

A. INTRODUCTION AND SUMMARY OF FINDINGS

This chapter summarizes the Proposed Project’s general phases and subphases of construction and the anticipated means and methods of construction and assesses the potential for construction of the Proposed Project to have temporary adverse environmental impacts.

The Proposed Project would be expected to be constructed in five phases over approximately 10 years. Each phase would consist of seven subphases and would overlap with the subsequent phase. Construction activities would occur simultaneously at all three Project Sites starting in the second half of Phase 2 and continuing through the first half of Phase 4. It is important to note that the anticipated construction phases and subphases may change based on market demand, financing, or other factors.

A Soil Erosion and Sediment Control Plan (“SESC Plan”), meeting State and City requirements, would be implemented to avoid and mitigate potential impacts associated with the off-site migration of sediment during construction. Excavation side walls would be adequately braced to mitigate potential steep slope issues during construction and any steep slopes remaining following construction would be secured with structural methods, such as retaining walls, or would be properly stabilized with vegetation.

Construction of the Proposed Project at the three Project Sites would create daily construction-related traffic to and from the Project Sites, including construction workers and the delivery of materials and equipment. Construction workers are anticipated to arrive mostly by mass-transit, minimizing potential impacts to traffic during the various construction phases. The Applicant would utilize a combination of surface parking on the Chicken Island Site, the parking garages constructed as part of the Project, and off-Site satellite parking to accommodate construction worker parking demand.

The Proposed Project would incorporate measures to avoid or minimize fugitive dust during construction, including watering of exposed areas during dry periods, installing truck washing pads at the egress points of each Project Site, and limiting construction vehicle speed to five miles per hour (mph) on-site. Construction vehicles and equipment would utilize clean emissions technology to reduce the impact from diesel emissions, as outlined in the Construction Management Plan and enforced by inspections/monitoring conducted by the City of Yonkers. Construction activities would be limited to the hours of 8:00 AM–6:00 PM during the week, in accordance with Chapter 66 of the City of Yonkers Code, subject to potential limited waivers.

Blasting, if required, would be conducted in conformance with the blasting protocol in Sections 59-54 through 59-76 of the City of Yonkers Code. Where pile driving and rock chipping would be used, pre-construction surveys would be undertaken and vibration monitoring would be implemented.

The Applicant would prepare a detailed Construction Management Plan (“CMP”) for City approval, which would establish construction management protocols and measures to mitigate potential adverse impacts. Although there may be adverse impacts associated with construction activities, they will be temporary in nature and minimized with control measures and are therefore not expected to be significant.

The Proposed Project would include certain off-site improvements, including public water and sewer extensions and replacements. These improvements would be coordinated with the City Engineering Department and the Westchester County Department of Health (WCDOH). Appropriate road closure and street opening permits would be obtained. There would be minimal disruption of service when reconnecting property owner connections to the new water mains.

A New York State Department of Environmental Conservation (NYSDEC) General Permit for Stormwater Discharges from a Construction Activity (GP-0-20-001) would be required for each Project Site. The permit would require preparation of a stormwater pollution prevention plan (SWPPP) for each Project Site (see also Chapter 9, “Stormwater Management”). The Proposed Project would incorporate measures to protect the existing Saw Mill River culvert and daylighted area within the area of disturbance of the Proposed Project. A structural evaluation of the existing culvert, which is located within the footprint of proposed Chicken Island Building 4, would be conducted to determine any necessary modifications, repairs, or replacement.

B. OVERVIEW OF CONSTRUCTION ACTIVITIES

Construction of the Proposed Project would require at least the following equipment: excavators, bulldozers, backhoes, grader, dump trucks, cranes, and hoists. Material loading and unloading would occur in designated on-site staging areas, typically adjacent to the area of construction. The staging areas would be screened by a berm or construction fencing with screens to prevent headlights from shining into neighboring properties. Sidewalk closings and pedestrian diversions would be implemented as needed throughout all phases of construction.

The Proposed Project is anticipated to be constructed in five phases that would occur over 10 years; each of the five phases would have roughly seven subphases of activity, as described in this chapter.

B.1. CONSTRUCTION PHASING

Phase 1 would involve construction activities on the Teutonia Site and Chicken Island Site and is anticipated to have an overall duration of 38 months. Phase 2 would involve construction activities on the North Broadway Site and is anticipated to have an overall duration of 33 months. Phase 3 would involve construction activities on the North Broadway Site and Teutonia Site with an overall duration of 41 months. Phases 4 and 5 would both involve construction activities on the Chicken Island Site and are anticipated to have overall durations of 35 months and 33 months, respectively.

The five principal phases of the Proposed Project are summarized in **Table 15-1**.

Table 15-1
Project Components by Phase

Phase	Site	Project Component
1	Teutonia	North Tower – Residential
	Chicken Island	Building 1 – Residential
	Chicken Island	Building 1a – Retail
	Chicken Island	Building 1b – Temporary Retail
2	North Broadway	South Tower – Residential
	North Broadway	Parking Garage
	North Broadway	Retail and Public Stair (28 and 30-32 N Broadway)
3	North Broadway	North Tower
	Teutonia	South Tower
4	Chicken Island	Building 2
	Chicken Island	Building 3
5	Chicken Island	Building 4
	Chicken Island	Building 5

Each phase would overlap with the subsequent phase. Construction activities would occur simultaneously at all three Project Sites starting in the second half of Phase 2 continuing through the first half of Phase 4 (see **Figure 15-1**). Because multiple phases would be implemented simultaneously, it is anticipated that the maximum number of workers on-site would be expected to be 2,190 workers per day during construction month 49 (see **Figure 15-1**). This peak would only occur for a short duration.

Figures 15-2 and 15-3 show the Phase 1 construction sites. Phase 2 construction sites are shown in **Figures 15-4 through 15-6**, Phase 3 in **Figures 15-7 and 15-8**, Phase 4 in **Figures 15-9 and 15-10**, and Phase 5 in **Figures 15-11 and 15-12**. Further detail is provided in the construction sites logistics diagrams (see **Appendix N-1**) and the civil engineering plans for each site (see **Appendices C-1, C-3, and C-9**).

As discussed in more detail in Section C.1, below, it is anticipated that the vast majority of construction workers would arrive to the Project Sites via mass transit (e.g., bus or rail). The Applicant would prohibit construction workers from parking their private vehicles on the active construction sites. Construction worker parking would be provided on the Chicken Island Site, south John Street and east of New School Street. This parking would serve all three Sites. In addition, the Applicant intends to utilize the parking garages on the various Project Sites upon their completion for construction worker parking while the balance of the building is being constructed. Finally, the Applicant would set up one or more privately contracted satellite parking locations, as necessary, and shuttle construction workers to the Project Sites. Any satellite construction worker parking area for more than 10 vehicles would be subject to approval by the City, pursuant to the CMP.

B.2. CONSTRUCTION SUBPHASES

This section describes each of seven general subphases of each principal phase.

B.2.a. Subphase 1 – Site Setup, Mobilization, Perimeter Fence

Subphase 1 would involve on-Site pest extermination, establishing the project perimeter, including a silt fence, hay bales, and construction fencing. Temporary construction offices and temporary parking and traffic arrangements would be established. Once site setup is complete, demolition of existing buildings (North

Broadway Site only) would occur. Subphase 1 would conclude with complete site clearing. Outreach would be in place to communicate with local residents as to activities and projected schedules. The Applicant would work with the City to determine the best way to reach the public to keep them informed of Project activities and schedules.

