

V. MITIGATION

The following section reviews the potential for significant adverse impacts and sets forth measures to mitigate those impacts. Actions required and parties responsible to implement the mitigation are identified. Positive improvements and mitigation measures are discussed in detail at the end of each section in **III**, *Environmental Impacts and Mitigation Measures*.

A. Soils and Topography

The proposed project is not anticipated to cause any significant negative impacts on either soils or topography of the project area, as much of the property has previously been disturbed and only a few limited areas of natural soils still exist. Therefore, no mitigation is proposed.

B. Subsurface

Investigation and remedial activities have identified that residual soil and groundwater impacts exist on the project site. In many instances, concentrations do not meet the cleanup objective for Unrestricted Use nor Restricted Residential land use as specified by 6 N.Y.C.R.R. Subpart 375-6.8(a) and (b) of the NYSDEC soil cleanup objective (SCO). In some instances the concentrations do not meet the cleanup objectives the agencies set when the projects were completed as documented in the ECR. As a result, the NYSDEC and the EPA indicated that an Environmental Easement (EE) may be granted to allow for residential development on all portions of the Project site. The EE will require that a series of engineering and institutional controls be established in order to protect residents and will be based upon site specific data, e.g. soil vapor results. The EE and associated Site Management Plan (SMP) is not intended to address any additional remediation if hot spots are uncovered during site excavation work or to deal with portions of the site that do not meet current standards. The City will participate in preparing the EE and SMP.

The analysis documented in the ECR identifies the need for additional site investigation to fill certain data gaps; and the potential remediation of areas with soil containing chemicals that were or may not have been removed during previous efforts. The timing of the data-gap investigation depends on when any multi-agency accord, as recommended by the Applicant and the IDA, is finalized. However, an appropriate amount of sampling will be done in work zones not sufficiently characterized for the purpose of preparing the site specific health and safety plans for the workers and surrounding residents.

The Applicant and the IDA believe that a multi-agency accord would be the best mechanism for achieving the stated goal of consistently protecting the environment and public health and safety.

The agencies involved in the discussions include but are not limited to, EPA, DEC, N.Y.S. Department of Health, Nassau County Department of Health, Glen Cove Industrial Development Agency, and Glen Cove Community Development Agency. The NYSDEC and USEPA have indicated that an Environmental Easement and Site Management Plan are needed for the sites to be reclassified and eligibility into the BCP considered. These documents are explained below:

The NYSDEC and USEPA have indicated that an Environmental Easement and Site Management Plan are needed for the sites to be reclassified and eligibility into the BCP considered. These documents are explained in more detail in the following sections:

1. Environmental Easement

An “Environmental Easement” (EE) will directly benefit the NYSDEC as it gives them the power to enforce their environmental requirements. An EE is defined under New York State Environmental Conservation Law (“ECL”) §71-3603 as “an interest in real property, created under and subject to the provisions of this title which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls.” An Environmental Easement is an effective and enforceable means of ensuring the performance of maintenance, monitoring or operation requirements of the Institutional Controls (ICs) and Engineering Controls (ECs).

An IC is defined in ECL 27-1405(18) as “any non-physical means of enforcing a restriction on the use of real property that limits human or environmental exposure, restricts the use of groundwater, provides notice to potential owners, operators, or members of the public, or prevents actions that would interfere with the effectiveness of a remedial program or with the effectiveness and/or integrity of operation, maintenance, or monitoring activities at or pertaining to a brownfield site.”

An EC is defined in ECL 27-1405(11) as “any physical barrier or method employed to actively or passively contain, stabilize, or monitor contamination, restrict the movement of contamination to ensure the long-term effectiveness of a remedial program, or eliminate potential exposure pathways to contamination. Engineering controls include, but are not limited to, pavement, caps, covers, subsurface barriers, vapor barriers, slurry walls, building ventilation systems, fences, access controls, and/or alternative water supplies via connection to an existing public water supply, adding treatment technologies to such water, supplies, and installing filtration devices on private water supplies.”

The kinds of institutional and engineering controls that are usually considered in these documents are:

- soil on the property must be covered by a barrier layer approved by the Department such as concrete, asphalt, structures, or a minimum two (2) foot clean soil cover underlain by a demarcation barrier (e.g. geotextile) for vegetated areas;
- intrusive activities, including building renovation/expansion, subgrade utility line repair/relocation, and new construction which will cause a disturbance of the soil below demarcation barrier (e.g. geotextile) must be conducted in accordance with the Department approved Site Management Plan (SMP);
- prohibited vegetable gardens and farming;
- prohibited the use of groundwater underlying the property without treatment to render it safe for use as drinking water or for industrial purposes, and the use must first notify and obtain written approval from the Department and the Nassau County Department of Health;
- install a vapor barrier with a sub-slab vapor extraction system along with a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation in every new building erected;
- monitor, maintain, and replace as necessary any on-site Groundwater Monitoring Wells, and sub-slab vapor extraction systems as set forth in the Department approved SMP.

