Glen Cove BOA Step III

Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

NYS DOS C1000368

This document was prepared for the City of Glen Cove and Glen Cove Community Development Agency with state funds provided by the New York State Department of State through the Brownfield Opportunity Areas Program.

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CITY OF GLEN COVE
BOA STEP III IMPLEMENTATION STRATEGY

FOR THE

ORCHARD NEIGHBORHOOD AND SEA CLIFF AVENUE CORRIDOR

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NELSON POPE & VOORHIS, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

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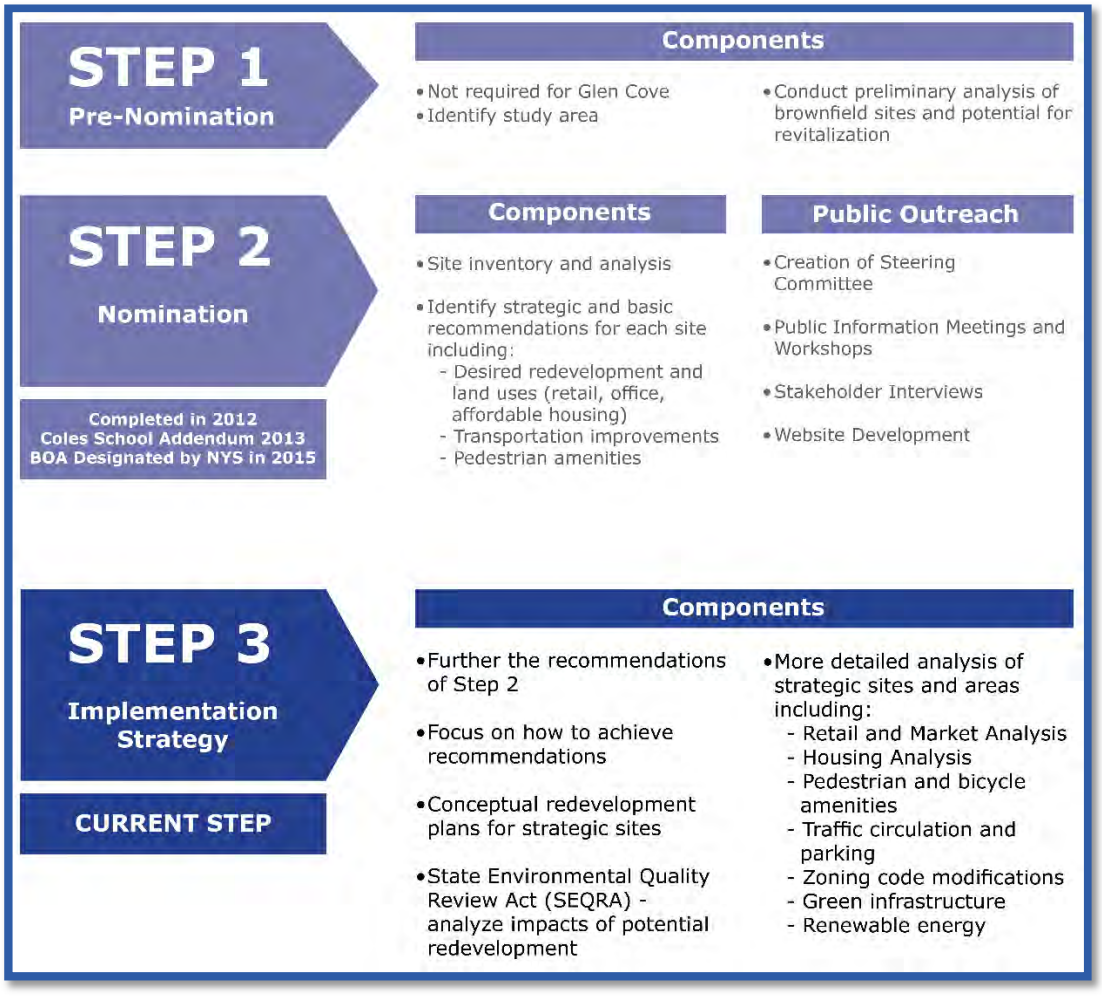
EXECUTIVE SUMMARY

A Brownfield Opportunity Area (BOA) Plan is comprised of a Nomination (Step II) and an Implementation Strategy (Step III). This document is the Step III Brownfield Opportunity Area (BOA) Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue in the City of Glen Cove.

The BOA Program is a three-step process designed to assist communities burdened by brownfield sites. The term brownfield has a broad definition under this program and can include any site where redevelopment or reuse is problematic due to impacts resulting from former land uses. The brownfields can be vacant, abandoned, or underutilized and may have actual or perceived environmental contamination.

The three steps of the BOA Program, as well as details about how these steps apply to the Orchard Neighborhood and Sea Cliff Avenue Corridor BOA are summarized in the graphic below.



WHAT IS THE STEP III BOA?

The Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue Corridor is, as the name implies, focused on action items.

The project was funded by the NYS DOS with funding through the Brownfield Opportunity based upon the work that was completed in the Step II BOA Nomination. The major recommendations of the Step II are provided in the next section. Based upon public feedback, there is clearly a misconception regarding what exactly a Step III Implementation plan means and how it would be used by the City.

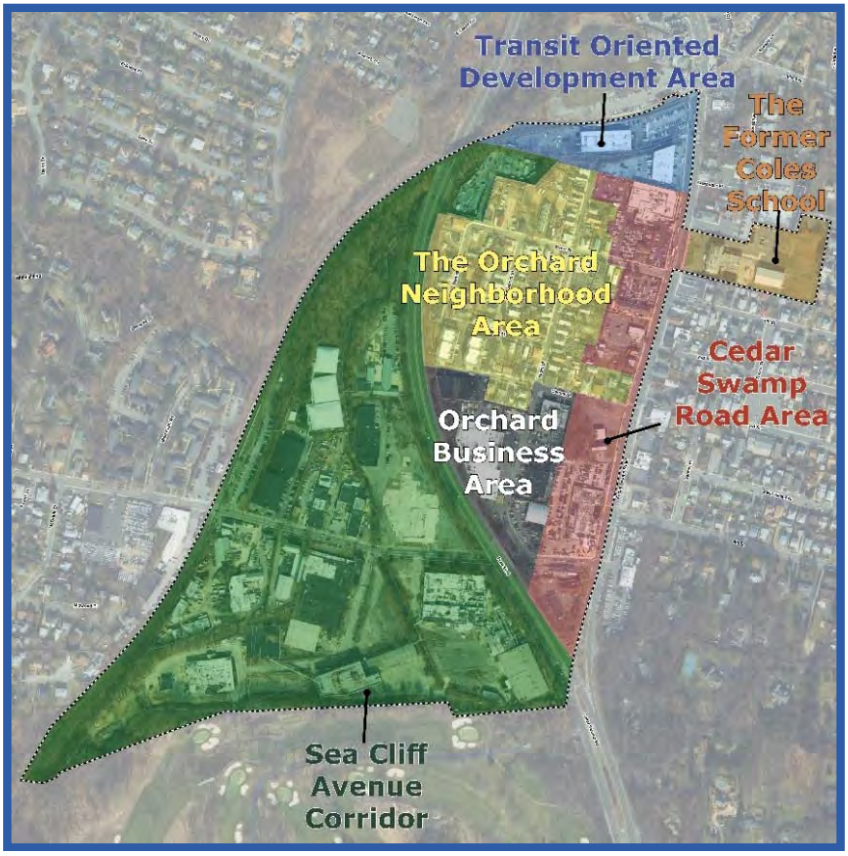
Below is a graphic that illustrates what the Step III Implementation Strategy is comprised of – versus what it is not.

The adoption of the Step III BOA will allow the City of Glen Cove to move forward with recommendations that could include physical improvements such as sidewalk, lighting and drainage improvements as well as zoning changes that will enable redevelopment consistent with the vision for the BOA.

WHAT THE BOA STEP III IMPLEMENTATION PLAN…	
IS…	**IS NOT…**
❖ Recommendations for quality-of-life improvements ❖ A guiding document for future development as neighborhood properties become available (examples: bowling alley, former Stango's restaurant, vacant properties) ❖ Recommendations for re-use of former industrial sites with environmental concerns ❖ A study that includes analysis of housing, traffic circulation, parking, green infrastructure, renewable energy, and economic development ❖ Keeping historic character and make-up of area ❖ An opportunity to enhance City zoning for transit-oriented housing near the Glen Street Station with affordable housing options	❖ City or Community Development Agency (CDA) purchase of any properties or use of eminent domain ❖ Displacement of residents (only major development proposed by train station) ❖ Adoption of zoning changes (the plan recommends zoning modifications for future consideration) ❖ A guarantee of change (neighborhood land uses tend to change over time, and the Step III Plan endeavors to create a framework for well thought-out future planning)

STUDY AREA AND STRATEGIC SITES

The Orchard Neighborhood and Sea Cliff Avenue Corridor BOA (Study Area) is provided in the image below. The Study Area is approximately 110 acres and has been divided into six areas of interest. The general land use pattern of the study area is generally the same as it existed in 2012, at the time that the BOA Step II was completed. Land uses includes a mix of single-family, two-family and multifamily residential uses in the core of the Orchard Neighborhood; commercial uses along Cedar Swamp Road, near the Glen Street LIRR Station, and at the southern end of Hazel Street; and industrial activity along Sea Cliff Avenue.



The strategic sites identified by the Step II BOA included three properties located on Sea Cliff Avenue which are within the New York State Department of Environmental Conservation (NYSDEC) State Superfund Program: the Photocircuits, Pass & Seymour, and Pall Corporation sites. Also identified as a strategic site was the City-owned property located on the west side of Pratt Boulevard (north of the former Pall Corporation property) developed with the Glen Cove Child Day Care Center. In 2013, the Coles School Addendum was prepared and for the purpose of this Step III Implementation Strategy, the Coles School was considered a strategic site.

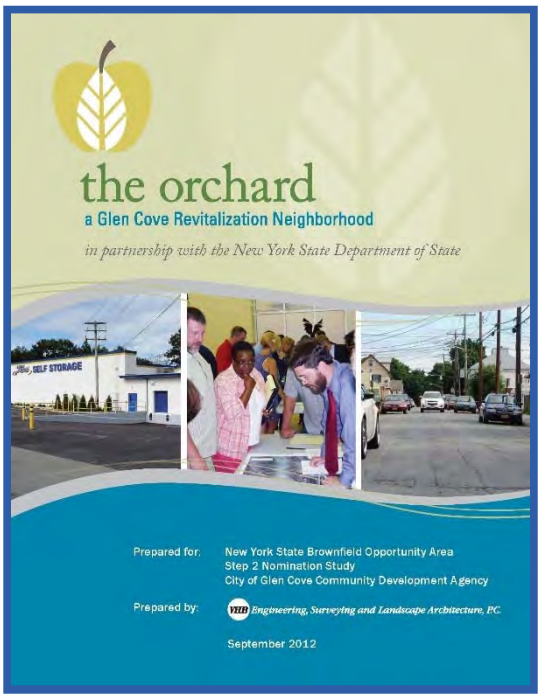
The existing zoning of the Study Area includes residential zones (R-4), business zones (B-2), industrial zones (I-1 and I-2), and the Orchard Neighborhood Redevelopment Incentive Overlay (RIO-ON). The R-4 residential district is located in the Orchard Neighborhood allows for single-family and two-family

homes, depending on the size of the property. The RIO-ON is an overlay district located in the Orchard Neighborhood and was adopted in 2010. This district permits additional flexibility by allowing townhouses, multifamily and mixed-use developments. It also allows for an increased residential density if public amenities are provided. Examples of the public amenities include recreational facilities, streetscape improvements, and high-performance buildings. Properties within the B-2 district are located along Cedar Swamp Road and Grove Street. The B-2 District is intended to provide opportunities for auto-oriented commercial uses or uses that require larger parcels. The district permits a wide range of retail stores, services, and offices, with potential for second story apartments. The industrial districts are the I-1and I-2 districts, with I-2 the largest district in the BOA Study Area which expands north and south of the Orchard Neighborhood and west of Pratt Boulevard. A small area of I-1 is located south of the Orchard Neighborhood. Both of these districts permit the same types of light industrial activity. The strategic sites located along Sea Cliff Avenue are zoned I-2.

SUMMARY OF RECOMMENDATIONS FROM THE 2012/2013 BOA STEP II NOMINATION AND COLES SCHOOL ADDENDUM

A summary of the main recommendations from the BOA Step II Nomination and Coles School Addendum is provided below as these provide the basis for tasks completed for the Step III:

- Improvements within the Orchard Neighborhood so that it becomes an attractive, walkable, vibrant neighborhood with improved linkages to the rest of Glen Cove.
- Promote the Redevelopment Incentive Overlay District (RIO-ON) as a zoning tool for positive redevelopment within the Orchard.
- Encourage new commercial investment along Sea Cliff Avenue that could include large scale retail and other uses.
- Study the need for shared parking within the Orchard Neighborhood.
- Prepare an engineering study to identify Green Infrastructure solutions for stormwater management and identify new green space within the Orchard.
- Improve pedestrian circulation by providing a connection between the north end of Hazel Street and the Glen Street Long Island Rail Road (LIRR) Station, a reinvigorated Sea Cliff Avenue area, and providing a safe route to the City Day Care facility.
- Pursue a Transit Oriented Development (TOD) at the Glen Street Station.



BOA Step II Cover

- Identify reuse opportunity for the former Coles School which preserve the existing building and provide an opportunity to maintain recreational use in the rear.

STEP III ANALYSIS & RECOMMENDATIONS FOR STRATEGIC SITES

As part of this Implementation Strategy, an analysis of potential reuse was conducted for each of the strategic sites, as well as for the City owned parking lot on Capobianco Street. This included the following special analyses and studies:

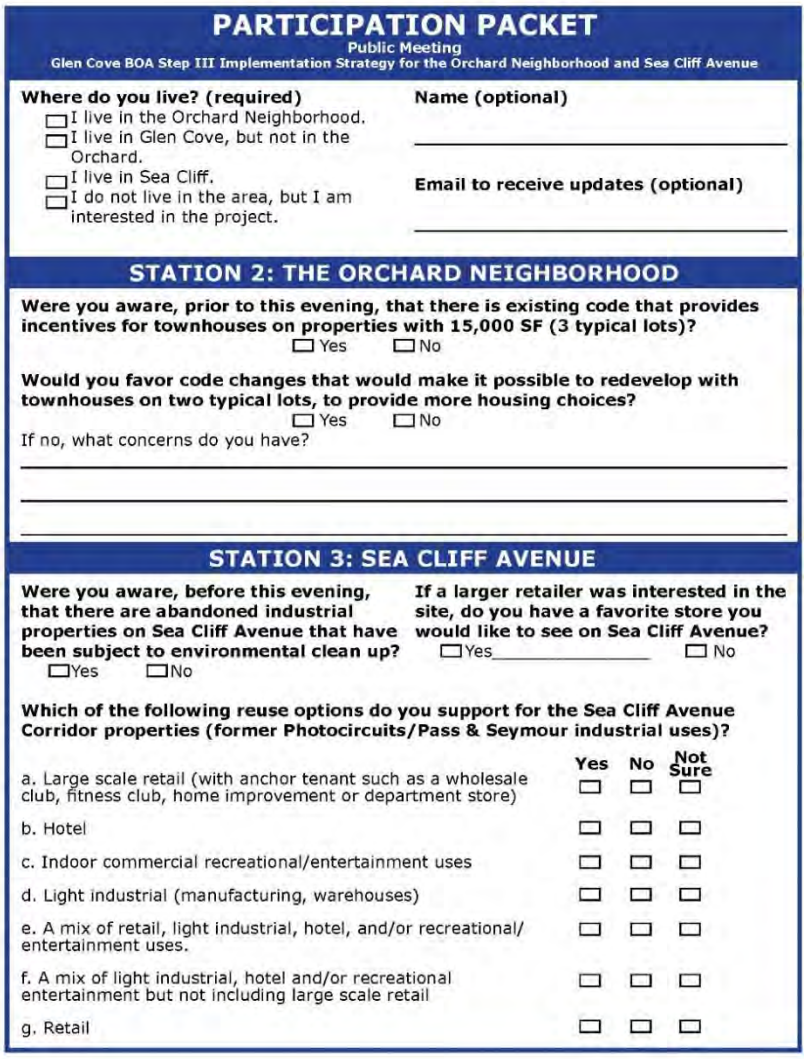
- Environmental Summary
- Transportation Engineering Study (Pedestrian and Bicycle Use Enhancement Study and Parking Needs Assessment)
- Green Infrastructure Engineering Report (See image from the report below)
- Housing needs analysis
- Cost benefit analysis to evaluate the development scenarios for strategic sites
- An evaluation of alternative energy options
- Phase I Environmental Site Assessment and estimates for remediation for Coles School

BOA PROGRAM COMMUNITY PARTICIPATION

Community participation was an important aspect of both the Step II and Step III BOA projects. The Step II Nomination included two public workshops and involvement by a Steering Committee.

The community participation for the Step III was focused on implementing Step II recommendations and therefore concentrated on interviews with agencies, stakeholders and property owners and included a public open house following completion of a draft document.

The open house was advertised through a combination of mailings, fliers, announcements at local meetings, news coverage, and the City website. Materials advertising the open house, questionnaires (sample page to the right), and posters displayed at the open house were bilingual (English and Spanish). These materials were posted on the City website after the open house with a link to an online survey (also in English and Spanish) that allowed members of the public to provide input following the open house.



PARTICIPATION PACKET
Public Meeting
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

Where do you live? (required)
- ☐ I live in the Orchard Neighborhood.
- ☐ I live in Glen Cove, but not in the Orchard.
- ☐ I live in Sea Cliff.
- ☐ I do not live in the area, but I am interested in the project.

Name (optional) _____

Email to receive updates (optional) _____

STATION 2: THE ORCHARD NEIGHBORHOOD

Were you aware, prior to this evening, that there is existing code that provides incentives for townhouses on properties with 15,000 SF (3 typical lots)? ☐ Yes ☐ No

Would you favor code changes that would make it possible to redevelop with townhouses on two typical lots, to provide more housing choices? ☐ Yes ☐ No

If no, what concerns do you have?

_____

_____

_____

STATION 3: SEA CLIFF AVENUE

Were you aware, before this evening, that there are abandoned industrial properties on Sea Cliff Avenue that have been subject to environmental clean up? ☐ Yes ☐ No

If a larger retailer was interested in the site, do you have a favorite store you would like to see on Sea Cliff Avenue? ☐ Yes_____ ☐ No

Which of the following reuse options do you support for the Sea Cliff Avenue Corridor properties (former Photocircuits/Pass & Seymour industrial uses)?

	Yes	No	Not Sure
a. Large scale retail (with anchor tenant such as a wholesale club, fitness club, home improvement or department store)	☐	☐	☐
b. Hotel	☐	☐	☐
c. Indoor commercial recreational/entertainment uses	☐	☐	☐
d. Light industrial (manufacturing, warehouses)	☐	☐	☐
e. A mix of retail, light industrial, hotel, and/or recreational/ entertainment uses.	☐	☐	☐
f. A mix of light industrial, hotel and/or recreational entertainment but not including large scale retail	☐	☐	☐
g. Retail	☐	☐	☐

There were seven stations at the Open House designed to provide background information, highlight strategic sites and specialized studies, outline what has been accomplished so far and the upcoming steps, and obtain feedback from the community. Participants were particularly interested in the Orchard Neighborhood, Sea Cliff Avenue, and TOD.

Overall, the feedback received from participants regarding the Implementation Strategy was positive and the open house was an excellent opportunity for participants to voice their ideas and any concerns. Following the open house, modifications to the draft BOA Step III document were made to reflect predominant concerns.

Images from the December 6, 2018 BOA Step III Implementation Strategy open house.

SUCCESS STORIES

As the name suggests, the Step III is primarily focused on implementation and action. In addition to the technical studies conducted, the BOA III included action related items towards achieving goals – some of which have already been implemented including for two sites that are highlighted below:

- **Pall Corporation:** A site plan was recently approved by the City Planning Board for the redevelopment of this Superfund Site with a self-storage warehouse. The BOA team worked with the City and applicant to achieve a site plan that included higher quality architecture and an easement through the site to provide an additional access to the Day Care property.

- **Former Coles School:** The BOA funding supported the City with an evaluation of alternative redevelopment options for the eastern portion of the site so that the former Coles School building could be reused for educational purposes. Following an analysis of several alternatives, it was determined that the eastern portion of the site should remain as City-owned property retained for community use. The BOA funding was used for studies, environmental remediation estimates, and the preparation of subdivision plans and applications to assist in the sale of the property to Tiegerman Schools.

FUTURE ACTIONS

Photocircuits/Pass & Seymour Sites

The Sea Cliff Avenue corridor includes the remnants of former industrial uses , two Superfund sites which are currently zoned for light industrial uses. Through the BOA process, a recommendation was developed that would allow for additional uses on the sites, including retail, hotel, and commercial recreation. In order to allow for more flexible uses, the current zoning would need to be amended and draft language for the potential modifications was prepared. This amendment to the I-2 District would encourage redevelopment of this strategic site.

Existing Conditions

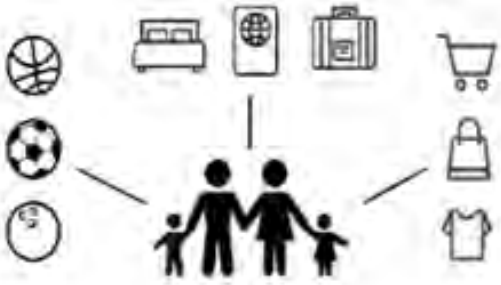
- Large vacant Superfund sites formerly known as the Photocircuits and Pass & Seymour industrial sites.
- Former Pall Corporation site currently under redevelopment as a self-storage facility.
- Predominantly an industrial area with some commercial recreation and a single-family residence.
- Area is zoned I-2 which allows for business or professional offices, research and development laboratories, manufacturing, storage of products or materials, and other light industrial uses.

Step II 2012 Recommendations

- Large-scale retail, light industrial and distribution/ warehousing.
- Improve access from Sea Cliff Avenue to Glen Cove Road and/or Cedar Swamp Road to attract large-scale retailers.
- Commercial uses such as film studio facilities or indoor recreation are appropriate for this area.
- Conceptual plan determined that former industrial sites could support a wholesale club*, retail or restaurant space and a commercial recreational facility.

Step III Proposed Zoning

- Recognize need for more flexible uses to promote redevelopment and investment.
- Amend Zoning Code to allow large-scale retail, as recommended by the 2012 Step II Study, in addition to a variety of commercial recreation uses and auxiliary uses such as a hotel.
- The former Photocircuits and Pass & Seymour sites are able to support renewable energy technologies such as geothermal heat, small-scale rooftop solar and small wind installations.



The Orchard Neighborhood

A number of recommendations apply to the Orchard Neighborhood. The Transportation Study identified several improvements for lighting, sidewalks and improving circulation. It is recommended that the City-owned parking lot on Capobianco Street be improved to include a rain garden and shade trees and continue to provide parking for residents of the area.

In 2010, the City adopted the RIO-ON Overlay District to encourage development. However, not as much change occurred as originally anticipated. To encourage additional development interest, modifications to the RIO-ON Overlay District and Zoning Map were prepared as part of the BOA Step III. After receiving feedback from the public, the proposed zoning code amendments were modified as indicated in the chart below.

Step III Recommended RIO-ON Code as Compared to Existing RIO-ON Code

Property Size (SF)	Development Allowed Under Existing Code*	Initial Recommended RIO-ON Code Amendments*	Recommended RIO-ON Code Amendments Subsequent to Public Feedback
5,000 SF	One-Family Home**	One-Family Home**	One-Family Home**
7,500 SF	Two-Family Home**	Two-Family Home**	Two-Family Home**
9,500 SF	Two-Family Home**	3 Townhomes and 1 Apartment OR 4 Townhomes	Two – Family Home (Recommendation for townhomes is no longer being considered for 9,500 SF lot)
15,000 SF	5 Townhomes	6 Townhomes	6 Townhomes with changes to have more flexibility in design
40,000 SF	Apartment Building	Apartment Building	Apartment Building

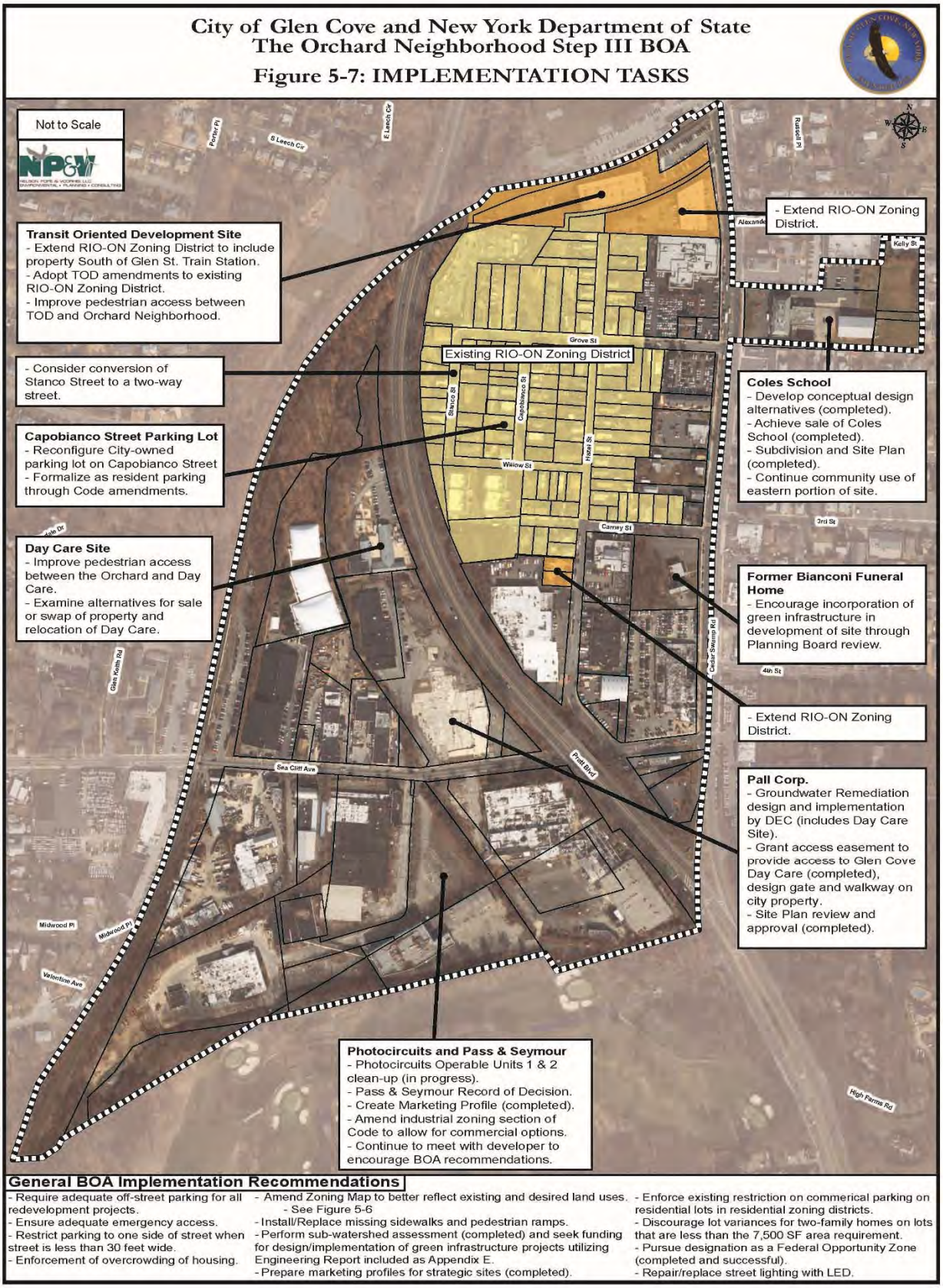
* Allowed development could potentially be increased based on density bonuses as outlined in the RIO-ON Overlay District.
** If within the R-4 District, varies if within other underlying zoning districts.

TOD Area

The BOA allowed the City to explore the potential for transit-oriented development (TOD) to occur near the Glen Street Station. During the Step II Study meetings were held with the MTA and LIRR to discuss the TOD, economic analyses were conducted, and conceptual plans were prepared. To achieve this goal in the future, it is recommended that the City amend the Zoning Map to extend the RIO-ON District to include this site and amend the RIO-ON District language to incorporate an option for TOD.

The bottom panel to the right identifies the major implementation strategies developed during the Step III to achieve the vision for a TOD at the Glen Street Station.

The figure on the following page provides an overview of implementation strategies, including those which were achieved during the project and future tasks.


City of Glen Cove and New York Department of State
The Orchard Neighborhood Step III BOA
Figure 5-7: IMPLEMENTATION TASKS
Not to Scale
Transit Oriented Development Site
- Extend RIO-ON Zoning District to include property South of Glen St. Train Station.
- Adopt TOD amendments to existing RIO-ON Zoning District.
- Improve pedestrian access between TOD and Orchard Neighborhood.
- Extend RIO-ON Zoning District.
- Consider conversion of Stanco Street to a two-way street.
Existing RIO-ON Zoning District
Capobianco Street Parking Lot
- Reconfigure City-owned parking lot on Capobianco Street
- Formalize as resident parking through Code amendments.
Coles School
- Develop conceptual design alternatives (completed).
- Achieve sale of Coles School (completed).
- Subdivision and Site Plan (completed).
- Continue community use of eastern portion of site.
Day Care Site
- Improve pedestrian access between the Orchard and Day Care.
- Examine alternatives for sale or swap of property and relocation of Day Care.
Former Bianconi Funeral Home
- Encourage incorporation of green infrastructure in development of site through Planning Board review.
- Extend RIO-ON Zoning District.
Pall Corp.
- Groundwater Remediation design and implementation by DEC (includes Day Care Site).
- Grant access easement to provide access to Glen Cove Day Care (completed), design gate and walkway on city property.
- Site Plan review and approval (completed).
Photocircuits and Pass & Seymour
- Photocircuits Operable Units 1 & 2 clean-up (in progress).
- Pass & Seymour Record of Decision.
- Create Marketing Profile (completed).
- Amend industrial zoning section of Code to allow for commercial options.
- Continue to meet with developer to encourage BOA recommendations.
General BOA Implementation Recommendations
- Require adequate off-street parking for all redevelopment projects.
- Ensure adequate emergency access.
- Restrict parking to one side of street when street is less than 30 feet wide.
- Enforcement of overcrowding of housing.
- Amend Zoning Map to better reflect existing and desired land uses. - See Figure 5-6
- Install/Replace missing sidewalks and pedestrian ramps.
- Perform sub-watershed assessment (completed) and seek funding for design/implementation of green infrastructure projects utilizing Engineering Report included as Appendix E.
- Prepare marketing profiles for strategic sites (completed).
- Enforce existing restriction on commerical parking on residential lots in residential zoning districts.
- Discourage lot variances for two-family homes on lots that are less than the 7,500 SF area requirement.
- Pursue designation as a Federal Opportunity Zone (completed and successful).
- Repair/replace street lighting with LED.

1.0 INTRODUCTION

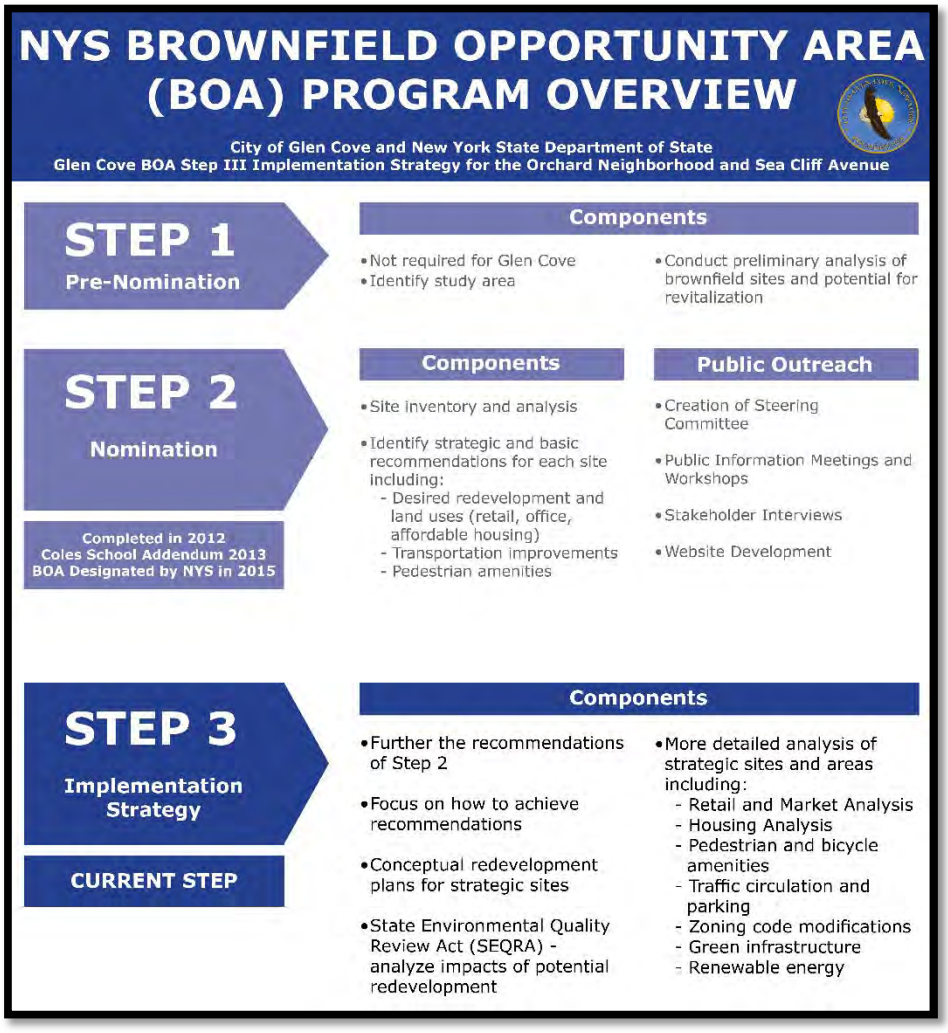
A Brownfield Opportunity Area (BOA) Plan is comprised of a Nomination (Step II) and an Implementation Strategy (Step III). This document is the Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue Brownfield Opportunity Area in the City of Glen Cove. Together with the Step II, it comprises the BOA Plan. Nelson, Pope & Voorhis, LLC (NP&V) was retained to prepare this Step III BOA Implementation Strategy with a number of subconsultants. The respective roles are summarized below:

- Nelson, Pope & Voorhis acted as the BOA project manager and was responsible for the majority of tasks completed under the contract and oversight of work performed by subconsultants. Turner Miller Group (TMG) was included as a team member with significant experience in planning and zoning matters having served as the City of Glen Cove's planning consultant for many decades. It is noted that in January 2017, TMG became part of NP&V and the TMG office is now the Hudson Valley Office of NP&V.
- Nelson & Pope (N&P) is a civil engineering firm and affiliate of NP&V. N&P's role in the project was in the preparation of the Green Infrastructure Engineering Analysis and to act in an advisory capacity related to civil engineering aspects of redevelopment.
- Roux Associates, LLC's role in this project was environmental consulting, specifically related to contamination resulting from past land uses. Roux prepared an areawide environmental assessment, prepared a Phase I Environmental Site Assessment for the Coles School and oversaw the estimates for remediation prepared by a separate MBE contractor (East Coast Environmental). Roux also provided technical expertise in the review of groundwater remediation plans and review of the vapor mitigation system at the day care facility.
- Urbanomics, Inc. was included on the team to prepare the demographic update, market analyses for housing and commercial uses, and to perform economic analysis of redevelopment scenarios. This role included the evaluation of economic viability of varying densities of development within the Orchard Neighborhood and Transit Oriented Development areas.
- Gedeon GRC Consulting was included on the team to prepare an analysis of transportation related items. An engineering report which includes an analysis of the street network of the Orchard Neighborhood, parking, pedestrian access and lighting was completed and is included as an appendix of this document. Gedeon also prepared a conceptual design for rehabilitation of the City owned parking lot on Capobianco Street.

Overview of the BOA Program

The New York State Brownfield Opportunity Area (BOA) Program is a three-step process designed to assist communities with brownfield sites and develop solutions for the range of problems that can accompany communities with brownfield properties. The term brownfields has a broad definition under this program and can include any site where redevelopment or reuse is challenging due to former land uses. The brownfields can be vacant, abandoned, or underutilized and may have actual or perceived environmental contamination. Through the Step II process, strategic sites and areas are identified, as well as goals for redevelopment or reuse. The Step III then focuses on implementation of recommendations for strategic sites and areas identified in Step II. Within the Orchard Neighborhood and Sea Cliff Corridor Study Area, strategic sites and areas include former industrial sites located along

Sea Cliff Avenue, the Orchard Neighborhood, the City of Glen Cove property where the City Day Care facility is located and the Coles School property, all which have unique needs related to redevelopment or reuse. The BOA Program provides funding and resources to communities for revitalization of brownfields and helps to build consensus among communities for redevelopment of strategic sites. For this project, the BOA Program has resulted in the implementation of several recommendations for specific strategic sites identified in the Step II Nomination Study and the preparation of formal recommended actions for implementation in future to facilitate redevelopment of additional strategic sites.



As noted, the BOA Program is a three step process. Step I of the BOA Program consists of a Pre-Nomination Study, which provides a preliminary analysis of brownfield sites and potential for revitalization and identifies whether an area would be eligible for designation as a Brownfield Opportunity Area. A Step I Pre-Nomination Study was not required by NYS for the City of Glen Cove because the City was able to justify eligibility in their grant application to the NYS DOS and the City was permitted to move forward with a Step II Nomination Study with funding received for this purpose.

The Step II Nomination Study provides an in-depth site inventory and analysis and identifies recommendations related to desired redevelopment options for strategic sites and areas and includes extensive public outreach in development of recommendations. The Step II Nomination Study for the Orchard Neighborhood and Sea Cliff Avenue Corridor was completed in 2012, amended in 2013 to add the Coles School, and the BOA was designated by New York State in 2015. A summary of the recommendations from the BOA Step II Nomination for the strategic areas is provided below to serve as the basis for the actions that have been completed throughout this BOA Step III Implementation Strategy process and in developing those actions that are recommended for furthering the goals of the Step II:

- Pursue improvements within the Orchard Neighborhood so that it becomes an attractive, walkable, vibrant neighborhood with improved linkages to the rest of Glen Cove.
- Require that new development within the Orchard Neighborhood be consistent with the established character of the neighborhood and highlight the area's unique historic and natural settings.
- Pursue public amenities and infrastructure improvements.
- Provide for increased recreational opportunities for residents.
- Encourage new commercial investment in the industrial area along Sea Cliff Avenue that will provide employment opportunities, enhance the City's tax base while avoiding direct competition with existing businesses.
- Facilitate redevelopment that could include large scale retail, light industry and distribution/warehousing.
- Conduct an analysis of street lighting to identify improvements to improve circulation, safety, visual appeal and energy efficiency.
- Study need for shared parking within the Orchard Neighborhood.
- Improve transportation and circulation at the Sea Cliff Avenue/Cedar Swamp Road/Pratt Boulevard intersection as it relates to commercial redevelopment on Sea Cliff Avenue.
- Enhance quality of life within the Orchard through continued code enforcement actions, enhancement of pedestrian circulation and beautification program.
- Prepare an engineering study to identify Green Infrastructure solutions for stormwater management and identify new green space within the Orchard.
- Improve pedestrian circulation by providing a connection between the north end of Hazel Street and the Glen Street LIRR Station, a reinvigorated Sea Cliff Avenue area, and providing a safe route to the City Day Care facility.
- Promote the Redevelopment Incentive Overlay District (RIO-ON) as a zoning tool for positive redevelopment within the Orchard.
- Pursue a Transit Oriented Development at the Glen Street Station.
- Identify reuse opportunity for the former Coles School which preserve the existing building and provide an opportunity to maintain recreational use in the rear.

The Step III Implementation Strategy is the final step in the BOA Program and provides a more detailed analysis of the strategic sites and focuses on actions to achieve the recommendations of the Step II analysis. Numerous detailed technical studies were conducted as part of this Step III including a retail and market analysis, housing analysis, transportation study (including traffic, circulation, parking, bicycles, and pedestrian amenities), green infrastructure study, and analysis of potential for increased application of renewable energy. Each of these studies provided additional information to support

implementation of recommendations for the strategic sites, as well as examined how to carry out the implementation.

Major Implementation Actions

As the name suggests, the Step III is primarily focused on implementation and action. In addition to the technical studies conducted, the Part III includes actionable items – some of which have already been implemented during the Step III process – and the Step III outlines additional actions to achieve the remaining goals. This Step III Implementation Strategy involves several private properties, some with ongoing redevelopment interest, as well as public properties. The redevelopment of some of the properties has advanced during the preparation of this strategy through both private investment and with the assistance of BOA funds. Therefore, this report documents where redevelopment activities have already been initiated for strategic areas identified in the BOA Step II Nomination Study, as well as provide recommendations for future action.

Accomplishments

The former Coles School site is an example of a strategic site where BOA funding has assisted in the revitalization of the property. The former Coles School was identified as a strategic site because the property is currently underutilized and could be more productive economically for the City. Through the BOA Step III Implementation Strategy, environmental investigations, appraisals, and land surveys of the property were completed, which were then utilized during outreach to potential purchasers. Potential reuse options for the rear portion of the former Coles School were also examined and the Step III recommends retaining the area for a community use. BOA resources assisted in the preparation of subdivision plans, applications, and traffic analyses to help facilitate the sale to the Tiegerman School, which received Planning Board approval in August 2018, and achieve reuse of the property.

The process also allowed examination of the reuse potential for the Pall Corporation Superfund Site. Through this Implementation Strategy, cost-benefit analyses were performed, and numerous meetings were held with the NYS DEC and Department of Health regarding the cleanup status of the site (although remediation is ongoing). The Step III identified the need for an access easement to the Day Care property located north of the site, which was implemented in the Planning Board review of site plan applications for a self-storage facility.

Future Implementation Actions

Redevelopment of other strategic sites/areas, such as the Sea Cliff Avenue Corridor, the Orchard Neighborhood, Capobianco Street Parking Lot, and the TOD site, require future actions by the City and thus, this Step III Implementation Strategy identifies additional actions to achieve these goals. Technical studies were conducted during the Step III project to support recommendations. The Step III also includes draft recommendations for zoning code and zoning map amendments for the City to consider at a later date that would support redevelopment of strategic sites.

This phase of the project focuses on implementation of the goals and recommendations of the adopted Step II Nomination Study. Since the adoption of the Step II Study and Coles School Addendum, some changes have occurred in the Study Area and within the City of Glen Cove that have affected the objectives for the BOA. The intent of this implementation strategy is to provide the foundation for

private redevelopment and revitalization of strategic areas within the BOA, amendments to the City Zoning Code to permit desired redevelopment, and to provide support for recommendations related to economic development, transportation, energy and green infrastructure.

Under the New York State Department of State (DOS) Work Plan, Sections 1 - 3 of the BOA Plan are comprised of the Step II Nomination Study's Section 1, Project Description and Boundary; Section 2, Community Participation; and Section 3, Analysis of the BOA. The Step III Implementation Strategy consists of Section 4, Implementation and Section 5, Compliance with the State Environmental Quality Review Act (SEQRA). However, for readability, this document has been organized in a way that allows it to stand on its own – in that a summary of the Step II Nomination is provided below– and where appropriate, has been updated to reflect changes that have occurred since 2012. The following provides a summary of the sections contained in this document. Compliance with SEQRA will be provided as a separate document.

Section 1.0 provides an introduction, background information, and organization of the document.

Section 2.0 contains a project description and boundary map identifying the areas of interest.

Section 3.0 contains a summary of the community participation that has occurred since 2012.

Section 4.0 provides an updated analysis of the BOA that provides additional analysis pertinent to implementation strategy as well as summaries of technical studies performed as part of the BOA Plan (including a pedestrian/bicycle use enhancement plan and parking needs assessment, green infrastructure engineering report and analysis of renewable energy resources within the BOA).

Section 5.0 provides the implementation strategy for each of the strategic sites and areas, the cost benefit analysis for each, proposed land use and zoning, a summary of the economic analysis, implementation projects, local management structure, regional, state and local actions and programs for implementation.

2.0 PROJECT BACKGROUND AND BOUNDARY

In 2012, The City of Glen Cove completed the Step II Nomination Study which documented that the Study Area was eligible for designation as a BOA by the DOS. Following completion, an addendum was prepared in July 2013 to incorporate the Coles School property into the proposed BOA boundary and to make recommendations related to the former school and property.

In 2015, the NY Secretary of State designated the Orchard BOA, making it eligible for the funding to prepare the Step III Implementation Strategy. The Step II study justified the designation of the area based on the presence of several contaminated areas including two Superfund sites and several sites which were vacant, underutilized or had a blighting influence on the surrounding residential neighborhood and commercial corridor. Additionally, drainage issues, inadequate parking, circulation problems, a poor pedestrian environment, incompatible adjacent land uses, need for recreational uses, and inadequate transportation access were documented and analyzed.

The Orchard Neighborhood and Sea Cliff Avenue Corridor Brownfield Opportunity Area which is also referred to throughout this document as the Study Area is provided as **Figure 2-1**. The area located at the southern gateway of the City of Glen Cove and is bounded by the City/Town of Oyster Bay boundary at the south, the Long Island Rail Road right of way to the west and north, and west side of Cedar Swamp Road (with the exception of the Coles School property which is located on the east side of Cedar Swamp Road).

City of Glen Cove
and
New York Department of State

The Orchard Neighborhood
Step III BOA

FIGURE 2-1
Brownfield Opportunity Area (BOA) Boundary

Legend

- Boundary
- Parcels

Source: NYSGIS Orthoimagery Program, 2016

Print Date: November 15, 2018

0 500 Feet

1 inch = 500 feet

3.0 COMMUNITY PARTICIPATION

The BOA Step II Nomination relied on the community input received during two public workshops - one visioning and one design workshop. Additionally, a stakeholder-based Steering Committee was formed to provide input during the project term and area stakeholders were identified and interviewed.

The community participation for preparation of the Step III was focused on implementing Step II recommendations. A new Steering Committee was formed comprised of individuals that could provide input related to the City vision, needed code amendments to achieve the desired land uses, enforcement within the residential neighborhood, Planning Board decisions, zoning relief sought within the area, and building related issues. The Community Participation Plan for the Step III thus included a Steering Committee that engaged the Mayor's office, Building Department, Code Enforcement, Police Department, Community Development Agency, Industrial Development Agency and representatives from the City Planning Board and Zoning Board of Appeals.

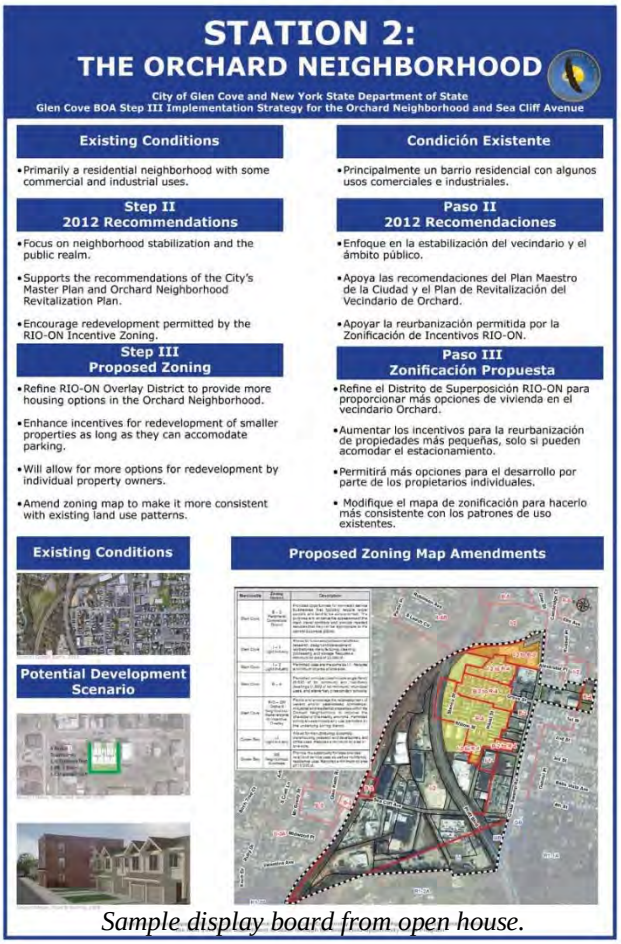
In addition to Steering Committee input, the Step III included targeted outreach to the development community, the MTA/LIRR, and with individual property owners to receive necessary feedback on implementation ideas allowing the Step III strategies to be practical, feasible and to generate real redevelopment interest.

In addition, once the Draft Step III Implementation Strategy was prepared in November 2018, the City Council asked that a public forum be held to obtain input from the community on the recommendations of the plan. A public open house was held on December 6, 2018 from 6:30 – 8:30 pm at City Hall, where interested parties could learn about the BOA Program, the successes that have been achieved utilizing funding from the DOS for implementation since 2015, the recommendations included in the Step III and next steps and an opportunity to provide feedback. The open house was advertised through a combination of mailings, fliers, announcements at local meetings, news coverage, and the City website. Bilingual (Spanish and English) fliers inviting stakeholders and residents to attend the open house were mailed to every available address within the Orchard Neighborhood and posted in apartment building lobbies and local stores. Fliers were also posted in other location in Glen Cove, including downtown businesses, supermarkets, City Hall, the Glen Cove Senior Center, the Glen Cove Youth Bureau, and the Glen Cove Public Library. The Glen Cove Inter-Agency Council (IAC) distributed the flier to its 36 member organizations and the meeting was announced at Glen Cove Downtown Business Improvement District (BID), Glen Cove Inter-Agency Council (IAC), City Council, and CDA/IDA meetings. The Open House was widely advertised through the regional and local press including, Newsday, the Glen Cove Record Pilot, the Glen Cove Herald Gazette, and News 12 Long Island. The City conducted interviews with several of these media outlets, and many attended the open house. In addition, a reporter from the New York Times also attended the public open house.

The open house format gave attendees an opportunity to learn about the recommendations at their own pace and speak with team members, elected officials, representatives from the City of Cove, and the Glen Cove CDA who have been a part of the Working Group throughout the project term. Participants were able to circulate throughout the room, with the flexibility to visit those stations which were of interest to them, and in any order while providing an opportunity to personally engage with members of the project team and City CDA. There were 7 stations attended by knowledgeable team members, including one staff member from NP&V who is fluent in Spanish. All station materials, including poster boards and a participation packet were available in English and Spanish at the open house. The materials from the open house are included as attachments to Appendix A. These materials were posted on the City website after the open house with a link to an online survey questionnaire (also in English and Spanish) that allowed members of the public to provide input following the open house.

The seven stations at the Open House were designed to provide background information about the BOA program, highlight strategic sites and specialized studies, outline what has been accomplished so far and the upcoming steps, and obtain feedback from the community. The following provides a summary of each of the stations:

- Station 1 was focused on providing an overview of the Brownfield Opportunity Area Program, the three steps in the BOA process and outlining the purpose of the Step III Implementation Study. This station also included a large poster to familiarize attendees with the Study Area and areas of interest;
- Station 2 focused on the Orchard Neighborhood and the recommended zoning code modifications to the RIO-ON Zoning Overlay District as well as recommended Zoning Map amendments;
- Station 3 was aimed at exploring the recommendations for redevelopment of the Sea Cliff Avenue former industrial sites;
- Station 4 included general information about Transit-Oriented Developments and provided an overview of the TOD recommendations near the Glen Street Train Station;
- Station 5 outlined the results from the transportation study (including parking, bicycling, and pedestrian amenities);
- Station 6 provided information regarding rain gardens and recommendations of the green infrastructure report; and,
- Station 7 provided a summary of the BOA



Sample display board from open house.

success stories achieved with the help of the DOS funding and future implementation strategies for the overall Study Area.

The public open house was well attended, with 45 attendees listed on the sign-in sheet and 35 questionnaire responses received (however, facilitators estimate that more than double the number of participants that signed in actually attended the open house). Overall, the feedback received from participants regarding the Implementation Strategy was positive and the open house was an excellent opportunity for participants to voice their ideas and any concerns and provided insight into modifications to the Step III recommendations that should be considered. Participants were particularly interested in the Orchard Neighborhood, Sea Cliff Avenue, and TOD recommendations as these stations seemed to generate the most excitement about potential redevelopment and the opportunity to increase housing variety in the Orchard and TOD and introduce a more diverse mix of uses along Sea Cliff Avenue. Facilitators received some concerns related to displacement of affordable and low-income housing, increased density and population in an already crowded area, and the potential to exacerbate traffic and parking concerns throughout the Study Area. Facilitators also commented that the majority of participants were highly supportive of the proposed TOD which will provide new affordable housing options in the area. Participants largely support zoning that would enable construction of a TOD near the Glen Street Train Station, especially since there is a recognized need for increased for affordable and workforce housing in the area. The concept of allowing for mixed use (commercial with multi-family residential) developments at this location – particularly in light of the increased affordable component - was overwhelmingly supported by participants. Respondents were also supportive of a pedestrian connection between the Orchard and Train Station, although some residents of this portion of Hazel Street were concerned that this would provide a location for loitering and crime. Other concerns related to the TOD concept were about traffic, parking, and specifically availability of train station parking.


Images from the December 6, 2018 BOA Step III Implementation Strategy open house.

The survey results (analysis of all submitted questionnaires) indicated that the majority of respondents were not aware of the existing code that provides incentives for townhome development in the Orchard, and although more respondents indicated that they would support code revisions to allow for townhome redevelopment on two typical lots, there was sufficient concern from residents about increased density, traffic, and the potential for displacement of existing tenants to warrant maintaining the current minimum lot size for townhouse redevelopment (15,000 SF). It is noted that some participants felt the proposed modifications did not go far enough to incentivize redevelopment in the Orchard and expressed that they were hoping for even more modifications to increase permitted density. However, facilitators commented that the major fear that was heard focused on displacement resulting from the proposed modifications to incentivize redevelopment of smaller properties and thus, based upon this feedback it is recommended that the provision for townhomes on 9,500 properties be omitted from the recommended RIO-ON District amendment.

The majority of participants were aware of the vacant industrial sites located along Sea Cliff Avenue and the related environmental clean-up and there was lengthy discussion focused on potential future uses of these sites. Overall, participants were enthusiastic about broadening the allowable uses beyond typical industrial uses to allow for commercial recreation, large scale retail, retail, or a mixture of uses (excluding residential). However, several participants noted their concerns about traffic circulation and access to/from these sites. Traffic and access will be reviewed as part of individual site plan applications and for larger developments, traffic impact studies will be required.

At the open house, many participants expressed their reactions to the transportation recommendations and all that commented on this aspect supported improving the sidewalk conditions and updating the streetlights in the Study Area. Participants offered mixed opinions about converting Stanco Street to a two-way street citing concerns about increasing traffic and reducing the on-street parking supply.

At the green infrastructure station, attendees were able to learn more about rain gardens and why they are proposed for certain areas. Participants were largely in favor of incorporating rain gardens as a drainage feature in the Study Area, as long as it was properly maintained and clear about who is responsible for maintenance. This input resulted in a new recommendation to include long term maintenance and assignment of this responsibility at the onset of any rain garden project.

As of January 2019, the Step III document has been revised to address comments to be provided to the City Council for acceptance at a public City Council meeting after which, NP&V will prepare a Generic Environmental Impact Statement to analyze the potential for significant environmental impacts related to adoption and implementation of the recommendations. A public hearing will be scheduled on the Draft GEIS, providing another opportunity for public input on the BOA Step III Implementation Strategy recommendations.

A copy of the Community Participation Plan is provided in **Appendix A**.

4.0 ANALYSIS OF THE BOA

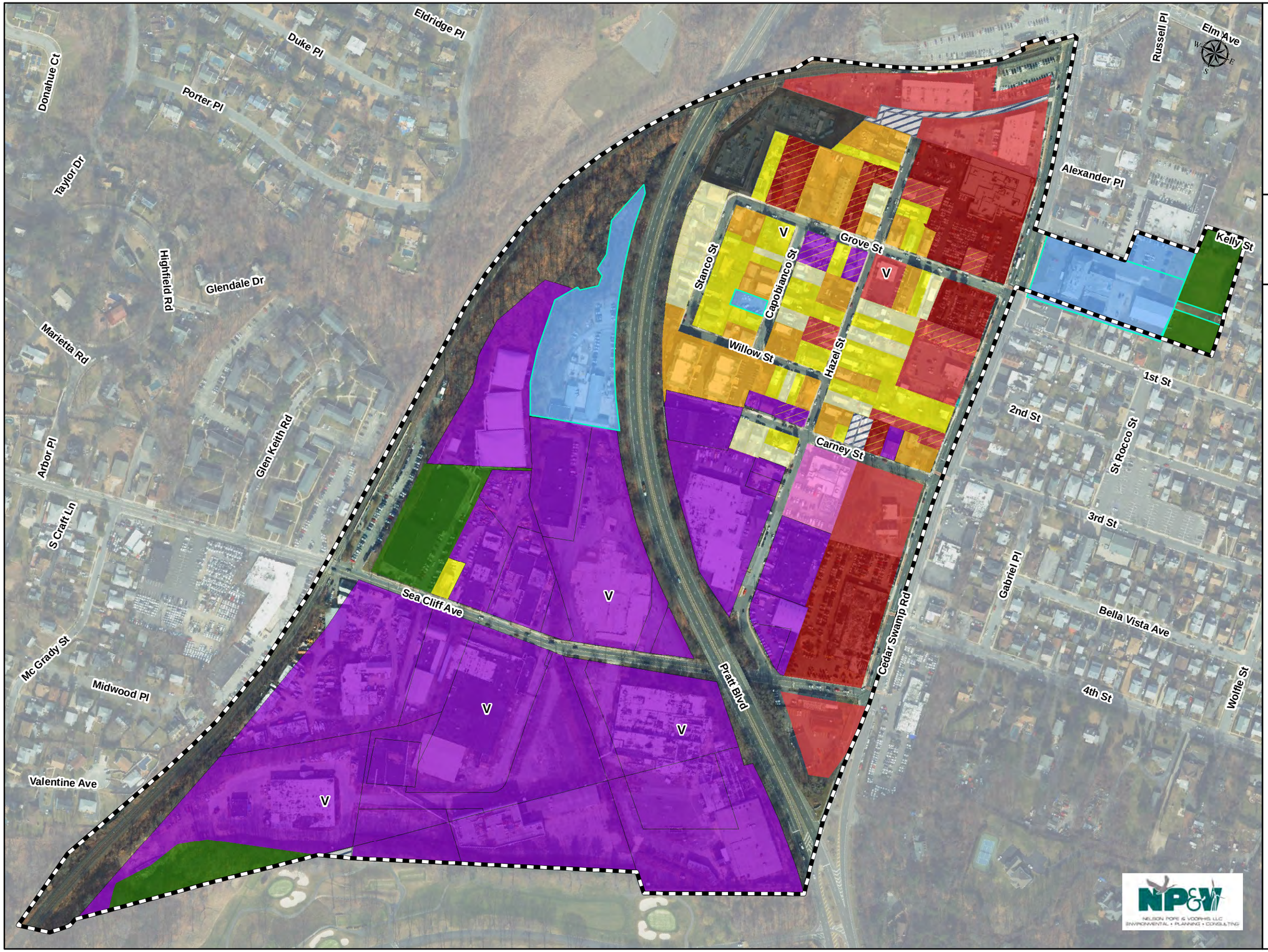
4.1 Existing Land Use

The BOA Step II Nomination Study provided a description and mapping of existing land uses within the area. This Step III Implementation Strategy included preparation of an updated land use map based upon a current inventory and it was found that only minimal changes in the land use have occurred since 2012. The updated map and inventory contained in this section are intended to enhance the quality of information as necessary to support the development of planning recommendations as compared to the information provided in the Step II Study which was primarily intended to support the inclusion of the area in the BOA program. For example, the Step II Study classified apartments, restaurants, automobile dealerships, funeral homes, self-storage, offices and mixed-use buildings with upper-floor apartments simply as "commercial". This single category does not provide enough information to properly understand the patterns or to formulate strategies for revitalization of the area including through zoning regulation of land use. Likewise, multifamily, two-family and single-family detached residences are all designated simply as “residential”. To provide a better understanding of the existing land use patterns and to allow the development of updated zoning for the area, land use analysis needed to convey more detailed information.

Figure 4-1 depicts existing land uses in the Study Area. The general land use pattern is the same as it was in 2012, consisting of single-family, two-family and multifamily residential use in the core of the Orchard Neighborhood; commercial uses along Cedar Swamp Road and the southern end of Hazel Street; and industrial activity along Sea Cliff Avenue. Land uses were mapped using the tax assessor land use code verified via windshield survey and modified as necessary to provide more detail. As noted above, apartments are classified as commercial uses according to the tax assessor code and this use is now shown as multifamily residential.

In total, residential land uses account for approximately 11.4 acres, commercial land uses account for approximately 6.6 acres, automobile-related commercial uses account for approximately 5.4 acres, mixed-uses (which are explained in further detail below) account for approximately 2.4 acres, office uses account for approximately 0.9 acres, community services account for 5.6 acres, commercial recreation uses account for approximately 4.5 acres, industrial/storage/warehouse/contracting parcels account for approximately 44.3 acres, utility uses account for approximately 1.7 acres, and vacant land accounts for approximately 0.6 acres.

For this Step III Implementation Study, the 11.4 acres of residential land uses were further classified into single-family, two-family and multi-family (three or more units) residences. Approximately 2.4 acres within the Study Area are developed with single-family residences, approximately 4.2 acres are developed with two-family residences and approximately 4.8 acres are developed with multi-family residences.



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The Orchard and Sea Cliff Avenue
Step III BOA

FIGURE 4-1
Existing Land Use

Legend

- Boundary
- City Owned Parcels

Land Use (Land Use Edits by NPV)

- Single Family Residential
- Two Family Residential
- Multi Family Residential (3 or more units)
- Mixed Use Residential and Commercial
- Mixed Use Residential and Auto
- Mixed Use Residential and Industrial
- Commercial
- Auto Commercial
- Office
- Commercial Recreation
- Community Services
- Industrial, Warehouse, Contracting
- Utility
- Vacant

"V" indicates a vacant building.

Source: NYSGIS Orthoimagery Program, 2016

Print Date: November 15, 2018

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1 inch = 300 feet

The mixed-use category was also further divided refined in order to better understand the variety of uses within the Study Area. The 2.4 acres of mixed-use is divided into approximately 1 acre of mixed residential and commercial uses, approximately 1 acre of mixed residential and automobile-related commercial uses, and approximately 0.4 acre of mixed residential and industrial uses. Within the mixed-use and commercial land use categories, commercial uses were separated from automobile-related commercial uses due to the large number of automobile uses within the Study Area. The Study Area also includes commercial recreation facilities and a child day care center.

The open field at the rear of the Coles School and a small area of open spaces associated with the Carney Street Apartments are the only open space resources within the study area. There are no designated parks within the area although Pascucci Park and Big Ralph Park lie just outside the northern and northeastern boundaries of the BOA. The private members-only Glen Head Country Club is located just south of the BOA in the Town of Oyster Bay. Another City-owned facility, Dennis Brian Murray Park (formerly Leech Circle Park), is located northwest of the Study Area but is not easily accessible to residents within the BOA. Thus, there is limited access to parks or open space for the residents of the Orchard Neighborhood. This concern was highlighted by the City's Parks Department and had been raised as a priority during the community engagement sessions for the Step II, when members of the community indicated the need for at least a playground for children. At that time, the City's Parks and Recreation Director suggested that there was also the need for an indoor sports complex in the community.

Of the total BOA area, over 21 acres or approximately 25% of the land area consists of parcels that are existing Superfund sites.

Since 2012, there have been a number of major developments approved within the City that have played a role in decision-making for refined future land uses within the BOA. These recently approved projects impact decision-making for the BOA Plan – e.g., the sheer volume of multifamily, the focus on the downtown as a destination, and desire not to compete with the downtown with excessive retail at a transit-oriented development (TOD). The following provides a list of significant residential developments that have received site plan or subdivision approval since 2012:

- North Manor Estates at Glen Cove Mansion – 40 high-end units in duplex buildings off of Dosoris Lane in the northerly section of the City;
- Garvies Point Phase I – 382 Multifamily Rental units and 3,000+/- square feet of retail at the Glen Cove Creek Waterfront;
- Garvies Point Phase II – 167 Condominium units at the Glen Cove Creek Waterfront;
- Carney Street Apartments Phases I and II – 56 rental apartment units located in the Orchard Neighborhood;
- The Villa at Glen Cove – 176 Condominium Units on Glen Cove Avenue; and,
- Village Square – 146 rental apartments and 17,000+/- square feet of retail/restaurant uses in the central business district.

4.2 Existing Zoning

The current zoning designations are illustrated on **Figure 4-2**, Existing Zoning and are summarized in **Table 4-1**. The southernmost area of the BOA is within the Town of Oyster Bay, and thus the first column lists the municipality.

TABLE 4-1
ZONING DISTRICTS WITHIN THE BOA

Municipality	Zoning District	Description
Glen Cove	B – 2 Peripheral Commercial District	Provides opportunities for non-retail service businesses that typically require larger parcels and tend to be auto-oriented. The purpose is to enhance the appearance of the main travel corridors and provide needed services that may not be appropriate in the central business district.
Glen Cove	I – 1 Light Industry	Allows for business/professional offices, research, design and development laboratories, manufacturing, cleaning, processing, and storage. Requires a minimum lot area of 20,000 sf.
Glen Cove	I – 2 Light Industry	Permitted uses are the same as I-1. Requires a minimum lot area of one acre.
Glen Cove	R – 4 One- and Two-Family Residence	Permitted principal uses include single-family (6,500 sf lot minimum) and two-family dwellings (7,500 sf lot minimum), municipal uses, and elementary or secondary schools.
Glen Cove	RIO – ON Orchard Neighborhood Redevelopment Incentive Overlay	Permit and encourage the redevelopment of vacant and/or deteriorated commercial, industrial and residential properties within the Orchard Neighborhood to improve the character of the nearby environs. Permitted principal uses include any use permitted by the underlying zoning district.
Oyster Bay	LI Light Industry	Allows for manufacturing, assembly, warehousing, research and development, and office uses. Requires a minimum lot area of one acre.
Oyster Bay	NB Neighborhood Business	Provide the opportunity for local-oriented retail and service uses as well as multifamily residence uses. Requires a minimum lot area of 10,000 sf.

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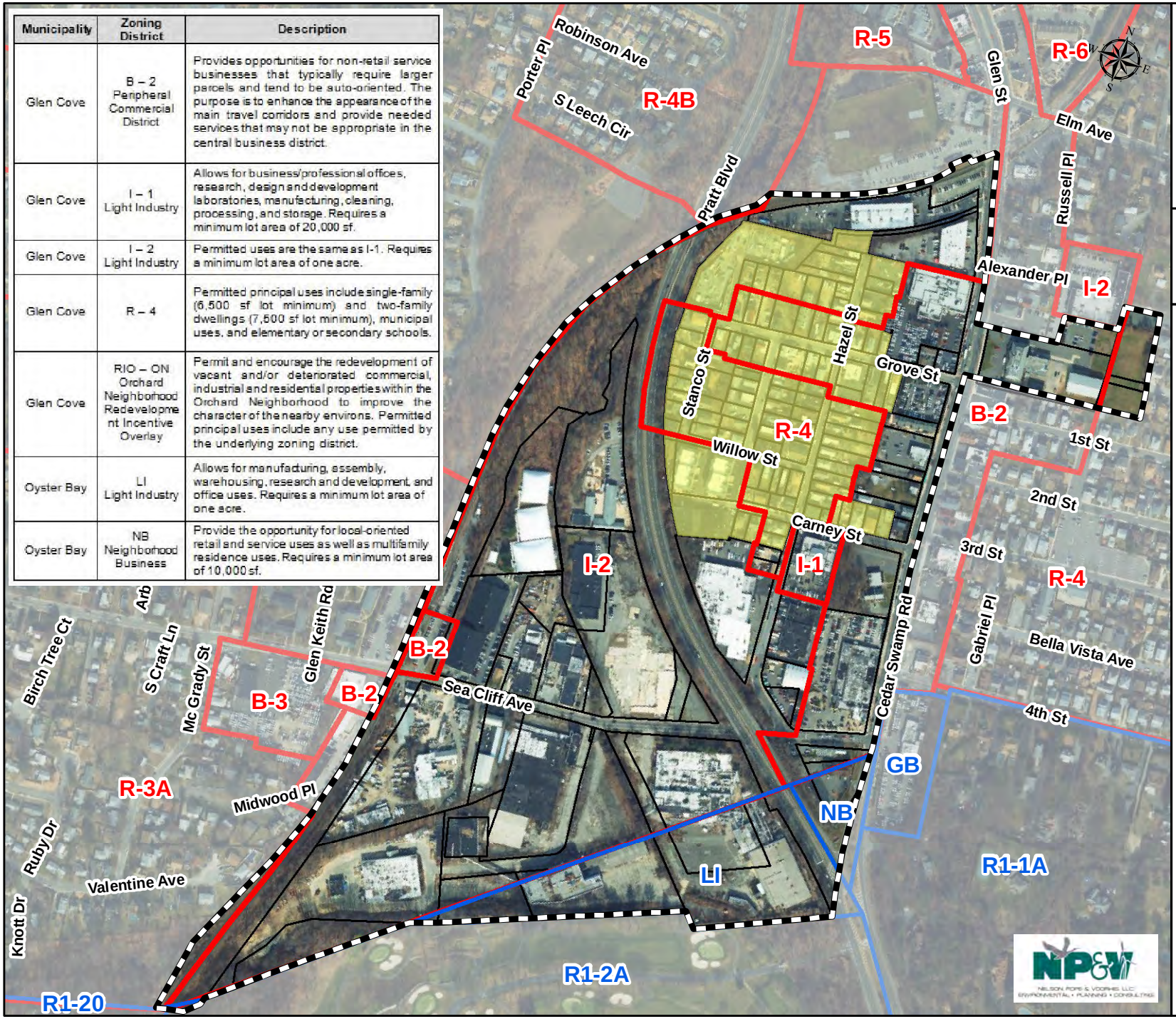

City of Glen Cove
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The Orchard Neighborhood
Step III BOA

FIGURE 4-2
Existing Zoning Map

Legend

- Boundary
- Parcels
- Glen Cove Zoning
- RIO-ON Overlay District
- Oyster Bay Zoning

Source: NYSGIS Orthoimagery Program, 2016

Print Date: November 15, 2018

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1 inch = 500 feet

The only residential zoning district within the BOA is the R-4 district which has a 6,500 SF minimum lot area requirement for single family residences and a 7,500 SF minimum for two family residences.

In addition, much of the BOA is within the RIO-ON Orchard Neighborhood Redevelopment Incentive Overlay District. The RIO-ON permits additional flexibility in land use in that it allows townhouses, multifamily and mixed-use developments provided the applications meet defined criteria. The RIO-ON was adopted in 2010 and was created specifically to incentivize redevelopment in the Orchard Neighborhood, while providing contemporary setback and open space requirements to ensure new development enhances the character of the neighborhood. Density increases up to a maximum residential density of 35 units per acre are permitted in this overlay district in exchange for provision of public amenities such as recreational facilities, streetscape improvements, structured parking out of substantial public view, and attaining high-performance buildings eligible for LEED Gold certification. The principles, density and design standards are consistent with TOD design concepts. To qualify for additional density over the underlying zoning within the RIO-ON District, a minimum lot area of 15,000 SF is currently required. Most of the residential lots within the Orchard Neighborhood are approximately 5,000 SF in size and thus, assemblage of three properties would be required to achieve any of the options permitted under the RIO-ON Overlay District. Other than the Carney Street apartment buildings that replaced the former bowling alley and a preliminary application for the former Stango's restaurant property which is 15,680 SF in size based upon the tax parcel database, no other applications for redevelopment under incentive provisions have occurred. **Table 4-2** provides a summary of the current density incentives of the RIO-ON District, which vary by lot size.

Within the City, the only commercial zoning within the BOA is the B-2, Peripheral Commercial District along Cedar Swamp Road and Grove Street. The B-2 District is intended to provide opportunities for auto-oriented (as opposed to the B-1, which is more pedestrian-oriented) commercial uses or uses that require larger parcels that may not be appropriate in the downtown. The district permits a wide range of retail stores, services, and offices, with potential for second story apartments. Schools are a special permit use.

TABLE 4-2
ORCHARD NEIGHBORHOOD REDEVELOPMENT INCENTIVE OVERLAY (RIO-ON) DISTRICT

Minimum Lot Size Required	Type of Unit	Allowable Units (not including density bonuses or other zoning requirements**/***)
15,000 sf	Townhouse	5 units (6 units with inclusionary housing) Based on 3,000 sf per townhouse
15,000 sf	Townhouse	7 units (8 units with inclusionary housing) Based on 2,000 sf per townhouse
25,000 sf	Townhouse with flats	12 townhouse units 4 flats (2 additional units with inclusionary housing) Based on: 2,000 sf per townhouse 1 flat per 3 townhouses Flat minimum 600 sf
40,000 sf	Multifamily residential buildings	All efficiency or 1-bedroom (1,800 sf/unit): 22 units – 35 with incentives (39 with inclusionary housing) All 2-bedroom units (2,500 sf/unit): 16 units – 35 with incentives (39 with inclusionary housing)
40,000 sf	Mixed use residential and commercial	Same minimum unit sizes and density as multifamily. Variety of combinations based on type of units and area used for commercial space.

* The Glen Cove Zoning Ordinance defines 1 acre as 40,000 square feet

** The City's Inclusionary Housing Provisions grant a 10% density increase in exchange for the provision of units affordable to families within certain income eligibility requirements.

*** The RIO-ON provides density incentives up to 35 units per acre (38.5 with affordable housing) for the provision of structured parking, streetscape improvements and sustainable environmental design. Such density may not be physically achievable for all building types.

Within the City, the remainder of the BOA is within the I-1 and I-2 Light Industrial Districts. Both of these districts permit the same types of light industrial activity, with the I-1 having a minimum lot area of 20,000 square feet and the I-2 requiring a minimum lot area of 1 acre. The area is not subject to any other special development controls (e.g., historic districts) or economic development designations. In addition, there are several parcels that are split between the City of Glen Cove and the Town of Oyster Bay at the southern end of the BOA. West of Pratt Boulevard (107) in the Town of Oyster Bay, these properties are zoned LI (Light Industry) and east of 107, NB (Neighborhood Business).

There are several areas within the Study Area where the zoning does not reflect the actual land use. These are summarized below:

In the I-2 District:

- At the north end of Hazel Street and the rears of lots to the north of Grove Street - mostly residential land uses (uses not permitted in the I-2 District);
- North of Hazel and west of Cedar Swamp Road - developed with shopping and private recreation (uses not permitted in the I-2);
- The I-2 District at the west end of Carney Street - residential land uses (uses not permitted in the I-2 District);
- The I-2 District at the south end of Hazel Street west of Hazel Street, which contains a lot with significant contractor material storage and a lot with an automobile garage (expressly prohibited in the I-2);
- A residential use on Sea Cliff Avenue in the western portion of the Study Area;
- The Tennis Center and Day Care uses north of Sea Cliff Avenue and west of Pratt Boulevard are not permitted in the I-2 District in which they are located.

In the I-1 District:

- A single lot at the southeast corner of Hazel Street and Carney Street contains a business office, which would be permitted in the adjacent B-2 District.

In the B-2 District:

- Residential uses extending down both sides of Grove Street – (residential use is not permitted in the B-2 District except as second-story apartments on Cedar Swamp Road);
- East of Cedar Swamp contains several residential uses (use not permitted in the B-2);
- Mixed-use (residential and industrial) development along the south side of Grove Street between Capobianco Street and Hazel Street;
- Industrial use on Carney Street and west of Cedar Swamp Road.

In the R-4 District:

- Mixed-use properties along Hazel Street (only residential and municipal uses allowed in R-4 district);
- Industrial uses located on the north side of Carney Street and west side of Hazel Street (industrial uses not allowed in R-4).

Where zoning is not consistent with the existing land use, there are opportunities for decision-making – the questions being:

- Is the existing zoning district appropriate for the area, and if so, should the nonconforming uses remain, or should the City seek to amortize the uses over time, bring enforcement proceeding for illegal uses, or encourage more appropriate uses through incentives?

