bound West Farms Road SW-Bound West Farms Road	45	3.6	1.8	44.6	3.6	1.8	-0.4	0	0
B	NB Longfellow Avenue	19.8	3.6	1.8	19.6	3.6	1.8	-0.2	0	0
C	NW-Bound Home Street	9	3.6	1.8	9.6	3.6	1.8	0.6	0	0

In the existing 2009 condition at all times, phase A has 45 seconds of green time, 3.6 seconds of yellow time, and 1.8 seconds of all red time. Phase B has 19.8 seconds of green time, 3.6 seconds of yellow time, and 1.8 seconds of all red time. Phase C has 9.0 seconds of green time, 3.6 seconds of yellow time and 1.8 seconds of red time.

In the No Action 2022 condition at all times, phase A has 44.6 seconds of green time, 3.6 seconds of yellow time, and 1.8 seconds of all red time. Phase B has 19.6 seconds of green time, 3.6 seconds of yellow time, and 1.8 seconds of all red time. Phase C has 9.6 seconds of green time, 3.6 seconds of yellow time and 1.8 seconds of red time.

West Farms Road at Freeman Street

In an effort to continually improve signal timings, NYCDOT has updated the signal timing at West Farms Road at Freeman Street and Longfellow Avenue. This change slightly increased the signal timing along Freeman Street which in existing conditions had the worst level of service out of any of the approaches. This change was received on December 7, 2010.

Table 5-8: West Farms Road at Freeman Street Signal Timing Changes

Phase	Movement	2009 Existing			2022 No Action			Change (No Action - Ex.)		
		Green	Yellow	Red	Green	Yellow	Red	Green	Yellow	Red
A	NB West Farms Road SB West Farms Road	54	2.7	1.8	53.5	2.7	1.8	-0.5	0	0
B	EB Freeman Street	27	2.7	1.8	27.5	2.7	1.8	0.5	0	0

Note: This table changed between the DEIS and FEIS because of No Action transportation environment changes

This intersection consists of two phases. Phase A allows all northbound and southbound movements along West Farms Road. Phase B allows all eastbound movements on Freeman Street

In the existing 2009 condition at all times, phase A has 54 seconds of green time, 2.7 seconds of yellow time, and 1.8 seconds of all red time. Phase B has 27 seconds of green time, 2.7 seconds of yellow time, and 1.8 seconds of all red time.

In the No Action 2022 condition at all times, phase A has 53.5 seconds of green time, 2.7 seconds of yellow time, and 1.8 seconds of all red time. Phase B has 27.5 seconds of green time, 2.7 seconds of yellow time, and 1.8 seconds of all red time.

NYCDOT Intersection Improvements

NYCDOT has conducted studies on two unsignalized intersections in the study area and determined that they warranted improvements. These intersections include:

- East 173rd Street at West Farms Road
- East 173rd Street at Boone Avenue

East 173rd Street at West Farms Road

East 173rd Street at West Farms Road is currently an unsignalized "T" intersection with West Farms Road acting as the two-way major street. East 173rd Street is also two-way but only has a westbound approach to the intersection which is stop controlled. After the Crotona Park Rezoning DEIS was issued, NYCDOT conducted a study on this intersection and has recommended the installation of a traffic signal independent of this project. In consultation with NYCDOT, this analysis assumes a signal installation at this intersection even though a final decision by NYCDOT's Bronx Borough Commissioner to install the signal is still pending (as of July 26th, 2011).

No signal timings were received from NYCDOT for this intersection. As a result, signal timings were created from similar intersections around the study area. For this intersection a 60 second cycle (a 60 second cycle was also used on East 173rd Street and Hoe Avenue) and two phases were used. Phase A allows all eastbound movements on East 173rd Street and all northbound and southbound movements on West Farms Road.

Phase A will have 18 seconds of green time, 3 seconds of yellow time, and 2 seconds of all red time. Phase B will have 32 seconds of green time, 3 seconds of yellow time, and 2 seconds of all red time.

East 173rd Street at Boone Avenue

In the existing conditions, Boone Avenue acted as the one-way major street running southbound while East 173rd Street was stopped controlled in its eastbound and westbound approaches. In August 2010, a study recommending this intersection become an all-way stop controlled intersection was approved. Although this all-way stop already exists, it was not implemented until after the 2009 existing year so for the purpose of analysis it is included as a No Action improvement.

Neighborhood Slow Zone Pilot Project

In addition, NYCDOT is studying the possible implementation of a Neighborhood Slow Zone Pilot Project . The Slow Zone project would use traffic calming measures to reduce speeds in the area to 20 mph and eliminate truck traffic. By reducing speed and eliminating through truck traffic, this would lead to safer streets, reduced traffic noise, reduced cut-through traffic and more social streets. While this program would be a first for New York City, results from other cities have shown 46% reduction in fatal and severe injury crashes and average speed reductions by 9 mph. The area designated for this pilot program would be marked by signed gateways, pavement markings and speed humps. Each of the gateways would exist along each roadway entering the speed zone project area Each gateway installed would eliminate two parking spaces due to signage (one on each side of the street). There are 14 locations in the study area that would require gateways, reducing the number of available parking spots by 28 spots. The area designated as the slow zone would be bounded by East 174th Street to the north, East 167th Street to south, Boone Avenue to the east and Southern Boulevard to the west.

Traffic conditions were evaluated at 20 intersections for the weekday AM, midday and PM period conditions. The analysis indicates that in the future with the Proposed Action, there would be the potential for significant adverse impacts at a total of 7 signalized intersections during one or more of the peak-hour periods analyzed, including 4 intersections during the weekday AM peak hour, 6 intersections

during the weekday midday peak hour, and 5 intersections during the weekday PM peak hour, at one or more lane-groups or approaches.

Although the No-Action Alternative would result in fewer trips than the Proposed Action, overall traffic volumes in the study area would increase as a result of the background growth and the traffic generated by specific development projects in the traffic study area that would be completed by 2022. A background growth rate of 0.25 percent was used between 2009 and 2014, and the a rate of 0.125 percent was used for the remaining eight years between 2014 and 2022, giving a total of 2.27 percent growth over 2009 existing conditions.. Scheduled projects in the study area would add approximately 1,512 dwelling units, 135,149 sf of retail space and 173,106 sf of community facility space. The increased traffic levels under the No-Action Alternative would result in congested service conditions at a number of intersections in the study area. Of the 7 signalized intersections that would experience a significant adverse traffic impact with the Proposed Action, all 7 would operate with notable service constraints (with one or more approaches operating at above mid-level of service (LOS) D) during one or more peak hours with the No-Action Alternative. A summary of the movements experiencing above mid-LOS -D or worse is shown below in Table 5-9 and Table 5-10.

Table 5-9: Number of Approach Movements with Substandard Level of Service in No-Action Conditions

	Analysis Hour		
Level of Service	**AM**	**MD**	**PM**
LOS D with v/c ≥ 0.90	1	0	1
LOS E	3	3	2
LOS F	11	8	9

Note: This table changed between the DEIS and FEIS because of No Action transportation environment changes

Table 5-10: Number of Approach Movements with Substandard Level of Service in No-Action Conditions

Int#	Intersection Name	Direction	Lane Group	Peak Periods with Substandard Level of Service		
				AM	MD	PM
1	East Tremont Ave at East 177th Street	Overall				
		Eastbound	LT			
		Westbound	DefL			
			TR			
		Northbound	L	AM	MD	PM
			LTR		MD	
		Southbound	LTR			
2	West Farms Road at Boston Rd, East Tremont Ave (1)	Overall		AM	MD	PM
		Eastbound	LTR			
		Westbound	LTR	AM	MD	PM
		Northbound	LTR	AM		PM
		NE-Bound	T	AM	MD	PM
		Southbound	Def L	AM	MD	PM
			TR	AM		PM
4	East 177th Street at Sheridan Expressway	Overall		AM		
		Eastbound	L	AM	MD	
			T			
		Westbound	R	AM		
			T			
		Northbound	LTR		MD	
		Southbound	LT	AM	MD	PM
			TR (4)			
6	Bronx River Ave at East 174th Street	Overall				
		Eastbound	LTR	AM	MD	PM
		Westbound	LT			PM
			R			
		Northbound	L			
			TR			
		Southbound	L			
			LTR			
7	Boone Ave at East 174th Street	Overall				
		Eastbound	TR			
		Westbound	Def L	AM		
			LT			
		Southbound	LTR			
8	Longfellow Ave at East 174th Street	Overall				
		Eastbound	LT			
		Westbound	TR			
		Northbound	LTR	AM	MD	PM
17	Westchester Ave at Sheridan Expressway Service Road, Whitlock Avenue	Overall				
		Eastbound	TR			
		Westbound	LT	AM		
		Southbound	LTR			
18	West Farms Road at Home Street, Longfellow Ave (2)	Overall		AM		PM
		NW-Bound	LTR	AM	MD	PM
		Northbound	LTR			PM
		NE-Bound	LT			
		SW-Bound	RT			
20	Westchester Ave at Sheridan Expressway Service Road and Northbound Off-Ramp	Overall				
		Eastbound	DefL			
			LT			
		Westbound	T	AM		
		Northbound	LTR			
		Southbound	LR			

Notes: (1) Boston Road approaches the intersection in the northeast bound and southbound direction. East Tremont Avenue approaches the intersection in the eastbound and westbound direction. West Farms Road approaches the intersection in the northbound direction

(2) Home Street approaches the intersection ins the northwest bound direction. Longfellow Avenue approaches the intersection in the northbound direction. West Farms Road approaches the intersection in the northeast bound and southwest bound directions.

Note: This table changed between the DEIS and FEIS because of No Action transportation environment changes

Parking

In the No-Action Alternative, new parking demand would be generated by background growth and new anticipated development independent of the Proposed Action. This alternative would also include off-street parking at Site 9C per the underlying zoning regulations. Neither the Proposed Action nor the No-Action Alternative would result in any significant adverse impacts on parking.

Transit and Pedestrians

Under either the No-Action Alternative or the Proposed Action, all transit and pedestrian elements would operate at LOS C or better during all peak periods. Neither the No-Action Alternative nor the Proposed Action would result in significant transit or pedestrian impacts.

Air Quality

Neither the Proposed Action nor the No-Action Alternative would result in significant adverse mobile source air quality impacts from CO mobile sources. Although the number of heavy duty trucks would be higher under the No-Action Alternative as compared to the Proposed Action, the overall emissions profile of the No-Action Alternative would be less than that of the proposed project.

Unlike the Proposed Action, the No-Action Alternative would not result in new residential buildings with heating, ventilation, and air conditioning (HVAC) system emissions that could potentially cause significant adverse air quality impacts on other new residential buildings. (E) designations and restrictive declarations specifying requirements regarding fuel source and emissions stack location would be incorporated as part of the Proposed Action, and would prevent the occurrence of stationary source impacts. Neither the Proposed Action nor the No-Action Alternative would result in significant adverse stationary source air quality impacts.

Greenhouse Gas Emissions

Development under the No-Action Alternative would result in approximately 19,472 fewer metric tons of greenhouse gas (GHG) emissions annually from its operations and 9,621 fewer metric tons of GHG emissions annually from mobile sources, for an annual total of 29,094 fewer metric tons of GHG emissions as compared to the Proposed Action. That amount represents about 0.06 percent of the city's annual total of 49.3 million metric tons, and it would not actually represent a net increment in GHG emissions, since similar GHG emissions would occur if residential units and associated uses were to be constructed elsewhere, and could be higher if constructed with less energy efficiency, such as lower density residential development, further from employment and commercial uses, and/or with less immediate access to transit service. The No-Action Alternative and the Proposed Action would be consistent with New York City's GHG and climate change goals.