Once an environmental easement has been placed on a site, it becomes the tool to enable the State to ensure the property will remain safe and protective of human health and the environment.

2. Site Management Plan

The EE will require certain procedures to be followed during and after construction if any disturbance to the soil is done. In addition, the ECs that will be installed during construction will need to be operated, monitored and maintained (OM&M). The document that describes these procedures is called the Site Management Plan (SMP).

A Draft Site Management Plan (SMP) has been prepared and a copy is included in the Appendix. The SMP will be adopted along with the EE. It will be implemented during site construction and post construction to manage excavated soils and mitigate exposure to soil and groundwater through a cover system, and soil vapor mitigation measures in all onsite buildings requiring same as part of building and site design. The SMP will be required to be implemented by all current and future owners and operators of the property through the EE. The SMP explains how to manage the Site in perpetuity or until extinguishment of the EE in accordance with Article 71 Title 36 of the Environmental Conservation Law and applicable regulations in 6 NYCRR

Part 375. The EE must be recorded and will run with the land requiring all future owners and operators to comply with the terms in the SMP and the easement.

3. Multi-Agency Accord

It is essential that all properties meet consistent cleanup criteria and that the various regulatory agencies agree on the standards and approaches for achieving the final cleanup standards and long term management of the property from the environmental and public health protection perspectives. The Applicant and the IDA believe that the best mechanism for achieving this goal is to secure a multi-agency accord. The multi-agency accord would assign expectations and responsibilities to the agencies and developer to manage or oversee any remediation, what standards will need to be achieved and how they will be reached; who will perform the work; and when that work will be performed.

C. Water Resources

The proposed redevelopment of the project area would not result in any significant negative impacts to water resources in or around the area, as much of the area has already been impacted by years of neglect, and stormwater runoff within the project area currently flows directly into Glen Cove Creek without any filtration.

The project would be designed to conform with applicable regulations regarding hydrogeologic resources, to avoid any negative impacts to the natural environment. Applicable structural and non-structural recommendations per the *Long Island Comprehensive Waste Treatment Management Plan* and the *Nonpoint Source Management Handbook* would be adhered to as part of project development.

The redevelopment would eliminate the potential for new industrial uses that could adversely affect the creek in the future, and preserve and enhance existing intertidal wetland areas while creating additional wetland areas. Additionally, as the project is located within an AE designated 100-year flood zone, all construction would be required to meet minimum flood elevations to protect the health and safety of residents, workers, and others, as well as the environment.

A Stormwater Pollution Prevention Plan (“SWPPP”) will be prepared as part of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-02-01). The SWPPP will implement stormwater control measures to minimize the potential for sediment to enter Glen Cove Creek. In addition, the SWPPP will require paving or planting of exposed

soils as soon as possible after disturbance to minimize sedimentation potential as per BMPs.

Construction of the large vessel marina, the reconstructed Angler's Club, construction of a smaller vessel marina in the east, and dredging associated with each of these facilities could have the potential to result in adverse impacts to the marine habitat of Glen Cove Creek. However, best management practices and mitigation measures will be employed to minimize these potential impacts (see **Section III.C** for details).

D. Ecology

The proposed action has the potential to result in positive and adverse impacts to the ecological resources of the project site and adjacent portions of Glen Cove Creek, Hempstead Harbor, and Garvies Point Preserve.

Potential environmental benefits include the creation of tidal wetlands located landward of the proposed low-sill bulkhead, creation of open water habitat at the proposed turning basin, and planting of native wetland vegetation in the Captain's Cove area. In addition, the proposed action will include the restoration of degraded wetland areas in Captains' Cove through the excavation of concrete and asphalt debris, removal of invasive *Phragmites australis*, and re-planting of native plants. In the Garvies Point Beach area, the removal of an existing bulkhead and proposed grading and planting activities will result in increased beach area thereby creating areas for passive beach recreation and additional habitat for shorebirds and songbirds. Lastly, 5.8 acres of open space to the west of Dickson Avenue consisting, in part, of upland woodlands will be preserved. These areas of habitat creation, restoration, and preservation will serve to provide habitat for a wide variety of terrestrial and aquatic wildlife.