- If the zoning district is not deemed appropriate for the area, how should the zoning be modified?

Of the above land use/zoning discrepancies, there are a number that would be rectified by the recommended zoning map amendments designed to achieve the preferred redevelopment plan for the area. These recommended map and code amendments are presented and discussed in **Section 5.2**.

One of the key difficulties in effecting change in the residential sector of the BOA is that existing lot sizes are generally non-conforming with the minimum lot area required under zoning, and densities are often in excess of what is permitted even within the RIO-ON District. With this in mind, the implementation strategy originally included a recommendation to adjust zoning incentives within the RIO-ON to provide greater incentives for smaller lot assemblies to encourage redevelopment at densities that are economically viable, profitable and physically practical to provide sufficient living space and off-street parking. However, based upon public feedback the recommendation to include a provision for smaller (9,500 square foot lots) has been removed. Additional refinements to the RIO-ON District language are recommended which have not been modified as compared to the November 2018 Draft document, with the addition of a relaxation to allow for 3 story buildings where not out of character with the surrounding properties.

Within the area proposed to be included within the R-4 and RIO-ON districts, there are numerous businesses which store trucks and or contracting supplies within the Orchard. This is incompatible with a high-quality residential neighborhood, but several of these businesses have been successful Glen Cove businesses for years. This implementation strategy recommends that the City explore locations for the construction of a business park, preferably within the BOA, tailored to contractor uses which provide parking for commercial vehicles, warehouse space for contractor supplies and office space. If such a business park is developed and further zoning incentives are enacted, it is recommended that the City consider amortizing non-conforming contractor storage within the Orchard.

Recommended zoning modifications are introduced in subsections of **Section 5.0** for strategic sites/areas where zoning amendments are appropriate to support changes in use and further described in **Section 5.2**.

4.3 Demographics and Retail Market Trends Analysis

Chapter 3.1 of the Step II Nomination Study provided an up-to-date description of the City of Glen Cove, a brief history of the evolution of land use within the City and within the BOA and a brief description of major household economic indicators from the 2010 Decennial Census and American Community Survey. The most recent estimates available from the US Census Bureau are 5-year estimates from 2012-2016. These estimates are not available at the block level that the Step II Study's decennial census information was. Additionally, due to the sample size of the ACS, comparison of the 2006-2010 and 2012-2016 five-year surveys may not be an accurate reflection of population at Block Group levels and lower. Nevertheless, as part of this Step III, demographic and market data has been compiled for use in marketing materials, economic feasibility analysis, and analysis of redevelopment scenarios and the implementation strategy. It will also be used in the State Environmental Quality Review Act (SEQRA) phase of the Step III process.

Baseline Trends

Population Characteristics

The Study Area is located within two different block groups, Census Tract 5172, Block Group 3 and Census Tract 5173.02 Block 1. Because the Study Area is a small portion of the block groups in question as shown in the following image, an effort was made to adjust the demographic data totals collected at the block group level to reflect the Study Area. To this end, population, household and jobs data were pulled from the Environmental Systems Research Institute (ESRI) demographic and Census Longitudinal Employer–Household Dynamics (LEHD) datasets, both of which allow a Geographic Information System (GIS) shapefile to be uploaded and used to define a study area, for both the study area and the two encompassing block groups.[1] The proportion of study area to aggregated block group residency in terms of population, housing, and jobs has been applied to corresponding demographic categories throughout this section.

[1] These datasets were not used for the entire analysis because the data are available only for the current year and therefore do not allow comparison over time.

In order to see how the Study Area performs compared to the surrounding areas, the demographic characteristics that follow are shown for the Study Area as a whole, the City of Glen Cove, Nassau County and all of Long Island. **Table 4-3** compares the population change for these geographic areas.

TABLE 4-3
POPULATION 2010, 2016[2]

Geography	2010	2016	Change	% Change
Study Area	813	706	-107	-13.2%
Glen Cove	26,728	27,246	518	1.9%
Nassau County	1,329,083	1,356,801	27,718	2.1%
Long Island	2,811,631	2,854,931	43,300	1.5%

Source: U.S. Census Bureau, ACS, 2006-10 and 2012-2016 5 Year Estimates.

Population in the Study Area has decreased by 13.2 percent in the last six years, going from 813 in 2010 to 706 in 2016. This is counter to population change in the areas of comparison: Glen Cove saw a population increase of 1.9 percent, Nassau County an increase of 2.1 percent, and Long Island an increase of 1.5 percent. **Table 4-4** shows breakdown of age cohorts.

TABLE 4-4
POPULATION BY AGE COHORT, 2016

	Study Area	Glen Cove	Nassau County	Long Island
Total population	100.0%	100.0%	100.0%	100.0%
Under 5 years	5.7%	6.1%	5.4%	5.4%
5 to 9 years	5.6%	5.8%	6.0%	6.0%
10 to 14 years	5.2%	5.8%	6.5%	6.6%
15 to 19 years	5.2%	5.1%	6.8%	6.9%
20 to 24 years	11.7%	7.1%	6.4%	6.5%
25 to 34 years	10.5%	15.8%	11.2%	11.3%
35 to 44 years	22.6%	12.6%	12.2%	12.4%
45 to 54 years	7.8%	11.5%	15.3%	15.7%
55 to 59 years	3.4%	6.4%	7.4%	7.3%
60 to 64 years	6.9%	6.3%	6.4%	6.2%
65 to 74 years	9.9%	8.6%	8.6%	8.6%
75 to 84 years	3.0%	5.2%	4.9%	4.8%
85 years and over	2.5%	3.8%	2.9%	2.4%

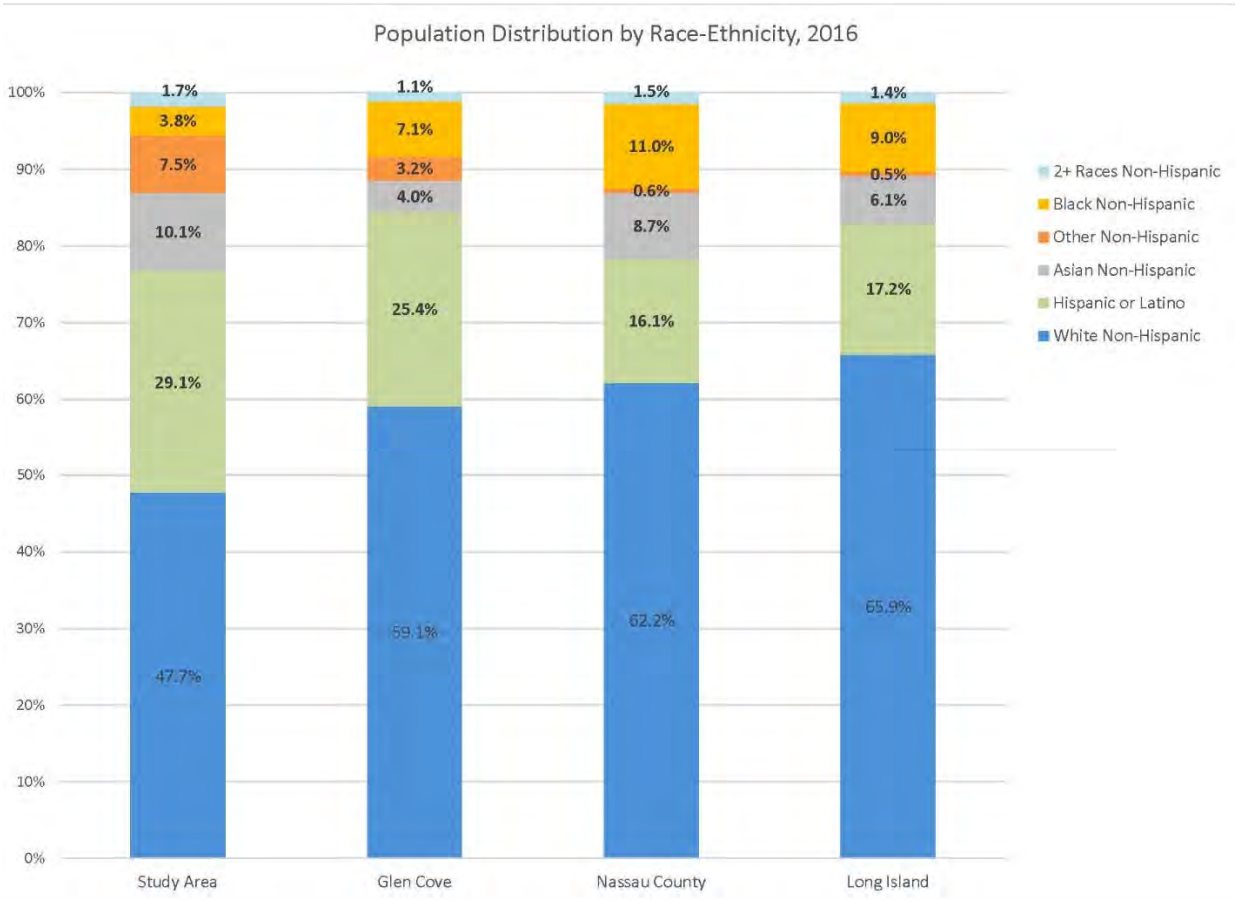
Source: U.S. Census Bureau, ACS, 2012-2016 5 Year Estimates.

As illustrated in **Table 4-4** which shows the age distribution of residents, almost half of the Study Area's population is at a young working age—between the ages of 20 and 44 (at 44.8%), compared to 35.5 percent of Glen Cove, 29.8 percent of Nassau County, and 30.2 percent of Long Island as a whole. The Study Area also has a smaller share of children (21.7%) and seniors aged 65 or older (15.3%) than the

[2] Only ACS data have been examined because Block Group geographies have changed since the 2010 Census.

surrounding areas. This concentration of younger adults of working age may reflect a transient workforce; however, it illustrates the demand for affordable housing for young adult residents.

CHART 4-1



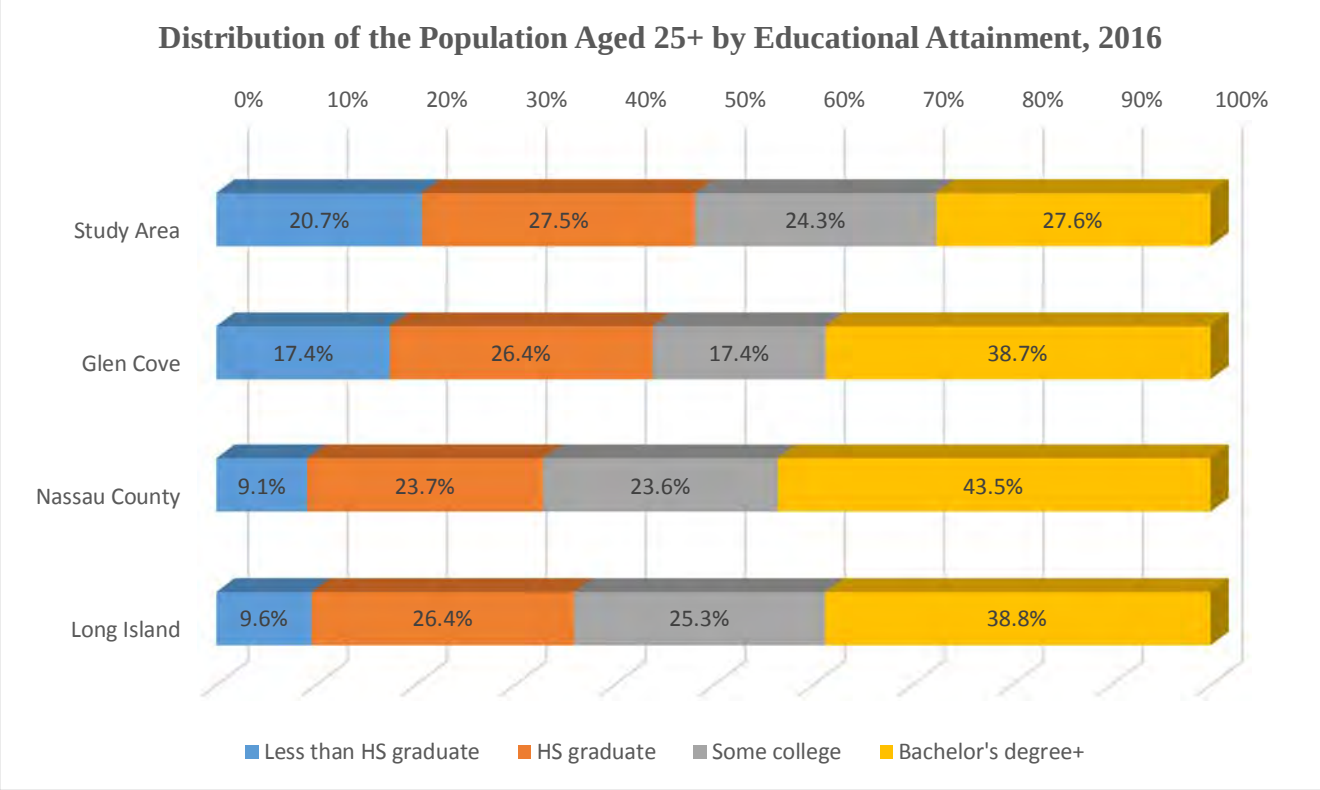
Source: U.S. Census Bureau, ACS, 2012-2016 5 Year Estimates.

As shown in **Chart 4-1** above, the largest share of residents in the Study Area identify themselves as White Non-Hispanic—as is the case in all of the other areas of comparison; however, this population makes up less than half of the total as compared with other geographic areas where this segment of the population is greater (between 59% to nearly 66% of the population). Three in ten of Study Area residents are Hispanic or Latino, higher than any of the areas of comparison. The Study Area has a relatively high share of residents who identify as Asian Alone Non-Hispanic at 10.1 percent, more than twice the concentration in Glen Cove (4.0%) and 1.5 percentage points higher than Nassau County (8.7%). The share of residents that identify as Black Non-Hispanic is much smaller in the Study Area (3.8%) than in Glen Cove (7.1%), Nassau County (11.0%) or Long Island (9.0%) as a whole. Interestingly, a relatively large share (7.5%) of Study Area residents self-classified as "some other race," which generally indicates the respondent does not identify with any standard racial classification or would prefer not to answer the question.

Educational Attainment

As shown in **Chart 4-2**, the greatest share of Study Area residents age 25 and older (27.6%) have a college degree. An additional 24.3 percent have attended some college and 27.5 percent of Study Area residents have a high school diploma or equivalent. One in every five Study Area residents has less than a high school diploma, a slightly higher share as compared to Glen Cove as a whole, which is at 17.4 percent. While the Study Area lags behind the rest of Glen Cove, Nassau County and Long Island as a whole in terms of educational attainment, the shares of those residents with little education have decreased over the last decade.

CHART 4-2

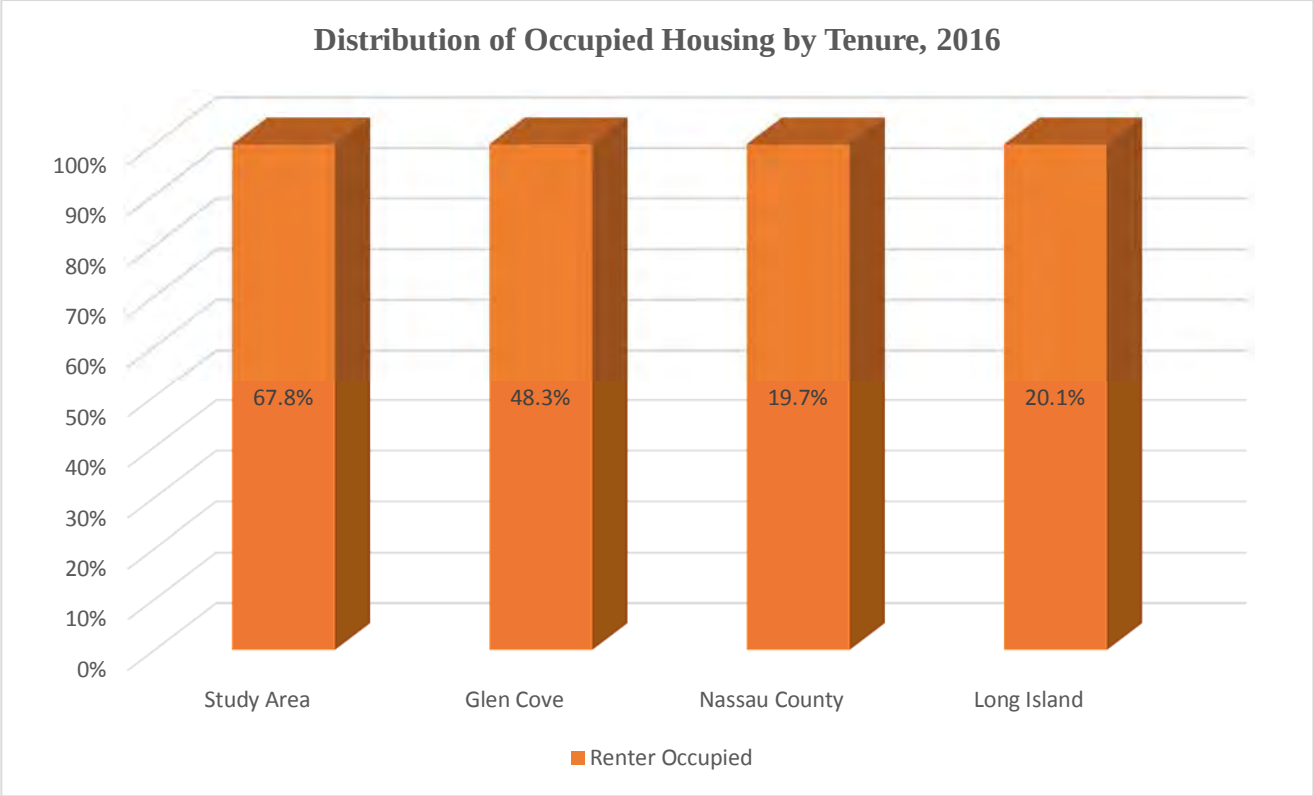


Source: U.S. Census Bureau, ACS, 2012-2016 5 Year Estimates.

Households

There are 203 households in the Study Area, 67.8 percent of which are rentals. It is noted that this value was confirmed to be consistent with the number of households identified by the City CDA in preparation of a mailing to the residents of the Orchard Neighborhood. Based upon the mailing and including the units of the Carney Street apartment buildings there are 215 households in the Orchard Neighborhood. As shown in **Chart 4-3**, the larger encompassing geographies have much greater rates of household ownership at 51.7 percent for Glen Cove and 8 out of every 10 households in Nassau County and Long Island (the Study Area has a much greater percentage of rentals than Glen Cove, Nassau County, and Long Island as a whole).

CHART 4-3



Source: U.S. Census Bureau, ACS, 2012-2016 5 Year Estimates.

Household size is an important consideration in determining unmet demand in housing stock. **Table 4-5** below shows the number of persons per household in each of the areas of study in 2010 and 2016. According to the American Community Survey, 26.6 percent of households had only one resident in 2010; this share increased to 28.9 percent in 2016. A similar share of households (28.4%) had two residents in 2016, also up slightly from 2010. The share of households with three persons shifted oddly between 2010 and 2016 from 21.4 percent to 8.8 percent; however, the combined share of three and four-person households remained similar, shifting from 35.1 percent in 2010 to 32.9 percent in 2016. Only one in ten households in the Study Area had five or more residents. This shift may be a false representation due to sampling differences, however if it is true it is significant and has implications on overall housing demand in the Study Area and Glen Cove. Overall, the Study Area has smaller households than Glen Cove, Nassau County and Long Island.

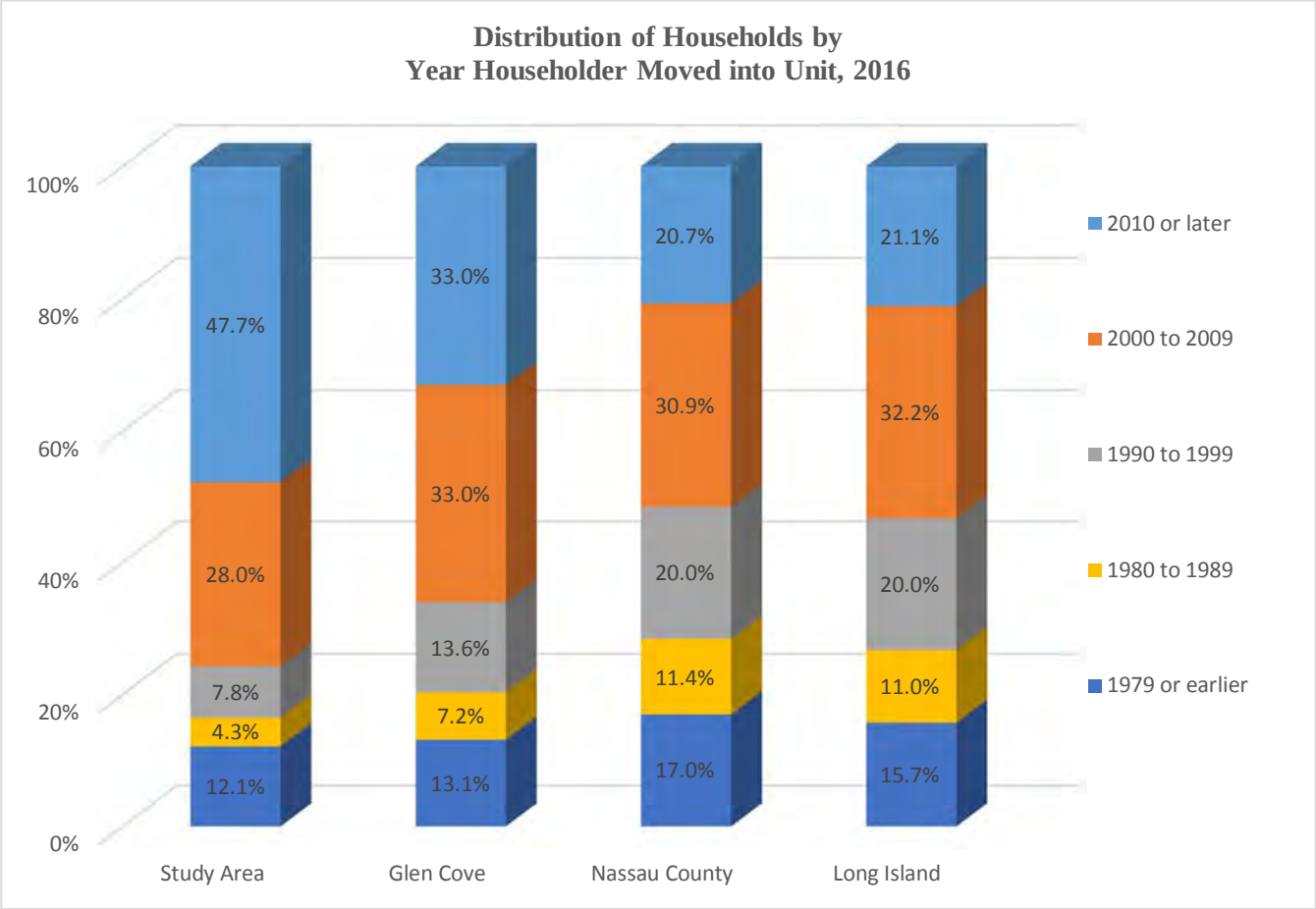
TABLE 4-5
PERSONS PER HOUSEHOLD, 2010 AND 2016

	2010				2016			
Household Size	**Study Area**	**Glen Cove**	**Nassau County**	**Long Island**	**Study Area**	**Glen Cove**	**Nassau County**	**Long Island**
1 person	26.6%	26.1%	19.9%	19.8%	28.9%	25.8%	20.0%	20.9%
2 person	26.8%	30.6%	29.3%	29.6%	28.4%	27.5%	28.3%	29.1%
3 person	21.4%	16.2%	17.2%	17.2%	8.8%	20.6%	18.1%	17.5%
4 person	13.7%	15.3%	19.0%	18.8%	24.1%	13.9%	18.8%	18.3%
5+ person	11.3%	11.8%	14.6%	14.5%	9.8%	12.3%	14.9%	14.2%

Source: U.S. Census Bureau, ACS, 2006-2010 and 2012-2016 5 Year Estimates.

As shown in **Chart 4-4**, almost half of Study Area residents are newcomers with 47.7 percent having moved into their current home since 2010, compared to Glen Cove (33%), Nassau County (20.7%), or Long Island (21.1%). This likely reflects sampling of the new developments in Long Island's building boom of the last several years. It may also demonstrate greater rates of housing turnover among renting households in the Orchard as well as the new construction of 56 units at the Carney Street Apartments.

CHART 4-4



Source: U.S. Census Bureau, ACS, 2012-2016 5 Year Estimates.

As shown in **Table 4-6**, household incomes in the Study Area are much less than in Glen Cove, Nassau County and Long Island, with the majority of households having incomes of less than $50,000.

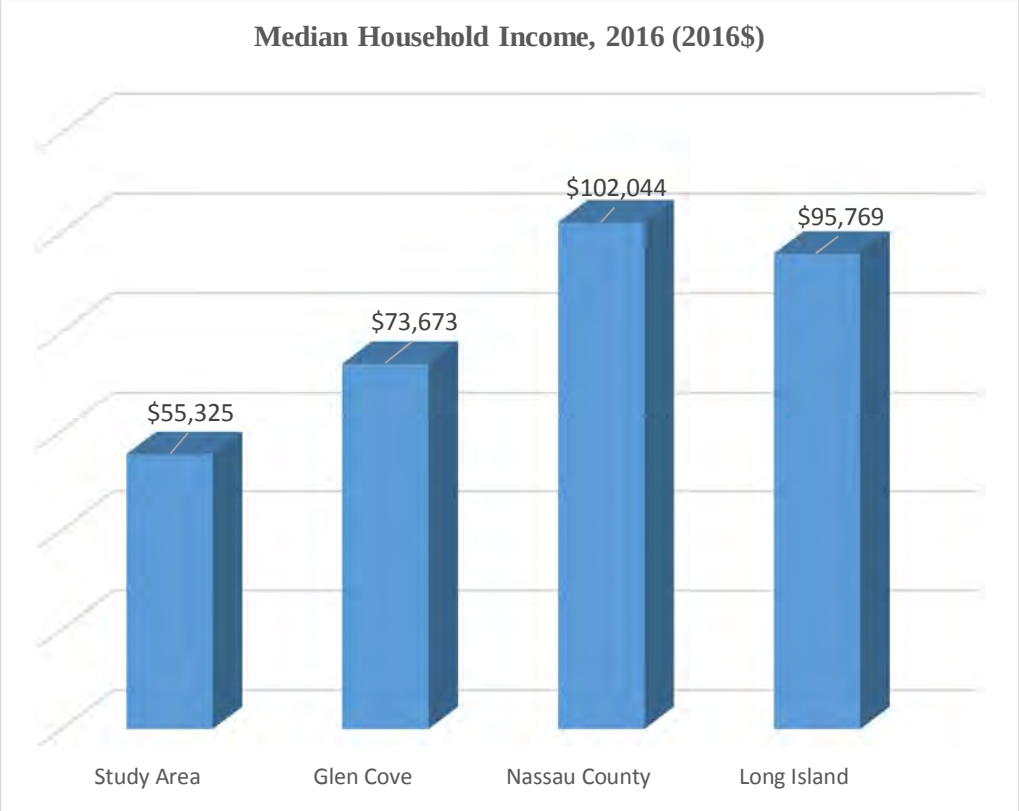
TABLE 4-6
HOUSEHOLDS BY INCOME DISTRIBUTION, 2016

	Study Area	Glen Cove	Nassau County	Long Island
Total households	203	9,531	441,912	938,692
Less than $50,000	44%	37%	24%	26%
$50,000 to $99,999	27%	28%	25%	26%
$100,000 to $149,999	17%	14%	20%	20%
$150,000 to $199,999	10%	9%	13%	12%
$200,000 or more	2%	13%	18%	15%

Source: U.S. Census Bureau, ACS, 2012-2016 5 Year Estimates.

Median household income in the Study Area was $55,325 in 2016; this was nearly $20,000 lower than the median household income in Glen Cove, roughly $50,000 lower than the Nassau County median household income, and $40,000 less than the Long Island household median.

CHART 4-5



Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

NYS Opportunity Zone Program

During the course of preparation of this Step III BOA, the NYS deadline to apply for the Opportunity Zone Program occurred, which under the 2017 tax law provides a development incentive in the form of temporary deferral of any capital gains tax that is derived from investment within Opportunity Zones. Per the program, 20% or more of individuals within the census tract must fall within the poverty level and the median income of the area must by 80% or less of the area median. The Nassau County area median income is currently $106,251 and thus, 80% of AMI is $85,001. The median income within census tract 5172 is $53,209 and according to the 2016 American Community Survey, 22.5% of the population is in poverty. The BOA Consultant Team confirmed that Census Tract 5172, located within the Orchard Neighborhood, was eligible to be identified by the State as an Opportunity Zone, and provided this data to the Community Development Agency for use in applying for the designation. On June 5, 2018, it was announced that the Glen Cove Opportunity Zone was one of the ten approved for Long Island.

Labor Force Participation and Employment

According to the 2016 American Community Survey as shown in **Table 4-7**, the labor force participation rate in the Study Area was 66.3 percent, slightly higher than the labor force participation rates of 64.7 percent, 65.2 percent and 65.1 percent in Glen Cove, Nassau County and Long Island, respectively.

TABLE 4-7
POPULATION 16+ BY LABOR FORCE AND EMPLOYMENT STATUS, 2016

Geography	Study Area	Glen Cove	Nassau County	Long Island
Population 16 years and over	574	22,162	1,095,011	2,301,818
In labor force	381	14,331	714,021	1,499,412
Employed	348	13,388	660,186	1,383,929
Unemployed	33	943	53,835	115,483
Not in labor force	194	7831	380990	802406
Labor Force Participation Rate	66.3%	64.7%	65.2%	65.1%
Unemployment Rate	8.7%	6.6%	7.5%	7.7%

Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

While labor force participation (the population of those employed or seeking employment) in the Study Area is higher, so is the unemployment rate. The Study Area rate is two full percentage points higher than Glen Cove's (8.7 percent and 6.6 percent, respectively) and one percentage point higher than Nassau County and Long Island as a whole. It should be noted that these levels of unemployment are the best available data for small areas such as block groups but are derived from a multi-year sample of the Census Bureau's American Community Survey. Unemployment rates have been going down throughout the region in the last several years, but there is no data source that will allow a year by year comparison for geographies on the block group scale.

Wages

The Census Bureau works with State Departments of Labor to maintain the Longitudinal Employer Household Dataset (LEHD). This dataset provides additional data on the characteristics of workers by place of residence and place of work. The wage data reported is broken into three categories, $1,250 a month or less ($15,000 per annum, or less than Long Island minimum wage), $1,251 to $3,333 per month (between $15,000 and $40,000 per year) and more than $3,333 per month ($40,000 per year or more).

TABLE 4-8
WAGES OF EMPLOYED RESIDENTS, 2015

Wages	Study Area (Block Groups)	Glen Cove	Nassau County	Long Island
Total All Jobs	100.0%	100.0%	100.0%	100.0%
$1,250 per month or less	21.7%	21.2%	20.6%	21.3%
$1,251 to $3,333 per month	36.3%	27.8%	24.9%	26.4%
More than $3,333 per month	41.9%	51.0%	54.5%	52.3%

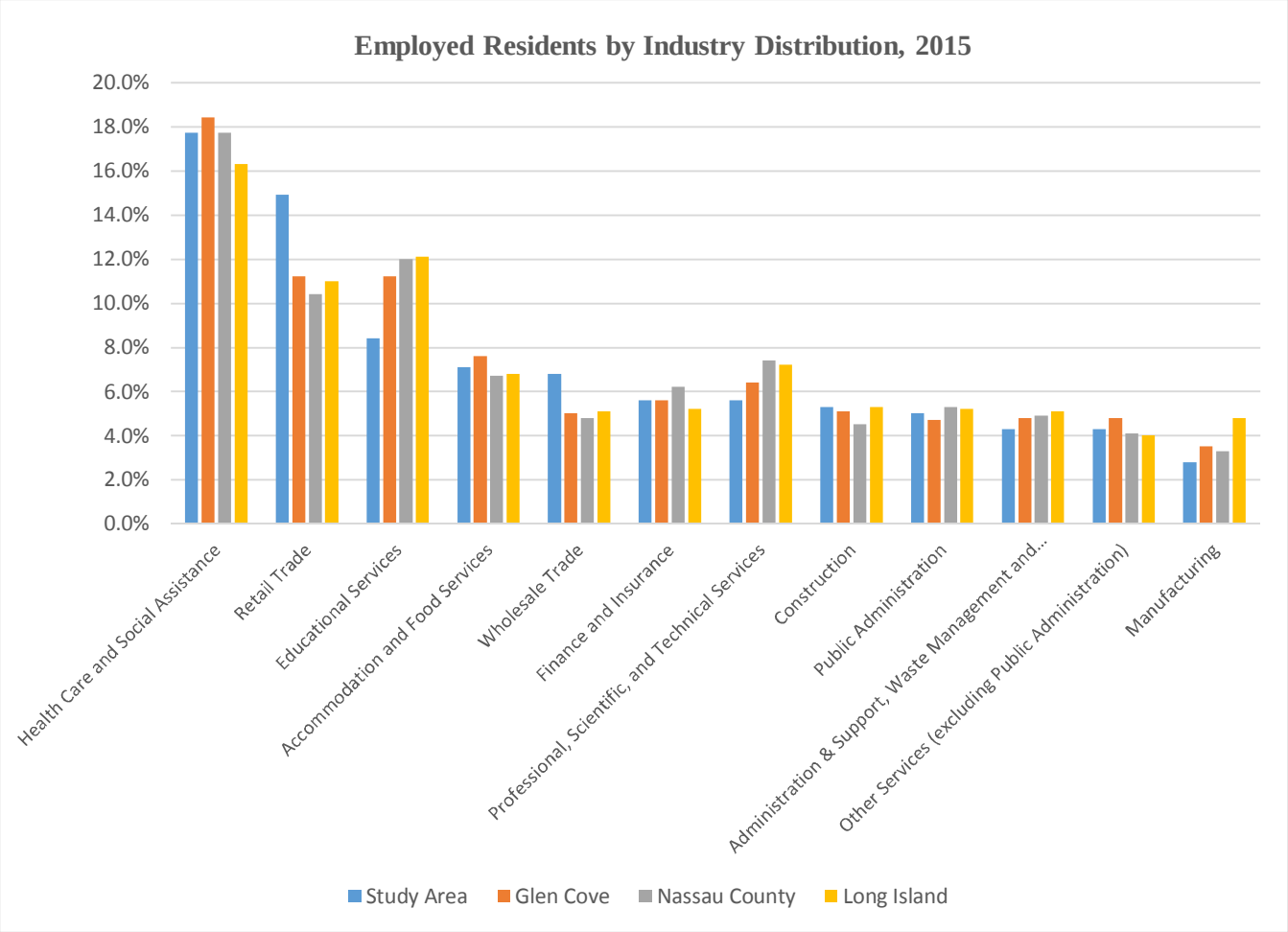
Source: U.S. Census Bureau, Longitudinal Employer Household Dataset, 2015

The greatest share of employed Study Area residents have wage incomes of $40,000 a year or more; however, that share is much lower at 41.9 percent than those throughout the rest of Long Island. One in every five employed Study Area residents makes less than minimum wage, similar to the other areas of comparison.

Employment by Industry

As shown on **Chart 4-6** on the following page, the greatest share of employed residents in the Study Area (almost 1 in 5) work in Health Care and Social Assistance. This is followed by Retail and Educational Services at 14.9 percent and 8.4 percent, respectively. Accommodation and Food Services follow at 7.1 percent. Approximately 6.8 percent of working residents work in the Wholesale Trade, followed by 5.6 percent each in Finance and Insurance, and Professional, Scientific and Technical Services. Administration and Support/Waste Management and Remediation and Other Services each provide jobs for 4.3 percent of local workers.

CHART 4-6

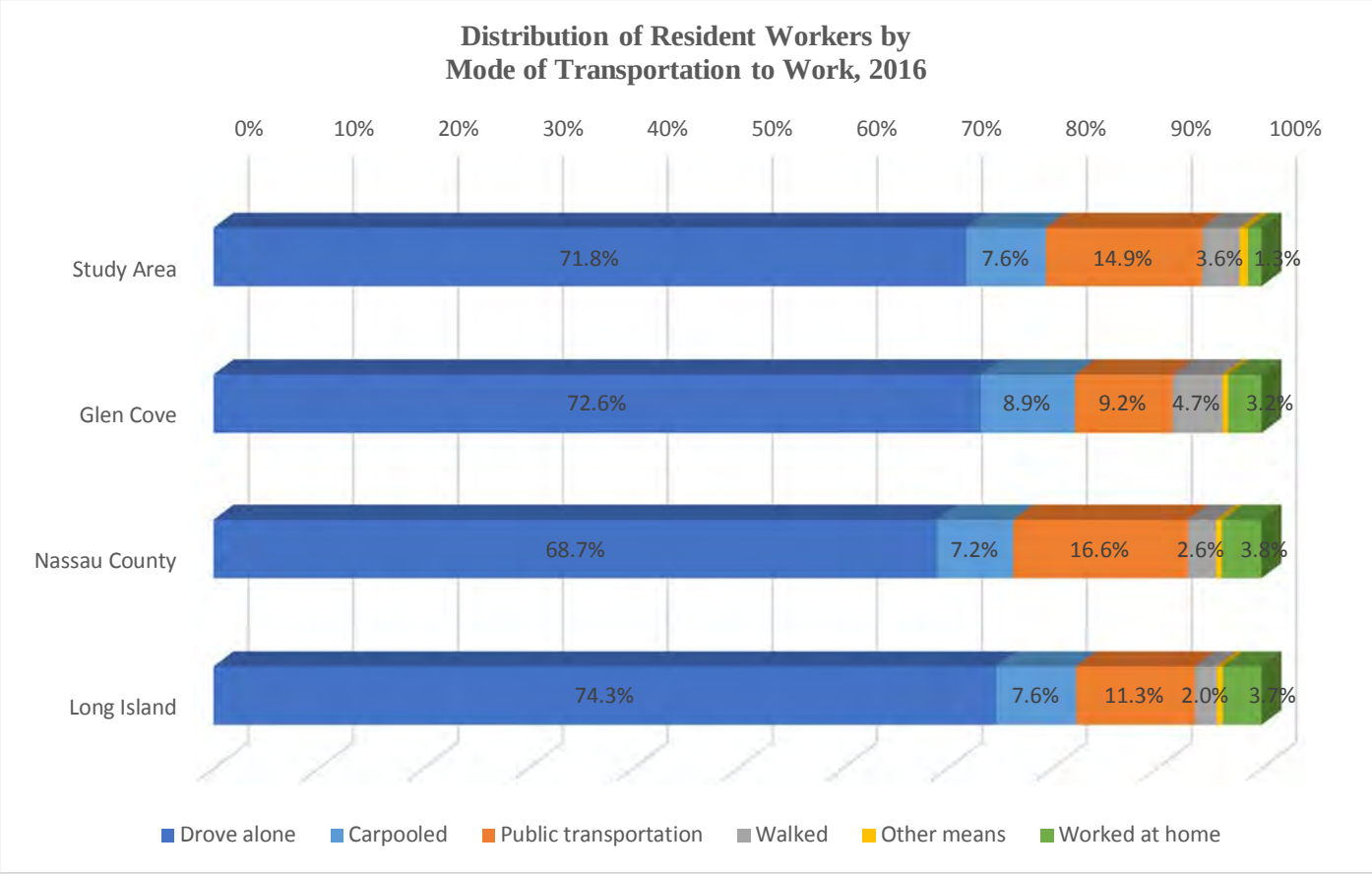


Source: U.S. Census Bureau, Longitudinal Employer Household Dataset, 2015

Journey to Work

Seven out of every ten working Study Area residents drive to work alone and an additional 7.6 percent carpool. The overall share of drivers in the study area is slightly less than Glen Cove and Long Island as a whole, but higher than Nassau County. Despite the large number of drivers, it is noteworthy that Study Area employed residents (14.9%) are more likely to take public transportation than the residents of Glen Cove (9.2%). The comparison is illustrated in **Chart 4-7**.

CHART 4-7



Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

Work Destination

According to the LEHD, almost one in every seven working residents in the Study Area work in Glen Cove, slightly less than Glen Cove overall at 15.3 percent. The greatest share of the Study Area's working residents are employed elsewhere in Nassau County at 42.2 percent and 39.0 percent for Glen Cove.

TABLE 4-9
WORK DESTINATION OF EMPLOYED RESIDENTS, 2015

	Study Area	Glen Cove	Nassau	Long Island
Glen Cove	14.0%	15.3%	1.1%	0.7%
Rest of Nassau County	42.2%	39.0%	46.2%	29.3%
Suffolk County	8.1%	9.8%	10.8%	38.1%
Manhattan	14.9%	14.9%	17.3%	13.0%
Rest of New York City	13.1%	12.5%	17.8%	12.1%
Other	7.7%	8.5%	6.8%	6.1%

Source: U.S. Census Bureau, Longitudinal Employer Household Dataset, 2015

Equal shares (14.9%) of Study Area and Glen Cove working residents commute into Manhattan for work, while an additional 13.1 percent and 12.5 percent, respectively work elsewhere in New York City. The commutation rate into the City is lower than that of all Nassau residents. Less than 10 percent of working Study Area and Glen Cove residents commute east to Suffolk County.

Housing Characteristics

The 2016 American Community Survey reports that there are 213 housing units in the Study Area. Vacancy rates in the Study Area are reported to be 4.7 percent, a full percentage point less than Glen Cove and Nassau County as a whole. This disparity is likely because it is relatively inexpensive. A vacancy rate of 8 percent is considered to be optimal for a healthy housing market. The vacancy rates shown in Nassau County, Glen Cove and the Study Area in **Table 4-10** all indicate a constrained market with a significant share of unmet demand.

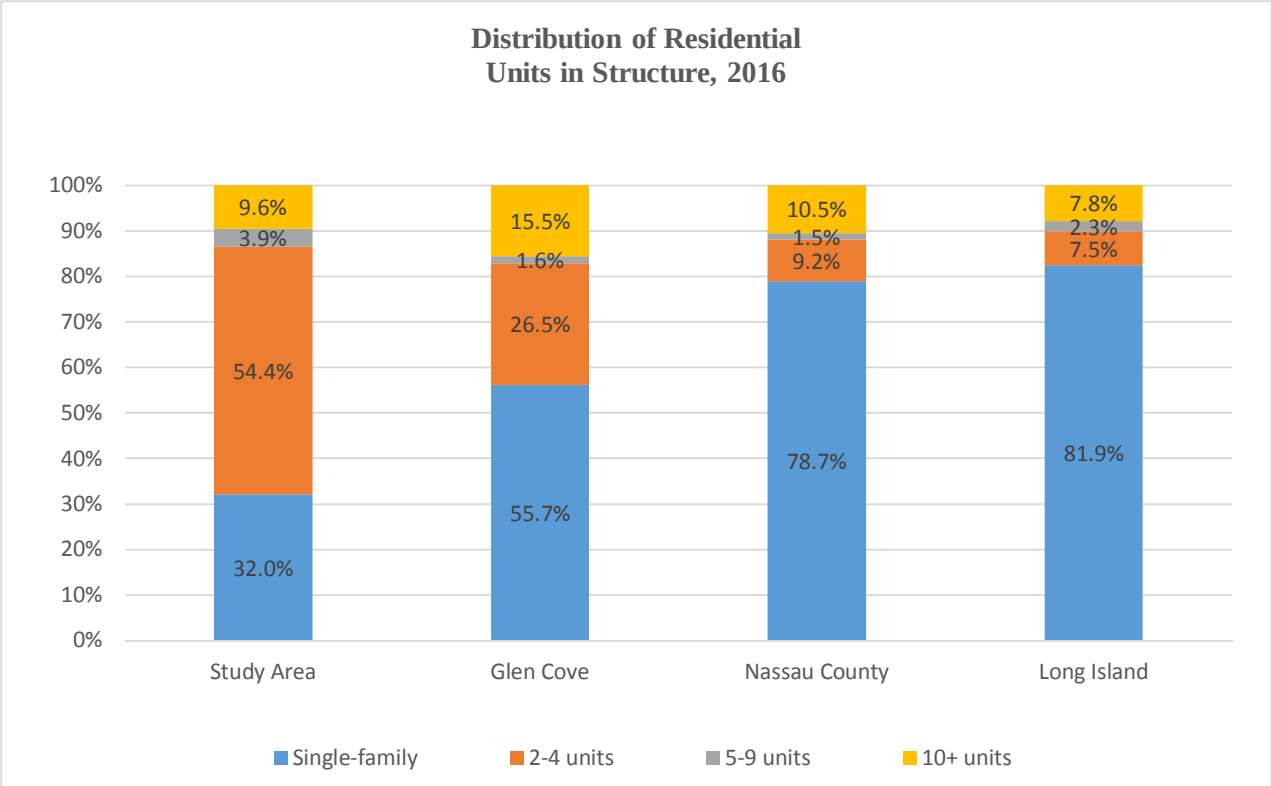
TABLE 4-10
HOUSING AND VACANCIES, 2014

	2016			
Geography	**Study Area**	**Glen Cove**	**Nassau County**	**Long Island**
Total housing units	213	10,182	467,127	1,037,591
Occupied housing units	203	9,587	440,230	929,988
Vacant housing units	10	595	26,897	107,603
Vacancy Rate	4.7%	5.8%	5.8%	10.4%

Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

The Study Area is anomalous to Long Island given the relatively small shares of single-family housing stock (32.0%). More than half of units in the Study Area are in 2-4 family buildings, compared to 26.5 percent of units in Glen Cove, 9.2 percent in Nassau County, and 7.5 percent in Long Island as a whole. However, while the Study Area has much larger shares of units in multi-family housing, it has relatively few (9.6%) in buildings with 10 or more units. With the approval and construction of 56 units in three structures at the Carney Street Apartments from 2011 through 2017, this number is anticipated to increase in future surveys. Approved and unbuilt units throughout Glen Cove will also further increase the percentage of 10-plus unit buildings in the City. **Chart 4-8** provides the breakdown of residential units in structures within the Study Area as compared to Glen Cove, the County and Long Island.

CHART 4-8



Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

Almost 60 percent of Study Area housing units have 2 or fewer bedrooms. This compares to 41.2 percent for the City of Glen Cove and only 25.4 and 26.2 percent for Nassau County and Long Island, respectively. It is notable that there were no reported studio apartments in the Study Area. From the data, summarized in **Table 4-11**, it appears that the size of units in terms of bedrooms is well matched to the household size in the Study Area. However, available stock may be driving local demand.

TABLE 4-11
HOUSING UNITS BY NUMBER OF BEDROOMS, 2016

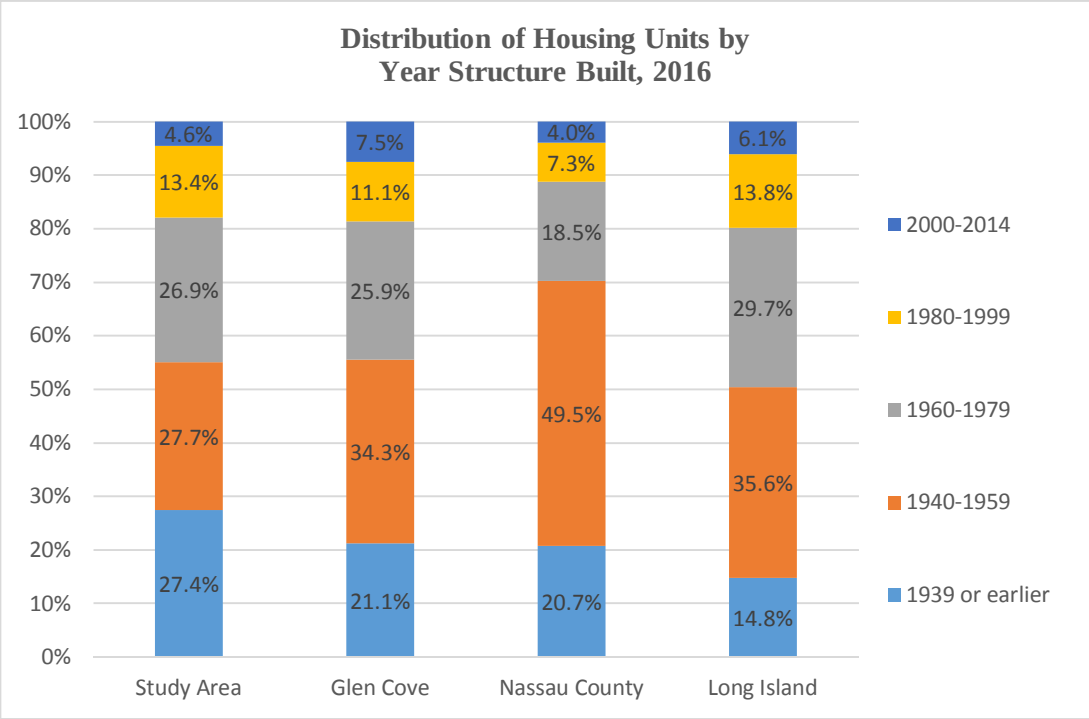
Geography	Study Area	Glen Cove	Nassau County	Long Island
Total housing units	213	10,182	467,127	1,037,591
Studios	0.0%	3.3%	1.9%	1.6%
1 BDs	27.5%	15.3%	8.8%	8.8%
2 BDs	30.5%	22.6%	14.7%	15.8%
3 BDs	29.7%	32.3%	37.4%	37.5%
4 BDs	11.6%	18.5%	27.3%	26.8%
5+ BDs	0.8%	8.0%	10.0%	9.5%

Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

Nassau County Multifamily Housing Submarket

While smaller units are currently in high demand by young professionals and seniors on Long Island, it is unlikely that the existing stock would meet modern preferences in terms of layout and style. Only 7.5 percent of Glen Cove's housing has been constructed in the last 15 years as shown in **Chart 4-9** below. This is a relatively large share compared to Nassau County, for which only 4 percent of all units have been built since 2000. The Study Area has the same relatively low share of new units as Nassau County at 4.6 percent, while the largest share of housing (27.4%) was constructed in 1939 or earlier. The high percentage of units more than 75 years old leads to questions not only of desirable design, but more importantly, regarding durability and maintenance.

CHART 4-9



Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

While much of the stock in the Study Area is quite old, the space is renting at a premium as shown in **Table 4-12**. The median gross rent in Block Group 5172.3, in which the majority of the Study Area is located, is reported at $1,801, roughly $75 higher than for Glen Cove as a whole, and $200 higher than for Nassau County or Long Island. The Study Area's relatively high median gross rent is likely influenced by new developments such as the Carney Street Apartments, in which one-bedrooms list for $2,300 per month. (However, it should also be noted that according to Orchard Neighborhood Section 8 records, even Section 8 housing rental ranges from $1,200 to $2,400 per month.)

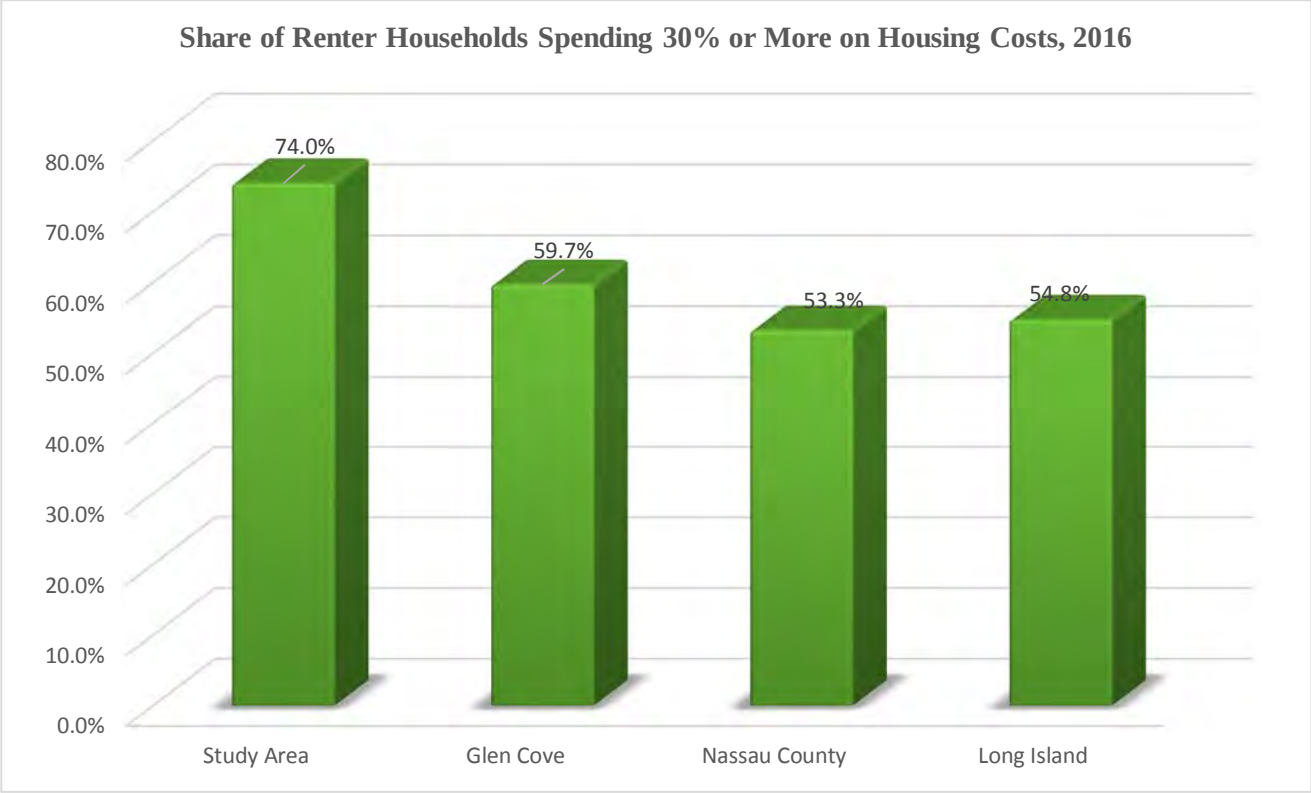
TABLE 4-12
MEDIAN GROSS RENT, 2016

Block Group 5172.3	Glen Cove	Nassau County	Long Island
$1,801	$1,728	$1,603	$1,595

Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

Almost 67.7 percent of the rental units in the Study Area have leases of more than $1,500 a month, very comparable to 65.7 percent for Glen Cove as a whole, but significantly more than 55.5 percent and 55.4 percent, respectively for Nassau and Long Island. Given the high rents, it is not unexpected that many of the renter households in the Study Area are rent-burdened, i.e., spending more than is considered affordable (30%) of household income on rent.

CHART 4-10

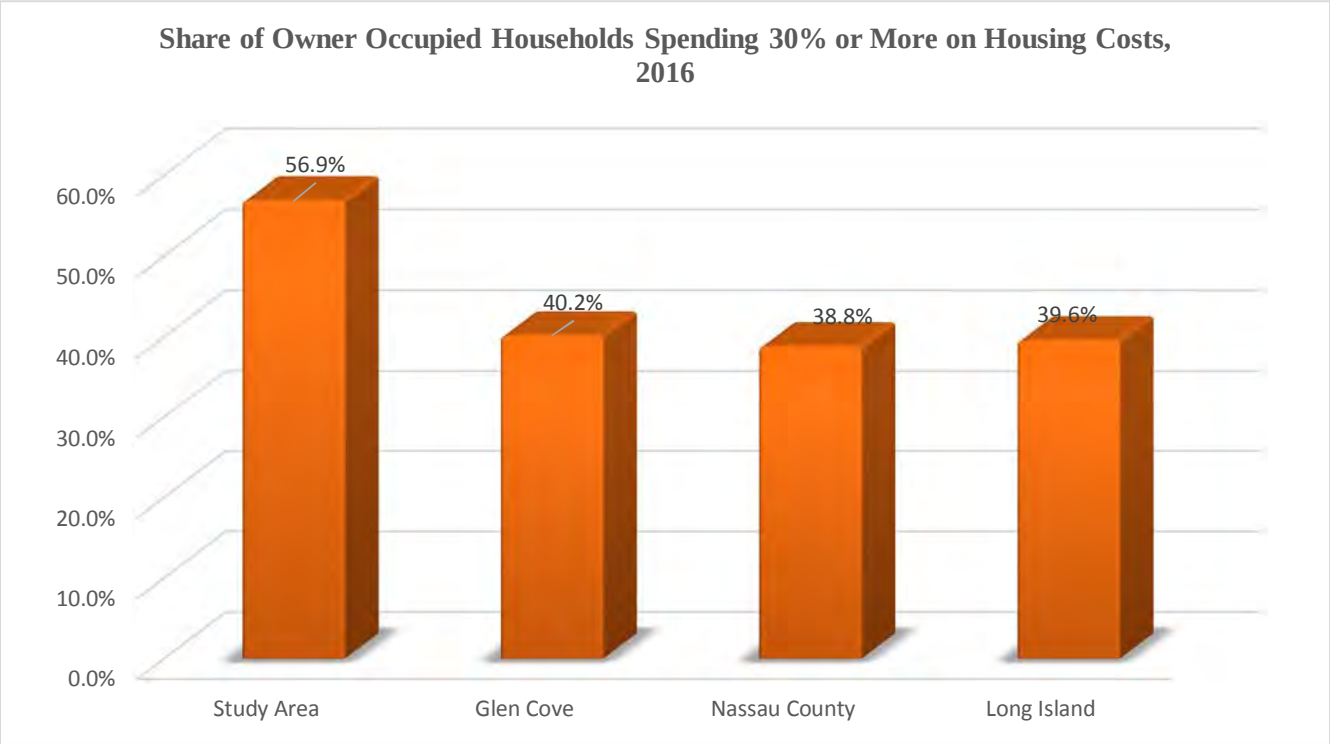


Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

As shown in **Chart 4-10**, three in every four renters in the Study Area spend more than is considered affordable on rent. The share of burdened renters is 59.7 percent in Glen Cove and only slightly less in Long Island (54.8%) and Nassau County (53.3%).

The lack of affordable housing is not only the domain of renters. **Chart 4-11** shows the share of all owner-occupied households spending more than 30 percent of income on housing costs.

CHART 4-11



Source: U.S. Census Bureau, 2012-2016 5 Year Estimates.

When owner-occupied units are taken into consideration including both those with and without mortgage[3], 56.9 percent of Study Area owned households are paying more than they can afford for housing. This compares to 40.2 percent of all Glen Cove households, 39.6 percent of all Long Island households and 38.8 percent of Nassau County households.

Study Area Business Summary

The ArcGIS shape file for the BOA Study Area was imported into ESRI's Marketplace data profile tool. The resulting extract shows the number of businesses and employees located within the geographic boundaries of the BOA, rather than conforming to Census designated geographies such as Census Tract Block Groups.

As shown in **Table 4-13**, ESRI's business analyst shows 116 businesses with 2,209 employees in the geographic Study Area. The largest share of both establishments and employment is in the Trade, Transportation and Utilities Super-Sector at 25 percent and 68 percent respectively. This Sector includes Wholesale and Retail Trades as well as Transportation and Warehousing. The Study Area's share of this Sector is greater than Glen Cove or Nassau County's.

[3] Housing costs for owner-occupied units include mortgages, maintenance, insurance, utilities, etc.

TABLE 4-13
BUSINESSES AND EMPLOYMENT BY LOCATION, 2015

	Share of Total Businesses			Share of Total Employees		
	Study Area	Glen Cove	Nassau County	Study Area	Glen Cove	Nassau County
Total	116	1,382	63,807	2,209	14,881	712,064
Trade, Transportation, and Utilities	25.0%	17.7%	22.2%	68.0%	27.2%	21.9%
Other Services (except Public Administration)	17.2%	14.9%	11.8%	2.6%	6.6%	6.3%
Professional and Business Services	12.1%	14.3%	15.7%	4.2%	6.5%	11.4%
Leisure and Hospitality	11.2%	9.8%	9.4%	5.0%	11.7%	10.0%
Construction	10.3%	11.1%	8.1%	8.5%	6.0%	4.0%
FIRE Services	8.6%	9.1%	12.2%	1.6%	3.7%	8.4%
Education and Health Services	5.2%	12.6%	10.6%	8.5%	33.1%	26.5%
Unclassified Establishments	4.3%	3.5%	3.6%	0.3%	0.6%	0.6%
Manufacturing	3.4%	3.0%	2.9%	0.7%	1.6%	4.3%
Natural Resources and Mining	1.7%	0.5%	0.3%	0.5%	0.4%	0.4%
Public Administration	0.9%	1.7%	1.3%	0.1%	1.7%	3.1%
Information	0.0%	2.0%	1.9%	0.0%	0.9%	3.2%

Source: ESRI Business Profile, 2015.

The next greatest number of businesses fall in the "Other Services" category, which includes equipment and machinery repairing, promoting or administering religious activities, grant making, advocacy, and providing dry cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services. Despite the relatively large number of establishments, only 2.6 percent of local jobs are in these businesses. Professional and Business Services (12.1%), Leisure and Hospitality (11.2%) and Construction (10.3%) round out the top five sectors by number of establishments.

After Trade, Transportation, and Utilities, the largest shares of BOA area employment are Construction and Education and Health Services at 8.5 percent each; Leisure and Hospitality at 5.0 percent; and, Professional and Business Services at 4.2 percent.

Retail Gaps Analysis

The potential for resident consumer expenditures in the BOA Study Area is quite limited both by population and expendable income. The demand for Retail, Food and Drink in the Study Area was $8.9 million in 2017: $8.0 million for Retail goods and $920,983 for Food and Drink. The BOA Study Area is so small that any retail development catering directly to Study Area residents would be limited to convenience retail in higher density locations such as the potential TOD site, especially given the diversity of stores in Glen Cove as a whole. Subsequently, the retail gaps analysis will focus on unmet demand for Glen Cove as a whole to identify any potential opportunities for the larger soft sites.

TABLE 4-14
GLEN COVE CONSUMER EXPENDITURES, RETAIL SALES AND LEAKAGE, 2017

	Consumer Expenditures	Retail Sales	Leakage
Total Retail Trade and Food & Drink	$483,433,644	$398,990,163	-$84,443,481
Total Retail Trade	$434,446,863	$363,590,198	-$70,856,665
Total Food & Drink	$48,986,781	$35,399,965	-$13,586,816

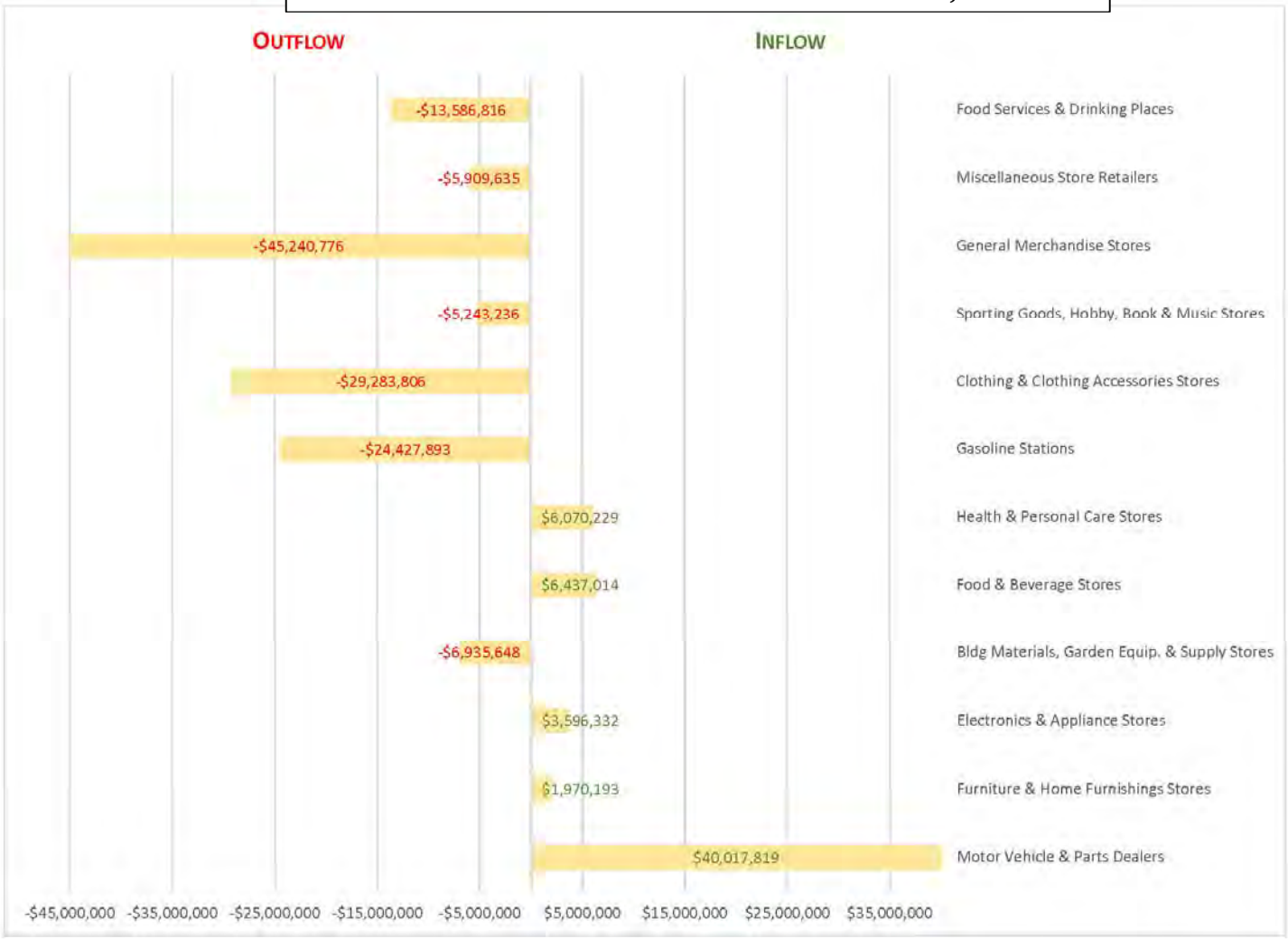
Source: ESRI Marketplace Profile, 2017.

As seen in **Table 4-14**, potential consumer expenditures for Glen Cove residents totaled $483.4 million in 2017. At the same time, retail sales reached $399.0 million, indicating an overall loss of local purchase power to areas outside of Glen Cove.

Chart 4-12 on the following page shows the retail sales leakage or the extent to which local resident consumer expenditures are being spent elsewhere (negative values) or money from outside of Glen Cove is being spent in Glen Cove (positive values), by major retail category. There are five categories that show an influx of outsider dollars into Glen Cove: Motor Parts and Vehicle Dealers, Food and Beverage Stores, Health and Personal Care Stores, Electronics and Appliance Stores, and Furniture and Home Furnishings Stores. Motor Parts and Vehicle Dealers, with $40.0 million in sales beyond that which can be accounted for by local residents, is an example of regional draw retail. These are exemplified by the Lexus and Land Rover retailers on Cedar Swamp Road and the construction suppliers on Sea Cliff Avenue.

The other sectors have sales that are less than the expected resident demand (i.e., residents are spending money outside of Glen Cove on these categories). The greatest losses are in the categories of General Merchandise Stores (-$45.2 million) and Clothing and Accessories Stores (-$29.3 million), which can be accounted for given nearby regional shopping centers including the Americana Manhasset and Roosevelt Field. Gasoline Stations follow with leakage of -$24.4 million. Unexpectedly, Food Services and Drinking Places show leakage of $13.6 million, indicating that Glen Cove residents are choosing other dining options in the City or elsewhere on Long Island. The remaining outflows are more modest. including Building Materials, Garden Equipment and Supply Stores (-$7 million), Miscellaneous Store Retailers (-$5.9 million), and Sporting Goods, Hobby, Book and Music Stores (-$5.2 million).

CHART 4-12 GLEN COVE RETAIL SALES LEAKAGE, 2017



Source: ESRI Marketplace Profile, 2017

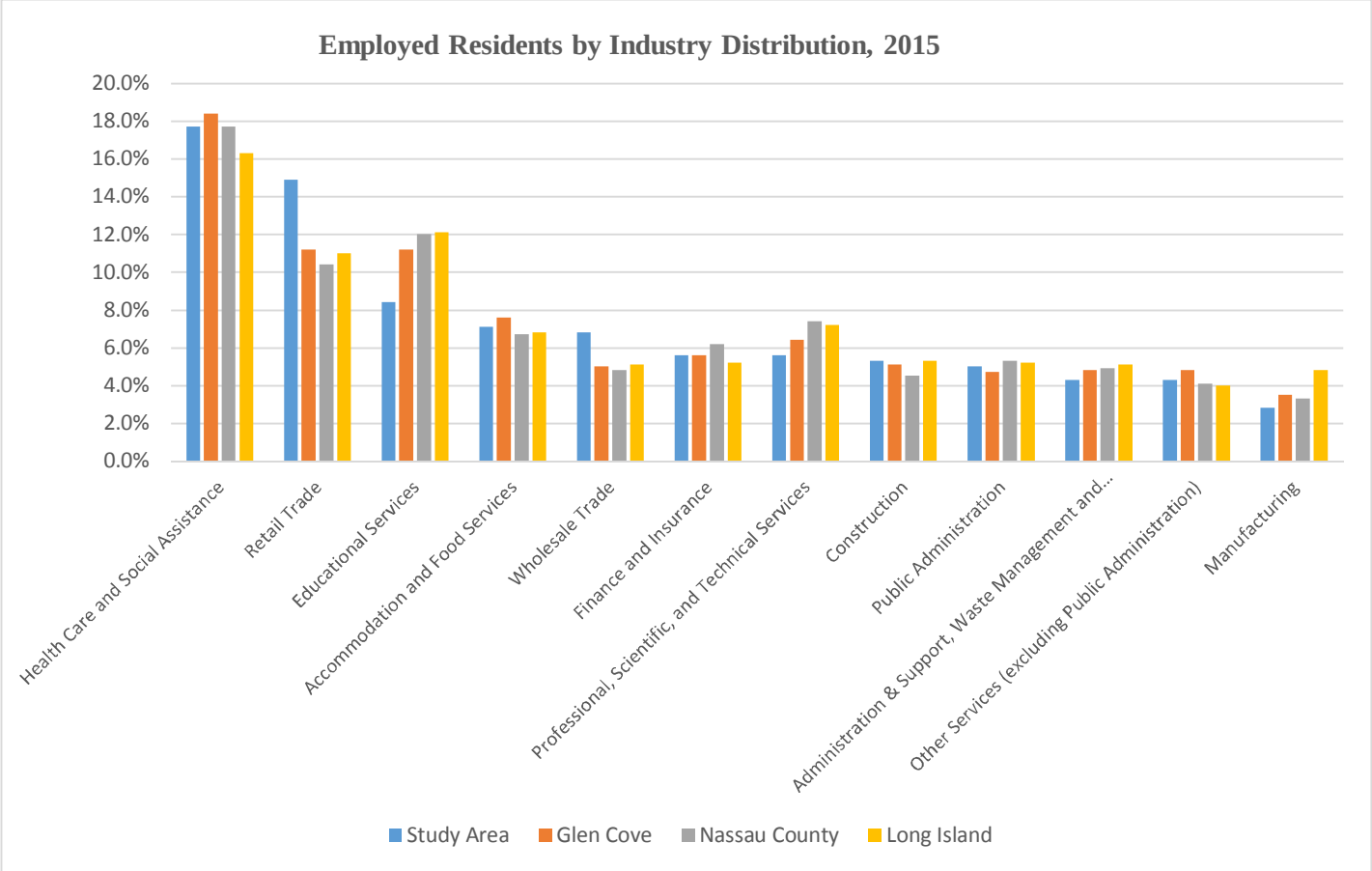
Place of Work Job Holder Analysis

This section will describe the characteristics of the persons who hold jobs in the Study Area. As with the ESRI datasets, the Study Area was defined by the BOA boundary shapefile, but as imported into the Census Bureau's LEHD OntheMap tool. According to the 2015 LEHD, there are 887 jobs located in the Study Area, or 9.5 percent of the 9,345 jobs located in Glen Cove.

Industry

As shown in **Chart 4-13**, the largest percentage of jobs in the BOA Study Area are in the Construction industry (33.0%), followed by Management of Companies and Enterprises at 18.5 percent according to the Census Bureau's LEHD. There is a mismatch between Study Area employed residents and the jobs located in there—only 5.3 percent of local residents work in Construction and a mere 1.9 percent are in the Management of Companies and Enterprises. Wholesale and Retail Trade jobs make up another 12.2 percent and 12.1 percent of area jobs, respectively—slightly more in line with employed residents. Health Care and Social Assistance, the greatest employers of area residents, makes up only 5.9 percent of jobs located in the Study Area.

CHART 4-13



Source: U.S. Census Bureau, Longitudinal Employer Household Dataset, 2015

Race

There is great racial disparity between area residents and job holders. Most area jobs are held by Non-Hispanics (80.6%) while more than half (51.6%) of working Study Area residents are from that group (i.e. while the majority group for job holders is Non-Hispanic, a much lower percentage of Non-Hispanics actually live in the study area). Job holders in the Study Area have similar racial distribution to Glen Cove, Nassau County and Long Island as shown in **Table 4-15**.

TABLE 4-15
DISTRIBUTION BY RACE OF JOB HOLDER, 2015

	Study Area	Glen Cove	Nassau County	Long Island
Total All Jobs	100.0%	100.0%	100.0%	100.0%
White Alone	76.7%	77.10%	75.20%	79.40%
Black or African American Alone	17.5%	14.90%	15.80%	13.00%
American Indian or Alaska Native Alone	0.5%	0.40%	0.50%	0.40%
Asian Alone	4.4%	6.30%	7.30%	5.90%
Native Hawaiian or Other Pacific Islander	0.0%	0.10%	0.10%	0.10%
Two or More Race Groups	1.0%	1.20%	1.20%	1.20%

Source: U.S. Census Bureau, Longitudinal Employer Household Dataset, 2015

Job Holder Place of Residence

As implied by the industry and racial disparity between local residents and area job holders, most of the BOA job holders live outside of Glen Cove. As shown in **Table 4-16**, almost one in three live elsewhere in Nassau County (33.2%), while the second largest share commutes to the Study Area to work from boroughs of New York City (25.1%) other than Manhattan. Suffolk County is home to 17.1 percent of Study Area workers, while only 15.7 percent live in Glen Cove.

TABLE 4-16
BOA JOB HOLDERS BY PLACE OF RESIDENCE, 2015

Workers Place of Residence	Percent
Glen Cove	15.7%
Rest of Nassau County	33.2%
Suffolk County	17.1%
Manhattan	0.9%
Other Boroughs of New York City	25.1%
Other	8.0%

Source: U.S. Census Bureau, Longitudinal Employer Household Dataset, 2015

4.4 Housing Analysis and Cost Benefit Analyses

This section presents a housing needs analysis that was prepared by Urbanomics, Inc. to assess the need for housing units in the BOA and assess the economic viability of redevelopment options within the Orchard Neighborhood and for a TOD adjacent to the Glen Street LIRR Station. In addition, the cost benefit analyses prepared for strategic sites is described with the resulting analyses provided in Section 5.1 for each site.

Housing Needs Analysis

The housing market on Long Island is strong and demand for all types of units is high, with particular demand for studio, one- and two-bedroom units. HUD's *Comprehensive Housing Market Analysis for Nassau-Suffolk* forecast for multifamily housing indicates the need for the construction of some 3,350 housing units by 2020, of which only 1,900 are under construction - a shortfall of 1,450 units. Further, this demand will meet the needs of the region only until 2020. As noted in the Long Island Index report *Long Island's Future: Economic Implications of Today's Choices*, a group of interconnected factors limit market viability:

- Stagnant population growth
- Decline in young families
- High housing costs/Limited housing options
- Lack of employment options

Stagnant population growth and the decline in young families are both aspects of the same issue, largely caused by the third point, high housing costs/limited housing options. Long Island, and in particular, Nassau County is largely built out; therefore, few new housing developments have been built in the last two decades.

Key to future demand is the Route 110 corridor just over the border in Suffolk County, which is proving to be an employment generator for the biotech industries. The labor force in these professions tend to be young professionals, who do not have families and who cannot yet afford single-family homes in the region. Potential economic growth may be limited by a lack of housing for the workforce in these emerging sectors.

