3.19 CONSTRUCTION IMPACTS

3.19.1 INTRODUCTION

Construction-related activities resulting from the proposed action are not expected to have any significant adverse impacts on historic resources, natural resources, infrastructure, traffic, air quality, noise, or hazardous materials conditions. This chapter assesses the potential impacts of the construction of buildings, an underground bus storage facility, and publicly accessible open space expected to result from the proposed East 125th Street Development project on a full block and two block portions in East Harlem (the "project site"). Construction impacts, although temporary, can include disruptive and noticeable effects of a project. Determination of their significance and need for mitigation are generally based on the duration and magnitude of the impacts. Construction impacts are usually important when construction activity could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns, and air quality conditions.

Elements of the proposed action include zoning map amendments, amendments to the Harlem-East Harlem Urban Renewal Plan, the disposition of City-owned property, and City Planning Certification pursuant to the Special Transit Authority (TA) District. The proposed action would result in the construction of approximately 1.7 million square feet of new affordable housing, media and entertainment businesses, cultural space, retail uses, hotel space, public open space, underground vehicle parking, as well as the replacement of an existing at-grade MTA bus storage facility with an underground bus storage facility. As described in other chapters of this DEIS, the proposed action is expected to replace existing vacant land, commercial and parking uses with high density residential and commercial buildings with building heights up to 210 feet tall.

Construction on the project site is assumed to be completed by 2012. Because the proposed action could result in construction-related impacts, this DEIS provides an assessment of the existing and future conditions with and without the proposed action. The following is a discussion of the potential effects associated with the construction related activities, including effects on traffic, air quality, noise, historic resources, natural resources, infrastructure, and hazardous materials.

3.19.2 CONSTRUCTION SCHEDULE AND ACTIVITIES

Project construction would begin in 2008, and be completed in 2012, a total construction period of approximately four years. Construction on the project site would entail temporary relocation of the existing at-grade MTA bus parking facility, currently housed on Parcel A, to Parcel B or elsewhere during construction of the new MTA underground bus storage facility on Parcel A. (If Parcel B is selected, this stage of the project would involve land clearing of Parcel B to allow for a portion of Parcel B to be used for temporary surface parking for the MTA). Once construction of the new MTA underground bus storage facility on Parcel A is fully built out and operational, construction of the buildings on Parcel B would begin and the above-grade portions of construction

on Parcel A would continue. As summarized in Table 3.19-1 and shown in Figure 3.19-1, environmental remediation and building demolition, excavation and grading, installation of foundations, and building construction on Parcels A, B, and C would likely occur in overlapping stages. The activities and durations indicated are estimated based on the Concept Plan as indicated in Chapter 2.0.