Noise

In terms of potential mobile source noise impacts, the No-Action Alternative would result in approximately the same noise levels as the Proposed Action; the difference in noise levels between this alternative and the Proposed Action would be barely perceptible in most instances (i.e., less than 3 dBA) (see Table 5-11). In one instance, at Boone Avenue and East 173rd Street, the No-Action Alternative would result in a perceptible noise increase over the Proposed Action during the midday period, due to the presence of trucks that would be eliminated under the Proposed Action development.

Table 5-11: Comparison of Noise Levels (dBA) under the No-Action Alternative and the Proposed Action

Intersection	Period	No Action		Proposed Action		Increment
		L_{eq}	L_{10}	L_{eq}	L_{10}	
Boone Ave. & E. 174th St.	AM	71.2	73.6	71	73.4	-0.2
	MID	75.1	72.6	75	72.5	-0.1
	PM	71.2	73.4	71.2	73.4	0
W. Farms Rd. & E. 174th St.	AM	72.8	75	72.7	74.9	-0.1
	MID	73.1	75	73.2	75.1	0.1
	PM	74.6	76.7	74.7	76.8	0.1
Boone Ave. & E. 173rd St.	AM	69.6	71.3	69.2	70.9	-0.4
	MID	66.4	67.6	63.3	64.5	-3.1
	PM	67.4	69.1	67.4	69.1	0
W. Farms Rd. & E. 173rd St.	AM	75.6	75.4	75.8	75.6	0.2
	MID	73.6	76.3	73.2	75.9	-0.4
	PM	72.6	74.7	72.4	74.5	-0.2
Boone Ave. & E. 172nd St.	AM	72.4	74.1	72.2	73.9	-0.2
	MID	68.7	70.9	68.4	70.6	-0.3
	PM	68.6	69.3	68.4	69.1	-2
W. Farms Rd. & E. 172nd St.	AM	74.5	76.3	74.6	76.4	0.1
	MID	74.6	76.1	74.4	75.9	-0.2
	PM	73.2	74.7	73.3	74.8	0.1
Boone Ave. & E. 176th St. Service Rd	AM	70.1	72.3	70.1	72.3	0
	MID	70.8	71.6	70.5	71.3	-0.3
	PM	67	69.6	66.3	68.9	-0.7
W. Farms Rd & Rodman Pl.	AM	68.5	71.7	68.7	71.9	0.2
	MID	68.8	71.8	68.7	71.7	-0.1
	PM	65.6	68.9	65.4	68.7	-0.2
W. Farms Rd. / Boston Rd.	AM	81.1	86.1	81.1	86.1	0
	MID	80.4	84.6	80.4	84.6	0
	PM	81.2	85.8	81.2	85.8	0
Boone Ave. / Whitlock Ave.	AM	70.4	73.3	70.4	73.3	0
	MID	71	73.7	71	73.7	0
	PM	70.8	74.4	70.8	74.4	0
W. Farms Sq. / E. Tremont Ave. station NB platform	AM	76.1	78.1	76.1	78.1	0
	MD	76.1	78.7	76.1	78.7	0
	PM	74.3	78	74.3	78	0
Longfellow Ave. / Cr. Bronx Expwy.	AM	76.2	78.1	76.3	78.2	0.1
	MID	74.9	75.8	74.9	75.8	0
	PM	69.3	72	69.3	72	0
West Farms Rd. / Cr. Bronx Expwy	AM	70.8	73.2	70.9	73.3	0.1
	MID	70.8	73.3	70.8	73.3	0
	PM	69.4	72.2	69.4	72.2	0

The northernmost block of the proposed rezoning area is adjacent to an elevated subway trestle above Boston Road. Because of this, the noise levels at Projected Development Site 9C and Potential Development Sites 9A and 9B would be in the Clearly Unacceptable category of the DEP Noise Exposure Guidelines. Site 9C would be redeveloped under either the Proposed Action or the No-Action Alternative, but with a larger number of residential units under the Proposed Action. Under guidelines in the *CEQR Technical Manual*, the development of new residential units at locations subject to these Clearly Unacceptable noise levels would ordinarily constitute a significant adverse impact because indoor noise levels could exceed the maximum acceptable level of 45 dBA. However, the Proposed Action would include the placement of (E) designations on Sites 9A (Block 3016, Lots 33 and 35), 9B (Block 3016, Lots 36 and 37), and 9C (Block 3016, Lots 38 and 42) that would require (1) specified levels of window-wall noise attenuation and (2) air conditioning or other alternative means of ventilation so that residents

can maintain a closed window condition at all times of the year. The specified attenuation levels would be at least 42 dBA on the affected lower floors of the buildings. That level of exterior-to-interior noise attenuation would ensure that indoor noise levels would be below 45 dBA, avoiding the potential significant adverse noise impact. Under the No-Action Alternative, approximately 140 housing units would be built at Site 9C, exposed to noise levels in the Clearly Unacceptable category, with no requirement for minimum window/wall noise attenuation or alternate source of ventilation. The No-Action Alternative would therefore result in a potential significant adverse noise impact that would be avoided under the Proposed Action.

Other projected and potential development sites would be subject to noise levels in the marginally unacceptable categories because of highway and other traffic noise. The No-Action Alternative would not introduce new noise-sensitive uses at any of these locations, but the RWCDS projects residential and commercial redevelopment of the projected development sites. If an action would introduce noise-sensitive uses at a location where the noise levels would exceed the marginally acceptable levels, the *CEQR Technical Manual* specifies that a significant impact would occur unless the building design provides a composite building attenuation that would be sufficient to reduce these levels to an acceptable interior noise level. The Proposed Action would include the placement of (E) designations on non-applicant-controlled projected and potential development sites and the recording of restrictive declarations for Proposed Project sites. The provisions of both the (E) designations and the restrictive declarations would mandate the required OITC rating levels to ensure that interior noise levels would be at 45 dBA or less for residential uses and 50 dBA or less for commercial uses. Where the projected L_{10} noise levels would be 70 dBA or more, the (E) designation and restrictive declaration provisions also would require alternate means of ventilation to permit a closed-window condition during warm weather. Although the projected noise levels would be high enough to result in significant adverse noise impacts, the potential impacts would be avoided through the placement of the (E) designations and recording of the restrictive declarations, so that neither the Proposed Action nor the No-Action Alternative would have a significant adverse noise impact as a result of introducing residential development at locations south of Sites 9A, 9B, and 9C that are characterized by high ambient noise levels.

Unlike the Proposed Action, the No-Action Alternative would not introduce both an outdoor children's playground (a new stationary noise source) and wings of a residential building (new sensitive noise receptors) along the southern part of the Boone Avenue frontage between East 172nd and 173rd Streets, on Site 2S. Under guidelines in the *CEQR Technical Manual,* noise from the playground would constitute a potential significant adverse impact to the residential windows that would face the playground. However, the restrictive declaration associated with the LSGD would require specified levels of window/wall noise attenuation on the affected lower floors of the two building wings, avoiding the potential impact. Therefore, neither the Proposed Action nor the alternative would result in a significant adverse noise impact as a result of introducing a new stationary source of noise.

Public Health

The potential for the Proposed Action to cause a significant adverse impact regarding water quality, hazardous materials, air quality, and noise is discussed in Chapters 2.H, Natural Resources; 2.I, Hazardous Materials; 2.N, Air Quality; 2.P, Noise; and Chapter 2.S, Construction Impacts respectively. No significant unmitigated impact has been identified for natural resources, hazardous materials, operational or construction period air quality, or operational noise. Chapter 2.S identifies a significant construction noise impact, but the impact would be too limited in extent and duration to constitute a significant adverse public health impact. Neither the Proposed Action nor the No-Action Alternative would cause a significant adverse public health impact.

Neighborhood Character

According to the *CEQR Technical Manual*, the Proposed Action could have a significant adverse neighborhood character impact if it would have the potential to affect the defining features of the neighborhood, either through the potential for a significant adverse impact in any relevant technical area or through a combination of moderate effects in those technical areas. The Proposed Action would not cause significant adverse impacts regarding land use, zoning, and public policy; socioeconomic conditions; shadows; or urban design and visual resources. The significant adverse impacts to open space, historic and cultural resources, and transportation would not affect any defining feature of neighborhood character, nor would a combination of moderately adverse effects affect such a defining feature. Neither the Proposed Action nor the No-Action Alternative would have a significant adverse neighborhood character impact.

Construction

Unlike the Proposed Action, the No-Action Alternative, with the exception of Parcel 9C at the north end of the project, would not result in significant construction activities. Hence, construction under the No-Action Alternative would be smaller in scale and shorter in duration than the Proposed Action, and the potential significant adverse construction era traffic and noise impacts under the Proposed Action would not occur under the alternative. As is discussed in Chapter 2.S, Construction Impacts, significant adverse non-peak-period traffic impacts would occur at two intersections during the AM construction peak (East 174th Street at Longfellow Avenue; West Farms Road at Home Street) and four intersections during the PM construction peak (East Tremont Avenue at East 177th Street, Devoe Avenue; East Tremont Road at Boston Road, West Farms Road; East 177th Street at the Sheridan Expressway; East 174th Street at Bronx River Avenue. The mitigation measures formulated to address the traffic impacts resulting from occupancy of the completed development would fully mitigate the construction traffic impacts at four of the intersections, but at the two intersections where unmitigated operational traffic impacts would occur (East 177th Street at the Sheridan Expressway and East Tremont Avenue and Boston Road at West Farms Road), the significant adverse construction traffic impacts would be unmitigated. The No-Action Alternative would avoid the unmitigated significant adverse construction traffic impacts.Although no long-term construction noise impacts are expected to occur as a result of the Proposed Action, very high short-term increases in construction noise (e.g., a cumulative L_{eq} noise level of 85 dBA or more or an increment of 15 dBA or more) would occur, affecting the rear facade of an existing six-story residential building fronting on the east side of Longfellow Avenue between East 173rd and East 174th Streets. The Proposed Action would thus cause an unmitigated significant adverse construction noise impact, which would not occur under the No-Action Alternative.

THE NO-IMPACT ALTERNATIVE

Description

This alternative examines a scenario in which the density and program design of the Proposed Action is changed specifically to avoid the significant adverse impacts associated with the Proposed Action. The Proposed Action would result in significant adverse impacts requiring mitigation if feasible (identified in Chapters 2.C, 2.D, 2.F, 2.M, and 2.S) related to public elementary schools, open space, archaeological resources, traffic, construction traffic and construction noise.

The assessment focuses only on those technical analyses (regarding elementary schools, open space, archaeological resources, traffic, and construction) for which significant adverse impacts, or a potential for a significant adverse impact, have been identified. There are no summary comparative assessments for technical analyses for which no significant adverse impacts have been identified.

Comparison with the Proposed Action

The effects of the No-Impact Alternative in comparison to those of the Proposed Action are summarized below.

Elementary Schools

Chapter 2.C, Community Facilities and Services, analyzes elementary school enrollment, capacity, and utilization in CSD's Sub-district 2. Because of projected increases in elementary school enrollment and anticipated reductions in elementary level classroom space in CSD 12, the elementary schools in Sub-district 2 are expected to have a collective utilization rate of 122 percent under future baseline conditions. Development under the Proposed Action is expected to generate 1,028 elementary school students, which, without mitigation, would increase the utilization rates in the Sub-district 2 to 136.

According to the *CEQR Technical Manual*, a significant adverse impact may result if the Proposed Action would result in:

- A collective utilization rate within the sub-district study area of at least 105 percent; and
- An increase of 5 percent or more in the collective utilization rate between the future no-action and with-action conditions.

In the absence of mitigation, to avoid a significant adverse elementary school impact, the amount of residential development would have to be reduced sufficiently so that utilization rates would increase by less than 5 percent relative to future no-action conditions, which would require that elementary school enrollment in Sub-district 2 would increase by less than 5 percent of the anticipated school seat capacity. To avoid a significant impact in Sub-district 2, the new development would have to generate fewer than 356 new public elementary school students. Development would be limited to an increment of fewer than 913 housing units, compared with the 2,635 units anticipated under the Proposed Action. That would constitute a 65 percent reduction in the number of new housing units projected under the RWCDS.