Roughly 15 miles from this corridor, Glen Cove is a particularly favorable location. As noted in the press: the September 27th, 2017 New York Times Real Estate section presented a profile entitled, *Glen Cove, N.Y.: An Old Gem Poised for a Comeback*.[4] Conservative forecasts of population and household growth support the article's claims.

In order to estimate housing demand in Glen Cove, Urbanomics prepared an unconstrained forecast of Study Area population to 2035 by determining the share of Nassau County's population by age that is found in Glen Cove from 2010 to 2015 and applying the trended

[4] https://www.nytimes.com/2017/09/27/realestate/living-in-glen-cove-ny.html

proportions to the New York Metropolitan Transportation Council's population projections to 2035. Using these calculations, which assumed that Glen Cove would maintain its share of Nassau County's population by age cohort, it was determined that population could increase by 4,739 people or 17.4% over the 2015 population.

Using established headship rates by age, this will yield demand for 1,734 new housing units or 87 new units per year from 2015 and 2035. While the majority of demand will be seen in households with heads between the ages of 45 and 74, Glen Cove shows more demand for housing for younger households than many areas in Nassau County.

TABLE 4-17
UNCONSTRAINED POPULATION-DRIVEN HOUSING DEMAND: 2015-2035

Population	2015-2035	Units per Year
Total	*1,734*	*87*
Under 35	172	9
35-44	325	16
45-74	723	36
Over 75	515	26

Sources: Urbanomics; US Bureau of the Census, American Community Survey 2010 and 2015; NYMTC's Socioeconomic Forecasts

Existing housing is predominantly single-family and occupied by long-term residents who are aging in place. Their children have moved away because the very limited supply of housing that does return to the market is too expensive for younger working adults, even before high property taxes and flood insurance premiums are taken into account. Given these conditions and the demand in the youngest and oldest age cohorts, smaller units, of 2 bedrooms or less will be most in demand.

Development in the Pipeline

There is already a significant supply of approved housing awaiting construction or with construction underway in the City of Glen Cove.

Garvies Point*	1,110 units
The Villa at Glen Cove	176 units
Village Square	146 units
Landing Cove**	72 units
Glen Cove Mansion	40 units
Total	1,544 units

* Note that while 1,110 units have received master development plan approval, only 549 units have received site plan approval.

** Note that the Landing Cove development has been stalled, but to be conservative, this development is included in the analysis of housing that is expected to be constructed in the City.

Factoring in these developments, there is still unmet demand for at least 190 units in the City over the next 20 years. In addition, it should be noted that the demand portrayed is based on existing shares of Nassau County's current potential. Given that other areas of Nassau County are reluctant to build residential uses, if desired, Glen Cove could capture the demand for hundreds of units more.

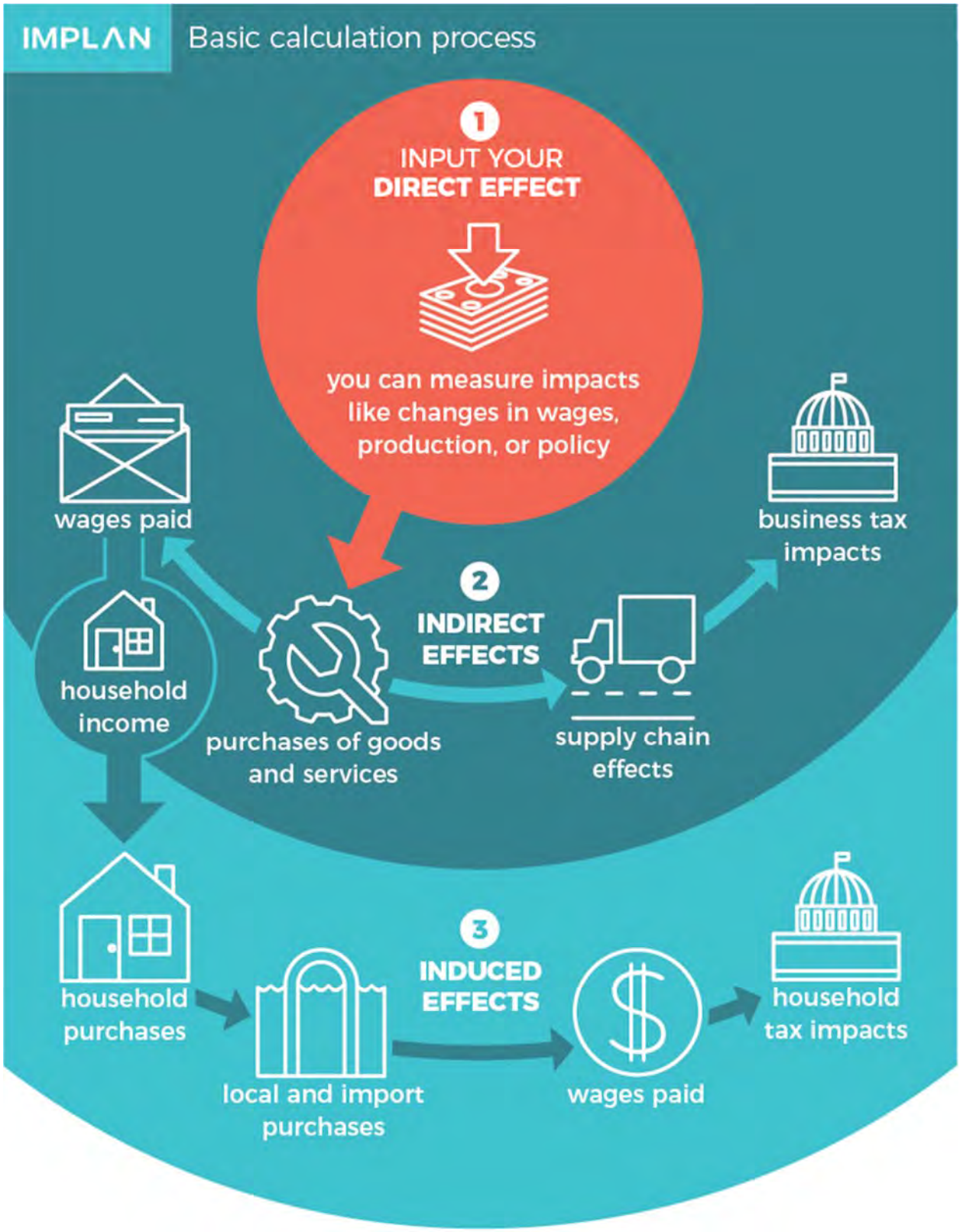
Cost Benefit Analyses

The cost benefit analysis that was prepared for each of the strategic sites considers net fiscal and economic benefits that would accrue to the City of Glen Cove in each of the potential development scenarios. The cost benefit analyses are provided below in Section 5.1 Strategic Sites and Areas and tables are provided in **Appendix B**.

Fiscal, or tax revenues from property and sales taxes, are balanced against the municipal and school district costs that can be attributed to new residents on a per capita basis. These are estimates prepared using assessment information of comparable building types and uses to determine assessed values per square foot as a proxy for the actual assessments and impacts that would come from an actual constructed development. (Assessment data on comparable properties are sourced from the Glen Cove Assessor's office and the Nassau County Land Records Viewer. Municipal and School District costs come from their respective budgets.)

Economic impacts are derived from running the likely direct spending from construction and operations of each of the development types through the IMPLAN input-output model (a model that combines a set of extensive databases, economic factors, multipliers, and demographic statistics) which was calibrated to reflect the spending patterns in the City of Glen Cove. The model takes the direct expenditures and adjusts for the portion of economic activity that is likely to be local and then further traces the ripple effects of that activity through the Glen Cove economy as money is spent and re-spent. For example, the money spent for the operations and maintenance of a new store includes worker wages paid and goods and services purchased for the maintenance and upkeep of the building. A share of these goods and services will be purchased from Glen Cove businesses. These businesses will in turn pay their workers and buy other goods and services from still other businesses, and so on. The construction impacts are a one-time event, which will end when the construction has concluded; however, the operations and maintenance impacts are annual benefits to the local economy.

The IMPLAN model estimates the full-time job creation during construction and under operation - and the direct, indirect and induced economic benefits related to purchase of goods and services. Direct effects are the immediate result of the project implementation. Indirect benefits stem from the purchase by local businesses/industries of goods and services from other local businesses/industries (also known as intermediate expenditures). Induced benefits reflect the spending of wages from residents (accounting for household purchases made by paid employees or from new residents in housing developments). The graphic that follows illustrates the basic calculation process employed through application of the IMPLAN model.



Graphic courtesy of www.implan.com

4.5 Existing Environmental Conditions

Roux Associates was retained to review the properties located within the Step III Brownfield Opportunity Area to identify properties with potential residual environmental contamination and potential additional sites where the BOA could provide an opportunity for funding for Phase I ESA work, if those sites were deemed to be abandoned or underutilized.

A summary of the environmental database research identified by Roux is provided in Table 1 of their review memo contained in **Appendix C**. These properties were divided into two categories: Active Remediation Sites and Potential Brownfield Sites with Redevelopment Interest. Summaries of these environmental findings were provided in the report:

Four properties were identified as being currently within the New York State Department of Environmental Conservation (NYSDEC) State Superfund Program: 1.) Photocircuits; 2.) Pass & Seymour; 3.) Pall Corporation; and 4.) National Grid. Photocircuits, Pass & Seymour and Pall Corporation are classified as Class 2 inactive hazardous waste sites and the National Grid Site is classified as a Class A active non-registry site. Each site was evaluated for causes of environmental contamination, methods of remediation and status of remediation and what, if any, site restrictions might be imposed.

<u>Photocircuits</u>
Photocircuits and the previous site owners Powers Chemco (1954-1971) and Kollmorgen Corporation (1971-1986), formerly manufactured printed circuit boards. The 10-acre site perimeter is surrounded in fencing and contains several large abandoned buildings, former parking areas and roadways. Glen Cove Creek transects the Photocircuits property and the former Pass & Seymour facility is located to the west. Past investigations of this area have documented high concentrations of chlorinated volatile organic compounds (CVOCs) in the groundwater underlying the site. The highest concentrations were reported near the northeast corner of the property in a drum storage and tank farm area. The site is divided into two operable units. Operable Unit 1 (OU1) includes on-site soils and groundwater to a depth of 100 feet below ground surface (ft bgs). Operable Unit 2 (OU2) addresses on-site and off-site groundwater at depths greater than 100 ft bgs. Groundwater is present at 4 to 10 ft bgs. Groundwater flow is generally to the north-northwest.

Photocircuits filed for bankruptcy in 2006 and the company assets were sold to American Pacific Financial Corporation. Remediation of OU-1 is not occurring and the groundwater is not being monitored. The March 2008 Record of decision (ROD) for OU-01 specified in situ bioremediation to address CVOC groundwater contamination. The initial round of substrate and bio-agent injection was completed in July 2018. Based upon verbal communication with Guy Bobersky, the NYSDEC project manager for OU-2, the NYSDEC is no longer pursuing the Photocircuits PRPs for funding to implement the OU-2 remedy. Remedial actions for OU-02 will be conducted in conjunction with the remedial actions for the Pall Corporation site (130053B) located downgradient (to the north) of the Photocircuits site. In situ chemical

oxidation will be used with groundwater extraction downgradient of the treatment area located on the Pall Corp site and re-injection upgradient of the Pall Corp OU-2 treatment area. The remedial design is currently underway by HDR and it is anticipated to be completed in the fourth quarter of 2018. Remedial construction is anticipated to occur between 2019 and 2020 and the remediation system for OU-2 will be limited to the Pall Corporation property.

Pass and Seymour

The Pass and Seymour site is located at 45 Sea Cliff Avenue and is 7.5 acres in size. The Glen Cove Creek flows to the north along the east side of the site. Groundwater depth is 4 to 10 ft bgs. Most of the site is paved and contains several industria1 buildings. Slater Electric began operations in 1959 when the main buildings on site were constructed. In 1988, Pass and Seymour purchased the property and manufactured electric components. PCE was stored in an above ground storage tank near Building 7 and was used as a degreasing solvent during site operations. Past investigations identified the contaminant source area within the vicinity of Building 7. Soil contamination was limited to the vicinity of the PCE storage tank located on the west wall of Building 7. Imposition of an institutional control in the form of an environmental easement for the controlled property will require:

- limiting the use and development of the property to industrial use;
- compliance with the approved site management plan;
- restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and
- submission of a periodic certification of institutional and engineering controls by the property owner to the NYSDEC.

As of May 2015, the site is still a class 2 inactive hazardous waste site. The AS/SVE system was removed and needs to be replaced. A potential developer was going to assume responsibility for the environmental remedy and had plans to install a new AS/SVE system. The redevelopment of the property has been on hold pending the legal issues surrounding the environmental cleanup and the PRPs for the site. On May 19, 2016 the remaining drums of chemicals were removed from the site, with the exception of a few drums that will need to be over packed prior to removal.

Pall Corporation

In 1918, the building at 30 Sea Cliff Avenue was constructed and was used as an ice house. In 1953, Pall Corporation purchased the property and used that building until 1999 to manufacture filtration products. In 1958, Pall Corporation constructed the building at 36 Sea Cliff Avenue and occupied it until 1971, when Pall Corporation sold the building to August Thomsen. Pall Corporation used both industrial buildings to manufacture filtration products and the solvents PCE and TCE were stored on both properties. The site is divided into two operable units. Operable Unit 1 (OU1) addresses both on-site soils, and on-site and off-site groundwater, to a depth of 60 ft bgs. Operable Unit 2 (OU2) addresses on-site and off-site groundwater at depths of greater than 60 ft bgs. Groundwater is present at 4 to 10 ft bgs and generally the groundwater

flow is north-northwest. In 2006, Pall Corporation and the NYSDEC reached a settlement where Pall Corporation provided funding to the NYSDEC to implement the OU-2 remedy. In-situ chemical oxidation will be used with groundwater extraction downgradient of the treatment area and re-injection upgradient of the OU-2 treatment area. The remedial design is currently underway by HDR and it is anticipated to be completed in the fourth quarter of 2018. Remedial construction is planned to start in the Spring of 2019. The current design requires extraction wells to be located on the adjacent down gradient City property. The City is in discussions with the NYSDEC to ensure that the proposed actions are sensitive to the existing uses on the property – and that proper standards are employed, and that a public education component be provided to the City.

Glen Cove Child Day Care

As noted, the current design for remediation of contaminated groundwater from upgradient sources will require that extraction wells be located on the day care property. The City met with the NYSDEC multiple times in 2017 and 2018 to ensure that the proposed actions are sensitive to the children, staff and users of the property. These meetings determined that there was no practical way to relocate extraction wells, which are required to be placed downgradient of the OU2 plume. Nevertheless, based on concerns expressed by the City, NYSDEC agreed to relocate the location of the extraction wells within the City property, as well as the incorporation of several operational and procedural controls, addition of a public education component be provided to the City, air sampling and installation of a vapor mitigation system for structures on the City parcel, implementation of a Community Air Monitoring Plan (CAMP) among several other proposed mitigation measures The following provides a full list of measures that were agreed upon by the NYSDEC/NYSDOH as a result of these meetings:

Soils on the City/Day Care Property

- NYSDEC will only use "clean fill" as back fill for any excavated areas located on the City/Day Care Property.
- NYSDEC will segregate and remove all excavated soils and drill cuttings from the City/Day Care Property to the Pall Site.
    - These soils will be tested for the purpose of characterizing the soils for off-site disposal.

Vapor Mitigation at the Day Care Building

- NYSDEC will engage a contractor to perform indoor and sub slab air sampling for contaminants of concern, including VOC's, in accordance with NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.
- NYSDEC or its contractor will install a new vapor mitigation system at the Day Care's building that will address any contaminants of concern, including VOCs.
- The new vapor mitigation system will be specifically designed for the Day Care building.
    - Although methane is not a contaminant of concern, the new system will address any concerns related to indoor air from methane.

- NYSDEC or its contractor will perform annual testing of the new vapor mitigation system to ensure proper function.
- NYSDEC or its consultant will perform any repairs to the new vapor mitigation system.
    - NYSDEC will provide the City and Day Care a contact number to call if service is need on the new vapor mitigation system.
- NYSDEC will perform training for the City and Day Care staff on how to properly monitor the new vapor mitigation system.

Vapor Intrusion Testing at the Boxing Club Building

- NYSDEC will engage a contractor to perform indoor and sub slab air sampling for contaminants of concern, including VOC's, in accordance with NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

Indemnification and Insurance

- NYSDEC will ensure that every contractor that performs work on the City/Day Care property adds the City and Day Care as additional insureds on their insurance policies.
- NYSDEC will indemnify the City and Day Care to the extent as provide in the draft indemnification language which was provided at the meeting.

Informational Session

- NYSDEC and NYSDOH will hold an informational session for parents, staff, and the public to discuss cleanup action at the Pall Corporation site and the work that will be conducted on the Day Care property.
- At this informational session, a graphic display will be utilized to show exactly where all work will occur on the Day Care property.
- NYSDEC will ensure that any necessary translators attend the meeting.
    - Spanish has been identified as the primary language of many of the parents who use the Day Care.
    - The Day Care and the City will identify to NYSDEC any additional primary languages in advance of the informational session to allow NYSDEC to secure additional translators which are needed.

NYSDEC Access to City/Day Care Property

- NYSDEC will access the Day Care property from the Pall Corporation site.

Day Care Drop-off and Pick-up

- NYSDEC will develop its work plans to address the Day Care's pick-up and drop-off plans.
- The Day Care will provide NYSDEC with pickup/drop-off plans for the Day Care building to allow the State to develop its work plan to address those plans.

Scheduling Alternatives for Work on City/Day Care Property

- NYSDEC will develop proposed scheduling alternatives for all work that is planned to be performed on the City/Day Care property.
- These scheduling alternatives will include, but are not limited to, a compressed schedule with weekday work, or an extended schedule with weekend-only work.

- The scheduling alternatives will be discussed between NYSDEC, the City and the Day Care.

To date, the City is still in the process of negotiating an access agreement with the NYSDEC and requested that the State consent to the following additional items prior to entering the agreement:

- A Community Air Monitoring Plan to address (1) any work at the Property, as well as (2) any work at the Pall Corporation Site ("Pall Site") should be developed and implemented to ensure that all children, staff and others are protected while work is being performed at both the Property and the Pall Site.

- Confirmation of NYSDEC/NYSDOH planned indoor and outdoor air post-remediation sampling schedule.

In late September, it was confirmed that the data for the vapor sampling performed at the Day Care and the Boxing Club has been returned and is currently being validated. Once this occurs, the DEC will send it to the City, the Day Care and the Boxing Club. In addition, the NYSDEC has agreed to implement a CAMP to address any work at the Day Care property as well as any work at the Pall Corporation Site that ensures all children, staff and others are protected while work is being performed. It was also communicated that so long as the newly installed vapor intrusion system (VIS) is working properly, the NYSDEC/NYSDOH does not intend to continue to perform indoor/outdoor air samples relative at the Day Care (relative to the VIS). A draft access agreement is expected from the NYSDEC shortly.

The Photocircuits/Pass & Seymour and Pall Corporation sites have cleanup underway. The collective Photocircuits/Pass & Seymour site has developer interest and the Pall Corporation site is pending redevelopment as a self-storage facility (plans having been approved by the City Planning Board).

National Grid

The former Glen Cove Manufactured Gas Plant (MGP) site is located at the intersection of the Long Island Rail Road and Route 107. The site is an active LIPA electrical substation. A LIPA easement runs along the north boundary of the property parallel to the health club property terminating to the east at Cedar Swamp Road. MGP operations began in 1905 and continued through 1929 under the ownership of the Sea Cliff and Glen Cove Gas Company. In 1923, Sea Cliff and Glen Cove Gas Company was purchased or merged with the Long Island Lighting Company (LILCO). In 1929, LILCO terminated MGP operations and demolished the facility's surface structures, thereafter the site was used for natural gas storage until approximately 1955. All of the surface structures were removed by 1966, when the electrical substation was constructed.

In 1998, Brooklyn Union Gas and LILCO merged to form the KeySpan Corporation, at which time the ownership of the substation was transferred to Long Island Power Authority (LIPA). Currently, the site is owned by LIPA and operated by Public Service Enterprise Group (PSEG) under contract to LIPA. The National Grid site is actively used by PSEG as a utility substation and there are no plans to modify the use of this site, nor does the use have any known impact on

the surrounding neighborhood. Through the 2008 acquisition of KeySpan, National Grid has accepted responsibility for addressing the environmental issues at the Site. The former MGP operations resulted in the contamination of both subsurface soils and groundwater on site with coal tar, specifically BTEX and polycyclic aromatic hydrocarbons (PAHs). The coal tar impacts are generally located at the water table and within the smear zone and decrease with depth to a vertical extent of 45 ft bgs.

The remedial action has been broken into two construction phases: Phase I of the remedial action was completed in August 2011. This phase consisted of source removal via excavation outside of the substation, and surface soil removal in the low-land area for the new LIPA substation footprint. A Final Interim SMP was submitted to NYSDEC in February 2015. The Phase II installation of nonaqueous phase liquid (NAPL) recovery wells and the oxygen injection system is tentatively scheduled to begin once the LIPA substation expansion project has been completed.

Other Sites within the Study Area

The areawide environmental study further identified properties as potential brownfield sites based upon environmental database research, the BOA Step II document, and input from the City of Glen Cove indicating where there may be a potential interest in redevelopment. These properties include:

- Sea Cliff Avenue Area
  - 59 Sea Cliff Avenue – Sea Cliff Coal and Lumber;
  - 55 Sea Cliff Avenue – Zoomar;
  - 44 Sea Cliff Avenue – 44 Sea Cliff Avenue LLC;
- TOD Area
  - 4 Cedar Swamp Road – Unity LLC
  - 10 Cedar Swamp Road – Candemore Realty
- Orchard Neighborhood Area
  - 34 Carney Street – Glen Cove Iron Works
  - 45 Hazel Street – residential
  - 20 – 22 Capobianco Street – City of Glen Cove
  - 15 – 17 Stanco Street – residential
  - 60 Hazel Street – residential
  - 44 Grove Street – Leona Place LLC
  - 34 Grove Street – Orchard Realty Corp
- Orchard Business Area
  - 100 Carney Street – Carney Realty Corp
  - 62 Cedar Swamp Road – Marcus Bianconi

Recommendations were made which included requesting documents through the Freedom of Information Law (FOIL) and completing Phase I Environmental Site Assessments (ESAs) at any property selected to be pursued for development. During the project term, consideration for providing assistance to property owners/developers for redevelopment of these properties within the BOA was given, specifically the ability to prepare a Phase I ESA utilizing BOA funds to aid in redevelopment process. During the project term, one Phase I ESA was completed, which was for the former Coles School property which assisted in the implementation of a City goal for reuse of the Coles School property.

Legend

- CHEMICAL BULK STORAGE
- DRYCLEANERS
- STORAGE TANKS
- LEAKING STORAGE TANK
- HAZARDOUS SUBSTANCE WASTE DISPOSAL
- GOVERNMENT HAZARDOUS WASTE FACILITIES
- GOVERNMENT SOLID WASTE FACILITIES
- INACTIVE HAZARDOUS WASTE DISPOSAL SITES
- NEW YORK SPILLS
- OPEN SPILL
- BOA BOUNDARY
- SITES WITH REDEVELOPMENT INTEREST - PHASE I ENVIRONMENTAL SITE ASSESSMENTS RECCOMENDED
- STATE SUPERFUND SITES
- CITY OWNED PARCEL

BOA Areas of Interest

- COLE SCHOOL AREA
- ORCHARD NEIGHBORHOOD AREA
- ORCHARD BUSINESS AREA
- CEDAR SWAMP ROAD AREA
- TRANSIT ORIENTED DEVELOPMENT (TOD) AREA
- SEA CLIFF AVENUE AREA

150 0 150 300 Feet

Title:

CITY OF GLEN COVE
POTENTIAL BROWNFIELDS

BOA STEP III

Prepared For: CITY OF GLEN COVE
COMMUNITY DEVELOPMENT AGENCY

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: K.S.	Date: 25MAY16	FIGURE 1
Prepared by: K.S.	Scale: 1 " = 150 '	
Project Mgr: K.S.	Project: 2743.00019000	
File: 2743.00019T00.101.R3		

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4.6 Transportation Engineering Study

Gedeon GRC Consultants completed a Transportation Report focusing on various transportation related conditions within the Orchard Neighborhood, including existing parking regulations, on-street parking availability sidewalk conditions, traffic circulation, bicycle usage, pedestrian amenities, curb cuts, street lighting, and American with Disabilities Act (ADA) compliance. The following provides a summary of the Transportation Study prepared by Gedeon Engineering, which is included as **Appendix D**.

4.6.1 Pedestrian and Bicycle Use Enhancement Study and Designs

This special study focused on the availability of sidewalks and their condition, as well as ADA accessibility and provides recommendations for improving pedestrian access within the Study Area as well as for improvements in street lighting.

Generally, the Study concluded that sidewalks are in fair to good condition, with some sections being recently installed or replaced. Typically, the widths of the sidewalks vary from 5 feet to 7 feet, which is generally adequate for the level of pedestrian activity observed. However, some road segments have discontinuous sidewalks sections or no sidewalks.

The street lighting system in the Orchard neighborhood consists of a mix of apparently old and new fixtures of varying wattages. Most of the existing street lighting system consists of 50-watt high pressure sodium heads. All street lights in the area are installed on existing wood utility poles and some gaps in the system are evident.

Providing access from the Orchard Neighborhood to the Day Care located on the west side of Pratt Boulevard, a divided highway west of the Orchard Neighborhood was identified as a goal of the BOA Nomination Study. The Transportation Study noted that the development of the former Pall Corp Site immediately to the south of the Day Care facility as a self-storage facility opens the possibility of acquiring an easement to the Child Care Center from Sea Cliff Avenue. This would provide access from both the east and west of the site with easy access from Sea Cliff Avenue. It was recommended that as part of the development of the commercial property, the feasibility of providing this easement or the transfer of property should be investigated.

While not addressed in the Transportation Study, it is noted here that while an access easement has been achieved through Site Plan Review and approval, the actual availability of the easement for pedestrian access – and entrance through the site via a gate has not been implemented, nor may this future possibility be apparent to the parents and guardians of the children attending the Day Care. Therefore, it is recommended that follow up in coordination with the Day Care and developer of the Pall Corp site occur to ensure that a gate is installed, and safe and clear pedestrian walkway provided from Sea Cliff Avenue.

Pedestrian access to Sea Cliff and Glen Street stations is an important goal as parking is limited in the stations. Installation of lockable bicycle racks at the train stations is recommended to encourage increased bicycle ridership.

The survey of the existing corner pedestrian ramps indicates that 45% of pedestrian ramps are non-compliant and 10% are non-existing. Most pedestrian curb ramps within the Orchard Neighborhood do not meet ADA standards and it is recommended that existing curb ramps be updated to meet standards.

The street lighting system should be updated to LED technology and power reduction programs may be available through the New York Power Authority or PSEGLI, which will help offset the capital costs of conversion. LEDs improve performance by increasing efficiency through lower wattages for the equivalent output while decreasing outages and maintenance costs due to their inherent longer lamp life.

Sidewalks should be available on all streets within the Orchard, and missing sidewalk sections should be installed. Lacking sidewalks, pedestrians will usually choose to walk in the street rather than in an unpaved area. A comprehensive program to install missing sidewalk sections, repair defective sidewalks and install or replace missing or improperly installed pedestrian ramps should be initiated.

Stop line and crosswalk pavement markings are non-existent within the Orchard. These markings are not required on every approach of every intersection but should be considered where pedestrian activity warrants.

The installation of dedicated bicycle lanes would increase the likelihood of bike usage. Unfortunately, installation of bike lanes is not feasible unless there are major revisions to existing parking regulations.

4.6.2 Parking Needs Assessment

The Orchard Neighborhood has extremely limited parking and very narrow streets. Parking demand is contributed by residential and commercial community members, including two car dealerships/repair garages. This situation creates circulation difficulties and contributes to perceptions of neighborhood blight. A comprehensive parking needs assessment has been prepared as part of the Step III Implementation Strategy to guide on-site parking requirements of future projects and zoning amendments, and to determine whether a shared structured parking should be pursued as part of a future redevelopment project.

The Orchard Neighborhood is approximately 1.5 square miles and contains a small number of access points (Sea Cliff Avenue, and Cedar Swamp Road) which effectively isolates the Orchard Neighborhood from non-local, through traffic. Most roadways in the Orchard operate as two-way streets. Exceptions are Hazel Street which runs one-way southbound from Grove Street to

Willow Street. Capobianco and Stanco Streets operate as a one-way couplet: Capobianco northbound and Stanco southbound. Street widths vary between 24 and 30-feet and on-street parking in largely unrestricted in the Orchard Neighborhood. There are two off-street parking facilities within the Study Area: a 14-space City-owned residential permit lot on Capobianco Street and approximately 70 spaces on the grounds of the former Coles School.

An inventory of available legal parking spaces was conducted for the Orchard Neighborhood, Coles School, Capobianco Street lot, and Cedar Swamp Road. The inventory concluded that there are 193 on-street spaces in the Orchard Neighborhood. A study of parking occupancy was conducted by utilizing a drone-mounted camera on June 6, 2017 at three separate times throughout the day: 1PM-2PM, 4PM-5PM, and 7PM-8PM. Overall, occupancy rates ranged between 24% and 49% for the observed areas and times, with the exception of Cedar Swamp Road between 1PM and 2PM, which experienced an occupancy rate of 79%.

As future development within the Orchard neighborhood increases, parking demand will rise and vehicular volumes will increase, and it may become necessary to restrict parking to one side of the street to ensure and unobstructed safe passage by fire apparatus, ambulances and delivery trucks. While it appears contradictory to reduce on-street parking supply in response to increased demand, the safe operation of public streets is of optimum importance.

The off-street lot on Capobianco Street is striped for fourteen vehicles. The lot does not have sufficient width to allow a vehicle to safely turn around and exit safely when striped in this manner. It is recommended that the lot be restriped to accommodate 10 vehicles parked perpendicular to the long side of the lot. After allowing for adequate space to back out of the parking stall, the remaining area may be landscaped to improve the attractiveness of the lot.

Recommendations

The following summarizes the major recommendations outlined in the Transportation Report:

- Hazel Street should remain a one-way road. Capobianco Street should remain one-way northbound to complement the one-way southbound traffic operation on Hazel Street.
- It is recommended that Stanco Street be converted to a two-way street. Vehicles arriving from the south destined for Stanco Street must traverse Capobianco, which would be unnecessary if Stanco Street were two-way. This change is recommended as it would not introduce additional traffic volume on to Stanco but would decrease the traffic volume on Capobianco.
- A formal traffic impact study for the Coles School site should be performed to determine the potential impacts on traffic operations on Cedar Swamp Road as well as the adequacy of the existing available on-site parking.
- Redevelopment of strategic sites along Sea Cliff Avenue should include traffic impact studies.

4.7 Green Infrastructure Engineering Report

The stormwater drainage infrastructure within the BOA is limited, with no drainage infrastructure present north of Carney Street within the heart of the residential Orchard Neighborhood. As reported by many respondents at the Public Workshop for the Step II Nomination, the infrastructure limitations in combination with the grade changes to the south and west of the Orchard core and debris management issues contributes to regular localized flooding at the western end of Carney Street and along Sea Cliff Avenue proximate to the existing stream crossing.

No major localized flooding has been reported or documented since 2012 and thus, the efforts were concentrated on identification of opportunities for implementation of green infrastructure for management of some of the stormwater runoff generated by impervious surfaces within the BOA. An assessment of stormwater management issues and opportunities for use of green infrastructure was conducted as part of the Step III Implementation Strategy and a summary is presented below.

NP&V with Engineers at N&P performed a sub-watershed assessment and identified potential green infrastructure projects within the Glen Cove BOA Study Area with cost estimates for implementation. Stormwater runoff generated in the area contributes to localized flooding issues and direct discharges to the Glen Cove Creek that runs through the Study Area. The engineering report provided in **Appendix E** identifies 22 potential projects for implementation of green infrastructure to reduce the volume of runoff and reduce the pollutant load of runoff that is directed to Glen Cove Creek. This report has been reviewed by a professional engineer and cover page is stamped and signed by licensed engineer Thomas Dixon, P.E. who is a partner of Nelson & Pope.

NP&V reviewed the entire BOA Study Area for the potential to incorporate green infrastructure within the area to reduce direct discharge and to improve the water quality of runoff that is entering Glen Cove Creek, which runs through the Study Area. Within the Glen Cove BOA Study Area, nearly 30 projects were identified with GIS analysis for follow-up site visits. While conducting the site visits, 22 potential projects were identified as feasible locations for installation of green infrastructure improvements. These 22 potential projects were evaluated, conceptual designs prepared, and pollutant load reduction modeling conducted. The sites and projects were assessed for treatment area, ease of construction, impact to improve water quality, and potential area that could be converted towards green infrastructure to assist in prioritizing and ranking projects. **Figure 4-3** provides the locations where green infrastructure projects are feasible based upon this study. As a result of public input, the long term maintenance of projects was identified as a concern. For projects on private property, the land owners will be required to maintain the features, however, for projects located on public properties, it is recommended that a local group be identified to champion the installation and management of the rain garden. Depending upon the location, this could be any number of groups and would be a great way for the public to learn about green infrastructure and be involved in a beneficial community project. Potential community/City groups could include the City Youth Bureau, Boys and Girls Club,

Senior Center, City Beautification Committee. It is recommended that as projects are identified, that a suitable championing group be identified and if interested be involved in the design, installation, short term and long term maintenance of the feature.

Outlined below are three out of the 22 potential projects identified in the Green Infrastructure Report:

GC-4.2: Capobianco Street Parking Lot: A simple rain garden that takes two parking spaces on the west end of the lot and a retaining wall to protect the slope would treat the water from the entire parking lot. Approximately 4,200 square feet of impervious surfaces direct water to this potential project. The potential size of the rain garden (bio-infiltration type) is 1,000 square feet with the available room and ability to capture a 2.8" rain event. However, only a 400 square foot rain garden is required to capture the water quality volume of water, 1.2" rain event. The proposed rain garden is able to attenuate 1.9 pounds of nitrogen and treat 70 billion bacteria annually. The rain garden would have a moderate difficulty to install due to the required retaining wall to the west of the garden and the loss of two parking stalls.

GC-1.2: Coles School (Tiegerman School) Parking Lot: In the front of the former Coles School, a portion of the building and parking lot conveys stormwater to the existing parking spaces in the front of the building. Between those parking spaces and Cedar Swamp Road is a lawn area that is underutilized. This area would be ideal for a non-complicated bio-infiltration practice using existing soils and minimal grading. As an added benefit, the garden would enhance the front of the school aesthetically and incorporate the existing flag pole. The ease of implementation of this treatment is due to using existing soils, the current drainage pattern, and existing lawn/hillside. Stormwater runoff is generated by approximately 5,780 square feet of roof and parking lot area that would be conveyed to this rain garden without changes to the parking area grading. The garden would attenuate up to 2.0 pounds of nitrogen annually and 65 billion bacteria annually.

GC-6.1: Former Bianconi Funeral Home Parking Lot: At the back (west) side of the parking lot is a natural slope and depression that is receiving all of the stormwater from the parking lot, which could be retrofitted to receive the stormwater from Carney Street, as well. As envisioned, the proposed rain garden would attenuate approximately 9.0 pounds of nitrogen annually (the second highest nitrogen load of all projects) and treat 325 billion bacteria annually. The rain garden can be designed to have an uncomplicated installation; however, it is ranked at a Moderately Difficult implementation as it is on private property. It is recommended that during Site Plan Review of the redevelopment of this property, the Planning Board consider making recommendations that stormwater be treated on-site utilizing green innovative stormwater practices.

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FIGURE 4-3
Green Infrastructure Projects Location ID

Legend

- Project Boundary
- Parcel Boundary

GC-1.0
GC-2.0
GC-3.0
GC-4.0
GC-5.0
GC-6.0
GC-7.0
GC-8.0
GC-9.0
GC-10.0

Craft Ave
Kemp Ave
Eldridge Pl
Duke Pl
Kemp Ave
Donahue Ct
Porter Pl
Donahue St
Highfield Rd
Taylor Dr
Glendale Dr
Marietta Rd
Elm Ave
Russell Pl
Alexander Pl
Kelly St
Grove St
Stanco St
Capobianco St
Willow St
Hazel St
1st St
2nd St
St Rocco St
Carney St
3rd St
Gabriel Pl
Bella Vista Ave
4th St
Wolffe St
Cedar Swamp Rd
Pratt Blvd
Sea Cliff Ave
Glen Keith Rd
Arbor Pl
S Craft Ln
Mc Grady St
Ruby Dr
Midwood Pl
Valentine Ave

Source: NYSGIS Orthoimagery Program, 2016

Print Date: November 15, 2018

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1 inch = 300 feet

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4.8 Energy

This section provides options for the applicability and feasibility of implementation of alternative energy sources within the BOA, including solar and wind power and specifically where these techniques may be suitable for implementation at individual sites.

The City of Glen Cove is a Clean Energy Community designated by the New York State Energy Research and Development Authority (NYSERDA). Implementing renewable energy as part of the redevelopment of the Sea Cliff Avenue sites would support this designation and New York State's goal of having half of the State's electricity come from renewable energy resources by 2030.

Renewable energy presents significant economic, environmental, and community benefits, and aligns with the environmental and revitalization goals of the Step III Implementation Strategy of the BOA. Based on information from several governmental sources, there is potential for renewable energy generation at the Pall Corporation, Pass and Seymour, Photocircuits, and Day Care properties. This renewable energy analysis identifies the potential; types of likely suitable renewable technologies such as small-scale solar, wind, and geothermal; the benefit of these technologies; and governmental incentives and resources to support their development. The complete analysis in included in **Appendix F** Renewable Energy Analysis and the major topics and recommendations are outlined below.

Solar Energy: Rooftop or ground-mounted solar panels are the two main types of solar installations. Property owners can decide which option is most advantageous based on where conditions are best for panels to operate on their property. Benefits of ground-mounted solar include that panels can be installed wherever conditions are best on a property, and they can be installed with tracking capabilities to better harness the power of the sun. Solar carports, which are solar panel installations installed above parking, are a type of ground-mounted solar that provide the benefits of solar while providing a dual purpose of parking and shade for vehicles.

The NY-Sun Initiative, a NYSERDA program, publishes a list of Participating Contractors specializing in solar installations for larger commercial and industrial businesses and offers a variety of incentives and financing options to support commercial solar. NY-Sun's Participating Contractor list for Small Commercial Solar Contractors, which lists contractors that install solar electric systems up to 200 kilowatts (kW), can serve as a resource for small-business and property owners in the Sea Cliff Avenue Corridor and the entire Orchard BOA. Energize NY financing, New York State tax credits, Federal Renewable Energy Production Tax Credits, and Federal Business Energy Investment Tax Credits may be available for redevelopers and owners of strategic sites for solar projects.

Wind Energy: Wind turbines and wind energy projects vary in size, configuration, and generating capacity depending on factors such as wind resources, land-use restrictions, project area, and site conditions. If the developers or owners of the Sea Cliff Avenue strategic sites are interested in developing wind energy using New York State incentives, assuming wind energy

generation is technically feasible at the sites, a NYSERDA-approved wind turbine must be used. Suitable locations for a wind energy installation would likely be dependent on where the most favorable wind resources are on the sites, where there is space available based on proposed redevelopment plans, and other environmental and regulatory considerations.

NYSERDA's Small Wind Turbine Program currently offers incentives based on projected energy production for installation of wind turbines for residential, commercial, institutional or government users. Federal incentives such as the Renewable Energy Production Tax Credit and Business Energy Investment Tax Credit are also currently available for small wind turbine installations.

Geothermal Energy: Geothermal heat pumps, also referred to as ground source heat pumps, are used to provide space heating and cooling as well as hot water for residential and commercial buildings. They work by using an indoor heat pump unit and a heat exchanging ground loop, which is usually buried underground or underwater, to transfer thermal energy between and amongst the ground and the building. Geothermal heating systems offer many benefits such as long-life expectancy, low operating cost, no required exposed outdoor equipment, no on-site combustion, level seasonal electric demand, low cost integrated water heating, and relatively low environmental impact. Risks of geothermal heat pump systems include potential contamination of groundwater from return water in open loop systems containing refrigerants and potential contamination of groundwater by the working fluid of closed loop systems leaking through plastic pipes. These potential risks are relevant for the City of Glen Cove, as several of the City's public water supply wells have faced Freon contamination. Given such concerns, open loop systems would not be desirable for the Sea Cliff Avenue Corridor sites.

New York State currently offers a Ground Source Heat Pump rebate to eligible ground source heat pump designers and installers approved by NYSERDA. Federal incentives such as the Renewable Energy Production Tax Credit and Business Energy Investment Tax Credit are also currently available for geothermal heat pump system installations.

Electric Vehicle Charging Stations: In 2017, the City of Glen Cove installed an electric vehicle charging station (also known as electric vehicle supply equipment (EVSE)) in a public parking garage in its downtown to support zero emission vehicle ownership, reduce greenhouse gas emissions for climate change mitigation, and increase environmental consciousness in the community. EVSE could feasibly be installed in parking lots of the Sea Cliff Avenue strategic sites. Financial incentives currently available for installing EVSE include the NYS Tax Credit for Public and Workplace Charging for businesses, a Municipal Zero Emission Vehicle (ZEV) Rebate Program offered by the NYSDEC, and a Workplace Charging Rebate program from PSEG Long Island for installation of EVSE.

Strategic Sites: The United States Environmental Protection Agency (EPA) has a publicly accessible "RE-Powering Mapper," an online interactive web application which allows users to visualize EPA's information about renewable energy potential on contaminated lands, landfills, and mine sites. Data on renewable energy potential for the Pall Corporation, Pass and Seymour,

and Photocircuits sites are available; however, further property-specific analysis would be required by the properties' private redevelopers or owners to understand specific limitations and opportunities. **Table 4-18** provides a summary of the three strategic sites on Sea Cliff Avenue and the potential capacity for the sites for solar, wind and geothermal technologies.

TABLE 4-18
RENEWABLE ENERGY CAPACITY FOR STRATEGIC SITES ON SEA CLIFF AVENUE

Name of Site	Size (acres)	Estimated solar photovoltaic (PV) capacity in megawatts (MW) based on acreage	Site can support 1-2 wind turbines and off-grid wind based on acreage (Yes/No)	Site can support geothermal heat pump (Yes/No)
Pall Corporation	2	0.38	Yes	Yes
Pass and Seymour	6	1.02	Yes	Yes
Photocircuits	10	1.72	Yes	Yes

All three properties have adequate acreage to support solar photovoltaic and small-scale wind installation and are identified as being able to support geothermal energy generation using geothermal heat pumps. The acreage of the Day Care property, which is 3.29 acres according to City of Glen Cove records, is also adequate for small-scale solar and wind.

5.0 IMPLEMENTATION STRATEGY

In 2012, the City of Glen Cove completed the Step II Nomination Study for the Orchard, including an addendum (2013) which introduced an additional area to incorporate the former Coles School property. This BOA Step III Implementation Strategy is intended to further the goals of the City of Glen Cove in achieving realization of the conceptual redevelopment plan for the Orchard Brownfield Opportunity Area. The implementation strategy includes a number of actions which are described in the following sections to achieve these improvements. In addition, this strategy includes an assessment of the economic feasibility of the various redevelopment options, plans for parking and other improvements that would be required to accommodate the redevelopment in the area.

The implementation strategy seeks to overcome obstacles to redevelopment. The vision developed as part of the Step II BOA Nomination Study provides the basis for a number of the success stories and recommended future actions identified in this Step III Implementation Strategy (including physical improvements such as access improvements, improved sidewalks, addition of green infrastructure/rain gardens, and energy efficient street lighting, and legislative actions that modify permitted uses based upon changes in zoning language and the City Zoning Map). Following acceptance of this BOA Step III Implementation Strategy by the City Council the SEQRA process may commence which will include the preparation of a Generic Environmental Impact Statement (GEIS) to analyze the actions recommended in the Step III prior to adoption of the BOA Step III Implementation Strategy. A noticed public hearing will be held on the Draft GEIS at which time the public may provide comments on the contents of the Step III BOA and the GEIS. Substantive comments may result in modifications to the Final Step III Implementation Strategy and will be addressed in a Final GEIS.

For the purpose of discussion within this document, the BOA Study Area has been divided into the following six areas which are illustrated on **Figure 5-1**.

- Coles School Area
- Sea Cliff Avenue Industrial Area
- Orchard Neighborhood Area
- TOD Area (adjacent to Glen Street Station)
- Orchard Business Area
- Cedar Swamp Road Area

These areas share characteristics and require similar "treatment" with respect to solutions for zoning, land use, parking, circulation, etc. It is noted that just because these areas were defined within the BOA, not all have specific recommendations associated with the areas. Neither the Orchard Business Area nor the Cedar Swamp Road for example have recommendations related to zoning – however, there are specific recommendations for land use and other recommended actions which apply to all areas of the BOA.

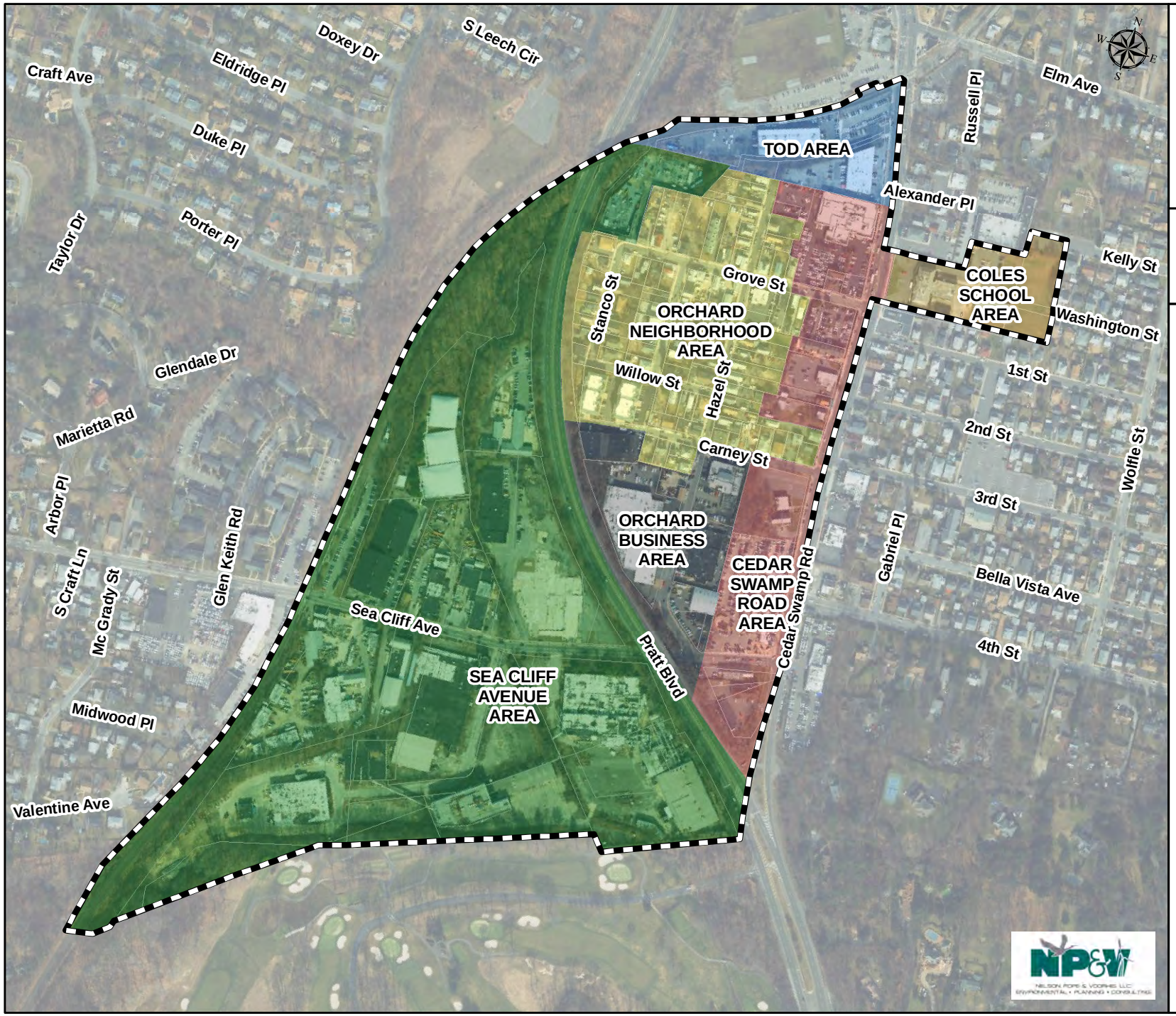

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FIGURE 5-1
Areas of Interest

Legend

- Boundary
- Parcels

Areas of Interest

- TOD Area
- Coles School Area
- Orchard Neighborhood Area
- Cedar Swamp Road Area
- Orchard Business Area
- Sea Cliff Avenue Area

Source: NYSGIS Orthoimagery Program, 2016

Print Date: November 15, 2018

0 500 Feet

1 inch = 500 feet

5.1 Strategic Sites and Areas

Strategic sites and areas have been refined through the course of this Step III process and are illustrated on **Figure 5-2** Potential Redevelopment Opportunities. The following sections identify and describe specific concepts for redevelopment of strategic sites and areas including design alternatives, cost benefit analyses, environmental considerations and implementation actions related to reuse of the properties. It is noted that the BOA Step II included the City-owned property which is home to the Day Care facility as a strategic site with the goal of considering relocation of the Day Care facility to another property (specifically the TOD area). Throughout the Step III process, the relocation of the Day Care was a consideration, including in the development of conceptual reuse options at the Coles School property. However, it was determined that the Coles School property was needed for community beneficial use and the building costs for relocation or replacement of the facility would be too high. The relocation of the Day Care facility is expected to be a consideration as redevelopment in the area occurs – whether as part of a TOD development project or in another location in Glen Cove.

These redevelopment opportunities for the strategic sites and areas, when considered together, comprise the proposed action to be evaluated under SEQRA in this BOA Plan/GEIS with respect to development feasibility/constraints and obstacles to redevelopment, economic benefit, and potential for significant adverse environmental impacts – all of which are analyzed.

The theoretical development plan developed as part of this Implementation Strategy is presented in greater detail in the subsections below which serve as the basis for analysis of the preferred alternative for the GEIS. The development plan provides details in order to conceptualize the recommended density (both residential and nonresidential) and intensity of land use preferences for strategic sites. These concepts are important as they provide the basis for recommended zoning code amendments discussed in **Section 5.2**.

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FIGURE 5-2
Conceptual
Redevelopment Plan

Legend

- BOA Boundary

Redevelopment Concepts

- Connection
- New Building
- Repurposed Building
- Redevelopment Sites

Source: NYSGIS Orthoimagery Program, 2016

Date Printed: November 16, 2018

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Feet

1 inch = 300 feet

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5.1.1 Coles School

The Coles School property is comprised of four separate Nassau County tax lots owned by the City of Glen Cove and an unimproved portion of Washington Street. The property is ±3.97 acres in size.[5] The Coles School, located at 27 Cedar Swamp Road, was constructed in the 1930s and served as one of Glen Cove School District's elementary schools for many decades before it was closed in 1992. Following closure by the School District, the school was leased to a private religious day school known as the Solomon Schechter School through 2011. After 2011, the school has been used for storage by the City and the rear Butler Building, which currently houses a gymnasium, has been leased to a local business that provides athletic instruction. This business also utilizes the open fields west of the Butler Building.

2013 Aerial Photo of Coles School property with Nassau County Tax Map overlay

The western part of the site includes the former Coles School Building, accessory structures, parking, a paved outdoor play area and the Butler Building. The eastern part of the site, to the rear of the Butler Building, contains open fields and the unimproved right-of-way extension of Washington Street, and the north end of the site contains parking facilities for Big Ralph Park at the end of Kelly Street.

The current zoning of the property is B-2 (Peripheral Commercial District) on the developed portion of the site and R-4 (Residential – minimum 6,500 SF lots) for the portion now used for playing fields (lots 22-1-540 and 22-A-640). A long-standing interpretation of the Building Department Administrator holds that where a parcel is split by a zoning district line, the

[5] Includes the area of the right of way and a portion of Kelly Street.

applicant may apply the more intensive zoning to the entirety of the parcel. The site is accessible from Cedar Swamp Road and there are two residential streets adjacent to the property at the east, which could potentially provide access to redevelopment uses in this portion of the site (see aerial photograph above).

Several professional reports were prepared related to the property. Several appraisals, including one performed prior to purchase of the property by the City and two performed more recently, were prepared to assess market value of the property. A summary of these studies and professional analyses are provided below:

- In May 2015, an appraisal report/market valuation/developable site analysis was prepared by R.D. Geronimo Ltd which identified several scenarios for redevelopment and sale of the property. The appraisal identified the highest and best use of the property under the current zoning as commercial in the front with residential lots in the rear. With a change of zone, the highest and best use identified was a multifamily residential development, possibly with a retail component. The valuation analysis also included an appraisal "as-is" and an additional scenario in which the school building would be retained for municipal use. The appraisal assumed that asbestos and mold would be abated (at a cost of $150,000 per RTP Environmental) although it did not address the removal or encapsulation of lead paint or removal of underground storage tanks. Based upon the report:
    - The 'as-is' market value (current zoning, with abandonment of the paper street portion of Washington Street, asbestos and mold abatement completed, and buildings demolished at a cost of $249,000) is $3.55 million.
    - The market value of the highest and best use (rezoned for multifamily residential and abandoned Washington Street with building demolition at a cost of $495,000):
        - With City retaining use of school building: $8.46 million
        - Without City retaining use of school building: $9.3 million

- In June 2015, the Coles School Building Assessment Report was prepared by LiRo Engineering. This study was performed on behalf of the City of Glen Cove's Department of Public Works to assess building and site conditions and to determine cost of repairs or replacement of building and site components. The Architectural Assessment portion of the report found that the building was in need of major repairs and provided itemized costs for repairs which included a new roof, ADA-compliant ramps/elevator, windows and doors, waterproofing, ADA bathrooms, and other improvements for a total cost of $3.13 million. The Mechanical, Electrical and Plumbing section of the report recommends replacement of all of the plumbing, fixtures, and sanitary system, and installation of a new sprinkler system, new heating system, central air conditioning, new electrical service, wiring and fire alarms, and gas service for a total cost of $5.3 million.[6]

[6] $2.6 million for mechanical systems, $1.6 million for electrical systems and $1.1 million for plumbing and water service/sanitary.

Asbestos abatement, mold abatement and air monitoring costs were estimated at $535,325.97. No storage tanks were observed on the property and it was assumed that lead-based paint exists within the building (no costs associated with abatement included in the report). Finally, a Civil Site Assessment reviewed site conditions and provided recommendations with respect to walkways/steps, driveway and parking area, need for clearing and grubbing, and drainage. No specific costs were provided for repair of concrete sidewalk surfaces where damaged, or for removal of the entire paved driveway and parking, regrading and repaving. Based upon the individual costs for repair, the total cost estimate associated with comprehensive repair of the building and remediation of asbestos and mold is estimated to be nearly $9 million. In comparison, the report provided an estimate for abatement of asbestos, demolition of site improvements, and construction of a new 10,000 SF building at just over $5 million.

- In 2014, the City issued a Request for Expressions of Interest, which noted the City's desire to preserve the "architectural integrity" of the building through adaptive re-use of the two-story school structure. Nine proposals were received, and the City held interviews with the top four proposers as evaluated. A cost-benefit analysis was performed, and the City held negotiations, but none of the proposers' plans were realized.

- In January 2017, as part of this BOA Step III work plan, Roux Associates prepared a Phase I ESA. In conjunction with this study, Roux oversaw East Coast Environmental, who performed a walkthrough of the Coles School building to identify items requiring immediate remediation/management to allow the school to be occupied by students. East Coast provided a summary of recommended actions and fees associated with remediation. The Phase I ESA and environmental estimates are summarized later in this Section.

- In May 2017, as part of this BOA Step III work plan, the property was surveyed by Bladykas & Panetta, LS & PE, PC.

- Also, as part of this BOA Step III, in June 2017, a partitioning map was prepared by Bladykas & Panetta, LS & PE, PC to identify areas to be sold and areas to be maintained by the City of Glen Cove.

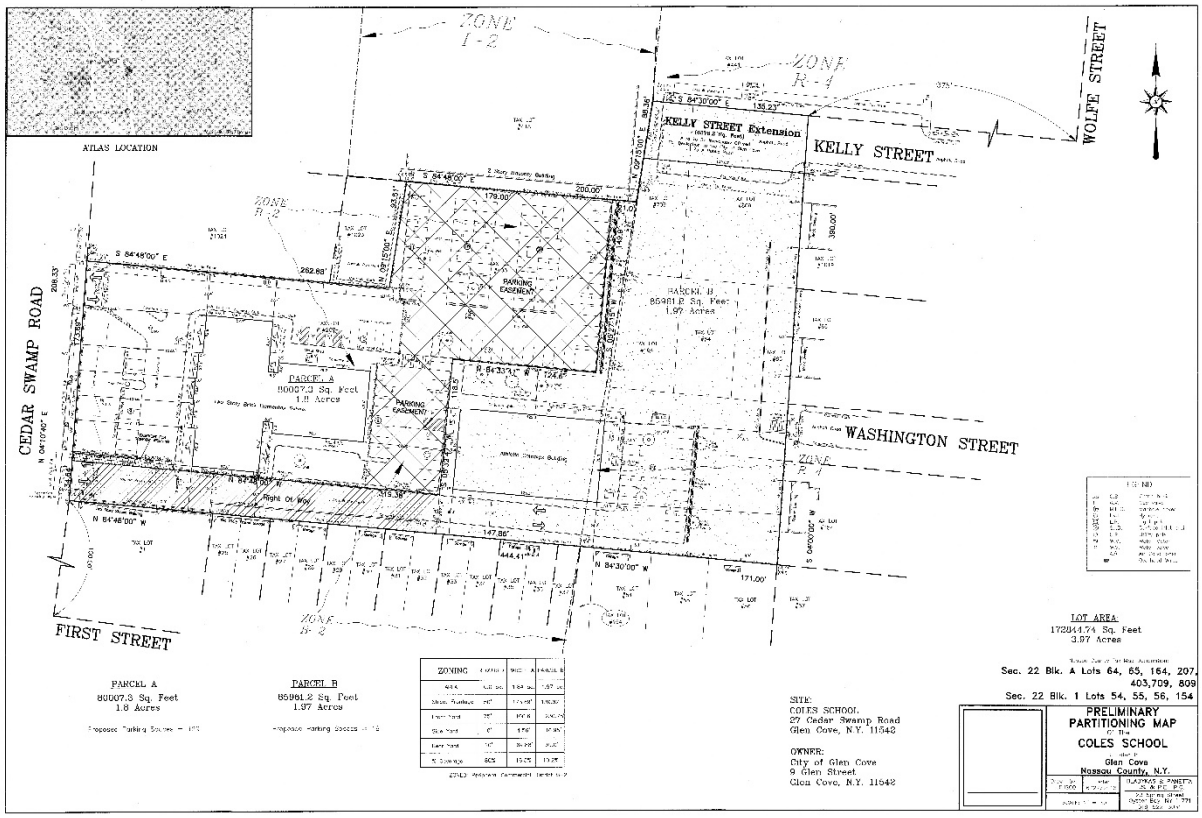
Based in large part on these reports and other activities supported by the BOA Step III work plan, redevelopment interest was induced by Tiegerman Schools (formerly School for Language and Communication Development (SLED)), a local school for developmentally disabled children. In December 2017 a contract for sale of the western portion of the site including the former Coles School Building was executed between the City of Glen Cove and Tiegerman Schools. The City would retain the eastern portion of the site including Butler Building and fields for an unspecified future use, and in the short-term it was determined that the existing private athletic use would be permitted to continue, until the City required the facilities. As of the date of this document, the only contemplated use by the City is the possible construction of a municipal water supply well. As part of the agreement, Tiegerman Schools is providing

easements to the City to allow the City to use the majority of Tiegerman Schools parking spaces when the School is not in operation – principally after 7 PM weekdays and on the weekend. The City is providing easements to Tiegerman, to allow them to use the City's access drive for their busses to exit the site.

In February and March of 2018, as part of this BOA Step III, Bladykas & Panetta, LS & PE, PC was retained to prepare several versions of a Yield Map to further discussions between the City of Glen Cove and Tiegerman Schools. The firm also prepared Subdivision Plats funded as part of this BOA on behalf of the City, and Site Plans were funded by Tiegerman Schools.

Formal application for subdivision was made to the Glen Cove Planning Board in May 2018. The Planning Board referred the application to the Glen Cove Zoning Board of Appeals on May 15, 2018 as the application required relief from strict compliance with two bulk requirements governing setback of the school from a property line and side yard as well as an addition variance for the design of the expanded parking lot. Formal application for site plan and special permit was made to the Planning Board in March 2018.

The Planning Board reviewed the application and requested several changes to the Plan, notably to improve circulation and access to the City's Butler Building, while maintaining security to the future Tiegerman Schools site. The application received all required variances from the Zoning Board of Appeals on July 17, 2018. The Planning Board held a public hearing on the project on July 31, 2018. The public hearing was closed, and the Planning Board approved the Subdivision, Special Permit and Site Plan, which were ratified by resolution on August 7, 2018.



On June 26, 2018, financing was approved for Tiegerman Schools in the form of bonds through the Glen Cove Local Economic Assistance Corporation (GCLEAC). On August 17, 2018, the project closing occurred between the City and Tiegerman Schools.

Coles School Site Design Alternatives

It has long been acknowledged that there is the potential for reuse of the school with redevelopment of the eastern portion of the site for another purpose. During the course of the study and prior to the signed contract of sale for the western portion of the site that includes the former Coles School building, the BOA Consultant Team developed several conceptual redevelopment strategies for the Coles School properties which incorporated reuse of the school building for an educational facility and alternative uses for the rear property. Several concepts that envisioned removal of the Butler Building and sale of the rear portion of the property with the fields for redevelopment as residential or for an assisted living facility were prepared. In addition, a spatial analysis of the potential reuse of the Butler Building with modifications to accommodate a day care facility was performed.

The conceptual redevelopment plans that involved the subdivision of the rear of the property into residential lots generally conformed with the current R-4 zoning. It is noted that a portion of the property that would be sold for redevelopment is currently zoned B-2 and thus a change of zone (or extension of zoning) would have been required to permit the subdivision and development with housing. A series of conceptual layouts were prepared on behalf of the City so that various

lot sizes, access options and configurations could be considered, and these concept plans were provided to the City and discussed with members of the Steering Committee.

The second redevelopment concept envisioned redevelopment of the eastern portion of the property with an assisted living facility. As the access to an assisted living facility would need to be from Cedar Swamp Road, and a shared access with an educational use is not appropriate, the concept included the provision of an access driveway along the southern property line to access the eastern area of the property. The concept would provide for approximately 1.85 acres of property, including the access strip, for redevelopment.

Finally, sketches were prepared to determine whether the site could accommodate the Glen Cove Child Day Care facility if relocated to this site. Concerns related to the combined traffic for the school as well as a day care facility on the site were expressed during a Steering Committee meeting, and there were additional concerns regarding the intensity of this use vis-à-vis the residential neighborhood to the east, and the expense of building expansion and/or construction of a new building for the day care. It was concluded that this option would not be pursued, at least not in the short term.

Samples of these concepts for reuse of the Coles School property are provided in **Appendix G**.

Based on these efforts, the potential for specific private redevelopment options on the eastern portion of the property were considered by the Steering Committee. Members of the Steering Committee discussed the potential options at length on several occasions, and through this assessment, the Steering Committee concluded that the best course of action would be to reuse the rear portion of the property for a community beneficial use. Potential relocation of the Youth Bureau, which has offices at 128B Glen Street, was under consideration but is not being pursued at this time.

<u>Coles School Cost Benefit Analysis</u>
A cost benefit analysis was initiated when sale of the rear portion of the site was under consideration; however, once the City decided to retain the rear for community beneficial use, that cost-benefit analysis was not finalized. The most appropriate and realistic land use of the property was determined based upon a review and analysis of potential options for redevelopment of the entire site. Although the sale of the rear of the property for development would result in an economic benefit for the City (through sale of the property and future tax revenue), the consensus of the Steering Committee was to maintain this property for community beneficial use. In part this decision was informed by the Step II which identified a need for community recreational space in the area.

There is a direct financial benefit of the sale of the western portion. The City received $2,100,000 in proceeds from the sale. In addition, the GCLEAC received fees as a result of the project bonding. The project will produce 80 new jobs in the City, along with increased local spending as a result.

The City receives $27,000 per year to lease the Butler Building on the easterly lot, which is believed to be less than what can be achieved if leased at full market value. There is additional revenue potential for lease of the easterly property. Additionally, the existing building has a replacement cost value that dependent upon reconstruction methods and materials could range for $500,000 to over $1 million and this building has value in its current state as it provides public recreational and a community service value to City residents.

The financial benefit of providing recreational space for the community cannot be calculated but is clearly an invaluable resource for all residents of the City that choose to utilize the recreational resources in future.

Table 5-1 provides a cost benefit analysis for the reuse of the Coles School property, comparing the existing use with the proposed use as a private school in the western portion of the site and public/community use to be determined in future in the eastern portion of the site. It is noted that the potential for tax revenue from property taxes would apply only for sale of the property to a for-profit business. The assessed and taxable value is shown; however, this is not revenue that would be achieved through the sale of the property to the nonprofit Tiegerman Schools. A cost-benefit analysis is most appropriate for understanding whether the improvements are justified in consideration of the costs – and in the case of the Coles School property, it was determined early in the process that the sale of the rear portion of the property for new development was not justifiable in consideration of the loss of public space and the value that the property presents as an opportunity for current and future community programming and for potential water resources.

TABLE 5-1
COST BENEFIT ANALYSIS FOR COLES SCHOOL PROPERTY

	Parameter	Existing	Proposed Development
	Use	Abandoned former public school; butler building in rear and fields	School (private) in front, public use in rear
	Property Size (acres)	3.97	1.86 for school, 2.11 for City
Inputs	Retail (SF)	0	
	Housing Units	0	
	Park/Open Space (sf)	0	
	Workforce Housing units	0	
	Affordable Housing Units	0	
	Residents	0	
	Public School Children	0	
Fiscal Impacts	Assessed Property Value	$6,572,500	
	Taxable Value	$6,572,500	$0
	Glen Cove Property Tax	$0	$0
	School District Property Tax	$0	$0
	Sale of Property	$0	$2,100,000
	Costs of City Services (per capita or commercial psf basis)	$0	$0
	Costs to School District	$0	$0
	Net Municipal Benefits *	$0	$1,100,000
	Net School District Benefits	$0	$0
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	3
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$234,062
	Construction (One-Time) Business	NA	$644,118
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	NA	NA
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	NA	NA
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	NA	NA
Community Benefits		The former Coles School building is in need of remediation; however, the butler building is leased for a private sports group, and parking is leased	Sale of the school property for $2.1 million, which after paying down debt service netted $1.1 million to the City. Retention of rear portion for community use, parking for community use and easement for access.

Coles School Environmental Recommendations

The Phase I ESA prepared by Roux Associates provided recommendations for testing and remediation of the Coles School. In addition, estimates for remediation of the Coles School were prepared for asbestos abatement (air cell pipe insulation, floor tiles and built up asphalt roof) and remediation of mold throughout the school building. These estimates were prepared by East Coast Environmental Restoration, as a subcontractor to Roux Associates and are provided in **Appendix H**.

Based on the information gathered as a result of the Phase I ESA process, no Controlled Recognized Environmental Conditions[7] (CRECs) were identified in connection with the Site. The following provides a summary of the findings and recommendations from the Phase I ESA.

Roux Associates has identified the following Recognized Environmental Conditions (RECs) in connection with the Site:

- Former Coal Use: At the time of the Site reconnaissance, an out-of-service coal-fired burner was noted in the basement of the Coles School main building. Depending on redevelopment plans for the Site, the coal burner will require decommissioning and associated assessment for the containment of hazardous material for disposal. The former coal burner is considered a REC in relation to the Site.
- Drums: Two 30-gallon (estimated) drums, with unknown contents, were noted in the boiler room. The origination of the drums was not known at the time of the Site reconnaissance. The unknown content of the drums is considered a REC in relation to the Site.
- Two transformers were located in a utility room in the basement of the Coles School building. The age of the transformers and the amount of polychlorinated biphenyls (PCBs) could not be confirmed at the time of the inspection. Based on the age of the transformers and the assumption that they contain oil with PCBs, the transformers are considered a REC in relation to the Site.
- Past and current use of adjoining properties: Several properties in the surrounding area of the Site were identified as properties with spill incidents and leaking underground storage tanks (USTs). In addition, a dry-cleaning facility was located northwest of the Site across Cedar Swamp Road with hazardous waste generator information for spent chlorinated solvents. Although several spill incidents were closed, and no reported releases are associated with the dry-cleaning facility, there is potential for impact to the groundwater and soil vapor beneath the Site. The surrounding property use is considered a REC in relation to the Site.

Roux Associates has identified the following Historical REC, in connection with the Site:

1. Spill Incidents: Four reported spill incidents assigned by the New York State Department of Environmental Conservation (NYSDEC) are associated with the Site. Two of the spills involved tightness test failures associated with a 5,000-gallon UST (Spill

[7] As defined by ASTM E1527 - 13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process

No. 8902218 and 9207082). Following system line repairs and a passed tightness test, Spill No. 8901128 was closed on July 5, 1989. Spill No. 9207082 was closed on December 28, 1992 after the 5,000-gallon UST was removed in October 1992. NYSDEC Spill #9810672 was assigned to the Site for an unknown amount of transformer oil that affected soil. The spill was closed by the NYSDEC on October 20, 2000. Lastly, NYSDEC Spill #1010214 was assigned to the Site due to a release, though the spill was closed by the NYSDEC on March 29, 2011. Due to the removed status of the UST and closed status of the reported spills associated with the Site, these incidents are considered a HREC in relation to the Site.

Roux Associates has identified the following business environmental risk (BER), in connection with the Site:

1. At the time of the Site reconnaissance, a vent line and fill port were noted outside of the northeast corner of the Site. Due to the closed status of the UST the vent line should be removed, and the fill port should be abandoned to avoid any accidental delivery of oil. The presence of the vent line and fill port are considered a BER in relation to the Site.

Coles School Implementation Actions

Required Administrative Steps/Permits – the contract of sale was subject to the purchaser obtaining all required permits, including relief from the Zoning Board of Appeals as necessary. The project required subdivision approval to merge several existing tax lots into two total lots. Special permit approval for a private school was required under the City Code. Under the contract of sale, the Tiegerman School was responsible for obtaining the necessary permits through the City and County; however, as an implementation project, funding from the BOA grant was utilized to arrive at the conceptual plans, the preparation of a survey, yield maps, subdivision plats, surveys and site plans by Bladykas and Panetta, as well as an Environmental Assessment Form, and application forms. Tiegerman Schools was responsible for funding a required traffic and parking analysis to identify potential impacts and need for mitigation. The BOA Consultant Team was involved in the review processes for the project and provided input to the Planning Board. All of these implementation items have been completed.

With respect to the eastern portion of the property, it is recommended that the City Council consider future use options for the Butler Building and athletic fields when considering recreational programming on a yearly basis. Additionally, the City should consider entering into agreements with Tiegerman to use facilities during after-school hours. Classroom space can be especially useful if the City wishes to foster or provide language, job and/or financial training to area residents.

5.1.2 The Orchard Neighborhood

The Orchard Neighborhood Area is shown shaded in yellow on **Figure 5-1** and is generally located north of Carney Street (with a few properties south of Carney) and west of Cedar Swamp Road. Residential uses dominate the core of the area, with heavy commercial and industrial uses to the south and a busy commercial corridor to the east fronting on Cedar Swamp Road. Several parcels within the residential areas of the Orchard contain business uses including a vacant restaurant, a plumbing contractor, an electrical contractor, an auto-repair shop, a tow yard

operating without a permit, and a landscaping business. Several landlords also store commercial vehicles overnight in the neighborhood.

The developed residential neighborhood dates back to the early twentieth century when it was established by or for predominantly immigrant families. These early residents established small single-family homes on lots of 2,000 to 5,000 SF. Over the years many of these homes have been converted to two-family and multifamily residences. Also, as time has passed, and the original residents and families have left or passed on, many of these residences have been converted into investment properties.

The Orchard Neighborhood was the subject of a Blight Study and Revitalization Plan prepared in 2003. This plan determined that the area was eligible for urban renewal, although only one property was ultimately acquired and cleared via eminent domain. This property on the North Side of Grove Street was redeveloped for affordable owner-occupied townhouses. The recommendations of the Revitalization Plan were shelved for several years until the 2009 Master Plan was adopted. The 2009 Plan recommended implementation of many of the 2003 recommendations. This resulted in the creation of the Orchard Neighborhood Redevelopment Incentive Overlay District (RIO-ON District) during the drafting and adoption of comprehensive zoning amendments implementing the Master Plan in 2010. The purpose of the RIO-ON was to encourage redevelopment of vacant and/or deteriorated properties within the neighborhood in a manner that will improve the character and promote additional housing opportunities.

The Step II Nomination Study concluded that the existing density and small lots within the Orchard Neighborhood would limit the potential for large-scale redevelopment, but did identify a number of actions which focus on neighborhood stabilization and enhancement of the public realm that still apply today and are as follows: concentrated code enforcement, design guidelines for new construction, renovations and additions, capital improvements to street/sidewalk network, beautification programs, and residential rehabilitation support programs, all consistent with the recommendations of the City's Master Plan and Orchard Neighborhood Revitalization Plan. In addition to emphasizing the continued value of the above techniques, several additional actions to enhance neighborhood stabilization and livability were recommended as part of the Step II Nomination Study which are as follows:

- Expansion of recreation uses in the Orchard; specifically, the reuse of the City-owned lot on Capobianco Street as a pocket park or other recreational amenity should be investigated as a way to introduce public recreation/open space into an underserved community.
- The reintroduction of landscaping (e.g., street trees) to help soften the streetscape, provide shading and green infrastructure benefits, and improve neighborhood perception. Improved street lighting may also improve the safety, quality and comfort of the pedestrian environment, and help support the attractiveness of the neighborhood as a transit-oriented community.

Since the 2012 Step II Nomination Study was prepared, there has been a successful redevelopment within the Orchard Neighborhood of the Carney Street apartments, made possible by the City's adoption of the RIO-ON District. The property located at the west end of Carney Street on the north side formerly contained a bowling alley. Utilizing the provisions of the RIO-

ON District the owner of the property was able to construct new apartments on the 1.38-acre property. Phase II of the project added six additional units for a total of 56 units between both phases on approximately 1.51 acres. These units are completely rented for market rates of between $1,600 per month for an efficiency apartment and $2,800 for a two-bedroom apartment. Amenities available to tenants include balconies, an on-site fitness center, landscaped picnic area and a community laundry room. The Glen Cove Community Development Agency (CDA) has been working with numerous redevelopment agencies to attract development interest for properties within the Orchard, especially for affordable/workforce housing. The CDA was successful in the development of the five townhome units on Grove Street mentioned previously (through a collaboration with the LI Housing Partnership).

The Step II Nomination identified issues within the Orchard Neighborhood related to disinvestment and deterioration in its housing stock, as well as overcrowding. Additional issues facing the area include:

1. **Insufficient parking** (not enough off-street parking provided for residential units; use of the properties for illegal storage/parking of commercial vehicles and limited on-street parking). The study prepared by Gedeon Engineering addresses parking issues and is summarized in **Section 4.6.2** with the full study provided in **Appendix D**.

2. **Illegal use of properties and overcrowding of nonconforming housing**
   Since the initiation of the Step III BOA project, enforcement actions for properties within the Orchard Neighborhood have been tracked by the City and provided to NP&V for mapping into categories using GIS. There is a commitment upon the part of the City to continue enforcement of violations that are prevalent in the Orchard.