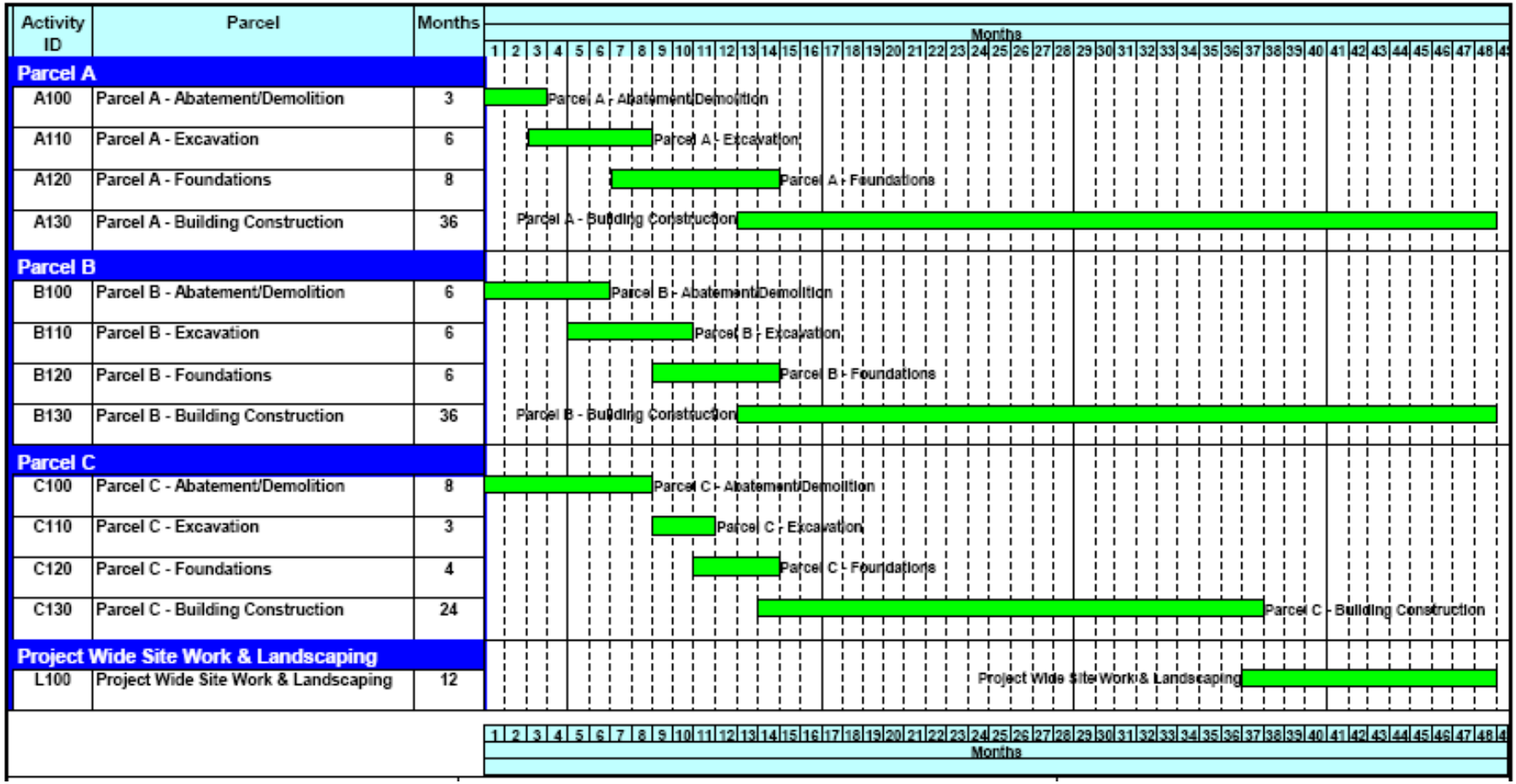
Table 3.19-1: Construction Activities and Durations*

Construction Activity		Duration in Months
Parcel A		
	Parcel A - Abatement/Demolition	3 Months
	Parcel A – Excavation	6 Months
	Parcel A – Foundations	8 Months
	Parcel A - Building Construction	36 Months
Parcel B		
	Parcel B - Abatement/Demolition	6 Months
	Parcel B – Excavation	6 Months
	Parcel B – Foundations	6 Months
	Parcel B - Building Construction	36 Months
Parcel C		
	Parcel C - Abatement/Demolition	8 Months
	Parcel C – Excavation	3 Months
	Parcel C – Foundations	4 Months
	Parcel C - Building Construction	24 Months
Project Wide Site Work & Landscaping		
	Project Wide Site Work & Landscaping	12 Months
	Anticipated Total Duration:	**48 Months (4 Years)**

Source: STV Incorporated, 2008.
*Estimated based on anticipated construction activities for Concept Plan, as shown in Chapter 2.0.

In addition, although a schedule has not been finalized, construction activity on the off-site parcel (Block 1791, Lot 44) that is on the same block but not part of the East 125th Street Development could also potentially occur in the future with the proposed action, with completion by 2012. This would be concurrent with construction on the project site, but is not expected to result in an over concentration of construction in any one location.