Limiting development to this level would substantially reduce the opportunity to provide housing (including affordable housing), and would substantially compromise the Proposed Action's stated goals and overall economic viability. It would therefore not be a reasonable alternative to the Proposed Action.

Open Space

The Proposed Action would have an adverse indirect effect by adding population and thus increasing the demand for open space in the area. As is discussed in Chapter 2.D, Open Space, the overall open space ratios for the residential study area would decrease from 0.76 acres per thousand persons under no-action conditions to 0.71 acres per thousand persons as the result of the Proposed Action, a reduction of 7.0 percent. The active open space ratio in the residential study area would drop from 0.26 to 0.24 acres per thousand users, or a 7.4 percent drop. The passive open space ratio for combined residents and non-residents would drop from 0.50 to 0.47, a 6.8 percent drop. Given the size of the decreases in the active and passive open space ratios, the Proposed Action would result in a significant adverse open space impact in the residential study area.

A maximum of 377 new housing units could be developed in the proposed rezoning area without causing any of the open space ratios to decrease by more than 1 percent, which the *CEQR Technical Manual* cites as the threshold for a significant adverse impact in underserved areas, compared with the net increase of 2,635 units anticipated under the Proposed Action. That would constitute a 86 percent reduction in the number of new housing units projected under the RWCDS.

Limiting development to this level would substantially reduce the opportunity to provide housing (including affordable housing), and would substantially compromise the Proposed Action's stated goals and overall economic viability. It would therefore not be a reasonable alternative to the Proposed Action.

Archaeological Resources

As described in Chapter 2.F, Historic and Cultural Resources, four projected development sites not controlled by the project applicant have been deemed archaeologically sensitive. Two of the sites may contain human remains from a former cemetery, and two may contain former privies (shafts) in which artifacts may have subsequently been disposed. No mechanism (such as a restrictive declaration or (E) designation) is available to ensure that their redevelopment would not result in unavoidable adverse impacts to these archaeological resources.

The sites are dispersed throughout the rezoning area. Two of the sites are located on Block 3009 (Lots 38 and 44, the two southernmost lots on the west side of Boone Avenue on the blockfront between East 172nd and 173rd Streets). Although it would be possible to eliminate these lots from the rezoning area, the result would be a half-block manufacturing district that would be inconsistent with the zoning and uses proposed for the surrounding area. The other two sites are located at mid-block locations and would require the elimination of other lots from the rezoning area resulting in isolated pockets of manufacturing zoning: Block 3015, Lot 87 (a through lot fronting on Boone Avenue and West Farms Road on the block extending from East 174th Street to the Cross Bronx Expressway); and Block 3016, Lot 71 (a midblock parcel on the north side of Rodman Place between West Farms Road and Longfellow Avenue). The result would be a checkerboard of residential and industrial zoning devoid of any planning rationale. This is therefore not a feasible alternative.

Traffic

As discussed in Chapter 2.M, Transportation, in the absence of signal timing changes or other measures, the Proposed Action would result in significant adverse impacts at seven study area intersections during one or more analyzed peak hours (weekday AM, weekday midday, and weekday PM), with significant adverse impacts at four intersections during the AM peak hour, six intersections during the midday peak hour, and five intersections during the PM peak hour. The intersections, listed by peak hour, are as follows:

AM Peak Period:

- East Tremont Avenue at Boston Road and West Farms Road
- East 177th Street at the Sheridan Expressway On/Off-Ramp
- East 174th Street at Bronx River Avenue
- East 174th Street at Boone Avenue

MD Peak Period:

- East Tremont Avenue at East 177th Street and Devoe Avenue
- East Tremont Avenue at Boston Road and West Farms Road
- East 177th Street at the Sheridan Expressway On/Off-Ramp
- East 174th Street at Bronx River Avenue
- East 174th Street at Longfellow Avenue

- West Farms Road at Home Street and Longfellow Avenue

PM Peak Period:

- East Tremont Avenue at East 177th Street and Devoe Avenue
- East Tremont Avenue at Boston Road and West Farms Road
- East 177th Street at the Sheridan Expressway On/Off-Ramp
- East 174th Street at Longfellow Avenue
- West Farms Road at Home Street and Longfellow Avenue

Analysis was performed to determine the reduction in traffic volumes generated by the Proposed Action that would be needed to avoid significant adverse impacts at these intersections. An eighty-eight (88) percent reduction in the development level as a whole would be needed to avoid significant adverse impacts within the traffic study area. As the result, any more than 12 percent of the traffic generated under the Proposed Action would trigger a significant adverse traffic impact. Twelve percent of the RWCDS translates into 317 dwelling units, 11,160 square feet of commercial space, and 1,440 square feet of child care space. Limiting development to this level would substantially reduce the opportunity to provide housing (including affordable housing), and would substantially compromise the Proposed Action's stated goals and overall economic viability. It would therefore not be a reasonable alternative to the Proposed Action.

Construction Impacts

As is discussed in Chapter 2.S, Construction Impacts, significant adverse construction-peak-period traffic impacts would potentially occur at two intersections during the AM construction peak (East 174th Street at Longfellow Avenue; West Farms Road at Home Street) and four intersections during the PM construction peak (East Tremont Avenue at East 177th Street, Devoe Avenue; East Tremont Road at Boston Road, West Farms Road; East 177th Street at the Sheridan Expressway; East 174th Street at Bronx River Avenue) . Although no long-term construction noise impacts are expected to occur as a result of the Proposed Action, very high short-term increases in construction noise (e.g., cumulative L_{eq} noise levels of 85 dBA or more or noise level increases of 15 dBA or more) would occur, affecting the rear facade of an existing six-story residential building fronting on the east side of Longfellow Avenue between East 173rd and East 174th Streets.

To avoid the significant adverse construction period traffic impacts, the overall level of construction activity within the rezoning area would have to be reduced considerably, with a consequent reduction in development levels. To avoid the significant adverse construction noise impacts, all or part of the west side of Boone Avenue between East 173rd and 174th Streets (Block 3010, Lots 26, 29, 33, 40, and 46) would have to be excluded from the rezoning.

Limiting development in this manner would substantially reduce the opportunity to provide housing (including affordable housing), and would substantially compromise the Proposed Action's stated goals and overall economic viability. Excluding the Boone Avenue frontage of Block 3010 would also leave a single block of industrial zoning surrounded by residential development and residential development. This would therefore not be a reasonable alternative to the Proposed Action.

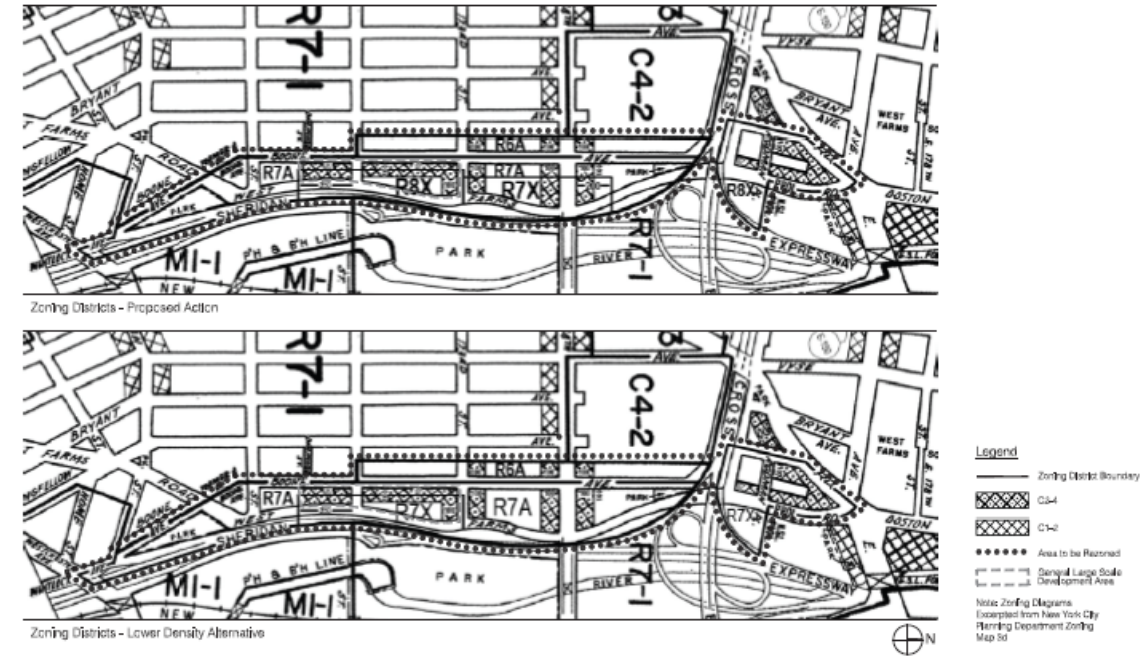
THE LESSER DENSITY ALTERNATIVE

Description

Public Actions

Under the Lesser Density Alternative, as under the Proposed Action, the M1-1 districts within the proposed rezoning area would be remapped as residential districts, and the existing R7-1 district at the northern end would be upzoned. The proposed R6A and R7A districts along Boone Avenue would be mapped at those locations, but the R7A district would be extended westward to West Farms Road to replace the proposed R7X district north of 173rd Street, and R7X districts would replace the proposed R8X districts north of the Cross Bronx Expressway and along West Farms Road south of 173rd Street. The differences between the zoning map under the Proposed Action and that under this alternative are shown in Figure 5-1. As under the Proposed Action, this alternative would include designation of all or part of two adjacent blocks as a Large-Scale General Development (LSGD), various special permits for the LSGD site, and zoning text amendments.

Figure 5-1: Proposed Action and Lower Density Alternative Zoning



CROTONA PARK EAST / WEST FARMS ZONING MAP AMENDMENT
Bronx, New York

Development Program

The Lesser Density Alternative would result in the same mix of uses as the Proposed Action, and there would be no difference in the number of projected development sites, the amount of new commercial space, or the size of the proposed childcare center. The Lesser Density Alternative would result in an anticipated increment of 2,210 new housing units, however, rather than the 2,635 anticipated with the

Proposed Action: a reduction of 425 housing units, or 16 percent. The applicant's project, under this alternative, would include 1,012 housing units rather than the Proposed Project's 1,325, a 313-unit or 24 percent reduction; and 1,198 rather than 1,310 housing units would be anticipated on sites not controlled by the project applicant, a 112-unit or 9 percent reduction. The number of subsidized affordable housing units reserved for low and moderate income households would be reduced to 774 from 923, a 149-unit or 15 percent reduction; and the number of new market rate units would be 1,436 rather than 1,713, a 277-unit or 17 percent reduction. The total amount of anticipated new floor area developed under the Lesser Density Alternative would be 2,225,743 square feet rather than the 2,606,344 square feet anticipated with the Proposed Action, a 15 percent reduction of 381,201 square feet. Table 5-12 provides details about the differences between the two development programs.[2]

[2] For both the RWCDS and the alternative, the number of dwelling units was estimated by assuming an average of 1,000 gsf of residential floor area per unit, and assuming maximum build-out with the FAR available under the Inclusionary Housing Program. For non-applicant-controlled sites, the estimate of affordable housing units assumed the minimum needed to qualify for the maximum FAR under the Inclusionary Housing Program, which mandates that 20% of residential floor area be included in affordable units, which for this purpose was assumed to translate to 20% of the number of units. For the Proposed Project the estimate is based on the applicant's intention to seek funding to construct 50% of the units under affordable housing programs.