   The City of Glen Cove maintains a landlord registry, which is intended to inventory and regulate rental units in the community. The registry currently indicates that there are 33 rental units in the area. However, based on Code Enforcement activity and neighborhood observation, it is likely that there are rental units within the neighborhood that are not yet accounted for on the registry or which represent illegal conversions. From a land use perspective, overcrowding and use of residential yards and garages for outdoor commercial storage are the most pressing issues (i.e., driveway and yards of residential properties area being leased or used by the owner for storage of commercial vehicles and equipment). Continued enforcement by the City of current codes which prohibit non-resident commercial vehicle and equipment storage would help to alleviate this issue. Many of the residential homes have been split illegally into multiple units – or bedrooms are being rented to individuals. While this is an indicator of a need for low-income housing in the area, it also leads to a lack of incentive for property owners to develop sites consistent with zoning. The RIO-ON District already provides incentives in the form of added density for property redevelopment for three typical lots in the Orchard Neighborhood. However, if illegal units are not enforced and income for multiple units are available to property owners without the need for investment, there is little incentive for property owners to make improvements.

3. **Need for open space/recreational space**
   There are opportunities to provide recreational space/open space within the Orchard, including a corner property reserved for this purpose at the Carney Street apartment complex. It was recognized that the city-owned parking lot on Capobianco Street could also be repurposed as a park or a portion of the lot could provide green space if determined to be surplus parking. However, based upon research and field verification, this parking area was found to be utilized by the residents in the area and thus is considered an asset as a parking lot. The preferred alternative is thus to improve the parking area and include landscaping for shade and a rain garden at the western end to improve the quality of stormwater runoff that is recharged.

4. **Need for improved pedestrian connections and infrastructure**
   A pedestrian connection via Hazel Street to a future TOD redevelopment to the north would facilitate access to the Pascucci Soccer field north of the LIRR on Cedar Swamp Road. This is a feature that would be an important component of a TOD project at the Glen Street Station. In addition, the Orchard contains areas of disconnected sidewalks and would benefit from improvements that include accessible ramps. The Step II identified the need for a pedestrian connection between the Orchard and the Day Care. Options for safe walkable route needed to be explored.

5. **Need for affordable housing and supportive housing**
   A focus of the redevelopment plans prepared for the Orchard Neighborhood and discussed herein analyzed feasible affordable housing concepts. The focus of this would be to provide additional flexibility to property owners for future redevelopment of vacant or homes that are not livable and where redevelopment is desired. (However, following the public input received, the major recommendation to reduce the minimum lot size to achieve density incentives under the RIO-ON provisions were removed). There are a substantial number of private property owners within the residential Orchard Neighborhood that own multiple lots. This provides an opportunity for more lot assemblage and streamlined coordination of public and private revitalization efforts. **Figure 5-3**, Parcels Under Common Ownership Map identifies properties that appear to be part of groupings owned by individual owners. However, it was recognized through this process that it will be difficult for many land owners to aggregate three lots; therefore, one strategy studied included an amendment to the RIO-ON District code to permit increased density on two typically sized lots within the Orchard Neighborhood. This recommendation is no longer proposed, as there was significant opposition from the residents of the neighborhood which was received at the public open house on December 6, 2018. The recommended code amendments propose refinements to the current dimensional standards for a townhouse redevelopment on 15,000 square feet – which will make such redevelopment more feasible. In addition, where it is in character with the surrounding properties, it is recommended that where parking is provided in first floor garage spaces that two floors of living space be permitted above.

City of Glen Cove
and
New York Department of State

The Orchard Neighborhood
Step III BOA

FIGURE 5-3
Parcels Under Common Ownership

Legend

- Study Area Boundary
- Parcels
- NC IDA
- 200 Carney St
- 44 Sea Cliff
- August Thompsen
- Cocchiola
- Curcio
- Demaria
- Leona Place
- Mac
- Maccarone
- Rally E
- Villatoro
- Sekelsky
- Renaldo
- Pall Corp
- Minicozzi

Source: NYSGIS Orthoimagery Program, 2016; NC GIS

Date Printed: November 16, 2018

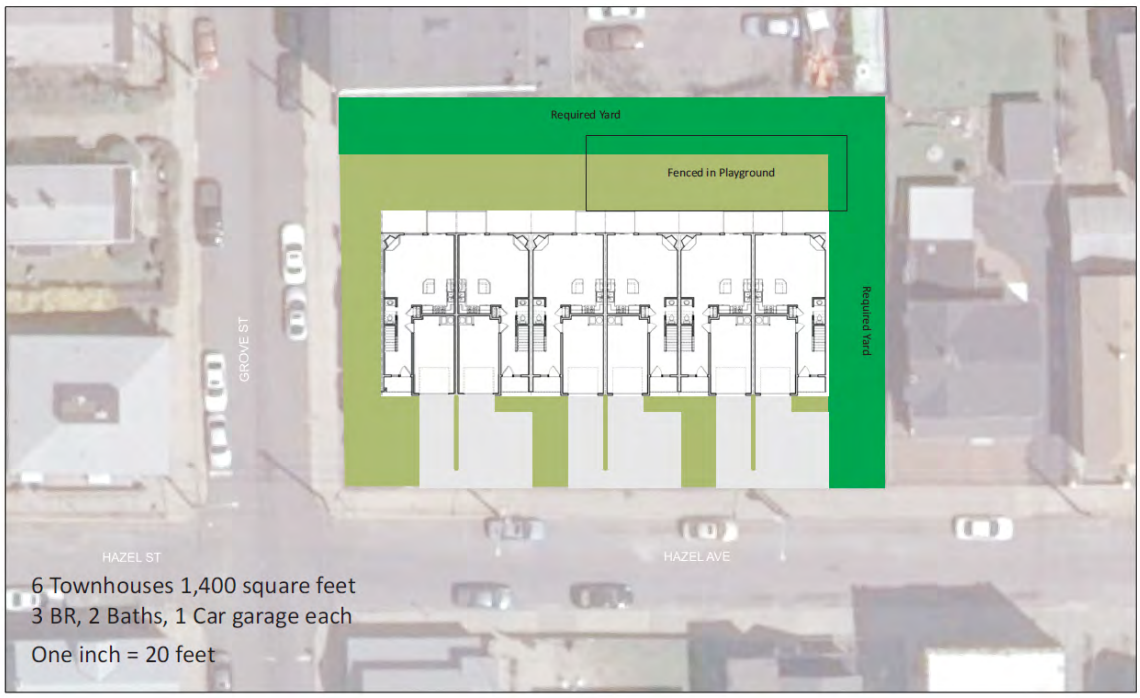
0 500 Feet

1 inch = 500 feet

Several potential redevelopment scenarios were analyzed conceptually to evaluate the feasibility of each under the current RIO-ON zoning district to assist in determining if modifications to the district would be appropriate to encourage additional application of the incentives provided for redevelopment. All of the scenarios are conceptual and with the exception of the analysis for the former Stango's Restaurant property, are not location specific (i.e. the development scenario could occur on similar properties if aggregated elsewhere in the district). Four are presented in this section.

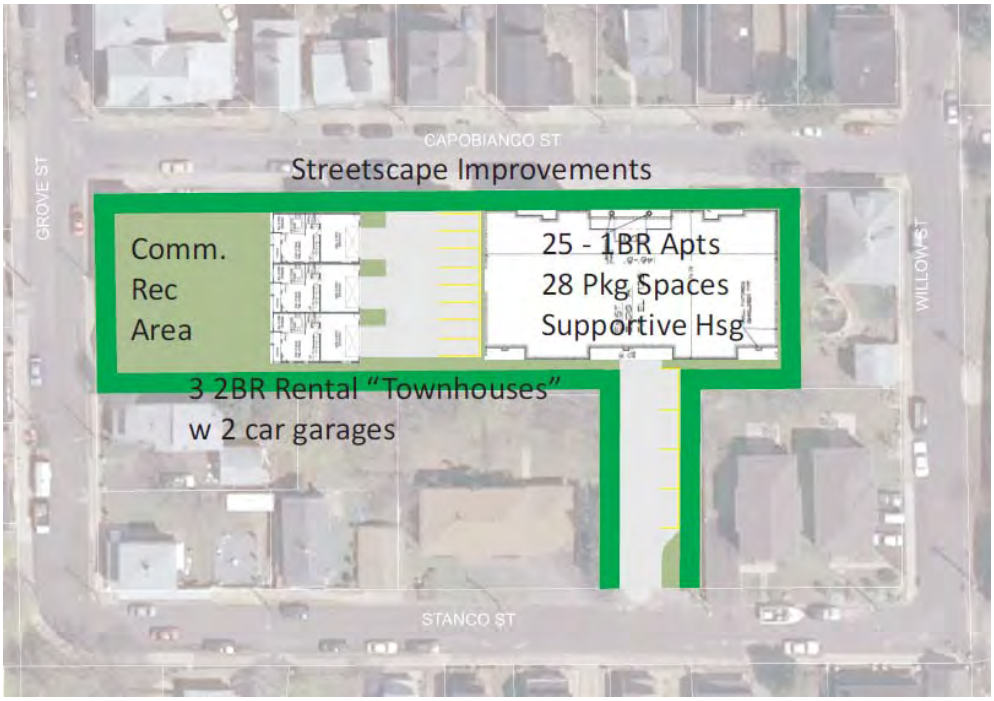
1. The Former Stango's Restaurant Property

The graphic below provides a reduced copy of a redevelopment concept for the 15,000 SF lot located at the southwest corner of Hazel Street and Grove Street. This illustration provides an example of how an aggregated property could be redeveloped with townhomes with for-sale units under the existing RIO-ON overlay zoning district. The conceptual plan illustrates that the site can accommodate 6 townhouses with the required parking and open space area required to achieve this level of density. This option was determined to be not economically viable by Urbanomics given the financing assumptions used - however, if the number of units was increased to 7, the scenarios could be economically viable, but only if units are to be rented (whereas for-sale units were found to be not economically feasible). Urbanomics' analysis concluded that the fewest units of this type on a 15,000 SF property that would yield a profit would be 7 units, but even in this case, the after-tax rate of return is minimal. Thus, it is not likely that the current RIO-ON provisions will encourage redevelopment at this density unless the developer owned the property (many of the properties in the Orchard are known to have been held for long periods as investment properties so some potential for this exists), has more favorable financing options, and/or subsidies were made available. Therefore, additional flexibility in the code may be warranted to achieve a project on this site.



2. Multifamily Concept for Supportive Housing

The conceptual plan below shows aggregated lots totaling 40,000 SF with a multifamily apartment building for analysis of a supportive housing option. The parking would be accessed via a property on Stanco Street which would provide access to a subsurface garage (facilitated by the decrease in elevation between Capobianco Street and Stanco Street). The conceptual plan also includes three townhomes and a community recreation area on the corner of Grove Street. Generally off-street parking was found to be the limiting factor in redeveloping for multifamily development.



Upon consideration of this concept, it was found that the BOA Steering Committee disfavored a multifamily supportive housing development of this kind within the Orchard Neighborhood. Also, of interest was that the Steering Committee was concerned about introducing a new park within the Orchard Neighborhood. Based upon the discussions, it was understood that there may be security or perceived security issues if a park is provided here as these areas may become areas for loitering and/or criminal mischief. The strategy favored by the Steering Committee would be to provide unprogrammed open space or stormwater rain gardens at this time, which presents a future opportunity for active use if conditions improve. The existing development on the block consists of small single- and two- to three-family homes – and one apartment building. The concept for the multifamily structure is at a scale similar to the Carney Street apartment complex. However, whereas Carney Street provides an appropriate location for larger buildings and greater density as a transitional use, being adjacent to industrial uses to the south, the character of Capobianco Street would be greatly affected by the introduction of a 25-unit structure.

The cost benefit analysis provided in **Table 5-2** indicates a net fiscal benefit to the City and School District. The option would also provide supportive housing, meeting a need within the region, and market-rate townhomes, also needed, with sufficient off-street parking.

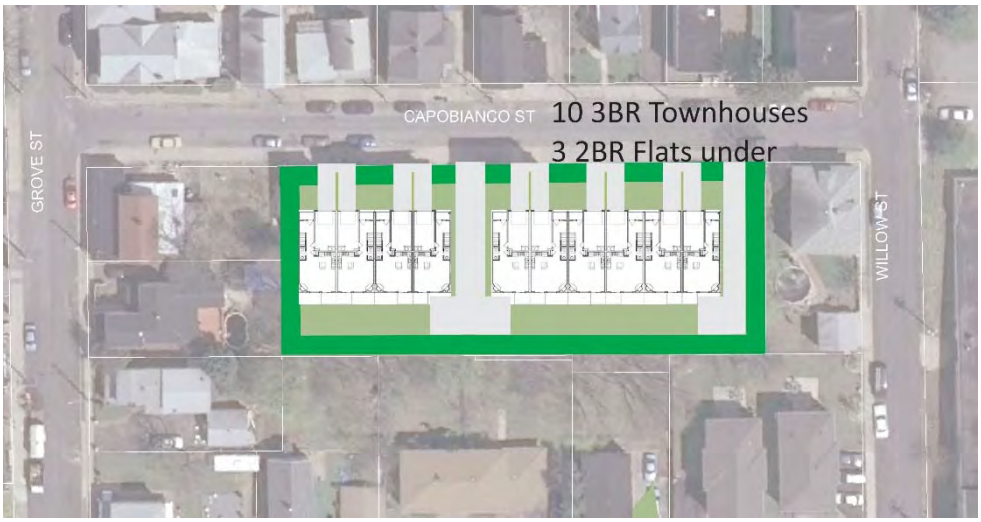
TABLE 5-2
COST BENEFIT ANALYSIS
25 UNITS OF SUPPORTIVE HOUSING/3 TOWNHOMES

	Parameter	Existing	Redevelopment Concept
	Use	Residential	Residential Supportive Housing and Townhouses
	Property Size (SF)	40,000	40,000
Inputs	Commercial Floorspace (SF)	0	-
	Housing Units	21	25 1 bedroom supportive housing and 3 rental townhomes (2 BR)
	Park/Open Space (sf)	0	0
	Workforce Housing units		3
	Affordable Housing Units		25
	Residents	40	43
	Public School Children	5	2
Fiscal Impacts	Assessed Property Value	$ 2,683,500	$ 3,568,868
	Taxable Value	$ 2,683,500	$ 3,568,868
	Glen Cove Property Tax	$ 48,036	$ 63,885
	School District Property Tax	$ 122,986	$ 163,563
	Costs of City Services (per capita or commercial psf basis)	$ (32,160.00)	$ (34,483.56)
	Costs to School District	$ (91,260.70)	$ (30,298.55)
	Net Municipal Benefits	$ 18,078.01	$ 29,402
	Net School District Benefits	$ 31,725.32	$ 133,264
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	75
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$ 5,137,077
	Construction (One-Time) Business	NA	$ 13,858,206
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	10	10
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$ 364,389	$ 572,015
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$ 1,000,835	$ 1,570,262

Multifamily supportive housing redevelopment was found not to be economically viable, based on currently permitted densities and parking requirements. For this particular concept, the net after-tax rate of return was estimated at -2.0%. Because parking was the limiting factor for density, adjusting regulations to allow more density was not explored as a means of making multifamily redevelopment more viable and therefore the code amendments for this type of development were not considered.

3. Mix of townhouses and flats

Another concept that was evaluated for multiple lots was for redevelopment of aggregated lots along Capobianco Street totaling 25,000 SF to include a mix of townhomes and flats. A conceptual layout of the plan is illustrated in the graphic below. This concept envisions a total of 10 townhomes and 3 apartments with adequate parking.



This design option was evaluated by Urbanomics - and based upon this analysis the option was considered economically viable with an after-tax rate of return of 13.5%; however, in this location, the annual after-tax net future revenue (+$107,436) over the cost to implement was not expected to be high enough to foster redevelopment, as the rent revenues on the properties in their existing state (17 units of which 13 are market rate) are four times the net future revenue. However, in another location (i.e., where the site does not include a lot developed with a multifamily apartment building), the potential revenue could exceed current income.

The cost benefit analysis (see Table 5-3) concludes that the project would result in a net increase in revenue to the City and to the School District. In addition, the construction of the townhome/flat development would result in the generation of 47 full-time construction jobs in the short term and 9 full-time jobs (direct, indirect and induced), following development.

TABLE 5-3
COST BENEFIT ANALYSIS FOR
10 TOWNHOMES AND 3 FLATS ON 25,000 SF

	Parameter	Existing	Recommended
	Use	Residential	Residential Townhouses
	Property Size (SF)	25,000	25,000
Inputs	Commercial Floorspace (SF)	0	-
	Housing Units	17	**10** 3-BR townhomes (owned) and **3** 2-Bedroom flats
	Park/Open Space (sf)	0	0
	Workforce Housing units		10
	Affordable Housing Units		3
	Residents	33	34
	Public School Children	4	3
Fiscal Impacts	Assessed Property Value	$ 1,997,000	$ 2,731,453
	Taxable Value	$ 1,997,000	$ 2,731,453
	Glen Cove Property Tax	$ 35,748	$ 48,895
	School District Property Tax	$ 91,523	$ 125,184
	Costs of City Services (per capita or commercial psf basis)	$ (26,532)	$ (27,424)
	Costs to School District	$ (73,009)	$ (60,962)
	Net Municipal Benefits	$ 9,216	$ 21,470
	Net School District Benefits	$ 18,515	$ 64,222
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	47
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$ 3,254,214
	Construction (One-Time) Business	NA	$ 8,778,838
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	9	9
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$ 294,981	$ 488,325
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$ 810,200	$ 1,337,958

This analysis shows that the hypothetical redevelopment would provide both the City and the School District with tax revenues that are more than doubled, as well as providing greater economic benefits and no modifications to the RIO-ON language are required to implement a development of this type.

4. Redevelopment of Two Lots Concepts

Under the current RIO-ON District provisions, a minimum of 15,000 SF is required before incentivize redevelopment density is made available; however, other than the Carney Street apartments that occurred on the former bowling alley site, no other property owners have come forward with redevelopment plans. Additional incentives were analyzed to consider whether an option would be viable for a two-lot assemblage (which would encompass approximately 9,500 SF on average) in comparison to the permitted development (two single-family homes or one two-family home). While this option is no longer recommended, as part of the analysis, it was determined that the smallest assemblage encompassing two lots could physically accommodate 4 building units with required parking spaces. These could be arranged as three owned townhouse units with an accessory rented apartment providing rental income to one or more of the homeowners, or four owned townhouse units.

Based upon the economic analysis, this type of redevelopment would be attractive enough for property owners in that it would induce redevelopment yielding between 4.9% and 8.2% after-tax net rate of return. By comparison, a for-sale townhome arrangement was deemed to be not profitable (six units were required before break even and the two lots were not able to support parking for six units.) The graphic below illustrates two options on typical lots within the area, one with 4 rental townhomes and the other with 3 townhomes and 1 rental apartment. Although it would not be a requirement that the units be rental units, as noted previously, the for-sale option is not economically viable in consideration of the financing assumptions applied by Urbanomics.

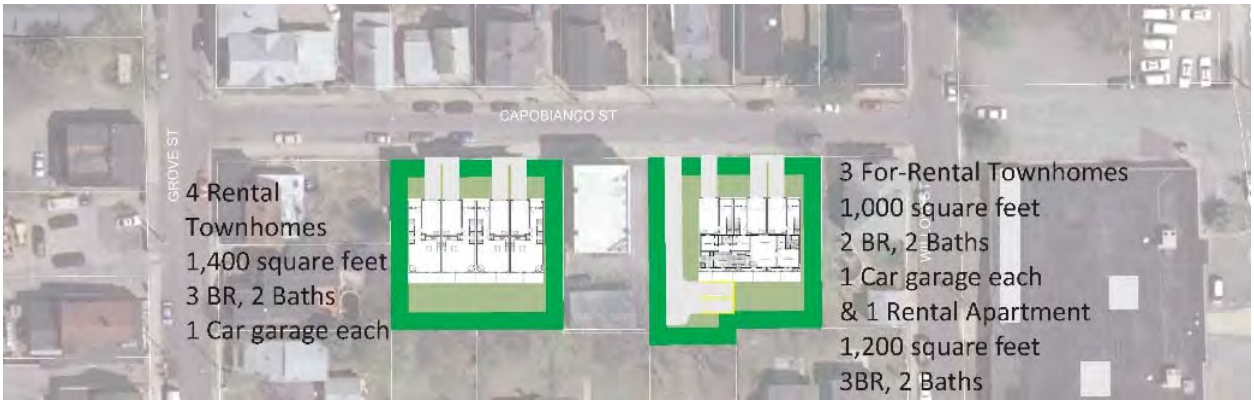


Table 5-4 provides a cost to benefit analysis in support of amendments to the RIO-ON District language to encourage redevelopment of two typical lots within the Orchard. The provisions would require that off-street parking be provided for all units and that a minimum of 9,500 SF be provided and would allow a density of 4 townhomes or 3 townhomes with one flat. (Note that this provision is no longer recommended).

TABLE 5-4
COST BENEFIT ANALYSIS FOR
INCENTIVIZED REDEVELOPMENT OPTIONS FOR A 9,500 SF LOT

	Parameter	Existing	Yield under current zoning	Proposed	Alternative Proposal
	Use	Residential	Residential	Residential (MF)	Residential (MF)
	Property Size (SF)	9,500.00	9,500.00	9,500.00	
Inputs	Commercial Floorspace (SF)	0	0	0	0
	Housing Units	2 grandfathered 1 family houses (single and separate lots)	1 two family	4 Rental townhomes	3 Rental townhomes with 1 apartment
	Park/Open Space (sf)	0	0	0	0
	Workforce Housing units		2		
	Affordable Housing Units		0		
	Residents	7	4	8	7
	Public School Children	1	1	1	1
Fiscal Impacts	Assessed Property Value	$ 725,000	$ 568,764	$ 955,680	$ 830,844
	Taxable Value	$ 725,000	$ 568,764	$ 955,680	$ 830,844
	Glen Cove Property Tax	$ 4,486	$ 3,519	$ 17,107	$ 14,873
	School District Property Tax	$ 10,952	$ 8,592	$ 43,799	$ 38,078
	Costs of City Services (per capita or commercial psf basis)	$ (5,339)	$ (3,007)	$ (6,046)	$ (5,950)
	Costs to School District	$ (22,268)	$ (9,856)	$ (16,062)	$ (12,046)
	Net Municipal Benefits	$ (853)	$ 512	$ 11,061	$ 8,923
	Net School District Benefits	$ (11,316)	$ (1,264)	$ 27,737	$ 26,032
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	5	9	9
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$ 327,385	$ 648,066	$ 632,565
	Construction (One-Time) Business	NA	$ 915,554	$ 1,748,277	$ 1,706,461
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	1	1	2	2
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$ 34,704	$ 53,325	$ 135,058	$ 127,956
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$ 95,318	$ 146,595	$ 369,834	$ 350,673

This analysis shows that the most favorable alternative is the scenario which results in 4 townhomes (rentals), which as projected would result in a greater net increase in revenue to the City and the School District.

Cost Benefit Analysis Summary for the Orchard

As established in the analysis presented in **Section 4.4**, there is significant demand for housing of all types in the City of Glen Cove. Demand and feasibility of development are not necessarily compatible however, given monetary constraints such as construction costs, financing, and taxes. Urbanomics was asked to determine the "tipping point" at which some portion of affordable residential development would be feasible for the Orchard Neighborhood[8] using the Capobianco block as an example. There are many variables that factor into this analysis, from current and future rents and taxes, to construction costs, to less easily estimated factors including interest rates and duration of mortgage and desired return on investment. Urbanomics modeled multiple scenarios to compare development scenarios that would be feasible based on existing conditions and reasonable assumptions of future revenues including the conceptual developments presented

[8] This analysis was also performed for the TOD, presented later in this section.

earlier in this section. Based upon this analysis, it was determined that there are viable options that are both physically achievable under the existing RIO-ON District and which would be economically advantageous[9] however, it is recognized that minor adjustments to the incentive provisions would encourage greater investment and redevelopment of properties of at least 15,000 square feet. The various scenarios and results are provided in **Appendix B**. Greater detail is provided in the following paragraphs.

The initial hypotheses assumed a density of 35 units per acre with units affordable to those at 80% the of HUD Adjusted Median Family Income. Following the July 2017 Working Group meeting and subsequent conversations among team members, revisions were made to the buildout alternatives. The alternatives tested are as follows, and those concepts presented earlier are shown in **bold typeface**[10]:

- 5,000 sf Lot Redevelopment (single property)
  - 2-unit replacement (market, 80% AMI)
  - 3-unit redevelopment (market, 80% AMI, 55% AMI)
- 9,500 sf Lot Redevelopment (2 properties)
  - 1 2-family home (yield under existing zoning)
  - 3 townhomes with auxiliary rental unit, for sale
  - **3 townhomes with auxiliary flat unit, for rent**
  - **4 townhomes, for rent**
- 15,000 sf Lot Redevelopment (3 properties)
  - 10 2-bedroom townhome units
  - 3 2-bedroom flats
- 25,000 sf Lot Redevelopment (5 properties)
  - 12 2-bedroom townhome units, 4 flats
  - **10 3-bedroom townhome units, with 3 2-bedroom flats**
  - 20 unit (10 1-bedroom, 10 2-bedroom) multi-family (market, 80% AMI)
- 40,000 sf Lot Redevelopment (8 properties)
  - 25 affordable 1-bedroom units
  - 3 2-bedroom townhome units
  - **25 affordable 1-bedroom units and 3 2-bedroom townhome units**
  - 28 parking spaces
  - 10 2-bedroom townhome units
  - 3 2-bedroom flats

Based upon input from the Steering Committee and as noted previously, the redevelopment of multiple parcels totaling 40,000 SF (+/-) with a supportive housing complex (25 units within one building with 3 townhomes provided in another portion of the site) was eliminated from the mix

[9] This was found to be especially true for those property owners that own properties who wish to redevelop and those that have available financing options that are more advantageous than those utilized by Urbanomics in their economic viability modeling (which applied worst-case financing)

[10] All scenarios are rental unless otherwise specified.

of preferred alternatives. Ultimately, the redevelopment within the Orchard Neighborhood will be largely driven by individual property owners, and based upon the analyses prepared by Urbanomics, there are a number of scenarios that would result in a positive rate of return without adjustments to the RIO-ON District are provided in **Appendix B**. Further, based upon the conceptual designs and analysis of each, it was determined that there are viable options that are physically achievable under the existing RIO-ON District provisions and would be economically advantageous, especially for those property owners that own properties who wish to redevelop and those that have available financing options that are more advantageous than those utilized by Urbanomics in their economic viability modeling (which applied worst-case financing).

However, it is assumed that part of the reason why property owners have not taken advantage of the density provisions offered in the RIO-ON District is that the cost associated with redevelopment (as well as revenue loss during construction) was too high to encourage redevelopment of multiple properties. There is also the practical obstacle of simply being able to acquire multiple adjacent properties to meet the thresholds for density bonuses of the RIO-ON District. Thus, a more flexible option that requires aggregating just two properties within the Orchard is recommended. Originally, it was recommended that the RIO-ON District be amended to permit the redevelopment of a 9,500 SF lot with 3 townhomes and 1 apartment or 4 townhomes. It was believed that the benefits to the community would be inherent in redevelopment with new housing that provides adequate parking and increases availability of affordable housing; though, it was noted that current neighborhood residents would be unlikely to be able to pay rents that are considered affordable by HUD standards[11]. This reflects some of the concerns that were heard from the public and based upon public feedback, this recommendation has been excluded.

Zoning Amendment Recommendation for the Orchard Neighborhood

Based upon the economic feasibility and cost-benefit analyses performed on hypothetical redevelopments under the existing RIO-ON zoning provisions, it was initially recommended that the minimum lot area to access zoning incentives be reduced from 15,000 square feet to 9,500 square feet. While the typical Orchard lot is around 5,000 square feet, a number of lots are just short of this area. The 9,500 square foot lot was intended to incentivize the assembly of just two typical lots to access density instead of the existing three. It was believed that so modifying the code would encourage greater participation in redevelopment.

However, after receiving feedback from the public and concerns related to intensifying development in the Orchard Neighborhood, and fears that the action would result in significant displacement of existing residents, this recommendation is no longer being considered. Incentive uses will continue to require the assembly of at least three standard Orchard Neighborhood lots totaling 15,000 square feet.

[11] HUD affordability standards are based on county-wide averages of household size and income. Incomes in the study area neighborhood are significantly lower than the county average.

Instead, it is now recommended that the RIO-ON District language be amended to make redevelopment of 15,000 square foot lot assemblies more feasible by allowing three stories overall for townhouse development where parking in attached garages is proposed on a ground floor with two stories of residential use, and where this height is not out of character with the neighborhood. These revised recommendations are contained in **Appendix I-3.**

Recommendation for Requests for Relief to the ZBA within the Orchard

It is recommended that the ZBA strictly adhere to minimum lot area requirements. This is with the understanding that the provision of area variances will do long-term harm to the Orchard Neighborhood's revitalization. It is recommended that a memorandum to the ZBA be prepared and that existing members receive a copy, and when new members are appointed, that this memo be included with other orientation materials. A draft memorandum providing the basis for the recommendation is provided in **Appendix I-1.**

Over the last ten to twenty years, the City ZBA has provided relief for properties within the Orchard to allow for higher density than is permitted by zoning in part with the perspective that doing so encourages investment in the area. That additional density may have been effective at promoting investment, but that investment is believed to be short-lived. Property owners invest in the building modifications to add apartments and this may result in immediate aesthetic improvements, but it has been the experience of the City that these structures tend to quickly fall back into disrepair.

Further, the granting of additional density is the principal incentive underpinning the Orchard Neighborhood Redevelopment Incentive Overlay Zoning District – to allow more density in modern structures with the assemblage of property and the provision of community amenities. With average lot sizes around 5,000 square feet, the current permitted density in the Orchard is approximately 6.7 units per acre (single-family homes on 6,500 square feet). The actual density of households, based on Census information, is closer to 17 households per acre and was achieved in the Orchard based on pre-existing non-conforming structures, variances, and through illegal conversion and overoccupancy.

RIO-ON incentives were therefore calibrated to allow additional density beyond 17 households per acre as landowners accumulate property. The first increase allows five townhouses to be constructed with the assembly of three typical Orchard Neighborhood lots. Under the R-4 zoning, assembly of three lots only yields four units in two two-family homes, so allowing five townhouses was seen as an improved incentive for redevelopment. However, where the Zoning Board of Appeals allows area variances for two-family homes on single-Orchard lots, this incentive is undermined as three Orchard lots in separate ownership would yield six units – in excess of the density permitted by the RIO-ON.

With the zoning amendments to the RIO-ON recommended to refine the dimensional standards under the special use permit requirements for 15,000 square foot lots and allow additional height it is believed that redevelopment interest will be increased. The continued denial of variance for

two-family homes on single lots will be essential to this adjustment to act as an incentive to redevelopment.

5.1.3 Capobianco Street City-Owned Parking Lot Analysis

Currently the City of Glen Cove owns a 5,500 +/- SF property on the west side of Capobianco Street with the address 20-22 Capobianco Street. The lot is posted for tenant parking only. It is unclear if this sign was posted by the City, as the Code does not indicate any special parking limitations for resident parking for this lot – nor is the property identified as parking in Section 265-54 Schedule XXII: Special Purpose Parking Zones of the City's Code of the City Code. The Building Department does not have any record of an agreement between the City and the neighboring property owner; however, it may have been posted upon request of the apartment building as a means of controlling use of the lot – and making sure it is used by local residents.

City Police Department Lieutenant Wright is currently in charge of enforcement with regard to signs. He was a patrol officer at the time when the sign was likely installed, so he is unable to shed light on who installed the sign. He noted that there have been several issues with the Capobianco Street lot over the years. Towards the back of the lot, where the lot slopes down, homeless people periodically build encampments. Abandoned cars have been left in the lot, which the police have needed to tow. He noted that the police generally only become involved with the Capobianco Street lot if someone calls and complains, which happens occasionally. Lieutenant Wright offered to have the police gather information about who is currently utilizing the lot. For three nights in early April 2018, the police visited the lot to check how many cars were parked there and to run the plates. The police found that the same eight cars were parked in the lot overnight for all three nights. Two of the cars were owned by residents of 18 Capobianco Street. The other six cars were from various spots in the neighborhood – mostly other residences on Capobianco Street.

If the City is considering changing restrictions related to the parking lot, Lieutenant Wright suggests that the lot possibly be made available to all residents of Capobianco Street (i.e., to vehicles registered to homes located on Capobianco Street) or perhaps to all Orchard Neighborhood residents. He noted that the neighborhood sometimes has a problem of having too many cars parked on the street, and some of the streets are narrow. In the summer months, there tend to be even more cars parked on the street – people come to Glen Cove to work in the warmer weather, stay with relatives in the Orchard, and park their cars on the street; Lieutenant Wright has noticed that in warmer months, license plates are often from VA, NC, or other southern states.

Potential redevelopment options for the Capobianco Street lot have been considered as part of this Implementation Strategy and are described below – with a cost benefit analysis provided by Urbanomics.

1. Redevelopment under R-4 Zoning District
   Under the current R-4 zoning designation, a single-family home could be constructed on this 5,500 SF property with a lot area variance. Alternatively, the property could be incorporated into a plan for redevelopment of multiple lots, such as was shown on two of the conceptual plans in the previous section. The addition of the property could provide additional space for development of housing or provide public recreational or open space amenities within the development.

2. Improved Public Parking Lot
   The lot is posted with a sign which identifies the lot as designated for tenant parking, implying that the lot is for the use of tenants of the multifamily apartment building located at 18 Capobianco Street, immediately to the north of the lot. However, based upon input received from the Police, the lot is used by tenants and local residents, and serves a purpose on the block. The parking utilization study indicated that the parking lot is up to 43% occupied before 8 pm with 6 out of 14 stalls occupied. The loss of this lot would negatively impact the local residents who utilize this resource.

   Based upon preliminary review, restriping and improvements to the existing parking lot would decrease the number of parking spaces by four spaces, but would improve maneuverability and would result in areas of landscaping. The City should formalize the restrictions on the lot by modification to City Code Section 265-54 Schedule XXII: Special Purpose Parking Zones. In addition, it is recommended that the parking sign indicate Resident Parking to clearly indicate that not only tenants of the apartment building may park in the lot.

3. Public Park or Community Garden
   There is a documented need for recreational space in the Orchard. However, as noted above, the parking lot on Capobianco is utilized by the residents of the community and the loss of parking would impact the residents. It is also not clear how beneficial a pocket park on Capobianco Street would be.

   Therefore, an option that provides for the incorporation of a garden area that has the additional benefit of reducing pollutants in stormwater runoff is a fourth option that is considered (see below).

4. Green Infrastructure (Rain Garden) with Parking (Preferred Alternative)
   A conceptual parking lot plan has been prepared and is provided as **Figure 5-4**. This conceptual design illustrates how the property could serve dual purpose, by providing needed off-street parking for residents and incorporating green infrastructure to improve the water quality of stormwater recharged on site.

   No permits would be required to reconstruct the parking lot as designed; however, as noted in option 2, the continuation of the lot as a restricted parking area for residents should be formally adopted by the City Council via amendment to Section 265-54 Schedule XXII: Special Purpose Parking Zones indicating the purpose of the lot, restrictions, and any registration requirements for residents who wish to use the lot.

A cost benefit analysis for the reuse options evaluated, are provided in **Table 5-5**.

City of Glen Cove
and
New York Department of State

The Orchard Neighborhood
Step III BOA

FIGURE 5-4
Conceptual
Parking Plan

Legend

- Boundary
- Capobianco Street Parking Lot

Source: NYSGIS Orthoimagery Program, 2016; Gedeon GRC Consulting

Date Printed: November 16, 2018

0 20 Feet

1 inch = 20 feet

TABLE 5-5
COST BENEFIT ANALYSIS
CITY-OWNED LOT COMPARISON

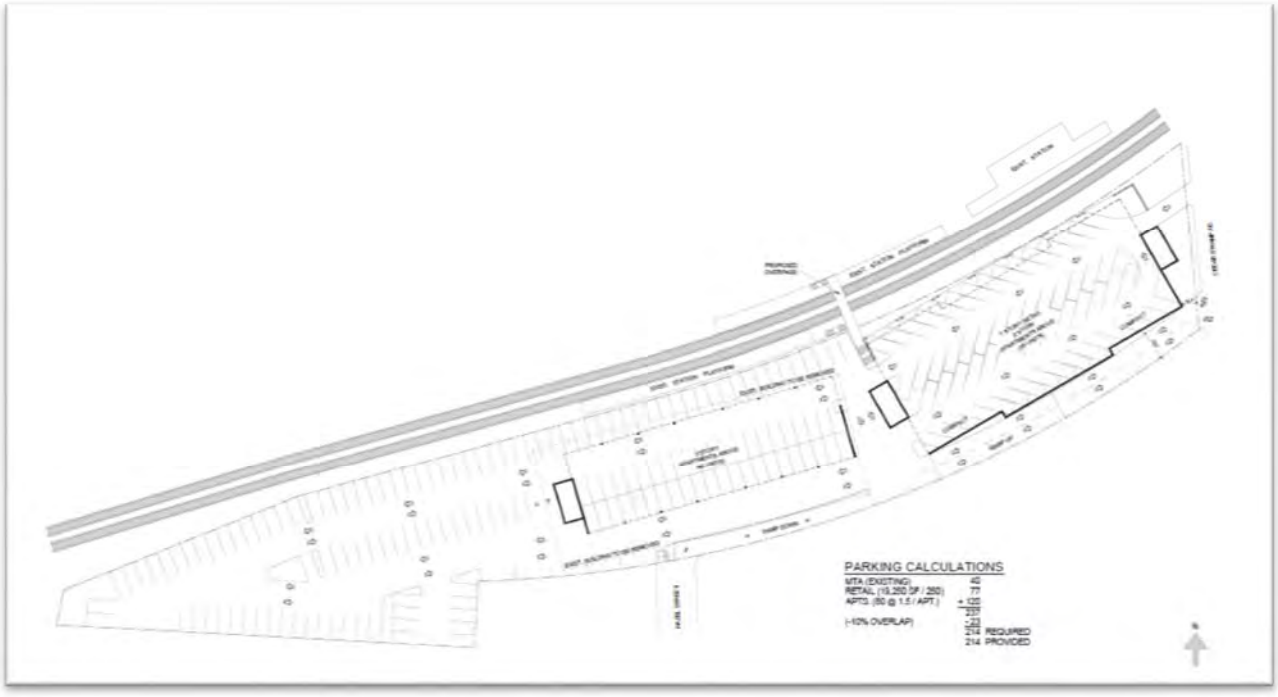
	Parameter	Existing	Yield under current zoning	Alternative	Alternative Proposal	Alternative Proposal
	Use	Parking Lot	Residential	Improved Parking Lot with Rain Garden	Community Garden	Rain garden
	Property Size (SF)	5,529.30	5,529.30	5,529.30	5,529.30	5529.3
Inputs	Commercial Floorspace (SF)	0	0	0	0	0
	Housing Units	0	1 one family	0	0	0
	Park/Open Space (sf)	5500	0	0	5529.3	5529.3
	Workforce Housing units	0	0	0	0	0
	Affordable Housing Units	0	0	0	0	0
	Residents	0	3	0	0	0
	Public School Children	0	1	0	0	0
Fiscal Impacts	Assessed Property Value	$154,400	$362,500	NA	NA	NA
	Taxable Value	$154,400	$362,500	NA	NA	NA
	Glen Cove Property Tax	$955	$2,243	NA	NA	NA
	School District Property Tax	$2,332	$5,476	NA	NA	NA
	Costs of City Services (per capita basis)	$0	-$2,669	NA	NA	NA
	Costs to School District	$0	-$11,134	NA	NA	NA
	Net Municipal Benefits	$955	$2,243	NA	NA	NA
	Net School District Benefits	$2,332	-$5,658	NA	NA	NA
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	3	minimal	minimal	0
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$203,667	minimal	minimal	$3,262
	Construction (One-Time) Business	NA	$569,568	minimal	minimal	$6,576
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	NA	1	NA	NA	NA
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	NA	$34,704	NA	NA	NA
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	NA	$95,318	NA	NA	NA
Community Benefits		Parking lot utilized by tenants of the apartment building and neighborhood residents	Sale of property for construction of a single family home	Improved community parking which more clearly designates for resident parking and provides a green infrastructure component for pollutant reduction, a handicap accessible and marked stall, and shade trees.	Community Garden resulting in loss of parking opportunity	Rain garden achieving pollutant reduction, with loss of parking

While the sale of the property would result in income to the city and provision of an additional residence on the block, the loss of the parking would result in an impact to tenants of the apartment building and residents in the area that utilize the lot. The improvement to the lot to formalize the parking as resident parking and including a rain garden component will continue to provide this benefit while achieving pollutant reduction for stormwater generated on site, as well as achieve a line of shade trees along the southern boundary.

5.1.4 Transit-Oriented Development (TOD) Site

A Transit Oriented Development (TOD) is a development that can include a residential, commercial or a mix of uses that is designed to take advantage of nearby transit. The Step II Nomination Study recommended the introduction of mixed-use development with ground floor retail adjacent to the Glen Street Station to provide an opportunity to facilitate redevelopment that is consistent with contemporary standards, satisfy local convenience shopping needs, and

provide additional street activity to further improve the visual perception of the neighborhood. A TOD was also recommended in the City's Master Plan and Cedar Swamp Road Corridor Study. Through this Implementation Strategy, working meetings were conducted with the MTA and LIRR and it was determined that a TOD located south of the Glen Street LIRR Station train tracks including the existing MTA parking lot was possible and would be expected to be supported by these agencies.



Conceptual Sketch of TOD south of Glen Street LIRR Station prepared by interested area stakeholder.

The above concept would include incorporate the current MTA ROW where parking exists which would need to be provided on the site following construction – however, a TOD in this area would not require use of the MTA ROW. For the purpose of this discussion, which was analyzed to determine feasibility of a development of this scale on the property, this concept is described more fully herein. The redevelopment of this area would likely involve a redevelopment partner that owns the current lot containing Retro Fitness (currently for sale) and as envisioned in the scenario such as the concept shown above, would include the construction of two new buildings, the more easterly fronting on Cedar Swamp Road and while not shown in the graphic, it would be recommended that the westerly building be tucked as far to the west on the lot as possible. The easterly structure would have grade-level retail or service commercial on Cedar Swamp Road to maintain commercial continuity, two floors of apartments above and parking below grade. The easterly building could contain approximately 20,000 square feet of retail and up to 40 apartment units. A 3D draft model has been prepared for the proposed configuration in order to visualize the proposal as it relates to the existing surrounding conditions of the neighborhood.

Draft 3D Model of conceptual TOD development south of Glen Street LIRR Station

This westerly building could be constructed in part over the current MTA-owned lot south of the Glen Street Station that is currently leased to and maintained by the City of Glen Cove. Meetings with the MTA were held in May and September of 2016, and the following conceptual process was developed as a potentially acceptable way to successfully incorporate that lot into a TOD redevelopment:

1. MTA swaps title of their 40-space parking lot south of Glen Street Station for equal value of land able to accommodate 40 parking spaces in current City parking lot north of Glen Street Station;
2. Redeveloper constructs 40 additional parking spaces west of existing City commuter lot (north of station);
3. City conveys 40-space lot south of station to private redeveloper for land value minus cost of improvement of the 40-space City lot expansion;
4. Redeveloper constructs TOD and reserves 40 spaces on the redevelopment site south of the Station for commuter use.

The TOD redevelopment would therefore result in City and MTA benefits of 40 additional parking spaces north of the station and would maintain the 40 spaces south of the station for MTA customer convenience. In exchange, the redeveloper would be able to construct a residential mixed-use development consistent with the 35 units per acre permitted in the Orchard Neighborhood. As envisioned, once the easterly building is completed, new space would be available for the Retro Fitness health club which is currently occupying the building on the property and has a long-term lease. The existing building would then be demolished, and a new apartment building constructed further to the west. The westerly building could contain up to

another 40 units on two floors located above one story of grade-level parking. Additional surface parking would be provided between the two structures. Under this scenario, parking relief would likely be required (237 spaces would be required by the Code and 214 would be provided) assuming the RIO-ON zoning is extended to the site. This would be appropriate given the parking demands of TOD developments in proximity to transit (LIRR in this case). The public input received indicated parking concerns related to such a development and the need to continue to provide parking for LIRR commuters. An analysis of the parking demand would need to be required as part of the site plan review and related analysis. The public input related to the redevelopment with a mixed use development that provides affordable housing was overwhelmingly positive.

The City would look to achieve some connectivity with the Orchard Neighborhood directly from the northerly terminus of Hazel Street through a pedestrian ramp or full-access road connection if feasible. This may require the City purchasing rights over an intervening parcel. The intent of this connection would be to increase housing values and demand by making the Glen Cove Station more convenient to the Orchard Neighborhood.

Following an economic analysis that analyzed the feasibility for a mix of units – it was determined that numerous scenarios would be economically viable. The City would also look to achieve a significant percentage of affordable units priced to meet the 30% to 80% of area median income (AMI) which achieves a higher rate than is currently required by City Code.

Based upon the analysis conducted and input from the Steering Committee, a TOD is recommended for the properties adjacent to the Glen Street Station. Based upon input from the committee, it was believed that a density of up to 80 units on the two acre site would be in line with the densities permitted in the RIO-ON District (35 units per acre), although based upon the analysis a TOD could feasibly include up to 200 residential units with a minimum of 50% affordable units at 80% of AMI. Based upon this input it is recommended that the permitted density for TOD development be 40 units per acre and, as the intent is to increase the amount of affordable housing proximate to transit and services, the recommendation is for a 30% requirement of affordable units at the following levels without any density increase over what is provided for in the code:

[1] At least 10% of proposed units affordable to households earning less than 30% of area median income (AMI);

[2] 10% of proposed units affordable to households earning less than 50% of AMI; and,

[3] 10% of proposed units affordable to households earning less than 80% of AMI.

To achieve this type of development, the Zoning Map would need to be amended to extend the RIO-ON District to include the properties within the BOA adjacent to the Glen Street LIRR Station and the RIO-ON code would be amended to permit a TOD of this scale with densities dependent upon benefits provided (including pedestrian connection to Hazel Street, provision of recreational space accessible to the public and provision of affordable units in perpetuity).

Economic Feasibility and Cost Benefit Analysis for TOD

Table 5-6 provides an analysis of various alternative mix of unit types for a TOD at the property south of the Glen Street Station. The analysis assumed the inclusion of approximately 13,500 SF area within the MTA ROW which achieves over 2 acres for the development. An analysis of the economic feasibility of the development for a TOD on the site containing 80 units and a comparison to a TOD on the site containing 200 units (which was not supported by the Steering Committee) was also prepared to ensure that the recommendations are realistic for implementation (see TOD Development Options worksheet in **Appendix B**). For all of the options, there is a gain in property tax income, although the cost of community service increases with the addition of residents on the property, it is projected that the tax revenue will exceed the costs. Because the units proposed contain a higher number of studios and 1 bedroom units, the projected number of school aged children is very low, and thus the cost to the school district is correspondingly low and thus taxes generated for the school district are greater than the cost for education of students. A table that provides the multipliers utilized to project the number of residents and public school-aged children is included in **Appendix B**. Construction and long term jobs created by the conceptual development are similar for each of the options – between 177 – 210 construction jobs and between 71 and 97 jobs following construction (direct, indirect and induced[12]).

[12] See Section 4.4 for definitions of direct, indirect and induced jobs.

TABLE 5-6
COST BENEFIT ANALYSIS
TRANSIT-ORIENTED DEVELOPMENT

	Parameter	Existing	Alternative 1	Alternative 2A	Alternative 2B	Alternative 2C	Alternative 2D
	Use	Commercial	Mixed Use TOD (as per local architect)	All Market Rate Units (35 Units per Acre)	Mixed Use TOD (80 market rate)	50-50 Market Rate (80% AMI)	70-30 Market to Affordable (Mixed Incomes 30-80% AMI)
	Property Size (SF)	82,398	also included MTA Parking area (additional 13,500 SF)	82,398	82,398	82,398	82,398
Inputs	Commercial Floorspace (SF)	28,185	19,250	20,000	20,000	20000	20,000
	Market Rate Housing Units	0	80 apartments	65 Units (16 studios, 41 1 BR, 8 2BR)	80 Units (22 studios, 46 1 BR, 12 2BR)	40 Units (11 studios, 23 1 BR, 6 2BR)	56 Units (14 studios, 35 1 BR, 7 2BR)
	Park/Open Space (sf)	0					
	Workforce Housing units	0					
	Affordable Housing Units					40 Units (11 studios, 23 1 BR, 6 2BR)	24 Units (6 studios, 15 1 BR, 3 2BR)
	Residents	0	113	92	112	112	113
	Public School Children	0	3	2	3	3	3
Fiscal Impacts	Assessed Property Value	$ 1,932,800	$ 8,686,560	$ 7,127,000	$ 8,048,534	$ 8,224,969	$ 8,275,515
	Taxable Value	$ 1,932,800	$ 8,686,560	$ 7,127,000	$ 8,048,534	$ 8,224,969	$ 8,275,515
	Glen Cove Property Tax	$ 34,598	$ 155,495	$ 127,578	$ 144,074	$ 147,233	$ 148,137
	School District Property Tax	$ 88,581	$ 398,109	$ 326,634	$ 368,868	$ 376,954	$ 379,271
	Costs of City Services (per capita basis)	$ -	$ (90,699)	$ (73,751)	$ (90,321)	$ (90,321)	$ (90,691)
	Costs to School District	$ -	$ (57,677)	$ (41,615)	$ (51,106)	$ (51,106)	$ (51,106)
	Net Municipal Benefits	$ 380,216	$ 300,848	$ 299,076	$ 299,002	$ 302,160	$ 302,695
	Net School District Benefits	$ 88,581	$ 340,432	$ 285,019	$ 317,762	$ 325,848	$ 328,165
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	210	177	177	177	177
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$ 14,465,693	$ 12,202,860	$ 12,202,860	$ 12,202,860	$ 12,202,860
	Construction (One-Time) Business	NA	$ 39,023,853	$ 32,919,447	$ 32,919,447	$ 32,919,447	$ 32,919,447
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	69	97	89	86	71	79
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$ 2,712,667	$ 4,596,848	$ 4,111,415	$ 3,946,786	$ 3,105,310	$ 3,573,859
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$ 6,833,163	$ 12,188,634	$ 10,843,603	$ 10,406,626	$ 8,087,183	$ 9,370,183
Community Benefits			Pedestrian connection from Hazel Street	Pedestrian connection from Hazel Street	Pedestrian connection from Hazel Street	Pedestrian connection from Hazel Street	Pedestrian connection from Hazel Street

Recommended Zoning Amendments in support of TOD

It is recommended that the Zoning Map be amended to extend the RIO-ON District to the property adjacent to the Glen Street Station and within 400' along Cedar Swamp Road and be accompanied by amended code language to permit redevelopment of this area as TOD.

The intent is to achieve a mixed income project with accessory commercial space (at a rate of 200 SF per residential unit), that has pedestrian access from the south end of Hazel Street, and adequate parking for the uses.

The recommended draft code language for the RIO-ON District is provided in Appendix I-3. In summary, to qualify for the density permitted for a TOD, the property requires a minimum of 40,000 SF in area, will provide pedestrian access from the Hazel Street; require 200 SF of commercial space per residential unit, require 30% affordable units as follows, at least:

- 10% of proposed units affordable to households earning less than 30% of area median income (AMI);
- 10% of proposed units affordable to households earning less than 50% of AMI; and,
- 10% of proposed units affordable to households earning less than 80% of AMI.

It is recognized that the commercial uses on the site will be supported in part by the residents of the property and therefore, the parking requirements should account for this. Therefore, it is recommended that reductions be permitted (1 space/1,500 SF of retail or 750 SF of office).

If the Zoning Map Amendment is adopted and RIO-ON District is amended, the property owner would have the option to redevelop the property as a TOD. If the intent is to incorporate the MTA ROW, additional outreach with these agencies will be required and agreements regarding this property.

Environmental Recommendations for the TOD

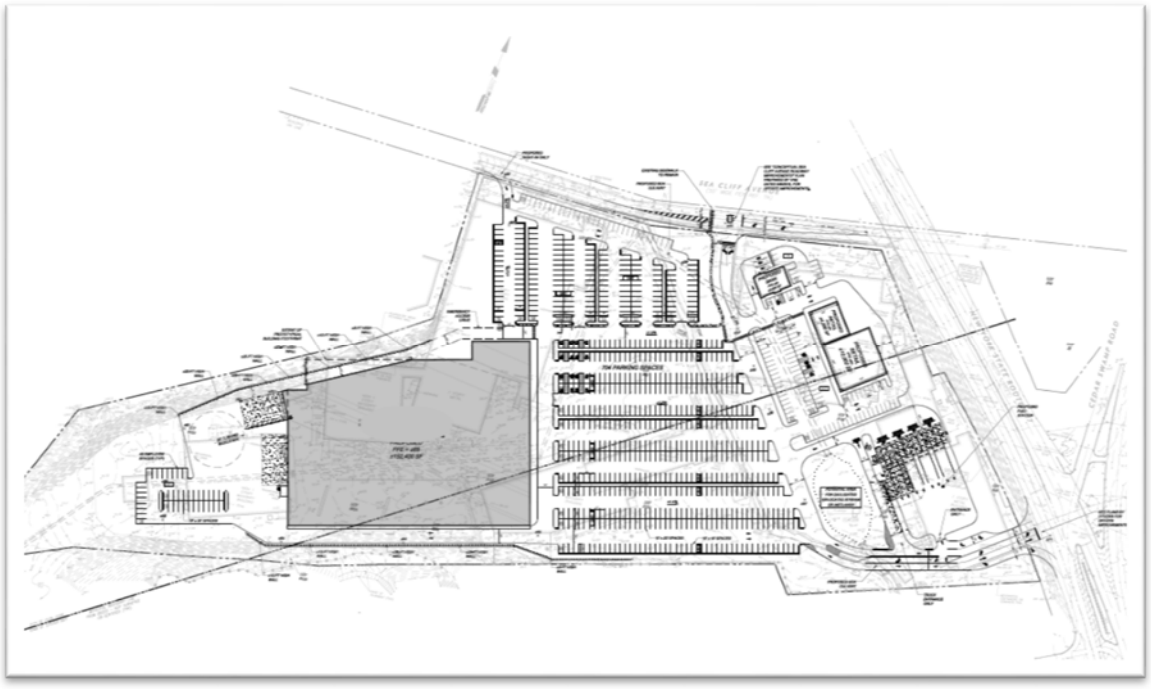
There are no environmental recommendations for the TOD concept at this time although the National Grid site is located to the southwest of the property. A Phase I ESA would be required by any commercial lender for purchase of the site, if financing were required. However, there are no known environmental sources of contamination on the subject property; and, in consideration that the properties are privately owned and the proposal for redevelopment as a TOD is as a future land use, it is not appropriate to prepare a Phase I ESA at this time.

5.1.5 Sea Cliff Avenue Corridor Sites

Photocircuits and Pass & Seymour Sites

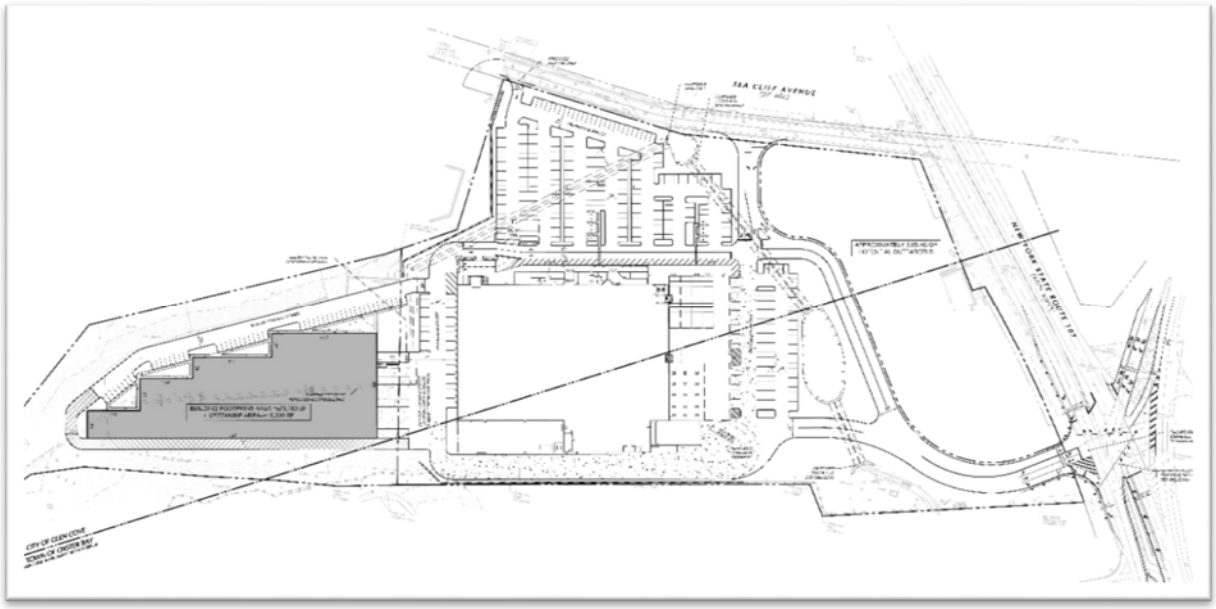
Two versions of a redevelopment plan for the former Photocircuits property at 31 Sea Cliff Avenue and the former Pass & Seymour site at 45 Sea Cliff Avenue have been provided by the applicant's attorney; the plans' components have been analyzed during this project. Both conceptual plans propose demolition of all onsite improvements and construction of new development. Both options recognize the need for direct access to NYS Route 107. The NYSDOT will require a highway work permit to allow an additional access to NYS Route 107 at the southern corner of the property. The applicant had identified a number of obstacles with respect to redevelopment in consideration of past land use and contamination and indicated that they were working with the NYSDEC on cleanup of the site.

The initial concept illustrated a wholesale retail use or other large format retail use and separate pad sites to be used for various uses which may include a bank, retail and a gas station. Due to site constraints with respect to the ongoing cleanup, management of stormwater on the site poses a unique difficulty (if the entire site is to be redeveloped), since recharging stormwater to groundwater while cleanup is underway is not appropriate. Therefore, a creative solution to management of stormwater was developed for the initial concept plan to provide a surface water feature with overflow to Glen Cove Creek which requires approval from the Nassau County DPW and DEC.



Initial Conceptual Site Plan submitted for the former Photocircuits/Pass & Seymour Sites, Sea Cliff Avenue, Glen Cove

The more recent concept plan (see below) illustrates construction of a single large format retail use, a portion of the site for manufacturing to accommodate an existing employer within the City that is seeking a larger facility, and area for additional uses in future.



Neither proposal is consistent with the current City of Glen Cove I-2 Zoning and thus code amendments would be required to enable such redevelopment. Such code amendments would need to be evaluated by the City and reviewed under the SEQRA prior to adoption by the City Council to ensure that no significant environmental impacts are incurred related to implementation of zoning modifications – and large projects would require site specific environmental review as well. In addition, within the I-1 District, a special use permit may be granted for business enterprises or membership clubs related to leisure time activity, and specifically includes tennis, swimming and health clubs as examples (and by inclusion, such special use permit is possible within the I-2 District as well). It is recommended that this language be refined to include a larger variety of indoor commercial recreation uses, so it is clear that recreational uses encompass a greater scope of variety. Code amendments have been drafted for consideration by the City Council. The Code amendments for the I-1 and I-2 districts and a memorandum outlining the amendments to the I-2 District are provided in **Appendix I-2**. The redevelopment of the site would subsequently be subject to a SEQRA review as well to analyze the specific impacts of the development once a formal application is submitted and under review by the City Planning Board.

A cost benefit analysis was prepared to compare the fiscal and economic benefits as well as other benefits of the redevelopment of the Photocircuits and Pass & Seymour sites. **Table 5-7** provides a comparison of the current conditions as compared to the two alternatives that have been considered during the course of this study.

TABLE 5-7
COST BENEFIT ANALYSIS FOR REDEVELOPMENT ALTERNATIVES

	Parameter	Existing	Former Development Proposal	Development Proposal
	Use	Photocircuits and Pass Seymour Superfund Sites (developed with multiple vacant buildings that have been abandoned)	Regional Commercial Center including wholesale with gasoline service and additional retail stores	Large Format Retail + Relocated Manufacturing
	Property Size (acres)	23.00	23.00	23.00
Inputs	Retail (SF)	0	14,200	-
	Big Box	0	162,400	152,245
	Manufacturing	0	-	89,700
	Gas Station (pump islands)	0	4	-
	Bank (SF)	0	2,800	-
	Housing Units	0	0	0
	Park/Open Space (sf)	0	0	0
	Workforce Housing units	0	0	0
	Affordable Housing Units	0	0	0
	Residents	0	0	0
	Public School Children	0	0	0
Fiscal Impacts	Assessed Property Value	$2,168,099	$26,755,267	$26,321,801
	Taxable Value	$2,168,099	$26,755,267	$26,321,801
	Glen Cove Property Tax	$38,810	$478,937	$471,178
	School District Property Tax	$99,365	$1,226,206	$1,206,340
	Retail Sales Taxes	$0	$2,165,550	$1,866,897
	Costs of City Services (per capita or commercial psf basis)	$0	$0	$0
	Costs to School District	$0	$0	$0
	Net Municipal Benefits	$38,810	$2,644,487	$2,338,076
	Net School District Benefits	$99,365	$1,226,206	$1,206,340
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	231	316
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$16,128,039	$22,095,688
	Construction (One-Time)	NA	$39,336,024	$53,891,021
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	NA	449	526
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	NA	$17,584,971	$24,055,986
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	NA	$44,142,253	$56,154,364
Community Benefits		None. In current configuration, site is composite of two abandoned industrial uses.	New access to site from NYS 107; removal of blighted site	New access to site from NYS 107; removal of blighted site; retaining existing business

The community benefits of the current development proposal are more favorable with respect to job creation in comparison to the original development proposal, both in the short term with construction jobs and long term following construction and full operation. The most recent concept has the added benefit of providing a long term solution for a manufacturer that is located

in the City and will need to relocate – and optimally to do so within the City of Glen Cove. The former proposal does achieve a higher tax benefit for the City and taxing jurisdictions, however it is noted that the full build of the site under the current concept (with additional pad sites that would be future development) would increase tax revenue and would be expected to achieve at least the amount projected for the original conceptual plan (i.e the eastern portion of the site is shown as undeveloped, whereas formerly included retail, a bank, and gas pumps).

The properties have adequate acreage to support solar photovoltaic and small-scale wind installation and are identified as being able to support geothermal energy generation using geothermal heat pumps. Small-scale rooftop solar on new buildings and solar carports on the parking lot portions of the property are likely the primary solar installation options for the redevelopment and the NY Solar Map indicated high solar radiation on existing rooftops. The Pass & Seymour and Photocircuits sites fulfill the acreage requirement for small-scale wind energy generation. It is anticipated that the site can accommodate geothermal heat pump technology for new or existing buildings, according to the EPA RE-Powering Mapper.

Pall Corporation Site

The Step II Study provided preliminary recommendations for redevelopment across the three strategic industrial sites (Photocircuits, Pall Corporation and Pass & Seymour) that included a range of wholesale, retail, restaurant and indoor recreational uses. The conceptual plan prepared to accompany these recommendations for reuse (Figure 17 from the Step II) specifically called for indoor recreation on the Pall Corporation site, but stated that the recommendations for the large redevelopment sites were interchangeable and would depend upon the market. The 2009 Master Plan recommended that the Sea Cliff Avenue Industrial Area be redeveloped with high-density office uses and ancillary retail. However, it is unlikely that the current market for office space would support development of high-density office space at this location. By the time the BOA Step III project was initiated, the building at the Pall Corporation site located at 30 Sea Cliff Avenue had been demolished and the site cleanup was underway.

Google aerial view of former Pall Corporation Site

At the time that the BOA Step III project was initiated, Hampshire Companies was the

contract vendee of the property (under contract contingent upon land use approvals) and indicated the desire to construct a three-story self-storage facility. As envisioned, the proposal conformed to zoning standards, with the exception of height, for which relief was required. The hardship that formed the basis for the relief was that additional height was required to accommodate cleanup infrastructure, which generally occupies the northerly third of the site. The applicant had taken the initiative to establish a settlement with NYSDEC that enables redevelopment to occur as the remedies for remediation are established. The new building was designed to be contained completely outside of the monitoring and remedy area.

The new building may be a suitable location for renewable energy technologies such as the installation of small-scale, off-grid rooftop solar panels. The NY Solar Map, a City University of New York online map, indicated that there is relatively high solar radiation on existing rooftops of the site. According to NYSERDA, there are several basic requirements for small wind technologies to be successful, including: the availability of at least one acre of land, appropriate annual wind speed determined by an analysis, and local governmental approval for the wind turbine tower. The Pall Corporation site meets the acreage requirements for wind energy production. It is anticipated that the site can accommodate geothermal heat pump technology for new or existing buildings, according to the EPA RE-Powering Mapper.

The BOA Steering Committee recognized that the redevelopment of the property as self-storage would not constitute the highest and best use for the site, as the project would generate little to no local economic benefits with respect to job creation. However, the Committee recognized that the redevelopment of the site with a viable business would provide a benefit in the development of a long-time vacant, abandoned property and might support some local retail and service businesses by providing low-cost storage.

Approved Redevelopment Plan for former Pall Corporation Site

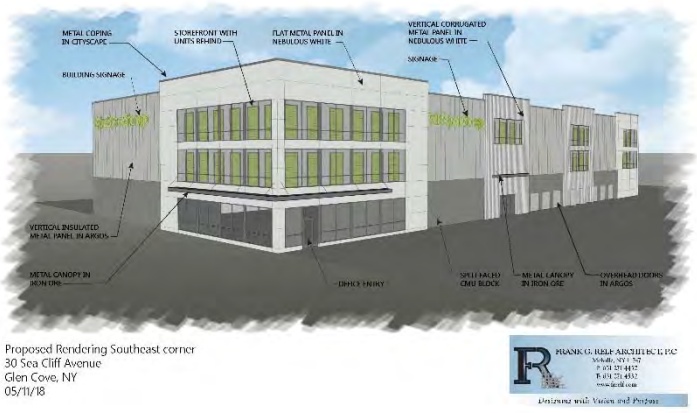
It is recognized that the proposed use as a self-storage facility was not the ideal redevelopment of the property in consideration of job creation and that this is one of the main goals for the BOA. However, the redevelopment of the site in general provides certain opportunities that were considered – and ultimately, the benefits were identified, and the following recommendations were provided to the Planning Board for consideration of the Site Plan application (which has since been approved):

- The purchaser would be required to prepare a SMP which would be the next step in cleanup of the property.

- Redevelopment would result in aesthetic benefits, including landscaping along Sea Cliff Avenue.

- There is an established utility and right-of-way (ROW) easement over the western boundary of the Pall Corporation property for access to the August Thomsen Corporation property; however, much of the area shown within the bounds of the easement has eroded into Glen Cove Creek. The committee recommended that a 30-foot ROW easement be established along the westerly boundary of the Pall Corporation property from Sea Cliff Avenue to the August Thomsen site as well as to the City property currently utilized for Head Start and the Day Care Center. Access from Pratt Boulevard to the City property is via a limited access highway (southbound only) and a second access for vehicles and pedestrians would be beneficial. Hampshire added this easement to the site plan and it was incorporated as a condition of site plan approval.

- Finally, it was recognized that the Pall Corporation Site, if developed with a multistory building, will be visible from Pratt Boulevard, a gateway to the City of Glen Cove. Thus, the committee recommended aesthetically pleasing architecture be employed on the property. During site plan review, the Planning Board provided extensive comment on the architecture of the building, reviewing several architectural options based on the end user's (Extra Space Self Storage) facilities around the country. The final design is shown at here (as submitted to the Planning Board by Frank G. Relf Architect, P.C.).



Proposed Rendering Southeast corner
30 Sea Cliff Avenue
Glen Cove, NY
05/11/18

The proposed self-storage warehouse will provide modest fiscal benefit to the City and the School District; the project would result in the generation of over $100,000 to the City in annual tax revenue and over $260,000 to the school district with no added burden to the school district. The economic impacts/benefits are achieved in the short term, with approximately 79 direct, indirect and induced full-time jobs created; in the long term, this number is reduced to 20.

3-D Model of redevelopment plan for former Pall Corporation Site

An application was made to the Planning Board on September 5, 2017. The Planning Board convened a public hearing on March 6, 2018, at which time the particulars of the NYSDEC cleanup of the site, the architectural appearance of the site and the proximity of the Day Care were foremost among considerations. On March 27, 2018, Hampshire Companies provided the Planning Board with copies of the March 2004 Record of Decision for Operable Unit 1 and the March 2013 Record of Decision for Operable Unit 2, indicating details of the required cleanup. On May 1, 2018, the Lead Agency further discussed contamination concerns, the proximity to the Glen Cove Child Day Care Center, the involvement of the Day Care in NYSDEC's remedial action plan, the potential for soil contamination to be exposed during construction, the handling of stormwater under NYSDEC's institutional controls, the relationship of Hampshire Companies to the NYSDEC cleanup, and the impact on Hampshire's plan in the event that the NYSDEC cleanup is modified based on concerns regarding the adjacent Glen Cove Child Day Care Center.

On May 8, 2018, Hampshire Companies submitted a draft Part 3 Environmental Assessment Form (EAF) based in large part on testimony prepared by its technical consultants including a letter from Richard J. Tobia, PE of Vertex Engineering, PC dated May 7, 2018 detailing the environmental conditions and proposed NYSDEC cleanup of the site. The EAF also included a description by Joseph A. Deal, PE of Bohler Engineering NY, PLLC dated May 7, 2018 detailing the particulars of how stormwater will be mitigated in light of the contaminated groundwater underlying the site. The EAF further addressed how the building design had evolved with input by the City's various Boards and how this architecture and incorporated landscaping will mitigate significant public views.

On May 15, 2018, the Planning Board heard testimony from the project sponsor's environmental engineer regarding the proposed cleanup and the changes to NYSDEC's remedial action plan to accommodate the proposed development. Having much concern about the potential impacts on the adjacent Day Care, and with knowledge of the Mayor and City Council's letter to NYSDEC regarding those concerns, the Planning Board requested that Hampshire provide more information. In response, three members of the Planning Board attended the June 26, 2018 meeting between NYSDEC, NYSDOH, the City of Glen Cove and the Glen Cove Child Day Care Center.

On July 17, 2018, the three Planning Board members reported to the balance of the Planning Board details of their attendance at the meeting, specifically regarding how the NYSDEC tailors its cleanup standards to the zoning of the site, and how concerns regarding the proximity of the Day Care are being addressed through replacement of the vapor mitigation system and institution of an air monitoring program among other measures.

On July 31, 2018, the Planning Board reviewed the submission and considered the advice of its consultants. Having found that the documents submitted along with testimony and information received from the NYSDEC provided adequate information and analysis to determine the importance of potential large impacts, the Planning Board adopted the Part III EAF and a Negative Declaration of Environmental Significance, and found as follows:

- Potential impacts from stormwater to the Glen Cove Creek can be mitigated by the construction of a stormwater treatment system to be approved by Glen Cove DPW, Nassau County DPW and NYSDEC;

- Significant Visual Impacts are mitigated by the improvement of the architecture proposed for the building as well as installation of landscaping throughout the site, and the existing site disposition, which is a blighting condition, will be alleviated;

- the proposed action is not directly related to the cleanup of the site, which will continue to be performed by the NYSDEC even in the absence of the project;

- that the proposed action as distinguished from the NYSDEC cleanup is not likely to result in health impacts to the adjacent Day Care or other area or future site users; that the proposed project has been designed under the review of NYSDEC in a manner that does not impair NYSDEC's ability to clean up the groundwater;

- that the proposed project cannot be constructed until NYSDEC has completed remediation of the site to commercial standards;

- that NYSDEC has reviewed the proposed project and will require the project sponsor to institute such institutional controls as are necessary to ensure that construction on the site does not result in impacts from exposure to on-site contaminants; and,

- that if NYSDEC must change its remedial action plan in response to concerns about the neighboring Day Care center and in a way that precludes construction of the proposed self-

storage project as shown on the site plan, the applicant would be required to return to the Planning Board and amend its site plan.

On July 31, 2018, Hampshire's proposed site plan was approved by the Glen Cove Planning Board.

A cost benefit analysis was prepared to compare the fiscal and economic as well as other benefits of the redevelopment of the Pall Corporation site. **Table 5-8** provides a comparison of the cost and benefit values for the vacant condition as compared to the self-storage use on the site.

TABLE 5-8
COST BENEFIT ANALYSIS FOR SELF STORAGE WAREHOUSE

	Parameter	Existing	Proposed Self Storage
	Use	Vacant Land (former Pall Corp) Superfund Site	3 story self storage warehouse
	Property Size (acres)	3.80	3.80
Inputs	Commercial Floorspace (SF)	0	105,600
	Housing Units	0	0
	Park/Open Space (sf)	0	0
	Workforce Housing units	0	0
	Affordable Housing Units	0	0
	Residents	0	0
	Public School Children	0	0
Fiscal Impacts	Assessed Property Value	$346,000	$5,728,448
	Taxable Value	$346,000	$5,728,448
	Glen Cove Property Tax	$6,194	$102,543
	School District Property Tax	$15,857	$262,537
	Costs of City Services (per capita basis)	$0	$0
	Costs to School District	$0	$0
	Net Municipal Benefits	$6,194	$102,543
	Net School District Benefits	$15,857	$262,537
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	79
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$5,662,843
	Construction (One-Time) Business	NA	$13,305,795
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	0	20
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$0	$1,420,879
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$0	$3,465,501
Community Benefits		None. In current configuration, site is abandoned industrial use - building has been removed, but site is overgrown, with broken pavement and unsightly.	Access easement from Sea Cliff Avenue to City property currently developed with a Day Care and boxing gym. Currently the only access is via Route 107 southbound.

Day Care Site

This is a City-owned property (currently leased by the Day Care). The site has constraints with respect to wetlands, limited access, and environmental quality. The property is accessible only via the southbound lanes of Route 107 (Pratt Boulevard). Exiting the site is particularly difficult for trucks and there are no pedestrian amenities available to allow safe walking to the Day Care

center. Several wells which formerly provided a large portion of the City's water supply, but which are now closed due to groundwater contamination, are located on the site. Three potential scenarios are currently under consideration for the future use of the Day Care Center but are not being acted upon at the present time:

1. Sell the property with a lease and allow the new owner to charge the Day Care rent;
2. Sell the property without a lease requirement and allow the buyer to relocate the Day Care; and
3. Sell the property and give the school $1,000,000 seed money out of $3,000,000 sales price to relocate itself. An appraisal of the property, both with the buildings and as vacant land, has been completed by the Glen Cove CDA.

A further potential scenario for the Day Care Center would involve a local developer who purchased property on Cedar Swamp Road. If the developer can build a 10,000 square foot building for the Day Care Center, the lot could be swapped with the City. If the Day Care Center is not relocated, alternative access plans, including the provision of safe pedestrian access routes, should be considered.

Depending on the redevelopment outcome, there may be potential for renewable energy generation on the site. Small-scale, off-grid rooftop solar (high solar radiation indicated on existing building) may be applicable for existing or new buildings and ground-mounted solar or solar carports may be feasible for areas of the site not covered by buildings. The wind speeds present at the Day Care property are above the threshold for economically feasible wind turbine installations and wind energy may be viable despite the site's "below average" wind energy potential rating from New York State's Small wind Explorer report. Further analysis of the site is needed to make this determination and to understand the appropriate scale for a wind turbine if wind energy is viable.

5.2 Proposed Land Use and Zoning

Future Land Uses

The major changes in land use within the BOA involve two areas: the redevelopment of the currently abandoned former industrial sites on Sea Cliff Avenue from industrial to a mix of commercial and industrial uses; and the redevelopment of the commercial property (zoned industrial) south of the Glen Street LIRR Station to a mixed-use TOD. There is a property that is located at the western end of Carney Street that is currently an industrial use and is thus shown as industrial land use. However, it is noted that any of the properties within the RIO-ON District have the potential for redevelopment by special use permit for multifamily residential use if sufficient land area is available. The future land use may thus include residential for this property and any other property within the RIO-ON District (including extensions to the RIO-ON if adopted by the City Council). It is noted that the reuse of the Coles School for another educational use and the redevelopment of the Orchard with new residential units do not constitute changes in land use and thus are not reflected as changes on the Future Land Use Map. Specific land use recommendations for each of the Strategic Sites/Areas are provided in **Section 5.1**. **Figure 5-5** illustrates the recommended land uses reflecting changes to strategic sites as noted above.