Figure 3.19-1: Estimated Construction Timeline*



Source: STV Incorporated, 2008.
*Estimated based on anticipated construction activities for Concept Plan, as shown in Chapter 2.0.

ENVIRONMENTAL REMEDIATION AND BUILDING DEMOLITION

Construction of the proposed project would begin with environmental remediation to address hazardous materials currently existing on the site and demolition of the existing structures. As described in Chapter 3.10, "Hazardous Materials," the selected developer would be obliged to prepare and submit plans for site remediation, for NYCDEP approval. The environmental remediation would be conducted under a Remedial Work Plan (RWP) and Construction Health and Safety Plan (CHASP) to be approved by the New York City Department of Environmental Protection (NYCDEP). In addition, it is expected that the selected developer would apply for inclusion in the NYSDEC Brownfields Cleanup Program (BCP), and would also be required to prepare the documentation required by NYSDEC to support that application. The New York State Department of Environmental Conservation would provide oversight for spill remediation.

Potential redevelopment of the parcel located at Third Avenue and East 127th Street that is off-site but within the rezoning area would be expected to occur in accordance with applicable regulations and guidelines related to hazardous materials. No development is currently proposed for that separate parcel.

It is expected that the remediation efforts required for the East 125th Street Development project site would include removal of existing buildings and foundations, and excavation for site development, to depths that would accommodate the proposed underground MTA bus garage on Parcel A and the vehicle garage on Parcel B. Basement foundations for Parcel A are estimated to be about 25 feet below grade and the basement for Parcel B is estimated to be 15 to 30 feet deep, depending on the number of parking levels.

As described in Chapter 3.10, "Hazardous Materials," measures would be taken to avoid potential adverse impacts during construction activities due to the presence of subsurface soil and groundwater contamination resulting from on- and potentially off-site sources, asbestos-containing materials (ACM), and lead-based paint. Demolition, excavation, and construction activities could disturb hazardous materials and increase pathways for human exposure. However, impacts would be avoided by performing construction activities in accordance with the following protocols:

- Prior to, or as part of initial construction activities for the project, all remaining petroleum storage tanks (and any associated contaminated soil) would be removed in accordance with applicable federal, state, and local requirements. As described in Chapter 3.10, "Hazardous Materials", it is recommended that additional soil and groundwater investigations are conducted, followed by remediation of the gasoline station property area located at 255 East 125th Street (Block 1790, Lot 24). It is also recommended that former gasoline USTs at the northeast corner lot of Third Avenue and 126th Street (southwest corner of Block 1791) be removed in accordance with NYSDEC tank closure regulations.

- All material that needs to be disposed of (e.g., excess fill or fill unsuitable for reuse due to contamination) would be disposed of off-site in accordance with applicable federal, state, and local requirements. In the event that petroleum contaminated soils are discovered during excavation activities (i.e., identified through staining, discoloration, or odor), such soil would be segregated, stockpiled, sampled for characterization purposes sufficient to meet the requirements of the applicable disposal facility, transported off-site by a licensed transporter, and disposed of in an approved treatment or disposal facility in accordance with all applicable federal, state, and local regulations and guidelines. If soil containing other potentially contaminated (non-petroleum) material is discovered during excavation, such soil would also be segregated, stockpiled, and sampled to determine whether the material requires off-site disposal or can be reused on site under impervious surfaces or the acceptable imported soil cap. If the material requires off-site disposal, the sampling would meet the applicable regulations and guidelines. Soil with no indication of petroleum or other contamination could be reused on-site under impervious surfaces or the acceptable imported soil cap. The volume of soil to be removed is estimated to be up to 236,272 cubic yards, conservatively assuming an underground two-level vehicle garage is constructed on Parcel B.

