

**A. INTRODUCTION**

This chapter assesses the potential impacts of the construction of buildings and parkland expected to occur within the subject area. Construction impacts, although temporary, can include disruptive and noticeable effects of a project. Determination of their significance and need for mitigation is generally based on the duration and magnitude of the impacts. Construction impacts can be considered significant when construction activities adversely affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns, and air quality conditions.

Because the Proposed Action could result in construction-related impacts, this EIS 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 traffic, air quality, noise, archaeological resources, historic resources, natural resources, and hazardous materials.

Elements of the Proposed Action would result in the construction of a range of uses, including mixed-use buildings with internal parking structures. In addition, the Proposed Action includes the creation of new open spaces and public plazas. Construction would also include various improvements to the road network, including roadway relocations and various infrastructure improvements to ensure adequate water and wastewater facilities and necessary electric and gas services.

The Proposed Action would be built out in multiple phases over a 10-year time period, beginning in approximately 2007. This chapter discusses the various activities that would be involved in constructing the development described in the Master Plan and evaluates the potential for significant adverse impacts together with the techniques and procedures that would be employed to avoid or minimize such impacts.

**B. SUMMARY OF THE CONSTRUCTION PROGRAM****PHASING**

It is expected that the Master Plan would be built in multiple phases over a 10-year time period. The plan is designed so that individual development parcels or development blocks comprising several parcels could be independently assembled and developed based on market conditions. It is anticipated that initial phases would result in development of the southernmost parcels, nearest to the existing Downtown Waterfront Development activities, in the area bounded roughly by Wells Avenue and Ashburton Avenue. Development may also occur early in the vicinity of the former BICC facility. Specific activities in these areas would likely include land assembly; site clearance; remediation of environmental contamination, as needed; the repair and replacement of existing shoreline structures; development of public streets and infrastructure; development of

the parkland along the shoreline; and private development of buildings on the designated development parcels. Subsequent phases would involve development of additional development parcels; bulkhead reconstruction; development of public streets, infrastructure, and the development of public open space and parkland.

The Proposed Action also involves improvements to the City of Yonkers' JFK Marina Park, which would occur independently of the redevelopment of the rest of the subject area. These improvements would proceed as permits are obtained.

### **SITE PREPARATION**

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. There are also NYCDEP/NYSDEC construction requirements, especially near the waterfront, as discussed in the "Natural Resources" section below.

### **CONSTRUCTION SCHEDULING**

Following is a general outline of typical scheduling for construction activities as they might occur during the development of a Development Parcel. It should be noted however that the duration and extent of new construction activities would vary depending on the extent and size of the individual building/development project. In general, construction on any given development parcel is expected to last approximately 24 months under the following schedule:

- Months 1-4: Site clearance, excavation, and foundation. The first 4 months of construction would entail site clearance; digging, pile-driving, pile capping, and excavation for the foundation; dewatering (to the extent required), and reinforcing and pouring of the foundation. Typical equipment used for these activities would include excavators, backhoes, tractors, piledrivers, hammers, and cranes. Trucks would arrive at the site with pre-mixed concrete and other building materials, and would remove any excavated material and construction debris.
- Months 5-10: Erection of the superstructure and underground parking foundation, where applicable. Once the foundations have been completed, the construction of the building's steel framework parking lots ramp and decking would take place. This process involves the installation of beams, columns and decking, and would require the use of cranes, derricks, hoists, and welding equipment.
- Months 11-24: Façade and roof construction, mechanical installation, interior and finishing work. This would include the assembly of exterior walls and cladding; installation of heating, ventilation and air conditioning (HVAC) equipment and ductwork; installation and checking of elevator, utility, and life safety systems; and work on interior walls and finishes. During these activities, hoists and cranes would continue to be used, and trucks would remain in use for material supply and construction waste removal.

Since different Development Parcels may be developed at any given time within the 10-year period, the exact type of construction activity within the subject area as a whole would vary over time.