The proposed action is expected to result in an improvement to the existing stormwater drainage along Garvies Point Road through the installation of a proposed sewer collection and conveyance system and infiltration swales and trenches along the northern side of Garvies Point Road. The proposed green roofs, vegetated swales, landscaped open spaces, dry wells, infiltration trenches, infiltration basins, and structural water quality treatment devices will be used to remove 80% of total suspended solids and 40% of total phosphorus from stormwater before it enters Glen Cove Creek. Therefore, the proposed action is not expected to result in any significant decrease in the water quality of Glen Cove Creek and Hempstead Harbor and will result in an improvement to the existing drainage conditions along Garvies Point Road.

Potential adverse impacts of the proposed action include the following:

- The loss of the recently created 12.6 acres of open field habitat and 3.9 acres of standing water and habitat, which followed the environmental clean up, provided to songbirds and waterfowl.
- Collision-related mortality to resident and migratory songbirds due to the installation of glass surfaces and external lighting associated with the proposed development.
- Degradation of habitat quality provided by the woodlands in the southernmost portion of Garvies Point Preserve due to by the proposed action due to presence of lights in parking areas and buildings, increased levels of noise and disturbance resulting from human activities, and increased abundance of predators and invasive competitors.
- Potential adverse impacts to the essential fish habitat resulting from increased turbidity in the project area during construction phase which will temporarily affect foraging and refuge habitat.

The proposed action incorporates mitigation measures to avoid and minimize these potential adverse impacts. For example, the architectural and landscape design features described in **Section III.D-2.b** will serve to minimize collision-related mortality in songbirds and shorebirds. In addition, dredging and shoreline construction will be constrained to dredging windows authorized by the US Army Corps of Engineers, NYS Department of State, and NYS Department of Conservation in order to avoid adverse impacts to finfish populations, including winter flounder.

The water quality of Glen Cove Creek and Hempstead Harbor will not be adversely impacted by the proposed action as a Stormwater Pollution Prevention Plan for construction activities will be implemented to prevent adverse impacts resulting from the discharge of stormwater, suspended sediments, or pollutants. The operation of marinas associated with the proposed action shall comply with the Hempstead Harbor Protection Committee's Green Marina Program and follow best management practices for the containment of harmful pollutants.

E. Land Use, Zoning and Public Policy

The proposed project incorporates measures to improve the land uses, visual and aesthetic qualities of the environment and areas along Glen Cove Creek, while conforming to adopted zoning regulations and applicable public policies.

Redevelopment under the Proposed Action would not result in any significant adverse land use impacts. The mixed-use redevelopment would replace blighted areas with land uses that are compatible with surrounding residential neighborhoods. Redevelopment would also positively affect Downtown Glen Cove. The open space, waterfront promenade and limited retail at the east end of the project would also provide a connection between the waterfront and downtown. Besides creating a physical linkage between these two areas, the

project's infusion of new residents and employees would further support the downtown.

The conceptual site plan, as submitted, conforms to the specified purposes and bulk requirements of the MW-3 district. It is noted that there is a proposed zoning amendment currently being considered by the City Council, which would amend the MW-3 District's PUD regulations to allow for a two-phase approval process, in accordance with typical PUD procedures for large projects. This would provide for a PUD Master Development Approval for the overall development framework, followed by PUD Site Plan Approval(s) for individual phases or portions of the project. (See zoning text amendment language in **Appendix S**.) The proposed zoning amendment is currently going through the amendment process set forth in Article VI of the City Zoning Ordinance. The Proposed Action is consistent with the GPURP, the City's Master Plan objectives and several other policy documents (see **Section III.E**).

F. Transportation

Roads

The proposed transportation system improvements (mitigation measures) to be implemented as part of the Glen Cove Creek Mixed-Use Waterfront Development include the following:

- ***Glen Cove Road & Glen Head Road*** – Widen to provide one additional northbound lane and one additional southbound lane at the intersection. Modify the traffic signal timing and phasing during each of the analysis peak hours. The intersection currently has a split phase operation for the eastbound and westbound approaches. Instead of a split phase operation, provide an eastbound leading left turn phase followed by a combined east-west phase. In addition, provide a north/south leading left turn phase.
- ***Glen Cove Road & Northern Boulevard*** – As stated previously, Nassau County has developed plans to improve the capacity of this intersection by widening the south leg of the intersection, thereby allowing for a third through lane on the southbound approach. The future conditions analyses for both the No-Action and Proposed Action scenarios are based on these proposed improvements being implemented prior to completion of the Proposed Action.
- ***Herb Hill Road & Dickson Street/Garvies Point Road*** – This intersection is expected to experience a reduction in LOS, from “A” or “B” to “F” if no mitigation is done. However, there are several options to improve the future operating conditions at this location. One option is to install a fully actuated traffic signal which will respond to the changing volumes on each of the approaches throughout the day. Another option is to construct a roundabout at this location. Both of these options were analyzed and both

will operate satisfactorily under the Proposed Action conditions. The final determination as to which alternative will be implemented will be determined in consultation with the City of Glen Cove as the site plan approval process moves forward.