- When dewatering is required for construction activities, there is a potential for contact with contaminated groundwater. Additional testing of groundwater at the locations of dewatering should be performed, as conditions may vary around the site and, if necessary, pretreatment would be conducted prior to the water discharge to the City's sewer system, as required by NYCDEP permit/approval requirements. It is anticipated that minimal dewatering would be required for construction of the footings, sumps, and piping needed for the building on Parcel B; however, if the floor slab elevation for Parcel B is set below the seasonally high ground water level, it is recommended that an underslab drainage system is installed.

- Parcel A's garage and Parcel B's two-level garage option would require temporary excavation support systems to retain perimeter sidewalks and streets, and dewatering to prevent subgrade disturbance. If there is the potential for surface plumes of contaminated fluids near the site, draining the upper aquifers by construction dewatering could cause the plumes to migrate onto off-site properties. One method to mitigate or preclude this possibility is to require the temporary excavation support system be watertight and extend to the silt layer, forming a cutoff. In that case, it is estimated that the steady state rate of pumping during construction would be about 200 gallons per minute for the 25 to 30 foot deep basements. Without a cutoff to the silt layer, the estimated pumping rate could be about five times higher. Installation of the perimeter wall system would require works crews of up to 45 workers at any point. Approximately 160 truck trips per day would be needed to deliver materials and remove excavated soil.

- If landscaped areas are incorporated into the development of the project site, then a clean fill cap of at least two feet in thickness should be placed over on-site soils in these areas.

- All activities involving disturbance of existing soils would be conducted in accordance with a CHASP that would detail measures to reduce the potential for exposure (e.g., dust control) and a soil management plan (SMP) would include measures to identify and manage known contamination (e.g., petroleum storage tanks) and unexpectedly encountered contamination (as described above). As described in Chapter 3.10, "Hazardous Materials", it is recommended that new buildings constructed in the area should consider incorporating soil vapor barriers or other vapor mitigation procedures in accordance with the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006.

- Prior to any demolition activities, a comprehensive asbestos survey of all structures would be conducted that would include the sampling of all suspect materials to confirm the presence or absence of asbestos. Based on the findings of the survey, the identified ACM would be removed and disposed of in accordance with all federal, state, and local regulations. Depending on the amount of ACMs to be removed and project phasing, 10 to 20 workers could be on site, and about one or two truckloads of materials could be removed per day. This phase could last about 20 months.

- During demolition activities, any economically salvageable materials would be removed and then large equipment would be used to deconstruct the buildings. Typical demolition requires solid temporary walls around the buildings to prevent accidental dispersal of building materials into areas accessible to the general public. After the buildings are deconstructed, bulldozers and front-end loaders would be used to load materials into dump trucks. The demolition debris would be sorted prior to being disposed at landfills to maximize recycling opportunities. Depending on the size of the buildings demolished, about 50 workers are expected to be on site, and typically two to four truckloads of debris would be removed per hour. The general demolition phase can last about 7 months for the project site.

- Any demolition activities with the potential to disturb lead-based paint would be performed in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62 – Lead Exposure in Construction). OSHA regulates construction activities to prevent excessive exposure of workers to contaminants in the building materials including lead in paint. New York State Solid Waste regulations control where demolition debris and contaminated materials associated with construction are handled and disposed of. Adherence to these existing regulations would prevent impacts from development activities at the project site; significant adverse impacts to the environment would not occur.

With the implementation of these measures, no significant adverse impacts related to hazardous materials would result from demolition and/or construction activities on the project site.

The remediation and demolition stage is expected to last approximately nine months and employ between 12 and 24 workers. However, any subsequent groundwater remediation that may be required would typically increase the length of this stage.