Subphase 1 is anticipated to require a workforce of between 20 and 30 persons.

B.2.b. Subphase 2 – Driven Piles, Dewatering, and Foundations

Subphase 2 would include pile driving, concrete elements of the foundations, and finalization of site utility rough-ins, followed by grading and shaping of the site to minimize dust and erosion. (Necessary pre-construction surveys of adjacent structures and improvements, as described below, would occur prior to pile driving.) Each project component of Subphase 2 would require a workforce of between 50 and 100 persons.

B.2.c. Subphase 3 – Foundations and Site Utilities

Subphase 3 would include construction of a temporary on-site sediment basin, followed by excavation of the areas for foundations of future structures, excavation and partial construction of utility lines. Dewatering may be required during excavation for the elevator pits and drainage structures. The extracted fluids from the dewatering would either be containerized for off-site disposal or treated for disposal in the storm sewer in accordance with permits and approvals from the Westchester County Department of Environmental Facilities and NYSDEC.

Subphase 3 would require a workforce of between 50 and 100 persons.

B.2.d. Subphase 4 – Building Superstructure

Subphase 4 would entail construction of the cast in place concrete superstructure for each of the new buildings. Subphase 4 would require a workforce of between 200 and 250 persons.

B.2.e. Subphase 5 – Building Enclosure, Interior Framing, and MEP Rough-In

There would be some construction related overlap between Subphases 4 and 5. Subphase 5 would involve installation of block and plank beginning at the lower floors and continuing up to the top of each building. At the same time, interior partitions and demising walls would be framed. Following completion of the block and plank, exterior brickwork, windows, and doors would be installed. Lastly, electrical, plumbing, and mechanical rough-ins would be conducted following enclosure of each floor.

Subphase 5 would require a workforce of between 300 and 350 persons.

B.2.f. Subphase 6 – Interior Finishes

Subphase 5 would overlap partially with Subphase 6. Subphase 6 would entail closing interior walls after completion of mechanical/electrical/plumbing (“MEP”) rough-ins and would occur area-by-area and floor-by-floor. After completion of drywall work, installation of interior doors, mechanical units, electrical panels, domestic hot water heaters, and other equipment would occur.

Interior construction would then conclude with painting, interior finishes, cabinetry, and installation of electrical and plumbing fixtures and appliances.

Subphase 6 would require a workforce of between 300 and 350 persons.

B.2.g. Subphase 7 – Site Work, Landscaping, and Occupancy

Completion of the building interior during Subphase 6 would occur simultaneously with portions of Subphase 7 activities, including landscaping, paving, and site lighting. Subphase 7 would also involve completion of the rooftop and the surrounding landscape. Subphase 7 would conclude with building commissioning and occupancy.

Subphase 7 would require a workforce of between 30 and 50 persons.

C. POTENTIAL CONSTRUCTION IMPACTS

This section describes the Proposed Project’s potential construction related impacts with regard to sediment and erosion control, traffic, air quality, noise and vibration, blasting and subsurface investigations, stormwater, and infrastructure and utilities.

C.1. TRAFFIC AND TRANSPORTATION

Construction of the Proposed Project would create daily construction-related traffic to and from the Project Sites. Construction-related traffic would include material delivery, construction vehicles transported to and from the Project Sites, material and waste disposal (excess material, packaging, scrap materials, dewatering fluids, etc.), disposal of excess excavated soil, and potentially contractor shuttle busses. The number of vehicles and type of construction-related traffic would vary considerably, depending on the subphase of construction.

The maximum number of workers on-site would be approximately 2,190 and would occur over a relatively brief, three-week period when Phases 2 and 3 overlap during construction month 49 (see **Figure 15-1**). However, the maximum number of on-site workers would be approximately 1,600 or more for durations of at least two to three months in multiple years throughout the 10-year construction period. This would occur for a 3.5-month period during Phases 1 and 2 between construction months 24 and 27, for a 4.5-month period during Phases 2 and 3 between construction months 45 and 50, and for a 2-month period during Phase 5 between construction months 93 and 95. It is important to note, however, that as the site plans for the Proposed Project are finalized and specific construction plans for each Project Site advanced, the Applicant would refine the phasing and staging schedule to “smooth out” short-duration variations in the number of construction workers so that potential impacts to traffic and transportation are also reduced.

Estimates of the minimum and maximum number of workers on-site simultaneously during each year is shown in **Table 15-2**.

A construction traffic routing plan would be finalized in consultation with the City Engineering Department, Traffic Engineering Division. To limit impacts to the roadway levels of service in the vicinity of each Project Site, deliveries of construction material would be scheduled to avoid peak hour traffic periods to the maximum extent practicable.

Every effort would be made to ensure public access on streets adjacent to the Project Sites. The Applicant would maintain these adjacent streets during construction.

**Table 15-2
Construction Workers by Year**

Year	Phase(s)	Minimum Manpower	Maximum Manpower
1	1	6	608
2	1	138	1,650
3	1,2	528	1,978
4	1,2,3	766	2,019
5	2,3	1,120	2,190
6	3,4	790	1,350
7	3,4	330	1,360
8	4,5	16	1,421
9	5	848	2,018
10	5	8	1,518

Source: Manpower estimates provided by Hudson Meridian on June 15, 2021.

The Applicant would prohibit construction workers from parking their private vehicles on the active construction sites. Based on the experience of the Applicant’s construction manager at other construction sites that are proximate to mass-transit, it is anticipated that approximately 75 percent of construction workers would utilize mass transit. The Applicant would accommodate construction worker parking in several ways, depending on the construction phases. At the outset of construction, the Applicant would utilize the New School Street Parcel and the southern portion of the Palisade Avenue Parcel for construction worker parking. Workers at the Chicken Island Site would walk to work, while workers at the Teutonia Site and North Broadway Site would be shuttled to the Sites. Parking on both parcels would be by valet to maximize the number of spaces. The New School Street Parcel could accommodate 100 vehicles, while the southern portion of the Palisade Avenue Parcel could accommodate 492 vehicles. After Chicken Island Stage 1 construction is complete (with the construction of the new Centre Street and the temporary retail building), the Palisade Avenue Parcel could accommodate 315 vehicles. To supplement this surface parking, the Applicant would utilize the new structured parking garages on a Project Site to accommodate parking for construction workers at that Project Site (and potentially on at the other Project Sites), while the balance of the building (e.g., the residential tower) is constructed and fitted out. As the largest number of construction workers would be present on each Project Site after the parking structure is complete and the balance of the building is being constructed, garage parking would be available to meet peak parking demand. Finally, the Applicant would set up one or more privately contracted satellite parking locations, as necessary, and shuttle construction workers to the Project Sites. Any satellite construction working parking area for more than 10 vehicles would be subject to approval by the City, pursuant to the CMP. The City would condition approval of temporary satellite parking on reasonable conditions required to assure adequate traffic operation and safety. The need for, and size of, the satellite lots would be vary during the approximately ten-year build out.

The potential construction worker and shuttle bus trips would have minimal impact on traffic surrounding the Project Sites, as the number of shuttle trips would be well below number of vehicular trips generated by operation of the Proposed Project (see Section F.2 of Chapter 11, “Traffic and Transportation”).