- **Route 107 & Glen Head Road** – Prohibit eastbound left turns at the intersection. The number of vehicles currently performing this movement is very low, but causes excessive delays when done.
- **Glen Cove Road at NY 107 Split** – Adjust signal timing to optimize cycle length and phase split to improve overall performance of intersection and provide substantial reduction in delay for southbound left turn from Glen Cove Road to NY 107 (Cedar Swamp Road).
- **Glen Cove Avenue & Glen Head Road** – Optimize the phase splits to improve overall performance of intersection and substantially reduce delays for southbound left turning vehicles.

Inter-Modal Transit

The proposed redevelopment of the north side of Glen Cove Creek would introduce modern, convenient and safe inter-modal transit services to and from the project area, local LIRR stations and the surrounding area, including downtown Glen Cove. Proposed transit service enhancements include new shuttle bus service within the project area, expanding the Long Island Bus N21 and/or N27 routes into the project area, linkages to LIRR service and other points of interest in the city. Additionally, regional ferry service to the project area is anticipated to be restored prior to the mixed-use development's construction.

G. Air Quality

Construction activity has the potential to temporarily adversely affect air quality as a result of diesel emissions. In order to minimize adverse affects on air quality, the following mitigation would be implemented as part of the construction program to the extent feasible:

- **Diesel Equipment Reduction** - Elements of the construction plan would minimize the use of diesel engines and instead use electric engines to the extent practicable. Construction contracts will encourage the use of electric engines where practicable and ensure the distribution of power connections throughout the area as needed. Access to grid power would be most beneficial by eliminating the need for diesel powered generators,
- **Clean Fuel** - ULSD would be required for diesel engines throughout the construction program. If fuel blends include bio-diesel, further reduction of PM emissions would be possible.

- Idle Time Restrictions - The construction specifications will include the restriction of on-site vehicle idle time to three minutes for all vehicles that are not using the engine to operate a loading, unloading, or processing device (e.g., concrete mixing trucks),
- Planning – Some emission sources (e.g., concrete trucks and pumps, cranes, large generators) will be located as far as possible from residential buildings and public spaces, to the extent practicable,
- Utilization of Tier 1 or Newer Equipment - The construction specifications will encourage the use of Tier 1¹ or later construction equipment for nonroad diesel engines greater than 50 hp. The more recent the “Tier,” the cleaner the engine for all criteria pollutants, including fine PM. Therefore, restricting site access to newer equipment with lower engine-out PM emission values would significantly reduce adverse affects on air quality from diesel engines.

Construction also has the potential to temporarily adversely affect air quality as a result of activities that generate fugitive dust. In order to minimize adverse affects on air quality, the following components will also be implemented as part of the construction program to the extent feasible:

- Planning - Fugitive dust control plans will be required as part of contract specifications,
- Watering - Truck routes and exposed excavation areas will be watered as needed,
- Cleaning - Truck exit areas will be established for washing off the wheels of all trucks that exit the construction sites, and include drive off pads
- Stabilization - In cases where truck routes will remain in the same place for an extended period, the routes would be stabilized, covered with gravel, or temporarily paved to avoid the re-suspension of road dust.
- Truck Covers – Dust covers for dump trucks will be required.

¹ The first federal regulations for new nonroad diesel engines were adopted in 1994, and signed by EPA into regulation in a 1998 Final Rulemaking. The 1998 regulation introduces Tier 1 emissions standards for all equipment 50 hp and greater and phases in the increasingly stringent Tier 2 and Tier 3 standards for equipment manufactured in 2000 through 2008. The Tier 1 through 3 standards regulate the EPA criteria pollutants, including particulate matter (PM), hydrocarbons (HC), oxides of nitrogen (NO_x) and carbon monoxide (CO). Prior to 1998, emissions from nonroad diesel engines were unregulated. These engines are typically referred to as Tier 0.

The Applicant will also maintain a construction schedule on its website so the public can be informed as to all activities. The Applicant will work closely with city officials and neighbors on the creek to ensure there are no conflicts with specific events.