EXCAVATION AND GRADING

The site would be excavated for utilities and below grade uses. As mentioned above, all material that needs to be disposed of (e.g., excess/unsuitable fill) would be disposed of off-site in accordance with applicable federal, state, and local requirements. In addition, any petroleum-contaminated soil or other contaminated soil encountered during excavation would be properly managed consistent with the SMP. This phase of the work would have about 100 – 200 workers employed on this task, and about 160 trucks would enter and exit the site daily at the peak of work. Utility connections would also be installed during this phase. During this phase of a building's construction, about 40 construction workers would be on site. This phase would last one to four months. Backfilling construction debris on site may also require New York City Department of Sanitation (DSNY) approval, and 6 NYCRR Part 360 approval for the disposal of solid waste from NYSDEC.

The site would be graded so that the foundations could be excavated and final elevations established. Existing foundations and roadways would be cleared. The proposed project's building footprints would be established above the 100-year floodplain. Fill used for grading would be suitable for supporting roadways, parking areas, and as a base for the proposed structures.

INFRASTRUCTURE IMPROVEMENTS

Infrastructure improvements at the site would include utility connections such as water, sewer, electric, gas, and telecommunications. Discharge of stormwater to the NYCDEP storm sewers would require implementation of a Stormwater Pollution Prevention Plan (SWPPP) in compliance with NYSDEC General Permit GP-02-01 for stormwater discharges from construction activity.

SITE PREPARATION, FOUNDATIONS AND PILE DRIVING

Following demolition and grading, construction of the proposed project's foundation and below-grade elements would begin. The proposed buildings at Parcels A and B may be supported on shallow foundations consisting of individual footings or a continuous mat foundation. Blasting is not anticipated to occur during construction. This phase of work would require approximately nine to twelve months and employ between 100 and 370 workers at the project site. On a typical day, about 80 truck trips would be generated.

SUPERSTRUCTURE

Following installation of foundations, the construction of the buildings' superstructures would commence. Construction of the buildings' superstructures is anticipated to last approximately 10 to 16 months. Each day, about 100 to 150 workers would be required for the construction of each building. As the frame is installed, work would commence on interior infrastructure---mechanical, electrical, and plumbing systems---and enclosures. Construction would be phased to overlap with the completion of the core and shell so that a significant amount of interior work is performed before the core and shell are completed.

BUILDING FINISHES AND SIDEWALKS

This phase of building construction is the exterior and interior finishes. The work would involve final roofing and finishing details on the exterior walls. While this construction is taking place, the sidewalks would be built. This activity would employ the greatest number of construction workers: up to 350 to 450 at the project site during the active periods, and up to 700 workers could be on-site during periods of maximum activity. The typical construction stage for a building, including the superstructure and building finishes, would generally last approximately 24 to 36 months, while smaller buildings may be completed in about 18 months.

3.19.3 CONSTRUCTION EQUIPMENT AND ACTIVITIES

Typical equipment used for demolition, excavation, and foundation work would include excavators, bulldozers, backhoes, pile driving and compaction equipment, tractors, jackhammers, and concrete pumping trucks. Other types of equipment that would be used include hoist complexes, dump trucks and loaders, concrete trucks, and back hoes. Trucks would deliver concrete and other building materials, and remove excavated material as well as demolition and construction debris. The construction equipment likely to be used during erection of the superstructure would include compressors, cranes, derricks, hoists, bending jigs, and welding machines. During façade and roof construction, hoists may continue to be used. Trucks would remain in use for material supply and construction waste removal. Interior and finishing work would employ a large number of construction workers, and a wide variety of fixtures and supplies would have to be delivered to the site.