Table 5-12: Reasonable Worst Case Development Scenarios, Proposed Action vs. Lesser Density Alternative

				Proposed Action							Lower Density Alternative						
Site Information				Future Action Condition							Future Action Condition						
Parcel	Block	Lot		Proposed Zoning	Proposed FAR	Subsidized Units	Total Dwelling Units	Residential Floor Area	Commercial Floor Area	Community Facility	Proposed Zoning	Proposed FAR	Subsidized Units	Total Dwelling Units	Residential Floor Area	Commercial Floor Area	Community Facility
Applicant Controlled Properties (Projected Development)																	
		12	*	R7A	LSGD						R7A	LSGD					
		29	*	R7A/R8X	LSGD						R7A/R7X	LSGD					
		31	*	R7A/R8X	LSGD						R7A/R7X	LSGD					
		35	*	R7A	LSGD						R7A	LSGD					
		37	*	R7A	LSGD						R7A	LSGD					
1	3013	46	*	R7A	LSGD	119	237	229,933	6,000	0	R7A	LSGD	101	202	201,509	6,000	0
		9	*	R7A/R8X	LSGD						R7A/R7X	LSGD					
2B	3014	45	*	R8X	LSGD	144	288	281,191	4,426	0	R7X	LSGD	110	220	218,802	4,426	0
2A	3014	15	*	R7A/R8X	LSGD	185	370	355,390	8,067	11,888	R7A/R7X	LSGD	140	280	297,906	8,067	11,888
3B	3009	33	*	R6A	3.6	18	36	36,000	0		R6A	3.6	18	36	36000	0	
		11	*	R8X	7.2						R7X	5.0					
		13	*	R8X/C2-4	7.2						R7X/C2-4	5.0					
8	3016	21	*	R8X/C2-4	7.2	100	200	199,598	10,040	0	R7X/C2-4	5.0	70	139	138,610	10,040	0
		60	*	R8X/C2-4	7.2						R7X/C2-4	5.0					
9D	3016	66	*	R8X/C2-4	7.2	97	194	193,702	17,500	0	R7X/C2-4	5.0	68	135	134,515	17,500	0
Subtotal						663	1,325	1,295,814	46,033	11,888			506	1,012	1,027,342	46,033	11,888
Projected Development Parcels																	
3A	3009	25		R6A	3.6	14	72	72,000	0		R6A	3.6	14	72	72,000	0	
3D	3009	38		R6A	3.6	10	50	49,500	0		R6A	3.6	10	50	49,500	0	
3E	3009	44		R6A	3.6	9	45	45,000	0		R6A	3.6	9	45	45,000	0	
4A	3015	1		R7A	4.6	10	50	50,168	10,000		R7A	4.6	10	50	50,168	10,000	
		3		R7A	4.6	0	0				R7A	4.6	0	0			
4B	3015	5		R7A/R7X	4.8	18	92	91,915	0		R7A	4.6	18	90	90,316	0	
		17		R7A	4.6						R7A	4.6					
		18		R7A	4.6						R7A	4.6					
		29		R7A/R7X	5.0						R7A	4.6					
4C	3015	31		R7A/R7X	5.0	28	140	140,116	0		R7A	4.6	26	132	132,089	0	
5A	3010	26		R6A	3.6	0	0	0	5,000		R6A	3.6	0	0	0	5,000	
5B	3010	29		R6A	3.6	7	36	36,000	0		R6A	3.6	7	36	36,000	0	
5C	3010	33		R6A	3.6	13	63	63,090	0		R6A	3.6	13	63	63,090	0	
5D	3010	40		R6A	3.6	11	54	53,910	0		R6A	3.6	11	54	53,910	0	
5E	3010	46		R6A	3.6	5	27	27,000	10,000		R6A	3.6	5	27	27,000	10,000	

= Applicant owned, subject to Special Permit
= Applicant owned, not subject to Special Permit
= Non Applicant Projected Development Parcels
= Potential Development Parcels

Table 5-12: Reasonable Worse Case Development Scenarios, Proposed Action vs. Lesser Density Alternative *(cont'd)*

Proposed Action											Lower Density Alternative						
Site Information				Future Action Condition							Future Action Condition						
Parcel	Block	Lot		Proposed Zoning	Proposed FAR	Subsidized Units	Total Dwelling Units	Residential Floor Area	Commercial Floor Area	Community Facility	Proposed Zoning	Proposed FAR	Subsidized Units	Total Dwelling Units	Residential Floor Area	Commercial Floor Area	Community Facility
		50		R7A	4.6						R7A	4.6					
		56		R7A	4.6						R7A	4.6					
6A	3015	110		R7A/R7X	4.8	12	62	61,573	10,000		R7A	4.6	12	60	60,140	10,000	
		62		R7A	4.6						R7A	4.6					
		87		R7A	4.6						R7A	4.6					
6B	3015	89		R7A	4.6	11	57	56,773	0		R7A	4.6	11	57	56,773	0	
		67		R7A	4.6						R7A	4.6					
		83		R7A	4.6						R7A	4.6					
		84		R7A	4.6						R7A	4.6					
6C	3015	85		R7A	4.6	10	51	51,138	0		R7A	4.6	10	51	51,138	0	
6E	3015	95		R7A/R7X	4.8	11	56	56,060	0		R7A	4.6	11	54	54,289		
6G	3015	97		R7A/R7X	4.8	12	60	59,546	12,536		R7A	4.6	12	58	57,666	12,536	
7A	2998	97		R6A	3.6	7	37	36,522	0		R6A	3.6	7	37	36,522	0	
		104		R6A	3.6	0	0		0		R6A	3.6	0	0		0	
		113		R6A	3.6	0	0		0		R6A	3.6	0	0		0	
7B	2998	124		R6A	3.6	36	181	180,572	0		R6A	3.6	36	181	180,572	0	
		38		R8X/C2-4	7.2				0		R7X/C2-4	5.0				0	
9C	3016	42		R8X/C2-4	7.2	56	280	280,282	38,300		R7X/C2-4	5.0	39	195	194,640	38,300	
9E	3016	71		R8X	7.2	8	39	38,549	0	0	R7X	5.0	5	27	26,770	0	0
Subtotal						290	1,450	1,449,713	85,836	0			268	1,338	1,337,584	85,836	0
Projected Development Totals						952	2,775	2,745,527	131,869	11,888			774	2,350	2,364,926	131,869	11,888
No Action to Action Increment						913	2,635	2,606,344	92,941	11,888			774	2,210	2,225,743	92,941	11,888
Potential Development Sites																	
3C	3009	37		R6A	3.6	3	14	13,500	0		R6A	3.6	3	14	13,500	0	
4D	3015	19		R7A	4.6	12	61	60,761	13,209		R7A	4.6	12	61	60,761	13,209	
		25		R7X	5.0						R7A	4.6					
4E	3015	26		R7X	5.0	17	84	83,905	10,781		R7A	4.6	15	77	77,193	10,781	
4F	3015	34		R7A/R7X	4.8	26	131	131,276	0		R7A	4.6	25	127	127,130	0	
6D	3015	81		R7A	4.6	2	11	10,598	0		R7A	4.6	2	11	10,598	0	
6F	3015	96		R7A/R7X	4.8	9	44	44,080	0		R7A	4.6	9	43	42,688	0	
		33		R8X/C2-4	7.2						R7X/C2-4	5.0					
9A	3016	35		R8X/C2-4	7.2	7	37	37,404	5,195		R7X/C2-4	5.0	5	26	25,975	5,195	
		36		R8X/C2-4	7.2						R7X/C2-4	5.0					
9B	3016	37		R8X/C2-4	7.2	8	41	40,637	5,644		R7X/C2-4	5.0	6	28	28,220	5,644	

= Applicant owned, subject to Special Permit
= Applicant owned, not subject to Special Permit
= Non Applicant Projected Development Parcels
= Potential Development Parcels

Site Planning, Bulk, and Massing

The same lots are identified as projected development sites under the Proposed Action and the Lesser Density Alternative. For the sites under the project applicant's control, the site plans would be identical. Buildings would have the same footprints as under the Proposed Action, and development on the two sites covered by the LSGD would incorporate the same midblock passages, interior courtyards, and children's playground. On the sites not controlled by the applicant, the zoning envelope would regulate height and massing.

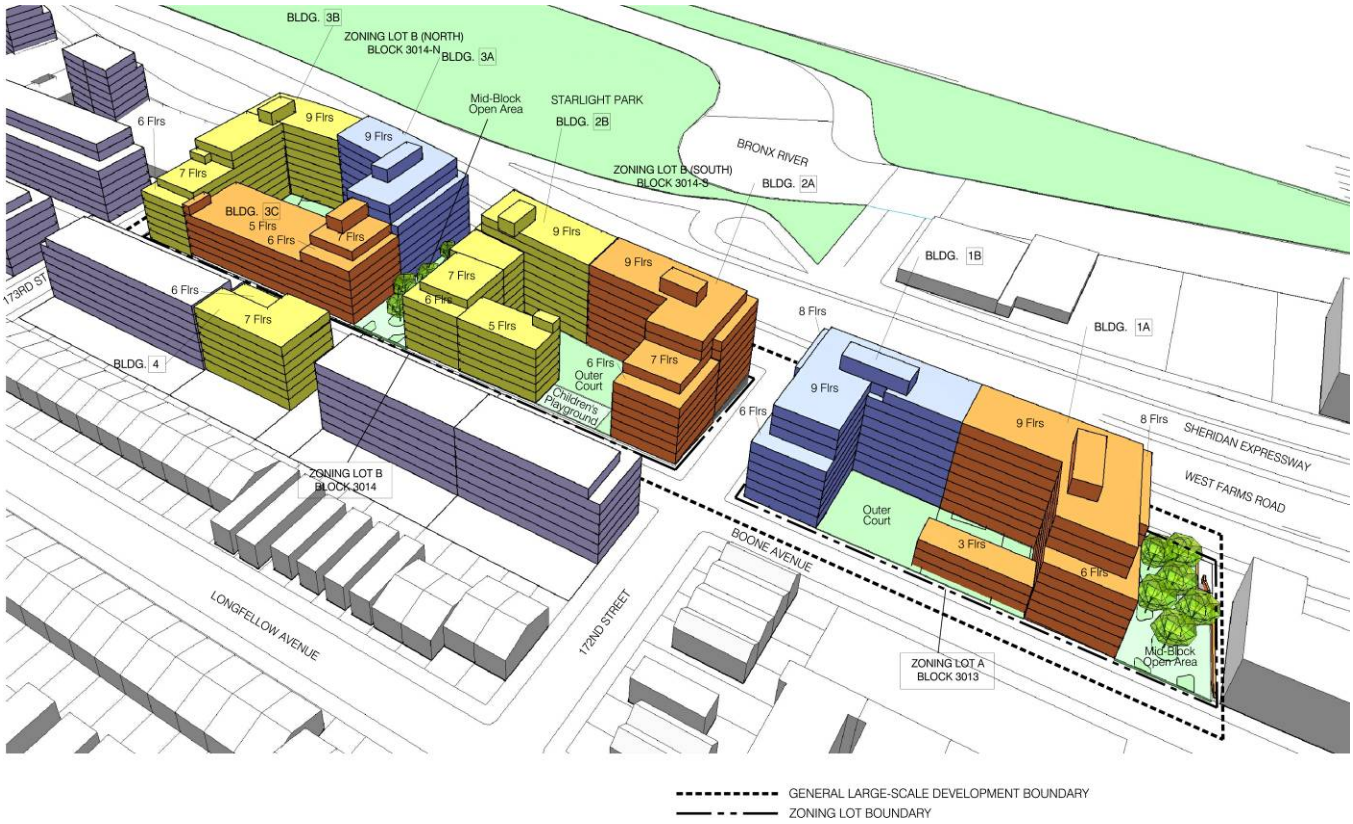
Conceptual massing plans have been prepared for the LSGD site – that is, the block bounded by West Farms Road, East 173rd Street, Boone Avenue, and East 172nd Street and the northern part of the block immediately to the south across East 172nd Street – under the Lesser Density Alternative (shown in Figure 5-2). The general massing scheme would be the same as under the Proposed Action. Also, building heights along Boone Avenue would be the same as under the Proposed Action, that is, three to seven stories. Building heights along the West Farms Road side of the blocks would be different, however. Under the Lesser Density Alternative, all three buildings would have consistent nine-story heights along the entirety of their West Farms Road frontages. In contrast, under the Proposed Action, the building to the south of 172nd Street would be partly nine and partly 15 stories tall along West Farms Road, the building on the north side of 172nd Street would be 12 stories tall at its southern end and 15 stories tall at its northern end with a nine-story-tall section in between, and the building between the midblock passage and 173rd Street along West Farms Road would have portions that would be 14, 11, and 15 stories tall. The alternative would thus provide less height along West Farms Road but also less visual variety.