The Proposed Action also includes measures that would reduce the carbon footprint of the project, and other design measures will be considered as the design progresses that have the potential to receive credits under the USGBC LEED rating system. Measures currently incorporated include:

- Project Location:
 - Transit Oriented Development: the proposed project will be located near the proposed Glen Cove Ferry Terminal, enabling commuters traveling between the project and New York City or other potential destinations along the Long Island Sound to travel via ferry rather than single occupancy vehicle trips. The proposed action would not only enable the residents of the project to use the ferry, but by bringing a critical mass of commuters and new public activity on the waterfront, would encourage expanded usage of the ferry by other area residents and visitors. The project will also provide shuttle bus connections to LIRR service, further reducing the number of single-occupancy vehicle trips.
 - Previously, the project site was primarily industrial. Transforming the site to mixed use would not require any deforestation and would enable some sequestration through planting of trees as part of the project landscaping.
- Project Design:
 - The project will include a mix of residential, commercial, hospitality, entertainment and recreational uses, and provides pedestrian and bicycle linkages throughout the site and to the downtown. This type of mixed-use character can provide for a reduction in vehicle trips.
 - The proposed project includes multifamily residential units. Compared with otherwise comparable households living in single-family detached units, households living in multifamily units consume 54 percent less energy for space heating and 26 percent less energy for space cooling.²
- Energy Systems and Appliances: The proposed project is expected to utilize very efficient heating, ventilation, and air conditioning (HVAC) systems, surpassing the new ASHRAE 90.1-2007 standard. This is expected to result in significant energy savings. In general, the intent is for the mechanical systems

² Ewing, Reid, and Fang Rong. 2008. The Impact of Urban Form on U.S. Residential Energy Use. *Housing Policy Debate*, V19, Issue 1.

to be the most efficient available in the marketplace at the time of construction. The systems will include the following:

- Heat and hot water systems will likely be fueled by natural gas, which is cleaner burning and more energy efficient.
- Based upon technology available today, the townhouses could be heated by condensing furnaces that will be 96% efficient. For air-conditioning, the furnaces could be equipped with direct expansion coil and air-cooled condensing units. The air-conditioning units are rated at 18.5 SEER (the minimum for Energy Star rating is 13). The use of energy recovery ventilators (ERV) in the HVAC systems is also being considered to further improve the efficiency of the systems.
- Domestic water heaters could be of the condensing type with thermal efficiency of over 90%.
- All refrigerators, dishwashers, clothes washers, and clothes dryers will be Energy Star compliant.
- The heating system for the hotel rooms will include individual controls, offering the flexibility to turn off the heat when a room is unoccupied, resulting in fuel and energy savings.
- Conference rooms, hallways, and other common areas' heating and air-conditioning will be accomplished by packaged rooftop units or split systems. The energy efficiency ratio (EER) of these units will be in the range of 11.0 to 14.5 depending on the size and capacity (11 is the minimum required to meet Energy Star requirements).
- The majority of lighting in the hotel common areas will be fluorescent lamps with electronic ballasts, and compact fluorescent lamps (CFL). Hotel guest bedrooms will be illuminated with compact fluorescent lamps (CFL) where practicable.

Additional measures that can be investigated as the project design progresses could include:

- Energy Efficiency:
 - Building Envelope—choose energy efficient components such as glazing, insulation, and roofing materials.
 - Design building orientation to maximize natural lighting and passive solar energy.
 - Utilize energy efficient lighting and/or Energy Star certified appliances for all project components.
 - Optimize outdoor lighting to meet but not exceed lighting needs.
 - Utilize photo and/or motion sensors to control lighting where practicable.
- Renewable Energy:
 - Install ground source heat pumps.

- Install solar water heating.
 - Install building integrated solar or wind power generation.
 - Encourage the purchase of renewable power.
- Energy Efficient Vehicles:
 - Provide priority or cheaper parking for energy efficient vehicles.
 - Provide electric charging stations for electric vehicles.
- Sequestration: maximize tree planting within the areas available for open space in a manner consistent with the intended use.
- Construction:
 - Optimize building design to minimize the quantity of cement and iron/steel.
 - Use locally produced or extracted materials.
 - Utilize recycled construction materials and/or materials with recycled content.
 - Use recovered wood or wood that is certified in accordance with the Sustainable Forestry Initiative or the Forestry Stewardship Council's Principles and Criteria.
 - Use fly ash in the cement mixture, replacing cement, to the extent practicable.

H. Noise

A wide variety of measures (source controls, path control, and receptor controls) can be used to minimize construction noise and reduce potential noise impacts. During each phase of construction at the project site, measures would be implemented to reduce construction noise and vibration levels to within the limits required by applicable codes and regulations. During periods of extensive excavation or pile driving activities, measures would be taken to ensure that no structural damage to adjacent structures would occur. For example, if deemed necessary: 1) the use of on-site vibration monitoring equipment and crack measurements; 2) the excavation contractor may install soldier piles and bracing to stabilize the foundations of the adjacent buildings and structures; and 3) in more extreme cases, the entire foundation of the adjacent building can be braced with horizontal members held in place with vertical and batter piles. All activities will be closely coordinated with Building Department officials.