Construction activities would normally take place Monday through Friday, although the delivery/installation of certain critical equipment could occur on weekend days. Construction staging most likely would occur on the project site itself and may, in some cases, extend within portions of sidewalks, and curb and travel lanes of public streets adjacent to the construction sites. It is likely that the staging area would be 20 feet in from the property line on Third Avenue north of East 125th Street so that field trailers, offices, and support operations would be provided for Parcels A, B, and C. To safeguard the public and to provide necessary access to the project site, it is anticipated that the sidewalk along this portion of Third Avenue adjacent to the project site

would be closed. It is recommended that a sidewalk scaffold with crossing be provided on the west side of Third Avenue for pedestrians walking north of 125th Street on Third Avenue. For Parcel C, it is recommended that a sidewalk scaffold be provided on 125th Street for a distance of approximately 130 feet to the east of Third Avenue. On both East 126th and East 127th Streets between Second and Third Avenues, it is anticipated that the traffic lane and sidewalk on the south side would be closed. Any sidewalk or street closures require the approval of the New York City Department of Transportation's Office of Construction Management and Coordination (NYCDOT-OCMC), the entity that ensures that critical arteries are not interrupted, especially during peak travel periods.

Builders would be required to plan and carry out noise and dust control measures during construction. In addition, there would be requirements for street crossing and entrance barriers, protective scaffolding, and strict compliance with all applicable construction safety measures.

3.19.4 POTENTIAL IMPACTS DURING CONSTRUCTION

Historic Resources

Archaeological Resources
As described in Chapter 3.6, "Historic Resources," the NYC Landmarks Preservation Commission (LPC) reviewed the proposed action area to determine the potential archaeological sensitivity of the area. This was done to determine if the proposed action could affect archaeological resources, as construction activities could result in excavation or other in-ground disturbance. The proposed action is not expected to result in significant adverse impacts on archaeological resources, although two lots within the project site (Block 1790, Lot 13, and Block 1791, Lot 1) that may not have been disturbed by twentieth-century construction and demolition could potentially contain intact nineteenth-century archaeological resources. The LPC has reviewed a November 2007 Archeological Documentary Study prepared by Historical Perspectives, Inc. (see Appendices) and has determined archeological testing is required before any excavation can occur at the site.

Architectural Resources
As described in the "Historic Resources" chapter, no NR-listed, eligible or potentially eligible historic resources or LPC-designated historic resources are located within the proposed rezoning area. Within 400 feet of the proposed rezoning area, there are five National Register eligible or potentially eligible architectural resources; one of those resources, the New York Public Library 125th Street Branch building, has also been identified as being eligible for listing as a New York City landmark.

The New York Public Library is located due south of projected development and is separated from that projected development by the 100-foot width of the 125th Street corridor, indicating little likelihood of construction effects. The remaining four of the eligible or potentially eligible historic resources are located more than 90 feet of projected development sites. As these

resources are located more than 90 feet of projected development sites, they would not be adversely affected by construction activities at the projected development sites; accordingly, no construction effects are anticipated.

Natural Resources

As discussed in Chapter 3.9, "Natural Resources," the proposed development would occur on sites that have been previously developed or improved. Additionally, the project site does not fall within New York City's designated Coastal Zone. Accordingly, as discussed in Chapter 3.11, "Waterfront Revitalization Program," the proposed action is not subject to the NYC Local Waterfront Revitalization Program (LWRP). Therefore, as the project site and study area do not contain any significant natural resources, the proposed action is not expected to result in any significant adverse construction impacts related to natural resources.

The northern portion of the off-site parcel (Block 1791, Lot 44) that is not part of the East 125th Street Development is classified by FEMA as Zone "B," areas of the 500-year flood. Future development in this area would not be considered a significant encroachment and would not result in any increases in flood levels in surrounding areas. The area is currently occupied by mainly impervious development; therefore, the proposed action would not eliminate existing primary beneficial floodplain characteristics. No development is currently proposed for the off-site parcel.

Infrastructure

Construction activities on the project site would not have significant adverse impacts on any water supply, waste water management or energy system. All utilities on the project site would be identified prior to the initiation of construction, and measures identified to protect them based on coordination with the responsible providers, including NYCDEP and Con Edison.

Hazardous Materials

The construction-period hazardous materials impacts of the proposed development project are described above in "Environmental Remediation and Building Demolition."