City of Glen Cove
and
New York Department of State

The Orchard Neighborhood
Step III BOA

FIGURE 5-5
Recommended Land Use

Legend

- Boundary

Recommended Future Land Use

- Residential
- Apartments
- TOD
- Commercial
- Community Facilities
- Commercial/Industrial
- Industrial
- Utility

Source: NYSGIS Orthoimagery Program, 2016

Print Date: November 16, 2018

0 500 Feet

1 inch = 500 feet

Proposed Zoning Map and Code Amendments

The achievement of desired future land use for strategic sites requires certain amendments to the City of Glen Cove Zoning Code which are discussed in this section. As envisioned, the Zoning Map will be amended to extend the boundaries of the RIO-ON Overlay District to include the property adjacent to the LIRR Station. **Figure 5-6** provides the recommended amendments to the Zoning Map which are described below:

- The northernmost area of the BOA is currently zoned I-2, which is contrary to the current and recommended uses for this area. Currently the properties are developed with commercial uses and are not suitable for industrial use. Therefore, it is recommended that the zoning be changed to B-2. In addition, this area should be included within an expanded RIO-ON District which will be revised to incorporate zoning provisions for development of TOD.

- South of this area the I-2 District extends into the Orchard Neighborhood that is primarily residential in nature. It is recommended that this area be rezoned to R-4.

  Along Grove Street and at the east end of Carney Street properties are currently zoned B-2 Peripheral Commercial District – which was appropriate in the past when these blocks historically contained a mix of retail and housing uses. However, this area has shifted to primarily residential use, and commercial uses have not survived here in recent years, nor can the properties accommodate the parking required for commercial businesses today. Therefore, it is recommended that these blocks be rezoned to R-4 as shown on **Figure 5-6**. Similarly, there are several parcels within the Orchard Neighborhood on the north side of Carney Street that are zoned I-2 which are recommended for rezoning to R-4.

Code amendments have been drafted for consideration by the City Council and are provided in **Appendix I-2** Proposed I-1 and I-2 Zoning District Amendments & Memorandum and **Appendix I-3** Proposed RIO-ON Zoning District Amendments and are described below:

- RIO-ON District amendments are recommended to support a TOD (transit-oriented development) consisting of affordable and market-rate units and a small commercial center supplying local goods adjacent to the Glen Street LIRR Station. The RIO-ON District regulations have been revised to allow TOD mixed-use commercial and residential structures with the permissible density of units increased to 40 units per acre as long as certain standards are met related to lot size, provision of at least 30% affordable units (including 10% each affordable to households earning less than 30%, 50% and 80% of area median income (AMI)), access between Hazel Street and Cedar Swamp Road; provision of adequate parking on-site and provision of a commercial component. Note: these provisions would set standards for affordable housing in this area beyond current City Inclusionary Housing Code.

- To support additional revitalization within the Orchard Neighborhood, it is recommended that modifications to the RIO-ON District be adopted which reduce standards for outdoor

usable open space and increase permissible height townhouses where parking in attached garages is proposed on a ground floor and where it is consistent with the character of the neighborhood.

- It is recommended that the I-2 District regulations be amended to permit a Regional Commercial Center by Special Use Permit as follows:

  A Regional Commercial Center, defined as a tract of land with buildings or structures planned as a whole, intended for three or more tenant spaces in which at least one single-tenant space is at least 50,000 square feet in size, intended to serve a regional market, that meets the following Special Use Permit Criteria:

  a. Minimum lot size for the entire parcel is 10 acres;
  b. No single tenant space or pad site shall be less than 4,000 square feet, except that the Planning Board may permit tenant spaces as small as 2,500 square feet, where the use includes a drive-through facility as an integral component of the use;
  c. Tenant spaces or pad sites shall be used for retail stores, grocery stores, restaurants (including fast-food or take-out), commercial recreation, personal service shops, gasoline filling stations, hotels and any other uses listed as permitted principal uses in the district;
  d. Nothing shall be construed to limit tenant spaces under single ownership or leasehold from being used for multiple permitted and traditionally complementary uses including but not limited to gasoline filling stations with convenience stores; hotels with restaurants and convenience markets or gift shops; or retail stores with coffee shops (restaurants);
  e. The parcel must provide direct access to the northbound and southbound lanes of a State Highway; and,
  f. Sufficient off-street parking will be provided to satisfy the mix of proposed uses and the proposed mix of uses will not result in significant traffic impacts as demonstrated upon submission of a parking demand study and traffic capacity analysis by a qualified traffic engineer.

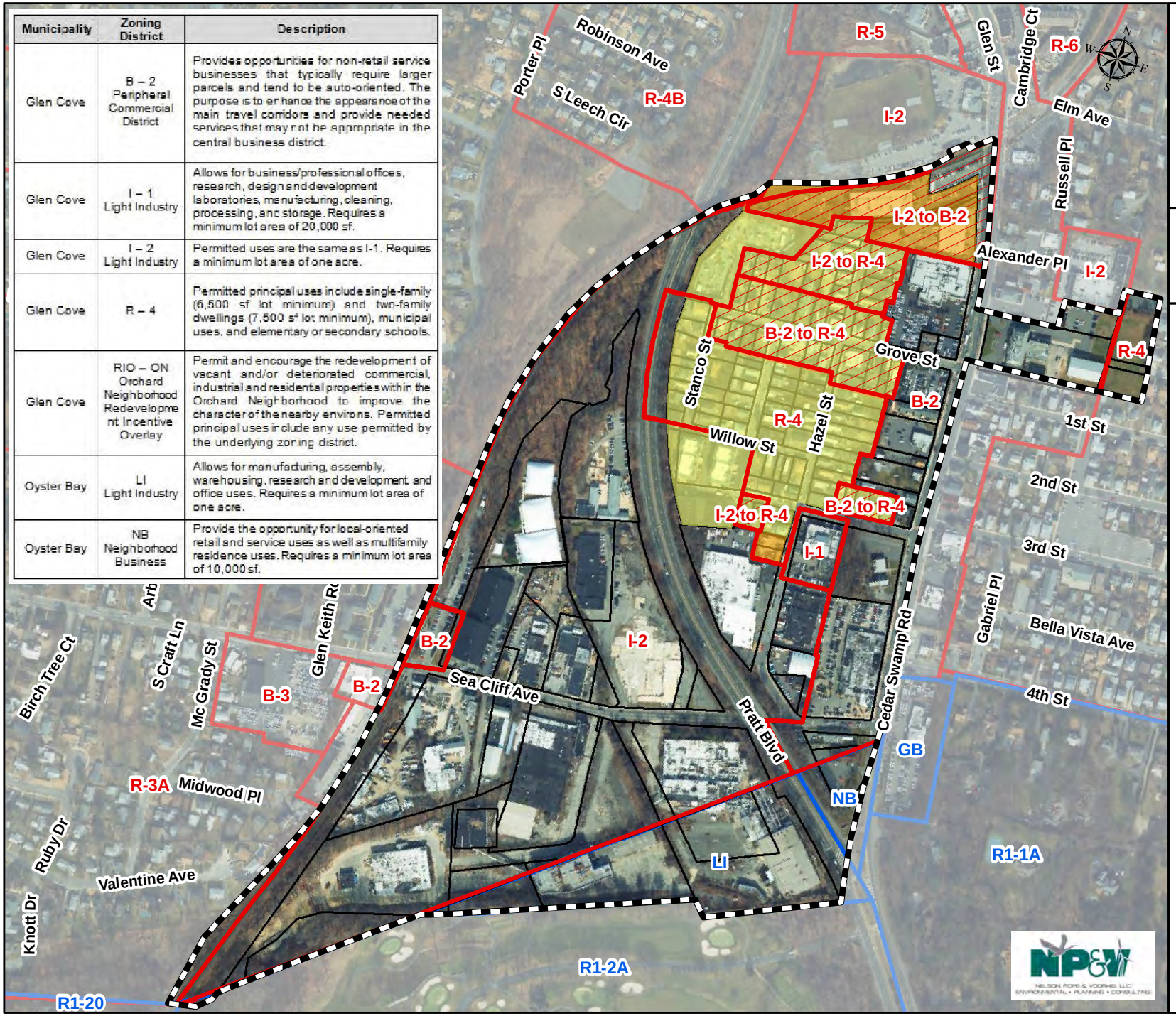
- It is recommended that the I-1 District language be modified to better define leisure time activities under permitted Special Permit Uses.

5.3 Implementation Projects

Through preparation of this Step III, a number of priority projects have been identified with respect to capital improvements and redevelopment of privately-owned property. Some of the recommendations have already been implemented through the BOA process. Redevelopment as envisioned in this plan will be encouraged through adoption of an amended Zoning Map and amendments to the Zoning Code (the I-2 District and RIO-ON District language).

Capital improvements and procedural items recommended are summarized in **Table 5-9** that also identifies specific actions and funding required for implementation. Major implementation projects are shown in **Figure 5-7 Implementation Tasks**.

Municipality	Zoning District	Description
Glen Cove	B – 2 Peripheral Commercial District	Provides opportunities for non-retail service businesses that typically require larger parcels and tend to be auto-oriented. The purpose is to enhance the appearance of the main travel corridors and provide needed services that may not be appropriate in the central business district.
Glen Cove	I – 1 Light Industry	Allows for business/professional offices, research, design and development laboratories, manufacturing, cleaning, processing, and storage. Requires a minimum lot area of 20,000 sf.
Glen Cove	I – 2 Light Industry	Permitted uses are the same as I-1. Requires a minimum lot area of one acre.
Glen Cove	R – 4	Permitted principal uses include single-family (6,500 sf lot minimum) and two-family dwellings (7,500 sf lot minimum), municipal uses, and elementary or secondary schools.
Glen Cove	RIO – ON Orchard Neighborhood Redevelopment Incentive Overlay	Permit and encourage the redevelopment of vacant and/or deteriorated commercial, industrial and residential properties within the Orchard Neighborhood to improve the character of the nearby environs. Permitted principal uses include any use permitted by the underlying zoning district.
Oyster Bay	LI Light Industry	Allows for manufacturing, assembly, warehousing, research and development, and office uses. Requires a minimum lot area of one acre.
Oyster Bay	NB Neighborhood Business	Provide the opportunity for local-oriented retail and service uses as well as multifamily residence uses. Requires a minimum lot area of 10,000 sf.



City of Glen Cove
and
New York Department of State

The Orchard Neighborhood
Step III BOA

FIGURE 5-6
Proposed Zoning Map Amendments

Legend

- Boundary
- Parcels

Glen Cove Zoning

- Proposed Zone Changes
- Zoning Districts

RIO-ON Overlay District

- Existing RIO-ON District
- Proposed RIO-ON Expansion

Oyster Bay Zoning

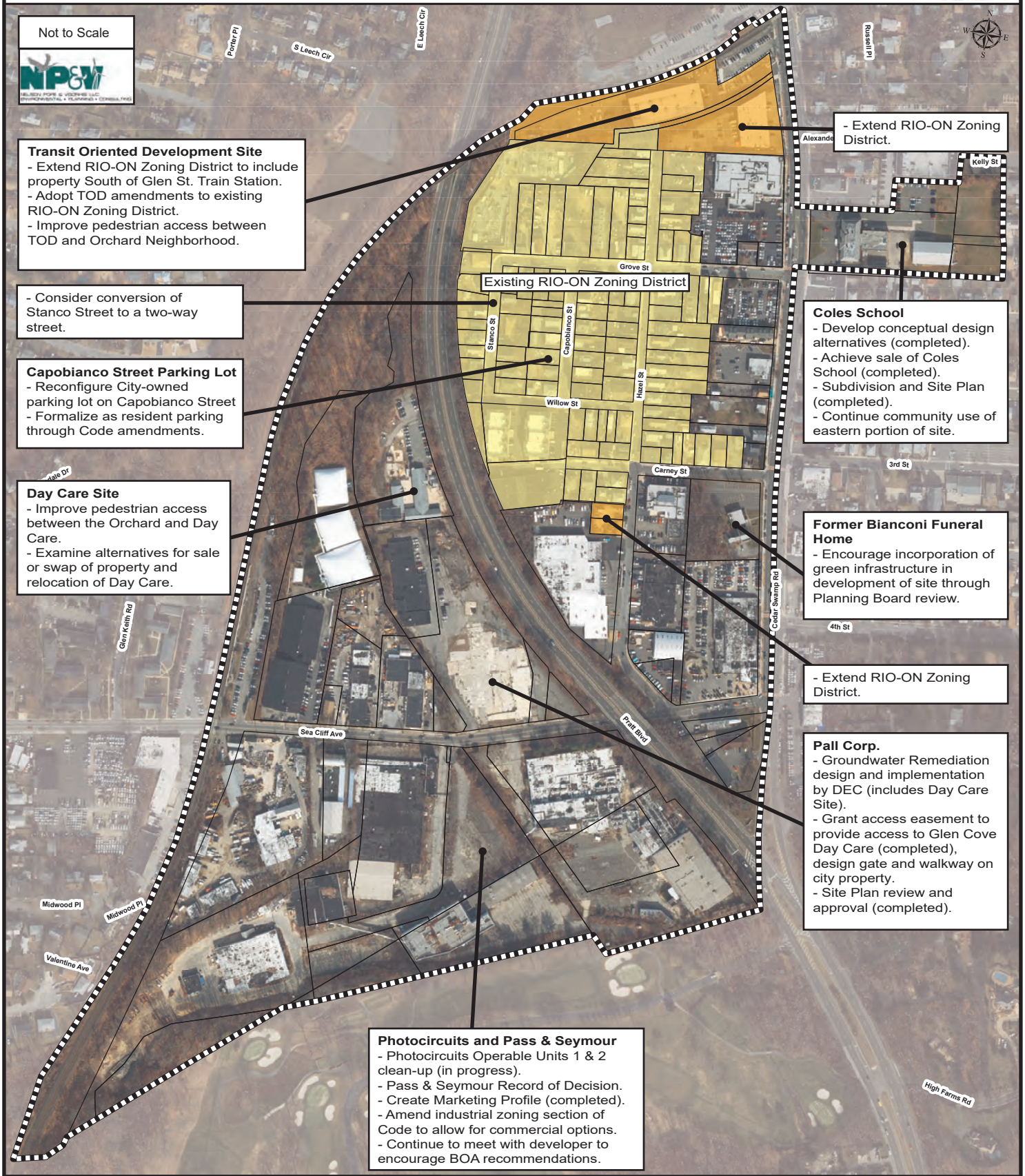
Source: NYSGIS Orthoimagery Program, 2016

Print Date: November 16, 2018

0 500 Feet

1 inch = 500 feet

City of Glen Cove and New York Department of State
The Orchard Neighborhood Step III BOA
Figure 5-7: IMPLEMENTATION TASKS



General BOA Implementation Recommendations

- Require adequate off-street parking for all redevelopment projects.
- Ensure adequate emergency access.
- Restrict parking to one side of street when street is less than 30 feet wide.
- Enforcement of overcrowding of housing.
- Amend Zoning Map to better reflect existing and desired land uses. - See Figure 5-6
- Install/Replace missing sidewalks and pedestrian ramps.
- Perform sub-watershed assessment (completed) and seek funding for design/implementation of green infrastructure projects utilizing Engineering Report included as Appendix E.
- Prepare marketing profiles for strategic sites (completed).
- Enforce existing restriction on commerical parking on residential lots in residential zoning districts.
- Discourage lot variances for two-family homes on lots that are less than the 7,500 SF area requirement.
- Pursue designation as a Federal Opportunity Zone (completed and successful).
- Repair/replace street lighting with LED.

TABLE 5-9
IMPLEMENTATION MATRIX

ACTION BY SUBJECT	IMPLEMENTATION TASKS	INVOLVED AGENCIES	PUBLIC AND PRIVATE INVESTMENT	PRIORITY/TIMING/STATUS
Pre-Construction Activities				
Improvements to Parking				
Require adequate off-street parking for all redevelopment projects	Site plan review	Planning Board/Building Department	N/A	Immediately
	Incorporate adequate parking requirements in code amendments	City Council	N/A	Within 1 year.
Ensure adequate emergency access	Restrict Parking to one side of streets of less than 30 feet paved width.	City Council	N/A	At the time of approval of any significant redevelopment project.
Revitalization of the Orchard Neighborhood				
Enforcement of overcrowding of housing	Concentrated Code Enforcement	City Code Enforcement/Council Support	N/A	Ongoing
Encourage redevelopment of assembled lots.	Adopt proposed RIO-ON District Amendments to allow 3 stories where appropriate to allow for ground level garages and reduce recreational space requirements.	City Council	N/A	Draft Amendments completed and will be transmitted to Council as Appendix of BOA Step III. Recommend adopting within 3 months.
Encourage redevelopment of site north of Glen Cove Station.	Adopt proposed map amendment to extend RIO-ON to TOD lot and adopt TOD amendments to RIO-ON text.	City Council	N/A	Draft Amendments completed and will be transmitted to Council as Appendix of BOA Step III. Recommend adopting within 3 months.
Amend zoning map to better reflect existing and desired land use pattern.	Adopt zoning map amendments.	City Council	N/A	Draft Amendments completed and will be transmitted to Council as Appendix of BOA Step III. Recommend adopting within 3 months.
Enforcement of existing restriction on commercial parking on residential lots in residential zoning districts.	Concentrated code enforcement.	City Code Enforcement	N//A	The City should continue to enforce under current policies. Intensive Code enforcement should be pursued upon completion of the Pall Corp groundwater remediation, which will make that area available for outdoor storage of commercial vehicles. Alternatively, this could be implemented if an industrial park or other facilities are built within Glen Cove or the surrounding area providing viable alternatives for storage of commercial vehicles and equipment.
Resolve outstanding use violations	Implement standard procedure to follow violations through justice court and where appropriate through the ZBA and/or Planning Board reviews as part of settling any violations.	City Council upon advice of City Attorney	N/A	Within 1 year.
Discourage lot area variances for two-family homes	Draft Memorandum to ZBA recommending use variances not be given for two family homes on lots of less than the current 7,500 square foot lot area requirement.	CDA/BOA Steering Committee	N/A	Draft Memorandum completed and is included in Appendix I of this BOA Step III. Recommend transmitting upon adoption.
Programs and Funding				
Designation as Federal Opportunity Zone	Gather relevant information and petition State for inclusion in Opportunity Zone.	Community Development Agency	N/A	Completed

ACTION BY SUBJECT	IMPLEMENTATION TASKS	INVOLVED AGENCIES	PUBLIC AND PRIVATE INVESTMENT	PRIORITY/TIMING/STATUS
CONSTRUCTION READY PROJECTS				
Transportation Improvement Projects				
Revise one-way street pattern	New signage, public notice, local law, code amendment	City Council; DPW	Potential funding sources include: 1. CDBG 2.MAP-21 Surface Transportation Program thru NYMTEC & NYSDOT 3.MAP 21 Transportation Enhancements 4. NYSDOT CHIPS Program 5. NYSDOT Multi-Modal Program 6. DASNY State and Municipal Facilities Capital Program 7. U.S. Economic Development Administration – Investment for Public Works and Economic Development (CEDS) 8.Tax Incremental Financing (TIF)	Within 1 year.
Replace missing sidewalk sections	Design, fund and build sidewalk sections where missing in the locations indicated in the Gedeon report.	City Council; DPW	Potential funding sources include: 1. CDBG 2.MAP-21 Surface Transportation Program thru NYMTEC & NYS DOT 3.MAP-21 Transportation Enhancements 4. NYSDOT CHIPS Program 5. NYSDOT Multi-Modal Program 6. DASNY State and Municipal Facilities Capital Program 7. U.S. Economic Development Administration – Investment for Public Works and Economic Development (CEDS) 8.Tax Incremental Financing (TIF)	Within 5 years.
Improved pedestrian access between the Orchard Neighborhood and the City Day Care	Provide access easement, paved drive and sidewalk over Pall Corp site through to the Glen Cove Daycare.	Planning Board	Hampshire Companies (applicant) will install improvements and provide easement. City to address gate and access route on the Day Care property.	Improvements and easement required by site plan for 30 Sea Cliff Avenue. Anticipate completion within 5 years.
Pedestrian Connection between the Orchard and TOD	Required element for any TOD at the Glen Street Station (included in code amendments).	City Council (code amendment	Noted that funding for this connection may be a negotiation item in the review of a TOD development plan.	Within 3 years of approval of a site plan for redevelopment of TOD.
Reconfigure City-owned parking lot on Capobianco Street	Draft final design of parking lot and rain garden, fund and construct. If desirable, adopt code amendments establishing lot for Orchard resident parking only and re-sign accordingly.	City Council; DPW	See green infrastructure improvements for potential funding for rain garden feature and shade trees.	Within 3 years.
Install/Repair missing pedestrian ramps.	Design, fund and build ADA-compliant pedestrian ramps at all intersection corners and other locations where a pedestrian ramp is recommended.	City Council; DPW	Potential funding sources include: 1. CDBG 2.MAP-21 Surface Transportation Program thru NYMTEC & NYS DOT	

ACTION BY SUBJECT	IMPLEMENTATION TASKS	INVOLVED AGENCIES	PUBLIC AND PRIVATE INVESTMENT	PRIORITY/TIMING/STATUS
			3.MAP 21 Transportation Enhancements 4. NYSDOT CHIPS Program 5. NYSDOT Multi-Modal Program 6. DASNY State and Municipal Facilities Capital Program 7. U.S. Economic Development Administration – Investment for Public Works and Economic Development (CEDS) 8.Tax Incremental Financing (TIF)	
Infrastructure				
Green Infrastructure Improvements	Perform sub-watershed assessment and identify potential locations for green infrastructure projects	CDA	CDA/BOA funds	Completed
	Identify community groups to champion green infrastructure projects and be involved with implementation and long term maintenance of rain garden features.	Multiple Community/City Groups and Organizations depending upon location.		Recommended as projects are identified.
	Develop conceptual designs for green infrastructure projects	CDA	CDA/BOA funds	Completed
	Prioritize, rank, schedule, final design and fund projects	City Council; DPW	Potential funding includes: 1. CDBG funds 2. NYS Environmental Facilities Corporation-Green Innovation Grant Program 3. NYSDEC Water Quality Improvement Program 4. OPRHP Environmental Protection Fund – land acquisition 5, DASNY – State and Municipal Facilities Capital Program	Recommended within 5 years
Repair/Replace Street lighting	Design, fund and install new energy efficient LED street lighting replacing all existing fixtures throughout the Orchard. Gaps in the lighting field should be filled in where necessary with new LED fixtures.	City Council; DPW	1. CDBG 2.NYSDEC Climate Smart Communities Implementation Grants 3. DASNY State and Municipal Facilities Capital Program 4. NYSDOT Multi-Modal Program 5. Tax Incremental Financing (TIF)	Recommend within 3 years.
Redevelopment and Remediation Projects				
Coles School Redevelopment	Perform Appraisals	CDA	CDA/BOA funds	Completed
	Perform Building Assessment	CDA; DPW	CDA/BOA funds	Completed
	Issue Request for Expressions of Interest	CDA	CDA/BOA funds	Completed
	Perform Phase 1 Environmental Site Assessment	CDA	CDA/BOA funds	Completed
	Survey Property	CDA	CDA/BOA funds	Completed
	Redevelopment Conceptual Design Alternatives	CDA	CDA/BOA funds	Completed
	Sale of Coles School Building and associated parking/property	City Council	Tiegerman School – purchase of property	Completed

ACTION BY SUBJECT	IMPLEMENTATION TASKS	INVOLVED AGENCIES	PUBLIC AND PRIVATE INVESTMENT	PRIORITY/TIMING/STATUS
	Financing Assistance to Tiegerman School	Glen Cove Local Economic Assistance Corp. (GCLEAC)	GCLEAC	Completed
	Subdivision and establish access easements, Use agreements	City Attorney; Planning Board	CDA/BOA – Fund Plan Preparation	Completed
	Site Plan/Bulk Variances (SEQRA required)	Planning Board; ZBA	Tiegerman School	Completed
	Remediation of school (asbestos and mold abatement)	Building Department oversight	Tiegerman School	Within one year
	Reuse of eastern portion of school site	City Council	Potential Funding: Several public funding sources exist depending on for what the City decides to use the project site	Within ten years according to City needs
Photocircuits and Pass & Seymour	Photocircuits Operable Unit 1 Clean Up	NYS DEC	NYS Superfund Program	First treatment completed July 2018. Additional treatments anticipated over next 5 years.
	Photocircuits Operable Unit 2 Clean Up	NYS DEC	NYS Superfund Program	To be conducted in conjunction with Pall Corp OU-2 Cleanup
	Pass & Seymour Record of Decision	NYS DEC	NYS Superfund Program	Unknown.
	Amend industrial zoning to allow for office, retail and commercial redevelopment options. Refine I-1 language for special use to make it clear that commercial recreation is possible by special use permit.	City Council	CDA/BOA	Draft Amendments completed and will be delivered to Council in Appendix I of the Step II. Recommend adoption within one year.
Redevelopment of Pall Corp Site	Groundwater remediation design – Operable Units 1 and 2	NYS DEC	NYS Superfund Program; Hampshire Properties (private redevelopment funding modification to RAP to allow for immediate development)	RAP approval anticipated within one year.
	Granting of access easements for Glen Cove Day Care	City Council; Glen Cove Daycare; CDA;	N/A	Meeting held between stakeholders; Easements anticipated within one-year.
	Site Plan Review and Approval (SEQRA required)	Planning Board; ZBA;	Hampshire Properties – Applicant	Completed
	Easements and vehicular/pedestrian access to Glen Cove Daycare property – See Transportation Improvement Projects			
	Vapor Mitigation at Glen Cove Daycare	City Council; Glen Cove Daycare; NYS DEC	NYS Superfund Program	Immediately
	Glen Cove Daycare Information Session	NYS DEC; NYS DOH	NYS Superfund Program	Prior to installation of groundwater remediation infrastructure.
	Glen Cove Daycare CAMP	NYS DEC	NYS Superfund Program	Before and during groundwater cleanup
	Glen Cove Daycare post-remediation air sampling	NYS DEC	NYS Superfund Program	After completion of groundwater cleanup
National Grid Site	Remedial Action Plan Phase 1	NYS DEC	NYS Superfund Program	Completed.
	Remedial Action Plan Phase 1	NYS DEC	NYS Superfund Program	After completion of LIPA Substation Expansion
Relocation/redevelopment of Glen Cove Daycare	Choose preferred alternative for sale or swap of property and relocation of daycare.	City Council	N/A	Recommended within next 5 years.
Redevelopment of TOD Site	Adoption of Code Amendments (see pre-construction tasks)			
	Land swap with MTA	City Council	Possible Private Development Partner	Upon adoption of a local development agreement for redevelopment of the TOD site.

5.4 Local Management Structure to Implement the BOA

The City of Glen Cove CDA and Steering Committee have overseen the preparation of the Step II Nomination and Step III Implementation Strategy. The CDA and City will continue to be the designated agencies and administrators responsible for the overall management and coordination of the BOA.

The CDA, City and Steering Committee will serve as the primary sponsors to lead and advance implementation projects. The roles of the CDA, City and Steering Committee in implementation of the BOA will include:

- Implementation of zoning recommendations (Zoning Map amendments, and amendments to RIO-ON District, I-1 and I-2 Districts).
- Continued marketing of strategic sites and coordination with developers (see **Appendix J** for marketing profiles of strategic sites, which were prepared as part of the Step III Implementation Strategy);
- Preparation of grant applications and grant management of funding for implementation projects identified in the BOA Plan;
- Coordination with City Council on a bi-monthly basis at pre-council meetings to report on ongoing projects and successes; and,
- Continued involvement in implementation strategies outlined in this document.

5.5 Regional, State, and Federal Actions and Programs for Implementation

The implementation strategy has identified a number of actions for implementation and the responsible agency. The majority of actions would be completed by the City of Glen Cove boards and departments, as well as the City of Glen Cove Community Development Agency. Some of the actions will require coordination with other agencies including Nassau County, the Town of Oyster Bay, the NYS DEC and NYS DOH. Some of the actions require coordination with the development community and potential public private partnerships. Finally, it is anticipated that funding for implementation actions would be sought through the NYS DOS and other agencies where appropriate as identified in **Table 5-9**.

APPENDICES

APPENDIX A

COMMUNITY PARTICIPATION PLAN

COMMUNITY PARTICIPATION PLAN

LAST REVISED: January 7, 2019

PREPARED BY: Nelson, Pope, & Voorhis, LLC

Contents

1.0 BACKGROUND AND PURPOSE

Broad community participation contributes to the quality of a planning process and increases the potential for local implementation of recommendations and success. Successful planning projects require effective communication with the community in question, as well as broad support and opportunities for meaningful participation. The New York State Brownfield Opportunity Area (BOA) program has been designed to include community participation and to seek input from various stakeholders through local steering committees, public workshops corresponding with key project milestones, and other means, such as interviews and focus groups.

The City of Glen Cove engaged a Steering Committee during the preparation of the Step II BOA Nomination Study in 2012 and also conducted public outreach events to arrive at a vision for the BOA Study Area and conceptual strategies to achieve the vision. The City of Glen Cove has since received a grant from the DOS for the preparation of a BOA Step III Implementation Strategy - which will provide the tools and studies required to begin to implement and foster the community vision.

The purpose of this Community Participation Plan is to describe the Project Team's approach to foster communication, engage a working group/Steering Committee, provide opportunities for input from the Glen Cove community, and illustrate how the outreach and input received shapes the conceptual redevelopment plan and implementation strategies (such as zoning code amendments) required by the City to begin seeing the change desired in the BOA.

Below is a summary description of each of the proposed community participation components and activities as well as contact information for the State and City project managers and the consultant team.

The components of community participation and types of interaction are described below in approximate chronological order, with the understanding that some elements, such as Steering Committee meetings, will take place intermittently throughout the course of the project. This Plan is intended to be a living document and will be updated periodically during the project period to reflect activities that take place and shifts in direction based upon what is learned and needed to advance the BOA Implementation.

2.0 COMMUNITY PARTICIPATION ACTIVITIES

2.1 Working Group/Steering Committee

The City has established a Steering Committee to act in an advisory capacity for the preparation of the Step III Implementation Strategy. A Working Group has also been established, which is a sub-set of the Steering Committee and consists of the core City staff involved with the day to day details for the BOA Project. As an implementation plan, the Steering Committee role is different than was in the Step II BOA process for which a broad vision for the community was established. For the implementation, the City appointed City staff and members of City Boards to identify specific implementation needs, needs for additional research and methods for refining the goals of the Step II towards achieving the vision.

The role of the Steering Committee is to review project progress and provide input on implementation, provide input and comments to the Working Group (core staff involved in overseeing the BOA process) and Consultant Team (consultants hired by the City to carry out the BOA study) for the duration of the project. For more information on the members of the Consultant Team, please refer to Section 4.0-Key Project Contacts. The members of the Steering Committee represent the City Council, Community Development Agency, Industrial Development Agency, Building Department, Code Enforcement, Police Department, Planning Board, and Zoning Board of Appeals.

The Steering Committee is also responsible for helping to strengthen partnerships to advance the goals of the BOA project, assisting with effective communication, and identifying local priorities.

In order to accommodate the Consultant Team's need for frequent feedback and in the interest of efficiency and timeliness, the Working Group was established with representation provided by the following personnel:

- Ann Fangmann, AICP BOA Project Manager, Executive Director, Glen Cove Community Development Agency (CDA), Executive Director, Glen Cove Industrial Development Agency (IDA)
- Camille Byrne, Executive Assistant, Glen Cove CDA/IDA
- Jocelyn Wenk, AICP, Grant Writer and Administrator, Glen Cove CDA

As the Glen Cove Step III BOA project progresses, the Consultant Team will report to the Steering Committee and Working Group to discuss progress, present information, and obtain guidance and input on key components of the project. Between scheduled meetings, the Consultant Team will present ideas, information, proposed activities, and as appropriate, draft materials to the BOA Project Manager for distribution to the Steering Committee and Working Group, to review and solicit feedback or input as needed and appropriate. The Working Group will review draft materials and provide feedback via email in the interest of efficiency and to expedite the feedback process. It is expected that Steering Committee meetings will be held roughly every three months during the duration of the assignment, generally on specific topics that correspond with major project milestones and components. Additionally, members of the Consultant Team will be available to attend CDA and/or City Council meetings at the request of the CDA Director throughout the course of the project. Examples of topical meetings and presentations may include:

- Introductions of key members of the Consultant Team, discussion of the BOA Program;
- Review of initial analysis
- Sharing stakeholder feedback/development potential
- Status update and presentation concept alternatives for development;
- Results of key task components;
- Status update on preparation of the draft Implementation Strategy and SEQRA.

The City of Glen Cove Working Group will, at the direction of the City BOA Project Manager, coordinate meeting times/and locations and circulate materials for review and comment. The Consultant Team will be responsible for preparing agendas, collecting attendee responses and sign in sheets, and preparing meeting minute summaries for review by the City.

The Steering Committee was selected to provide input from City departments and Boards that have insight into planning matters and includes the Mayor, Deputy Mayor, Chairs of the Planning Board and Zoning Board of Appeals, Building Department, Code Enforcement and Police Department as well as the members of the working group. The following provides the list of Steering Committee Members:

- Timothy Tenke, Mayor, Chairman CDA and IDA
- Maureen Basdavanos, Deputy Mayor
- Thomas Scott, Planning Board
- Tip Henderson, Zoning Board of Appeals
- Chris Grella, Code Enforcement
- Richard Summa, AIA, Building Department Director
- Chris Ortiz, City of Glen Cove Police Department
- Working Group members

As noted, this is a living document and therefore will be updated periodically to include refinements and list key stakeholder, Steering Committee and Working Group meetings.

2.2 Stakeholder Interviews/Focus Groups

In order to gain a better understanding of the Glen Cove BOA Study Area and to gather information about existing conditions, opportunities and challenges or barriers to redevelopment, potential future uses or redevelopment concepts, the Working Group and Consultant team members will conduct a series of interviews of key stakeholders. This will include property owners (particularly those that own several properties within the study area), developers/representatives on key properties (such as Photo Circuits and Pall Corp on Sea Cliff Avenue) and prospective developers of sites with Transit Oriented Development (TOD) potential. There is also interest by the City in reaching out and working with housing organizations and potential developers to identify opportunities for new affordable housing and supportive housing that may be possible in the Orchard Neighborhood area. Finally, it is important for the City to receive input on the feasibility of MTA/LIRR support for and potential partnering opportunities for a TOD at the Glen Street Station and thus, a group meeting with these organizations is imperative. Information gathered through the interviews will supplement quantitative data and will be valuable in the design of redevelopment scenarios.

As of the date of this Plan, the Working Group/Consultant Team has conducted meetings with the following individuals/representatives:

- Frank Caruso/Jim O'Grady (Orchard neighborhood property owner and architect)
- Photo Circuits (developer/contract vendee, engineer and attorney)
- Pall Corp Site (developer/attorneys/engineers/NYSDEC) (separate meetings regarding development and design of groundwater remediation)
- MTA Real Estate Department (TOD Unit) and LIRR (two meetings)

- Potential developer TOD site (City/IDA representatives, local developer)
- Orchard neighborhood property owners

Input received during these meetings is summarized in meeting minutes provided to the City CDA under separate cover.

In addition, there have been meetings between Steering Committee members and interested parties regarding some of our strategic sites. Updates from those meetings are being provided to the Working Group for incorporation into our implementation strategies.

2.3 Options for Providing Written Input on the BOA Step III Implementation Strategy

The City website has been utilized as a repository for the Step III Implementation Strategy following acceptance by the City Council, as well as for SEQRA documents and announcements as needed.

The Draft BOA Step III Implementation Strategy was posted to the City of Glen Cove website, as well as the PowerPoint presentation from the City Council public meeting on November 13, 2018. The City set up an email address devoted to receipt of feedback regarding the BOA Step III: BOAFeedback@glencovecda.org. This enabled provision of public comment on the draft Step III BOA document to City and CDA staff via email. Several emails were received related to the November draft, and the input considered in revisions to the January 2019 version of the Step III document.

2.4 Public Workshop and Public Hearing

Interactive public workshops and visioning are core elements of the BOA process. Public meetings were held during the Step II BOA Nomination preparation and the Steering Committee agreed that a public event at this stage would be most useful once a master conceptual redevelopment strategy has been prepared and feasibility analysis completed. This redevelopment strategy will set the stage for the zoning modifications and other actions (such as potential acquisitions/dispositions, private/public partnerships, infrastructure improvements, Phase I Environmental Site Assessments or Phase II Site Testing).

Following input from the City Council at a Pre-Council meeting on November 7, 2018, it was determined that an opportunity for public input was appropriate, given the length of time between the adoption of the Step II, Coles School Addendum, designation of the BOA by NY State and release of a Draft BOA Step III Implementation Strategy. Therefore, a public open house was held on December 6, 2018 from 6:30 – 8:30 pm at City Hall, where interested parties could learn about the BOA Program, the successes that have been achieved utilizing funding from the DOS for implementation since 2015, the

recommendations included in the Step III and next steps and an opportunity to provide feedback. This public open house meeting was announced during the presentation to the City Council and public on November 13, 2018.

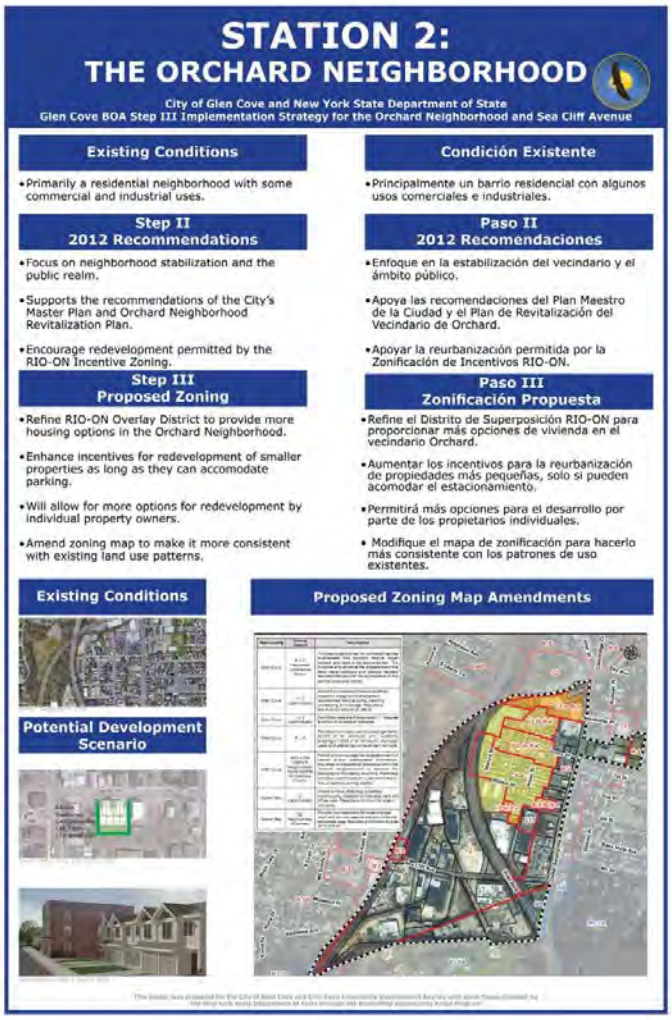
The open house was advertised through a combination of mailings, fliers, announcements at local meetings, news coverage, and the City website. Bilingual (Spanish and English) fliers inviting stakeholders and residents to attend the open house were mailed to every available address within the Orchard Neighborhood and posted in apartment building lobbies and local stores. Fliers were also posted in other location in Glen Cove, including downtown businesses, supermarkets, City Hall, the Glen Cove Senior Center, the Glen Cove Youth Bureau, and the Glen Cove Public Library. The Glen Cove Inter-Agency Council (IAC) distributed the flier to its 36 member organizations and the meeting was announced at Glen Cove Downtown Business Improvement District (BID), Glen Cove Inter-Agency Council (IAC), City Council, and CDA/IDA meetings. The Open House was widely advertised through the regional and local press including, Newsday, the Glen Cove Record Pilot, the Glen Cove Herald Gazette, and News 12 Long Island. The City conducted interviews with several of these media outlets, and many attended the open house in addition to a reporter from the NY Times who attended the public open house.

The open house format gave attendees an opportunity to learn about the recommendations at their own pace and speak with team members, elected officials, and representatives from the City of Cove and the Glen Cove CDA who have been a part of the Working Group throughout the project term. Participants were able to circulate throughout the room, with the flexibility to visit those stations which were of interest to them, and in any order while providing an opportunity to personally engage with members of the project team and City CDA. There were 7 stations attended by knowledgeable team members, including one staff member from NP&V who is fluent in Spanish. All station materials, including poster boards and a participation packet were available in English and Spanish at the open house. See **Attachment A** for the participation packet and fact sheet, and **Attachment B** for reduced copies of the posters. These materials were posted on the City website after the open house with a link to an online survey questionnaire (also in English and Spanish) that allowed members of the public to provide input following the open house. The survey was held open until the end of 2018, after which a message in English and Spanish was posted to direct additional comments to the project's custom email address (which is directed to the City of Glen Cove CDA).

This survey is now closed. If you would like to provide feedback on the City of Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue, please send an email to: BOAFeedback@glencovecda.org. Thank you for your interest in this project.

The seven stations at the Open House were designed to provide background information about the BOA program, highlight strategic sites and specialized studies, outline what has been accomplished so far and the upcoming steps, and obtain feedback from the community. The following provides a summary of each of the stations:

- Station 1 was focused on providing an overview of the Brownfield Opportunity Area Program, the three steps in the BOA process and outlining the purpose of the Step III Implementation Study. This station also included a large poster to familiarize attendees with the Study Area and areas of interest;
- Station 2 focused on the Orchard Neighborhood and the recommended zoning code modifications to the RIO-ON Zoning Overlay District as well as recommended Zoning Map amendments;
- Station 3 was aimed at exploring the recommendations for redevelopment of the Sea Cliff Avenue former industrial sites;
- Station 4 included general information about Transit-Oriented Developments and provided an overview of the TOD recommendations near the Glen Street Train Station;
- Station 5 outlined the results from the transportation study (including parking, bicycling, and pedestrian amenities);
- Station 6 provided information regarding rain gardens and recommendations of the green infrastructure report; and,
- Station 7 provided a summary of the BOA success stories achieved with the help of the DOS funding and future implementation strategies for the overall Study Area.



Sample display board from open house.

At the Public Open House, in addition to receiving verbal input from attendees, feedback was gathered on the draft BOA report via written questionnaire. Participants provided written responses to survey questions about each station/topic. The responses were inputted into a survey tool (utilizing

SurveyMonkey© software) and the results exported for analysis and consideration in refining the recommendations of the Step III Implementation Strategy.

The public open house was well attended, with 45 attendees listed on the sign-in sheet and 35 survey responses received; although, facilitators estimate that more than double the number of participants that signed in actually attended the open house and provided verbal feedback instead of completing the written survey. Overall, the feedback received from participants regarding the Implementation Strategy was positive and the open house was an excellent opportunity for participants to voice their ideas and any concerns with the BOA Team. Participants were particularly interested in the Orchard Neighborhood, Sea Cliff Avenue, and TOD recommendations as these stations seemed to generate the most excitement about potential redevelopment and the opportunity to increase housing variety in the Orchard and TOD and introduce a more diverse mix of uses along Sea Cliff Avenue. Facilitators at these stations heard some concerns related to displacement of affordable and low-income housing, increased density and population in an already crowded area, and the potential to exacerbate traffic and parking concerns throughout the Study Area. Facilitators also heard that the majority of participants were highly supportive of the proposed TOD which will provide new affordable housing options in the area.

Images from the December 6, 2018 BOA Step III Implementation Strategy open house.

The survey results (analysis of all submitted questionnaires) indicated that the majority of respondents were not aware of the existing code that provides incentives for townhome development in the Orchard, and although more respondents indicated that they would support code revisions to allow for townhome redevelopment on two typical lots, there was sufficient concern from residents about increased density,

traffic, and the potential for displacement of existing tenants to warrant maintaining the current minimum lot size for townhouse redevelopment (15,000 SF). It is noted that some participants felt the proposed modifications did not go far enough to incentivize redevelopment in the Orchard and expressed that they were hoping for even more modifications to increase permitted density. However, facilitators commented that the major fear that was heard focused on displacement resulting from the proposed modifications to incentivize redevelopment of smaller properties and thus, based upon this feedback it is recommended that the provision for townhomes on 9,500 properties be omitted from the recommended RIO-ON District amendment.

The majority of participants were aware of the vacant industrial sites located along Sea Cliff Avenue and the related environmental clean-up and there was lengthy discussion focused on potential future uses of these sites. Overall, participants were enthusiastic about broadening the allowed uses beyond typical industrial uses to allow for commercial recreation, large scale retail, retail, or a mixture of uses (excluding residential). However, several participants noted their concerns about traffic circulation and access to/from these sites.

Participants largely support zoning that would enable construction of a TOD near the Glen Street Train Station, especially since there is a recognized need for increased for affordable and workforce housing in the area. The concept of allowing for mixed use (commercial with multi-family residential) developments at this location – particularly in light of the increased affordable component - was overwhelmingly supported by participants. Respondents were also supportive of a pedestrian connection between the Orchard and Train Station, although some residents of this portion of Hazel Street were concerned that this would provide a location for loitering and crime. Other concerns related to the TOD concept were about traffic, parking, and specifically availability of train station parking.

At the open house, many participants expressed their reactions to the transportation recommendations and all that commented on this aspect supported improving the sidewalk conditions and updating the streetlights in the Study Area. Participants offered mixed opinions about converting Stanco Street to a two-way street citing concerns about increasing traffic and reducing the on-street parking supply. At the green infrastructure station, attendees were able to learn more about rain gardens and why they are proposed for certain areas. Participants were largely in favor of incorporating rain gardens as a drainage feature in the Study Area, as long as it was properly maintained and clear about who is responsible for maintenance. This input will result in a recommendation to include long term maintenance and assignment of this responsibility at the onset of any rain garden project.

As of January 2019, the Step III document has been revised to address comments to be provided to the City Council for acceptance at a public City Council meeting after which, NP&V will prepare a Generic Environmental Impact Statement to analyze the potential for significant environmental impacts related

to adoption and implementation of the recommendations. A public hearing will be scheduled on the Draft GEIS, providing another opportunity for public input on the BOA Step III Implementation Strategy recommendations.

3.0 COMMUNICATION AND INFORMATION SHARING

As noted, there was an extensive public outreach component of the Step II Nomination, and at this phase of the project the community input is to be focused on stakeholders that can assist or directly inform implementation projects. The City BOA Project Manager and Working Group will be primarily responsible for the actual communication and outreach to the public. For any public events, the Consultant Team will draft messages, prepare flyers, design mailings with direction from the City Project Manager. Any materials for public meetings will be reviewed by the City's PR representative Lisa Travatello and provided to NYSDOS for review in advance.

City website: As the BOA implementation strategies advanced, information about the BOA project was, and will continue to be, uploaded to the City website. A project page has been created on the City website to focus on the Step III Implementation Strategy (https://www.glencove-li.us/boa-step-iii-implementation-strategy)[1]. The information on the Step III Implementation Strategy webpage currently includes the following: presentation from the November 13, 2018 City Council meeting; November 2018 Draft BOA Step III Implementation Strategy document; an email to use to contact the project team for more information or to share input; posters and handouts utilized at the December 6, 2018 Open House; and, a link to the questionnaire using a SurveyMonkey link to provide another avenue to receive feedback from community members that were unable to attend the open house.

Information Repository: The City of Glen Cove Community Development Agency (CDA) office is the official repository for project documents.

Glen Cove Community Development Agency Office
City of Glen Cove - City Hall
3rd Floor
9 Glen Street
Glen Cove, NY 11542

[1] It is noted that the 2012 BOA Step II Nomination can be downloaded from this page: http://www.glencove-li.us/brownfield-opportunity-area-the-orchard.

4.0 KEY PROJECT CONTACTS

New York State Department of State (DOS)

DOS is the lead agency on BOA projects and has provided the City of Glen Cove with a grant to complete the BOA Step III Implementation Strategy. The DOS will continue to provide oversight, direction, and technical assistance throughout the duration of this project. Contact information for the DOS project manager is provided below:

David Ashton
Project Manager – Brownfields
NYS Dept. of State - Communities & Waterfronts
(518) 473-2473
David.Ashton@dos.ny.gov

City of Glen Cove Community Development Agency (CDA)

The City is responsible for the day-to-day administration and management of the BOA Step III project. Representatives from the City's Community Development Agency (CDA) will provide project oversight and technical expertise. In addition, CDA staff, together with City Council, members of the Working Group and Steering Committee members will work with the Project Team to guide the process. The City's primary contact is the Executive Director of the CDA.

Ann Fangmann, AICP
Executive Director, Glen Cove Community Development Agency and
Executive Director, Glen Cove Industrial Development Agency
516-676-1625, Ext. 102
afangmann@glencovecda.org

Camille Byrne
Executive Assistant, Glen Cove CDA
(516) 676-1625 Ext. 112
cbyrne@glencovecda.org

Jocelyn Wenk, AICP
Grant Writer and Administrator, City of Glen Cove CDA
(516) 676-1625 Ext. 100
jwenk@glencovecda.org

Nelson, Pope & Voorhis (NP&V)

NP&V is the lead environmental and planning consultant on the project and is responsible for the day-to-day administration and management of the BOA planning process and management of the Consultant Team. NP&V's primary contact is listed below:

Kathryn J. Eiseman, AICP
Partner and Division Manager, Nelson, Pope & Voorhis, LLC
Division of Environmental & Community Planning
(631) 427-5665 x 208
KEiseman@nelsonpopevoorhis.com

N&P, an affiliate of Nelson, Pope & Voorhis, is responsible for reviewing general infrastructure systems, including roads, drainage, water, sewer, and energy, components of the BOA project. Ms. Eiseman will coordinate with appropriate engineering staff of N&P as needed.

Former Turner Miller Group (TMG) (Now NP&V)

At the time the contract was awarded, the Turner Miller Group was co-lead on this project. TMG was a planning firm that had been working with the City of Glen Cove for over 30 years and prepared zoning amendments, a blight study and reviews planning and development projects on behalf of the City. As of January 1, 2017, TMG became part of NP&V and the former TMG office is now the Hudson Valley Branch of NP&V. Max Stach, formerly VP of TMG is now a Partner of NP&V and together with partners Stuart Turner and Bonnie Franson, oversee management of the Hudson Valley Office.

Maximilian Stach, AICP
Partner, NP&V, Hudson Valley Office
(845) 368-1472 x106
MStach@nelsonpopevoorhis.com

Other firms involved with the Step III Implementation Strategy are Roux Associates, Urbanomics (WBE) and Gedeon Engineering (MBE). In addition, East Coast Environmental are subcontractors to Roux Associates and are a registered MBE with the State of New York.

ATTACHMENT A

PUBLIC PARTICIPATION PACKET AND FACT SHEET

PARTICIPATION PACKET

Public Meeting

Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

Where do you live? (required)

- ☐ I live in the Orchard Neighborhood.
- ☐ I live in Glen Cove, but not in the Orchard.
- ☐ I live in Sea Cliff.
- ☐ I do not live in the area, but I am interested in the project.

Name (optional)

_____

Email to receive updates (optional)

_____

STATION 2: THE ORCHARD NEIGHBORHOOD

Were you aware, prior to this evening, that there is existing code that provides incentives for townhouses on properties with 15,000 SF (3 typical lots)?

☐ Yes ☐ No

Would you favor code changes that would make it possible to redevelop with townhouses on two typical lots, to provide more housing choices?

☐ Yes ☐ No

If no, what concerns do you have?

_____

_____

_____

STATION 3: SEA CLIFF AVENUE

Were you aware, before this evening, that there are abandoned industrial properties on Sea Cliff Avenue that have been subject to environmental clean up?

☐ Yes ☐ No

If a larger retailer was interested in the site, do you have a favorite store you would like to see on Sea Cliff Avenue?

☐ Yes_____ ☐ No

Which of the following reuse options do you support for the Sea Cliff Avenue Corridor properties (former Photocircuits/Pass & Seymour industrial uses)?

	Yes	No	Not Sure
a. Large scale retail (with anchor tenant such as a wholesale club, fitness club, home improvement or department store)	☐	☐	☐
b. Hotel	☐	☐	☐
c. Indoor commercial recreational/entertainment uses	☐	☐	☐
d. Light industrial (manufacturing, warehouses)	☐	☐	☐
e. A mix of retail, light industrial, hotel, and/or recreational/ entertainment uses.	☐	☐	☐
f. A mix of light industrial, hotel and/or recreational entertainment but not including large scale retail	☐	☐	☐
g. Retail	☐	☐	☐

PARTICIPATION PACKET

Public Meeting

Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

STATION 4: TRANSIT ORIENTED DEVELOPEMENT

Would you support zoning in this location to allow for affordable, workforce and market-rate housing?

☐ Yes ☐ No ☐ Not sure

Do you agree that there is a need for affordable workforce housing in this area?

☐ Yes ☐ No ☐ Not sure

Would you support a pedestrian connection pathway from the Orchard Neighborhood to the train station via Hazel Street?

☐ Yes ☐ No ☐ Not sure

STATION 5: TRANSPORTATION

Do you ride the train from either the Glen Street or Sea Cliff Avenue LIRR stations?

☐ Yes ☐ No

If yes, how do you usually get to/from the station? Walking, biking, taxi, and/or driving?

_____

Would you support changing Stanco Street from a one-way to a two-way operation?

☐ Yes ☐ No ☐ Not Sure

Would you support improving streetlights in the area?

☐ Yes ☐ No

Do you feel that parking is available in The Orchard Neighborhood?

Yes ☐ No ☐ Sometimes

If sometimes, please explain when: _____

What other suggestions do you have related to walking/biking/transportation/parking in the area?

_____

STATION 6: GREEN INFRASTRUCTURE

Are you in favor of incorporating rain gardens as a drainage feature in the Study Area?

☐ Yes ☐ No ☐ Not sure

If no, please provide your concerns:

_____

ADDITIONAL COMMENTS

_____

_____

_____

_____

PAQUETE DE PARTICIPACIÓN

Public Meeting

Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

¿Dónde vives? (necesario)

- ☐ Vivo en el barrio de Orchard.
- ☐ Vivo en Glen Cove, pero no en el barrio de Orchard.
- ☐ Vivo en Sea Cliff.
- ☐ No vivo en la zona, pero soy interesado en el proyecto.

Nombre (Opcional)

_____

Correo electrónico para recibir actualizaciones (Opcional)

_____

STATION 2: THE ORCHARD NEIGHBORHOOD

¿Sabían, antes de esta noche, que hay un código existente que proporciona incentivos para las casas adosadas en propiedades con 15,000 pies cuadrados (3 lotes typicas)?

☐ Sí ☐ No

¿Favorecería los cambios de código que harían posible la reconstrucción de casas adosadas en dos lotes típicos para proporcionar más opciones de vivienda?

☐ Sí ☐ No

Si no, ¿qué preocupaciones tiene?

_____

_____

_____

STATION 3: SEA CLIFF AVENUE

¿Sabían, antes de esta noche, que hay propiedades industriales abandonadas en Sea Cliff Avenue que han sido objeto de una limpieza ambiental?

☐ Sí ☐ No

Si un minorista más grande estaba interesado en el sitio, ¿tiene una tienda favorita que le gustaría ver en Sea Cliff Avenue?

☐ Sí_____ ☐ No

¿Cuál de las siguientes opciones de reutilización admite para las propiedades de Sea Cliff Avenue Corridor (anteriormente, Photocircuits / Pass & Seymour, usos industriales)?

	Sí	No	No Estoy Seguro
a. Venta por gran escala (con el arrendatario principal, como un club mayorista, un gimnasio, mejoras para el hogar o grandes almacenes)	☐	☐	☐
b. Hotel	☐	☐	☐
c. Usos recreativos / de entretenimiento comerciales interiores	☐	☐	☐
d. Industrial leve (fabricación, almacenes)	☐	☐	☐
e. Una mezcla de venta minorista, industria leve, hotel y / o usos recreativos / de entretenimiento.	☐	☐	☐
f. Una mezcla de entretenimiento industrial ligero, hotelero y / o recreativo, pero sin incluir el comercio minorista a gran escala	☐	☐	☐
g. Minoristas	☐	☐	☐

PAQUETE DE PARTICIPACIÓN

Public Meeting

Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

STATION 4: TRANSIT ORIENTED DEVELOPEMENT

¿Apoyaría la zonificación en esta ubicación para permitir viviendas asequibles para la fuerza laboral y viviendas a precio del mercado?

☐ Sí ☐ No ☐ A Veces

¿Está de acuerdo en que existe la necesidad de viviendas asequibles para la fuerza laboral en esta área?

☐ Sí ☐ No ☐ A Veces

¿Apoyaría una vía de conexión peatonal desde el vecindario Orchard a la estación de tren a través de Hazel Street?

☐ Sí ☐ No ☐ A Veces

STATION 5: TRANSPORTATION

¿Usted viaja en el tren desde las estaciones LIRR de Glen Street o Sea Cliff Avenue? ☐ Sí ☐ No

En caso afirmativo, ¿cómo suele llegar a / desde la estación? Caminar, andar en bicicleta, taxi y / o conducir?

_____

¿Apoyaría cambiar la calle Stanco de una operación de una vía a una operación de dos vías? ☐ Sí ☐ No ☐ A Veces

¿Apoyarías en mejorar las farolas de la zona?

☐ Sí ☐ No

¿Sientes que hay estacionamiento disponible en el barrio del Orchard?

☐ Sí ☐ No ☐ A Veces

Si a veces, explique cuándo: _____

¿Qué otras sugerencias tiene relacionadas con caminar / andar en bicicleta / transporte / estacionamiento en el área?

_____

STATION 6: GREEN INFRASTRUCTURE

¿Apoyarías el uso de jardines de lluvia como una función de drenaje en el área de estudio?

☐ Sí ☐ No ☐ A Veces

Si no, ¿qué preocupaciones tiene?

_____

COMENTARIOS ADICIONALES

_____

_____

_____

_____

CITY OF GLEN COVE

FACT SHEET

Brownfield Opportunity Area (BOA) Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

December 6, 2018

WHAT THE BOA STEP III IMPLEMENTATION PLAN…	
IS…	**IS NOT…**
❖ Recommendations for quality-of-life improvements ❖ A guiding document for future development as neighborhood properties become available (examples: bowling alley, former Stango's restaurant, vacant properties) ❖ Recommendations for re-use of former industrial sites with environmental concerns ❖ A study that includes analysis of housing, traffic circulation, parking, green infrastructure, renewable energy, and economic development ❖ Keeping historic character and make-up of area ❖ An opportunity to enhance City zoning for transit-oriented housing near the Glen Street Station with affordable housing options	❖ City or Community Development Agency (CDA) purchase of any properties or use of eminent domain ❖ Displacement of residents (only major development proposed by train station) ❖ Adoption of zoning changes (the plan recommends zoning modifications for future consideration) ❖ A guarantee of change (neighborhood land uses tend to change over time, and the Step III Plan endeavors to create a framework for well thought-out future planning)

CITY OF GLEN COVE

HOJA INFORMATIVA

Brownfield Opportunity Area (BOA) Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

Diciembre 6, 2018

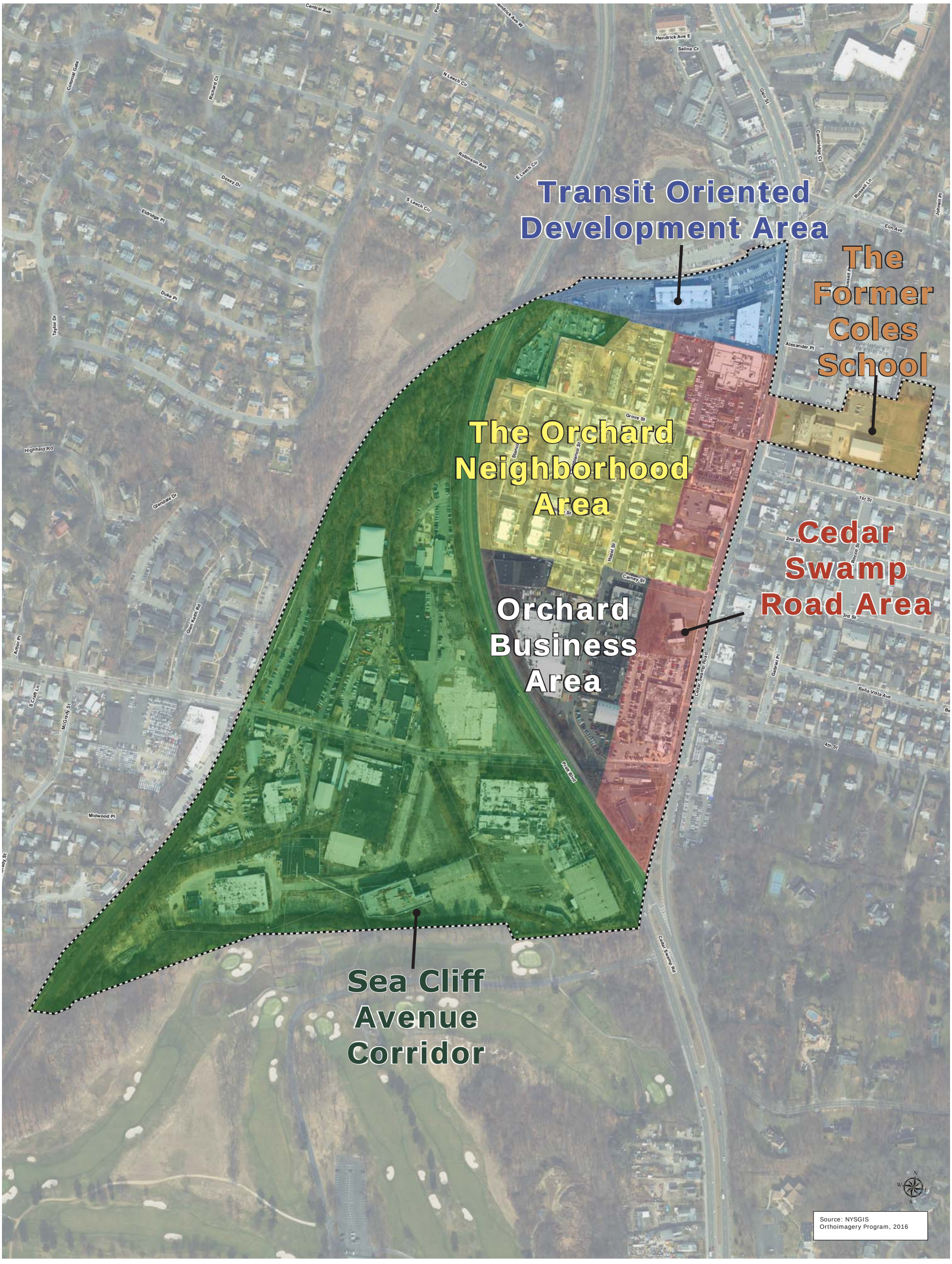
EL BOA PASO III PLAN DE EJECUCIÓN …	
ES…	**<u>NO</u> ES…**
❖ Recomendaciones para mejorar la calidad de vida. ❖ Un documento orientador para el desarrollo futuro a medida que las propiedades del vecindario estén disponibles (ejemplos: bolera, el antiguo restaurante de Stango, propiedades vacantes) ❖ Recomendaciones para la reutilización de antiguos sitios industriales con preocupaciones ambientales. ❖ Un estudio que incluye análisis de vivienda, circulación de tráfico, estacionamiento, infraestructura verde, energía renovable y desarrollo económico ❖ Mantener el carácter histórico y la composición del área. ❖ Una oportunidad para mejorar la zonificación de la ciudad para viviendas orientadas al tránsito cerca de la estación de Glen Street con opciones de vivienda asequibles	❖ Compra de cualquier propiedad o uso del dominio eminente por parte de la Agencia de Desarrollo de la Ciudad o la Comunidad (CDA) ❖ Desplazamiento de residentes (solo desarrollo importante propuesto por la estación de tren) ❖ Adopción de cambios de zonificación (el plan recomienda modificaciones de zonificación para futuras consideraciones) ❖ Una garantía de cambio (los usos en el vecindario tienden a cambiar con el tiempo, y el Plan del Paso III se esfuerza por crear un marco para una planificación futura bien pensada)

ATTACHMENT B

STATION POSTERS FROM COMMUNITY MEETING

AREAS OF INTEREST

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue



This poster was prepared for the City of Glen Cove and Glen Cove Community Development Agency with state funds provided by the New York State Department of State through the Brownfield Opportunity Areas Program

NYS BROWNFIELD OPPORTUNITY AREA (BOA) PROGRAM OVERVIEW

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

STEP 1
Pre-Nomination

Components

- Not required for Glen Cove
- Identify study area
- Conduct preliminary analysis of brownfield sites and potential for revitalization

STEP 2
Nomination

Completed in 2012
Coles School Addendum 2013
BOA Designated by NYS in 2015

Components

- Site inventory and analysis
- Identify strategic and basic recommendations for each site including:
  - Desired redevelopment and land uses (retail, office, affordable housing)
  - Transportation improvements
  - Pedestrian amenities

Public Outreach

- Creation of Steering Committee
- Public Information Meetings and Workshops
- Stakeholder Interviews
- Website Development

STEP 3
Implementation Strategy

CURRENT STEP

Components

- Further the recommendations of Step 2
- Focus on how to achieve recommendations
- Conceptual redevelopment plans for strategic sites
- State Environmental Quality Review Act (SEQRA) - analyze impacts of potential redevelopment
- More detailed analysis of strategic sites and areas including:
  - Retail and Market Analysis
  - Housing Analysis
  - Pedestrian and bicycle amenities
  - Traffic circulation and parking
  - Zoning code modifications
  - Green infrastructure
  - Renewable energy

What is a Brownfield?

- Any site where redevelopment or re-use is complicated or challenged by former land use.
- Includes former industrial and commercial sites.
- Brownfields can be vacant, abandoned, or underutilized, and may have actual or perceived environmental contamination.

What is the BOA Program?

- Provides resources and funding to communities to revitalize brownfields.
- Identifies solutions for the range of problems posed by brownfields.
- Builds consensus for redevelopment of strategic sites.

This poster was prepared for the City of Glen Cove and Glen Cove Community Development Agency with state funds provided by the New York State Department of State through the Brownfield Opportunity Areas Program

NYS PROGRAMA DE ÁREAS DE OPORTUNIDAD BROWNFIELD (BOA) DESCRIPCIÓN DEL PROGRAMA

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

PASO 1
Pre-Nomination

Completado en 2012
Coles School Addendum 2013
BOA Designado por NYS en 2015

Componentes

- No es necesario para Glen Cove
- Identificar el área del estudio
- Realizar un análisis de brownfields y lugares de revitalización cultural

PASO 2
Nominación

Componentes

- Inventario y análisis del área esudiada
- Identificar la estrategia y las recomendaciones básicas del área estudiada incluyendo:
  - Remodelación y usos deseadoes (minorista, oficinas, viviendas asequibles)
  - Mejoramientos de transportación
  - Servicios para peatones

Divulgación Pública

- Creación de un Comité Directivo
- Sesiónes publicas de información y seminarios
- Entrevistas con partes interesadas
- Creación de un sitio web

PASO 3
Estrategia de Implementacion

PASO ACTUAL

Componentes

- Seguir examinando las recomendaciones del Paso 2
- Enfocarse en cómo lograr las recomendaciones
- Planes de redesarrollo conceptual para sitios estratégicos
- Evaluación de Impacto Ambiental del estado de Nueva York (SEQRA) - Analiza los impactos de posibles escenarios de reurbanización
- Análisis más detallados de sitios y áreas estratégicas incluyendo:
  - Análisis del mercado minorista
  - Análisis de vivienda
  - Servicios para peatones y bicicletas
  - Circulación de tráfico y aparcamiento
  - Modificaciones al código de zonificación
  - Infraestructura ecológica
  - Energías renovables

¿Que es un Brownfield?

- Cualquier sitio en que la reurbanización o reutilización sea complicado o cuestionado por el uso anterior.
- Incluye antiguos sitios industriales y comerciales.
- Brownfields puede estar vacante, abandonado o infrautilizado, y puede tener contaminación ambiental real o percibida.

¿Que es la Programa de Brownfield?

- Proporciona algunos recursos y fondos a las comunidades para revitalizar zonas industriales abandonadas.
- Identifica soluciones para la gama de problemas planteados por los brownfields.
- Construye consenso para la reurbanización de sitios estratégicos.

This poster was prepared for the City of Glen Cove and Glen Cove Community Development Agency with state funds provided by the New York State Department of State through the Brownfield Opportunity Areas Program

STATION 2:
THE ORCHARD NEIGHBORHOOD

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

Existing Conditions

- Primarily a residential neighborhood with some commercial and industrial uses.

Step II
2012 Recommendations

- Focus on neighborhood stabilization and the public realm.
- Supports the recommendations of the City's Master Plan and Orchard Neighborhood Revitalization Plan.
- Encourage redevelopment permitted by the RIO-ON Incentive Zoning.

Step III
Proposed Zoning

- Refine RIO-ON Overlay District to provide more housing options in the Orchard Neighborhood.
- Enhance incentives for redevelopment of smaller properties as long as they can accomodate parking.
- Will allow for more options for redevelopment by individual property owners.
- Amend zoning map to make it more consistent with existing land use patterns.

Condición Existente

- Principalmente un barrio residencial con algunos usos comerciales e industriales.

Paso II
2012 Recomendaciones

- Enfoque en la estabilización del vecindario y el ámbito público.
- Apoya las recomendaciones del Plan Maestro de la Ciudad y el Plan de Revitalización del Vecindario de Orchard.
- Apoyar la reurbanización permitida por la Zonificación de Incentivos RIO-ON.

Paso III
Zonificación Propuesta

- Refine el Distrito de Superposición RIO-ON para proporcionar más opciones de vivienda en el vecindario Orchard.
- Aumentar los incentivos para la reurbanización de propiedades más pequeñas, solo si pueden acomodar el estacionamiento.
- Permitirá más opciones para el desarrollo por parte de los propietarios individuales.
- Modifique el mapa de zonificación para hacerlo más consistente con los patrones de uso existentes.

Existing Conditions

Source: Google Earth, 2018

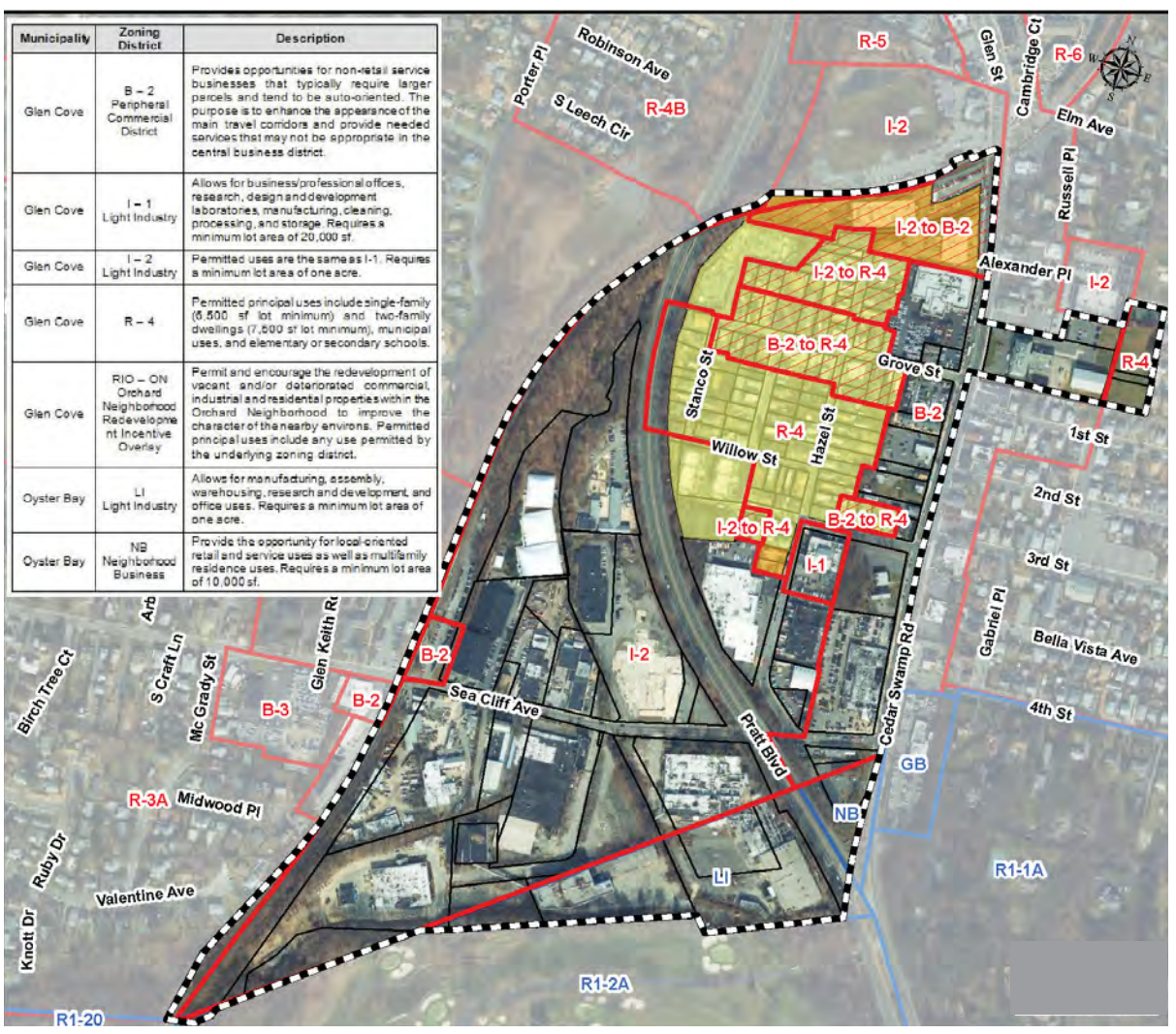
Potential Development Scenario

Source: Nelon, Pope, and Voorhis 2018

Source:Nelson, Pope & Voorhis, 2018

Proposed Zoning Map Amendments

Municipality	Zoning District	Description
Glen Cove	B – 2 Peripheral Commercial District	Provides opportunities for non-retail service businesses that typically require larger parcels and tend to be auto-oriented. The purpose is to enhance the appearance of the main travel corridors and provide needed services that may not be appropriate in the central business district.
Glen Cove	I – 1 Light Industry	Allows for business/professional offices, research, design and development laboratories, manufacturing, cleaning, processing, and storage. Requires a minimum lot area of 20,000 sf.
Glen Cove	I – 2 Light Industry	Permitted uses are the same as I-1. Requires a minimum lot area of one acre.
Glen Cove	R – 4	Permitted principal uses include single-family (6,500 sf lot minimum) and two-family dwellings (7,600 sf lot minimum), municipal uses, and elementary or secondary schools.
Glen Cove	RIO – ON Orchard Neighborhood Redevelopment Incentive Overlay	Permit and encourage the redevelopment of vacant and/or deteriorated commercial, industrial and residental properties within the Orchard Neighborhood to improve the character of the nearby environs. Permitted principal uses include any use permitted by the underlying zoning district.
Oyster Bay	LI Light Industry	Allows for manufacturing, assembly, warehousing, research and development, and office uses. Requires a minimum lot area of one acre.
Oyster Bay	NB Neighborhood Business	Provide the opportunity for local-oriented retail and service uses as well as multifamily residence uses. Requires a minimum lot area of 10,000 sf.



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STATION 2:
THE ORCHARD NEIGHBORHOOD

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

Step III Recommended RIO-ON Code as Compared to Existing RIO-ON Code

Property Size (SF)	Development Allowed Under Existing RIO-ON Code*	Recommended RIO-ON Code Amendments*
6,500 SF	One-Family Home**	One-Family Home**
7,500 SF	Two-Family Home**	Two-Family Home**
9,500 SF	Two-Family Home**	3 Townhomes and 1 Apartment OR 4 Townhomes
15,000 SF	5 Townhomes	6 Townhomes
40,000 SF	Apartment Building	Apartment Building

* Allowable development could potentially be increased further based upon density bonuses as outlined in the RIO-ON Overlay Zoning District (§ 280-73.4 of City Code).
** Examples are for properties within the R-4 District (Code varies if within other underlying zoning districts).