In terms of source controls (i.e., reducing noise emission levels at the source or during the most noise sensitive time periods), all contractors and subcontractors would be required to properly maintain their equipment and have the appropriate manufacturer's noise reduction devices, including, but not limited to, a quality muffler that is free of rust, holes, and exhaust leaks installed.

In terms of path controls (e.g., placement of equipment, implementation of barriers between equipment and noise sensitive receptors), the following measures for construction would be implemented to the extent feasible and practicable:

- Noisy equipment, such as generators, cranes, trailers, concrete pumps, concrete trucks, and dump trucks, would be located away from and shielded from noise sensitive receptor locations.
- During the construction of Building Block J, either vibratory pile drivers or a shroud/noise bellows system would be used in conjunction with impact pile drivers to reduce noise levels from pile driving activity at adjacent noise sensitive locations (i.e., residences and parks/open space).

The project's sponsor will install a dedicated sound system (i.e., a distributed sound system that would control speaker type, orientation, layout, directivity, and sound emissions so as to control noise levels at sensitive receptors, particularly residential locations south of Glen Cove Creek) at the proposed restaurant. The sound system will be designed so that noise levels due to the proposed outdoor music at the project's restaurant would not exceed the Glen Cove Noise Code at any of the analyzed receptor locations during any time period. Consequently, a significant impact is not predicted to occur due to outdoor music operations at the proposed restaurant

To reduce noise levels in the Garvies Point Preserve emanating from vehicular traffic on Garvies Point Road, the installation of a noise barrier or earth berm adjacent to Garvies Point Road was considered. It was determined that the installation of a noise barrier or earth berm would not be feasible or practicable and also would not meet the key public purposes and needs for the proposed project for the following reasons:

- As presented in the Chapter III D, "Ecology," the noise levels created by the proposed project's vehicular traffic are not anticipated to significantly adversely affect species that inhabit the Garvies Point Preserve. As discussed in the Ecology Chapter, a noise barrier or earth berm would not likely provide acoustical benefit to the species that inhabit the Garvies Point Preserve.
- A visual and physical barrier would be created by the installation of a noise barrier or earth berm. A noise barrier or earth berm would obstruct the visual corridor to the Garvies Point Preserve for residents of the proposed project and users of the newly created open spaces. Additionally, the installation of a noise barrier or earth berm would likely interrupt view corridors and prevent connections between the proposed project's newly created open spaces, such as the woodland park discussed in Chapter II, "Description of Proposed Action," and the Garvies Point Preserve. Consequently, a noise barrier or earth berm would not meet one of the key public purposes and needs for of the proposed project identified in Chapter II, which relates to, "Improving the existing blighted visual and aesthetic conditions of the area with new and attractive structures, while providing new view corridors and public open space amenities."

- Installation of a noise barrier or earth berm may raise additional safety concerns by creating shadowed areas or hiding spaces and, depending on its location and height, obscuring sight lines for pedestrians and vehicles:

For these reasons, the installation of a noise barrier or earth berm would not be considered a feasible or practicable mitigation option, would not meet the key public purposes and needs of the proposed project, and therefore, is not being proposed as part of this project.

I. Community Facilities and Services

It is estimated that the City would receive approximately \$5.6 million in annual property tax revenues from the Proposed Action (see Section III.K, *Economics* and Appendix for details), a portion of which could be used to support hiring additional police personnel and EMS personnel, increase harbor patrol hours and support the purchase of new uniforms and equipment.

The proposed development would include a security program with private security personnel to monitor the entire project area in coordination with the Glen Cove Police Department. The Applicant would provide initial funding for the security, with responsibility eventually being shifted to the Property Owner's Association. The project developer is also willing to place automated external defibrillators (AEDs) in multiple high visibility locations.

The School District has adequate capacity to accommodate the anticipated project-generated school children, and the project would also result in a substantial annual net fiscal benefit of approximately \$10.6 million for the School District.

No adverse impacts to educational services, health care, parks, or solid waste are expected as a result of the project and, therefore, no additional mitigation is proposed.

J. Utilities

The proposed development would not have a negative impact on sanitary sewage disposal, therefore, no mitigation is proposed. Regarding water services, the City has begun to study improving its water infrastructure to accommodate the increased water demand resulting from its desired future growth and various proposed developments in the City, including the proposed Glen Isle project. The Applicant will cooperate with the City in the City's evaluation of viable options for a water source improvement plan that will address the City's current and future needs.