C.1.a. Teutonia Project

Construction-related traffic would arrive and depart from Buena Vista Avenue, which is the only street that provides public access to the Teutonia Site. A construction entrance would be installed along Buena Vista Avenue and large construction trucks would be directed to use Buena Vista Avenue for staging.

Construction traffic would be coordinated with child drop-off and pickup at the adjacent Queen's Daughter's Daycare, located immediately south of the Site. If practical, material or large equipment deliveries would be scheduled between 9:00 AM and 3:00 PM to avoid conflicts with drop-off and pickup times at the facility. If material deliveries or large construction equipment deliveries would be necessary between the hours of 7:00 AM and 9:00 AM or 3:00 PM and 5:00 PM, then a flagman would be used near the intersection of Buena Vista Avenue and Prospect Street at the front of the facility. It is not anticipated that the construction in front of the facility would result in intersection closure, but a flagman would assist in moving traffic through the intersection in an efficient manner.

Police may be required on a short-term basis during any required street closures of Buena Vista Avenue. Street closures would occur during utility street work and/or certain crane operations, if any. Although the number of closures due to crane operations cannot be estimated at this time, it is anticipated that approximately 12 temporary street closures would occur for utility street work. Traffic would be rerouted with detour signs, placed in consultation with the City Traffic Engineering Division. Buena Vista Avenue would only be closed for the delivery of large building material, such as steel or the arrival and staging of large construction equipment, such as a construction crane. Any request for police assistance would be scheduled in advance in accordance with City policy.

After excavation and grading activities are completed, the greatest number of construction vehicle trips (approximately 15 to 20 per day) would be expected to occur at the beginning of each individual construction phase when building materials would be transported to the Site.

Approximately 1,477 truck trips would be required to remove the approximately 22,150 cubic yards of material from the Teutonia Site, based on 15 cubic yards per truck. These truck trips would be spread out over two construction phases, over several years, limiting the traffic impact to the surrounding area. As currently anticipated, excavation for Building 1 would occur over a period of approximately four months during Phase 1 in construction year one whereas excavation for Building 2 would occur over a period of approximately seven months during Phase 3 in construction year four. Removal of excavated material would typically result in up to 25 truck trips per day.

C.1.b. Chicken Island Project

Construction-related traffic would arrive and depart from John Street and the Project Site entrance along Nepperhan Avenue (i.e., the extension of Henry Herz Street) as the street provides the only public access to the Chicken Island Site. A construction entrance would be installed along John Street and Ann Street. Large construction trucks would be directed to use New School Street for access.

Flagmen would be utilized to ensure entry of the trucks into the Site. No trucks would be staged on the street.

Access to and from the firehouse at the intersection of New School Street and Palisade Avenue would be maintained during construction and flagmen placed at the Site entrances would minimize the potential for construction trucks to back up and obstruct the firehouse. The existing parking area on the Chicken Island Site would be used for deliveries and material staging.

Construction traffic would be coordinated with the existing parking lot on the south end of the Chicken Island Site as well as storefronts along James Street to the west of the Site. If practical, material, or large equipment deliveries, would be scheduled between 9:00 AM and 3:00 PM to avoid conflicts with peak parking times and potential delivery hours to nearby businesses. If material deliveries or construction traffic would be necessary between the hours of 7:00 AM and 9:00 AM or 3:00 PM and 5:00 PM, then a flagman would be used at the intersections and roadways surrounding the Site. It is not anticipated that the construction around the Site would result in intersection closures, but a flagman would assist in moving traffic through the intersections in an efficient manner.

Police may be required on a short-term basis during any required street closures of the surrounding roadways, particularly Palisade Avenue, New School Street, and Nepperhan Avenue. Traffic would be rerouted with detour signs, placed in consultation with the City Traffic Engineering Division. The surrounding roadways listed above, as well as the internal roadways such as James Street, John Street, and Ann Street, would only be closed for the delivery of large building material, such as steel or the arrival and staging of large construction equipment, such as a construction crane. Any request for police assistance would be scheduled in advance in accordance with City policy.

After the excavation and grading activities are completed, the greatest number of construction vehicle trips would be expected to occur at the beginning of each individual construction phase when building materials would be transported to the Site.

Approximately 6,620 truck trips would be required to remove the approximately 99,300 cubic yards of material from the Chicken Island Site, based on 15 cubic yards per truck. These truck trips would be spread over several phases of building construction over several years. As currently anticipated, excavation for the Chicken Island Site components would be as follows:

- Building 1: approximately five months during Phase 1 in construction year one.
- Buildings 1A/1B: approximately three months during Phase 1 in construction year three.
- Buildings 2 and 3: approximately seven months during Phase 4 in construction years five and six.
- Buildings 4 and 5: approximately seven months during Phase 5 in construction years seven and eight.

Removal of excavated material would typically result in up to 25 truck trips per day.

C.1.c. North Broadway Project

The majority of construction-related traffic for the North Broadway Project would arrive and depart from Locust Hill Avenue. Some construction-related traffic would arrive and depart from North Broadway for construction activities on the North Broadway-fronting lots. A construction entrance would be installed along North Broadway, Overlook Terrace, and Baldwin Place. The entrances on Overlook Terrace and Baldwin Place would be accessed via Locust Hill Avenue. Large construction trucks would be directed to use North Broadway and Locust Hill Avenue for access and/or staging, earth export, and material deliveries.

Construction traffic would be coordinated with the existing storefronts along North Broadway to the west of the North Broadway Site. If practical, material, or large equipment deliveries would be scheduled between 9:00 AM and 3:00 PM to avoid conflicts with peak parking times and potential delivery hours to nearby businesses. If material deliveries or construction traffic would be necessary between the hours of 7:00 AM and 9:00 AM or 3:00 PM and 5:00 PM, then a flagman would be used at the roadways surrounding the Site. It is not anticipated that the construction within the Site would result in intersection closure, but a flagman would assist in moving traffic through any intersection in an efficient manner.

Police may be required on a short-term basis during any required street closures of the surrounding roadways, particularly North Broadway and Locust Hill Avenue. Traffic would be rerouted with detour signs, placed in consultation with the City Traffic Engineering Division. The surrounding roadways listed above would only be closed for the delivery of large building material, such as steel or the arrival and staging of large construction equipment, such as a construction crane. Any request for police assistance would be scheduled in advance in accordance with City policy.

After the excavation and grading activities are completed, the greatest number of construction vehicle trips would be expected to occur at the beginning of each individual construction phase when building materials would be transported to the Site.

Approximately 2,400 truck trips would be required to remove the approximately 36,000 cubic yards of material from the North Broadway Site, based on 15 cubic yards per truck. These truck trips would be spread out over multiple construction phases over several years. As currently anticipated, excavation for “Building 1” would occur over a period of approximately five months during Phase 2 in construction years two and three whereas excavation for the remainder of the North Broadway work would occur over a period of approximately five months during Phases 2 and 3 in construction year four. Removal of excavated material would typically result in up to 25 truck trips per day.