Figure 5-2: Massing of the Lesser Density Alternative Applicant Properties



Note: View From Southeast

Figure 5-2(cont): Massing of the Lesser Density Alternative Applicant Properties

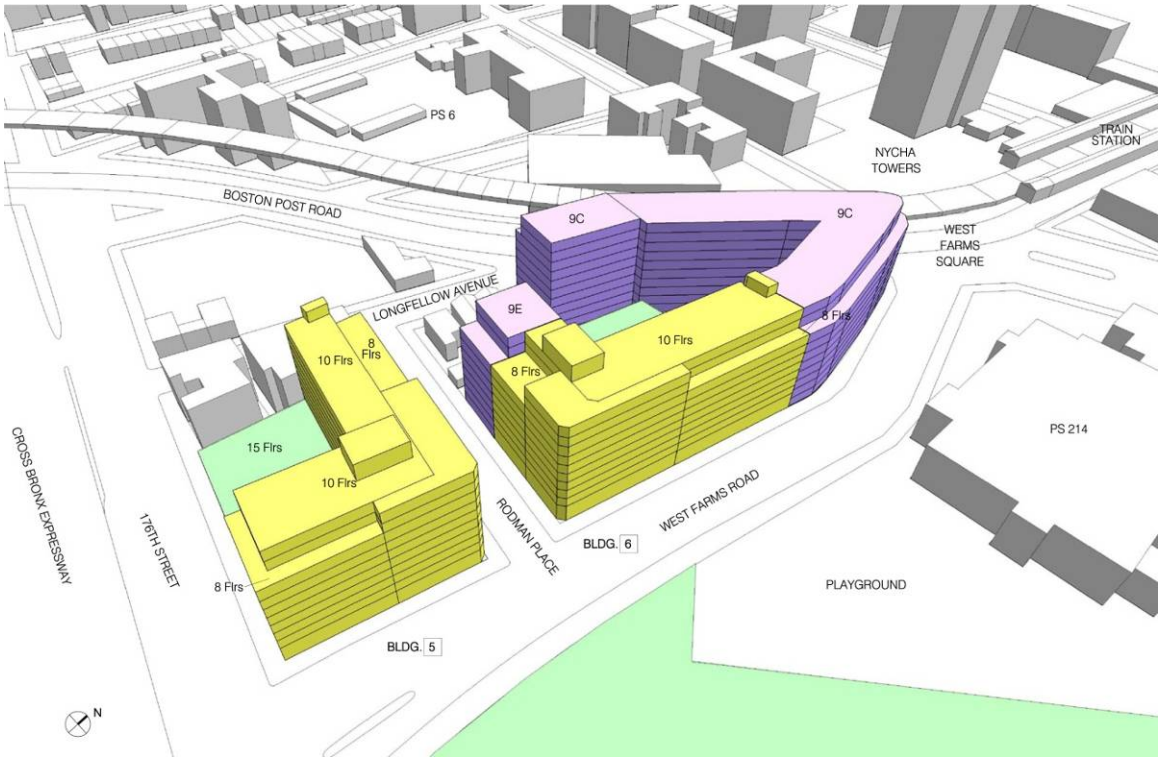


Note: View from Southwest

Elsewhere on the blocks south of the Cross Bronx Expressway, building height and massing is assumed to follow the permitted zoning envelopes. Along both sides of Boone Avenue, the zoning would be the same under the alternative and the Proposed Action. On the blocks west of Boone Avenue, therefore, building height and massing would be the same. On the block bounded by East 173rd Street, West Farms Road, East 174th Street, and Boone Avenue, three projected development sites have been identified. One would be located entirely in an R7A district under either the alternative or the Proposed Action. The other two would be split between R7A and R7X districts under the Proposed Action but would be entirely in an R7A district under the alternative. Along West Farms Road, the maximum permitted base height would be 65 feet under the alternative but 85 feet under the Proposed Action, and the maximum permitted building height would be 80 feet under the alternative rather than 125 feet. The Lesser Density Alternative would accommodate buildings of up to eight or nine stories facing West Farms Road, whereas the Proposed Action would accommodate buildings of up to 12 or 13 stories. On the block bounded by East 174th Street, West Farms Road, the Cross Bronx Expressway, and Boone Avenue, there are five projected development sites, three of which would be zoned R7A under either the alternative or the Proposed Action, and two of which would be zoned R7A under the Lesser Density Alternative but split between an R7A and an R7X district under the Proposed Action. At these two sites, the zoning envelope would accommodate buildings of up to eight or nine stories under the Lesser Density Alternative rather than 12 or 13 stories under the Proposed Action.

On the blocks north of the Cross Bronx Expressway, conceptual massing diagrams (shown in Figure 5-3) have been prepared for the two buildings that would be constructed on applicant-controlled parcels under the Lesser Density Alternative. Their footprints and general massing schemes would be the same as under the Proposed Action, but they would be 10 rather than 15 stories tall. Figure 5-3 also shows the buildings on the non-applicant-controlled sites on these blocks as nine stories tall, whereas buildings of up to 15 stories could be built under the Proposed Action.

Figure 5-3: Massing of the Lesser Density Alternative North of the Cross Bronx Expressway



Note: View from the east

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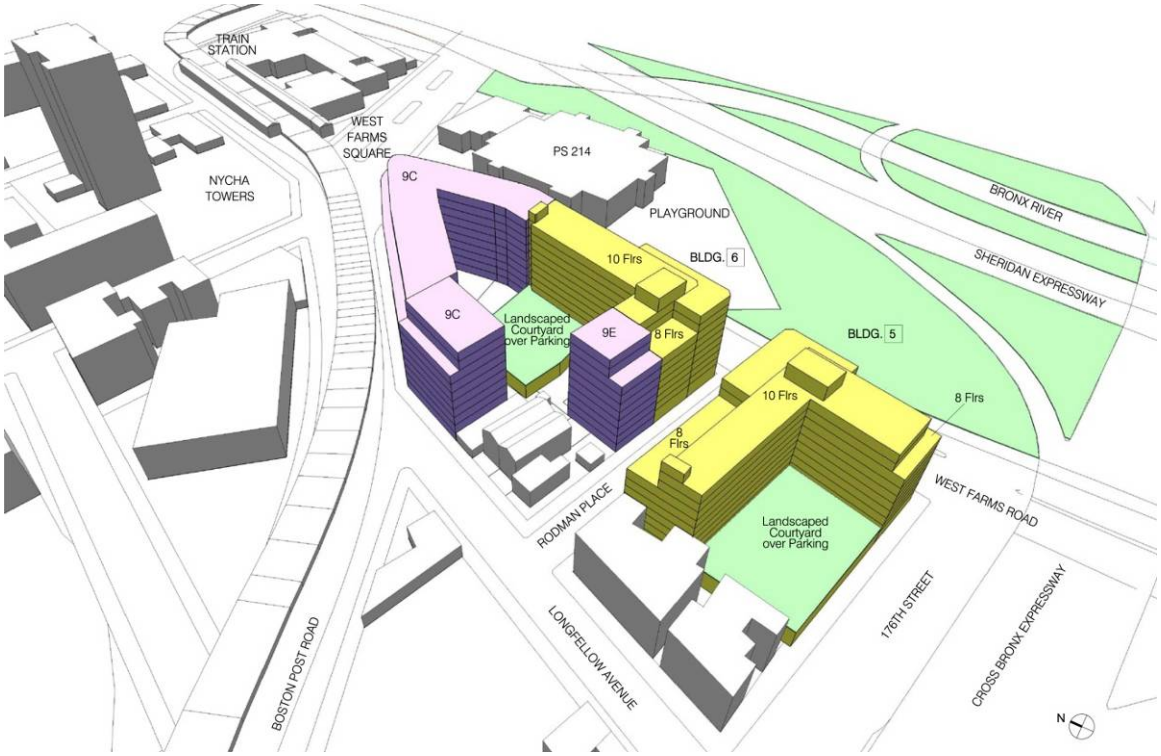

Note: View from the west

Circulation and Parking

Circulation patterns under the Lesser Density Alternative would be the same as under the Proposed Action, and building and garage entrances would be at the same locations. Because there would be approximately 425 fewer housing units under this alternative than under the Proposed Action, there would also be approximately 178 fewer accessory off-street parking spaces.

Comparison with the Proposed Action

The effects of the Lesser Density Alternative in comparison to those of the Proposed Action are summarized below.

Land Use, Zoning, and Public Policy

Neither the Proposed Action nor the Lesser Density Alternative would have a significant adverse impact on land use or zoning. The same parcels would be likely to be redeveloped under both, and the mix of uses would be the same. The only land use difference is that some of the new multifamily apartment buildings would contain fewer housing units, with an overall difference of 425 dwelling units. The Proposed Action and the Lesser Density Alternative would include similar zoning actions: zoning map amendments, designation of a Large-Scale General Development (LSGD), various special permits for the LSGD site, and zoning text amendments. The zoning map changes would cover the same area, with an equal amount of land changed from manufacturing to residential zoning. The only difference is that different residential zoning districts would be mapped in some locations.

Both the Lesser Density Alternative and the Proposed Action would be consistent with the 197-a plan that covers a portion of the proposed rezoning area, the Waterfront Revitalization Program (which covers only a small corner of the rezoning area), and PlaNYC's major sustainability initiatives. Both would promote the 197-a plan's objectives of increasing the area's population, diversifying the income mix, and encouraging residential zoning changes that would promote higher density residential development. The Lesser Density Alternative would produce less new housing overall and less new market rate housing than the Proposed Action, and would therefore make less progress in advancing the objectives of the 197-a plan.

Among the goals and objectives of the Proposed Action are to improve street presence and activity within the rezoning area, reinforce adjacent residential neighborhoods and provide new opportunities for redevelopment and economic growth. The extensive existing warehouse, industrial, institutional and open uses in the rezoning area inhibit pedestrian and other street activity, especially at night. The applicant believes that the greater density under the Proposed Action will be necessary, particularly for the early phases of the project, to generate street activity and a stronger sense of place, as well as to provide sufficient economic rationale to support the proposed retail uses and justify redevelopment costs.

Socioeconomic Conditions

Direct Residential Displacement

The Proposed Action and the Lesser Density Alternative would both be expected to directly displace the same six households with an estimated 17 residents. According to CEQR guidelines, a significant adverse direct residential displacement impact would not occur under either the Proposed Action or the Lesser Density Alternative.

Direct Business Displacement

The Proposed Action and the Lesser Density Alternative would both be expected to directly displace the same 26 businesses employing 274 workers. The businesses consist mainly of auto repair shops, warehouses, contractors, and other light industrial establishments. According to CEQR guidelines, a

significant adverse direct business displacement impact would not occur under either the Proposed Action or the Lesser Density Alternative, since the businesses facing displacement do not provide products or services essential to the local economy that would otherwise be unavailable and no public plans or policies call for the protection of automotive or light industrial enterprises in this part of the Bronx.