K. Economics

The proposed project would generate employment and taxes during the construction phase and approximately 768 full-time equivalent positions during on-going operations. The anticipated employment on site would include hospitality, retail, restaurant, office and other jobs. The proposed project would generate on-going City, County, State, MTA and School District taxes that exceed current tax revenues and anticipated increased expenses to properly service the development. Total annual revenues attributable to on-going operations are estimated at \$27.6 million, including approximately \$5.6 million to the City of Glen Cove, \$5.2 million to Nassau County, \$4.0 million to the State of New York, \$458,000 to the MTA and \$12.4 million to the Glen Cove School District. No mitigation is proposed.

L. Demographics

No adverse effects of the housing stock increase, including workforce housing units, or the population or employment generation anticipated as a result of the Proposed Action have been identified. Therefore, no mitigation is proposed. See **Section V.I Community Facilities and Services**, for discussion of mitigation of potential impacts on the public school system.

M. Aesthetics

The proposed project would maintain view corridors in between the proposed buildings and along the creek, allowing views to remain towards and from the creek. View corridors from and to the open space in the western and eastern portions of the project area would “open up” looking southward towards the creek, as well as provide views from the creek into the project area, as might be viewed looking northward from areas along the south side of the creek. Such views comply with MW-3 District requirements, which promote “the creation of view corridors, from public streets and open spaces on the site and/or surrounding streets, to Glen Cove Creek and Hempstead Harbor, and to the Garvies Point Preserve.”

The placement of the buildings, configuration, massing and height depicted on the conceptual plan is designed to maximize view corridors to and from Garvies Point Preserve, Glen Cove Creek and Hempstead Harbor. The building placement, massing and height reflect consideration of the effects of sun-shadow impacts during the year and mitigate to the extent possible the casting of shadows off site to residential neighborhoods, Garvies Point Preserve and the waterfront. The use of multiple setbacks, varied heights and scale of buildings has been integrated into the project to reflect topographic and other conditions and promote interface with

the scale and character of existing neighborhoods and the public nature of the esplanade.

The proposed action includes streetscape improvements along Garvies Point Road, as well as a new promenade along the waterfront, which would also provide for and enhance the views and safety elements for pedestrians, bicyclists and other users. Such enhancements would include lighting, landscaping, medians and other streetscape related elements. Full cut-off shades would be used on exterior lamps to minimize light pollution off site.

Therefore, no further mitigation is proposed.

N. Cultural Resources

Based on the Phase 1A analysis, four general areas of the project site should be considered potentially sensitive for archaeological resources from the Precontact Period.

Of the potential Historic Period resources identified for the APE, only the pre-1837 dwelling at the northwestern corner of Parcel 3 Block G Lot 311 is recommended for Phase 1B field testing as per OPRHP standards.

If this area will not be disturbed by any aspect of the proposed project (e.g., construction staging, utility installation, landscaping, grading and filling) and no ground disturbance would occur there, then no testing would be warranted in this location.

As described in **Section III.N**, if additional soil borings will be performed in the identified sensitive locations as concluded by the Phase 1A, an archaeological evaluation of the logs may further clarify existing subsurface conditions. The additional data may make it possible to better define the areas of potential sensitivity by identifying surviving pre-development natural surfaces, as well as areas in which undocumented disturbance has destroyed these potentially sensitive strata. For example, soil borings conducted in 2008 on the site of the Glen Cove Ferry Terminal and Boat Basin (Block 259 Lot 1 (eastern end) and Block A Lot 12 (western end)), were instrumental in eliminating further archaeological consideration of that location (HPI 2008).

The Phase 1A also concludes that if a potentially sensitive location will not be disturbed by any aspect of the proposed project (e.g., construction staging, utility installation, landscaping, grading and filling) and no ground disturbance would occur there, then no further archaeological consideration and/or testing would be warranted in that location. For example, the potentially sensitive sections of Parcel 1 Block A Lot 545 (also referred to as Li Tungsten Area C Prime), are designated as "Open Space," on the conceptual plan, indicating there are no construction plans for that location at present. If that continues to be the case,

then no further action concerning archaeological resources on Parcel 1 Block A Lot 545 would be warranted.

O. Construction Impacts

See **Section V.G Air Quality** and **Section V.H Noise** for potential construction impacts on air quality and noise, and mitigation measures.

Traffic

The sequencing of construction and provision of staging and material stockpile areas over the approximate seven-year construction period would permit the coordinated use of construction crews and equipment and the reduction of material deliveries. As described above, construction workers typically arrive on-site prior to the AM peak hour and depart before the PM peak hour, limiting the potential impact of employee traffic.