C.2. AIR QUALITY

Construction of the Proposed Project requires the use of both non-road construction equipment and on-road vehicles. Non-road construction equipment includes equipment operating on-site such as cranes, loaders, and excavators. On-road vehicles include construction delivery trucks, dump trucks, and potentially, contractor shuttle buses

arriving to and departing from the Project Sites as well as operating on-site. Emissions from non-road construction equipment and on-road vehicles have the potential to affect air quality. In addition, emissions from dust-generating construction activities (i.e., truck loading and unloading operations) also have the potential to affect air quality. As required by the Scoping Document (see **Appendix A-1**), a qualitative analysis of temporary air quality impacts from construction of the Proposed Project was conducted.

Air quality impacts associated with construction activities are typically the result of fugitive dust or emissions from vehicles or equipment. Fugitive dust can result from earth moving, including grading and excavation, from driving construction vehicles over dry, unpaved surfaces, and from demolition activities. While a large proportion of fugitive dust would be of relatively large particle size and would be expected to settle within a short distance of being generated and thus not affect off-site receptors, measures to minimize and avoid this potential impact would be incorporated into the Proposed Project. The erosion and dust control procedures that would be implemented include the following:

- Minimizing the area of soil that is disturbed at any one time;
- Minimizing the amount of time during which soils are exposed;
- Minimizing vehicle movement over areas of exposed soil;
- Installing truck vehicle washing pads at the construction entrance to avoid the tracking of soil onto paved surfaces;
- Watering of exposed areas during dry periods to reduce dust;
- Using drainage diversion methods (e.g., silt fences) to avoid soil erosion during Site grading;
- Covering stored materials with a tarp to reduce windborne dust;
- Limiting on-site construction vehicle speed to 5 mph; and,
- Using truck covers/tarp rollers that cover fully loaded trucks and keep debris and dust from being expelled from the truck along its haul route.

In addition, during the demolition process, debris and disturbed earth would be wet down with water, if necessary, to control dust. Fugitive dust impacts would not persist for the entire construction period, but would be limited to times when there would be exposed soil on-site or to specific dust generating activities (e.g., transfer of soil during excavation). Once each building foundation is set in place, on-site fugitive dust would be minimal.

Although exhaust emissions from construction equipment is not as significant as fugitive dust generation, particulate matter from diesel exhaust emission would also be controlled through proper tuning of the engine and maintenance of the air pollution controls. This would minimize additional contribution to site-generated particulate emissions during construction.

The internal combustion engine-powered construction equipment used for the Proposed Project would be limited to late model (1998 and newer) so as to ensure use of cleaner burning engines, unless an exception is granted by the City Commissioner of Housing and Building upon a demonstration that obtaining such equipment would not be feasible or practicable. All non-road vehicles over 50 horsepower used for the Proposed Project would utilize the best technology available for reducing emissions of pollutants, including

but not limited to retrofitting such vehicles with oxidation catalysts, particulate filters, and/or technology with comparable or better effectiveness. All construction equipment would include PM_{2.5} emission controls.

Localized increases in mobile source emissions would be minimized by using ultra-low sulfur diesel fuel for all on-site construction equipment and delivery trucks. Furthermore, delivery and/or other construction equipment engines would not be permitted to remain idling during unloading or other inactive times. These measures would be outlined in the Construction Management Plan, discussed below, and would be enforced through inspections and monitoring to be conducted by the City.

The most intense construction activities in terms of air pollutant emissions would occur during demolition, excavation, and foundation activities, during which the largest number of large non-road diesel engines such as excavators, dozers, graders, and loaders would be employed. Construction sources would move around each Project Site over the construction period such that the air pollutant concentration increments due to construction of the Proposed Project would not persist in any single location. The other subphases of construction, including superstructure, exteriors, and interiors and finishing would result in substantially lower air emissions since they would require fewer pieces of heavy-duty diesel equipment and would not involve soil disturbance activities that generate dust emissions. Construction activities involving grinding, chopping, and coring would utilize water to minimize the generation of dust. Dust that may be generated during these activities would be further reduced by utilizing air handling equipment with HEPA filters to minimize dust leaving the Project Sites. In addition, interior construction work would generally occur within a partially enclosed building, thereby shielding nearby sensitive receptors from direct pathways to construction sources and preventing unobstructed dispersion of pollutants to off-site locations. Although there may be adverse impacts associated with the construction activities, they will be temporary in nature and minimized with control measures and are therefore not expected to be significant.

C.3. NOISE AND VIBRATION

Construction of the Proposed Project would generate noise and vibration from construction activities, construction equipment, construction vehicles, and delivery vehicles traveling to and from the Project Sites. Noise levels caused by construction activities would vary widely, depending on the phase of construction and the specific task being undertaken. Construction activities would be conducted in compliance with the Chapter 66 Noise of the Code of the City of Yonkers (the “City Noise Code”), which states that the operation of any tool used in construction, repair, demolition or excavation is prohibited between the hours of 6:00 PM and 8:00 AM, on weekends, and on legal holidays. Considerations would be taken during construction to locate equipment away from any sensitive adjoining areas. Furthermore, all equipment used for construction must be operated with a muffler. Trucking companies involved with the Proposed Project would be required to comply with the City Noise Code. With these limitations in place, short-term noise impacts would be reduced to the maximum extent practicable. Noise resulting from construction activities is a temporary impact and would cease upon completion of work at each Project Site. As discussed in Chapter 17, “Alternatives,” development under the existing zoning would be likely to result in similar impacts to those of the Proposed Project. Specifically, noise impacts would be anticipated to occur over a

period of approximately 10 years with excavation, grading, and foundation work that would be similar to that of the Proposed Project.

Noise generating work outside of the hours permitted by the City Noise Code may occur subject to the variance procedure contained in the Sections 66-10 through 66-13 of the City Noise Code. The Applicant, as well as the owner or operator of any stationary sound source, can apply to the City's Commissioner of the Department of Housing and Buildings for the variance by submitting the information described in Section 66-10 of the City Noise Code. Critical construction activity, such as monolithic pours that extend beyond permitted hours out of necessity, or deliveries which must occur outside of normal construction hours, might necessitate such a request.

Prior notice of any extraordinary noise (e.g., rock chipping) that might occur for more than one day would be provided to any property owners within 200 feet of each Project Site. As discussed above, the Applicant would locate noisy construction equipment and processes away from sensitive receptors to the maximum extent practicable.

Vibratory levels at a receiver are a function of the source strength (which is dependent upon the construction equipment and methods utilized), distance between the equipment and the receiver, characteristics of the transmitting medium, and receiver building construction. Construction equipment operations cause ground vibrations, which spread through the ground and decrease in strength with distance. Vehicular traffic, even in locations close to major roadways, typically does not result in perceptible vibration levels unless there are discontinuities in the roadway surface. With the exception of the case of fragile and possibly historically significant structures or buildings, construction activities generally do not reach levels that can cause architectural or structural damage but can achieve levels that may be perceptible and annoying in buildings very close to a construction site. As discussed in Chapter 4, "Cultural Resources," a Construction Protection Plan would be developed in consultation with the Office of Parks, Recreation, and Historic Preservation to avoid inadvertent construction-related impacts on nearby historic resources. Measures would include monitoring the buildings for cracks, vibration, and movement and installation of physical protection as appropriate.