Indirect Residential Displacement

Neither the Proposed Action nor the Lesser Density Alternative would be expected to have a significant adverse indirect residential displacement impact. Under the Lesser Density Alternative approximately 2,210 new housing units would be constructed, rather than the 2,635 anticipated under the Proposed Action. In both cases the new population added by the development would exceed the *CEQR Technical Manual* threshold of 5 percent of the existing study area population, indicating that the development would be large enough to potentially substantially alter socioeconomic character and real estate conditions. Nevertheless, the analysis described in Chapter 2.B, Socioeconomic Conditions, concluded that less than 5 percent of the existing study area population is considered to be at risk of involuntary displacement as a result of changing real estate market conditions. Under the Lesser Density Alternative an estimated 139 fewer subsidized, permanently affordable housing units would be built for low and moderate income households.

Indirect Business Displacement

Neither the Proposed Action nor the Lesser Density Alternative would be expected to have a significant adverse indirect business displacement impact. Both would directly displace the same business establishments, alter the land use character of the proposed rezoning area, and introduce the same concentration of new commercial development. Neither would be expected to have a significant indirect business displacement impact because the businesses that would be displaced do not have strong linkages to the local economy and thus are not critical to the continued viability of other nearby businesses, because the land use changes would follow existing trends rather than initiate or accelerate such trends, and because the 93,000 square feet of anticipated new commercial floor area would be below the threshold for a retail market saturation impact.

Adverse Effects on Specific Industries

A significant adverse impact on a specific industry would generally occur only in the case of a regulatory change affecting the city as a whole or in the case of a local action that affects an area in which a substantial portion of that sector is concentrated, relative to the city as a whole. Neither the Proposed Action nor the Lesser Density Alternative would affect citywide policy or regulatory mechanisms, and the businesses in the proposed rezoning area are mainly small warehouses and automotive repair shops of the sort that are common throughout the city. Neither the Proposed Action nor the alternative would have a significant adverse impact on any of the city's economic sectors.

Community Facilities and Services

As in the case of the Proposed Action, the Lesser Density Alternative would not result in any significant adverse impacts to libraries, intermediate or high schools, child care services, health care facilities, and police and fire protection services.

Because of projected increases in elementary school enrollment and anticipated reductions in elementary level classroom space in CSD 12, the elementary schools in Sub-district 2 are expected to have a collective utilization rate of 122 percent under future baseline conditions. Development under the Proposed Action is expected to generate 1,028 elementary school students, and development under the Lesser Density Alternative would be expected to generate 862 elementary school students. Any action that would generate more than 356 elementary school students would have a significant adverse impact on elementary schools in Sub-district 2. (See Table 5-13 below.)

Table 5-13: 2022 Sub-district 2 Elementary School Enrollment, Capacity, and Utilization Data

Study Area	Future No-Action Enrollment	Students Generated by Action-Generated Development	Total Future Enrollment	Target Capacity	Available Seats	Utilization Rate
Lesser Density Alternative						
Sub-district 2	8,676	862	9,538	7,123	-2,415	133.9%
Proposed Action (RWCDS)						
Sub-district 2	8,676	1,028	9,704	7,123	-2,581	136.2%

Note: The values in this table have changed slightly in the FEIS because of the inclusion of future no-action enrollment from an additional projected study area development.

Without mitigation, both the Proposed Action and the Lesser Density Alternative would increase utilization rates in Sub-district 2, already over capacity under future baseline conditions, by more than 5 percent, causing a significant adverse impact under CEQR guidelines.

As discussed in Chapter 3, Mitigation, measures that could be undertaken under the Proposed Action that would fully mitigate the potential significant adverse impact on schools: the construction by the SCA of a new elementary school on a site provided by the applicant. To mitigate the Lesser Density Alternative the projected utilization would have to be lowered from 133.9 percent in Sub-district 2 to 126.7 percent, a reduction of 506 elementary schools seats. The mitigation measure presented in Chapter 3, the option for the SCA to acquire a site from the applicant for construction of a 540-seat elementary school, would be necessary to mitigate the significant adverse elementary school impact under either the Proposed Action or the Lesser Density Alternative. The applicant has stated that the reduction in density in the Lesser Density Alternative over the Proposed Action would inhibit the financial feasibility of providing a school on site. Therefore, the significant adverse impact to elementary schools, which would be fully mitigated under the Proposed Action, would remain unmitigated under the Lesser Density Alternative.

Open Space

Both the Proposed Action and the Lesser Density Alternative would result in a significant adverse open space impact. The Lesser Density Alternative would result in net increases of 1,271 fewer residents and 19 fewer workers than the Proposed Action, thus resulting in somewhat less demand for recreational open space. Both the Proposed Action and the alternative would increase the area's open space inventory by close to half an acre with a new children's playground and two landscaped open areas. For the non-residential study area addressed in Chapter 2.D, Open Space, the ratio of passive open space acreage to thousand daytime users (workers and residents) would exceed the *CEQR Technical Manual* target of 0.15. For the larger residential study area, the ratios for passive and overall open space would all be minimally higher under the Lesser Density Alternative (0.47 and 0.71 respectively versus 0.47 and 0.71 with the Proposed Action). The Lesser Density Alternative would cause declines in those ratios of 5.6 percent and 5.8 percent respectively relative to no-action conditions, compared with declines of 6.8 percent and 7.0 percent as a result of the Proposed Action. The Lesser Density Alternative active open space ratio would be 0.24, which would be 6.3 percent lower than under no-action conditions, as compared to 7.4 percent lower under the Proposed Action. Since the *CEQR Technical Manual* specifies that any decrease greater than 5 percent constitutes a significant adverse impact, or as low as 1 percent in an underserved area such as this, the density reduction of the Lesser Density Alternative would not be great enough to avoid the significant adverse impact to open space. The significant adverse open space impact caused by the Lesser Density Alternative, like that caused by the Proposed Action, could not be fully mitigated.

Shadows

Neither the Proposed Action nor the Lesser Density Alternative would result in a significant adverse shadows impact. Despite extensive resulting redevelopment, the Proposed Action would not result in significant new shadows being cast on any nearby open space during any of the CEQR seasonal analysis periods, with the exception of Boone Slope Park; however, Boone Slope Park, which measures 0.03 acres and is steeply sloped, is not publicly accessible, and there are no current plans for its improvement to make it publicly accessible. The pattern of redevelopment would be similar under the alternative, except that some building heights would be lower under this alternative. The same parcels are expected to be redeveloped, with buildings of similar or identical massing. The maximum building height would be 10 stories under the Lesser Density Alternative as opposed to 15 stories under the Proposed Action, with the height differences restricted to the three blocks bounded by West Farms Road, Jennings Street, Boone Avenue, and East 174th Street; the northwest corner of West Farms Road and East 174th Street; and the two blocks north of the Cross Bronx Expressway. The incremental shadow durations on park uses especially within Starlight Park would be less than in the Proposed Action Condition. However, the incremental shadow durations under either alternative would not constitute a significant adverse shadow impact. In the vicinity of Boone Slope Park, the zoning districts and thus allowable building heights and massing would be the same under the Proposed Action and the alternative, so both would cast the same shadows on the mapped but unimproved park.

Historic and Cultural Resources

Architectural Resources

Neither the Proposed Action nor the Lesser Density Alternative would result in a significant adverse impact on architectural resources since no such resources have been identified within the proposed rezoning area or within 400 feet of its boundaries.

Archaeological Resources

Because the Proposed Action and the Lesser Density Alternative are expected to result in redevelopment of the same lots with buildings having identical footprints, the potential impacts on archaeological resources would be the same under the Proposed Action and the alternative. Both would result in ground disturbance on 49 tax lots, of which 8 modern lots (15 lots historically) may contain potentially sensitive subsurface archaeological artifacts. Four of the modern lots (11 of the historical lots) are under the control of the project applicant; potential adverse impacts would be avoided at these locations because the applicant has agreed to enter into a restrictive declaration with the New York City Landmarks Preservation Commission to follow an approved testing protocol and to recover any artifacts that are found. The other four modern lots, two of which may contain human remains from a former cemetery and two of which may contain former privies (shafts) in which artifacts may have subsequently been disposed, are not under the applicant's control, and there is no mechanism available to ensure that their redevelopment, under either the Proposed Action or the Lesser Density Alternative, would not result in unavoidable adverse impacts to these archaeological resources.

Urban Design and Visual Resources

Urban Design

Neither the Proposed Action nor the Lesser Density Alternative would result in a significant adverse urban design impact. Both would lead to the removal of existing buildings and open storage areas that are inconsistent with the built form within the surrounding neighborhoods. Under both the Proposed Action and this alternative, residential street walls, with regular fenestration patterns and some ground floor storefronts, would create a streetscape that is more pleasing and conducive to pedestrian activity, and more consistent with the residential neighborhoods, than the existing array of blank walls, fences, and

truck bays. The same parcels are expected to be redeveloped under the Proposed Action and the Lesser Density Alternative, with buildings of similar or identical layout and massing. The maximum building height would be 10 stories under the Lesser Density Alternative as opposed to 15 stories under the Proposed Action, with the height differences restricted to the three blocks bounded by West Farms Road, Jennings Street, Boone Avenue, and East 174th Street; the northwest corner of West Farms Road and East 174th Street; and the two blocks north of the Cross Bronx Expressway. Under both the Proposed Action and the Lesser Density Alternative, the new buildings would be taller and larger than existing nearby residential development, except at the northern end of the proposed rezoning area, but the Crotona Park East and West Farms neighborhoods do not have homogeneous urban design features that would be undermined by the scale of the anticipated redevelopment.

Pedestrian Wind Conditions

Neither the Proposed Action nor the Lesser Density Alternative would result in a significant adverse wind impact. The proposed rezoning area is not subject to unusual wind conditions. It is not an exposed area on or near the waterfront, and it is not on high ground or on the upper portion of an exposed slope. Indeed, it is a low area at the base of a slope rising to the west, facing another ridge to the east on the other side of the Bronx River, and as such it is sheltered from high winds. None of the new buildings would be taller than 10 stories under the Lesser Density Alternative or 15 stories under the Proposed Action, and the contextual zoning regulations that would be put in place mandate street walls and high lot coverage. There would therefore not be freestanding towers that could cause pedestrian level vortex effects under either the Proposed Action or the alternative. Under both the Proposed Action and the Lesser Density Alternative, buildings would be oriented to the existing streets, and the only anticipated breaks in the street wall in the areas zoned for the largest buildings would be midblock passages that, at 60 feet in width, would be as broad as streets.

Visual Resources

Neither the Proposed Action nor the Lesser Density Alternative would result in a significant adverse impact to visual resources. Under both, the anticipated redevelopment would not obstruct existing views to or from the Bronx River or Starlight Park, which will be the area's principal visual resources in the 2022 analysis year (after Starlight Park is completed), and would not diminish any valuable aspects of their visual setting.

Natural Resources

The proposed rezoning area is substantially devoid of natural resources and contains no built resource that is known to contain or may be used as a habitat by a protected species. It is separated from the nearest important natural resources, the Bronx River and its adjacent wetlands, by a multilane, limited access highway and the drainage systems for the highway and West Farms Road. Neither the Proposed Action nor the Lesser Density Alternative would result in a significant adverse impact to natural resources.

Hazardous Materials

Because the Proposed Action and the Lesser Density Alternative are expected to result in redevelopment of the same lots with buildings having identical uses, the potential for opening new pathways for exposure to hazardous materials is the same under the Proposed Action and the alternative. The screening assessment summarized in Chapter 2.I, Hazardous Materials, concluded that all of the lots within the proposed rezoning area are potentially contaminated with hazardous materials. Under either the Proposed Action or the alternative, all of the 45 lots that would be rezoned and have been identified as projected or potential development sites but that are not under the applicant's control will receive (E) designations. The (E) designation would require that, prior to the issuance of construction-related permits for redevelopment, the property owner conduct a Phase I environmental site assessment in accordance with the American Society of Testing Materials (ASTM) E1527-05, prepare and implement a soil and

groundwater testing protocol, and perform such remediation activities as are deemed appropriate by DEP, to the satisfaction of DEP. For those lots under the applicant's control, DEP has reviewed the Phase I and Phase II reports that have been prepared to date and has determined that additional investigation and/or remediation will be required. For each lot under the applicant's control, a restrictive declaration will be recorded against the property, binding the applicant to perform all investigative or remedial activities required by DEP, in accordance with protocols devised by the agency, and to the agency's satisfaction, before submitting any permit applications to the New York City Department of Buildings. The placement of (E) designations on the 45 tax lots not controlled by the applicant and the recording of restrictive declarations against all of the 15 lots controlled by the applicant would ensure that no significant impacts related to hazardous materials would occur as a result of the Proposed Action or the Lesser Density Alternative.