Erosion and Sedimentation

The proposed project will employ a Stormwater Pollution Prevention Plan (SWPPP) during both project construction and post-development phases of the project to address potential sources of pollution through the development of a plan indicating appropriate measures and controls. At a minimum, the SWPPP will include:

- Description of Site Soils
- Description of Pollution Prevention Measures
- Description of Construction and Waste materials and control
- Description of the permanent and temporary controls as depicted on the Soil Erosion & Sediment Control (SESC) Plan to control runoff and sediment during all phases of the project
- Spill Prevention and Response Plan
- Identification of practices specified on the SESC plans
- Identification of temporary practices which will be converted to permanent controls at the completion of construction
- Construction Schedule
- Maintenance Schedule for the SESC devices during construction
- Temporary diversions will be identified on the SESC plans for exposed upstream areas
- Calculations for Soil Erosion practices where application
- Maintenance Schedule for the permanent stormwater management devices

The Soil Erosion and Sediment Control Plan included as part of the SWPPP would be prepared in conformance with the NYSDEC New York State

Stormwater Management Design Manual (April 2008). In addition, practices would be designed based on the NYSDEC New York State Standards and Specifications for Erosion and Sediment Control (August 2005).

The following general guidelines and best management practices shall be observed:

- Remaining perimeter vegetation will be protected with construction fencing and remain undisturbed.
- Grading will be carefully scheduled to minimize the size of exposed areas and the length of time that areas are exposed.
- The length of cleared slopes will be minimized to reduce potential erosion and sedimentation. The steepness of the slopes will not exceed 1 on 3 in a fill situation and 1 on 2 in a cut situation to also minimize erosion and sedimentation.
- Sediment shall be trapped on the site.

Specific control measures will include the following:

Swales will be constructed along portions of the northern side of Garvies Point Road to collect and direct runoff from the off-site areas, prior to discharging across the project site during construction. The runoff will be collected in the infiltration trenches directly below the swale and dissipated into the soil. The swales will be planted with grass, groundcover, shrubs and trees which will reduce the runoff velocities and allow the stormwater to be filtered and dissipated back into the soil. Currently, the site does not contain any stormwater drainage system and runoff flows overland directly into Glen Cove Creek or Hempstead Harbor, with the exception of several storm sewer collection systems located within Garvies Point Road. The proposed stormwater drainage system for the project is discussed in Chapter III.C, *Water Resources*.

Site construction activity (earthwork) will not be permitted during heavy rain, frozen conditions or excessively wet conditions. It is expected that the site construction activity (grading, installation of drainage and sanitary systems, etc.) will take several years to complete. Once the building foundations are completed, other activities could be performed during inclement weather. This will facilitate the project being completed on schedule.

Sediment barriers (silt fence, hay bales or approved equal) will be installed as required along the limits of disturbance for the duration of the work in addition to a temporary construction fence. Haybales will be installed at various locations on the site, including along the water's edge, to minimize transport of soils and sediments into the adjacent tidal water bodies. In addition, a temporary 4' high construction fence with silt fencing will be installed around the entire perimeter of the subject property. No sediment from the site shall be permitted to wash onto adjacent properties, public streets or water bodies.

Graded and stripped areas and stockpiles, while kept to a minimum, will be kept stabilized through the use of temporary seeding or salt hay as required. Seed mixtures will be in accordance with the National Resources Conservation Service (formerly Soil Conservation Service) recommendations.

Drainage inlets installed will be protected from sediment buildup through the use of sediment barriers, sediment traps, etc., as required.

Trees to remain on the project site, as well as trees adjacent to the site, will be protected by fencing placed around the crown drip line of the trees. Construction equipment will not be permitted within this fenced area to minimize the possibility of soil compaction around the root system and damage to the existing trees. Minimum treatment will consist of each tree trunk being protected by a fence barrier.

Proper maintenance of erosion control measures will be implemented by daily and follow-up inspections after heavy or prolonged storms. Maintenance measures include, but are not limited to, cleaning of sediment basins or traps, cleaning or repair of sediment barriers, repair/replacement of damaged silt fencing, replacement of damaged haybales, cleaning and repair of berms and diversions, and cleaning and repair of inlet protection. Sediment, which has accumulated to the point of impairing the function of the above structures, will be removed. Additionally, supplemental hay bales and silt fencing will be required to be stored on-site, to be utilized if the initial hay bales and silt fencing become damaged or are not working as they were intended.

Appropriate means shall be used to control dust during construction. This may include water trucks and / or a sprayed on adhesive (i.e., acrylic polymer or resin in water).

A stabilized construction entrance, located at the various site driveways, shall be maintained to minimize soil and loose debris from being tracked onto local roads. These measures will be maintained until the site is permanently stabilized.

Sediment barriers and other erosion control measures shall remain in place until disturbed areas are permanently stabilized. After permanent stabilization, drainage structures shall be cleaned and flushed as necessary. If during construction operations and routine maintenance requirements it is determined that additional erosion control measures are necessary, additional barriers/protection will be added.