Paso III: Código RIO-ON Recomendado Comparado Con El Código RIO-ON Existente

Tamaño de la Propiedad (SF)	Desarrollo Permitido Bajo el Código RIO-ON Existente*	Enmiendas recomendadas del Código RIO-ON*
6,500 SF	Casa Unifamiliar**	Casa Unifamiliar**
7,500 SF	Casa De Dos Familias**	Casa De Dos Familias**
9,500 SF	Casa De Dos Familias**	3 Townhomes and 1 Apartamento OR 4 Townhomes
15,000 SF	5 Townhomes	6 Townhomes
40,000 SF	Edificio de Apartamentos	Edificio de Apartamentos

* El desarrollo permisible podría potencialmente incrementarse aún más en función de los bonos de densidad como se describe en el Distrito de Zonificación de Superposición RIO-ON (§ 280-73.4 of City Code).
** Los ejemplos son para propiedades dentro del Distrito R-4 (el Código varía si está dentro de otros distritos de zonificación subyacentes).

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STATION 3:
SEA CLIFF AVENUE CORRIDOR

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

Existing Conditions

- Large vacant Superfund sites formerly known as the Photocircuits and Pass & Seymour industrial sites.
- Former Pall Corporation site currently under redevelopment as a self-storage facility.
- Predominantly an industrial area with some commercial recreation and a single-family residence.
- Area is zoned I-2 which allows for business or professional offices, research and development laboratories, manufacturing, storage of products or materials, and other light industrial uses.

Step II
2012 Recommendations

- Large-scale retail, light industrial and distribution/ warehousing.
- Improve access from Sea Cliff Avenue to Glen Cove Road and/or Cedar Swamp Road to attract large-scale retailers.
- Commercial uses such as film studio facilities or indoor recreation are appropriate for this area.
- Conceptual plan determined that former industrial sites could support a wholesale club*, retail or restaurant space and a commercial recreational facility.

Step III
Proposed Zoning

- Recognize need for more flexible uses to promote redevelopment and investment.
- Amend Zoning Code to allow large-scale retail, as recommended by the 2012 Step II Study, in addition to a variety of commercial recreation uses and auxiliary uses such as a hotel.
- The former Photocircuits and Pass & Seymour sites are able to support renewable energy technologies such as geothermal heat, small-scale rooftop solar and small wind installations.

Condición Existente

- Grandes lugares vacantes de Superfund antes conocidos como Photocircuits y Pass & Seymour terrenos industrial.
- El antiguo sitio de Pall Corporation actualmente en proceso de remodelación como una instalación de autoalmacenamiento.
- Predominantemente un área industrial con alguna recreación comercial y una residencia unifamiliar.
- El área tiene una zona I-2 que permite oficinas comerciales o profesionales, laboratorios de investigación y desarrollo, fabricación, almacenamiento de productos o materiales y otros usos industriales leve.

Source: Google Earth, 2018

Paso II
2012 Recomendaciones

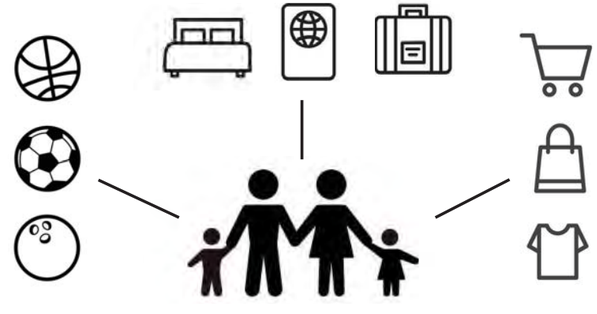
- Gran distribución minorista, industria leve y distribución / almacenaje.
- Mejore el acceso desde Sea Cliff Avenue a Glen Cove Road y / o Cedar Swamp Road para atraer a minoristas de gran escala.
- Los usos comerciales tales como instalaciones de estudio de cine o salón recreativo interior son apropiados para esta área.
- El plan conceptual determinó que los antiguos sitios industriales podrían apoyar un centro mayorista *, locales comerciales o restaurantes y una instalación recreativa comercial.

* Wholesale use is not currently permitted in the I-2 zoning district
* Actualmente no se permite el uso al por mayor en el distrito de zonificación I-2

Source: The Orchard, Step 2 Nomination Study by VHB

Paso III
Zonificación Propuesta

- Reconocer la necesidad de usos más flexibles para promover la reurbanización y la inversión.
- Modifique el Código de Zonificación para permitir el comercio minorista a gran escala, según lo recomendado por el Estudio del Paso II de 2012, además de una variedad de usos recreativos comerciales y usos auxiliares, como un hotel.
- Los sitios anteriores son capaces de soportar tecnologías de energía renovable como el calor geotérmico, la instalación solar a pequeña escala en las azoteas y las instalaciones eólicas pequeñas.



Source: Target, Dave and Busters, Strike Zone Bowling Lanes, Courtyard by Marriot, 2018

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STATION 4:
TRANSIT ORIENTED DEVELOPMENT AREA

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

What is TOD?

- Mixed-use communities, typically with residential apartments above ground-floor retail and restaurants, centered around a transit station.
- Promote compact, walkable and pedestrian-friendly neighborhoods to reduce car dependence and traffic.
- Promote vibrant, sustainable and unique places to live, work and play all in the same area.
- Positive impacts for health and wellness

Step II
2012 Recommendations

- Introduce mixed-use development with ground floor retail next to the Glen Street train station.
- Create a pedestrian connection to the train station from Hazel Street.
- Expand existing parking facilities or explore new parking areas.
- Improve transit access to promote redevelopment in the Orchard Neighborhood.

Step III
Proposed Zoning

- Modify the Zoning Code to allow mixed-use development with affordable housing (retail with residential).
- Modify the Zoning Map to extend the RIO-ON District to include the potential TOD Site.
- Incorporate the existing commercial use at the site into the future TOD mixed-use development.

¿Qué es TOD?

- Comunidades de uso mixto, típicamente con apartamentos residenciales en el piso superior y restaurantes, centrados alrededor de una estación de tránsito.
- Promover vecindarios compactos, transitables y aptos para peatones para reducir la dependencia y el tráfico de automóviles.
- Promover lugares vibrantes, sostenibles y únicos para vivir, trabajar y jugar en la misma área.
- Impactos positivos para la salud y el bienestar.

Paso II
2012 Recomendaciones

- Introduzca el desarrollo de uso mixto con tiendas minoristas en la planta baja junto a la estación de tren de Glen Street.
- Crear una conexión peatonal a la estación de tren de Hazel Street.
- Expansión de estacionamientos o ncontrar estacionamiento más conveniente.
- Mejorar el acceso al transporte público para promover la reurbanización en el vecindario Orchard.

Paso III
Zonificación Propuesta

- Modifique el Código de Zonificación para permitir el desarrollo de uso mixto con viviendas asequibles (tiendas minoristas con viviendas).
- Modifique el Mapa de Zonificación para extender el Distrito RIO-ON para incluir el posible Sitio TOD.
- Incluir el uso comercial existente en el futuro desarrollo de use mixto de TOD.

Source: Avalon Rockville Centre by Avalon Communities

Source: New Village at Patchogue, TRITEC Development Group

Source: Google Earth 2018; Nelson, Pope & Voorhis, 2018

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STATION 5:
TRANSPORTATION IMPROVEMENTS

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

Transportation Recommendations

- Redesign Capobianco Street parking lot to increase efficiency and incorporate green infrastructure (rain garden and trees).
- Restrict parking to one side of street when street is less than 30 feet wide.
- Consider conversion of Stanco Street to a two-way street.
- Evaluate the feasibility of providing additional ways to access the existing Day Care site.
- Individual projects will need to conduct separate traffic studies.

Pedestrian Amenities

- Install sidewalks along streets where they currently do not exist and replace sidewalks in fair or poor condition.
- Upgrade existing curb ramps and sidewalks to comply with the Americans with Disabilities Act (ADA).
- Convert existing street lighting to LED lighting fixtures.
- Replace missing and non-working street lights.

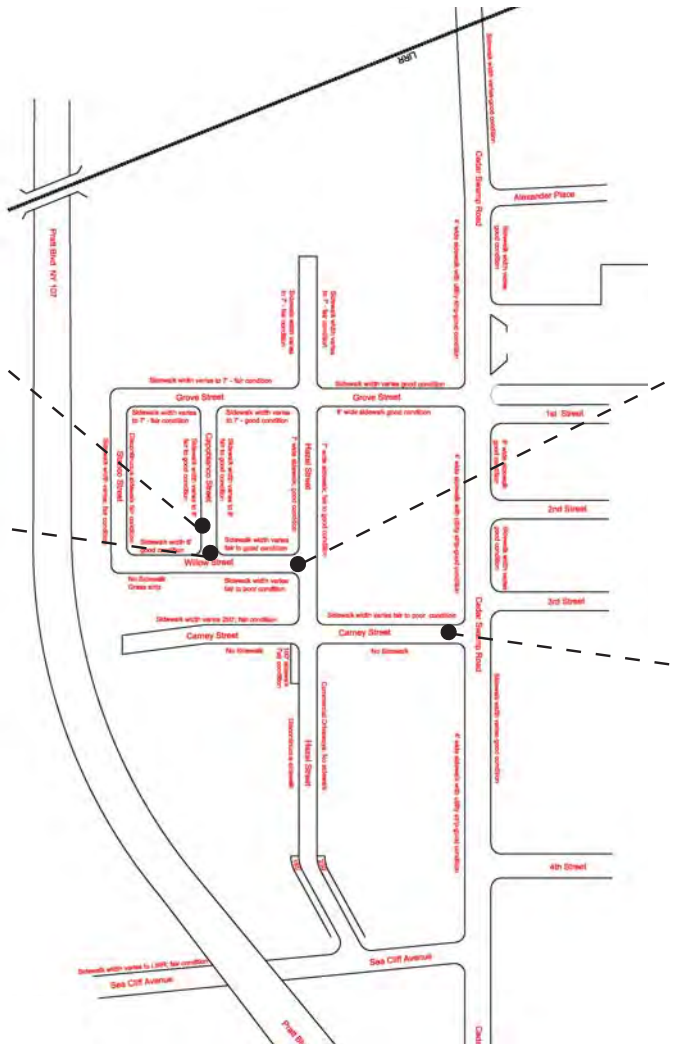
Recomendaciones de Transportacion

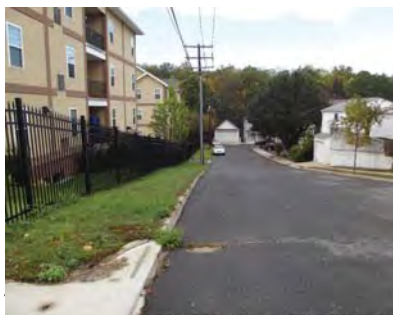
- Rediseño del estacionamiento de la calle Capobianco para aumentar la eficiencia e incorporar infraestructura ecológica (jardín de lluvia y árboles).
- Restrinja el estacionamiento a un lado de la calle cuando la calle tenga menos de 30 pies de ancho.
- Considere la posibilidad de la conversión de la calle Stanco a una calle de dos vías.
- Evalúe la viabilidad de proporcionar formas adicionales de acceso al Day Care.
- Los proyectos individuales deberán realizar estudios de tráfico separados.

Servicios Para Peatones

- Instale aceras a lo largo de las calles donde actualmente no existen y reemplace las aceras en condiciones normales o deficientes.
- Actualizar las rampas y aceras existentes para cumplir con el Americans with Disabilities Act (ADA).
- Convertir el alumbrado público existente en accesorios de iluminación LED.
- Reemplace las luces de la calle faltantes y que no funcionan.

Existing Sidewalk Conditions





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STATION 6: GREEN INFRASTRUCTURE

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

Potential Green Infrastructure Locations

Green Infrastructure

Green Infrastructure is a stormwater treatment practice that utilizes the chemical, biological and physical properties of plants, microbes and soils for managing stormwater runoff and removing pollutants from runoff.

Rain Garden

Rain Gardens are shallow basins that collect water during a storm event to reduce local flooding and improve the quality of water returning into the ground. These gardens are planted with predominantly native plants that require minimal maintenance.

Infraestructura Ecológica

La infraestructura ecologica es una práctica de tratamiento de aguas pluviales que utiliza las propiedades químicas, biológicas y físicas de las plantas, los microbios y los suelos para gestionar la escorrentía de aguas pluviales y eliminar los contaminantes de la escorrentía.

Jardín de Lluvia

Los jardines de lluvia son cuencas poco profundas que recogen agua durante una tormenta para reducir las inundaciones locales y mejorar la calidad del agua que regresa al suelo. Estos jardines están plantados con plantas predominantemente nativas que requieren un mantenimiento mínimo.

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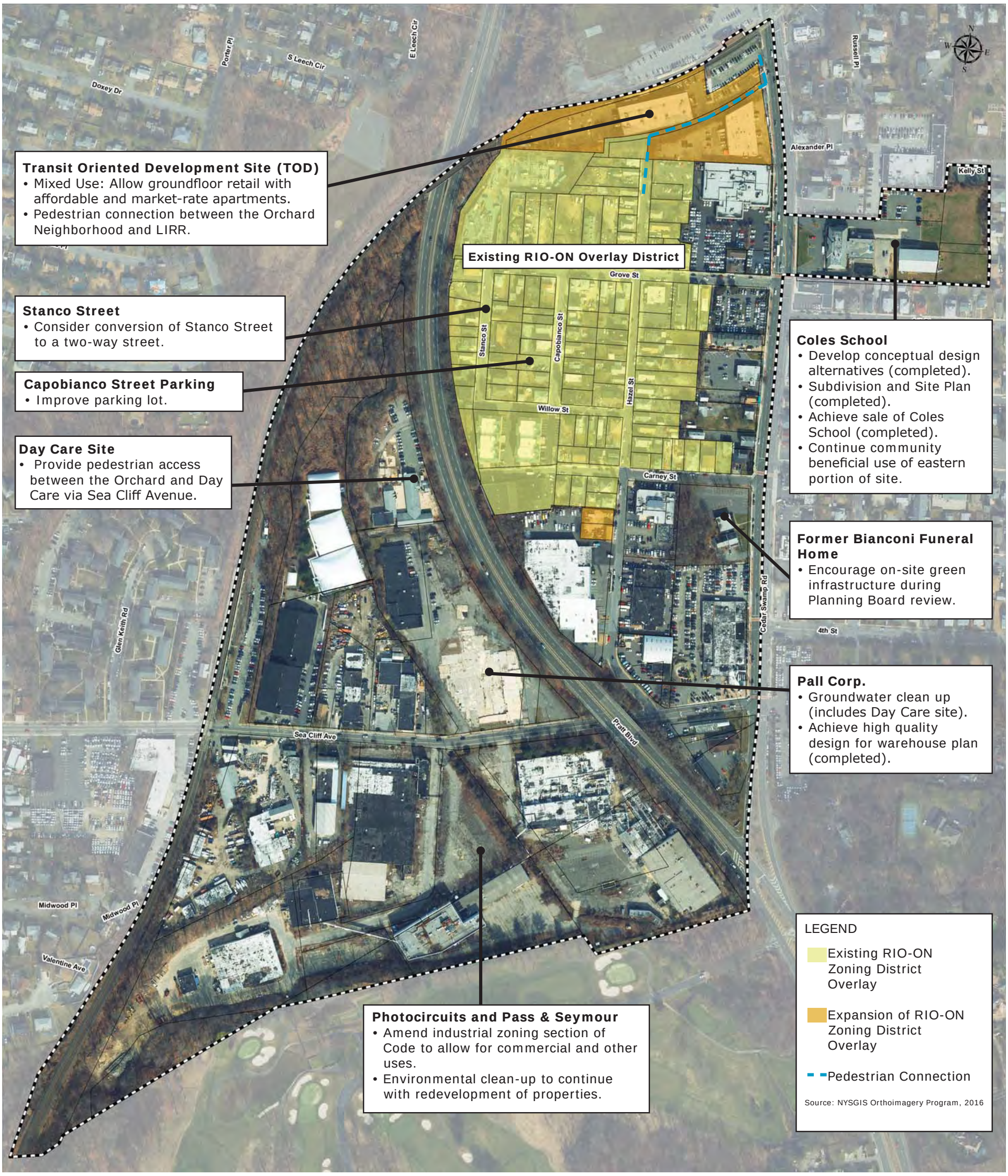
IMPLEMENTATION STRATEGIES

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue



General BOA Implementation Recommendations

- Require adequate off-street parking for all redevelopment projects.
- Ensure adequate emergency access.
- Restrict parking to one side of street when street is less than 30 feet wide.
- Amend Zoning Map to better reflect existing and desired land uses.
- Install or replace missing sidewalks and pedestrian ramps.
- Use rain gardens where possible.
- Enforce existing commercial parking restrictions on residential lots.
- Discourage variances for two-family homes on lots that do not meet 7,500 SF area requirement.
- Repair or replace street lighting with LED lighting fixtures.

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BOA SUCCESS STORIES

City of Glen Cove and New York State Department of State
Glen Cove BOA Step III Implementation Strategy for the Orchard Neighborhood and Sea Cliff Avenue

Sale of the Former Coles School

- Outreach to potential purchasers, including Request for Expressions of Interest.
- Evaluated proposals for reuse of rear portion of property and recommended that the area be retained for community beneficial use.
- Performed cost benefit analysis.
- Conducted environmental investigations and land surveys.
- Assisted City in joint application with Tiegerman, preparation of subdivision plan, applications, and traffic analysis to assist in implementation for reuse of the school.
- Planning Board Site Approval in August 2018.

Venta de la Antigua Escuela de Coles

- Difusión a compradores potenciales, incluida la Solicitud de Expresiones de Interés.
- Se evaluaron las propuestas para la reutilización de la parte trasera de la propiedad y se recomendó que el área se retenga para un uso beneficioso para la comunidad.
- Análisis de costo beneficio realizado.
- Realización de investigaciones ambientales y medición de los terrenos.
- Asistió a la Ciudad en una solicitud conjunta con Tiegerman, preparación del plan de subdivisión, aplicaciones y análisis de tráfico para ayudar en la implementación para la reutilización de la escuela.
- Junta de Planificación de Aprobación del sitio en agosto de 2018.

Pall Corporation Superfund Site

- Performed cost benefit analysis.
- Identified need for access easement to Day Care property.
- Advised City on architecture and status of environmental remediation.
- Meetings with NYS Department of Environmental Conservation (NYS DEC), NYS Department of Health, City and Day Care.
- Achieved better site plan for City.
- Planning Board approved Site Plan in July 2018.

Pall Corporation Sitio Superfund

- Análisis de costo beneficio realizado.
- Necesidad identificada de acceso a la propiedad de l Day Care.
- Asesoró a la Ciudad sobre la arquitectura y el estado de remediación ambiental.
- Reuniones con el Departamento de Conservación Ambiental de NYS (NYS DEC), el Departamento de Salud, Ciudad y Day Care.
- Logrado mejor plan de sitio para la ciudad.
- La Junta de Planificación aprobó el Plan del Sitio en julio de 2018.

Ongoing Remediation

- The City is involved in discussions with NYS DEC regarding environmental cleanup to ensure the State actions are considerate of the Day Care.
- DEC is overseeing the process.
- BOA funding allows for collaboration between the City and State.

Remediación en curso

- La Ciudad está involucrada en discusiones con el NYS DEC sobre la limpieza ambiental para asegurar que las acciones estatales sean consideradas en la guardería.
- DEC está supervisando el proceso.
- La financiación de la BOA permite la colaboración entre la Ciudad y el Estado.

Technical Studies

- Economic Analysis to understand the costs of development and make sure recommendations are feasible.
- Phase I Environmental Assessments
- Housing Analysis
- Green Infrastructure
- Remediation Estimates
- Renewable Energy
- Marketing Profiles
- Parking and Traffic Circulation Study
- Pedestrian and Bicycle Study

Estudios Tecnicos

- Análisis económico para comprender los costos de desarrollo y asegurarse de que las recomendaciones sean factibles.
- Fase I Evaluaciones Ambientales
- Análisis de Vivienda
- Infraestructura Ecológica
- Estimaciones de Remediación
- Energía Renovable
- Perfiles de Marketing
- Estudio de Circulación de Estacionamiento y Tráfico.
- Estudio de peatones y bicicletas.

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APPENDIX B

COST BENEFIT & ECONOMIC ANALYSIS

Pall Corp

	Parameter	Existing	Proposed Self Storage
	Use	Vacant Land (former Pall Corp) Superfund Site	3 story self storage warehouse
	Property Size (acres)	3.80	3.80
Inputs	Commercial Floorspace (SF)	0	105,600
	Housing Units	0	0
	Park/Open Space (sf)	0	0
	Workforce Housing units	0	0
	Affordable Housing Units	0	0
	Residents	0	0
	Public School Children	0	0
Fiscal Impacts	Assessed Property Value	$346,000	$5,728,448
	Taxable Value	$346,000	$5,728,448
	Glen Cove Property Tax	$6,194	$102,543
	School District Property Tax	$15,857	$262,537
	Costs of City Services (per capita basis)	$0	$0
	Costs to School District	$0	$0
	Net Municipal Benefits	$6,194	$102,543
	Net School District Benefits	$15,857	$262,537
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	79
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$5,662,843
	Construction (One-Time) Business	NA	$13,305,795
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	0	20
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$0	$1,420,879
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$0	$3,465,501
Community Benefits		None. In current configuration, site is abandoned industrial use - building has been removed, but site is overgrown, with broken pavement and unsightly.	Access easement from Sea Cliff Avenue to City property currently developed with a Day Care and boxing gym. Currently the only access is via Route 107 southbound.

Coles School

	Parameter	Existing	Proposed Development
	Use	Abandoned former public school; butler building in rear and fields	School (private) in front, public use in rear
	Property Size (acres)	3.97	1.86 for school, 2.11 for City
Inputs	Retail (SF)	0	
	Housing Units	0	
	Park/Open Space (sf)	0	
	Workforce Housing units	0	
	Affordable Housing Units	0	
	Residents	0	
	Public School Children	0	
Fiscal Impacts	Assessed Property Value	$6,572,500	
	Taxable Value	$6,572,500	$0
	Glen Cove Property Tax	$0	$0
	School District Property Tax	$0	$0
	Sale of Property	$0	$2,100,000
	Costs of City Services (per capita or commercial psf basis)	$0	$0
	Costs to School District	$0	$0
	Net Municipal Benefits *	$0	$1,100,000
	Net School District Benefits	$0	$0
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	3
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$234,062
	Construction (One-Time) Business	NA	$644,118
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	NA	NA
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	NA	NA
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	NA	NA
Community Benefits		The former Coles School building is in need of remediation; however, the butler building is leased for a private sports group, and parking is leased	Sale of the school property for $2.1 million, which after paying down debt service netted $1.1 million to the City. Retention of rear portion for community use, parking for community use and easement for access.

	Parameter	Existing	Former Development Proposal	Development Proposal
	Use	Photocircuits and Pass Seymour Superfund Sites (developed with multiple vacant buildings that have been abandoned)	Regional Commercial Center including wholesale with gasoline service and additional retail stores	Large Format Retail + Relocated Manufacturing
	Property Size (acres)	23.00	23.00	23.00
Inputs	Retail (SF)	0	14,200	-
	Big Box	0	162,400	152,245
	Manufacturing	0	-	89,700
	Gas Station (pump islands)	0	4	-
	Bank (SF)	0	2,800	-
	Housing Units	0	0	0
	Park/Open Space (sf)	0	0	0
	Workforce Housing units	0	0	0
	Affordable Housing Units	0	0	0
	Residents	0	0	0
	Public School Children	0	0	0
Fiscal Impacts	Assessed Property Value	$2,168,099	$26,755,267	$26,321,801
	Taxable Value	$2,168,099	$26,755,267	$26,321,801
	Glen Cove Property Tax	$38,810	$478,937	$471,178
	School District Property Tax	$99,365	$1,226,206	$1,206,340
	Retail Sales Taxes	$0	$2,165,550	$1,866,897
	Costs of City Services (per capita or commercial psf basis)	$0	$0	$0
	Costs to School District	$0	$0	$0
	Net Municipal Benefits	$38,810	$2,644,487	$2,338,076
	Net School District Benefits	$99,365	$1,226,206	$1,206,340
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	231	316
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$16,128,039	$22,095,688
	Construction (One-Time) Business	NA	$39,336,024	$53,891,021
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	NA	449	526
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	NA	$17,584,971	$24,055,986
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	NA	$44,142,253	$56,154,364
Community Benefits		None. In current configuration, site is composite of two abandoned industrial uses.	New access to site from NYS 107; removal of blighted site	New access to site from NYS 107; removal of blighted site; retaining existing business

The Orchard Neighborhood
40,000 SF Area

	Parameter	Existing	Proposed
	Use	Residential	Residential Supportive Housing and Townhouses
	Property Size (SF)	40,000	40,000
Inputs	Commercial Floorspace (SF)	0	-
	Housing Units	21	25 1 bedroom supportive housing and 3 rental townhomes (2 BR)
	Park/Open Space (sf)	0	0
	Workforce Housing units		3
	Affordable Housing Units		25
	Residents	40	43
	Public School Children	5	2
Fiscal Impacts	Assessed Property Value	$ 2,683,500	$ 3,568,868
	Taxable Value	$ 2,683,500	$ 3,568,868
	Glen Cove Property Tax	$ 48,036	$ 63,885
	School District Property Tax	$ 122,986	$ 163,563
	Costs of City Services (per capita or commercial psf basis)	$ (32,160.00)	$ (34,483.56)
	Costs to School District	$ (91,260.70)	$ (30,298.55)
	Net Municipal Benefits	$ 18,078.01	$ 29,402
	Net School District Benefits	$ 31,725.32	$ 133,264
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	75
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$ 5,137,077
	Construction (One-Time) Business	NA	$ 13,858,206
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	10	10
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$ 364,389	$ 572,015
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$ 1,000,835	$ 1,570,262

The Orchard Neighborhood
25,000 SF Area

	Parameter	Existing	Proposed
	Use	Residential	Residential Supportive Housing and Townhouses
	Property Size (SF)	25,000	25,000
Inputs	Commercial Floorspace (SF)	0	-
	Housing Units	17	**10** 3-BR townhomes (owned) and **3** 2-Bedroom flats
	Park/Open Space (sf)	0	0
	Workforce Housing units		10
	Affordable Housing Units		3
	Residents	33	34
	Public School Children	4	3
Fiscal Impacts	Assessed Property Value	$ 1,997,000	$ 2,731,453
	Taxable Value	$ 1,997,000	$ 2,731,453
	Glen Cove Property Tax	$ 35,748	$ 48,895
	School District Property Tax	$ 91,523	$ 125,184
	Costs of City Services (per capita or commercial psf basis)	$ (26,532)	$ (27,424)
	Costs to School District	$ (73,009)	$ (60,962)
	Net Municipal Benefits	$ 9,216	$ 21,470
	Net School District Benefits	$ 18,515	$ 64,222
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	47
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$ 3,254,214
	Construction (One-Time) Business	NA	$ 8,778,838
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	9	9
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$ 294,981.45	$ 488,325
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$ 810,199.60	$ 1,337,958

The Orchard Neighborhood
9,500 SF Area

	Parameter	Existing	Yield under current zoning	Proposed	Alternative Proposal
	Use	Residential	Residential	Residential (MF)	Residential (MF)
	Property Size (SF)	9,500	9,500	9,500	9,500
Inputs	Commercial Floorspace (SF)	0	0	0	0
	Housing Units	2 grandfathered 1 family houses (single and separate lots)	1 two family	4 Rental townhomes	3 Rental townhomes with 1 apartment
	Park/Open Space (sf)	0	0	0	0
	Workforce Housing units		2		
	Affordable Housing Units		0		
	Residents	7	4	8	7
	Public School Children	1	1	1	1
Fiscal Impacts	Assessed Property Value	$ 725,000	$ 568,764	$ 955,680	$ 830,844
	Taxable Value	$ 725,000	$ 568,764	$ 955,680	$ 830,844
	Glen Cove Property Tax	$ 4,486	$ 3,519	$ 17,107	$ 14,873
	School District Property Tax	$ 10,952	$ 8,592	$ 43,799	$ 38,078
	Costs of City Services (per capita or commercial psf basis)	$ (5,339)	$ (3,007)	$ (6,046)	$ (5,950)
	Costs to School District	$ (22,268)	$ (9,856)	$ (16,062)	$ (12,046)
	Net Municipal Benefits	$ (853)	$ 512	$ 11,061	$ 8,923
	Net School District Benefits	$ (11,316)	$ (1,264)	$ 27,737	$ 26,032
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	5	9	9
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$ 327,385	$ 648,066	$ 632,565
	Construction (One-Time) Business	NA	$ 915,554	$ 1,748,277	$ 1,706,461
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	1	1	2	2
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$ 34,704	$ 53,325	$ 135,058	$ 127,956
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$ 95,318	$ 146,595	$ 369,834	$ 350,673

The Orchard Neighborhood
9,500 SF Area

	Parameter	Existing	Yield under current zoning	Proposed	Alternative Proposal
	Use	Residential	Residential	Residential (MF)	Residential (MF)
	Property Size (SF)	9,500	9,500	9,500	9,500
Inputs	Commercial Floorspace (SF)	0	0	0	0
	Housing Units	2 grandfathered 1 family houses (single and separate lots)	1 two family	4 Rental townhomes	3 Rental townhomes with 1 apartment
	Park/Open Space (sf)	0	0	0	0
	Workforce Housing units		2		
	Affordable Housing Units		0		
	Residents	7	4	8	7
	Public School Children	1	1	1	1
Fiscal Impacts	Assessed Property Value	$ 725,000	$ 568,764	$ 955,680	$ 830,844
	Taxable Value	$ 725,000	$ 568,764	$ 955,680	$ 830,844
	Glen Cove Property Tax	$ 4,486	$ 3,519	$ 17,107	$ 14,873
	School District Property Tax	$ 10,952	$ 8,592	$ 43,799	$ 38,078
	Costs of City Services (per capita or commercial psf basis)	$ (5,339)	$ (3,007)	$ (6,046)	$ (5,950)
	Costs to School District	$ (22,268)	$ (9,856)	$ (16,062)	$ (12,046)
	Net Municipal Benefits	$ (853)	$ 512	$ 11,061	$ 8,923
	Net School District Benefits	$ (11,316)	$ (1,264)	$ 27,737	$ 26,032
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	5	9	9
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$ 327,385	$ 648,066	$ 632,565
	Construction (One-Time) Business	NA	$ 915,554	$ 1,748,277	$ 1,706,461
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	1	1	2	2
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$ 34,704	$ 53,325	$ 135,058	$ 127,956
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$ 95,318	$ 146,595	$ 369,834	$ 350,673

	Parameter	Existing	Alternative 1	Alternative 2A	Alternative 2B	Alternative 2C	Alternative 2D
21 H 03120	Use	Commercial	Mixed Use TOD (as per local architect)	All Market Rate Units (35 Units per Acre)	Mixed Use TOD (80 market rate)	50-50 Market Rate (80% AMI)	70-30 Market to Affordable (Mixed Incomes 30-80% AMI)
	Property Size (SF)	82,398	also included MTA Parking area (additional 13,500 SF)	82,398	82,398	82,398	82,398
Inputs	Commercial Floorspace (SF)	28,185	19,250	20,000	20,000	20000	20,000
	Market Rate Housing Units	0	80 apartments	65 Units (16 studios, 41 1 BR, 8 2BR)	80 Units (22 studios, 46 1 BR, 12 2BR)	40 Units (11 studios, 23 1 BR, 6 2BR)	56 Units (14 studios, 35 1 BR, 7 2BR)
	Park/Open Space (sf)	0					
	Workforce Housing units	0					
	Affordable Housing Units					40 Units (11 studios, 23 1 BR, 6 2BR)	24 Units (6 studios, 15 1 BR, 3 2BR)
	Residents	0	113	92	112	112	113
	Public School Children	0	3	2	3	3	3
Fiscal Impacts	Assessed Property Value	$ 1,932,800	$ 8,686,560	$ 7,127,000	$ 8,048,534	$ 8,224,969	$ 8,275,515
	Taxable Value	$ 1,932,800	$ 8,686,560	$ 7,127,000	$ 8,048,534	$ 8,224,969	$ 8,275,515
	Glen Cove Property Tax	$ 34,598	$ 155,495	$ 127,578	$ 144,074	$ 147,233	$ 148,137
	School District Property Tax	$ 88,581	$ 398,109	$ 326,634	$ 368,868	$ 376,954	$ 379,271
	Costs of City Services (per capita basis)	$ -	$ (90,699)	$ (73,751)	$ (90,321)	$ (90,321)	$ (90,691)
	Costs to School District	$ -	$ (57,677)	$ (41,615)	$ (51,106)	$ (51,106)	$ (51,106)
	Net Municipal Benefits	$ 380,216	$ 300,848	$ 299,076	$ 299,002	$ 302,160	$ 302,695
	Net School District Benefits	$ 88,581	$ 340,432	$ 285,019	$ 317,762	$ 325,848	$ 328,165
Economic Impacts (modeled in IMPLAN)	Construction (One-Time) Jobs (Direct, Indirect, Induced)	NA	210	177	177	177	177
	Construction (One-Time) Wages (Direct, Indirect, Induced)	NA	$ 14,465,693	$ 12,202,860	$ 12,202,860	$ 12,202,860	$ 12,202,860
	Construction (One-Time) Business	NA	$ 39,023,853	$ 32,919,447	$ 32,919,447	$ 32,919,447	$ 32,919,447
	Annual Operations/Maintenance Jobs (Direct, Indirect, Induced)	69	97	89	86	71	79
	Annual Operations/Maintenance Wages (Direct, Indirect, Induced)	$ 2,712,667	$ 4,596,848	$ 4,111,415	$ 3,946,786	$ 3,105,310	$ 3,573,859
	Annual Operations/Maintenance Revenues (Direct, Indirect, Induced)	$ 6,833,163	$ 12,188,634	$ 10,843,603	$ 10,406,626	$ 8,087,183	$ 9,370,183
Community Benefits	Pedestrian Benefit		Pedestrian connection from Hazel Street	Pedestrian connection from Hazel Street	Pedestrian connection from Hazel Street	Pedestrian connection from Hazel Street	Pedestrian connection from Hazel Street
Notes:	Notes		would require approval from MTA/LIRR for relocation of parking and use of the ROW for development				

TOD Development Options: assumes control of site

Green indicates feasible without subsidy. **Bold indicates evaluated further in CBA.**

			TOD: 80 units				Higher Density Option: 200 units				
	Existing Conditions	**All Market (35 units per acre)**	**All Market**	**All Affordable (80% AMI)**	**50-50 Market-Affordable (80% AMI)**	**70-30 Market-Affordable (Mixed 30-80%)**	All Market	All Affordable (80% AMI)	All Affordable (Mixed 30-80% AMI)	70-30 Market-Affordable (Mixed 30-80%)	50-50 Market-Affordable (80% AMI)
Properties	1	**1**	**1**	**1**	**1**	**1**	1	1	1	1	1
Area	1.88	**1.88**	**1.88**	**1.88**	**1.88**	**1.88**	1.88	1.88	1.88	1.88	1.88
Existing Taxes on Land	$ (180,078)	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA	NA	NA	NA
Units		**65**	**80**	**80**	**80**	**80**	200	200	200	200	200
Floorspace (SF)	28,185	**82,203**	**96,902**	**92,832**	**94,867**	**95,450**	231,400	171,400	171,400	224,925	207,572
Total Affordable Units	NA	**0**	**-**	**80**	**40**	**24**	0	200	200	61	100
Studios	NA	**0**	**-**	**22**	**11**	**6**	0	50	50	15	28
1 Bedroom	NA	**0**	**-**	**46**	**23**	**15**	0	125	125	38	56
2 Bedroom	NA	**0**	**-**	**12**	**6**	**3**	0	25	25	8	16
Total Market Rate Units	NA	**65**	**80**	**0**	**40**	**56**	200	0	0	139	100
Studios	NA	**16**	**22**	**0**	**11**	**14**	50	0	0	35	28
1 Bedroom	NA	**41**	**46**	**0**	**23**	**35**	125	0	0	87	56
2 Bedroom	NA	**8**	**12**	**0**	**6**	**7**	25	0	0	17	16
Commercial (20,000 SF)	NA	**20,000**	**20,000**	**20,000**	**20,000**	**20,000**	20,000	20,000	20,000	20,000	20,000
Affordable Rents (Annual at 2% vacancy)	NA	**$ -**	**$ -**	**$ 1,642,872**	**$ 821,436**	**$ 361,126**	$ -	$ 3,640,445	$ 3,009,384	$ 919,056	$ 2,054,895
Market Rents (Annual at 2% vacancy)	NA	**$ 1,732,636**	**$ 2,464,308**	**$ -**	**$ 1,232,154**	**$ 1,725,016**	$ 5,328,750	$ -	$ -	$ 3,700,590	$ 3,082,343
Retail Rents (10% vacancy)	NA	**$ 324,000**	**$ 324,000**	**$ 324,000**	**$ 324,000**	**$ 324,000**	$ 324,000	$ 324,000	$ 324,000	$ 324,000	$ 324,000
Total Annual Rents	NA	**$ 2,056,636**	**$ 2,788,308**	**$ 1,966,872**	**$ 2,377,590**	**$ 2,410,142**	$ 5,652,750	$ 3,964,445	$ 3,333,384	$ 4,943,646	$ 5,461,238
Annual Debt Service	NA	**$ (870,736)**	**$ (899,629)**	**$ (862,975)**	**$ (881,302)**	**$ (886,553)**	$ (2,034,279)	$ (1,674,041)	$ (1,674,041)	$ (1,905,803)	$ (1,896,319)
CAP Rate	NA	**10.2%**	**12.0%**	**9.4%**	**10.7%**	**10.4%**	12.4%	11.7%	7.9%	11.3%	11.5%
County AV	$ 27,413	**$ 71,270**	**$ 84,014**	**$ 80,485**	**$ 82,250**	**$ 82,755**	$ 183,284	$ 148,604	$ 148,604	$ 180,878	$ 179,965
City AV	$ 2,741,300	**$ 7,127,000**	**$ 8,401,403**	**$ 8,048,534**	**$ 8,224,969**	**$ 8,275,515**	$ 18,328,380	$ 14,860,380	$ 14,860,380	$ 18,087,788	$ 17,996,492
Total Annual Taxes	$ (180,078)	**$ (485,182)**	**$ (572,015)**	**$ (547,917)**	**$ (560,003)**	**$ (563,444)**	$ (1,247,734)	$ (1,011,644)	$ (1,011,644)	$ (1,231,355)	$ (1,225,302)
City Taxes (1.790068 per 100)	$ (48,806)	**$ (127,578)**	**$ (150,391)**	**$ (144,074)**	**$ (147,233)**	**$ (148,137)**	$ (328,090)	$ (266,011)	$ (266,011)	$ (323,784)	$ (322,149)
County Taxes (43.545 per 100)	$ (13,305)	**$ (30,970)**	**$ (36,584)**	**$ (34,975)**	**$ (35,816)**	**$ (36,036)**	$ (79,645)	$ (64,575)	$ (64,575)	$ (78,600)	$ (78,366)
School/Library Taxes (45.830454 per $1000)	$ (117,966)	**$ (326,634)**	**$ (385,040)**	**$ (368,868)**	**$ (376,954)**	**$ (379,271)**	$ (839,998)	$ (681,058)	$ (681,058)	$ (828,972)	$ (824,787)
Annual After-Tax Net Revenue	***NA***	***$ 700,718***	***$ 1,316,664***	***$ 555,980***	***$ 936,285***	***$ 960,145***	***$ 2,370,737***	***$ 1,278,760***	***$ 647,565***	***$ 1,806,488***	***$ 2,339,617***
After-Tax Rate of Return	NA	**18.4%**	**33.5%**	**14.8%**	**24.4%**	**24.8%**	26.4%	17.5%	8.9%	19.9%	28.3%

Capobianco Commercial Development Options:
assumes control of at least 1 property

Green indicates feasible without subsidy. **Bold indicates evaluated further in CBA.**

		All Market (35 units per acre)										80% AMI					
	Existing	Townhome v1 (fewest units with profit)	Townhome v1 (max units)	Townhome v2	Townhome v2 (max units)	**Townhome v3 (10TH + 3 flats)**	Townhome v3 (max)	MF 12 Eff, 10 each 1-Bed, 2-Bed	MF 12 Eff, 10 each 1-Bed, 2-Bed + Retail	**4 Townhome Redevelopment**	**3 Townhome, 1 Flat Redevelopment**	Townhome v1 (max)	Townhome v2 (max)	Townhome v3 (max)	MF 12 Eff, 10 each 1-Bed, 2-Bed	MF 12 Eff, 10 each 1-Bed, 2-Bed + Retail	**25-Unit MF + 3 TH**
Properties*	7	3	3	3	3	**5**	5	8	8	**2**	**2**	3	3	5	8	8	**8**
Lot Size	30,000	15,000	15,000	15,000	15,000	**25,000**	25,000	40,000	40,000	**9,500**	**9,500**	15,000	15,000	25,000	40,000	40,000	**40,000**
Floorspace (SF)		14,000	24,000	10,920	18,720	**20,280**	26,400	29,740	34,740	**8,000**	**6,955**	24,000	18,720	26,400	29,740	34,740	**29,875**
Units	18	7	12	7	12	**13**	20	32	32	**4**	**4**	12	12	20	32	32	**28**
Retail	0	0	0	0	0	**0**	0	0	5,000	**0**	**0**	0	0	0	0	5,000	**0**
Section 8/Affordable Units	4	0	0	0	0	**0**	0	0	0	**0**	**0**	0	0	0	0	0	**25**
Owner- Occupied Units	1	NA	NA	NA	NA	**NA**	NA	NA	NA	**0**	**0**	NA	NA	NA	NA	NA	**NA**
Market Rate Rental Units	13	7	12	7	12	**13**	20	32	32	**4**	**4**	NA	NA	NA	32	32	**3**
Section 8/Affordable Rents (Monthly)	$ 6,675	NA	NA	NA	NA	**NA**	NA	$ -	NA	**NA**	**NA**	12	12	20	$ -	NA	**$ 39,690**
Estimate of Market Rents (Monthly)	$ 31,947	$ 22,803	$ 39,090	$ 20,539	$ 35,209	**$ 39,710**	$ 53,248	$ 71,393	$ 71,393	**$ 12,720**	**$ 11,827**	$ 31,272	$ 28,168	$ 42,599	$ 57,114	$ 57,114	**$ 9,540**
Estimate of Retail Rents (Annual)		NA	NA	NA	NA	**NA**	NA	NA	$ 81,000	**NA**	**NA**	NA	NA	NA	NA	$ 81,000	**NA**
Parking Spaces (1 per unit)	NA	NA	NA	NA	NA	**NA**	NA	47	47	**$ -**	**$ -**	NA	NA	NA	47	47	**NA**
Annual Rent Revenue	$ 463,462	$ 273,632	$ 469,083	$ 246,466	$ 422,513	**$ 476,515**	$ 638,980	$ 856,716	$ 931,881	**$ 152,645**	**$ 141,920**	$ 375,266	$ 338,010	$ 511,184	$ 685,373	$ 766,373	**$ 590,760**
Annual Debt Service	NA	$ (158,166)	$ (248,225)	$ (130,427)	$ (200,674)	**$ (183,106)**	$ (269,840)	$ (530,071)	$ (538,011)	**$ (72,231)**	**$ (62,796)**	$ (248,225)	$ (200,674)	$ (269,840)	$ (530,071)	$ (538,011)	**$ (381,341)**
CAP Rate	NA	5.8%	6.3%	6.9%	7.7%	**9.1%**	9.0%	4.6%	7.2%	**6.9%**	**7.9%**	4.2%	5.3%	6.3%	4.8%	5.4%	**5.2%**
County AV (1% of Commercial)	$ 11,141	$ 16,724	$ 28,670	$ 13,045	$ 22,363	**$ 27,315**	$ 31,537	$ 35,035	$ 38,287	**$ 9,557**	**$ 2,077**	$ 28,670	$ 22,363	$ 31,537	$ 35,035	$ 38,287	**$ 35,689**
City AV	$ 2,051,000	$ 1,672,440	$ 2,867,040	$ 1,304,503	$ 2,236,291	**$ 2,731,453**	$ 3,153,744	$ 3,503,547	$ 3,828,672	**$ 955,680**	**$ 830,844**	$ 2,867,040	$ 2,236,291	$ 3,153,744	$ 3,503,547	$ 3,828,672	**$ 3,568,868**
Total Annual Taxes	$ (55,650)	$ (113,869)	$ (195,204)	$ (88,818)	$ (152,259)	**$ (185,973)**	$ (214,725)	$ (238,541)	$ (260,678)	**$ (65,068)**	**$ (55,183)**	$ (195,204)	$ (152,259)	$ (214,725)	$ (238,541)	$ (260,678)	**$ (242,989)**
City Taxes (1.790068 per 100)	$ (12,691)	$ (29,938)	$ (51,322)	$ (23,351)	$ (40,031)	**$ (48,895)**	$ (56,454)	$ (62,716)	$ (68,536)	**$ (17,107)**	**$ (14,873)**	$ (51,322)	$ (40,031)	$ (56,454)	$ (62,716)	$ (68,536)	**$ (63,885)**
County Taxes (43.545 per 100)	$ (11,976)	$ (7,283)	$ (12,485)	$ (5,680)	$ (9,738)	**$ (11,894)**	$ (13,733)	$ (15,256)	$ (16,672)	**$ (4,162)**	**$ (2,233)**	$ (12,485)	$ (9,738)	$ (13,733)	$ (15,256)	$ (16,672)	**$ (15,541)**
School/Library Taxes (45.830454 per $1000)	$ (30,983)	$ (76,649)	$ (131,398)	$ (59,786)	$ (102,490)	**$ (125,184)**	$ (144,538)	$ (160,569)	$ (175,470)	**$ (43,799)**	**$ (38,078)**	$ (131,398)	$ (102,490)	$ (144,538)	$ (160,569)	$ (175,470)	**$ (163,563)**
Annual After-Tax Net Revenue	***$ 407,812***	***$ 1,597***	***$ 25,654***	***$ 27,221***	***$ 69,580***	***$ 107,436***	***$ 154,415***	***$ 88,104***	***$ 133,192***	***$ 15,346***	***$ 23,941***	***$ (68,163)***	***$ (14,923)***	***$ 26,619***	***$ (83,239)***	***$ (32,316)***	***$ (33,570)***
After-Tax Rate of Return	NA	0.23%	2.37%	4.78%	7.95%	**13.5%**	13.1%	3.8%	5.7%	**4.9%**	**8.2%**	-6.3%	-1.7%	2.3%	-3.6%	-1.6%	**-2.0%**

*Based on Average lot area of 5000sf

Green indicates feasible without subsidy

Persons per household					
Structure Type	Studio	1	2	3	4+
1-family detached	2.89	3.04	2.02	3.32	4.47
1-family attached	NA	NA	1.88	2.91	5.68
2-family	2.08	1.51	1.87	4.27	5.12
3-4 family	1.00	1.02	1.76	4.32	NA
5 + Family	1.08	1.49	1.67	2.49	2.91
Public School Children per household					
Structure Type	Studio	1 BR	2 BR	3 BR	4+BR
1-family detached	1.89	0.93	0.04	0.61	0.88
1-family attached	NA	NA	0.22	0.31	0.13
2-family	1.06	0.00	0.27	1.15	1.38
3-4 family	0.00	0.00	0.00	0.80	NA
5 + Family	0.00	0.04	0.08	0.52	0.77

Source: Urbanomics, US Census American Community Survey 2012-2016, Public Use Microdata Sample

APPENDIX C

ENVIRONMENTAL DATABASE RESEARCH

Prepared by Roux Associates

ENVIRONMENTAL CONSULTING & MANAGEMENT
ROUX ASSOCIATES INC
209 SHAFTER STREET
ISLANDIA, NEW YORK 11749
TEL 631-232-2600 FAX 631-232-9898

ROUX MEMORANDUM

TO: Ms. Myralee Machol, City of Glen Cove, CDA

FROM: Kathryn Sommo, Roux Associates, Inc.

CC: Maximillian Stach, AICP, Turner Miller Group
Kathryn J. Eiseman, AICP, Nelson, Pope & Voorhis, LLC
Charles J. McGuckin, P.E., Roux Associates, Inc.

DATE: May 26, 2016

RE: BOA Step III Environmental Summary
City of Glen Cove

Roux Associates reviewed the properties located within the limits of the Step III Brownfields Opportunity Area (BOA) for potential environmental impacts. This report summarizes the findings of the environmental databases researched and other publicly available environmental documents. Figure 1 shows the extent of the BOA Step III limits, the BOA areas of interest and the properties that will be focused on for redevelopment. The BOA areas of interest include:

- Cole School Area;
- Orchard Neighborhood;
- Orchard Business District;
- Cedar Swamp Road Area;
- Transit Oriented Development (TOD) Area; and
- Sea Cliff Avenue Area.

Table 1 provides a summary of all properties included in the BOA Step II and additional properties added through input from the City of Glen Cove and the BOA Step III 2016 environmental review. The highlighted properties in Table 1 are divided into two categories: 1.) Active Remediation Sites, and 2.) Potential Brownfield Sites with Redevelopment Interest. A summary of the environmental findings for each of these highlighted properties is provided below.

Active Remediation Sites

Through the BOA Step III, four properties were identified that are currently in the New York State Department of Environmental Conservation (NYSDEC) State Superfund Program: 1.) Photocircuits; 2.) Pass & Seymour; 3.) Pall Corporation; and 4.) National Grid. Photocircuits, Pass & Seymour and Pall Corporation are classified as Class 2 inactive hazardous waste sites and the National Grid site is classified as a Class A an active non-registry site.

1. Photocircuits

Photocircuits and the previous site owners Powers Chemco (1954-1971) and Kollmorgen Corporation (1971-1986), formerly manufactured printed circuit boards. The 10 acre site perimeter is surrounded in fencing and contains several large abandoned buildings, former parking areas and roadways. Glen Cove Creek transects the Photocircuits property and the former Pass & Seymour facility located to the west.

Past investigations of this area have documented high concentrations of chlorinated volatile organic compounds (CVOCs) in the groundwater underlying the site. The highest concentrations were reported near the northeast corner of the property in a drum storage and tank farm area.

Potentially Responsible Parties (PRPs) who may be legally liable for contamination at the site include:

- Photocircuits Division of Kollmorgen;
- Photocircuits Corporation;
- PC Liquidation Corp;
- American Pacific Financial Corporation (AMPAC);
- GCP, LLC; and
- Photocircuits of New York (Nevada Photocircuits).

The NYSDEC and the Photocircuits Corporation entered into a Consent Order (Index No. Wl-0713-94-12) on March 31, 1997, this consent order also included the Pass & Seymour site. Photocircuits Corporation was obligated to implement a Remedial Investigation/Feasibility Study and to select and implement the remedy for the environmental impacts under the Order on Consent. The PRPs for the site declined to implement a remedial program when requested by the NYSDEC. Photocircuits filed for bankruptcy in 2006 and there was no settlement for funds to complete the environmental remediation.

Operable Units

The site is divided into two operable units. Operable Unit 1 (OU1) includes on-site soils and groundwater to a depth of 100 feet below ground surface (ft bgs). Operable Unit 2 (OU2) addresses on-site and off-site groundwater at depths greater than 100 ft bgs. Groundwater is present at 4 to 10 ft bgs. Groundwater flow is generally to the north northwest.

OU1

Total VOC concentrations in soil ranged from non-detect to 48 ppm (mg/kg). Tetrachloroethene (PCE) and trichloroethene (TCE) were the VOCs most frequently detected. Concentrations of individual VOC contaminants in soils did not exceed New York State Department of Environmental Conservation (NYSDEC) Soil Cleanup Objectives (SCOs).

The groundwater samples collected in the vicinity of the tank farm and the drum storage area indicated the presence of the following compounds in excess of groundwater standards:

- vinyl chloride (VC),
- chloroethane,
- 1,1-dichloroethene (1,1-DCE),
- methylene chloride,
- 1,1-Dichloroethane (DCA),
- 1,2-Dichloroethane,
- 2-Butanone,
- 1,1,1- Trichloroethane (TCA),
- trichloroethene (TCE),
- toluene, and
- tetrachloroethene (PCE).

Site-related contamination entered the Upper Glacial Aquifer which is a sole source aquifer providing groundwater for private, public and industrial use in the area.

The Glen Cove Creek is located approximately 200 ft cross-gradient from the contaminated tank farm and drum storage area. Sampling results from shallow groundwater monitoring wells located adjacent to the stream indicated total VOC levels of 38 ppb (µg/kg) or less.

Interim Remedial Measures (IRM)

In 1999, an air sparge/soil vapor extraction system (AS/SVE) was installed in the vicinity of the tank farm and the drum storage area of the site. The system included shallow air sparge wells (screened 10-12 ft bgs), and deep air sparge wells (screened 30-32 ft bgs), and shallow horizontal SVE wells. A catalytic oxidizer/scrubber was added to the system in 2000. Removal rates gradually declined, and the system was decommissioned in November 2002. Significant mass removal of VOC contaminants was accomplished; however, levels of VOC contamination in groundwater in the treatment area remained high. In 2002, the highest concentrations detected in groundwater were as follows: TCA 19,500 ppb (µg/L), DCA 20,500 ppb (µg/L) and chloroethane 10,100 ppb (µg/L). The SCGs (New York State Ambient Water Quality Standard) for TCA, DCA and chloroethane are all 5 ppb (µg/L). Other CVOCs detected in exceedance of the SCGs included PCE, TCE, 1,1-DCE, 1,2-DCE, vinyl chloride, toluene, and benzene.

Accelerated Anaerobic Bioremediation was implemented between August 2000 and February 2002 through the injection of emulsified soybean oil (9,000 gallons) to a depth of 50 ft bgs. Overall, the results showed progressive dechlorination of the contaminants and the generation of large quantities of methane. Elevated levels of vinyl chloride were also generated, and CVOC concentrations increased in some monitoring points.

Between January 2002 and 2003, a hydraulic restraint system was installed and began operation; it was located between the Photocircuits' main building and Sea Cliff Avenue. Groundwater extraction wells were installed at depths up to 60 ft bgs. The operation of the hydraulic restraint system did not result in significant decrease in downgradient (north of Sea Cliff Avenue) contaminant concentrations, particularly in groundwater samples taken from 60-100 ft bgs. In

2004 the highest concentrations detected in groundwater were as follows: TCA 14,000 ppb (µg/L), DCA 26,000 ppb (µg/L) and chloroethane 41,000 ppb (µg/L).

ROD – OU1
A Record of Decision (ROD) was issued in March 2008 for OU1 by the NYSDEC-DEC #130009. The remedy included the following components:

- AS/SVE
- Substrate injection (emulsified soybean oil)
- Groundwater monitoring

The IRMs described above were implemented by the NYSDEC prior to the ROD being issued.

ROD – OU2
A ROD was issued in March 2013 for OU2 by the NYSDEC-DEC #130009. **The same ROD was issued to the Pall Corporation site as one remedy will address the combined deep groundwater plume.** Refer to the Pall Corporation OU-2 ROD Summary.

Photocircuits Current Status: Photocircuits filed for bankruptcy in 2006 and the company assets were sold to American Pacific Financial Corporation. Based upon verbal communication on May 25, 2016 with the NYSDEC project manager for OU-1 George Momberger, active remediation of OU-1 is not occurring and the groundwater is not being monitored. Any additional environmental work related to OU-1 will be addressed once the OU-2 remedial design is completed. Based upon verbal communication with Guy Boberesky, the NYSDEC project manager for OU-2, the NYSDEC is no longer pursuing the Photocircuits PRPs for funding to implement the OU-2 remedy. In situ chemical oxidation will be used with groundwater extraction downgradient of the treatment area and re-injection upgradient of the OU-2 treatment area. The remedial design is currently underway by HDR and it is anticipated to be completed in the fourth quarter of 2016. Remedial construction is anticipated to occur between 2017 and 2018 and the remediation system for OU-2 should be limited to the Pall Corporation property.

2. Pass and Seymour

The Pass and Seymour site is located at 45 Sea Cliff Avenue and is 7.5 acres in size. The site is bounded by Sea Cliff Avenue to the north; the Photocircuits Corporation, Site No. 130009, site to the east; the Glen Head Country Club to the south and the Tweezerman property to the west. The Glen Cove Creek flows to the north along the east side of the site. Groundwater depth is 4 to 10 ft bgs. Most of the site is paved and contains several industria1 buildings.

Slater Electric began operations in 1959 when the main buildings on site were constructed. In 1988, Pass and Seymour purchased the property and manufactured electric components. PCE was stored in an above ground storage tank near Building 7 and was used as a degreasing solvent during site operations. Past investigations identified the contaminant source area within the vicinity of Building 7. Soil contamination was limited to the vicinity of the PCE storage tank located on the west wall of Building 7, with the highest concentrations of PCE detected at 2.5 ppm (mg/kg) (12-16 ft bgs) compared to the NYSDEC Unrestricted Use SCO of 1.3 ppm (mg/kg).

PCE concentrations of 32,000 and 17,000 ppb (µg/L) were detected in groundwater grab samples (12-28 ft bgs) within the Building 7 footprint. In May 1996, the site was listed as a Class 2 Inactive Hazardous Waste Disposal Site.

Potentially Responsible Parties (PRPs)
On March 31, 1997, the NYSDEC and the Photocircuits Corporation entered into a Consent Order (Index No. W1- 071 3-94-12) that included both the Photocircuits and the Pass & Seymour sites. Photocircuits Corporation was obligated to implement a Remedial Investigation/Feasibility Study and to select and implement the remedy for the environmental impacts under the Order on Consent. Photocircuits filed for bankruptcy in 2006 and there was no settlement for funds to complete the environmental remediation.

Interim Remedial Measures (IRM)
An AS/SVE system was installed as an IRM in and around Building7 during the Fall of 2000. Air sparging wells were installed to a depth of about 40 ft bgs, and soil vapor extraction wells were screened from just beneath the building's slab foundation (about 3 ft bgs). The SVE system was started on November 1, 2000. Because the initial contaminant concentrations were relatively high, the AS portion of the system was not started until March 28, 2001.

To evaluate the effectiveness of the IRM, downgradient samples were collected 14 times between January 2002, and November 2006. PCE concentrations reached a high of 3,600 ppb in January 2003, and by November of 2006, concentrations of PCE were 35 ppb. In April 2007 PCE was not detected in the downgradient sample however 230 ppb of TCE was present. Based upon the sampling results for AS/SVE system effluent and downgradient groundwater, the IRM was determined to be effectively remediating the source area.

ROD
A ROD was issued in March 2008 by the NYSDEC in consultation with the NYS Department of Health (NYSDOH) -DEC #130053A. The IRM selected was the installation and operation of an AS/SVE system (eleven air sparging and nine soil vapor extraction wells). Based upon the successful implementation of the IRM, the NYSDEC determined the site was no longer a significant threat to human health or the environment. Therefore, the NYSDEC selected No Further Action with continued operation of the AS/SVE IRM as the site remedy and (a) continued evaluation of the potential for vapor intrusion for any buildings developed or existing buildings re-occupied on the site, including provision for mitigation of any impacts identified; (b) monitoring of on-site and downgradient groundwater; (c) identification of any use restrictions on the site; and (d) provisions for the continued proper operation and maintenance of the components of the remedy.

Environmental Easement Restrictions: Imposition of an institutional control in the form of an environmental easement for the controlled property that will require

- **limiting the use and development of the property to industrial use;**
- compliance with the approved site management plan;

- restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and

- submission of a periodic certification of institutional and engineering controls by the property owner to the NYSDEC.

Pass and Seymour Current Status: Mike Mason is the NYSDEC project manager for the Pass & Seymour site. Through verbal communication on May 25, 2016 he indicated the site is still a class 2 inactive hazardous waste site. The AS/SVE system was destroyed and needs to be replaced. A potential developer was going to assume responsibility for the environmental remedy and had plans to install a new AS/SVE system. The development of the property into a COSTCO store has been on hold pending the legal issues surrounding the environmental cleanup and the PRPs for the site. On May 19, 2016 the remaining drums of chemicals were removed from the site, with the exception of a few drums that will need to be over packed prior to removal.

3. Pall Corporation

In 1918, the building at 30 Sea Cliff Avenue was constructed and was used as an ice house. In 1953, Pall Corporation purchased the property and used that building until 1999 to manufacture filtration products. In 1958, Pall Corporation constructed the building at 36 Sea Cliff Avenue and occupied it until 1971, when Pall Corporation sold the building to August Thomsen. Pall Corporation used both industrial buildings to manufacture filtration products and the solvents PCE and TCE were stored on both of these properties.

Potentially Responsible Parties (PRPs): Pall Corporation is the only PRP identified as legally liable for contamination at the site.

Operable Units

The site is divided into two operable units. Operable Unit 1 (OU1) addresses both on-site soils, and on-site and offsite groundwater, to a depth of 60 ft bgs. Operable Unit 2 (OU2) addresses on and off-site groundwater at depths of greater than 60 ft bgs. Groundwater is present at 4 to 10 ft bgs and generally the groundwater flow is north-northwest.

OU-1

The OU-1 ROD was not available for review. A brief summary of OU-1 is provided within the OU-2 ROD these are the identified VOCs of concern, the media was not specified:

- tetrachloroethene (PCE);

- trichloroethene (TCE);

- dichloroethene (DCE);

- vinyl chloride (VC);

- trichloroethane (TCA);

- dichloroethane (DCA);
- 1,1,2-trichlorotrifluoroethane (Freon-113);
- acetone;
- 2-pentanone;
- bromoform; and
- BTEX - benzene, toluene, ethylbenzene and xylene.

The surface water and sediments in the Glen Cove Creek were investigated. VOC contamination was present only in the downstream samples. The samples collected at point's upgradient and mid-point of the site were not impacted. No further information was provided in the OU-2 ROD.

OU-2
On-site soils and the underlying sole-source aquifer are contaminated with VOCs. Past investigations indicated the primary contaminants of concern for OU2 are the same CVOCs of concern identified within OU1. The areal extent of groundwater contamination lies beneath both the Pall Corporation and neighboring Photocircuits site. The vertical extent of CVOC contamination is from the groundwater table down to approximately 130 ft bgs. The highest concentrations for individual contaminants were located in the northeast portion of the site: 10,000 ppb of TCE, 5,900 ppb of DCE and 5,700 ppb of DCA.

Record of Decision (ROD)
A ROD was issued in March 2013 for OU2 by the NYSDEC -DEC #130053B. **The same ROD was issued for the Photocircuits site.** The estimated present worth cost to implement the remedy is $4,900,000. The cost to construct the remedy is estimated to be $4,024,000 and the estimated average annual cost is $99,000.

Environmental Easement Restrictions: Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the NYSDEC a periodic certification of institutional and engineering controls;
- **allows the use and development of the controlled property for commercial and industrial uses**, although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;

- prohibits agriculture or vegetable gardens on the controlled property; and
- requires compliance with the Department-approved Site Management Plan.

Pall Corporation Current Status: In 2006, Pall Corporation and the NYSDEC reached a settlement where Pall Corporation provided funding to the NYSDEC to implement the OU-2 remedy. In-situ chemical oxidation will be used with groundwater extraction downgradient of the treatment area and re-injection upgradient of the OU-2 treatment area. The remedial design is currently underway by HDR and it is anticipated to be completed in the fourth quarter of 2016. Remedial construction is anticipated to occur between 2017 and 2018 and the remediation system for OU-2 should be limited to the Pall Corporation property.

4. National Grid

The former Glen Cove Manufactured Gas Plant (MGP) site is located at the intersection of the Long Island Rail Road and Route 107. The site is an active LIPA electrical substation. It sits in a flat-bottomed depression bounded by approximately 20-foot high slopes to the north, south and east, and the site perimeter is completely surrounded by chain link fence. The west side of the site is wooded and slopes downward about 17-feet toward Glen Cove Creek. A LIPA easement runs along the north boundary of the property parallel to the health club property terminating to the east at Cedar Swamp Road. The easement is designated as Lot 311 on the Nassau County Department of Assessment Land & Tax Map.

MGP operations began in 1905 and continued through 1929 under the ownership of the Sea Cliff and Glen Cove Gas Company. Facility structures were located on the northern section of the property. In 1923, Sea Cliff and Glen Cove Gas Company was purchased or merged with the Long Island Lighting Company (LILCO). In 1929, LILCO terminated MGP operations and demolished the facility's surface structures, thereafter the site was used for natural gas storage until approximately 1955. All of the surface structures were removed by 1966, when the electrical substation was constructed.

In 1998, Brooklyn Union Gas and LILCO merged to form the KeySpan Corporation, at which time the ownership of the substation was transferred to Long Island Power Authority (LIPA). Currently, the Site is owned by LIPA and operated by Public Service Enterprise Group (PSEG) under contract to LIPA. Through the 2008 acquisition of KeySpan, National Grid has accepted responsibility for addressing the environmental issues at the Site.

The former MGP operations resulted in the contamination of both subsurface soils and groundwater on site with coal tar, specifically BTEX and polycyclic aromatic hydrocarbons (PAHs). The coal tar impacts are generally located at the water table and within the smear zone and decrease with depth to a vertical extent of 45 ft bgs.

Melissa Reindl, the National Grid project manager indicated impacts from the MGP were not observed in soils within 30 ft bgs at the parking facility located immediately north of the site (Unity LLC property). Groundwater in this area is approximately 30 ft bgs. PAH impacts were observed in groundwater at two of the monitoring wells (GCMW-15 and GCMW-16) located off

site and west of Glen Cove Creek during the most recent sampling completed in February 2016. The depth to water in these monitoring wells is 46 ft bgs. During the remedial investigation in 2008, the surface water and sediment were analyzed in Glen Cove Creek. According to the Final Remedial Investigation Report (November 2008), the surface water results indicated there are no impacts from the MGP site and the PAH detections in the creek sediments were determined to be representative of background PAH sources not related to the site.

Order on Consent

On September 30, 1999, an Order on Consent was accepted by the NYSDEC and KeySpan, followed by a Modification to Order on Consent issued on October 5, 2005 (Index No. D1-001-98-11). In March 2010, the NYSDEC issued a Decision Document. The remedy includes excavation and off-site transport/treatment of MGP impacted soils to a depth of approximately 15 ft bgs located outside the active LIPA substation; recovery of mobile tar from collection wells, if present; installation of an oxygen injection system for microbial degradation of site-related contaminants in groundwater; institutional controls; and development of a SMP. Commercial Use SCOs applied to the shallow subsurface soils removed at the site (up to15 ft bgs).

Environmental Deed Restriction

Since the remedy allows for contamination above unrestricted levels to remain at the site, an institutional control in the form of a deed restriction will be required. The deed restriction will:

- **restrict the use of the site to commercial or industrial use**. Any specific future development of the site must comply with local laws and regulations;
- restrict the use of groundwater at the site;
- require the management of the site in accordance with the provisions of the NYSDEC approved site management plan; and
- require the property owner to complete and submit to the NYSDEC a periodic certification.

Current Status

The remedial action has been broken into two construction phases: Phase I of the remedial action was completed in August 2011. This phase consisted of source removal via excavation outside of the substation, and surface soil removal in the low-land area for the new LIPA substation footprint. A Final Interim SMP was submitted to NYSDEC in February 2015.

Melissa Reindl, the National Grid project manager indicated the Phase II installation of non-aqueous phase liquid (NAPL) recovery wells and the oxygen injection system is tentatively scheduled to begin in 2016, once the LIPA substation expansion project has been completed.

The anticipated cost for this site was $192,500. The actual cost in 2015 was $45,904. The projected cost for 2016 is $736,800.

Potential Brownfield Sites with Redevelopment Interest
The following properties were identified as potential brownfield sites based upon environmental database research, the BOA Step II documents and input from the City of Glen Cove indicating a potential development interest. A list of the properties is provided below and organized by geographic BOA Area along with a brief summary of any environmental concerns, additional information is provided in Table 1.

Sea Cliff Avenue Area

- 59 Sea Cliff Avenue (Owner information not known) – Sea Cliff Coal and Lumber was a former operator; there is the potential for the presence of creosote, gasoline, solvents, and petroleum.

- 55 Sea Cliff Avenue (55 Sea Cliff Avenue, INC) – Zoomar was a former operator and manufactured optical equipment; there is the potential for the presence of solvents.

- 44 Sea Cliff Avenue (44 Sea Cliff Avenue, LLC) – Property used for auto sales and service; it is listed as a small quantity generator of ignitable wastes, lead, benzene, and PCE. However, no waste amounts or dates of generation listed and no violations were noted. Low potential for impacts.

TOD Area

- 4 Cedar Swamp Road (Unity LLC) – Upon further review the environmental database listings previously associated with this property in the BOA Step II are actually related to 297 Glen Street, located approximately 100 feet north of the Glen Cove BOA boundary. Environmental impact at this site is considered low; however, this property was identified as a possible redevelopment site.

- 10 Cedar Swamp Road (Candemore Realty) – Historic property use included the Standard Oil Company and a dry cleaner; there is the potential for the presence of gasoline and petroleum related contaminants, solvents and chlorinated compounds.

Orchard Neighborhood Area

- 34 Carney Street (Owner information not known) – Property has been used by Glen Cove Iron Works for the past 30 years; there is a potential for the presence of metals and solvents.

- 45 Hazel Street (Residential Owner) – Low potential for impacts; however, there is an active spill and no determination has been made if groundwater is impacted.

- 20-22 Capobianco Street (City of Glen Cove) – Historic property use included a laundry facility; there is the potential for the presence of CVOCs.

- 15 – 17 Stanco Street (Residential Owner) – Historic property use included a junk yard; there is the potential for the presence of solvents and petroleum products.

- 60 Hazel Street (Residential Owner) – Historic property use included a shirt company; there is the potential for the presence of CVOCs.

- 44 Grove Street (Leona Place, LLC) – Historic fuel oil spill; there is the potential for the presence of petroleum products.

- 34 Grove Street (orchard Realty Corp) – Historic fuel oil spill; there is the potential for the presence of petroleum products.

Orchard Business Area

- 100 Carney Street (Carney Realty Corp.) – Leaking underground storage tank associated with this property; it was removed and the case file was "clean closed". Low potential for environmental impacts.

- 62 Cedar Swamp Road (Marcus Bianconi) – Current property use is a funeral home and it was identified as a potential redevelopment property.

Recommendations

Based upon the available documents regarding the active remediation sites and verbal communication with the NYSDEC project managers and the National Grid project manager we have an understanding of the current status for all of the sites. The following documents are recommended to be requested through the Freedom of Information Law (FOIL):

- Pall Corporation OU1 ROD;

- Legal documents related to the Pall Corporation settlement with the NYSDEC; and

- Remedial Investigation reports for all four active remediation sites to gain a better understanding the nature and extent of impacts both onsite and to adjacent properties and Glen Cove Creek.

These documents will provide a more thorough understanding of these sites and any potentially related off site impacts to complete the site summaries. This information will also be helpful for a developer in determining the extent of environmental work that will be required.

Phase I Environmental Site Assessments (ESAs) should be completed at any properties selected to be pursued for development. This would provide a site developer with a thorough understanding of potential environmental concerns for a specific property.

Based upon confirmation from the City of Glen Cove, FOIL requests will be submitted for the remediation sites. Phase I ESAs will be pursued for properties selected from the list provided above at the direction of the City of Glen Cove.

Table 1. Summary of Environmental Database Research for Potential Redevelopment Sites

OWNER/RESPONSIBLE PARTY	ADDRESS	SANBORN INFO	DATABASE	USE/TENANT	STATUS	BOA STEP II COMMENTS	UPDATE MARCH 2016- BOA STEP III
Sea Cliff Avenue Area							
Photo Circuits (Current Owner: Nassau County Industrial Development)	31 Sea Cliff Avenue 33 Sea Cliff Avenue	Slater Electrical Mfg, Co, (1972)	RCRAGEN, COR, TSD, STATE, CERCLIS, UST, LUST; AIRS, SPILLS	Photo Circuits	EPA Gen ID: NYD096920483; DEC Superfund Site Code 130009-active; HW Site Code 338737; Spill #s 0004815, 9609700, 9302725, 8901928-cl; #9813638-cl CBS (Reg # unknown)	CVOCs (111 and PCE) in soil and groundwater. Deemed significant and impacting soil source aquifer. Disposal on site from 1954 to present. Daughter compounds as well. "Site represents significant environmental threat due to the levels of VOC contamination in groundwater." Threat from soil contact limited due to restricted access. Manufactured printed circuit boards. SVE installed 4/2000. Hydraulic restrain system along Sea Cliff 1/02 to prevent off-Site migration. 12/06 FS. ROD 3/08.	Operable Unit 1 (OU1) includes on-site soils and groundwater to a depth of 100 ft bgs. Operable Unit 2 (OU2) addresses on-site and off-site groundwater at depths greater than 100 ft bgs. Groundwater is present at 4 to 10 ft bgs. Groundwater flow is generally to the north/northwest. An AS/SVE system ran until November 2002. Significant mass removal of VOC contaminants was accomplished; however, levels of VOC contamination in groundwater in the treatment area remained high. Emulsified soybean oil was injected in 2002 - results were mixed, dechlorination of the contaminants and large quantities of methane were generated, elevated levels of vinyl chloride were generated and total VOCs actually increased in some monitoring points. In January 2002, a hydraulic restraint system was pilot tested through the installation of four groundwater extraction wells at depths up to 60 ft bgs. The hydraulic restraint system did not significantly decrease downgradient contaminant concentrations in groundwater samples taken from 60-100 ft bgs. ROD Issued March 2008 for OU-1 • Air Sparge/Soil Vapor Extraction System • Substrate injection (emulsified soybean oil) • Groundwater monitoring ROD Issued March 2013 for OU-2 1. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. 2. ISCO will be used with Groundwater Extraction downgradient of the treatment area and Re-injection upgradient of the treatment area. ALLOWS FOR COMMERCIAL & INDUSTRIAL FUTURE USE OU-2 Remedy designs should be completed by the 4th quarter of 2016, with construction to occur in 2017-2018 CBS - 2,000 gallon ammonium hydroxide double walled fiberglass UST; two - 3,600 gallon sodium hypochlorite fiberglass USTs; 6,700 gallon sodium hypochlorite fiberglass UST; 220 gallon hydrochloric acid fiberglass AST in service (registration number not listed).
			RCRAGEN, UST, ERNS	Mason Supply Sun Casting Co.			Tax Map Block S, Lots 843A, 843B, 895A and 895B were not listed in any database listing or identified on historical Sanborn maps and are excluded from remediation limits. Environmental impact is considered insignificant.
Photo Circuits (Pass & Seymour)	45 Sea Cliff Avenue	A-1 Recycling Keyco Moster Freight Pass & Seymour Slater Electric, Planet Waste Mgt	STATE, SWL, LUST, UST, SPILLS	Pass & Seymour	DEC Superfund Site Code 130053A-active	PCE degreasing and storage tanks. Past disposal on Site. SVE installed at the site. Indoor air sampling at nearest downgradient non-industrial properties show threat to indoor air from contaminated groundwater. PA 1994; SI 1997; RI/IRM 1997; Pilot Test 1999; AS/SVE 2000. 2001 groundwater data showed unacceptable levels. Modified SVE 2002-2005. Feb 2007 still operating SVE.	ROD Issued March 2008 Continued operation of SVE system Limiting the use and development of the property to INDUSTRIAL use
Pall Corporation August Thompsen Corp AKA Pall Corporation	30-36 Sea Cliff Avenue	Knickerbocker Ice Co (1931) F. R. Hormann Co, Inc. (1947) Pall Corp Micro Metallic Div (1972) Glen Components Corp (1972)	STATE, UST, RCRAGEN, OTHER, UST, GEN, INST, STATE	Photo Circuits Tennis Courts Glen Cove Head Start Child Care	DEC Superfund Site Code 130053B-active	Site boundary includes both properties. Pall is at 30 and August is at 36. Historically utilized as tennis court and Glen Cove Head Start Child Care. Currently vacant. Well field also north of site. Same well field closed due to sites noted above (Carney St). PCE, TCE, Freon and daughters in soil and groundwater. Concentrations higher than upgradient sources. GW flow to the north/north west. SVE installed but running errors due to water infiltration. 2001 FS for ISCO pilot; 2002 potassium permanganate injections; 2004 ROD for ISCO on surface and shallow contamination; 2005 2nd pilot using Fenton's Reagent through injection wells. 2006	ROD Issued March 2013 for OU-2 1. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. 2. In-Situ Chemical Oxidation will be used with Groundwater Extraction downgradient of the treatment area and Re-injection upgradient of the treatment area. ALLOWS FOR COMMERCIAL & INDUSTRIAL FUTURE USE OU-2 Remedy designs should be completed by the 4th quarter of 2016, with construction to occur in 2017-2018
Walter J. Moretto Inc. with NCFM T and D Towing Corp with EPA	59 Sea Cliff Avenue	Sea Cliff Coal & Lumber Co., (1931, 1947, 1972)	AST, UST, RCRAGEN, ERNS	WJ Moretto Masonry Contractors Moretto Boat Shop T & D Towing O & D Auto Repair	NCFM-5786/1-00048 EPA Gen ID NYR00072298	Sanborns for 1931, 1947, and 1972 show Sea Cliff Coal and Lumber there. Gasoline tank and coal storage. First Search identified 3 occupants of the Site. Moretto - UST (unidentified); T & D Towing (RCRAGEN) solvents; and O & D Auto Repair (ERNS) for complaint about spilling antifreeze and oil on ground.	Phase I recommended: potential for Creosote, gasoline, solvents & petroleum
55 Sea Cliff Ave Inc	55 Sea Cliff Avenue	Zoomar Corp. (1972)	Tweezerman: OTHER (FED BROWNFIELD), ECHO, FINDS	Mallcom	FINDS/ECHO ID 110011511042	Sanborn says Zoomar manufactured optical equipment.	Listed as Federal Brownfield in historical First Search. Listed as FINDS and ECHO, as of 2016 for National Compliance Database (NCDB) supporting implementation of Federal Insecticide, Fungicide, and Rodenticide Act and the Toxic Substances Control Act. Based upon past site use - Potential for solvents
44 Sea Cliff Avenue LLC	44 Sea Cliff Avenue	Auto Sales & Service (1972)	RCRAGEN	Mohpine Enterprises, Auto Repair Detailing	EPA Gen ID NYR000072298	Details not Available	Wind Auto listed as conditionally exempt small quantity generator of ignitable wastes, lead, benzene, and PCE; no waste amounts or dates of generation listed. No violations noted. Low potential for environmental impacts.
Glen Cove Gas Plant	Grove and Stanco Streets	Nassau Gas Construction Co (1908) Sea Cliff & Glen Cove Gas Co (1915,1925,1931) Long Island Lighting Co (1947)	STATE, HSWDS, CERCLIS	Electrical Substation Former MGP	DEC Superfund Site Code 130089-active; EPA Gen ID NYD986881696; HS1016	First phase remediation done August 2011. Soil excavation in source areas. Contaminants are Coal Tar, SVOC, PAHs, and metals. Also BTEX in soil. GW impacted as well. Highly permeable sand and gravel media. GW flow direction to the west/northwest. Sanborn maps show gas holders, purifier, retort house, oil tanks, and other gas production support structures.	National Grid has entered into a VCA with the DEC to investigate and remediate potential contamination at a number of former manufactured MGP properties in New York, including this site. Post-Remediation: Phase I of the remedial action was completed in August 2011. This phase consisted of source removal via excavation outside of the substation, and surface soil removal in the low-land area for the new LIPA substation footprint. Phase II (installation of NAPL recovery wells, oxygen injection system) is tentatively scheduled to begin in 2016, once the LIPA substation expansion project has been completed.
Glen Head Country Club, Inc.	240 Glen Cove Road	NI	NL	Glen Head Country Club	Active Country Club	Details not Available	The northwest portion of the Glen Head Country Club (included in the Sea Cliff Avenue Area) was not listed in any database listing or identified on historical Sanborn maps and is excluded from remediation limits. Low potential for environmental impacts.
Lauric Tennis Association LLC	60 Sea Cliff Avenue	NI	UST	Lauric Tennis Association LLC	NCFM-1037/ Loc ID 16718	Details not Available	Low potential for environmental impacts.