Generally, the construction activities with the highest source strength and potential to result in perceptible or potentially damaging vibrations include excavation and rock disturbance operations such as blasting, pile driving, and rock drilling. Aside from excavation and rock disturbance, demolition would have the most potential to result in perceptible or damaging vibrations at nearby sensitive uses. Vibrations from building erection and finishing activities would be less than demolition activities and would not have the potential to produce damaging or perceptible levels of vibration at surrounding receptors.

As recommended by the "Revised Geotechnical Investigation and Foundations Recommendations" report, prepared by Geotechnical Engineering Services, P.C. and last revised May 3, 2019 (the "Geotechnical Report") (see **Appendix G-1**), throughout the excavation and foundation construction phases at the Teutonia Site, measurements of movement and vibration levels would be made in the adjacent buildings to the north and south of the Site, the Metro-North Railroad ("MNR") right-of-way adjacent to the west, and the street/nearby utilities running beneath Buena Vista Avenue to the east. A pre-construction survey would be conducted for adjacent structures, rail lines, or utilities within 25 feet of the property. This pre-construction survey would help to establish survey

points for monitoring during construction. Based on the “Preliminary Geotechnical Letter Report,” prepared by Geotechnical Engineering Services, P.C. and dated April 22, 2019 (see Appendix G-6), presence of bedrock at the North Broadway Site may require rock removal techniques including chipping and/or blasting. Structures in the vicinity of the North Broadway Site may require vibration monitoring if significant rock removal is necessary.

C.4. BLASTING AND SUBSURFACE INVESTIGATIONS

Any blasting required would be conducted in conformance with the blasting protocol in Sections 59-54 through 59-76 of the City of Yonkers Code (the “City Blasting Regulations”). A license for use of explosives would be obtained through submittal of an application including the appropriate pre-blasting surveys and vibration monitoring plan to the Yonkers Fire Department.

At this time, there are no current regulations specifically addressing pile driving and rock chipping. However, it is highly recommended that where these techniques would be used, pre-construction surveys should be performed, and vibration monitoring should be implemented when sensitive receptors are in the proximity of the construction site.

C.4.a. Teutonia Site

Based on the Geotechnical Report (see **Appendix G-1**), bedrock was generally found between elevation -30 to -26.5. With the underground parking levels extending down to elevation 20.5, rock blasting would not be anticipated within the Teutonia Site. Deep pile foundations, which would require pile driving activities, have not been recommended for the Teutonia Project.

C.4.b. Chicken Island

Based on the “Geotechnical Review Letter,” prepared by SESI Consulting Engineers and dated October 29, 2020 (see **Appendix G-3**), bedrock was generally found between elevation -16 and +35. Table 15-3 below indicates the various bedrock depths within each of the areas of development in comparison to the lowest floor elevations.

**Table 15-3
Chicken Island Elevation Summary**

Development Area (Lowest Floor El.)	Ground Surface Elevations (Increasing West to East)	Top of Rock Elevations
Building 1 (B.F.E. +26)	+51 to +66	-16 to +23
Building 1A (F.F.E. unknown)	+54 to +56	-15
Buildings 2 & 3 (B.F.E. +40)	+57 to +61	+15 to +17
Building 4 (B.F.E. +57)	+58 to +63	+34 to +35
Building 5 (F.F.E. +65)	+61 to +63	+3 to +22

Notes: B.F.E. = base floor elevation, F.F.E. = finished floor elevation

Source: Appendix 9

Based on **Table 15-3**, very little to no rock chipping or blasting would be anticipated within the Chicken Island Site. Deep pile foundations, which would require pile driving activities, have not been recommended for the proposed Chicken Island Project.

C.4.c. North Broadway Site

Based on the “Preliminary Geotechnical Letter Report,” prepared by Geotechnical Engineering Services, P.C. and dated April 22, 2019 (see **Appendix G-6**), bedrock was found as shallow as 4 to 25 feet below ground surface elevations. As the topography of the Site is heavily sloped, rock outcroppings may be encountered within the areas of excavation. As such, a further investigation and evaluation of existing rock within the North Broadway Site would be performed to enhance foundation recommendations for the North Broadway Project. Rock removal techniques including chipping and/or blasting may be employed utilizing mitigating measures and vibration monitoring. Blasting would be subject to the City Blasting Regulations. If needed, these activities would occur during Phases 2 and 3.

C.5. CONSTRUCTION MANAGEMENT PROTOCOL

Adverse impacts from construction of the Proposed Project would be avoided and minimized through the implementation of a detailed CMP prepared for each Project Site. The CMP would be prepared by the Applicant and would be approved as part of the first application for site plan approval and be made a condition thereof. The City would, therefore, be able to enforce the provisions of the CMP throughout the construction process across all three Project Sites. It is anticipated that the City would enforce compliance with the CMP through their inspection activities, which would be funded through permit fees paid by the Applicant. The CMP would provide for implementation of the SWPPP and SESC Plan for each Project Site during each phase of construction, as well as the measures to avoid impacts to traffic, air quality, noise and vibration, and blasting and subsurface investigations.

At a minimum, the CMP would include the following protocols:

- **Hours of Operation**—Construction activities would occur between 8:00 AM–6:00 PM on weekdays, in accordance with Section 66-4.F of the City Noise Code or otherwise permitted by a noise variance as described above in Section C.3. The typical work week would be from 8:00 AM to 6:00 PM on weekdays.
- **Deliveries**—Loading or unloading of vehicles would occur only between 8:00 AM-6:00 PM, which would be in compliance with Section 66-4.D of the City Noise Code. Loading, unloading, opening, closing, or other handling of boxes, crates, etc. between the hours of 10:00 PM and 7:00 AM when the sound creates a noise disturbance across from a residential property line is prohibited. When practical, material or large equipment deliveries would be scheduled between 9:00 AM and 3:00 PM. Deliveries to the Project Sites would utilize the Teutonia Site’s entrance on Buena Vista Avenue, the Chicken Island Site’s entrances on John Street, Palisade Avenue, and Nepperhan Avenue, Ann Street, and New School Street (depending on the phase of construction), and the North Broadway Site’s entrances on North Broadway and on Baldwin Place and Overlook Terrace, which are accessed via Locust Hill Avenue. The majority of construction material for the North Broadway Site would arrive via Locust Hill Avenue, either via Palisade Avenue or Ashburton Avenue.
- **Parking**—It is anticipated that the majority of the construction workers would utilize mass transit. Construction worker parking would be provided on the Chicken Island Site, south John Street and east of New School Street. This parking would serve all

three Sites. In addition, the Applicant intends to utilize the new parking garages on the various Project Sites upon their completion for construction worker parking while the balance of the building is being constructed. Finally, the Applicant would set up one or more privately contracted satellite parking locations, as necessary, and shuttle construction workers to the Project Sites. Any satellite construction worker parking area for more than 10 vehicles would be subject to approval by the City, pursuant to the CMP. Such locations would be reviewed for potential impacts to traffic and vehicular and pedestrian safety.