Traffic and Parking

The proposed action would result in office, retail, entertainment, and residential development on the project site by 2012. It would also result in the creation of new public open space on the project site. The proposed development would replace existing uses on the project site including commercial, transportation, parking, and vacant parcels. Construction resulting from the proposed action would generate trips resulting from arriving and departing construction workers, movement of materials and equipment, and removal of construction waste. Construction would likely occur between 7 AM and 4 PM. Construction workers would typically arrive before the AM peak commuter period and depart before the PM peak hour, and therefore would not represent a substantial increment during the area's peak travel periods. Truck movements typically would be

spread throughout the day on weekdays, and would generally occur between the hours of 7:00 AM and 4:30 PM. Wherever possible, the scheduling of deliveries and other construction activities would take place during off-peak travel hours.

Construction activities may result in short-term disruption of both traffic and pedestrian movements at the project site. This would occur primarily due to the temporary loss of curbside lanes from the staging of equipment and the movement of materials to and from the site. Additionally, construction at times would result in temporary closings of sidewalks adjacent to the site.

These conditions would be temporary and not result in significant adverse impacts on traffic and transportation conditions. NYCDOT-OCMC issues permits for any street/sidewalk closures after evaluation of traffic and pedestrian conditions.

Construction workers would use either public transportation or private automobile to travel to and from the project site. As with other workers in the area, construction worker parking would generally be accommodated off-street throughout construction. In the mid-day period, there are currently 245 parking spaces available within ¼-mile of the project site. While there may be occasions when the total construction worker parking demand may not be met, such occasions would be infrequent and at short durations. Even on those infrequent occasions where construction worker parking demand exceeds the off-street supply, or when there would be limited curb lane disruptions, the effect of construction on neighborhood parking supply and its location is not expected to be significant due to the short-term nature of the shortfall. Therefore, these temporary parking shortfall situations would not constitute a significant adverse parking impact.

Air Quality

Possible impacts on local air quality during construction of the East 125th Street Development project include:

- Fugitive dust (particulate) emissions from land clearing operations; and
- Mobile source emissions, including hydrocarbons, nitrogen oxide, and carbon monoxide.

Fugitive Emissions

Fugitive dust emissions could occur from land clearing, excavation, hauling, dumping, spreading, grading, compaction, wind erosion, and traffic over unpaved areas. Actual quantities of emissions depend on the extent and nature of the land clearing operations, the type of equipment employed, the physical characteristics of the underlying soil, the speed at which construction vehicles are operated, and the type of fugitive dust control methods employed. The U.S. Environmental Protection Agency (EPA) has suggested, in general, an overall emission rate of about 1.2 tons of particulate matter per acre per month of active construction from all phases of land clearing operations with no fugitive dust control measures. However, this is a national estimate and actual emissions would vary widely depending on many factors, including the intensity and type of land

clearing operations. Much of the fugitive dust generated by construction activities consists of relatively large-size particles, which are expected to settle within a short distance from the construction site and to not significantly impact nearby buildings or people. All appropriate fugitive dust control measures—including watering of exposed areas and dust covers for trucks—would be employed during construction of the proposed development.

Mobile Source Emissions

Mobile source emissions may result from the operation of construction equipment, trucks delivering materials and removing debris, workers' private vehicles, or occasional disruptions in traffic near the construction site. Localized increases in mobile source emissions would be minimized by following standard traffic maintenance requirements, such as:

- Construction requiring temporary street closings would be performed during off-peak hours wherever possible;
- The existing number of traffic lanes would be maintained to the maximum extent possible; and
- Idling of delivery trucks or other equipment would not be permitted during unloading or other inactive times.