Table 1. Summary of Environmental Database Research for Potential Redevelopment Sites

OWNER/RESPONSIBLE PARTY	ADDRESS	SANBORN INFO	DATABASE	USE/TENANT	STATUS	BOA STEP II COMMENTS	UPDATE MARCH 2016- BOA STEP III
TOD Area							
Unity LLC	4 Cedar Swamp Road	NI	UST, LUST, SPILLS	Retail Plaza	NL	Identified as Train Station with UST, LUST, SPILLS information	According to further review, the environmental database listings are associated with 297 Glen Street, located approximately 100 feet north of the Glen Cove BOA boundary. Low potential for environmental impacts. This property was identified as a possible redevelopment site.
Candemore Realty Co.	10 Cedar Swamp Road	Standard Oil Co. (1908)	RCRAGEN	Retail Plaza including S&G Cleaners & Tailors Inc.	NL	1908 Sanborn Standard Oil located at 10 Cedar Swamp Road. Standard Oil expanded to 20 Cedar Swamp Road by 1915 until sometime prior to 1931. According to Sanborn maps, tanks associated with Standard Oil.	S&G Cleaners identified as a cleaner/tailor, registered in May 2003 and inspected in May 2007. No other details available. Although generation of solvent waste is likely due to operations as a dry cleaner, RCRA waste generation information not provided in environmental database search.
Cole School Area							
Porta Systems Corp.	1 Alexander Place	NI	RCRAGEN, MANIFEST, FINDS, ECHO	Generator-All Requirements (oversight)	EPA Gen ID NYD002055820/ SGN	Generation and disposal of corrosives, ignitables and solvents in 1992	Generation and disposal of corrosives, ignitables and solvents in 1992; no longer generating waste.
Vittorios	21 Cedar Swamp Road	NI	SPILLS	Road (traffic accident)	Spill #1011229-cl	Spill to parking area/parking lot drain impacted. Cleanup underway.	De minimis; Low potential for environmental impacts. Low interest for redevelopment.
Glen Cove School District	Cedar Swamp Road	NI	LUST	Glen Cove School District	Spill #9207082-cl	5K failed at -0.451 psi; tank specialist tester, they will probably uncover tank and go for a tank holding test, will advise.	Low potential for environmental impacts; however, this property was identified as a possible redevelopment property.
LIPA/National Grid	27 Cedar Swamp Road	NI	SPILLS	Govt. (On road)	Spill #1010214-cl	National grid incident description: Pole top transformer blew top, went on fire and spilled dielectric oil all over sidewalk, street and manhole, WRS (environmental company) cleaned up.	Low potential for environmental impacts.
Orchard Neighborhood Area							
Unknown Landlord	11 Capobianco Street	NI	SPILLS	Private Dwelling	Spill #9204971-cl	Customer noticed two gallons of #2 fuel oil on basement floor, called Giffords Oil, plugged hole in tank bottom, applied Speedi Dry.	Although the spill is closed and considered de minimis, this property was identified as a possible redevelopment property.
Glen Cove Iron Works (property owner unknown)	34 Carney Street	NI	NL	Glen Cove Iron Works	NL	Not on First Search	Property has been used by the Glen Cove Iron Works for the past 30 years: potential for metals and solvents.
Scalici Salvatore & RS	13 Hazel Street	NI	NL	Scalicic Kitchen & Bath	NL	Not on First Search	Low potential for environmental impacts.
Gulino et al Joseph	16 Grove Street	NI	NL	Laundry Mat	NL	Not on First Search	Low potential for environmental impacts.
Residence	45 Hazel Street	NI	SPILLS	Residence	Spill #1510926-active	Equipment Failure	Low potential for environmental impacts.; however no determination if groundwater is impacted and spill is active.
No Owner/Responsible Party Listed	Grove and Hazel Streets	NI	SPILLS	Keyspan	Spill #9902653-cl	Caller advised that transformer failed causing four quarts to spray on ground. Fire Dept. used hose line and washed some of the product into the storm drain. Cleanup will take place ASAP.	De minimis
City of Glen Cove	20-22 Capobianco Street	Laundry (1925, 1931)	NL	Current Use Unknown	NL	Not on First Search	Potential for chlorinated compounds.
Curico Ernest	15 Stanco Street	Junk Yard (1915, 1925, 1931, 1947)	NL	Current Use Unknown	NL	Not on First Search	Potential for solvents and petroleum products.
Curico Ernest	17 Stanco Street	Junk Yard (1915, 1925, 1931, 1947)	NL	Current Use Unknown	NL	Not on First Search	Potential for solvents and petroleum products.
Deluca Pasquale	60 Hazel Street	Glen Cove Shirt Co. (1925, 1931, 1947)	NL	Current Use Unknown	NL	Not on First Search	Potential for chlorinated compounds.
Leona Place LLC	44 Grove Street	NI	SPILLS	Residence	Spill #0205313-cl	Unspecified amount of #2 fuel oil released; no cleanup documented.	Potential for petroleum products.
Orchard Colony Realty Corp	34 Grove Street	NI	SPILLS	Orchard Colony Realty Corp	Spill #0202811-cl Spill #0203420-cl	Spill #0202811 assigned for release of unknown amount of #2 fuel oil during tank removal. Spill #0203420 assigned for previously removed tanks placed on the soil.	Potential for petroleum products - #2 fuel oil spill; quantity unknown
200 Carney Street Inc.	200 Carney Street	NI	SPILLS	Bowling Alley, Batting Cages & Master Q Billiards	Spill #9714498-cl	First Search notes transformer oil spill due to traffic accident. Vehicle hit pad mounted transformer. Release contained to concrete. NFA.	De minimis
Orchard Business Area							
MAC Properties, Inc	10 Sea Cliff Avenue	NI	UST, LUST	Maccarone Plumbing & Heat Harbor Fuel Co.	MAC-Active Harbor Fuel-Inactive; Spill #8701073-cl	Harbor Fuel - Waste oil UST and diesel fuel UST. Tank test failure resulted in LUST designation. First Search notes indicate "clean up" met the appropriate standards. Maccarone - only notes an unregistered, active	Not enough information to make a determination.
Carney Realty Corporation	100 Carney Street	NI	LUST, UST	Clean Water Revival, Community Coupon, and Elite Tent and Party Rental	Spill #8702257-cl	First Search notes Man Products as the Responsible Party. LUST due to failed tank test. Removed in 1987 with no holes or soil contamination noted. Case closed.	Appears to be "Clean Closed".
TM Bier & Assoc Inc.	79 Hazel Street (corner of Hazel and Carney Streets)	NI	OTHER	TMBA Energy (HVAC)	96221-active	Other = Federal Brownfield; First Search notes that a Phase I Assessment recommended a Phase II to identify potential contamination at the Site.	This property has already been redeveloped.
85 Hazel St Corp	Hazel Street	NI	NL	Shines Auto Detailing and TWB (HVAL) and Service Pro	NL	Not on First Search	Low potential for environmental impacts. Low interest for redevelopment
NYSDOT BIN 1036889	Route 107, on Sea Cliff Avenue overpass	NI	RCRAGEN	NYSDOT	NY000038441	Lead	Low interest for redevelopment

Table 1. Summary of Environmental Database Research for Potential Redevelopment Sites

OWNER/RESPONSIBLE PARTY	ADDRESS	SANBORN INFO	DATABASE	USE/TENANT	STATUS	BOA STEP II COMMENTS	UPDATE MARCH 2016- BOA STEP III
Cedar Swamp Road Area							
Marcus Bianconi	62 Cedar Swamp Road	NI	NL	Funeral Home	NL	Not on First Search	This property was identified as a possible redevelopment property.
Land Rover of Glen Cove	60 and 70 Cedar Swamp Road	NI	ERNS, UST, RCRAGEN, SPILLS	Luyster Motors	Spill #1012512-cl; NCDH: N-058153; NCFM-3315; NYD013600135	Spill #1012512 assigned for incorrect handling and disposal of mold, asbestos, and motor oil. NCDH - 280 gallon motor oil AST; 280 gallon transmission fluid AST; 280 gallon waste oil AST active under N-058153. NCFM requested that tank information remain confidential. ERNS listing due to spills. Conditionally exempt small quantity generator for generation and disposal of ignitable wastes and spent solvents.	Low interest for redevelopment
Rallye	20 Cedar Swamp Road 34 Cedar Swamp Road	Standard Oil Co. (1915, 1925, 1972)	UST, LUST, RCRAGEN	Rallye Lexus/Troffa	NYD013600523; Spill #8907042-cl; Spill #9515671-cl	Standard Oil expanded to 20 Cedar Swamp Road by 1915 until sometime prior to 1931. According to Sanborn maps, tanks associated with Standard Oil. Auto Sales and Service identified by 1972. No generator information available. Spill #8907042 assigned for failed tank tightness test; tank removed. Spill #9515671 assigned for discovery of contaminated soil during tank removal. One 2,500 gallon waste oil fiberglass UST; one 2,500 gallon motor oil fiberglass UST. No other tank information available. Additional spills and tank information listed under separate addresses.	Low interest for redevelopment
Eastern Property Development, Inc.	34 Cedar Swamp Road	NI	SPILLS	Former Church	Spill #0551689-cl	NCDH was present for tank removals on 12/23/05. No visual or olfactory evidence of contamination. End point samples revealed exceedance of TAGM for Benzo(a)pyrene.	Low interest for redevelopment
Glenn Street Yard	2nd Street and Cedar Swamp Road	NI	SPILLS	Current Use unknown	Spill #0609810-cl	Leaking fuel cap from a rail car. Cleaned up released and closed.	De minimis; Low interest for redevelopment
Holzkamp Residence	12 Grove Street	NI	SPILLS, LUST	Residence	Spill #9700936-cl	Overfill - Came out vent pipe Milro called to handle cleanup.	Low interest for redevelopment
ANGS S/S	73 Cedar Swamp Road	NI	SPILLS, UST	Service Station	Spill #9009792-cl; NCFM-2555	During tank removal, contamination found, stockpiled approx. 120-150 yards. NCFM requested that tank information remain confidential.	Low interest for redevelopment
Jericho Public Schools	Route 107 and Cedar Swamp Road	NI	RCRAGEN	Government	NYD987007143	Lead, ignitable waste, benzene, tetrachloroethylene generated and disposed of.	Low interest for redevelopment

Notes
Properties shaded in blue are in an active remediation program.
Properties shaded in brown are sites with redevelopment interest, Phase I ESAs are recommended.
Acronyms are provided in Table 2

Table 2. Acronym List

Acronym	Definitions
1,1,1	1,1,1-Trichloroethane (1,1,1 TCA)
AS	air sparging
AIRS	Air Emissions Data - Point source emissions inventory data.
AST	Petroleum Bulk Storage -Registered Aboveground Storage Tanks
BOA	Brownfields Opportunity Area
BTEX	benzene, toluene, ethylbenzene, xylenes
CBS	Chemical Bulk Storage
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System is an USEPA database incorporated into the Superfund program, containing information such as the current status of cleanup efforts, cleanup milestones reached, and amounts of liquid and solid media treated at sites on the National Priorities List (NPL) or under consideration for the NPL.
CL	NYSDEC SPILLS case declared closed by the NYSDEC
COR	Corrective Action Report (CORRACTS) identifies hazardous waste handlers with RCRA corrective action activity.
CVOC	chlorinated volatile organic compound
DEL SHWS	Delisted Registry Sites - database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.
DEC	New York State Department of Environmental Conservation
ECHO	Enforcement & Compliance History Information - ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.
EPA	United States Environmental Protection Agency
ERNS	Emergency Response Notification System - reported releases of oil and hazardous substances.
FED BROWNFIELD	Federal Brownfield
FINDS	Facility Index System/Facility Registry System -both facility information and 'pointers' to other sources that contain more detail.
FOIA	Freedom of Information Act
ft bgs	feet below ground surface
FS	Feasibility Study
GW	Groundwater
HSWDS	Hazardous Substance Waste Disposal Site Inventory - any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared.
ISCO	In Situ Chemical Oxidation
LUST	Leaking Storage Tank Incident Reports

Table 2. Acronym List

Acronym	Definitions
MANIFEST	Facility and Manifest Data; manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.
MGP	manufactured gas plant
NAPL	non-aqueous phase liquid
NCDB	National Compliance Data Base
NCDH	Nassau County Department of Health
NCFM	Nassau County Fire Marshall
NFA	No Further Action
NI	Not identified on Certified Sanborn Fire Insurance maps as a property of environmental concern, according to August 2012 Brownfield Inventory Report
NL	Not identified any environmental database as a property of environmental concern, according to August 2012 Brownfield Inventory Report
NPL	National Priorities List (Superfund)
PA	Preliminary Assessment
PAHs	polycyclic aromatic hydrocarbons
PCE	tetrachloroethylene, also known as perc
RCRA	Resource Conservation and Recovery Act
RCRA GEN	RCRA - generator of hazardous waste
RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List - incidents derived from historical databases and includes many records that no longer appear in current government lists.
RI/IRM	Remedial Investigation/Interim Remedial Measures
ROD	Records Of Decision -ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.
SI	Supplemental Investigation
SPILLS	Spills Information Database
STATE	New York State Superfund Site
SVE	soil vapor extraction
SVOC	semi-volatile organic compounds
SWL	Solid Waste Landfills are facilities or landfills that dispose of solid waste. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.
TAGM	Technical and Administrative Guidance Memorandum
TANKS	Storage Tank Facility Listing - This database contains records of facilities that are or have been regulated under Bulk Storage Program.

Table 2. Acronym List

Acronym	Definitions
TCE	trichloroethylene or trichloroethene
TSD	a facility that treats, stores, and disposes of hazardous waste.
UST	Petroleum Bulk Storage (PBS) Database - Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.
VOC	volatile organic compound
VCA	Voluntary Cleanup Agreement

Legend

- ▲ CHEMICAL BULK STORAGE
- ■ DRYCLEANERS
- ▲ STORAGE TANKS
- ⬟ LEAKING STORAGE TANK
- ⬟ HAZARDOUS SUBSTANCE WASTE DISPOSAL
- ■ GOVERNMENT HAZARDOUS WASTE FACILITIES
- ■ GOVERNMENT SOLID WASTE FACILITIES
- ☆ INACTIVE HAZARDOUS WASTE DISPOSAL SITES
- ● NEW YORK SPILLS
- ■ OPEN SPILL
- BOA BOUNDARY
- SITES WITH REDEVELOPMENT INTEREST - PHASE I ENVIRONMENTAL SITE ASSESSMENTS RECCOMENDED
- STATE SUPERFUND SITES
- CITY OWNED PARCEL

BOA Areas of Interest

- COLE SCHOOL AREA
- ORCHARD NEIGHBORHOOD AREA
- ORCHARD BUSINESS AREA
- CEDAR SWAMP ROAD AREA
- TRANSIT ORIENTED DEVELOPMENT (TOD) AREA
- SEA CLIFF AVENUE AREA

150 0 150 300 Feet

Title:

CITY OF GLEN COVE
POTENTIAL BROWNFIELDS

BOA STEP III

Prepared For: CITY OF GLEN COVE
COMMUNITY DEVELOPMENT AGENCY

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: K.S.	Date: 25MAY16	FIGURE 1
Prepared by: K.S.	Scale: 1 "= 150 '	
Project Mgr: K.S.	Project: 2743.0001Y000	
File: 2743.0001Y100.101.R3		

APPENDIX D

TRANSPORTATION STUDY

Prepared by Gedeon GRC Consulting

CITY OF GLEN COVE

THE ORCHARD NEIGHBORHOOD AND SEA CLIFF AVENUE

STEP III BROWNFIELD OPPORTUNITY AREA IMPLEMENTATION STRATEGY

Prepared By

GEDEON GRC CONSULTING

ENGINEERS • PLANNERS • CONSTRUCTION MANAGERS

I - INTRODUCTION and DESCRIPTION of the STUDY AREA EXISTING CONDITIONS

Gedeon GRC Consultants has been assigned the task of investigating transportation-related conditions in the Orchard neighborhood of the City of Glen Cove. Gedeon GRC has surveyed the existing parking regulations, on-street parking availability, sidewalk conditions, traffic circulation, bicycle usage, pedestrian activity, Americans with Disabilities Act (ADA)-compliant curb ramps, and street lighting intensity. Gedeon has also inventoried existing rights-of-way and identified potential right-of-way improvements.

The Orchard neighborhood is located near the southern border of the City of Glen Cove. It is bounded by Cedar Swamp Road on the east, Pratt Boulevard (NY107) on the west, the LIRR on the north and Sea Cliff Avenue on the south. Outside of this immediate area but also included in this study are the industrial areas north and south of Sea Cliff Avenue; and the site of the former Coles School on the east side of Cedar Swamp Road. These industrial buildings are now largely vacant; however, there are pending development proposals for these sites.

The total area is approximately 1.5 square miles including the former industrial zones on both sides of Sea Cliff Avenue. There are 1.4 miles of roadway within the study area including Cedar Swamp Road and Sea Cliff Avenue. Cedar Swamp Road and Sea Cliff Avenue are Nassau County Roads maintained by Nassau County Department of Public Works.

The Orchard neighborhood is partially zoned light industrial and residential. As a result, both uses often co-exist side by side within this area. The industrial-zoned area lies at the south end of the study area. However, there are numerous contractor businesses (plumbing and electrical contractors, iron works fabricator) on both Carney Street and Grove Street.

Access to the Orchard neighborhood is limited to three streets. From Sea Cliff Avenue on the south, vehicles and pedestrians may enter on Hazel Street. Hazel Street at Sea Cliff Avenue is a STOP-controlled intersection. From the east on Cedar Swamp Road, access is possible from Carney Street and Grove Street; both intersections are signalized. There is no street access from the north (LIRR) or from the west (NY 107). This small number of access points effectively isolates the Orchard neighborhood from non-local/ through traffic.

Most roadways in the Orchard operate as two-way streets. Exceptions are Hazel Street which runs one-way southbound from Grove Street to Willow Street. Capobianco and Stanco Streets operate as a one-way couplet: Capobianco northbound and Stanco southbound. Street widths vary between 24 and 30-feet.

On-street parking in the Orchard is largely unrestricted. No Stopping regulations exist at many intersections to increase sight distance and to assist turning vehicles. Two-Hour limited parking exists on the northerly dead-end portion of Hazel Street, and No Stopping regulations are posted on the south sides of Carney and Grove Streets due to the narrow widths and the

necessity to queue for the signal at Cedar Swamp Road. Signs prohibiting on-street commercial vehicle parking are posted on all residential streets.

Where conditions permit, Two-Hour limited parking signs are posted on both sides of Cedar Swamp Road to service the businesses located on this thoroughfare. Parking is not permitted on Sea Cliff Avenue.

There are two off-street parking facilities within the study area. On Capobianco Street, a 14-space City-owned off-street lot exists. Parking in this lot is by residential permit only. On the east side of Cedar Swamp Road, there are approximately 70 spaces on the grounds of the former Coles School.

Existing parking regulations and an inventory of both on-street and off-street parking spaces are shown in the Appendix on Table 3. Existing parking regulations may also be found on Figure 2 in the Appendix.

II - ISSUES AND CHALLENGES

PARKING

Revitalization of the Orchard may in part depend on the availability of parking for residents. Consequently, an important aspect of this neighborhood study is an evaluation of the existing parking conditions.

An inventory of available legal parking spaces has been conducted. The inventory included not only the Orchard neighborhood but also the Coles School site, the Capobianco Street lot and both sides of Cedar Swamp Road. There is no on-street parking available on Sea Cliff Avenue or Pratt Boulevard (NY107).

On-street legal parking spaces within the Orchard neighborhood numbered 193. In addition, there are 38 parking spaces on Cedar Swamp Road that have a Two-Hour Limit during normal business hours. These spaces service the various local businesses but may be utilized as overnight overflow spaces by residents as needed. Locations of legal parking spaces and of posted regulations are shown on Figures 1a, 1b and 1c (Morning, Midday and Evening, respectively, in the Appendix).

A video record of parking occupancy was created utilizing a drone-mounted camera. Observations of the parking occupancy within the neighborhood, on both sides of Cedar Swamp Road, within the Coles School property, and inside the Capobianco off-street lot were conducted on Tuesday, June 6, 2017. Three separate observations were made between the hours of 1PM - 2PM, 4PM - 5PM and 7PM - 8PM. These hours were chosen to determine the parking levels at hours that residents would be expected to be at school or work (1PM-2PM),

after school (4PM-5PM) and during the peak after work-hours (7PM-8PM). Occupancy, expressed as a percentage of the total available parking spaces, was determined from this data. On the local streets, during the 1PM – 2PM period, 62 of the 193 parking spaces were occupied, or 32%. Between 4PM-5PM, 77 or 40% of the parking spaces were occupied and during the 7PM-8PM period 93 spaces, or 48%, of the on-street neighborhood parking was being utilized.

Hazel Street looking north at Willow Street.
Note the One-Way operation southbound with parking permitted on both sides

Hazel Street looking south at Carney Street

Two-way operation; note lack of continuous sidewalks

TABLE 1

PARKING OCCUPANCY SUMMARY

ON-STREET

OBSERVED HOURS	NUMBER OF SPACES	SPACES OCCUPIED	OCCUPANCY (%)
1 PM – 2 PM	193	62	32%
4 PM – 5 PM	193	77	40%
7 PM – 8 PM	193	93	48%

COLES SCHOOL SITE

OBSERVED HOURS	NUMBER OF SPACES	SPACES OCCUPIED	OCCUPANCY (%)
1 PM – 2 PM	70	34	49%
4 PM – 5 PM	70	17	24%
7 PM – 8 PM	70	21	30%

CEDAR SWAMP ROAD

OBSERVED HOURS	NUMBER OF SPACES	SPACES OCCUPIED	OCCUPANCY (%)
1 PM – 2 PM	38	30	79%
4 PM – 5 PM	38	18	47%
7 PM – 8 PM	38	18	47%

CAPOBIANCO STREET LOT

OBSERVED HOURS	NUMBER OF SPACES	SPACES OCCUPIED	OCCUPANCY (%)
1 PM – 2 PM	14	5	36%
4 PM – 5 PM	14	4	28%
7 PM – 8 PM	14	6	43%

Within the Coles School property, 70 available parking spaces were counted, in accordance with the existing striping. Drone observations were conducted during the same time periods as the on-street spaces. There were 34 cars, or 49%, parked during the early afternoon between 1PM-

2PM. Late-afternoon occupancy was 17 cars, or 24%, and during the evening hours, 7PM-8PM, occupancy rose slightly to 21 vehicles, or 30%.

On Cedar Swamp Road, an opposing trend was observed. Of the 38 Two-Hour spaces, 30, or79%, were observed to be occupied between 1PM - 2PM. Between 4PM - 5PM this number decreased to 18 occupied spaces, or 47%. Parking activity remained constant after 7 PM with the same 18 spaces, or 47% occupancy. Much of this parking demand was from the auto dealerships located at the north and south ends of Cedar Swamp Road. However, it should be noted that minimal impact on the local residential streets was observed during our surveys. No dealer-owned vehicles were noted on the street and the limited-time parking regulations on Cedar Swamp Road appeared to satisfy demand for customer parking.

Finally, the 14-space City-owned lot on Capobianco Street showed occupancies of 5 vehicles, 4 vehicles and 6 vehicles or 36%, 28% and 43% during the three study periods, respectively.

Refer to Table 1 for a summary of parking occupancy levels.

RECOMMENDATIONS:

Gedeon GRC has carefully reviewed both the on-street parking supply and parking demand. The off-street parking facilities at the Coles School and on Capobianco Street were also examined.

As noted in the report, on-street parking demand as measured by a percentage of occupied available spaces, never exceeded 49%. This occurred during the 7PM -8PM weekday hour.

Narrow two-way streets (less than 30 feet curb-to-curb) operate satisfactorily because of the low parking demand and light volumes. As future development within the Orchard neighborhood increases, parking demand will rise and vehicular volumes will increase, and it may become necessary to restrict parking to one side of the street to ensure unobstructed safe passage by fire apparatus, ambulances and delivery trucks. While it appears contradictory to reduce on-street parking supply in response to increased demand, the safe operation of public streets is of optimum importance.

This increased demand would result from additional residential development within the Orchard neighborhood. Further discussion of the impacts of proposed developments follows later in this report.

The off-street lot on Capobianco Street is striped for fourteen vehicles. The lot does not have sufficient width to allow a vehicle to safely turn around and exit safely when striped in this manner. It is recommended that the lot be restriped to accommodate 10 vehicles parked perpendicular to the long side of the lot. After allowing for adequate space to back out of the parking stall, the remaining area may be landscaped to improve the attractiveness of the lot.

SIDEWALKS AND PEDESTRIANS

A survey of the existing sidewalks and pedestrian ramps has been conducted.

Generally, sidewalks in the Orchard are in Fair to Good condition, and some sections have been recently installed or replaced. The width of these sidewalks is generally adequate for the level of pedestrian activity observed. Typically, where sidewalks exist, widths vary from 5 feet to 7 feet. Curb-to-curb roadway widths are typically 24 to 25 feet wide. However, Grove Street is 30 feet in width.

Some road segments have discontinuous (missing) sidewalk sections, but these blocks tend to have usable sidewalks on the opposite side of the street. However, many block segments have no sidewalks at all.

Discontinuous sidewalks on Carney Street looking west toward Hazel Street

Figure 2 in the Appendix presents the sidewalk information including locations of missing sidewalks in a graphical format.

Table 3 in the Appendix contains a listing of all sidewalk widths and condition.

Within the Orchard neighborhood there are few commercial establishments that generate external pedestrian activity. The businesses that do exist are either local (laundromat, for example) or light industrial (HVAC and self-storage, for example). Local food stores are on the perimeter of the neighborhood, primarily on Cedar Swamp Road. It is therefore unlikely that pedestrians from outside the neighborhood would have a need to traverse the Orchard neighborhood. However, residents should have the ability to walk to surrounding retail/commercial uses, as well as train and bus stops on the perimeter of the neighborhood.

Our survey of the existing corner pedestrian ramps indicates that 45% of pedestrian ramps are non-compliant and 10% are non-existing. The condition and locations of these Orchard curb ramps is shown in Table 2 below. On Cedar Swamp Road the sidewalks and curb ramps were upgraded as part of a streetscape project completed approximately ten years ago. The sidewalks are in good condition while some pedestrian ramps, though quite usable, do not meet current ADA standards.

TABLE 2 - CURB RAMPS - ADA COMPLIANCE

INTERSECTION	Northeast	Southeast	Southwest	Northwest
Cedar Swamp Road at Alexander Place	Noncompliant	Noncompliant		
Cedar Swamp Road at 1st Street	Compliant	Compliant		
Cedar Swamp Road at Grove Street			Compliant	1 - Compliant 1- Noncompliant
Cedar Swamp Road at 2nd Street	Compliant	Compliant		
Cedar Swamp Road at 3rd Street	Compliant	Compliant		
Cedar Swamp Road at Carney Street			Noncompliant	2- Compliant
Cedar Swamp Road at 4th Street	Compliant	Compliant		
Cedar Swamp Road at Sea Cliff Avenue		Noncompliant	Noncompliant	
Hazel Street at Sea Cliff Avenue	Non-Existent			Noncompliant
Hazel Street at Carney Street	Noncompliant	Compliant	Compliant	Compliant
Hazel Street at Willow Street			Noncompliant	Noncompliant
Hazel Street at Grove Street	Noncompliant	Noncompliant	Noncompliant	Noncompliant
Capobianco Street at Willow Street	Non-Existent	No Sidewalk	No Sidewalk	Non-Existent
Capobianco Street at Grove Street		Noncompliant	Noncompliant	
Stanco Street at Willow Street	Noncompliant	No Sidewalk		
Stanco Street at Grove Street		Noncompliant	Non-Existing	

Marked crosswalks exist only on Cedar Swamp Road; there are no marked crosswalks within the remainder of the Orchard neighborhood.

See Figure 3 in the Appendix for curb ramp locations and conditions in the Orchard.

The Orchard is served by two LIRR stations: Glen Street at the north end of the study area and Sea Cliff, southwest of the Orchard on Sea Cliff Avenue. Both stations have limited available parking and were at 100% occupancy during our surveys. No off-site illegally parked cars were observed. Fortunately, both stations are within walking or biking distance from the Orchard neighborhood. The Glen Street station borders on the north of the study area; Sea Cliff station is a walkable distance southwest of the Orchard on Sea Cliff Avenue. Since most residences are on the north side of the neighborhood, it is assumed that a greater number of local residents would utilize the Glen Street station. There is also a higher level of consumer oriented-businesses near the Glen Street station.

Glen Street LIRR station

Note 100% parking occupancy

Immediately south of the Glen Street station lies the north edge of the Orchard. From the dead end of Hazel Street to the station, there exists a vertical grade differential of approximately 25 feet. To provide an ADA-compliant access from Hazel Street, a handicapped-accessible ramp would need to be constructed between Hazel Street and the Glen Street station. Further study of such a ramp should be considered in conjunction with possible future residential and Transit-Oriented Developments. Pedestrian access to the Glen Street station from the Orchard is available via the sidewalk on the west side of Cedar Swamp Road. This sidewalk is relatively new and while somewhat narrow, it is in good condition.

The Sea Cliff station, located southwest of the study area, is further from the center of the Orchard but may be more accessible to residents living in the southern portion of the neighborhood. The sidewalks on both sides of Hazel Street south of Carney Street are discontinuous, with missing sections where extensive commercial driveways exist. The east side of Hazel Street particularly, is lacking sidewalk access. Fortunately, the north sidewalk on Sea Cliff Avenue between Hazel Street and the LIRR station is continuous and is in acceptable (fair) condition. There are no intersecting streets on Sea Cliff Avenue which would require curb ramps.

Sea Cliff LIRR station – 100% parking occupancy

No significant bicycle usage was observed during our study. As bike usage is to be encouraged, an effective methodology would be the installation of dedicated bike lanes. The installation of these bike lanes is dependent on the parking demand, street widths and street operations. However, with parking permitted on both sides of these narrow (less than 30 feet wide) streets, installation of bike lanes is problematic.

RECOMMENDATIONS:

With the exception of residents who live and work within the Orchard neighborhood, or those who utilize public transit on Cedar Swamp Road, the lack of local destinations within the Orchard necessitates the use of an automobile. Therefore, pedestrian activity within the Orchard neighborhood was light.

However, as noted within the report, sidewalk conditions in the Orchard neighborhood are generally fair. While most meet the minimum width standard, this minimum does not encourage enjoyable walking, particularly if pedestrian activity increases in the future. It is the sections of missing sidewalk (or sidewalks that were never installed) that will preclude increases in pedestrian activity. Prominent among these locations are Hazel Street between Carney Street and Sea Cliff Avenue, the south side of Willow Street between Stanco Street and Capobianco Street, and the east side of Stanco Street.

The following actions are recommended to improve pedestrian safety, comply with the ADA and to encourage an increase in pedestrian activity.

Sidewalks should be available on all streets within the Orchard, and missing sidewalk sections should be installed. Lacking sidewalks, pedestrians will usually choose to walk in the street rather than in an unpaved area.

Missing sidewalk sections are noted on Figure 2 in the Appendix.

Properly designed and installed pedestrian ramps enhance the experience of walking in an urban environment. As shown above in Table 2 above and on Figure 3 in the Appendix, over 50% of the intersections with the Orchard have improperly installed or missing pedestrian ramps.

A comprehensive program to install missing sidewalk sections, repair defective sidewalks and install or replace missing or improperly installed pedestrian ramps should be initiated. In addition, stop line and crosswalk pavement markings are non-existent within the Orchard. These markings are not required on every approach of every intersection but should be considered where pedestrian activity warrants.

Regarding bike lanes, as discussed above, the installation of dedicated bike lanes would increase the likelihood of bike usage. Unfortunately, with many streets operating as two-way streets installation of dedicated bike lanes is not feasible. In fact, even Hazel Street which operates as a one-way street between Grove Street and Willow Street, would not allow the installation of a dedicated bike lane. At 24 feet in total width and with two 8 foot parking lanes, only 8 feet of roadway width remains for through traffic, leaving no room for a dedicated bike lane.

The installation of dedicated bike lanes within the Orchard cannot be accomplished without major revisions to the existing parking regulations.

TRAFFIC OPERATIONS, STREET DIRECTIONS and CIRCULATION

As shown in the results of the on-street parking survey, occupancy during much of the day is quite low; peaking occurs in the evening hours when residents return home. On most block fronts parking is permitted on both sides of the street. As stated above, most streets have unregulated parking except for the northern dead end of Hazel Street which has Two-Hour limited parking during business hours. No Stopping regulations are posted at corners to increase sight distance and accommodate large turning vehicles. Street widths in the Orchard are relatively narrow, varying from 24 to 30 feet, curb-to-curb.

Regulations restricting on-street parking are installed when parked vehicles prevent the safe and efficient flow of traffic, for street cleaning and snow removal and to enhance public safety. Whenever parking demand and occupancy are low, and traffic volumes are not excessive, a relatively small number of vehicles parked at the curb will not disrupt traffic flow and posted regulations are unnecessary. This is particularly true when drivers respect the needs of those who must turn into and out of narrow driveways and do not park directly opposite one another thus interfering with through traffic flow.

When the traffic volume on the street approaches a critical level with vehicles parked on both sides that action must be taken to ensure public safety. Immediate access by emergency vehicles, particularly ambulances and fire apparatus, is of critical importance.

Generally, on streets less than 30 feet in width that carry two-way traffic, parking should be restricted to one side of the street. Many of the streets in the study area are less than 30 feet

wide and carry two-way traffic; Grove Street is the only street that has a 30-foot curb-to-curb width. Because parking demand is relatively low, 26-foot-wide two-way streets have in the past operated without significant problems. Parking spaces are readily available and delivery trucks can easily find a curbside space for loading activities, and thus do not block emergency vehicles and through traffic.

Hazel Street between Willow Street and Grove Street is 24 feet in width and operates as a one-way street southbound. Parking is permitted on both sides. Examining the one-way section of Hazel Street separately, there are 32 available parking spaces, 17 of which were occupied during the peak evening parking period. Occupancy at that time was 53%.

Capobianco and Stanco Streets are both 24-foot-wide one-way streets with parking permitted on both sides. Parking demand is light to moderate, peaking on Capobianco Street during the 7PM-8PM period at 57%, both sides combined.

Capobianco Street looking north from Willow Street

RECOMMENDATIONS:

Hazel Street, Capobianco Street and Stanco Street form a one-way ‘triplet’. Hazel Street functions as a collector street through the center of the neighborhood. With a 24-foot curb-to-curb width, and parking permitted on both sides, this street should remain one-way.

Capobianco Street and Stanco Street function as local access streets. Virtually all traffic traversing these streets are vehicles whose destinations are on these streets. However, vehicles arriving from the south destined for Stanco Street must traverse Capobianco Street. This would be unnecessary if Stanco Street were two-way. This change is recommended as it would not introduce additional traffic volume on Stanco Street but would decrease the traffic volume on Capobianco Street.

Capobianco Street should remain one-way northbound to complement the one-way southbound traffic operation on Hazel Street. These two streets would become a one-way couplet. The two-way operation on all other streets in the Orchard should remain.

STREET LIGHTING - The street lighting system in the Orchard neighborhood is a mixture of old and new fixtures of varying wattages. Most of the existing street lighting system consists of 50-watt high-pressure sodium heads. There are a small number of 100-watt fixtures, and two new 53-watt LED fixtures have been installed. All street lights in the area are installed on existing wood utility poles. Some gaps in the system are evident. Note the condition of the lens and reflector on the street light head shown below.

Please see Figure 4 in the Appendix for locations and wattages of the existing street lights in the Orchard district.

Existing Street Light on Stanco Street

RECOMMENDATIONS

Adequate street light levels are crucial to making a neighborhood viable and safe after sunset.

The existing street lighting system is made up of various street light fixtures of different wattages, ages and conditions, including some LEDs. Nighttime surveys conducted by Gedeon GRC revealed multiple missing or non-working street lights and areas where there was not enough light to get a reliable reading on the light meter.

The entire system should be updated to LED technology. LEDs improve performance by increasing efficiency through lower wattages for the equivalent output while decreasing outages and maintenance costs due to their inherent longer lamp life.

Power reduction programs may be available through the New York Power Authority or PSEGLI which will help offset some or all the initial capital costs of conversion.

COLES SCHOOL SITE

The Coles School is a former Glen Cove public school building located on the east side of Cedar Swamp Road between 1st Street and Alexander Place.

The site has 70 parking spaces surrounding the building. Presently, a privately-run sports facility operates in a separate steel frame building immediately to the rear of the original school building.

As part of our area-wide parking study, occupancy levels were observed in the lots surrounding the school building. Thirty-four vehicles were observed parked in the lot between 1 PM - 2 PM,

an occupancy of 49%. Occupancy declined during the course of the day to 21% between 4PM-5PM and rose again slightly after 7 PM to 30%.

The Glen Cove City Council has approved a contract for the sale of the building to The School for Language and Communication Development for use as a middle school. It is proposed that all students would be bussed in or dropped off by parents or guardians. It is expected that the student population will be 156 students. The staff is expected to number 75.

Assuming 12 students per bus and 1.2 faculty members per auto, parking demand would be 13 busses and 63 staff passenger cars. It is expected that the busses will not park on the school grounds all day but will return to their garages during the midday period. The busses will, however, enter and exit the site two times per day. The faculty and parent's cars will, at a minimum, create an additional 63 entries and exits. On-site space in front of the building is limited and the arrival of more than four school busses at one time may cause queueing that backs out onto Cedar Swamp Road. On-street parking is not permitted in front of the school building.

It is recommended that a formal traffic impact study be performed to determine the potential impacts on traffic operations on Cedar Swamp Road as well as the adequacy of the existing available on-site parking.

POSSIBLE FUTURE DEVELOPMENT

The former industrial sites on the north and south sides of Sea Cliff Avenue west of Pratt Boulevard are largely vacant. Plans have been forwarded regarding possible development of these properties.

Preliminary plans for a large warehouse retailer have been developed for the property south of Sea Cliff Avenue. Access to the site would be from two locations. The intersection of Cedar Swamp Road and Pratt Boulevard is a New York State highway (NY 107) and will require significant improvements to accommodate the large retailer as proposed. A new driveway entrance/exit on Sea Cliff Avenue immediately west of the Pratt Boulevard overpass has been approved.

On the north side of Sea Cliff Avenue, there is a proposal to build a self-storage facility. A traffic study should be performed to determine possible impacts to the surrounding roadway system

caused by the additional vehicular traffic volumes generated by this facility. In addition, a day care center is presently in operation immediately to the north of the proposed self-storage facility. Presently, access to the day care center is possible only by automobile from southbound NY 107; right turns in and out of the center are the only permitted movements. There is no pedestrian access. In addition to alleviating the safety issues associated with turns on to and off a roadway with a 50 MPH speed limit, access to the day care center from a local street is crucial to its continued success.

Existing entrance to the Glen Cove Child Care Center
Markings are temporary due to recent resurfacing

III - SUMMARY

PARKING

Gedeon GRC has carefully reviewed both the on-street parking supply and parking demand. The off-street parking facilities at the Coles School and on Capobianco Street were also examined.

As noted in the report, on-street parking demand as measured by a percentage of occupied available spaces, never exceeded 49%. This occurred during the 7PM -8PM weekday hour.

Presently, available on-street parking is sufficient to meet current demand.

Narrow two-way streets (less than 30 feet curb-to-curb) operate satisfactorily because of the low parking demand and light volumes. As future development within the Orchard neighborhood increases, parking demand will rise and vehicular volumes will likely increase, and it may become necessary to restrict parking to one side of the street to ensure unobstructed safe passage by fire apparatus, ambulances and delivery trucks. While it appears contradictory to reduce on-street parking supply in response to increased demand, the safe operation of public streets is of optimum importance.

This increased demand resulting from additional residential development within the Orchard neighborhood should be accommodated by the provision of adequate off-street parking at each development site. Doing so will offset the need to construct publicly operated off-street parking structures.

PEDESTRIANS

Typical of most low-to-moderate density residential neighborhoods, even in urban settings such as the Orchard, observed pedestrian activity was light. The use of an automobile is necessary to reach any destination except for the railroad stations and the Cedar Swamp Road retail/dining establishments.

As noted above, sidewalk conditions in the Orchard neighborhood are generally fair. Most meet the minimum width standard but this minimum does not encourage enjoyable walking, particularly as pedestrian activity increases. It is, however, the sections of missing sidewalk (or sidewalks never installed) that will preclude increases in pedestrian activity. Prominent among these locations are Hazel Street between Carney Street and Sea Cliff Avenue, the south side of Willow Street between Stanco Street and Capobianco Street, and the east side of Stanco Street.

South side of Willow Street looking toward Stanco Street

South side of Carney Street looking toward Cedar Swamp Road

The proximity of two LIRR stations, Sea Cliff and Glen Street, is a positive factor in the redevelopment of the Orchard. Pedestrian access to these stations is an important goal as parking is limited at the stations themselves and having mass transit conveniently available is a major plus in the redevelopment of the neighborhood. The undeveloped sidewalk sections are an obstacle to increasing pedestrian activity. Regardless of any desire to increase pedestrian activity, continuous, safe sidewalks should always be provided within any urban center.

The ADA dictates the criteria for the installation of curb ramps, standards for sidewalk slopes, widths and ramp slopes. Most pedestrian curb ramps within the Orchard do not meet these standards. As part of a concerted effort to improve the walking experience and to comply with ADA standards, it is recommended that an aggressive program be initiated to upgrade the existing curb ramps and install sidewalk sections where needed.

BICYCLE USAGE

Within the neighborhood most destinations are walkable and therefore observed bicycle usage in the Orchard was low. For many commuters, walking to the LIRR stations may not be possible. However, the distances from most residences within the Orchard to these stations is ideal for bicycling. A factor limiting bicycle usage by railroad commuters and others are the narrow streets with parking on both sides. This condition creates an uncomfortable environment for bicyclists.

Unless parking is restricted to one side, installation of shared bike lanes is not feasible.

TRAFFIC CIRCULATION

At low volumes, local roadways operate most efficiently as two-way streets. This method of operation minimizes vehicular miles driven, thus reducing overall traffic on the streets. One-way traffic operation increases capacity at the expense of an increase in vehicle-miles driven.

Stanco Street should be converted to two-way operation. This will eliminate the necessity of northbound drivers using Capobianco Street. Capobianco Street and Hazel Street may remain a one-way couplet.

GLEN COVE CHILD DAY CARE CENTER

Access to and from the Glen Cove Child Day Care Center needs to be improved. Vehicular traffic must take a circuitous route to enter and exit the site. The introduction of left-turn movements into and out of the Center is not possible without significant capital expense. The level of expenditure relative to the number of users does not appear to be economically feasible.

The development of the site immediately to the south as a self-storage facility opens the possibility of acquiring an easement to the Child Care Center from Sea Cliff Avenue. This would provide access from both the east and west directions with easy access to Cedar Swamp Road immediately to the east. As part of the development of the commercial property, the feasibility of providing this easement or the transfer of property should be investigated.

Site of the proposed self-storage facility.
The existing child care center can be seen in the background.

STREET LIGHTING

An existing LED street light fixture on Hazel Street

Excluding the street lights on Nassau County roads (Cedar Swamp Road and Sea Cliff Avenue), there are 23 street light locations in the Orchard; 2 of which are LEDs.

The entire system should be updated to LED technology exclusively. LEDs improve performance by increasing efficiency through lower wattages for the equivalent output while decreasing outages and maintenance costs due to their inherent longer lamp life.

Power reduction programs may be available through the New York Power Authority or PSEGLI which will help offset some or all the initial capital costs of conversion.

FUTURE DEVELOPMENT

Plans exist for significant new development in the Orchard area. Some plans are in development and others are nearing completion. Following are the most significant projects with recommended actions regarding traffic controls and operations:

- Wholesale Warehouse and Retail – located at the south end of the study area, south of Sea Cliff Avenue, this development is planned to be self-contained within its site. This retail development will have a significant traffic impact on the surrounding roadway network but is not expected to adversely affect traffic or parking on the streets within the Orchard neighborhood. It will, however provide employment for local residents who may, ideally, walk or bicycle from their homes to this site.
- Self-Storage Warehouse – similar to the wholesale warehouse proposed for the north side of Sea Cliff Avenue, this facility is outside of the Orchard neighborhood, separated by Pratt Boulevard, NY 107. Self-storage sites generally do not provide significant employment, nor do they generate high traffic volumes. This development is important as a possible solution to the access problem existing at the Glen Cove Child Day Care Center. As part of the permitting process, the acquisition of an easement or a transfer of property to allow access to the Child Care Center from Sea Cliff Avenue should be investigated.
- New housing is being developed or is under construction:
  - ❖ At the former Stango restaurant site on the corner of Grove Street and Hazel Street; it should be noted that rehabilitation work on the site is on-going.
  - ❖ On the south side of Carney Street west of Hazel Street (at the dead end);
  - ❖ On the north side of Carney Street at the dead end (this project has been completed);
  - ❖ Multifamily residential buildings between Carney and Willow Streets, under construction;
  - ❖ There are conceptual plans for the development of affordable housing on Capobianco Street between Willow Street and Grove Street. At each of these sites it is necessary to provide adequate off-street parking for residents to maintain the already existing on-street parking supply for guests, deliveries and service personnel;
  - ❖ Glen Street LIRR station Transit-Oriented Development (TOD) - this planned development will combine residential with ground-level retail. It is assumed that the retail component will serve both residents and commuters. Again,

provision of adequate off-street parking for residents is critical. The parking needs of commuters and customers must also be accommodated.

❖

Site of the conceptual TOD at the Glen Street station
The dead end of Hazel Street is in the background

- ❖ Cedar Swamp Road Mixed Use – this site fronts on Cedar Swamp Road and Carney Street; and
- ❖ Former Coles School site – the reuse of this former school building as a private school is being planned. Off-street parking appears adequate for the number of students and faculty. However, the impacts from busses and faculty and parents' vehicles should be carefully assessed. Little on-site space exists for the short-term storage of busses awaiting children to board; parents' private cars will also require additional space. On Cedar Swamp Road the curb lane is a moving lane. As such, any spillback onto Cedar Swamp Road is unacceptable. As part of the planning process for the use of the Coles School, a traffic impact analysis should be conducted to determine what remedial measures may be taken to alleviate these concerns at the Coles School site.

APPENDIX

FIGURES

TABLES

N

Coles School Property
70 Spaces
Occupancy: 34veh/ 49%

Alexander Place

No Parking

1st Street

2nd Street

3rd Street

4th Street

2 Hr Parking 7am-5pm
2 Spaces
Occupancy: 2veh/ 100%

2 Hr Parking 7am-5pm;
4 + 1 ADA Spaces
Occupancy: 4veh/ 80%

2 Hr Parking 7am-5pm; 5 + 1 ADA; 6 Spaces
Occupancy: 5veh/ 83%

Cedar Swamp Road

Cedar Swamp Road

Cedar Swamp Road

2 Hr Parking 7am-5pm; 12 Spaces
Occupancy: 10veh/ 83%

NO Stopping

LIRR

One Hour Parking
Parking Spaces - 8
Occupancy: 6veh/100%

NO Stopping

Grove Street

NO Stopping

Parking Spaces - 6
Occupancy Data: 3veh/50%

NO Stopping

NO Stopping

2 Hr Parking 7am-5pm;
6 Spaces
Occupancy: 2veh/33%

NO Stopping

Parking Spaces - 8
Occupancy: 4veh/ 50%

Carney Street

NO Stopping

Parking Spaces - 0
Occupancy: 0veh/0 %

2 Hr Parking 7am-5pm; 7 Spaces
Occupancy: 7veh/ 100%

NO Stopping

Parking Spaces - 9
Occupancy:0veh/0%

Sea Cliff Avenue

NO Stopping

2 Hr Parking 7am-5pm; 6 Spaces
Occupancy:3 veh/ 50%

NO Stopping

NO Stopping

NO Stopping

Parking Spaces - 18
Occupancy: 7veh/ 39%

NO Parking

Continuous Commercial Driveways
Parking Spaces - 0

Hazel Street

Hazel Street

Parking Spaces - 9
Occupancy:0veh/ 0%

NO Stopping

NO Stopping

NO Stopping

Parking Spaces - 14
Occupancy: 1veh/ 7%

NO Stopping

NO parking

Parking Spaces - 6
Occupancy:5veh/83%

Parking Spaces - 6
Occupancy:5veh/83%

NO Stopping

NO Stopping

Parking Spaces - 3
Occupancy: 2veh/ 66%

Parking Spaces - 9
Occupancy: 3veh/ 33%

Parking Spaces - 10
Occupancy: 2veh/ 20%

Parking Spaces - 15
Occupancy: 3veh/ 20%

Grove Street

Capobianco Street

Willow Street

Parking Spaces - 14
Occupancy: 0veh/ 0%

Parking Spaces - 4
Occupancy: 2veh/ 50%

Carney Street

Parking Spaces - 6
Occupancy: 0veh/0 %

NO Stopping

Parking Spaces - 6
Occupancy: 4veh/ 66%

Municipal Lot
14 Spaces
Occ: 5veh/ 36%

Parking Spaces - 10
Occupancy: 1veh/ 10%

Parking Spaces - 7
Occupancy: 1veh/ 14%

Parking Spaces - 9
Occupancy: 4veh/ 44%

Stanco Street

NO Stopping

Parking Spaces - 12
Occupancy: 6 veh/ 50%

Pratt Blvd NY 107

Pratt Blvd NY 107

Sea Cliff Avenue

EXISTING PARKING INVENTORY	
ORCHARD BOA PARKING STUDY CITY OF GLEN COVE	
GEDEON GRC CONSULTING	
STUDY PERIOD 1PM-2PM	
FIGURE 1A	AUGUST 2017

N

Coles School Property
70 Spaces
Occupancy: 17veh/ 24%

Alexander Place

No Parking

1st Street

2 Hr Parking 7am-5pm
2 Spaces
Occupancy: 1veh/ 50%

2nd Street

2 Hr Parking 7am-5pm;
4 + 1 ADA Spaces
Occupancy: 2veh/ 40%

3rd Street

2 Hr Parking 7am-5pm; 5 + 1 ADA; 6 Spaces
Occupancy: 2veh/ 33%

4th Street

Cedar Swamp Road

Cedar Swamp Road

Cedar Swamp Road

LIRR

2 Hr Parking 7am-5pm; 12 Spaces
Occupancy: 9veh/ 75%

NO Stopping

One Hour Parking
Parking Spaces - 6
Occupancy: 5veh/83%

Grove Street

NO Stopping

2 Hr Parking 7am-5pm; 6 Spaces
Occupancy:3 veh/ 50%

NO Stopping

NO Stopping

NO Stopping

2 Hr Parking 7am-5pm;
6 Spaces
Occupancy: 2veh/ 33%

NO Stopping

NO Stopping

Parking Spaces - 6
Occupancy Data: 3veh/50%

NO Stopping

Parking Spaces - 18
Occupancy: 7veh/ 39%

NO Stopping

NO Parking

Parking Spaces - 8
Occupancy: 7veh/ 88%

Carney Street

NO Stopping

Parking Spaces - 0
Occupancy: 0veh/0 %

2 Hr Parking 7am-5pm; 7 Spaces
Occupancy: 2veh/ 28%

NO Stopping

Parking Spaces - 9
Occupancy:1veh/11%

Sea Cliff Avenue

NO Stopping

Continuous Commercial Driveways
Parking Spaces - 0

Hazel Street

Hazel Street

Parking Spaces - 9
Occupancy:2veh/ 22%

NO Stopping

NO Stopping

NO Stopping

NO Stopping

Parking Spaces - 14
Occupancy: 5veh/ 36%

NO Stopping

Parking Spaces - 3
Occupancy: 3veh/ 100%

Parking Spaces - 9
Occupancy: 1veh/ 11%

Parking Spaces - 15
Occupancy: 4veh/ 27%

Parking Spaces - 6
Occupancy:5veh/83%

NO Parking

Parking Spaces - 6
Occupancy:3veh/50%

NO Stopping

Parking Spaces - 4
Occupancy: 2veh/ 50%

NO Stopping

Parking Spaces - 6
Occupancy: 2veh/33 %

Carney Street

Parking Spaces - 10
Occupancy: 5veh/ 50%

Grove Street

Capobianco Street

Willow Street

Parking Spaces - 14
Occupancy: 2veh/ 14%

NO Stopping

Parking Spaces - 6
Occupancy: 5veh/ 83%

Municipal Lot
14 Spaces
Occ: 4veh/ 28%

Parking Spaces - 10
Occupancy: 4veh/ 40%

Parking Spaces - 9
Occupancy: 4veh/ 44%

Parking Spaces - 7
Occupancy: 0veh/ 0%

NO Stopping

Stanco Street

NO Stopping

Parking Spaces - 12
Occupancy: 4 veh/ 25%

Pratt Blvd NY 107

Pratt Blvd NY 107

Sea Cliff Avenue

EXISTING PARKING INVENTORY
ORCHARD BOA PARKING STUDY CITY OF GLEN COVE
GEDEON GRC CONSULTING
STUDY PERIOD 4PM-5PM
FIGURE 1B | AUGUST 2017

N

Coles School Property

70 Spaces
Occupancy: 21 veh/ 30%

Alexander Place

No Parking

1st Street

2 Hr Parking 7am-5pm
2 Spaces
Occupancy: 4veh/ 200%

2nd Street

2 Hr Parking 7am-5pm;
4 + 1 ADA Spaces
Occupancy: 4veh/ 80%

3rd Street

2 Hr Parking 7am-5pm; 5 + 1 ADA; 6 Spaces
Occupancy: 7veh/ 116%

4th Street

Cedar Swamp Road

Cedar Swamp Road

Cedar Swamp Road

2 Hr Parking 7am-5pm; 12 Spaces
Occupancy: 2veh/ 17%

LIRR

One Hour Parking
Parking Spaces - 6
Occupancy: 4veh/66%

NO Stopping

Grove Street

NO Stopping

Parking Spaces - 6
Occupancy Data: 3veh/50%

NO Stopping

NO Stopping

2 Hr Parking 7am-5pm;
6 Spaces
Occupancy: 0veh/ 0%

NO Stopping

Parking Spaces - 8
Occupancy: 8veh/ 100%

Carney Street

NO Stopping

Parking Spaces - 0
Occupancy: 0veh/0 %

2 Hr Parking 7am-5pm; 7 Spaces
Occupancy: 1veh/ 14%

NO Stopping

Parking Spaces - 9
Occupancy:0veh/0%

Sea Cliff Avenue

NO Stopping

2 Hr Parking 7am-5pm; 6 Spaces
Occupancy:3 veh/ 50%

NO Stopping

NO Stopping

NO Stopping

Parking Spaces - 18
Occupancy: 10veh/ 55%

NO Parking

Continuous Commercial Driveways
Parking Spaces - 0

Hazel Street

Hazel Street

Parking Spaces - 9
Occupancy:3veh/ 33%

NO Stopping

NO Stopping

Parking Spaces - 10
Occupancy: 6veh/ 60%

NO Stopping

Grove Street

NO Stopping

NO Stopping

Parking Spaces - 14
Occupancy: 7veh/ 50%

NO Stopping

NO Stopping

Parking Spaces - 3
Occupancy: 2veh/ 66%

Parking Spaces - 9
Occupancy: 6veh/ 67%

Parking Spaces - 15
Occupancy: 7veh/ 47%

Capobianco Street

NO Stopping

Parking Spaces - 6
Occupancy: 3veh/ 50%

Municipal Lot
14 Spaces
Occ: 6 veh/ 43%

Parking Spaces - 10
Occupancy: 2veh/ 20%

Parking Spaces - 7
Occupancy: 1veh/ 14%

Parking Spaces - 9
Occupancy: 7veh/ 77%

Stanco Street

NO Stopping

Parking Spaces - 12
Occupancy: 5 veh/ 42%

Willow Street

NO Stopping

Parking Spaces - 14
Occupancy: 4veh/ 29%

Parking Spaces -
Occupancy:4veh/67%

NO Stopping

NO Stopping

Parking Spaces - 4
Occupancy: 2veh/ 50%

Carney Street

Parking Spaces - 6
Occupancy: 1veh/17 %

NO Parking

Parking Spaces - 6
Occupancy:5veh/83%

Pratt Blvd NY 107

Pratt Blvd NY 107

Sea Cliff Avenue

EXISTING PARKING INVENTORY	
ORCHARD BOA PARKING STUDY CITY OF GLEN COVE	
GEDEON GRC CONSULTING	
STUDY PERIOD 7PM-8PM	
FIGURE 1C	AUGUST 2017

N

Coles School Site

Alexander Place

1st Street

2nd Street

3rd Street

4th Street

Sidewalk width varies-good condition

Sidewalk width varies good condition

8' wide sidewalk good condition

Sidewalk width varies good condition

Sidewalk width varies-good condition

Cedar Swamp Road

Cedar Swamp Road

Cedar Swamp Road

4' wide sidewalk with utility strip-good condition

4' wide sidewalk with utility strip-good condition

4' wide sidewalk with utility strip-good condition

LIRR

Sidewalk width varies good condition

Grove Street

8' wide sidewalk good condition

Sidewalk width varies fair to poor condition

Carney Street

No Sidewalk

Sea Cliff Avenue

Sidewalk width varies to 7' - fair condition

7' wide sidewalk; fair to good condition

Commercial Driveways; No sidewalk

250'

Hazel Street

Hazel Street

Sidewalk width varies to 7' - fair condition

7' wide sidewalk; good condition

Discontinuous sidewalk

100' sidewalk Fair condition

185'

Pratt Blvd NY 107

Sidewalk width varies to 7' - fair condition

Sidewalk width varies to 7' - good condition

Sidewalk width varies fair to good condition

Sidewalk width varies to 8' fair to good condition

Capobianco Street

Willow Street

Sidewalk width varies fair to poor condition

Carney Street

No Sidewalk

Sidewalk width varies to 7' - fair condition

Sidewalk width varies to 8' fair to good condition

Sidewalk width 6' good condition

Discontinuous sidewalk fair condition

Stanco Street

No Sidewalk Grass strip

Sidewalk width varies; fair condition

Sidewalk width varies to LIRR; fair condition

Sea Cliff Avenue

Pratt Blvd NY 107

EXISTING SIDEWALK CONDITION

ORCHARD BOA PARKING STUDY
CITY OF GLEN COVE

GEDEON GRC CONSULTING

FIGURE 2 | AUGUST 2017

N

Coles School Property

Alexander Place

1st Street

2nd Street

3rd Street

4th Street

Non-Compliant Curb Ramps

Compliant Ramps

Compliant Ramps

Compliant Ramps

Compliant Ramps

Compliant Ramps

Cedar Swamp Road

Cedar Swamp Road

Compliant Ramp

Non-Compliant Curb Ramp

Compliant Ramp

Compliant Ramps

Non-Compliant Curb Ramp

LIRR

Sidewalk width varies good condition

Grove Street

8' wide sidewalk good condition

Carney Street

No Sidewalk

Sea Cliff Avenue

No Ramp

Sidewalk width varies fair condition

Non-Compliant Apex Ramp

Compliant Ramp

Commercial Driveways; No sidewalk

250'

Hazel Street

Hazel Street

Good condition

100' sidewalk

Commercial Driveways; No sidewalk

185'

Non-Compliant Ramp

Pratt Blvd NY 107

Non-Compliant Apex Ramps

Non-Compliant Apex Ramp

Compliant Ramp

No Sidewalk

No Ramp

Willow Street

Sidewalk width varies fair condition

Capobianco Street

Non-Compliant Ramps

No Sidewalk Grass strip

Discontinuous sidewalk poor condition

Stanco Street

Sidewalk width varies fair condition

Sea Cliff Avenue

Pratt Blvd NY 107

EXISTING CURB RAMP CONDITION

ORCHARD BOA PARKING STUDY
CITY OF GLEN COVE

GEDEON GRC CONSULTING

FIGURE 3 | AUGUST 2017

N

Coles School Property

Alexander Place

1st Street

2nd Street

3rd Street

4th Street

Cedar Swamp Road

Cedar Swamp Road

Cedar Swamp Road

LIRR

50W

50W

Grove Street

100W

Carney Street

Sea Cliff Avenue

250W COBRA HEAD

50W

53W LED

50W 50W 50W 50W 70W 50W 50W 100W

Hazel Street

Hazel Street

Pratt Blvd NY 107

50W

50W 50W 50W 50W

Capobianco Street

Grove Street

Willow Street

Carney Street

100W

100W

50W 53W LED 50W 50W

Stanco Street

Sea Cliff Avenue

Pratt Blvd NY 107

LEGEND

SYMBOLOGY	DESCRIPTION
○-○- W	Street light on wood utility pole Luminaire wattage shown when known
•	Wood utility pole No street light
✳	Decorative street light

EXISTING STREET LIGHTING	
ORCHARD BOA PARKING STUDY CITY OF GLEN COVE	
GEDEON GRC CONSULTING	
FIGURE 4	AUGUST 2017

ORCHARD BOA PARKING STUDY - SIDEWALK CONDITION SURVEY
CITY OF GLEN COVE

STREET NAME	SIDE	CROSS STREET 1	CROSS STREET 2	STREET WIDTH	STREET LENGTH	NUMBER OF SPACES	SIDEWALK WIDTH	SIDEWALK CONDITION
GROVE STREET	NORTH	CEDAR SWAMP ROAD	HAZEL STREET	30'	390'	6	VARIES	GOOD
	SOUTH	CEDAR SWAMP ROAD	HAZEL STREET	30'	390'	6	8 FEET	GOOD
GROVE STREET	NORTH	HAZEL STREET	STANCO STREET	30'	440'	10	7 FEET	FAIR
GROVE STREET	SOUTH	HAZEL STREET	CAPOBIANCO STREET	30'	200'	3	7 FEET	GOOD
GROVE STREET	SOUTH	CAPOBIANCO STREET	STANCO STREET	30'	200'	6	7 FEET	FAIR
STANCO STREET	WEST	GROVE STREET	WILLOW STREET	25'	390'	12	VARIES	POOR-FAIR
	EAST	GROVE STREET	WILLOW STREET	25'	390'	9	SIDEWALK IS DISCONTINUOUS	POOR-FAIR
WILLOW STREET	SOUTH	STANCO STREET	HAZEL STREET	24'	190'	14	NO SIDEWALK IN FRONT OF NEW CONSTRUCTION	NON-EXISTENT
WILLOW STREET	NORTH	STANCO STREET	CAPOBIANCO STREET	24'	390'	7	6 FEET	GOOD
WILLOW STREET	NORTH	CAPOBIANCO STREET	HAZEL STREET	24'	390'	9	VARIES	FAIR-GOOD
CAPOBIANCO STREET	EAST	WILLOW STREET	GROVE STREET	24'	390'	15	VARIES 7 FEET TO 9 FEET	FAIR-GOOD
	WEST	WILLOW STREET	GROVE STREET	24'	390'	10	VARIES 7 FEET TO 9 FEET	FAIR-GOOD
HAZEL STREET	EAST	DEAD END	GROVE STREET	24'	340'	6	VARIES	FAIR
	WEST				340'	9	VARIES	FAIR
HAZEL STREET	WEST	GROVE STREET	WILLOW STREET	24'	390'	14	7 FEET	GOOD
HAZEL STREET	EAST	GROVE STREET	CARNEY STREET	24'	540'	18	7 FEET	FAIR-GOOD
HAZEL STREET	WEST	WILLOW STREET	CARNEY STREET	24'	150'	6	10 FEET	FAIR
HAZEL STREET	WEST	CARNEY STREET	SEA CLIFF AVENUE	25'	780'	6	SIDEWALK DISCONTINUOUS	FAIR
	EAST	CARNEY STREET	SEA CLIFF AVENUE	25'	780'	9	SIDEWALK DISCONTINUOUS	FAIR
CARNEY STREET	NORTH	CEDAR SWAMP ROAD	HAZEL STREET	27'	380'	8	VARIES	FAIR
	SOUTH	CEDAR SWAMP ROAD	HAZEL STREET	27'	380'	0	NO SIDEWALK	
CARNEY STREET	NORTH	HAZEL STREET	DEAD END	27'	220'	4	VARIES	FAIR
	SOUTH	HAZEL STREET	DEAD END	27'	220'	6	NO SIDEWALK	
			TOTAL ON-STREET SPACES			**193**		

ORCHARD BOA PARKING STUDY - SIDEWALK CONDITION SURVEY

CITY OF GLEN COVE

STREET NAME	SIDE	CROSS STREET 1	CROSS STREET 2	STREET WIDTH	STREET LENGTH	NUMBER OF SPACES	SIDEWALK WIDTH	SIDEWALK CONDITION
CEDAR SWAMP ROAD	WEST	LIRR	GROVE STREET	64'	900'	12	4 FEET PLUS UTILITY STRIP	GOOD
CEDAR SWAMP ROAD	WEST	GROVE STREET	CARNEY STREET	64'	550'	6	4 FEET PLUS UTILITY STRIP	GOOD
CEDAR SWAMP ROAD	WEST	CARNEY STREET	SEA CLIFF AVENUE	64'	640'	7	4 FEET PLUS UTILITY STRIP	GOOD
CEDAR SWAMP ROAD	EAST	4TH STREET	3RD STREET	64'	380'	6	VARIES	GOOD
CEDAR SWAMP ROAD	EAST	3RD STREET	2ND STREET	64'	190'	5	VARIES	GOOD
CEDAR SWAMP ROAD	EAST	2ND STREET	1ST STREET	64'	170'	2	8 FEET	GOOD
CEDAR SWAMP ROAD	EAST	1ST STREET	LIRR/ALEXANDER PL	64'	780'	0	VARIES	GOOD
			TOTAL			**38**		

ORCHARD BOA PARKING STUDY
CITY OF GLEN COVE

							OCCUPIED SPACES					
				STREET	STREET	NUMBER		%		%		%
STREET NAME	SIDE	CROSS STREET 1	CROSS STREET 2	WIDTH	LENGTH	OF SPACES	1PM-2PM	Occupied	4PM-5PM	Occupied	7PM-8PM	Occupied
GROVE STREET	NORTH	CEDAR SWAMP ROAD	HAZEL STREET	30'	390'	6	6	100%	5	83%	4	66%
	SOUTH	CEDAR SWAMP ROAD	HAZEL STREET	30'	390'	6	3	50%	3	50%	3	50%
GROVE STREET	NORTH	HAZEL STREET	STANCO STREET	30'	440'	10	2	20%	5	50%	6	60%
GROVE STREET	SOUTH	HAZEL STREET	CAPOBIANCO STREET	30'	200'	3	2	66%	3	100%	2	66%
GROVE STREET	SOUTH	CAPOBIANCO STREET	STANCO STREET	30'	200'	6	4	66%	5	83%	3	50%
STANCO STREET	WEST	GROVE STREET	WILLOW STREET	25'	390'	12	6	50%	4	25%	5	42%
	EAST	GROVE STREET	WILLOW STREET	25'	390'	9	4	44%	4	44%	7	77%
WILLOW STREET	SOUTH	STANCO STREET	HAZEL STREET	24'	190'	14	0	0%	2	14%	4	29%
WILLOW STREET	NORTH	STANCO STREET	CAPOBIANCO STREET	24'	390'	7	1	14%	0	0%	1	14%
WILLOW STREET	NORTH	CAPOBIANCO STREET	HAZEL STREET	24'	390'	9	3	33%	1	11%	6	67%
CAPOBIANCO STREET	EAST	WILLOW STREET	GROVE STREET	24'	390'	15	3	20%	4	27%	7	47%
	WEST	WILLOW STREET	GROVE STREET	24'	390'	10	1	10%	4	40%	2	20%
HAZEL STREET	EAST	DEAD END	GROVE STREET	24'	340'	6	3	50%	3	50%	3	50%
	WEST				340'	9	0	0%	2	22%	3	33%
HAZEL STREET	WEST	GROVE STREET	WILLOW STREET	24'	390'	14	1	7%	5	36%	7	50%
HAZEL STREET	EAST	GROVE STREET	CARNEY STREET	24'	540'	18	7	39%	7	39%	10	55%
HAZEL STREET	WEST	WILLOW STREET	CARNEY STREET	24'	150'	6	5	83%	3	50%	4	67%
HAZEL STREET	WEST	CARNEY STREET	SEA CLIFF AVENUE	25'	780'	6	5	83%	5	83%	5	83%
	EAST	CARNEY STREET	SEA CLIFF AVENUE	25'	780'	9	0	0%	1	11%	0	0%
CARNEY STREET	NORTH	CEDAR SWAMP ROAD	HAZEL STREET	27'	380'	8	4	50%	7	88%	8	100%
	SOUTH	CEDAR SWAMP ROAD	HAZEL STREET	27'	380'	0	0	0%	0	0%	0	0%
CARNEY STREET	NORTH	HAZEL STREET	DEAD END	27'	220'	4	2	50%	2	50%	2	50%
	SOUTH	HAZEL STREET	DEAD END	27'	220'	6	0	0%	2	33%	1	17%
			TOTAL ON-STREET SPACES			**193**	**62**	**32%**	**77**	**40%**	**93**	**48%**

TABLE4
Existing Parking Inventory August 2017

ORCHARD BOA PARKING STUDY
CITY OF GLEN COVE

STREET NAME	SIDE	CROSS STREET 1	CROSS STREET 2	STREET WIDTH	STREET LENGTH	NUMBER OF SPACES	1PM-2PM	% Occupied	4PM-5PM	% Occupied	7PM-8PM	% Occupied
COLES SCHOOL PARKING LOT						70	34	49%	17	24%	21	30%
CAPOBIANCO OFF-STREET LOT						14	5	36%	4	28%	6	43%
CEDAR SWAMP ROAD	WEST	LIRR	GROVE STREET	64'	900'	12	10	83%	9	75%	2	17%
CEDAR SWAMP ROAD	WEST	GROVE STREET	CARNEY STREET	64'	550'	6	2	67%	2	33%	0	0%
CEDAR SWAMP ROAD	WEST	CARNEY STREET	SEA CLIFF AVENUE	64'	640'	7	7	100%	2	28%	1	14%
CEDAR SWAMP ROAD	EAST	4TH STREET	3RD STREET	64'	380'	6	5	83%	2	40%	7	117%
CEDAR SWAMP ROAD	EAST	3RD STREET	2ND STREET	64'	190'	5	4	80%	2	40%	4	80%
CEDAR SWAMP ROAD	EAST	2ND STREET	1ST STREET	64'	170'	2	2	100%	1	50%	4	200%
CEDAR SWAMP ROAD	EAST	1ST STREET	LIRR/ALEXANDER PLACE	64'	780'	0	0	0%	0	0%	0	0%
			CEDAR SWAMP TOTALS			**38**	**30**	**79%**	**18**	**47%**	**18**	**47%**

APPENDIX E

EVALUATION OF GREEN INFRASTRUCTURE WITHIN THE ORCHARD NEIGHBORHOOD AND SEA CLIFF AVENUE BOA ENGINEERING REPORT

Evaluation of Green Infrastructure within the Orchard Neighborhood and Sea Cliff Avenue Brownfield Brownfield Opportunity Area Engineering Report

City of Glen Cove, New York

Submitted to:

City of Glen Cove and
Glen Cove Community Development Agency
City Hall
9 Glen Street
Glen Cove, NY 11542

Submitted by:

Nelson, Pope & Voorhis, LLC
Nelson & Pope, Engineers & Surveyors
572 Walt Whitman Road
Melville, NY 11747

Funding:

This document was prepared for the City of Glen Cove, Glen Cove Community Development Agency and the New York State Department of State with state funds provided through the Brownfield Opportunity Areas Program.

OCTOBER 23, 2018

EVALUATION OF GREEN INFRASTRUCTURE WITHIN THE ORCHARD NEIGHBORHOOD AND SEA CLIFF AVENUE BROWNFIELD OPPORTUNITY AREA

ENGINEERING REPORT

Prepared for:
City of Glen Cove & Glen Cove Community Development Agency
City Hall
9 Glen Street
Glen Cove, New York 11542

Prepared By:
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Funding:
This document was prepared for the City of Glen Cove, Glen Cove Community Development Agency and the New York State Department of State with state funds provided through the Brownfield Opportunity Areas Program.

October 23, 2018

Engineers Stamp:

NELSON & POPE, PLLC
NELSON, POPE & VOORHIS, LLC
ENVIRONMENTAL PLANNING AND ENGINEERING

Contents

Appendices

1.0 INTRODUCTION

Nelson, Pope and Voorhis (NP&V) and Nelson & Pope Engineers and Surveyors (N&P) were retained by the City of Glen Cove through funds provided by New York State Department of State (NYSDOS) through the Brownfield Opportunity Area (BOA) Program to perform a sub-watershed assessment and cost estimate for potential green infrastructure projects within the Glen Cove BOA Study Area. Stormwater runoff generated in the area contributes to localized flooding issues and direct discharges to Glen Cove Creek, which runs through the Study Area. This engineering report identifies 22 potential projects for implementation of green infrastructure to reduce the volume of runoff and reduce the pollutant load of runoff that is directed to Glen Cove Creek. This report has been reviewed by a professional engineer and the cover page is stamped and signed by licensed engineer, Thomas C. Dixon, P.E., of Nelson & Pope.