## C. POTENTIAL IMPACTS OF CONSTRUCTION

### HISTORIC AND CULTURAL RESOURCES

The Proposed Action would encourage the adaptive reuse of existing important and historic buildings on the subject area. Among the sites included for redevelopment and adaptive reuse is the existing City Jail building (eligible for the State and National Register of Historic Places) and the Glenwood Power Station.

The 30- and 22-story buildings proposed for Parcels A and B, respectively, are located within 90 feet of the Yonkers Jail. A distance of approximately 100 feet is generally considered sufficient by SHPO to account for construction related impacts on historic buildings. Therefore, Parcels A and B are located close enough to historic sites to potentially cause inadvertent construction-related impacts. These could include ground-borne construction-period vibrations, falling debris, and damage from heavy machinery. The City of Yonkers would ensure that the developers for these parcels prepare Construction Protection Plans (CPPs) for these buildings. The CPPs would be developed in consultation with SHPO and implemented to avoid damage to these historic structures resulting from project demolition and construction. It is not expected that the Proposed Action would have adverse physical effects on any of the other historic resources in the subject area, as they are located beyond the area of potential physical impacts for construction activities.

It is not anticipated that construction induced by the Proposed Action would have any adverse physical impacts on any historic resources in the area, as no other resources abut any of the projected or potential development sites. By improving public access and the visual character of the subject area, existing historic resources would become better connected to the urban fabric.

### NATURAL RESOURCES

The Proposed Action would result in the rehabilitation and improvement of approximately 1.3 miles of shoreline that is presently bulkhead/riprap. These improvements would occur as part of the development of each new residential and mixed use building along the waterfront. There are no site specific details for each waterfront site with respect to the installation of new shoreline improvements.

However, it would be expected that at each waterfront Development Parcel there would be:

- An engineering assessment of existing bulkhead/riprap conditions and a determination as to the need for such improvements;
- Installation of new shoreline structures, as necessary;
- Creation of a public access esplanade and landscaping.

Assuming a reasonable worst case, that each linear foot of waterfront would need to be improved at the development sites, it would not be expected that these potential shoreline improvements would result in significant natural resource impacts for the following reasons:

- The wetlands within the subject area are low-quality habitats. For example, there are no known submerged aquatic vegetation (SAV) habitats along the water's edge of the subject area. Therefore, no moderate to high-quality wetland environments would be affected.
- Any impacts to water quality would be temporary and are likely to be confined. There would also be the repair and replacement of existing shoreline protection structures, as well as a

limited amount of filling associated with the breakwater at JFK Marina Park. The impacts of such activities are temporary and are typically not significant.

- Any impacts to aquatic resources that are present along the existing shoreline or benthos (e.g., algae, crustaceans) would not be significant due to the generally degraded quality of existing habitats. In addition, the types of species that would be affected are likely to re-colonize once new shoreline structures are in place. Likewise, impacts on primary organisms should be short-term or minimal.

Shoreline improvements under the Proposed Action would include landscape zones (e.g., trees, shrubs and groundcover) that would provide habitat for migratory species and songbirds, as well as other wildlife. This is a positive impact of the Proposed Action.

In examining these potential impacts it is important to note that it is likely that development activities in the immediate waterfront area would be subject to their own permitting requirements (e.g., ACOE Section 10 or DEC Tidal Wetlands and Protection of Waters Permits). As part of that permitting process, additional site design details would be prepared and more detailed site-specific environmental impacts would be addressed. This permitting would entail an environmental review of the potential impacts of each of these actions. The permitting agencies would require, as part of the Proposed Action, mitigating actions that would prevent pollution during the operations of the project, such as containment for gasoline spills at the marina dock.