Water and Sewer Infrastructure

Neither the Proposed Action nor the Lesser Density Alternative would result in any significant adverse impacts related to infrastructure in terms of water supply, sanitary sewage, or storm water runoff. Because it would result in the construction of an estimated 425 fewer housing units, the alternative would result in 0.13 million gallons per day (mgd) less water usage and less sanitary sewage flow than the Proposed Action (based on a multiplier of 295 gallons per day (gpd) per dwelling unit), but this difference would not be significant with regard to the city's water supply and delivery system, the sewer system, or the Hunts Point Water Pollution Control Plant. Because the Proposed Action and the Lesser Density Alternative are expected to result in redevelopment of the same lots with buildings having identical footprints and open areas with the same surfaces, storm water run-off would be the same for either alternative. However, owing to a decrease of 425 residential units, the Lesser Density Alternative would have less water demand and sanitary sewer flows. This would represent about a 10 percent reduction in water demand and sanitary flows. Neither the Lesser Density Alternative nor the Proposed Action would result in significant impacts to the CSO system in the area.

Solid Waste and Sanitation Services

The Proposed Action and the Lesser Density Alternative would result in similar development programs, with the only expected difference being that the alternative would result in 425 fewer housing units. The *CEQR Technical Manual* recommends a multiplier of 41 pounds of solid waste per week per household. Compared with the Proposed Action, the Lesser Density Alternative would generate 17,425 fewer pounds (8.7 fewer tons) per week of residential solid waste, which would be carted away by the Department of Sanitation (DSNY). The difference is substantially less than the approximately 15,500 tons per day of solid waste that is managed by DSNY. The higher volume projected under the Proposed Action, averaging approximately 11,470 pounds (5.7 tons) per day of solid waste, is below the 50 tons per week identified in the *CEQR Technical Manual* as a "substantial amount" of solid waste. Further, it would require fewer than four DSNY collection truck trips per week, compared to the nearly 5,000 collection truck trips made per day. Neither the Proposed Action nor the Lesser Density Alternative would have a significant adverse impact on the city's solid waste and sanitation services.

Energy

Neither the Proposed Action nor the Lesser Density Alternative would have a significant adverse impact on energy consumption. Under the Proposed Action the annual energy consumption of buildings and activities on the projected development sites would increase by an estimated 211.36 billion British thermal units (BTUs) over future baseline conditions. The Lesser Density Alternative would result in the same amount of commercial and community facility development as the Proposed Action but 519,784 square feet less of residential floor area. Based on the multiplier of 126,700 BTUs per square foot of residential space recommended by the *CEQR Technical Manual*, annual energy consumption would be

65.86 billion BTUs less than under the Proposed Action: 145.5 rather than 211.36 billion BTUs. Either amount would be insignificant in the context of the city's energy use as a whole.

Transportation

Neither the Proposed Action nor the Lesser Density Alternative would have a significant adverse impact on transit or pedestrian conditions or parking availability. There would be no substantial crowding at subway station stairways or turnstiles or along sidewalks or crosswalks. Neither the Proposed Action nor the alternative would add a significant number of new riders to any bus line. The number of available parking spaces would exceed the anticipated parking demand under either the Proposed Action or the alternative.

As discussed in Chapter 2.M, Transportation, in the absence of signal timing changes or other measures, the Proposed Action would result in significant adverse impacts at seven study area intersections during one or more analyzed peak hours (weekday AM, weekday midday, and weekday PM), with significant adverse impacts at four intersections during the AM, six in the midday peak hours and five intersections during the PM peak hour.

Fewer peak hour vehicular trips would be generated by the Lesser Density Alternative than by the Proposed Action. Tables 5-14 and 5-15 summarize the alternative's reduction in peak hour person trips by mode of transportation and the reduction in vehicular trips, respectively. As the tables show, the alternative would result in 80 fewer vehicular trips during the peak AM hour, 43 fewer vehicular trips during the midday peak hour, and 86 fewer vehicular trips during the peak PM hour. Because of the lower person and vehicular trip generation under the Lesser Density Alternative, the alternative would result in the same or fewer significant traffic impact locations as those identified for the Proposed Action

Table 5-14: Comparison of Person Trips Generated by the Proposed Project and the Lesser Density Alternative

Peak Hour	Project Alternatives	Mode						LDA% of PA
		Auto	Bus	Subway	Walk/Other	Taxi	Total	
Weekday AM	Lesser Density Alternative	313	394	689	125	64	1585	82%
	Proposed Action	421	466	829	147	76	1939	
	Net Difference (LDA-Proposed Project)	**-108**	**-72**	**-140**	**-22**	**-12**	**-354**	
Weekday MD	Lesser Density Alternative	156	510	470	62	154	1352	88%
	Proposed Action	200	554	542	74	162	1532	
	Net Difference (LDA-Proposed Project)	**-44**	**-44**	**-72**	**-12**	**-8**	**-180**	
Weekday PM	Lesser Density Alternative	423	574	848	137	128	2110	84%
	Proposed Action	541	663	1001	162	138	2505	
	Net Difference (LDA-Proposed Project)	**-118**	**-89**	**-153**	**-25**	**-10**	**-395**	

Table 5-15: Comparison of Vehicular Trips Generated by the Proposed Project and the Lesser Density Alternative

Peak Hour	Project Alternatives	Mode				LDA% of PA
		Auto	Taxi	Truck	Total	
Weekday AM	Lesser Density Alternative	174	48	-28	194	71%
	Proposed Action	242	56	-24	274	
	Net Difference (LDA-Proposed Project)	**-68**	**-8**	**-4**	**-80**	
Weekday MD	Lesser Density Alternative	61	132	-12	181	81%
	Proposed Action	96	138	-10	224	
	Net Difference (LDA-Proposed Project)	**-35**	**-6**	**-2**	**-43**	
Weekday PM	Lesser Density Alternative	248	104	-26	326	79%
	Proposed Action	326	112	-26	412	
	Net Difference (LDA-Proposed Project)	**-78**	**-8**	**0**	**-86**	

Table 5-16 summarizes the intersections and movements which would be experience significant adverse traffic impacts for the Proposed Action and the Lesser Density Alternative.

Table 5-16: Summary of Impacted Intersections under the Proposed Action And the Lesser Density Alternative

Intersection	AM	MD	PM	AM	MD	PM
East Tremont Ave at East 177th Street, Devoe Avenue		NB-L	NB-L		NB-L	NB-L
West Farms Rd at Boston Road, East Tremont Avenue	NB-LTR, NEB-LTR, SB-DefL	WB-LTR, NEB-LTR, SB-DefL	WB-LTR, NB-LTR, NEB-LTR, SB-TR**	NB-LTR, NEB-LTR, SB-DefL	WB-LTR, NEB-LTR, SB-DefL	WB-LTR, NEB-LTR, SB-TR**
East 177th Street at Sheridan Expressway	NB-LTR**, SB-LT**	EB-L**, NB-LTR**, SB-LT**	SB-LT **	NB-LTR**, SB-LT**	EB-L**, NB-LTR**, SB-LT**	SB-LT **
Bronx River Avenue at East 174th Street	EB-LTR	EB-LTR		EB-LTR	EB-LTR	
Boone Avenue at East 174th Street	SB-LTR			SB-LTR		
Longfellow Avenue at East 174th Street		NB-LTR	NB-LTR		NB-LTR	NB-LTR
West Farms Road at Home Street, Longfellow Avenue		NWB-LTR	NWB-LTR		NWB-LTR	NWB-LTR

Note: ** Proposed Mitigations that would successfully mitigate impacts at these locations were not accepted by NYCDOT, therefore these approaches are unmitigated.

Note: This table changed between DEIS and FEIS because of No Action transportation environment changes.

As may be seen from the table above, the Lesser Density Alternative would result in significant adverse impacts at all of the same intersections as the Proposed Action. However, the Lesser Density Alternative would result in one less movement being impacted than that seen with the Proposed Action. This

movement is the northbound left/through/right turn movement at the West Farms Road/Boston Road/East Tremont Avenue intersection in the PM peak period.[3] With the exception of this movement, the same significant adverse impacts would occur at the two intersections at which impacts could not be fully mitigated, and those significant adverse traffic impacts would remain unmitigated under either the Proposed Action or the Lesser Density Alternative.

Air Quality

Lesser Density Alternative Mobile Source Emissions

Neither the Proposed Action nor the Lesser Density Alternative would cause a significant adverse mobile source air quality impact. Traffic volumes for passenger cars would be slightly lower under the Lesser Density Alternative than under the Proposed Action, but the reduction in truck traffic would be the same. As a result, vehicular emissions of carbon monoxide (CO) would be similar to, and probably slightly lower than, the CO levels projected for the Proposed Action. Emissions of fine particulates ($PM_{2.5}$ and PM_{10}) would be similar to the Proposed Action. Because the analysis in Chapter 2.N, Air Quality, concluded that the Proposed Action would not cause a significant adverse impact as a result of mobile source emissions, no quantitative analysis was carried out to determine whether the Lesser Density Alternative would result in higher pollutant concentrations.

The sizes and locations of future garages would be the same as for the Proposed Action, and the parking accumulations would be the same as or less than under the Proposed Action; therefore, emissions of CO from garages would be the same as, or lower than, the Proposed Action. The new garages would not cause significant adverse air quality impacts under either the Proposed Action or the alternative.

Potential impacts from air toxics and odors would be identical to those for the Proposed Action. No impacts from these sources would occur as a result of either the Proposed Action or the Lesser Density Alternative.

For stationary HVAC sources, screening analysis was carried out, and those sites that failed the screen were modeled with AERMOD modeling to determine whether the emissions from buildings developed under the Lesser Density Alternative would cause significant air quality impacts on either existing buildings or other buildings that would be developed in the rezoning area. As in the case of the Proposed Action, no significant adverse impact to an existing building would result. As in the case of the Proposed Action, the potential would exist for numerous project-on-project impacts, but the potential impacts would be avoided through the placement of (E) designations on non-applicant-controlled sites and the recording of restrictive declarations against applicant-controlled parcels that would require the use of natural gas rather than #2 fuel oil, require that the emissions stacks be set back from the property lines by specified minimum distances, or both. To prevent the potential for pollutant concentrations that would exceed National Ambient Air Quality Standards (NAAQS), the restrictions shown in Table 5-17would be imposed on the projected and potential development sites that are listed. As in the case of the Proposed Action, the use of (E) designations and restrictive declarations to impose such restrictions would avoid significant adverse stationary source air quality impacts.

[3] LOS tables supporting this conclusion are presented in Appendix 7.2, Lesser Density Traffic Analysis.