- **Stormwater**—An SWPPP and SESC Plan for each Project Site would be implemented at the outset of construction. These plans would have been previously approved by the City Engineering Department.
- **Air Quality**—A fugitive dust protection plan would be developed as part of the CMP. At a minimum, this plan would include the elements described in Section C.3, above. In addition, the requirements related to the reduction of emissions from construction vehicles and equipment described above would be incorporated as conditions of the Proposed Project’s construction.
- **Site Security**—The Applicant would develop and implement a plan to secure the Project Sites prior to the commencement of construction. Areas of each Site that would pose an increased risk to unauthorized individuals during the various phases of construction would be made inaccessible to the public.
- Posting of phone numbers for responsible City and contractor contacts.
- **Construction Waste Management Plan**—The Applicant would develop and implement a plan to reduce non-hazardous construction and demolition waste by at least 75 percent by weight through use of recycling, salvaging, or diversion practices.

C.6. SEDIMENT AND EROSION CONTROL

The Proposed Project would require a NYSDEC General Permit for Stormwater Discharges from a Construction Activity (GP-0-20-001) for each Project Site. The permit ensures that potential soil erosion and sedimentation impacts are controlled and mitigated through the preparation and implementation of an SESC Plan.

To mitigate the potential for soils exposed during construction to erode and for sediment to travel downstream and adversely affect the on-site and off-site stormwater systems, a preliminary SESC Plan has been developed as part of the SWPPP for each Project Site. The SWPPPs are discussed in Chapter 9, “Stormwater Management,” of this DEIS. The SESC Plans identify the location, type, and sizing of soil and erosion control measures. The final SESC Plans would be developed in accordance with the “New York State Standards and Specifications for Erosion and Sediment Control,” dated November 2016 and would be subject to the review and approval of both the City Department of Public Works and NYSDEC.

Temporary mitigation measures would be implemented at each Project Site during construction to reduce the amount of sediment pollution to the stormwater runoff. The anticipated measures are summarized in this section and described more fully in **Appendices J-1, J-2, and J-3**.

- *Stabilized Construction Entrance/Exit*: A stabilized construction entrance/exit would have a stabilized aggregate pad underlain with filter cloth to prevent construction

vehicles from tracking sediment off-site. The stabilized construction entrance would be located at specific transition areas between concrete/asphalt to exposed earth. The contractor would not be permitted to track sediment into the public roadways.

- *Silt Fence*: Silt fence would be installed on the down gradient edge of disturbed areas parallel to existing or proposed contours or along the property line as perimeter control. Silt fence would be used where stakes can be properly driven into the ground as per the Silt Fence detail in the SESC Plan.

Silt fence controls sediment runoff where the soil has been disturbed by slowing the flow of water and encouraging the deposit of sediment before water passes through straw bale and/or the silt fence. When sediment has reached one-third the height of the bale/fence, it would be removed from silt fences and properly disposed.

- *Inlet Protection*: Inlet protection would be installed at drainage structure inlets that are subject to possible construction runoff. Inlet protection would be constructed to pass stormwater but prevent silt and sediment from entering the drainage system.
- *Soil Stockpile*: When activities temporarily cease during construction for seven days or more, stockpiled and exposed soil would be protected and stabilized by seed, mulch, or other appropriate measures in accordance with NYSDEC requirements.
- *Sediment Trap*: A sediment trap intercepts sediment-laden runoff and filters the sediment laden stormwater runoff leaving the disturbed area to protect downstream drainage ways, properties, and rights-of-way. The sediment traps may be installed down gradient of construction operations, which expose critical areas to soil erosion. The trap would be maintained until the disturbed area is protected against erosion by permanent stabilization.

The sediment traps would not be connected to the municipal storm sewer if the site is designated a brownfield/hotspot (i.e., portions of the Teutonia Site and Chicken Island Site). After storm events, the collected water would be tested to ensure quality prior to discharge. Sediment traps would be drawn down after storm events to restore volume for future storm events.

- *Dust Control*: During the demolition and construction process, debris and disturbed earth would be wetted down with water, if necessary, to control dust. Other New York State Department of Transportation (NYSDOT)-approved dust control measures may also be used.¹ On-site construction vehicle speeds would be limited to 5 mph to limit potential for dust and other particulates to become airborne during construction activities. After demolition and construction activities, all disturbed areas would be covered and/or vegetated to mitigate the creation of dust.
- *Soil Stabilization*: Where construction activities have ceased, temporary seeding or permanent landscaping would be implemented to control sediment-laden runoff and provide stabilization to control erosion during storm events. The contractor would apply soil stabilizer in accordance with NYSDEC specifications and manufacturer's requirements. This temporary seeding/stabilization or permanent landscaping would

¹ Such measures include dust palliatives, which are a chemical or mix of chemicals applied to unpaved surfaces to reduce dust from wind or vehicle traffic. The commercial dust palliative products currently approved for use by NYSDOT are provided at the following website. <https://www.dot.ny.gov/divisions/engineering/technical-services/geotechnical-engineering-bureau/dust-palliatives>

be in place no later than seven days after demolition and construction activities have ceased.

- *Dewatering*: The NYSDEC General Permit authorizes limited non-stormwater discharges including uncontaminated discharges from construction site dewatering operations. Contaminated discharge must be properly permitted by the applicable regulatory authority and are not covered under the SWPPP. If required, a Remedial Action Plan would be developed to detail the proper handling of contaminated discharges. See also Chapter 14, “Hazardous Materials,” of this DEIS.
- *Material Handling*: The contractor would be required to store construction and waste materials as far away as practical from environmentally sensitive areas, including stormwater inlets. Where possible, materials would be stored in a covered area to minimize any potential runoff. The contractor would be required to implement spill prevention and response where practicable. Prior to commencing construction activities, the contractor would be required to obtain all necessary permits and verify permits have been obtained.
- *Concrete washout stations*: The contractor would use concrete washout stations to contain concrete and liquids when the chutes of mixers and hoppers of concrete pumps are rinsed out after deliveries.

Erosion controls on each Project Site would be relocated and replaced around the Site as needed throughout each of subsequent construction phase. Excess excavated soils would be transported from the Sites. Excavation walls and shoring would be installed as required throughout each Site, particularly along the property limits. Excavation side walls would be adequately braced to mitigate any potential steep slope issues. An excavation retaining wall system would be used at each Project Site to ensure there is no damage to adjoining foundations and would be properly installed prior to any excavation for the proposed development.

C.6.a. Teutonia Site

The Teutonia Site is typical of urban construction sites in that nearly the entire property would require grading and excavation, and excavation for the foundation and subsurface usable space (i.e., parking garage) would result in excavation with no direct stormwater outlet. There are no streams or drainage swales currently conveying stormwater from the Teutonia Site. Stormwater that collects would be managed and pumped to an approved discharge point, minimizing the potential for soil erosion.

Prior to any ground disturbance, pre-construction surveys would be performed when sensitive receptors are in the proximity of the construction site. The total area of ground disturbance at the Teutonia Site would be approximately 1.25 acres, which includes surrounding roadways to connect utilities and make other infrastructure improvements as described in Chapter 8, “Infrastructure and Utilities.” Ground disturbance would be limited to the area within the limit of disturbance depicted on Drawing C-07 in **Appendix C-1**.

A double row of silt fencing would be placed along the western edge of the Site adjacent to the MNR right-of-way. The silt fencing would minimize the potential for sheet flow erosion to occur along the western edge of the Site. Along the eastern, northern, and southern edges of the Site, excavation would occur which

would result in those portions of the Site being at a lower elevation than the adjacent properties during site grading and soil exposure.