Furthermore, as the number of construction-related vehicle trips generated by the proposed action would be 160 per day at a maximum, the number of truck trips is not expected to exceed the CEQR threshold for traffic impacts. It is anticipated that mitigation measures described in Chapter 3.15, "Traffic and Parking," would be in effect when the proposed buildings are occupied and would likely address potential effects on traffic resulting from construction activities should they overlap with occupancy of a portion of the development. The emissions from such vehicles as well as construction equipment would occur through 2012 and be dispersed throughout the proposed action area and vicinity, the mobile source emissions generated by the proposed action would not be significant.

Noise

Impacts on noise levels during construction of the proposed development project would include noise and vibration from the operation of construction equipment. The severity of impacts from these noise sources would depend on the noise characteristics of the equipment and activities involved, the construction schedule, and the distance to potentially sensitive noise receptors. Noise and vibration levels at a given location are dependent on the kind and number of pieces of construction equipment being operated, as well as the distance from the construction site (refer to Table 3.19-2). Noise caused by construction activities would vary widely, depending on the phase of construction - land clearing and excavations, foundation and capping, erection of structural steel, construction of exterior walls, etc.—and the specific task being undertaken.

Construction noise associated with the proposed action is expected to be similar to noise generated

by other residential and commercial construction projects in the city. Increased noise levels caused by construction activities can be expected to be most significant during the early phases of construction. The most significant noise source associated with the construction equipment would be the use of pile-drivers. This noise would be intrusive and would be heard by the employees at surrounding businesses and the residents who live within several blocks of the project site; however, this construction noise would be temporary in nature. Increases in noise levels caused by delivery trucks and other construction vehicles would not be significant. Small increases in noise levels are expected to be found near a few defined truck routes and the streets in the immediate vicinity of the project site.

Construction noise is regulated by the revised 2005 New York City Noise Code promulgated on July 7, 2007 and by the EPA noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emissions standards; that, except under exceptional circumstances, construction activities be limited to weekdays between the hours of 7 AM and 6 PM; and that construction material be handled and transported in such a manner as not to create unnecessary noise. These regulations would be carefully followed. In addition, appropriate low-noise emission level equipment and operational procedures would be used. Compliance with noise control measures would be ensured by directives to the construction contractor.

Table 3.19-2: Typical Noise Emission Levels for Construction Equipment

Equipment Item	Noise Level at 50 ft. (dBA)
Air Compressor	81
Asphalt Spreader (paver)	89
Asphalt Truck	88
Backhoe	85
Bulldozer	87
Compactor	80
Concrete Plant	83[1]
Concrete Spreader	89
Concrete Mixer	85
Concrete Vibrator	76
Crane (derrick)	88
Delivery Truck	88
Diamond Saw	90[2]
Dredge	88
Dump Truck	88
Front End Loader	84
Gas-driven Vibro-compactor	76
Hoist	76
Jackhammer (Paving Breaker)	88
Line Drill	98
Motor Crane	83
Extractor	101
Pump	76
Roller	80
Shovel	82
Truck	88

Notes:
1 Wood, E.W. and A.R. Thompson, *Sound Level Survey, Concrete Batch Plant: Limerick Generating Station,* Bolt Beranek and Newman, Inc., Report 2825, Cambridge, MA, May 1974.
2 New York State Department of Environmental Conservation, *Construction Noise Survey,* Report No. NC-P2, Albany, NY, April 1974.
Sources: Patterson, W.N., R.A. Ely, and S.M. Swanson, *Regulation of Construction Activity Noise,* Bolt Beranek and Newman, Inc., Report 2887, for the Environmental Protection Agency, Washington, D.C., November 1974. Except for footnoted items.

3.19.5 CONCLUSION

Construction-related activities resulting from the proposed action are not expected to have any significant adverse impacts on historic resources, natural resources, infrastructure, traffic, air quality, noise, or hazardous materials conditions. The construction process in New York City is highly regulated to ensure that construction period impacts are eliminated or minimized. The construction process requires consultation and coordination with a number of agencies, including NYCDOT, NYC Department of Buildings (DOB), and NYCDEP, among others.