However, based on the assumptions above, it is concluded that the Proposed Action could move forward without resulting in any significant direct or indirect impacts. In addition, the permitting process for each direct waterfront activity would involve coordination with natural resource and permitting agencies in order to comply with regulations for obtaining the required permit approvals for construction or rehabilitation activities along the shoreline. It is expected that this review process would also minimize impacts to the extent practicable.

Moreover, stormwater discharges from certain construction activities to waters of the United States are unlawful unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit or by a state permit program. New York's State Pollutant Discharge Elimination System (SPDES) is a NPDES-approved program with permits issued in accordance with the Environmental Conservation Law. Discharges of Pollutants to all other "Waters of New York State" such as groundwaters are also unlawful unless they are authorized by a SPDES permit. Coverage for such activities can be obtained under the NYSDEC SPDES General Permit for Stormwater Discharges for Construction Activity by submitting a Notice of Intent (NOI) to the department. Prior to the submission of an NOI, a Stormwater Pollution Prevention Plans (SWPPP) must have been completed in compliance with all requirements of the general permit.

Stormwater Pollution Prevention Plans (SWPPP) are developed prior to construction activities, and prior to the initiation of activities requiring coverage under a SPDES permit. The SWPPP would identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges. In addition, the SWPPPs would describe and ensure the implementation of practices which would be used to reduce the pollutants in stormwater discharges and to assure compliance with the terms and conditions of a SPDES permit. All SWPPPs must include erosion and sediment controls. SWPPPs must present fully designed and engineered stormwater management practices with all necessary maps, plans and construction drawings. With these procedures, no construction period impacts from stormwater discharges would be anticipated.

## TRAFFIC AND TRANSPORTATION

Construction of new buildings would create daily construction-related traffic to and from the subject area, including workers, delivery of materials and equipment, and if necessary truck removal of excavation materials from the build sites.

The number and type of vehicles would vary depending on the phase of construction on a particular development parcel. A mix of different types of construction activity can occur simultaneously in the development area as a whole. During land clearing, grading, and excavation, the primary activity would be limited to that specific equipment (which would remain on-site during the land preparation phase) and the workers operating the equipment and generally working on the initial effort. However, since the earthwork for this site is essentially balanced, off-site truck traffic would generally be limited.

During the core building phase, foundation work would primarily involve concrete delivery to the site, concurrent with delivery and staging of the other building elements (e.g., framing and roofing material, etc.) that would be used in the buildings. As noted above, it is assumed that staging areas for concrete trucks and all materials delivery and storage would be accommodated on site. During interior construction, trucks would be delivering building materials, such as drywall, electrical equipment, and other supplies and equipment.

Because all parking and staging can be accommodated on site, there is anticipated to be no queuing of construction related traffic on study area roadways, no street closures, no parking off-site, and therefore no significant adverse impacts related to the construction of the Proposed Action.

As specified in the Yonkers Code, construction on-site is proposed to occur between 7 AM and 6 PM on weekdays. Delivery times would be arranged and determined in consultation with the Town in order to minimize their impact on residents and businesses in the area and to ensure timely construction of the Proposed Action.

## AIR QUALITY

The principal air quality impact associated with construction activities is the generation of fugitive dust, which can vary widely in terms of volume and size of particulate matter generated. Fugitive dust is associated with earth moving, such as site grading, filling, and excavation for foundations. A large proportion of the fugitive dust generated by construction activities would be of relatively large particle size, and would be expected to settle to the ground within a short distance from the construction site and not significantly affect nearby buildings or people.

To minimize these problems, the following erosion and dust control measures would be followed during construction:

- Construction sequencing which would limit the area of disturbed or exposed soil at any one time;
- Phasing grading operations so that only the areas needed for a particular construction activities are disturbed;
- Installing truck mats which would clean the trucks' tires prior to leaving development sites;
- Watering of exposed areas during dry periods;
- Using drainage diversion methods (silt fences) to minimize soil erosion during site grading.