Excavation side walls would be adequately braced to mitigate potential steep slope issues. Currently, the only area of steep slope is located along the western half of the Site near the MNR right-of-way. Grading and excavation of this slope would occur to lower the grade for the parking garage. Areas of steep slope remaining on-site following construction would be secured with structural methods, such as retaining walls, or would be properly stabilized with vegetation.

The excavation required at the western edge of the property is less than on the eastern side of the property, near Buena Vista Avenue, due to existing changes in grade throughout the Site from east to west. As per the proposed Grading Plan (Drawing C-05 in **Appendix C-1**), approximately 22,150 cubic yards of material would be removed; no fill material would be needed. Existing concrete retaining walls, located along the southwestern and southern edges of the Teutonia Site, would not be disturbed. The Applicant would coordinate with MNR to determine any conditions or requirements for excavation work adjacent to the MNR right-of-way. Specifically, MNR would be provided with contractor means and methods and documentation as requested to show calculations for sheeting to indicate the sheeting would accommodate MNR Cooper E-80 loadings and to demonstrate that the existing wall would not overturn during excavation behind it. An MNR Entry Permit would be obtained and MNR would be notified prior to the start of work. As noted in **Appendix N-2**, MNR takes no exception to the support or excavation plan submitted for the Teutonia Project, provided the conditions described above are met. Excavation work along the eastern portion of the Site near the Buena Vista Avenue right-of-way would be designed to protect the nearby/adjacent utilities and would include lateral bracing to support Buena Vista Avenue.

As discussed above in Section C.3, a pre-construction survey would be conducted for adjacent structures help to establish survey points for monitoring during construction. Throughout the excavation and foundation construction phases at the Teutonia Site, measurements of movement and vibration levels would be made in the adjacent buildings to the north and south of the Site.

Portions of excavation that would occur on the Teutonia Site involve soils associated with a BCP site. Therefore, these soils would be handled in accordance with Occupational Safety and Health Administration (OSHA) standards, as well as be disposed of in accordance with BCP criteria. Groundwater, if encountered, would be handled in accordance with applicable requirements and regulations and the BCP Site Management Plan and be approved by the City engineer. As discussed in Chapter 14, "Hazardous Materials," water would not be recharged to the surface or subsurface, but would be managed off-site, as per the Site Management Plan. Chapter 14, "Hazardous Materials," discusses the measures anticipated to be taken during construction to avoid, minimize, and mitigate potential adverse impacts from subsurface environmental conditions on the Teutonia Site, including the vapor barrier and passive sub-slab depressurization system.

C.6.b. Chicken Island

The Chicken Island Site is typical of urban construction sites in that nearly the entire property would require grading and excavation. Runoff on-site is conveyed via sheet and shallow concentrated flow to either nearby stormwater infrastructure (both combined sanitary and storm and separate storm sewers) or directly to the Saw Mill River; therefore, there is the potential for soil erosion to impact off-site properties.

Prior to any ground disturbance, pre-construction surveys would be performed when sensitive receptors are in the proximity of the construction site. The total area of ground disturbance at the Chicken Island Site would be approximately 5.80 acres, which includes surrounding roadways to connect utilities and make other infrastructure improvements as described in Chapter 8, "Infrastructure and Utilities." Ground disturbance would be limited to the area within the limit of disturbance depicted on Drawings SE-1 and SE-2 in **Appendix C-3**.

A double row of silt fencing and construction fencing would be placed along the outer limits of the phase under construction, particularly near the Saw Mill River and along James Street on the western edge of the Site. The silt fencing would minimize the potential for sheet flow erosion to occur along the daylighted park and James Street. Along the eastern, northern, and southern edges of the Site, excavation would occur which would result in those portions of the site being at a lower elevation than the adjacent properties and roadways during site grading and soil exposure.

There are currently no steep slopes (i.e., slopes > 15 percent) within the Chicken Island Site that would be impacted by construction activities. Areas of steep slope created by construction activities would be secured with structural methods, such as retaining walls, or would be properly stabilized with vegetation.

As per the proposed Grading Plan (Drawings GR-1 and GR-2 in **Appendix C-3**), approximately 99,300 cubic yards of material would be removed; no fill material would be needed. An existing retaining wall, which borders the existing parking lot along the eastern end at New School Street and the southern end at Nepperhan Avenue, would not be disturbed. The Applicant would coordinate with the City Engineering Department to determine any specific or unique conditions or requirements for excavation work adjacent to the surrounding roadways.

Portions of excavation that would occur on the Chicken Island Site involve soils associated with a BCP site. Therefore, these soils must be handled in accordance with OSHA standards, as well as disposed of in accordance with BCP criteria. Chapter 14, "Hazardous Materials," discusses the measures anticipated to be taken during construction to avoid, minimize, and mitigate potential adverse impacts from subsurface environmental conditions on the Chicken Island Site.

Based on the excavation depths, multiple levels of tiebacks would be required, which would likely extend beyond the property lines and into the adjoining properties and the City right-of-way which would require temporary easements from adjoining property owners and/or the City.

Groundwater elevations would be above the basement floor elevations for Buildings 1, 2, and 3. Groundwater would also likely be encountered during

deeper utility installations. Therefore, a temporary dewatering system would be required to keep groundwater levels at least two feet below the bottom of the excavation during construction. As described in Chapter 14, “Hazardous Materials,” groundwater would be sampled during excavation to determine the presence of contaminants. Should contaminants be found, the groundwater would be treated in accordance with the active BCP on the Site and would be stored on-site to be transported and treated at an approved facility. If significant groundwater inflow is encountered or if any excavations extend greater than two feet below the observed groundwater levels, a more comprehensive dewatering system may be required. Permits for construction dewatering may be required. Foundation drains would be required for any retaining walls below grade and would be tied to the storm sewer system or would utilize a sump pump. All pumped water would be handled in accordance with applicable requirements and regulations and the BCP Site Management Plan and be approved by the City engineer. As discussed in Chapter 14, “Hazardous Materials,” water would not be recharged to the surface or subsurface, but would be managed off-site, as per the Site Management Plan.

C.6.c. North Broadway

The North Broadway Site is typical of urban construction sites in that nearly the entire property would require grading and excavation, and that excavation for the foundation and subsurface usable space (parking garage) would result in excavation with no direct stormwater outlet. There are no streams or drainage swales currently conveying stormwater from the North Broadway Site. Stormwater would be collected, managed, and directed to an approved discharge point, thereby minimizing the chance for erosion.

Prior to any ground disturbance, pre-construction surveys would be performed when sensitive receptors are in the proximity of the construction site. The total area of ground disturbance at the North Broadway Site would be approximately 2.39 acres, which includes surrounding roadways to connect utilities and make other infrastructure improvements as described in Chapter 8, “Infrastructure and Utilities.” Ground disturbance would be limited to the area within the limit of disturbance depicted on Drawing C-09 in **Appendix C-9**.

A double row of silt fencing and construction fencing would be placed along the outer limits of the North Broadway Site, particularly along North Broadway to the west and south, Baldwin Place to the north, and Locust Hill Avenue to the east. The silt fencing would minimize the potential for sheet flow erosion to occur along the sloped hill to North Broadway and along Overlook Terrace and Baldwin Place toward Locust Hill Avenue.