Table 5-17: Restrictive Declarations and (E) Designations for the Lesser Density Alternative

Site	Block	Lot(s)	Minimum Set-Back or Fuel Use Requirements
7B	2998	104,113,124	Use natural gas with setback of 30 feet
3A	3009	25	70 feet for fuel oil #2 or use natural as
3B (4)	3009	33	Use natural gas with setback of 30 feet
3C	3009	37	Use natural gas
3D	3009	38	60 feet for fuel oil #2 or 20 feet for natural gas
3E	3009	44	60 feet for fuel oil #2 or 20 feet for natural gas
5B	3010	29	40 feet for fuel oil #2 or use natural gas
5C	3010	33	60 feet for fuel oil #2 or 20 feet for natural gas
5D	3010	40	60 feet for fuel oil #2 or 20 feet for natural gas
5E	3010	46	50 feet for fuel oil #2 or 20 feet for natural gas
1(1A)	3013	12, 46, 29	No restrictions
2N(3C)	3014N	15 (part)	Use natural gas with setback of 20 feet
2S(2A)	3014S	9 (part)	No restrictions
4A	3015S	1	Use natural gas with setback of 20 feet
4B (Boone)	3015 S	3 (part), 5 (part)	Use natural gas with setback of 20 feet
4B (WFR)	3015S	3 (part), 5 (part)	Use natural gas with setback of 20 feet
4C (Boone)	3015S	17, 18	Use natural gas with a setback of 20 feet
4C (WFR)	3015S	29, 31	Use natural gas with setback of 20 feet
4D (Boone)	3015S	19	Use natural gas with a setback of 20 feet
4E	3015S	25, 26	Use natural gas with a setback of 20 feet
4F (Boone)	3015S	34 (part)	80 feet for fuel oil #2 or 20 feet for natural gas
4F (WFR)	3015S	34 (part)	60 feet for fuel oil #2 or 20 feet for natural gas
6A	3015N	50, 56, 110	80 feet for fuel oil #2 or 20 feet for natural gas
6B	3015N	62, 87, 89	60 feet for fuel oil #2 or 20 feet for natural gas
6C	3015N	67, 83, 84, 85	Use natural gas with setback of 20 feet
6D	3015N	81	Use natural gas
6E	3015N	95	Use natural gas
6F	3015N	96	Use natural gas
6G	3015N	97	Use natural gas with setback of 20 feet
5 (8)	3016	11, 13, 21	20 feet for fuel oil #2 or use natural gas
9A	3016	33, 35	Use natural gas
9B	3016	36. 37	Use natural gas
9C	3016	38, 42	100 feet for fuel oil #2 or 30 feet for natural gas
9D	3016	60, 66	Use natural gas
9E	3016	71	Use natural gas

Source: Sandstone Environmental Associates, Inc.

Greenhouse Gas Emissions

Development under the Proposed Action would result in approximately 19,472 metric tons of GHG emissions annually from its operations and 9,621 metric tons of GHG emissions annually from mobile sources, for an annual total of 29,094 metric tons of GHG emissions. That amount represents about 0.06 percent of the city's annual total of 49.3 million metric tons, and it would not actually represent a net increment in GHG emissions, since similar GHG emissions would occur if residential units and associated uses were to be constructed elsewhere, and could be higher if constructed with less energy efficiency, as lower density residential, further from employment and commercial uses, and/or with less immediate access to transit service. The Proposed Action would be consistent with New York City's GHG and climate change goals.

The Lesser Density Alternative would result in fewer vehicle trips, less energy use for HVAC and electricity, and less solid waste generation than the Proposed Action. The amount of concrete and other materials required to construct the new buildings under the Lesser Density Alternative would be less than what would be required with the Proposed Action. As the Lesser Density Alternative would serve fewer people, the per capita GHG emissions associated with the Lesser Density Alternative would be comparable, if not higher than, the per capita GHG emissions associated with the Proposed Action. Furthermore, since the Lesser Density Alternative would serve fewer residents, the GHG emissions associated with the additional households that could be served by development under the Proposed Action would occur elsewhere, potentially without the benefit of transit oriented development in a mixed-use setting, resulting in higher per capita GHG emissions. Therefore, compared with the Proposed Action, the Lesser Density Alternative would not be as supportive of PlaNYC's underlying strategy of reducing the city's contribution to greenhouse gas emissions while accommodating additional growth and development.

Noise

Because both the Proposed Action and the Lesser Density Alternative would result in the redevelopment of sites where industrial uses are now located, they would both result in lower volumes of truck traffic through study area intersections and therefore vehicular source noise levels that would be lower than or almost identical to the projected future no-action levels.

The northernmost block of the proposed rezoning area is adjacent to an elevated subway trestle above Boston Road. Because of this, the noise levels at Projected Development Site 9C and Potential Development Sites 9A and 9B would be in the Clearly Unacceptable category of the DEP Noise Exposure Guidelines. Site 9C would be redeveloped under either the Proposed Action or the Lesser Density Alternative, but with a larger number of residential units under the Proposed Action. Under guidelines in the *CEQR Technical Manual*, the development of new residential units at locations subject to these Clearly Unacceptable noise levels would ordinarily constitute a significant adverse impact because indoor noise levels could exceed the maximum acceptable level of 45 dBA. Both the Proposed Action and the alternative would include the placement of (E) designations on Sites 9A (Block 3016, Lots 33 and 35), 9B (Block 3016, Lots 36 and 37), and 9C (Block 3016, Lots 38 and 42) that would require (1) specified levels of window-wall noise attenuation and (2) air conditioning or other alternative means of ventilation so that residents can maintain a closed window condition at all times of the year. The specified attenuation levels would be at least 42 dBA on the affected lower floors of the buildings. That level of exterior-to-interior noise attenuation would ensure that indoor noise levels would be below 45 dBA, avoiding the potential significant adverse noise impact. Neither the Proposed Action nor the Lesser Density Alternative would result in a significant adverse impact as a result of introducing sensitive uses at a location where the ambient noise levels are in the Clearly Unacceptable category.

Other projected and potential development sites would be subject to noise levels in the marginally unacceptable categories because of highway and other traffic noise. The Proposed Action and the Lesser Density Alternative would introduce new noise-sensitive uses at the same locations, although the alternative would introduce fewer residential units at some of the locations in the marginally unacceptable categories. If an action would introduce noise-sensitive uses at a location where the noise levels would exceed the marginally acceptable levels, the *CEQR Technical Manual* specifies that a significant impact would occur unless the building design provides a composite building attenuation that would be sufficient to reduce these levels to an acceptable interior noise level. Both the Proposed Action and the alternative would include the placement of (E) designations for non-applicant-controlled projected and potential development sites and the recording of restrictive declarations for Proposed Project sites. The provisions of both the (E) designations and the restrictive declarations would mandate the required window/wall noise attenuation levels to ensure that interior noise levels would be at 45 dBA or less for residential uses and 50 dBA or less for commercial uses. Where the projected L_{10} noise levels would be 70 dBA or more,

the (E) designation and restrictive declaration provisions also would require alternate means of ventilation to permit a closed-window condition during warm weather. Although the projected noise levels would be high enough to result in significant adverse noise impacts, the potential impacts would be avoided through the placement of the (E) designations and recording of the restrictive declarations, so that neither the Proposed Action nor the Lesser Density Alternative would have a significant adverse noise impact as a result of introducing residential development at locations south of Sites 9A, 9B, and 9C that are characterized by high ambient noise levels.

Both the Proposed Action and the alternative would introduce both an outdoor children's playground and a new residential building in close proximity to each other. The noise levels resulting at windows in the nearest building wings facing the playground would be the same under the Proposed Action and the Alternative, and the heights and apartment counts of these building portions, located along Boone Avenue, would be the same under the Proposed Action and the alternative. The required levels of window/wall noise attenuation would be the same, and in both cases the restrictive declaration for the development site would mandate those levels of attenuation.

In summary, neither the Proposed Action nor the Lesser Density Alternative would result in any significant adverse noise impact, and the terms of the restrictive declarations and (E) designations regarding noise attenuation would be the same for the Proposed Action and the alternative.

Public Health

The potential for the Proposed Action to cause a significant adverse impact regarding water quality, hazardous materials, air quality, noise, or construction era air quality or noise is discussed in Chapters 2.H, Natural Resources; 2.I, Hazardous Materials; 2.N, Air Quality; 2.P, Noise; and 2.S, Construction Impacts, respectively. The only significant unmitigated impact identified in any of these areas is a construction noise impact affecting the rear façade of one six-story residential building fronting on the east side of Longfellow Avenue between East 173rd and East 174th Streets. As explained in Chapter 2.Q, Public Health, the construction noise impact would not be of sufficient extent or duration to constitute a significant adverse public health impact. Neither the Proposed Action nor the Lesser Density Alternative would cause a significant adverse public health impact.

Neighborhood Character

According to the *CEQR Technical Manual*, a proposed action could have a significant adverse neighborhood character impact if it would have the potential to affect the defining features of the neighborhood, either through the potential for a significant adverse impact in any relevant technical area or through a combination of moderate effects in those technical areas. Neither the Lesser Density Alternative nor the Proposed Action would cause significant adverse impacts regarding land use, zoning, and public policy; socioeconomic conditions; shadows; urban design and visual resources, or noise. The significant adverse impacts to open space, historic and cultural resources, and transportation would be similar between the two alternatives, and would not affect any defining feature of neighborhood character, nor would a combination of moderately adverse effects affect such a defining feature. The Lesser Density Alternative and the Proposed Action would therefore not have a significant adverse neighborhood character impact.

Construction

The Lesser Density Alternative would be constructed on the same sites as that of the Proposed Action, and would be expected to follow the same reasonable worst case construction schedule. A minor difference between the two alternatives would be that the larger buildings in the Proposed Action would take modestly less time to construct under the Lesser Density Alternative. However, this difference would be marginal and only for the larger sites. Exactly the same construction activities would occur under either alternative. Hence, construction-related impacts under the Lesser Density Alternative would

be similar to those of the Proposed Action, and the significant adverse construction traffic and noise impacts under the Proposed Action would also occur under the Lesser Density Alternative.

Traffic

As is discussed in Chapter 2.S, Construction Impacts, significant adverse construction peak period traffic impacts would occur at two intersections during the AM construction peak and four intersections during the PM construction peak; and, as is discussed in Chapter 3, Mitigation, and Chapter 4, Unavoidable Significant Adverse Impacts, the impacts at two of the intersections could not be mitigated. As is stated above, the differences between the Proposed Action and the Lesser Density Alternative regarding the intensity of construction activity, and thus the number of vehicular trips generated during any analyzed time period, would be minor. It is not anticipated that the differences would be sufficient for the identified significant adverse impacts to be avoided, or for the unmitigated adverse impacts to be mitigated, under the alternative.

Air Quality

Based on the preliminary construction analysis, for the Proposed Action, construction activities are not likely to cause mobile source air quality impacts. Although the construction-related trucks may exceed the increment projected for the Future with Action Conditions during some hours of the day and/or short-term periods, no significant long-term adverse impacts are anticipated. No long-term air quality impacts from stationary sources are anticipated with the exception of potential impacts from Site 2N on Site 2S, which would be avoided through the implementation of a diesel particulate matter (DPM) emissions reduction program that would include best management practice. No significant construction air quality impact would occur under either the Proposed Action or the Lesser Density Alternative.

Noise

Based on the preliminary construction analysis, the Proposed Action construction activities are not likely to cause long-term impacts due to mobile sources, impulse noise, or noise within a narrow range of frequencies.

Even though no long-term construction noise impacts are expected to occur as a result of the Proposed Action, there are shorter periods during which very high increases in construction-noise (e.g., a cumulative noise Leq of 85 dBA or more or a noise level increment of 15 dBA or more) would occur, resulting in a significant adverse construction noise impact to the rear façade of one six-story residential fronting on the east side of Longfellow Avenue between East 173rd and East 174th Streets. The high noise levels would be generated by construction activities on non-applicant sites that are located along the west side of Boone Avenue between East 173rd and East 174th Streets. Consequently, the Proposed Action would result in a significant adverse impact related to construction noise. Because the size of buildings and therefore the nature, duration, and extent of construction activities at projected development sites along the west side of Boone Avenue would be the same under the Proposed Action and the Lesser Density Alternative, this same assessment would apply to the Lesser Density Alternative. The same unmitigated significant adverse construction noise impact would occur under either the Proposed Action or the Lesser Density Alternative.