**NOISE**

Construction of the Proposed Action would typically generate noise and vibration from construction equipment, construction vehicles, worker traffic, and delivery vehicles traveling to and from the subject area. Noise levels caused by construction activities would vary widely, depending on the phase of construction—demolition, excavations, foundation, construction of the structures, etc.—and the specific task being undertaken. All construction activities would be conducted in full compliance with existing regulations, including local day and hour construction limitations and would be limited to between 7 AM and 6 PM on weekdays.

Local, state, and federal requirements mandate that certain classifications of construction equipment and motor vehicles be used to minimize adverse impacts. Thus, construction equipment would meet specific noise emission standards. Usually, noise levels associated with construction and equipment are identified for a reference distance of 50 feet, as shown in Table 14-1.

Significant noise levels typically occur nearest the construction activities, and may reach as high as 90 A-weighted decibels (dBA) under worst-case conditions. The level of noise impacts at local receptors would depend on the noise characteristics of the equipment and activities involved, the hours of operation, and the location of sensitive noise receptors. Noise levels would decrease with distance from the construction site. Increased noise levels due to construction activity can be expected to be most significant during the early construction phases such as clearing and excavation, which would be relatively short in duration (approximately three to four months).

Construction operations, for some limited time periods, would result in temporary increased noise levels that may be intrusive and may significantly increase ambient noise levels. However, as with air quality, the noise impacts would be temporary and at a distance from any receptors; and thus would not be expected to affect any residential neighborhoods. Therefore, because these noise effects would be temporary in nature and would typically occur during daytime hours no significant adverse noise impacts would be expected to occur.

**Table 14-1  
Typical Noise Emission Levels For Construction Equipment**

Equipment Item	Noise Level at 50 Feet (dBA)
Air Compressor	81
Asphalt Spreader (paver)	89
Asphalt Truck	88
Backhoe	85
Bulldozer	87
Compactor	80
Concrete Plant	83 <sup>(1)</sup>
Concrete Spreader	89
Concrete Mixer	85
Concrete Vibrator	76
Crane (derrick)	76
Delivery Truck	88
Diamond Saw	90 <sup>(2)</sup>
Dredge	88
Dump Truck	88
Front End Loader	84
Gas-driven Vibro-compactor	76
Hoist	76
Jack Hammer (Paving Breaker)	88
Line Drill	98
Motor Crane	93
Pile Driver/Extractor	101
Pump	76
Roller	80
Shovel	82
Truck	88
Vibratory Pile Driver/Extractor	89 <sup>(3)</sup>
<p><b>Notes:</b></p> <p><sup>1</sup> 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.</p> <p><sup>2</sup> New York State Department of Environmental Conservation, <i>Construction Noise Survey, Report No. NC-P2</i>, Albany, NY, April 1974.</p> <p><sup>3</sup> F.B. Foster Company, Foster <i>Vibro Driver/Extractors, Electric Series Brochure</i>, W-925-10-75-5M.</p> <p><b>Sources:</b> Patterson, W.N., R.A. Ely, And S.M. Swanson, <i>Regulation of Construction Activity Noise</i>, Bolt Beranek and Newman, Inc., Report 2887, for the Environmental Protection Agency, Washington, D.C., November 1974, except for notated items.</p>	

**HAZARDOUS MATERIALS**

As also discussed in Chapter 11, “Hazardous Materials,” a Phase I Environmental Site Assessment was prepared for most of the development area, which indicated that the site had a history of industrial use including cable manufacturing, petroleum bulk storage, and a manufactured gas plant. Testing on this site has confirmed the presence of contaminants consistent with the cited historic and current use of various sites within the subject area. All

appropriate testing would be completed and all necessary remediation measures would be undertaken, as necessary, prior to construction.

**CONCLUSIONS**

Construction-related activities resulting from the Proposed Action are not expected to have any significant adverse impacts on natural resources, architectural resources, traffic, air quality, noise, or hazardous materials conditions as a result of the Proposed Action.

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