Excavation side walls would be adequately braced to mitigate potential steep slope issues. Currently, the western half of the Site nearest North Broadway has steep slopes. Grading and excavation of these slopes would lower the grade for the retail and apartment building lobby structures. Areas of steep slope remaining on-site following construction would be secured with structural methods, such as retaining walls, or would be properly stabilized with vegetation.

As per the proposed Grading Plan (Drawing C-05 in **Appendix C-9**), between 10–15 feet of excavation would be required within 20 feet of the northern and

eastern ends of the North Broadway Site. Approximately 36,000 cubic yards of material would be removed. The Applicant would coordinate with the City Department of Housing and Buildings to determine any specific or unique conditions or requirements for excavation work adjacent to the surrounding buildings and the City Engineering Department for concerns regarding the roadways.

C.7. STORMWATER MANAGEMENT

A NYSDEC General Permit for Stormwater Discharges from a Construction Activity (GP-0-20-001) would be required for each Project Site, which would include preparation of an SWPPP for each Project Site. Preliminary SWPPPs are discussed in Chapter 9, “Stormwater Management” and are provided in **Appendices J-1, J-2, and J-3**.

On the Chicken Island Site, the existing Saw Mill River culvert, which extends underneath New School Street and the existing Chicken Island Site parking lot, and the daylighted park area adjacent to the southern corner of the Site, are within close proximity to the Proposed Project activities. In particular, the footprint and foundation of Building 4, and to some extent Building 3, would be located over this culvert. The existing river culvert is approximately 90 years old. A thorough structural evaluation of the existing culvert would need to be completed as part of site plan review and any modifications or repairs needed to accommodate the Chicken Island Project would be done by the Applicant. Adequate shoring and bracing would need to be implemented at those building locations to protect the existing Saw Mill River culvert. Alternatively, if the culvert is deemed not structurally sound to support the buildings, the structure would need to be removed and replaced entirely with a new ConSpan culvert. Any necessary permits for this demolition, construction, and renovation would need to be obtained from the City, NYSDEC, and the United States Army Corps of Engineers.

Mitigation measures to protect the existing Saw Mill River culvert and daylighted area during construction would be developed as part of site plan review. Depending on the condition of the existing culvert, the following mitigation measures may be proposed:

- If the existing culvert is in relatively good condition, proper shoring and bracing will be provided adjacent the existing culvert to protect the structural integrity of the system. Any portion of the Building 4 foundation that will overlap the existing culvert will be bridged to protect the culvert.
- If the existing culvert is in poor condition and incapable of supporting the buildings, it will be replaced as part of the Proposed Project. Proper shoring and bracing will be provided adjacent the culvert. Any portion of the Building 4 foundation that will overlap the existing culvert will be bridged to protect the culvert.

C.8. OFF-SITE IMPROVEMENTS

It is anticipated that any required tiebacks for the foundation bracing systems at each Project Site would be below the utilities in the surrounding roadways and would be designed to avoid any impact to existing utilities.

If deemed necessary by the City Engineering Department, the Applicant would coordinate improvements to the existing sewer system with the City. Improvements to the water supply system for each Project Site are discussed in the subsections below. For each Project Site, water main extensions would require approval from the City Engineering

Department and the WCDOH prior to construction. Water main construction would require trenching and plating in the right-of-way. Any water main shutdown, the wet tap, and disconnection of the existing water main would be coordinated with the City Water Bureau and Engineering Department. Road closure and street opening permits would be coordinated with the City Engineering Department and Department of Public Works.

C.8.a. Teutonia Project

As discussed in Chapter 8, “Infrastructure and Utilities,” improvements to the water supply infrastructure would be needed to service the Teutonia Project. The Applicant proposes to extend the existing 12-inch water main starting at the intersection of Prospect Street and Hawthorne Avenue. The new 12-inch water main would continue west until Prospect Street and Buena Vista Avenue where it would run north until it connects to the 12-inch water main at Main Street (see **Appendix I-2**). The new 12-inch water main would replace approximately 900 linear feet of water main. All existing connections currently supplied by the 6-inch line would be reconnected to the 12-inch water main, including existing fire hydrants.

The new water main would be installed, tested, and approved for use by the WCDOH. At that time, property owner service connections and hydrants along Buena Vista Avenue and Prospect Street would be relocated to the new main and the existing main closed and abandoned in place. There should be minimal disruption of service during the reconnection process.

C.8.b. Chicken Island Project

As discussed in Chapter 8, “Infrastructure and Utilities,” the City Water Bureau has requested an upgrade of the water main in James Street, currently an 8-inch DIP, to complete the overall water service loop for the Chicken Island Project. This upgrade would include the construction of a new 12-inch water main extending from the 12-inch water mains in Ann Street and Henry Herz Street, constructed during Phase 3 of the City’s Saw Mill River daylighting project, and would connect to the existing 12-inch water main in Palisade Avenue, approximately 500 linear feet of water main.

The new water main would be installed, tested, and approved for use by the WCDOH. At that time, property owner service connections and hydrants along James Street would be relocated to the new main and the existing main closed and abandoned in place. There should be minimal disruption of service during the reconnection process.

C.8.c. North Broadway Project

The Applicant would install approximately 2,000 linear feet of new water main from Ashburton Avenue to Palisade Avenue in Locust Hill Avenue, as discussed in Chapter 8, “Infrastructure and Utilities” (see Drawing C-06, Drainage and Utility Plan in **Appendix C-9**). The new 12-inch water main would supplement the existing water service and provide additional water supply needed for the current and future developments along Locust Hill Avenue. This improvement would be completed prior to obtaining a temporary Certificate of Occupancy for the North Broadway Project.

The new water main would be installed, tested, and approved for use by the WCDOH. At that time, property owner service connections and hydrants along Locust Hill Avenue would be relocated to the new main and the existing main closed and abandoned in place. There should be minimal disruption of service during the reconnection process.

D. MITIGATION

The Applicant would prepare a detailed CMP for City approval, which would establish construction management protocols and measures to mitigate potential adverse impacts. Construction mitigation measures are summarized below.

A SESC Plan, meeting State and City requirements, would be implemented to avoid and mitigate potential impacts associated with the off-site migration of sediment during construction. Temporary mitigation measures would be implemented at each Project Site during construction to reduce the amount of sediment pollution to the stormwater runoff.

Excavation side walls would be adequately braced to mitigate potential steep slope issues during construction and any steep slopes remaining following construction would be secured with structural methods, such as retaining walls, or would be properly stabilized with vegetation.

As discussed further in Chapter 14, “Hazardous Materials,” measures would be taken during construction to avoid, minimize, and mitigate potential adverse impacts from subsurface environmental conditions on the Teutonia and Chicken Island Sites. Intrusive work on the portions of the Teutonia and Chicken Island Sites in the BCP must be completed in compliance with the Site Management Plan, Excavation Work Plan, and environmental easements set for each Site in accordance with NYSDEC Part 375 and NYSDEC DER-10. Mitigation measures anticipated for the Teutonia Site include a vapor barrier and passive sub-slab depressurization system.

Mitigation measures to protect the existing Saw Mill River culvert and daylighted area during construction would be developed as part of site plan review. These mitigation measures could include shoring and bracing to protect the structural integrity of the existing culvert or replacement of the culvert.

With implementation of these mitigation measures, although there may be adverse impacts associated with construction activities, they will be temporary in nature and are not expected to be significant. *