NP&V staff conducted a Geographic Information Systems (GIS) analysis of the Study Area and conducted two site visits on December 13th, 2017 and January 8th, 2018 to follow up with flooding and pipe concerns after a storm event the previous day.

NP&V reviewed the entire BOA Study Area for the potential to incorporate green infrastructure within the area to reduce direct discharge and improve the water quality of runoff that is entering Glen Cove Creek. Within the Glen Cove BOA Study Area, nearly 30 projects were identified with GIS analysis for follow-up site visits. While conducting the site visits, 22 potential projects were identified as feasible locations for installation of green infrastructure improvements. These 22 potential projects were evaluated and conceptual designs were prepared, and pollutant load reduction modeling was completed. The sites were assessed for treatment area, ease of construction, impact to improve water quality, and potential area that could be converted towards green infrastructure.

The 22 projects were then conceptually designed to maximize the size available and the treatment area calculated. NP&V used the New York State Department of Environmental Conservation (NYSDEC) accepted 2013 Watershed Treatment Model by the Center for Watershed Protection to determine the estimated reduction in pollutant load annually for each of the potential drainage improvement projects. Inputs to the model included, but were not limited to, the approximate contributing drainage area, street salt notes, soil type, and depth to groundwater. Model output of estimated reduction of pollutants were compiled in a spreadsheet (See **Appendix A** for complete list of model inputs).

The size of the green infrastructure solution/practice was also included in the spreadsheet, as this information is required to evaluate adequacy of the practice based upon the size for a particular rain event as well as for estimating the approximate cost of installation. Cost estimations were determined using a realistic cost per square foot, based upon NP&V experience in the design and installation of green infrastructure solutions.

The data was then analyzed to create a ranking of projects as a cost benefit analysis, which evaluated cost versus total nitrogen reduction. By dividing the cost by TN (total nitrogen) attenuation, the cost per pound of nitrogen reduction was estimated for each project. This ranked cost/pollutant reduction factor was then ordered from lowest probable cost to highest approximate cost. The other consideration in determining those projects that should receive the highest priority for implementation is the anticipated ease of construction, which factors in the existing conditions (paved or unpaved). Although the prioritization ranking of the projects does indicate the cost to benefit comparison, it does not consider how feasible the project would be to construct due to land ownership, difficulty or ease of access, or other considerations. Therefore, in identifying the top 9 projects, ease of construction was considered first (which considered ownership and ease of access, with a grade from A (best) to D (worst)), followed by the cost to benefit ranking. A complete list of projects, details, and ranking values are provided in **Appendix B**.

The recommended projects to be prioritized for the City to implement are ordered below based on implementation priority as listed below. Project prioritization was determined by both ease of construction or ability of the City to acquire the property followed by the cost to benefit ranking.

GC-4.2 City Parking on Capobianco Street
GC-1.2 Parking Lot of Coles School in the front
GC-7.1 Parking Lot of Daycare
GC-5.2 Apartment ROW off Willow Street
GC-8.3 South Side of Sea Cliff Avenue, East of the Creek
GC-8.2 South Side of Sea Cliff Avenue, East of the Creek
GC-9.1 South Side of Sea Cliff Avenue, West of the Creek
GC-9.2 South Side of Sea Cliff Avenue, West of the Creek
GC-7.2 Road Terminus of Carney Street

2.0 EXISTING CONDITIONS

The Study Area is a mix of land uses, with medium to high density residential, commercial, industrial and former industrial, institutional/community services, and commercial recreation uses. However, there are no parks and little open space within the Study Area. It appears through visits to the Study Area and review of aerial photography that there are limited areas where stormwater can infiltrate into the ground naturally, as much of the area has a high percentage of impervious surfaces with limited green space.

Development within the Study Area directs stormwater runoff to Glen Cove Creek, either directly or indirectly. The creek runs through the Study Area towards the north, eventually discharging to Hempstead Harbor. The Study Area has a high percentage of impervious surfaces with many areas where stormwater is directed into the Creek. Figure 9 of the BOA Step II Nomination Study (shown here) shows exclusively direct discharge from neighborhood catch basins from the Study Area into Glen Cove Creek. The drainage areas for each catch basin often have steep grades with large tracts of impervious surfaces. Stormwater infrastructure tends to be at the bottom of the slopes, near major arterial roadways, or at the base of the terrain.

Major localized areas of flooding were not expressed as a concern to NP&V staff, nor has major flooding from large storm events been documented. Water volume and pipe retrofitting, stream bank stabilization, and/or flooding were not observed while conducting site visits or documented as necessary infrastructure in prior studies. The BOA area is not located within a FEMA Flood Zone as indicated on Figure 7 of the Step II. However, the quality of the stormwater discharge directed into Glen Cove Creek is of concern. A minimum of 11 outfalls with direct discharge points to the Creek are noted in Figure 9 of the BOA Step II Nomination Study (shown here).

The soils throughout the Study Area have commonly been replaced with fill. Based upon a general assessment, the fill used has been a sandy/loam mix (for those sites where observation of soil conditions was possible). However, soil conditions will need to be analyzed for specific site design prior to implementation of any of the projects recommended. Specifically,

soil infiltration rates will be needed at each potential project site to determine viability during a feasibility study.

Depth to groundwater throughout the Study Area was documented as over 5 feet and in general 20+ feet below the surface. It is expected, however, that groundwater depths may be at 5 feet or closer to the surface along the Creek. The minimum depth to groundwater required for infiltration practices must be 3 feet or greater. A spatial analysis indicates that the depth to groundwater should not be an issue for any of the projects identified; however, onsite testing should be conducted to verify viability of any potential project as site-specific refined designs are prepared.

3.0 POTENTIAL PROJECTS

Prior to conducting the site visits on December 13th, 2017 and January 8th, 2018, a GIS desktop analysis was conducted. A desktop analysis involves computer-based spatial analysis of the Study Area for potential retrofits and/or specific sites. GIS data is used to identify existing public lands for potential drainage improvement projects as well as for prioritizing projects. The table below summarizes features which may be utilized.

Desktop retrofit analysis features to look for and potential stormwater retrofit projects:

Features	Potential Retrofit Project
Open Space	New regional treatment (bioretention)
Outfalls	Split flows or add storage below outfalls if open space is available
Conveyance system	Add or improve performance of existing swales, ditches and non-perennial streams
Large Impervious Areas (campus, commercial, parking)	Stormwater treatment on site or in nearby open spaces
Neighborhoods	Utilize right of way, roadside ditches, curb-cut rain gardens, or filter systems before water enters storm drain network

After identifying potential retrofit sites through the desktop analysis, field investigations were conducted to evaluate each site to test assumptions and identify site-limiting factors. A careful assessment of site-specific information was conducted to determine which type of retrofit would be most appropriate for each site.

The project locations identified through this analysis have been labeled across the top third of the BOA boundary from northeast to northwest, then the next third of the BOA boundary from west to east, then the final third of the boundary labeled from east to west again. **Figure 1** shows the location of projects by ID number.

City of Glen Cove
and
New York Department of State

The Orchard Neighborhood
Step III BOA

FIGURE 1
Location ID Map for GI Projects

Legend

- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

0 40
Feet

1 inch = 300 feet

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Each drainage solution identified through the Desktop Retrofit Analysis and verified in the field with the Retrofit Reconnaissance Investigation is summarized. The estimated volume of stormwater and pollutant load removed through the proposed solution was calculated using the NYSDEC accepted 2013 Watershed Treatment Model created by the Center for Watershed Protection.

A complete list of projects is provided in **Appendix B** showing location; size of the project; expected reductions of phosphorous, nitrogen, total suspended solids, and bacteria; amount of runoff captured yearly; estimated cost; ranking by cost to benefit ratio; and ease of construction. The 9 highest ranked projects collated with the ease of construction are shown in **Table 1**. Ranking projects was conducted with an emphasis towards projects with the highest nitrogen reductions as the primary factor in improving water quality within Glen Cove Creek and Hempstead Harbor. The 9 projects which have the greatest reduction (a reduction of 3 pounds of nitrogen per year) are summarized in **Table 2**. Projects are described in detail in the following subsections.

TABLE 1
TOP-RANKED PROJECTS FROM GREEN INFRASTRUCTURE ANALYSIS

Project ID #	Location	Ownership (Title)	Impervious Treatment Area (SF)	Size of Practice (SF)	TP (lbs/yr)	TN (lbs/yr)	TSS (lbs/yr)	Bacteria (billion/yr)	Estimated Cost *	Cost/TN **	Ease of Construction
GC-3.1	Right-of-way (ROW) of Pratt Blvd by PSEG	PSEG	30,950	3,500	0.0	0.0	0	0	$0	$0	**A**
GC-1.2	Parking lot of Coles School	Tiegerman Schools	5,780	836	0.3	2.0	33	65	$6,700	$3,350	A
GC-7.1	Parking lot of Day Care Center	City	5,000	1,000	0.2	1.8	300	70	$10,000	$5,556	A
GC-5.2	Apartment ROW off Willow St	Private	4,658	400	0.3	2.0	2,135	77	$4,800	$2,400	B
GC-8.3	South side of Sea Cliff Ave, east of Creek	ROW of City and Private	13,373	1,400	0.7	4.7	1,488	166	$16,800	$3,574	B
GC-4.2	City Parking on Capobianco St	City	4,200	1,000	0.2	1.9	1,102	70	$12,000	$6,316	B
GC-8.2	South side of Sea Cliff Ave, east of Creek	ROW of City and Private	5,270	1,200	0.3	2.2	1,450	90	$14,400	$6,545	B
GC-9.1	South side of Sea Cliff Ave, west of Creek	Nassau County Industrial Development Agency (IDA)	7,690	1,360	0.2	1.9	2,217	73	$16,320	$8,589	B
GC-9.2	South side of Sea Cliff Ave, west of Creek	Nassau County IDA	6,500	1,200	0.2	1.6	1,890	62	$14,400	$9,000	B

* The cost figures are for preliminary budgetary purposes only. Costs may be more or less depending on the bidding process and local factors. Costs may be reduced through use of in-kind services, if available.
** Cost per pound of nitrogen removed annually (cost/TN)
*** Reductions of phosphorous, nitrogen, total suspended solids, and bacteria are shown in the columns above labeled TP, TN, TSS, and Bacteria, respectively

TABLE 2
SUMMARY OF PROJECTS WITH HIGHEST REDUCTIONS OF NITROGEN LOADING (GREATER THAN 3 POUNDS PER YEAR)

Project #	Location	Ownership	BMP Type	Impervious Treatment Area (SF)	Size of Practice (SF)	TP (lbs/yr)	TN (lbs/yr)	TSS (lbs/yr)	Bacteria (billion/ yr)	Estimated Cost *	Cost/TN **
GC-1.1	Parking lot of Coles School	GC City	Rain garden	51,380	2,400	2.3	19.0	367	779	$36,000	$1,895
GC-6.1	Parking lot at Carney St	Private	Rain garden	20,080	4,000	1.0	9.0	4,437	325	$40,000	$4,444
GC-8.1	North side of Sea Cliff Ave, east of Creek	Nassau County IDA	Rain garden	24,660	2,150	1.2	8.6	1,626	300	$32,250	$3,750
GC-7.2	Road Terminus of Carney St	County ROW	Rain garden	11,960	1,000	0.6	5.0	2,200	189	$12,000	$2,400
GC-10.1	ROW between Pratt Blvd and Cedar Swamp Rd	ROW of City and County	Rain garden	11,125	1,725	0.6	4.8	4,230	184	$20,700	$4,313
GC-8.3	South side of Sea Cliff Ave, east of Creek	ROW of City and Private	Rain garden	13,373	1,400	0.7	4.7	1,488	166	$16,800	$3,574
GC-2.3	4 Cedar Swamp Rd (back)	Private	Rain garden	13,374	850	0.7	4.5	1,121	155	$12,750	$2,833
GC-4.1	Vacant house off Stanco St	Private	Rain garden	8,950	600	0.5	3.9	1,215	147	$7,200	$1,846
GC-2.1	Glen St Train Station parking	Metropolitan Transportation Authority (MTA) ROW	Tree Trench/Boxes	10,788	1,600	0.5	3.6	1,094	125	$32,000	$8,889

* The cost figures are for preliminary budgetary purposes only. Costs may be more or less depending on the bidding process and local factors. Costs may be reduced through use of in-kind services, if available.
** Cost per pound of nitrogen removed annually (cost/TN)
*** Reductions of phosphorous, nitrogen, total suspended solids, and bacteria are shown in the columns above labeled TP, TN, TSS, and Bacteria, respectively

3.1 COLES SCHOOL CONCEPTS

The following provides details regarding the green infrastructure concepts on the Coles School property. See **Figure 2** for the location and contributing areas of the Coles School Green Infrastructure Concept Plans.

GC-1.1: Glen Cove City Coles School property (behind school building)
This property has a large drain in the rear parking lot of the school that receives stormwater from the existing parking lot, turf area, and building roof runoff. The drainage area is approximately 23,150 square feet of turf, 24,000 square feet of parking lot, and about 4,230 square feet of roof. Placing rain gardens around the building, near the turf, and surrounding the existing drain would reduce the amount of water by 3.2-acre feet, intercept the runoff of a 1.25" rain event, and capture nearly 19 pounds of nitrogen annually. This is the largest amount of nitrogen documented that could be attenuated of all of the potential projects.

To accomplish this, the parking lot would need to be retrofitted to allow a bioretention/rain garden at the catch basin and surrounding landscaped parking islands. The other locations near the building or within the turf area would be easier to locate. If implemented, the rain garden should be planted with trees to help with interception of rainfall as well as to offer the additional benefit of providing shade in the parking area. This garden would also include other plantings.

As this project is ranked number two of all rain gardens and achieves the highest reduction of nitrogen compared to the other projects, this project should be considered a priority if deemed feasible. It is recommended that the City consider sharing this information with the Tiegerman School, who purchased the western portion of the property, so as this entity is designing necessary improvements, the potential for incorporating green infrastructure may be considered.

Recommendation: Ranked 2 of 22 projects – Moderate Difficulty for Implementation. Recommend providing green infrastructure information to the Tiegerman School for their consideration for parking lot design to provide an opportunity to capture nutrients and pollutants through the addition of a rain garden, tree trench or other green infrastructure to allow stormwater to enter the catch basin and dry wells that are proposed. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year). However as this is on private land, unless a private/public agreement is established, the maintenance will be the responsibility of the landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

GC-1.2: Glen Cove City School site (in front of the school building)
In the front of the former Coles School, a portion of the building and parking lot conveys stormwater to the existing parking spaces in the front of the building. Between those parking spaces and Cedar Swamp Road is a lawn area that is underutilized. This area would be ideal for

a non-complicated bio-infiltration practice using existing soils and minimal grading. As an added benefit, the garden would enhance the front of the school aesthetically and incorporate the existing flag pole.

The ease of implementation of this treatment is due to using existing soils, the current drainage pattern, and existing lawn/hillside. A curb cut with a Rain Guardian® (see photo at right) would treat the first flush of pollutants, make an easy maintenance regime and direct the water slowly into the rain garden.

Stormwater runoff is generated by approximately 5,780 square feet of roof and parking lot area that would be conveyed to this rain garden without changes to the parking area grading. The area available for the rain garden is 840 square feet, which would be able to capture stormwater from a 2" rain event. Only 600 square feet is required to capture the water quality volume of water of 1.2". The garden would attenuate up to 2.0 pounds of nitrogen annually and 65 billion bacteria annually. As this is a bio-infiltration practice with a curb cut, it is assumed that the cost is approximately $8 per square foot to install the garden.

As with GC-1.1, the City should consider sharing this information with the Tiegerman School, who purchased the western portion of the property, so as this entity is considering design improvements, the potential for incorporating green infrastructure may be considered.

Recommendation: Ranked 6 *of 22 projects* – Easy Implementation. As stormwater already travels to this area of the parking lot and the area of lawn between the parking lot and Cedar Swamp Road is currently underutilized, this would be a non-complicated bio-infiltration practice with a Rain Guardian® pretreatment inlet. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance would be the responsibility of the landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

TREATMENT:
GC-1.1 HAS BEEN ELIMINATED DUE TO APPROVED SITE PLANS FOR THE COLES SCHOOL, NOW TIEGERMAN SCHOOL.

GC-1.2 IS 836 SF RAIN GARDEN ABLE TO CAPTURE A 2" RAIN EVENT PLACED ON THE SLOPE FROM THE SCHOOL TOWARDS THE STREET.

ESTIMATED TREATMENT FROM MODELING:
TP = 0.3 LBS/YEAR
TN = 2.0 LBS/YEAR
TSS = 33 LBS/YEAR
BACTERIA = 65 BILLION/YEAR

Cedar Swamp Rd

Kelly St

GC-1.1

GC-1.2

2,130 SF ROOF
3,650 SF PARKING

LEGEND:

- RAIN GARDEN (GC 1.1 & GC 1.2)
- 1' CONTOUR
- TREATMENT AREA
- FLOWLINE IN TREATMENT AREA
- EXISTING CATCH BASIN
- PARCEL BOUNDARY
- PROJECT BOUNDARY

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FIGURE 2
Tiergerman Schools &
Parking Lot

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

0 40 Feet

1 inch = 40 feet

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3.2 GLEN STREET LIRR STATION AND PROXIMITY

The following concepts are located near the Glen Street Train Station. **Figure 3** provides the location and contributing areas of the concepts at and proximate to the Glen Street Train Station.

GC-2.1: Glen Street Train Station (north)

The parking lot at the Glen Street Long Island Rail Road (LIRR) Train Station (south of the railroad tracks) within the BOA Study Area is within the ROW of the LIRR tracks (owned by the MTA) and has potential to provide significant treatment using a different kind of green infrastructure design than has been discussed in this report previously. A tree trench with pervious pavement cover would allow for treating a significant amount of stormwater and continue to provide easy access to the station – and result in no loss of parking stalls. Creating a 10-foot wide trench along the entire curb on the north side of the parking lot would provide sufficient space for stormwater storage that would treat stormwater and provide a healthy soil for street trees. The trench would be filled with a healthy soil mix with integrated drain tile within the sub-base layer that would direct excess water to the existing storm drain system. Openings within the curb and an elevated pervious pavement cover would allow the stormwater from the parking area to enter the tree trench. Approximately 10,788 square feet of impervious parking area would direct water to this potential project.

The street tree roots would uptake a large portion of the runoff from rain events as they mature– up to 75% of the rain volume. The trench would be required to provide at least 500 cubic feet of soil for each tree to provide a solid footing for the trees to reach maturity. The storage within the trench would provide up to 1,600 cubic feet of storage of stormwater, which would be able to capture a 2.0" rain event.

The recommended tree trench would potentially result in the uptake or reduction of 3.6 pounds of nitrogen annually and could treat 125 billion bacteria annually once established. The cost for the tree trench is estimated at $20 per square foot or $32,000 with a cost benefit rank of $8,890 per pound of nitrogen. This location is ideal for tree trenches in an urbanized environment and would provide a demonstration project for Long Island. Though this project ranks low from a cost to benefit perspective, it is highly recommended due to the unique quality/demonstration and the large amount of nitrogen attenuation.

Recommendation: Ranked 18 of 22 projects – Moderate to Difficult Implementation. Construction would be difficult, as this would be a unique design on Long Island. This parking lot is located within the MTA/LIRR ROW, and is typically full during commuting hours, both creating additional complications to implementation. The project would require coordination with – or implementation by – the MTA and the provision of an equal or greater number of unrestricted parking stalls elsewhere during construction. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on MTA land, an agreement between the City and MTA should be established, with an understanding on whom will maintain the tree trench.

GC-2.2: Retro Fitness Gym parking lot (front)

Another parking area south of GC-2.1 is parking for a commercial use and also has potential to provide significant treatment. This project would be similarly designed to GC-2.1; however, a retaining wall would also be required, increasing the cost and difficulty of the project.

Runoff from approximately 7,900 square feet of impervious parking area would be directed to this potential installation. The soil surrounding the street trees would infiltrate a large portion of rain events and intercept up to 75% of the rainfall as the trees mature. The trench would be required to provide at least 500 cubic feet of soil for each tree to provide a solid footing for the trees to reach maturity. The storage within the trench would provide up to 1,000 cubic feet of storage of stormwater, which would be able to capture a 1.75" rain event.

The recommended tree trench would potentially attenuate 2.6 pounds of nitrogen and treat 90 billion bacteria annually once established. The cost for the tree trench is estimated at $25 per square foot or $25,000 with a cost benefit rank of $9,615 per pound of nitrogen. This location is not as ideal for tree trenches in an urban environment as GC-2.1; however, it would complement that project well. Though this project ranks low, it is a highly recommended project due to the unique quality/demonstration and amount of pollution treatment.

Recommendation: Ranked 20 of 22 projects – Difficult Implementation. The tree trench has a high difficulty to install due to existing infrastructure, need for a retaining wall, private ownership, and heavily used parking lot. Note that a transit-oriented development (TOD) on the site could incorporate green infrastructure in the design when the property is redeveloped in future. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance would be conducted by landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

GC-2.3: Retro Fitness Gym parking lot (back)

The back parking lot for the private gym could be retrofitted, the parking can be rearranged to provide a large parking lot island and catch basins at the existing low spot. As envisioned, a parking lot island would be converted into a bio-retention basin using the existing catch basins as overflow drainage.

The location of the recommended rain garden is on private property; it would receive stormwater from ±13,300 square feet of impervious parking lot that is currently draining directly to the catch basins in the lot. The area that could be modified within the parking lot is about 850 square feet in size, which would provide an area sufficient to intercept runoff from a 1.0" rain event. A reconfigured parking layout would be required.

This bio-retention basin would have the ability to capture and attenuate 4.5 pounds of nitrogen annually. Bacteria capture would be about 155 billion annually with a cost of $15/square foot to build, and the estimated cost would be $12,750 or a cost to benefit of $2,833 per pound of nitrogen reduction.

Recommendation: Ranked 5 of 22 projects – Moderate to Difficult Implementation. This project is ranked as moderately difficult because the site is privately owned and the parking lot would need to be reconfigured. The project involves creating a bio-retention basin around the existing catch basins and restriping the parking lot. Note that a TOD on the site could incorporate green infrastructure in the design when the property is redeveloped in future. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance would be conducted by the landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

GC-2.4: 10 Cedar Swamp Road; Existing Pervious Pavement

An existing turf stone pervious pavement product exists at the private property located at 10 Cedar Swamp Road in the rear parking lot. The pavement is currently in need of maintenance to improve its functionality. Approximately 3,740 square feet of impervious surfaces direct runoff to the area where the existing pavement. With a reconfiguration of the parking lot islands and pavement the project may have the capability to capture more stormwater.

The current size of the permeable pavement is 400 square feet and able to capture a 2.8” rain event, which is sized correctly for the drainage area. Furthermore, maintenance of the turf stone would address increased infiltration rates and increase the ability to maybe capture more water.

If the permeable pavement was completely removed and replaced, the cost would be about $20 per square foot or $8,000. However, maintenance would likely be half that cost to blow out and/or wash the existing pavement. The project is likely not reaching the potential of 1.3 pounds of nitrogen and 45 billion bacteria treatment annually.

Recommendation: Ranked 13 of 22 projects – Moderate Implementation. The restoration of the pervious pavement is not difficult; the implementation rating is affected by the fact that the project site is on private property. Maintenance is estimated to be $200 annually (typically power wash annually and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance will be the responsibility of the landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

LEGEND:

- RAINGARDENS (GC-2.3)
- TREE TRENCH (CG-2.1 & 2.2)
- EXISTING TURF STONE (CG-2.4)
- 1' CONTOUR
- TREATMENT AREA
- FLOWLINE IN TREATMENT AREA
- EXISTING CATCHBASIN

GC-2.1
10,788 SF
GC-2.2
7,900 SF
13,374 SF
GC-2.3
GC-2.4
3,740 SF

TREATMENT:
GC-2.1 IS A 1,600 SF TREE TRENCH ABLE TO CAPTURE THE 2.0" RAIN EVENT PLACED ALONG THE FRONT OF THE PARKING WITH A PERVIOUS PAVEMENT AT GRADE.

GC-2.2 IS A 1,000 SF RETROFIT TREE TRENCH ABLE TO CAPTURE THE 1.75" RAIN EVENT PLACED ALONG THE FRONT OF THE PRIVATE PROPERTY PARKING IN UPPER LOT.

GC-2.3 IS 850 SF RAIN GARDEN ABLE TO CAPTURE THE 1.0" RAIN EVENT PLACED AROUND THE CATCHBASINS WITHIN THE EXISTING PARKING, NEW PARKING LAYOUT WILL BE REQUIRED.

GC-2.4 IS AN EXISTING 2 BY 400 SF TURF STONE PERVIOUS PAVEMENT ABLE TO CAPTURE THE 2.8" RAIN EVENT WHEN REVITALIZED.

ESTIMATED TREATMENT FROM MODELING:
TP = 1.8 LBS/YEAR
TN = 12 LBS/YEAR
TSS = 4,300 LBS/YEAR
BACTERIA = 415 BILLION/YEAR

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FIGURE 3
Glen Cove Train Station and Surrounding Area

Legend
- 1' Contour
- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

N W E S

0 50 Feet

1 inch = 50 feet

NP&V
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3.3 NATIONAL GRID PROPERTY

GC-3.1: PSEG property

According to the 2011 United States Geological Survey (USGS) National Elevation Dataset, an existing natural depression is within the ROW of Pratt Boulevard and on the property of National Grid. The stormwater runoff generated by impervious surfaces on the property, including the driveway into the site, is directed towards the ROW to the north and west of the site towards that depression. The large depression acts like a natural rain garden on-site and appears to have capacity to capture all of the runoff generated by a 2.8" rain event (1-year – 24-hour), effectively treating stormwater from the property. Due to the presence of high density vegetation and difficult access from Pratt Boulevard, NP&V did not confirm that the depression exists as depicted by topography. See **Figure 4** for site information and potential depression area.

Recommendation: Not Ranked – Check site only. Check within the ROW to determine that the depression exists; if so, no further action is required.

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FIGURE 4
PSEG Facility

Pratt Blvd

8,450 SF

GC-3.1

22,500 SF

LEGEND:

- RAINGARDENS (GC-3.1)
- 1' CONTOUR
- TREATMENT AREA
- FLOWLINE IN TREATMENT AREA

TREATMENT:
GC-3.1 IS A 3,500 SF DEPRESSION ABLE TO CAPTURE THE 2.8" RAIN EVENT

THE EXISTING DEPRESSION ACTS LIKE A NATURAL RAIN GARDEN AND IS TREATING THE STORMWATER FROM THE LOT. CHECK TO SEE IF THE DEPRESSION IS UNDER THE VEGETATION IN THE ROW.

ESTIMATED TREATMENT FROM MODELING:
EXISTING DEPRESSION IS DOING THE WORK OF WHAT A RAIN GARDEN WOULD DO, ASSUMING THE DEPRESSION IS UNDER ALL OF THE VEGETATION.

Legend

- 1' Contour
- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

N W E S

0 40 Feet

1 inch = 40 feet

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3.4 CONCEPTS FOR PROPERTIES ON STANCO, GROVE, AND CAPOBIANCO STREETS

See **Figure 5** for the location and contributing areas for concepts in the northern area of the Orchard Neighborhood.

GC-4.1: Private property on Stanco Street

A lot with an unoccupied house on the north side of Stanco Street (listed vacant as of September 2018) is the area with the lowest elevation in the surrounding residential area that a large volume of water drains towards. A modification would be required within the street to install a catch basin with a sump that would direct the water under the sidewalk to the surface on the private property. A large rain garden could be installed on that property to capture the stormwater and treat it for pollutants.

Two buildings are on the site currently. The building closest to the street would also direct water into the rain garden from the north side of the house. Though if this property were purchased and converted into a neighborhood park, the buildings could be removed and the flat building footprint near the street would make an ideal play area.

There is an approximate area of 8,950 square feet that contributes to the drainage area of Grove Street from Capobianco Street to Stanco Street, and the north end of Stanco Street drains toward this lot. There is enough room on the property for a 600+ square foot rain garden to capture a 1.0" rain event. The project would require the City to purchase the property or enforce storage when it is planned for redevelopment. The garden would treat 3.9 pounds of nitrogen and 147 billion bacteria annually. The cost would be about $7,200, which breaks down to about $1,846 per pound of nitrogen. Even though this project ranks first when evaluated for a rain garden only, it would drop significantly if the purchase price of the lot and/or cost for public park improvements are added.

Recommendation: Ranked 1 of 22 projects – Difficult Implementation. The rain garden has a high difficulty to install due to the need for a catch basin in the street and private ownership. If the property were converted into a neighborhood park, the project could be maximized to treat for a larger storm and the site could also be developed as a playground for the neighborhood. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance will be conducted by the landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

GC-4.2: Capobianco Street Parking Lot

On the west side of Capobianco Street is a City-owned parking lot that directs stormwater to the west down a steep embankment towards a private residence. A simple rain garden that takes two parking spaces on the west end of the lot and a retaining wall to protect the slope would

treat the water from the entire parking lot. Approximately 4,200 square feet of impervious surfaces direct water to this potential project.

The potential size of the rain garden (bio-infiltration type) is 1,000 square feet with the available room and ability to capture a 2.8" rain event. However, only a 400 square foot rain garden is required to capture the water quality volume of water, 1.2" rain event. The rain garden would enhance the look of the parking lot, and more importantly improve any issues of directing water to the neighbor's property to the west.

The proposed rain garden is able to attenuate 1.9 pounds of nitrogen and treat 70 billion bacteria annually. The cost for the rain garden is estimated at $12 per square foot or $12,000 with a cost benefit rank of $6,316 per pound of nitrogen; however, if sized to 400 square feet to capture the water quality volume only, the cost would drop to $4,800 and changing the ranking to a top ten project.

Recommendation: Ranked 14 of 22 projects, Ranked 5 if decrease the size – Moderate Implementation. The rain garden would have a moderate difficulty to install due to the required retaining wall to the west of the garden and the loss of two parking stalls. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year).

GC-4.3: Private property at corner of Grove and Capobianco Streets

The south half of Grove Street directs water to the intersection of Grove and Capobianco Streets, then the water travels south down Capobianco to the other end of the street before there is a catch basin. The vacant lot with an unoccupied house (listed vacant as of September 2018) has a small depression along Capobianco, which could be retrofitted to a sump catch basin or curb cut to direct stormwater onto the property. However, the property would be required to be purchased or regulated for redevelopment.

The property is large enough for a 700 square foot rain garden or larger. A rain garden of this size would be able to capture a 1.75" rain event and still provide space for further improvements like a park or community garden. The amount of surface area directing stormwater to the corner is approximately 5,760 square feet. A 600 square foot rain garden would be large enough to capture and treat a water quality rain event of 1.2".

The rain garden would not be complicated to install once a design was created to direct the water past the sidewalk to the property. The garden would provide 2.4 pounds of nitrogen attenuation and 91 billion bacteria to be treated annually. The project would require the City to purchase the property or enforce storage when it is planned for redevelopment. With an expected cost of the project of approximately $8,400 for the rain garden, this breaks down to about $3,500 per pound of nitrogen. Even though this project ranks high when evaluated for a rain garden only, it would drop significantly with the addition of the purchase price of the lot and/or cost for public park improvements.

Recommendation: Ranked 7 of 22 projects – Difficult Implementation. GC-4.3 has a similar difficulty to GC-4.1, a vacant private residence that receives significant stormwater from the street and the required catch basin in the street. The project could be maximized to treat for a larger storm and the site could be developed as a park or community garden for the neighborhood. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance will be conducted by landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

GC-4.4: Townhouses along Grove Street

Near the intersection of Capobianco Street and Grove Street on the north side of Grove is a rather new townhome development with a natural depression in the landscape between the building and the street. That depression could be retrofitted into a rain garden that would capture the stormwater generated by the building and driveway/parking area. By directing that stormwater to the potential rain garden, it would decrease stormwater entering Grove Street and flowing towards Stanco Street.

The impervious area of roof and asphalt that directs the water to the potential rain garden is 5,300 square feet. The area available is about 400 square feet and would be able to capture and treat a 1.25" water quality volume rain event. The garden would also enhance the front of the apartment and reduce the amount of mowing required for the property.

This easy-to-install bio-infiltration basin would attenuate approximately 1.1 pounds of nitrogen and treat 42 billion bacteria annually. The estimated cost would be $10 per square foot or $4,000 and a ranking of $3,636 per pound of nitrogen.

Recommendation: Ranked 9 of 22 projects – Easy Implementation, though Difficult. The difficulty is due to being on private property. However, the garden would be inexpensive and easy to install. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance will be conducted by landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

LEGEND:

- RAINGARDENS (GC-4.1 TO GC-4.4)
- 1' CONTOUR
- TREATMENT AREA
- FLOWLINE IN TREATMENT AREA

GC-4.1

8,950 SF

GC-4.2

4,200 SF

GC-4.3

1,630 SF

3,660 SF

GC-4.4

5,760 SF

Grove St

Stanco St

Capobianco St

TREATMENT:
GC-4.1 IS A 600 SF RAIN GARDEN ABLE TO CAPTURE THE 1.0" RAIN EVENT PLACED IN THE DEPRESSION OF THE VACANT PROPERTY ALONG STANCO STREET.

GC-4.2 IS A 1,000 SF RAIN GARDEN ABLE TO CAPTURE THE 2.8" RAIN EVENT PLACED IN THE LAST TWO SPACES OF THE PUBLIC PARKING LOT.

GC-4.3 IS 700 SF RAIN GARDEN ABLE TO CAPTURE THE 1.75" RAIN EVENT PLACED IN A VACANT LOT ON THE SOUTHWEST CORNER OF GROVE AND CAPOBLANCO ST.

GC-4.4 IS A 400 SF RAIN GARDEN ABLE TO CAPTURE THE 1.25" RAIN EVENT AT THE FRONT OF THE APARTMENT COMPLEX.

ESTIMATED TREATMENT FROM MODELING:
TP = 1.2 LBS/YEAR
TN = 9.3 LBS/YEAR
TSS = 3,473 LBS/YEAR
BACTERIA = 350 BILLION/YEAR

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and
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FIGURE 5
Stanco and Grove Streets

Legend

- 1' Contour
- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

N
W
E
S

0 40 Feet

1 inch = 40 feet

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3.5 CONCEPTS ON WILLOW STREET

A description of concepts for installation of green infrastructure along Willow Street in the southern portion of the Orchard Neighborhood is provided below. **Figure 6** illustrates the location and contributing areas for these concepts.

GC-5.1: Willow Street (west)

New apartment buildings were built on Willow Street (also fronting on Carney Street and known as Carney Street Apartments). Between the building and Willow Street is lawn area that could be developed into a rain garden. No sidewalk exists, though a decorative wrought iron fence has been installed by the landowner on the property line, which would make the project slightly more complicated.

The rain garden is proposed to be slightly larger than needed to capture the volume of water from Willow Street, but also the overflow from the GC-5.2 up the hill and east of this proposed garden. As envisioned, this garden would be 600 square feet and able to capture the runoff from a 2.0" rain event. The garden would attenuate approximately 1.1 pounds of nitrogen and treat 42 billion bacteria annually. The treatment area of Willow Street directed to this project is 2,656 square feet.

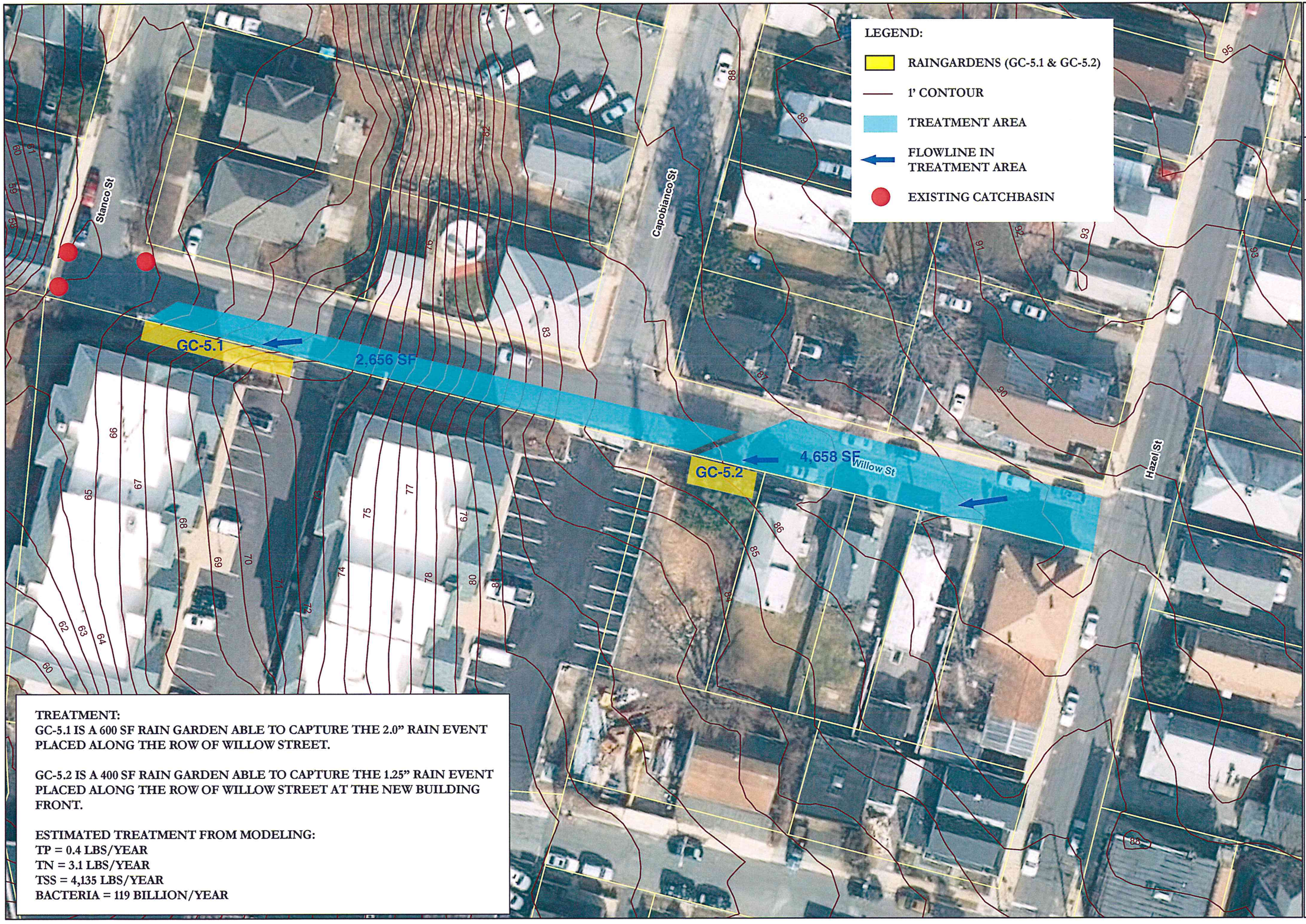
Recommendation: Ranked 15 of 22 projects – Moderate Implementation. This is a narrow space between the apartment and the street, with a wrought iron fence along the property line that is in the way, as well. An agreement would be required with the landowners and the City for this project. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance will be conducted by landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

GC-5.2: Willow Street (east)

A new apartment building was built on Willow Street (known as Carney Street Apartments), east of the first apartment building constructed. A depression is located between the building and Willow Street, and a driveway entrance is at the street. The driveway entrance provides a less complicated design to direct the stormwater from Willow Street to the depression within the landscaped area of the apartment complex.

The area available is about 400 square feet and is not large enough to capture large storm events. However, the garden is able to capture a 1.25" rain event and attenuate 2 pounds of nitrogen annually, as well as 77 billion bacteria. A unique outlet design would be required for this rain garden. The excess stormwater from larger storm events would be directed towards GC-5.1 further west on Willow Street.

Recommendation: Ranked 3 of 22 projects – Easy to Moderate Implementation. Retrofit the driveway entrance along the curb into an inlet for the rain garden. Because the driveway entrance already exists, this becomes an easy retrofit due to less issues in construction, improving the ranking of this project. The garden should be a bio-infiltration practice placed between the building and Grove Street. Excess stormwater from a larger than 1-year 24-hour event would be directed west to GC-5.1. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance will be conducted by landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.



TREATMENT:
GC-5.1 IS A 600 SF RAIN GARDEN ABLE TO CAPTURE THE 2.0" RAIN EVENT PLACED ALONG THE ROW OF WILLOW STREET.

GC-5.2 IS A 400 SF RAIN GARDEN ABLE TO CAPTURE THE 1.25" RAIN EVENT PLACED ALONG THE ROW OF WILLOW STREET AT THE NEW BUILDING FRONT.

ESTIMATED TREATMENT FROM MODELING:
TP = 0.4 LBS/YEAR
TN = 3.1 LBS/YEAR
TSS = 4,135 LBS/YEAR
BACTERIA = 119 BILLION/YEAR

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Step III BOA

FIGURE 6
Willow Street

Legend
- 1' Contour
- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

0 40 Feet

1 inch = 40 feet

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3.6 PARKING AT CARNEY STREET CONCEPT

A description of a concept for the installation of green infrastructure at a private property on Cedar Swamp Road that housed the former Bianconi Funeral Home, since demolished, is provided below. The property is currently being used as a parking lot for a car dealership. **Figure 7** illustrates the location and contributing areas for this concept.

GC-6.1: Carney Street, private parking lot

Along Carney Street is a large parking lot on the south side of the street at the southwest corner of Carney Street and Cedar Swamp Road, which is being considered for redevelopment. The site was the former Bianconi Funeral Home.

At the back (west) side of the parking lot is a natural slope and depression that is receiving all of the stormwater from the parking lot, which could be retrofitted to receive the stormwater from Carney Street, as well. During design, consideration will be required for an outlet for overflow, may need to provide an emergency outlet for 10-year or great storm events. Approximately 20,080 square feet of impervious surfaces could direct water to this potential project.

The potential size of the rain garden (bio-infiltration type) is 4,000 square feet and able to capture a 2.6" rain event, but this project could be sized smaller to just 2,150 square feet to capture rainwater from a 1.5" rain event.

As envisioned, the proposed rain garden would attenuate approximately 9.0 pounds of nitrogen annually (the second highest nitrogen load of all projects) and treat 325 billion bacteria annually. The cost for the rain garden is estimated at $40,000 maximum with a cost benefit rank of $4,313 per pound of nitrogen.

Recommendation: Ranked 11 of 22 projects – Moderately Difficult Implementation. The rain garden can be designed to have a straightforward installation; however, it is ranked at a Moderately Difficult implementation as it is on private property. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year), however as this is on private land, unless a private/public agreement is established, the maintenance will be conducted by landowner. The City could provide guidance and guidelines for maintenance to the landowner to have continued green infrastructure functionality.

It is recommended that during Site Plan Review of the redevelopment of this property, the Planning Board consider making recommendations that stormwater be treated on-site utilizing green innovative stormwater practices.

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The Orchard Neighborhood
Step III BOA

FIGURE 7
Carney Street

Legend

- 1' Contour
- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

Carney St
Hazel St
3rd St
Cedar Swamp Rd
GC-6.1
5,280 SF
14,800 SF

LEGEND:

- RAINGARDENS (GC-6.1)
- 1' CONTOUR
- TREATMENT AREA
- FLOWLINE IN TREATMENT AREA
- EXISTING CATCHBASIN

TREATMENT:
GC-6.1 IS A 4,000 SF RAIN GARDEN ABLE TO CAPTURE THE 2.6" RAIN EVENT

RAIN GARDEN PLACED WITHIN NORTHWEST CORNER OF PROPERTY RECEIVING STORMWATER FROM STREET AND PARKING LOT

ESTIMATED TREATMENT FROM MODELING:
TP = 1.0 LBS/YEAR
TN = 9.0 LBS/YEAR
TSS = 4,437 LBS/YEAR
BACTERIA = 325 BILLION/YEAR

N
W
E
S

0 40 Feet

1 inch = 40 feet

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3.7 CITY PROPERTY/DAY CARE SITE AND LOWER CARNEY STREET CONCEPTS

Descriptions of concepts for installation of green infrastructure along the western end of Carney Street and at the Day Care property on Pratt Boulevard are provided below. **Figure 8** illustrates the locations and contributing areas for these concepts.

GC-7.1: Glen Cove Child Day Care Center

At the Glen Cove Child Day Care facility, the building and main parking lot direct water towards the building and to Glen Cove Creek, which runs along the west side of the lot. It is difficult to create green infrastructure at that portion of the lot without a large retrofit project. However, the gravel parking lot north of the entrance directs the stormwater directly to the Creek to the west and north. At the edge of the lot, a rain garden would provide the treatment required to help mitigate this situation. Approximately 5,000 square feet of impervious gravel lot directs water to this potential project.

The area available for the rain garden (bio-infiltration type) is 1,000 square feet and as envisioned could capture runoff from a 2.8" rain event. In this case, a large garden would be preferable to capture large events. The new garden will provide treatment to runoff to nearby Creek. As envisioned, the rain garden would attenuate approximately 1.8 pounds of nitrogen and treat 70 billion bacteria annually. The cost for the rain garden is estimated at $10,000 with a cost benefit rank of $5,556 per pound of nitrogen. The rain garden would also provide treatment of stormwater that has a direct discharge to the Creek. Ranking is therefore higher for this concept because of the expected impacts that existing stormwater runoff has on the water quality of the Creek.

Recommendation: Ranked 12 of 22 projects – Easy Implementation. The rain garden would be easy to install, as it would be a bio-infiltration practice with minimal infrastructure needs other than a pretreatment inlet to prevent excessive sediment. As the property is City-owned, this further eases implementation. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year).

GC-7.2: Road terminus at Carney Street:

A rain garden can be placed at the west end of Carney Street, which is a road terminus. The road terminus of Carney Street ranks high, however it would be a very difficult site to design due to the flow, velocity, and volume of water to control. The installation would be fairly straight forward once the design conditions are complete as it is a road terminus with access available. The site would be difficult to maintain due to trash and other pollutants.

As envisioned, the rain garden would be easy to install, as it is at a road end. It should be installed as a bio-infiltration practice and using the existing soils on-site within this natural depression. The project would involve enlargement of the depression, new plantings, and measures to control the high velocity of stormwater entering the garden. As envisioned, the ROW rain garden

would treat nearly 12,000 square feet of drainage area with available area for a 1,000 square foot rain garden able to capture a 1.2" rain event. The garden could attenuate approximately 5 pounds of nitrogen and treat 189 billion bacteria annually.

Recommendation: Ranked 4 of 22 projects – Difficult Implementation. The difficulty is due to the velocity of the water and the long-term maintenance needs of trash and debris entering the project. However, once an engineered design with pretreatment is prepared, the construction would be straightforward. Maintenance is estimated to be $1,000 annually (typically weeding and trash removal four times per year).

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The Orchard Neighborhood
Step III BOA

FIGURE 8
James Davis Day Care
& Carney Street

GC-7.1
5,000 SF
GC-7.2
5,280 SF
6,680 SF
Pratt Blvd
Stanco St
Willow St
Carney St

Legend
- 1' Contour
- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

LEGEND:
- RAINGARDENS (GC-7.1 & GC 7.2)
- 1' CONTOUR
- TREATMENT AREA
- FLOWLINE IN TREATMENT AREA
- EXISTING CATCHBASIN

TREATMENT:
GC-7.1 IS A 1,000 SF RAIN GARDEN ABLE TO CAPTURE THE 2.8" RAIN EVENT PLACED NEAR THE GRAVEL PARKING LOT OF THE JAMES DAVIS DAY CARE

GC-7.2 IS A 1,000 SF RAIN GARDEN ABLE TO CAPTURE THE 1.2" RAIN EVENT PLACED AT THE WEST END OF CARNEY STREET

ESTIMATED TREATMENT FROM MODELING:
TP = 0.8 LBS/YEAR
TN = 6.8 LBS/YEAR
TSS = 2,500 LBS/YEAR
BACTERIA = 259 BILLION/YEAR

0 40 Feet

1 inch = 40 feet

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3.8 SEA CLIFF AVENUE EAST-OF-CREEK CONCEPTS

Along Sea Cliff Avenue, former industrial facilities are being considered for redevelopment including the Photocircuits/Pass and Seymour Superfund sites. The former Pall Corporation Superfund site has a redevelopment approved. A description of concepts for installation of green infrastructure along Sea Cliff Avenue, east of Glen Cove Creek, is provided below. **Figure 9** illustrates the location and contributing areas for these concepts.

Proposed redevelopment along the entire Sea Cliff Corridor should consider new street trees and/or tree trenches along Sea Cliff Avenue to provide stormwater attenuation and interception where the following green infrastructure projects are not implemented, in addition to the projects or where projects will not work or be approved. Street trees have shown a reduction in stormwater runoff. Studies have shown a reduction of up to 75% of a storm event from running off the landscape with the use of street trees. Stormwater runoff reduction occurs by capturing and storing rainfall in the trees canopy and releasing water into the atmosphere as well as the root and leaf litter create soil conditions that promote the infiltration of rainwater into the soil. These trees can be beneficial by taking up nutrients and other pollutants from soils and water through their roots and can transform pollutants into less harmful substances. Other benefits from trees include improving air quality, saving energy by shading, increase property values, reduce carbon dioxide, and protect water quality. Tree trenches allow for the trees to grow to maturity with a minimum of 500 cubic feet of soil. The more mature the tree, the better it provides all of the benefits of stormwater management and air quality. A list of street trees are located in the appendix.

<u>GC-8.1: Sea Cliff Avenue (north side of Street):</u>

On the north side of the street, east of the creek, are existing Nassau County catch basins and an existing sidewalk, which limits some of the options. In addition, the redevelopment with a self-storage facility of the Pall Corporation Site has been approved by the Planning Board, and thus, implementation of green infrastructure options may be difficult to introduce at this point.

As envisioned, a bio-retention basin is ranked highly for this location, as it could receive a large volume of water from impervious surfaces of the industrial complex and could be configured to capture water from the northern half of the street area of Sea Cliff Avenue, as well. As envisioned, approximately 24,660 square feet of impervious surfaces would direct runoff to this potential project. The potential size of the rain garden (bio-retention type) is 2,150 square feet, which is designed to capture runoff from a 1.2” rain event.

As envisioned, the rain garden would be designed to attenuate 8.6 pounds of nitrogen annually (third highest nitrogen load reduction of proposed projects) and treat 300 billion bacteria annually. The cost for the rain garden is estimated at $32,250 with a cost benefit rank of $3,750 per pound of nitrogen. The rain garden would also provide treatment of stormwater that has a direct discharge to the Creek.

Recommendation: Ranked 22 of 22 projects –Difficult Implementation. The rain garden would have a moderate difficulty to install with existing infrastructure; however, it would be more difficult to capture the water from the street with a sidewalk between the proposed garden and street. Now that this property has an approved site plan, the project ranking is very low. The project would also involve coordination with Nassau County Department of Public Works (DPW) for modifications to the roadway drainage infrastructure. Recommendations rank this project higher, as it has direct stormwater inputs to Glen Cove Creek. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year).

It is recommended that if stormwater retention can be established into the approved site plan, the City should pursue the opportunity as the site has direct drainage and is adjacent to the Creek.

GC-8.2: Sea Cliff Avenue (south and east side of Street):
Along Sea Cliff Avenue on the south side, there are no sidewalks present in front of the industrial facilities that are the former Photocircuits and Pass and Seymour sites. Two catch basins within the street limit the size of the drainage area to two potential rain gardens within the ROW. The eastern garden (GC-8.2) has the lowest ranking of these two, due to the amount of stormwater that is directed to it from Sea Cliff Avenue only.

The potential size of the rain garden (bio-retention type) is 1,200+ square feet and able to capture a 2.8" rain event. As envisioned, the rain garden would attenuate approximately 2.2 pounds of nitrogen and treat 90 billion bacteria annually. The cost for the rain garden is estimated at $14,400 with a cost benefit rank of $6,545 per pound of nitrogen. The rain garden would also provide treatment of stormwater that has a direct discharge to the Creek, ranking this as a higher proposed project.

Recommendation: Ranked 16 of 22 projects – Moderate Implementation. As a ROW rain garden, and using the infrastructure that is currently in place, the construction would not be complicated. The moderate level is due to limited space for construction between the ROW and the property. Ranking for this project is higher, as it has direct stormwater inputs to Glen Cove Creek. It is recommended that during Site Plan Review of the redevelopment of the Photocircuits/Pass and Seymour property complex, the Planning Board consider making recommendations that stormwater that is captured be treated on-site utilizing green innovative stormwater practices. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year). An agreement with Nassau DPW and the City will need to be established to determine operations and maintenance plans.

GC-8.3: ROW along Sea Cliff Avenue:
Along Sea Cliff Avenue on the south side, there are no sidewalks present in front of the industrial facilities. Two catch basins are within the street, limiting the size of the drainage area to two potential ROW rain gardens. The western garden (GC-8.3) has the highest ranking of the two due to the amount of stormwater that is directed to it from both Sea Cliff Avenue and the existing

parking lot for the industry. The potential size of the rain garden (bio-retention type) is 1,400+ square feet and able to capture a 1.5" rain event. Furthermore, during redevelopment of this property, the Planning Board should recommend that all stormwater is captured by green innovative infiltration practices to improve water quality entering Glen Cove Creek.

The proposed rain garden would be able to attenuate 4.7 pounds of nitrogen annually and treat 166 billion bacteria annually. The cost for the rain garden is estimated at $16,800 with a cost benefit rank of $3,574 per pound of nitrogen. The rain garden would also provide treatment of stormwater that has a direct discharge to the Creek, ranking this as a higher proposed project.

Recommendation: Ranked 8 of 22 projects – Moderate Implementation. As a ROW rain garden, and using the infrastructure that is currently in place, the construction would not be complicated. The moderate level is due to a limited space for construction between the ROW and the property. This project ranks higher because it has direct stormwater inputs to Glen Cove Creek. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year). An agreement with Nassau DPW and the City will need to be established to determine operations and maintenance plans.

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The Orchard Neighborhood
Step III BOA

FIGURE 9
Sea Cliff Avenue
East of Creek

Legend
- 1' Contour
- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

4,230 SF
16,400 SF
GC-8.1
4,030 SF
2,800 SF
5,270 SF
GC-8.3
GC-8.2
10,573 SF
Pratt Blvd
Hazel St
Sea Cliff Ave

0 50 Feet
1 inch = 50 feet

LEGEND:
- RAINGARDENS (GC 8.1 - GC-8.3)
- 1' CONTOUR
- TREATMENT AREA
- FLOWLINE IN TREATMENT AREA
- EXISTING CATCHBASIN

TREATMENT:
GC-8.1 IS 2,150 SF RAIN GARDEN ABLE TO CAPTURE THE 1.2" RAIN EVENT LOCATED AROUND THE CATCHBASIN NORTH OF SEA CLIFF AVE.

GC-8.2 IS 1,200+ SF RAIN GARDEN ABLE TO CAPTURE THE 2.8" RAIN EVENT PLACED ALONG THE ROW OF SEA CLIFF AVE.

GC-8.3 IS 1,400+ SF RAIN GARDEN ABLE TO CAPTURE THE 1.5" RAIN EVENT PLACED NEAR THE PARKING LOT AND ROW OF SEA CLIFF AVE.

ESTIMATED TREATMENT FROM MODELING:
TP = 2.2 LBS/YEAR
TN = 15.5 LBS/YEAR
TSS = 4,567 LBS/YEAR
BACTERIA = 556 BILLION/YEAR

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3.9 SEA CLIFF AVENUE WEST-OF-CREEK CONCEPTS

The following provides a description of concepts for installation of green infrastructure along south side of Sea Cliff Avenue, west of the Creek. **Figure 10** illustrates the location and contributing areas for these two concepts.

The entire Sea Cliff Corridor should consider new street trees and/or tree trenches along Sea Cliff Avenue to provide stormwater attenuation and interception where the following green infrastructure projects are not implemented, in addition to the projects or where projects will not work or be approved. Street trees have shown a reduction in stormwater runoff. Studies have shown a reduction of up to 75% of a storm event from runoff the landscape. Stormwater runoff reduction occurs by capturing and storing rainfall in the trees canopy and releasing water into the atmosphere as well as the root and leaf litter create soil conditions that promote the infiltration of rainwater into the soil. These trees can be beneficial by taking up nutrients and other pollutants from soils and water through their roots and can transform pollutants into less harmful substances. Other benefits from trees are improving air quality, saving energy by shading, increase property values, reduce carbon dioxide, and protect water quality. Tree trenches allow for the trees to grow to maturity with a minimum of 500 cubic feet of soil. The more mature the tree, the better it provides all of the benefits of stormwater management and air quality. A list of street trees are located in the appendix.

<u>GC-9.1: Sea Cliff Avenue (west of Creek):</u>

Along Sea Cliff Avenue west of the Creek and on the south side of the road is part of the industrial facility that is under consideration for redevelopment (the Photocircuits/Pass and Seymour site). There are two existing catch basins and a bus stop, but no sidewalk along this section of the street. As envisioned, a bio-retention basin can be installed which would receive a large amount of stormwater from impervious surfaces of the industrial complex parking lot and water from the south side of the surface of Sea Cliff Avenue. The potential size of the rain garden (bio-retention type) is 1,360 square feet and could be designed to capture runoff from a 2.0" rain event. As envisioned, the rain garden would attenuate approximately 1.9 pounds of nitrogen and treat 73 billion bacteria annually. The cost for the rain garden is estimated at $16,320 with a cost benefit rank of $8,589 per pound of nitrogen. The rain garden would also provide treatment of stormwater that has a direct discharge to the Creek, ranking this as a higher proposed project.

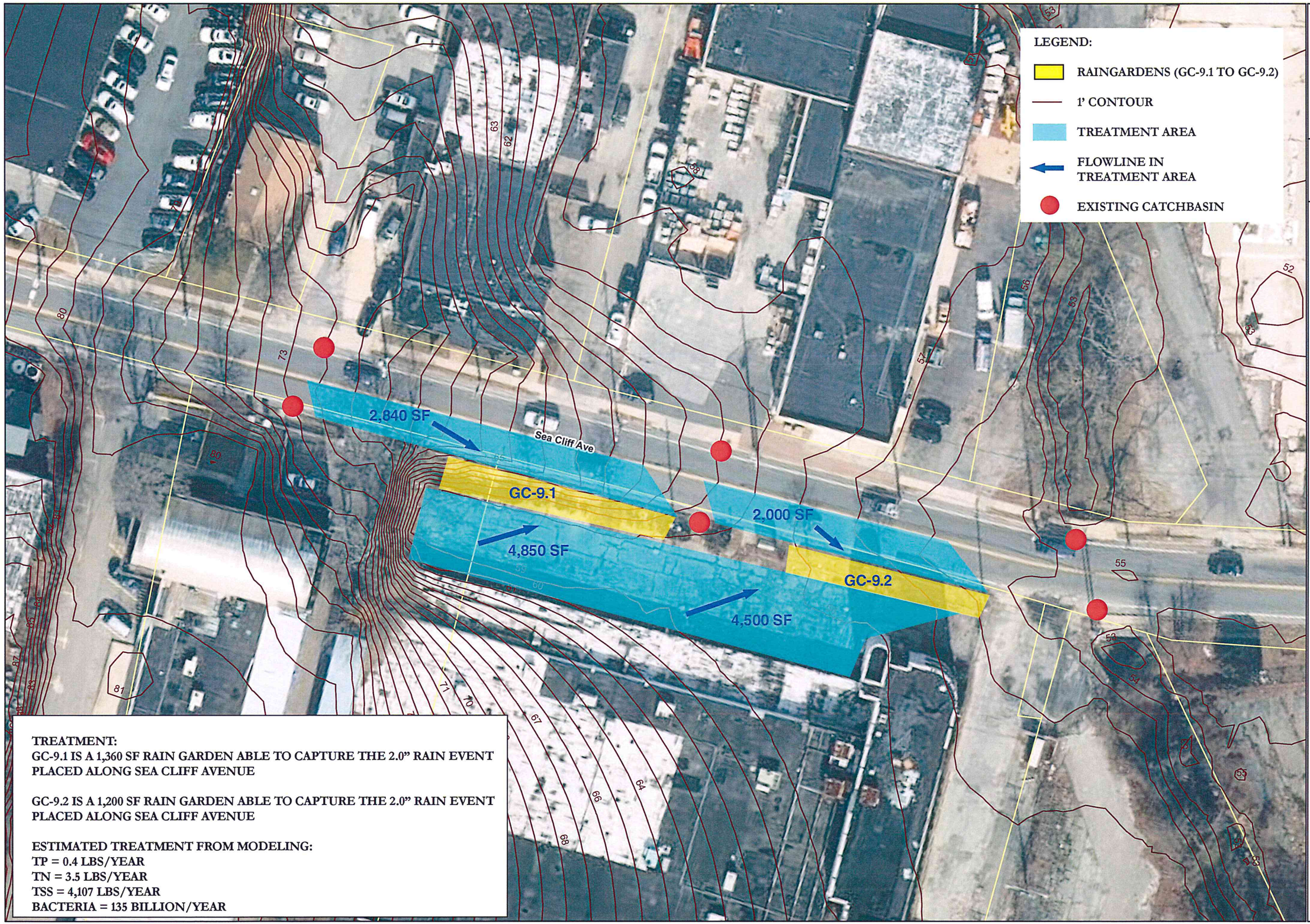
Recommendation: Ranked 17 of 22 projects – Moderate to Difficult Implementation. The rain garden would have a moderate difficulty to install with existing infrastructure, due to the grade change between the lot and street. This project should be considered for a higher ranking as it has direct stormwater inputs to Glen Cove Creek. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year). An agreement with Nassau DPW and the City will need to be established to determine operations and maintenance plans.

GC-9.2: Sea Cliff Avenue (west of Creek):

Similar to GC-9.1, this project envisions a bio-retention basin designed to receive a large amount of stormwater from impervious surfaces of the industrial complex parking lot and water from the south side of Sea Cliff Avenue. The potential size of the rain garden (bio-retention type) is 1,200 square feet to capture runoff from a 2.0" rain event. As envisioned, the rain garden would attenuate 1.6 pounds of nitrogen and treat 62 billion bacteria annually. The cost for the rain garden is estimated at $14,400 with a cost benefit rank of $9,000 per pound of nitrogen. The rain garden would also provide treatment of stormwater that has a direct discharge to the creek, ranking this as a higher proposed project.

Recommendation: Ranked 19 of 22 projects – Moderate to Difficult Implementation. The rain garden would have a moderate difficulty to install with existing infrastructure due to the grade change between the lot and street. This project should be considered for a higher ranking as it has direct stormwater inputs to Glen Cove Creek. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year). An agreement with Nassau DPW and the City will need to be established to determine operations and maintenance plans.

As with other projects on Sea Cliff Avenue, it is recommended that during Site Plan Review of the redevelopment, the Planning Board consider making recommendations that stormwater that is captured be treated on-site utilizing green innovative stormwater practices.



TREATMENT:
GC-9.1 IS A 1,360 SF RAIN GARDEN ABLE TO CAPTURE THE 2.0" RAIN EVENT PLACED ALONG SEA CLIFF AVENUE

GC-9.2 IS A 1,200 SF RAIN GARDEN ABLE TO CAPTURE THE 2.0" RAIN EVENT PLACED ALONG SEA CLIFF AVENUE

ESTIMATED TREATMENT FROM MODELING:
TP = 0.4 LBS/YEAR
TN = 3.5 LBS/YEAR
TSS = 4,107 LBS/YEAR
BACTERIA = 135 BILLION/YEAR

City of Glen Cove
and
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The Orchard Neighborhood
Step III BOA

FIGURE 10
Sea Cliff Avenue
West of Creek

Legend
- 1' Contour
- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

0 40 Feet

1 inch = 40 feet

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3.10 CONCEPT FOR CEDAR SWAMP ROAD AT PRATT BOULEVARD

The following provides a description of a concept for installation of green infrastructure at the intersection of Cedar Swamp Road and Pratt Boulevard. **Figure 11** illustrates the location and contributing areas for this concept.

GC-10.1: ROW of junction of Cedar Swamp Road and Pratt Boulevard

A natural depression exists near the ROW at the northern junction of Cedar Swamp Road and Pratt Boulevard. The depression is not far from the existing parking lot and building located on the private property to the north. Runoff from approximately 11,125 square feet of impervious surfaces could be directed to this potential project.

As envisioned, the size of the rain garden (bio-infiltration type) would be 1,725 square feet and capture runoff from a 2" rain event.

As an added benefit, the garden would be located at a very busy intersection at the southern boundary of the City, this will provide the opportunity for an aesthetically pleasing gateway feature (at the right is an example of a gateway treatment that welcomes visitors driving from the ferry in Port Jefferson Village).

The inlets off of both roads would require pretreatment devices and specialized inlets to direct stormwater and control the velocity. As this is a low spot, a drywell within the rain garden with a raised inlet would be incorporated to provide storage for large rain events.

This rain garden would attenuate approximately 4.8 pounds of nitrogen annually (fifth highest nitrogen load of project concepts) and treat 184 billion bacteria annually. The cost for the rain garden is estimated at $20,700 with a cost benefit rank of $4,313 per pound of nitrogen.

Recommendation: Ranked 10 of 22 projects – Moderate Implementation. The rain garden would be moderately difficult to install, as it is on City-owned land near private land and requires specialized inlets and a drywell. The bio-infiltration basin is of simple design and construction. Maintenance is estimated to be $500 annually (typically weeding and trash removal twice per year). An agreement with Nassau DPW and the City will need to be established to determine operations and maintenance plans.

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Step III BOA

FIGURE : 11
Cedar Swamp Road and Pratt Blvd.

Legend

- 1' Contour
- Project Boundary
- Parcel Boundary

Source: NYSGIS Orthoimagery Program, 2016

Print Date: January 31st, 2018

5,925 SF

5,200 SF

GC-10.1

Cedar Swamp Rd

Pratt Blvd

LEGEND:

- RAINGARDENS (GC-10.1)
- 1' CONTOUR
- TREATMENT AREA
- FLOWLINE IN TREATMENT AREA
- EXISTING CATCHBASIN

TREATMENT:
GC-10.1 IS A 1,725 SF RAIN GARDEN ABLE TO CAPTURE THE 2" RAIN EVENT

RAIN GARDEN PLACED AT THE LOW AREA AT THE JUNCTION OF CEDAR SWAMP ROAD AND PRATT BLVD. PARTIALLY IN BOTH ROW AND PRIVATE OWNERSHIP

ESTIMATED TREATMENT FROM MODELING:
TP = 0.6 LBS/YEAR
TN = 4.8 LBS/YEAR
TSS = 4,230 LBS/YEAR
BACTERIA = 184 BILLION/YEAR

0 40 Feet

1 inch = 40 feet

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APPENDIX A
MODEL ASSUMPTIONS/RESULTS

City of Glen Cove - Recommended Water Quality Improvement Projects (not organized by ranking but by Project #)

Project #	Location	Ownership	Best Management Practice (BMP) Type	Impervious Treatment Area (SF)	Size Required - 1" Rain (CF)	Size Required - 1.5" Rain (CF)	Size of Practice (SF)	Volume Captured (CF)	TP *** (lbs/yr.)	TN *** (lbs/yr.)	TSS *** (lbs/yr.)	Bacteria (billion/ yr.)	Runoff (acre-feet/yr.)	Unit Price	Estimated Cost *	Cost/TN **	Ease to Construct
GC-1.1	Parking lot of Tiegerman Schools	Tiegerman Schools	Rain Garden	51,380	1,920	3,333	2,400	2,400	2.3	19.0	367	779	3.2	$15/SF	$36,000	$1,895	C
GC-1.2	Parking lot of Tiegerman Schools	Tiegerman Schools	Rain Garden	5,780	380	617	836	836	0.3	2.0	33	65	0.3	$8/SF	$6,700	$3,350	A
GC-2.1	Glen Street Train Station - parking area	MTA	Tree Trench/Boxes	10,788	711	1,150	1,600	1,600	0.5	3.6	1,094	125	0.5	$20/SF	$32,000	$8,889	C
GC-2.2	4 Cedar Swamp Rd. (front)	Private	Tree Trench/Boxes	7,900	520	843	1,000	1,000	0.4	2.6	1,060	90	0.4	$25/SF	$25,000	$9,615	D
GC-2.3	4 Cedar Swamp Rd. (back)	Private	Rain Garden	13,374	880	1,430	850	850	0.7	4.5	1,121	155	0.6	15/SF	$12,750	$2,833	C
GC-2.4	10 Cedar Swamp Rd. (back)	Private	Turf Stone	3,740	250	400	400	800	0.2	1.3	1,022	45	0.2	20/SF	$8,000	$6,154	C
GC-3.1	ROW of Pratt Blvd. by PSEG	National Grid	Rain Garden	30,950	2,040	3,302	3,500	3,500	0.0	0.0	0	0	0.0	$0/SF	$0	$0	A
GC-4.1	Vacant Property off Stanco St.	Private	Rain Garden	8,950	590	955	600	600	0.5	3.9	1,215	147	0.6	$12/SF	$7,200	$1,846	D
GC-4.2	City Parking on Capobianco St.	City	Rain Garden	4,200	277	448	1,000	1,000	0.2	1.9	1,102	70	0.3	$12/SF	$12,000	$6,316	B
GC-4.3	Vacant Property at corner of Grove and Capobianco	Private	Rain Garden	5,760	380	614	700	700	0.3	2.4	1,133	91	0.4	$12/SF	$8,400	$3,500	D
GC-4.4	Townhomes off of Grove St.	Private	Rain Garden	5,290	350	564	400	400	0.2	1.1	23	42	0.2	$10/SF	$4,000	$3,636	D
GC-5.1	Apartment ROW off Willow St.	Private	Rain Garden	2,656	175	283	600	600	0.1	1.1	2,000	42	0.2	$12/SF	$7,200	$6,545	C
GC-5.2	Apartment ROW off Willow St.	Private	Rain Garden	4,658	307	500	400	400	0.3	2.0	2,135	77	0.3	$12/SF	$4,800	$2,400	B
GC-6.1	Parking lot at Carney St.	Private	Rain Garden	20,080	1,323	2,142	4,000	4,000	1.0	9.0	4,437	325	1.0	$10/SF	$40,000	$4,444	C
GC-7.1	Parking lot of Day Care	City	Rain Garden	5,000	330	530	1,000	1,000	0.2	1.8	300	70	0.3	$10/SF	$10,000	$5,556	A
GC-7.2	Road Terminus of Carney St.	ROW County	Rain Garden	11,960	790	1,276	1,000	1,000	0.6	5.0	2,200	189	0.8	$12/SF	$12,000	$2,400	D
GC-8.1	North side of Sea Cliff Ave., east of Creek.	Nassau County Industrial Dev. (FDA)	Rain Garden	24,660	1,625	2,630	2,150	2,150	1.2	8.6	1,626	300	1.2	$15/SF	$32,250	$3,750	C
GC-8.2	South side of Sea Cliff Ave., east of Creek.	ROW of City and Private	Rain Garden	5,270	350	562	1,200	1,200	0.3	2.2	1,450	90	0.3	$12/SF	$14,400	$6,545	B
GC-8.3	South side of Sea Cliff Ave., east of Creek.	ROW of City and Private	Rain Garden	13,373	880	1,430	1,400	1,400	0.7	4.7	1,488	166	0.7	$12/SF	$16,800	$3,574	B
GC-9.1	South side of Sea Cliff Ave., west of Creek.	Nassau County Industrial Dev. (FDA)	Rain Garden	7,690	510	820	1,360	1,360	0.2	1.9	2,217	73	0.3	$12/SF	$16,320	$8,589	B
GC-9.2	South side of Sea Cliff Ave., west of Creek.	Nassau County Industrial Dev. (FDA)	Rain Garden	6,500	430	700	1,200	1,200	0.2	1.6	1,890	62	0.3	$12/SF	$14,400	$9,000	B
GC-10.1	ROW between Pratt Blvd. and Cedar Swamp Rd.	ROW of City and County	Rain Garden	11,125	735	1,188	1,725	1,725	0.6	4.8	4,230	184	0.7	$12/SF	$20,700	$4,313	C

Note: * The cost figures are for preliminary budgetary purposes only. Costs may be more or less depending on the bidding process and local factors. Costs may be reduced through use of in-kind services, if available.

** Cost per pound of Nitrogen removed annually. (Cost/TN)

*** Reductions of phosphorous, nitrogen, total suspended solids, and bacteria are shown in the columns above labeled TP, TN, TSS, and Bacteria, respectively

APPENDIX B
ANALYSIS OF CONCEPTUAL PROJECTS

City of Glen Cove - Recommended Water Quality Improvement Projects (Ranked by Ease of Construction, then by Cost/TN)

Project #	Location	Ownership	Best Management Practice (BMP) Type	Impervious Treatment Area (SF)	Size Required - 1" Rain (CF)	Size Required - 1.5" Rain (CF)	Size of Practice (SF)	Volume Captured (CF)	TP *** (lbs/yr.)	TN *** (lbs/yr.)	TSS *** (lbs/yr.)	Bacteria (billion/ yr.)	Runoff (acre-feet/yr.)	Unit Price	Estimated Cost *	Cost/TN **	Ease to Construct
GC-3.1	ROW of Pratt Blvd. by PSEG	National Grid	Rain Garden	30,950	2,040	3,302	3,500	3,500	0.0	0.0	0	0	0.0	$0/SF	$0	$0	A
GC-1.2	Parking lot of Tiegerman Schools	Tiegerman Schools	Rain Garden	5,780	380	617	836	836	0.3	2.0	33	65	0.3	$8/SF	$6,700	$3,350	A
GC-7.1	Parking lot of Day Care	City	Rain Garden	5,000	330	530	1,000	1,000	0.2	1.8	300	70	0.3	$10/SF	$10,000	$5,556	A
GC-5.2	Apartment ROW off Willow St.	Private	Rain Garden	4,658	307	500	400	400	0.3	2.0	2,135	77	0.3	$12/SF	$4,800	$2,400	B
GC-8.3	South side of Sea Cliff Ave., east of Creek.	ROW of City and Private	Rain Garden	13,373	880	1,430	1,400	1,400	0.7	4.7	1,488	166	0.7	$12/SF	$16,800	$3,574	B
GC-4.2	City Parking on Capobianco St.	City	Rain Garden	4,200	277	448	1,000	1,000	0.2	1.9	1,102	70	0.3	$12/SF	$12,000	$6,316	B
GC-8.2	South side of Sea Cliff Ave., east of Creek.	ROW of City and Private	Rain Garden	5,270	350	562	1,200	1,200	0.3	2.2	1,450	90	0.3	$12/SF	$14,400	$6,545	B
GC-9.1	South side of Sea Cliff Ave., west of Creek.	Nassau County Industrial Dev. (FDA)	Rain Garden	7,690	510	820	1,360	1,360	0.2	1.9	2,217	73	0.3	$12/SF	$16,320	$8,589	B
GC-9.2	South side of Sea Cliff Ave., west of Creek.	Nassau County Industrial Dev. (FDA)	Rain Garden	6,500	430	700	1,200	1,200	0.2	1.6	1,890	62	0.3	$12/SF	$14,400	$9,000	B
GC-1.1	Parking lot of Tiegerman Schools	Tiegerman Schools	Rain Garden	51,380	1,920	3,333	2,400	2,400	2.3	19.0	367	779	3.2	$15/SF	$36,000	$1,895	C
GC-2.3	4 Cedar Swamp Rd. (back)	Private	Rain Garden	13,374	880	1,430	850	850	0.7	4.5	1,121	155	0.6	15/SF	$12,750	$2,833	C
GC-8.1	North side of Sea Cliff Ave., east of Creek.	Nassau County Industrial Dev. (FDA)	Rain Garden	24,660	1,625	2,630	2,150	2,150	1.2	8.6	1,626	300	1.2	$15/SF	$32,250	$3,750	C
GC-10.1	ROW between Pratt Blvd. and Cedar Swamp Rd.	ROW of City and County	Rain Garden	11,125	735	1,188	1,725	1,725	0.6	4.8	4,230	184	0.7	$12/SF	$20,700	$4,313	C
GC-6.1	Parking lot at Carney St.	Private	Rain Garden	20,080	1,323	2,142	4,000	4,000	1.0	9.0	4,437	325	1.0	$10/SF	$40,000	$4,444	C
GC-2.4	10 Cedar Swamp Rd. (back)	Private	Turf Stone	3,740	250	400	400	800	0.2	1.3	1,022	45	0.2	20/SF	$8,000	$6,154	C
GC-5.1	Apartment ROW off Willow St.	Private	Rain Garden	2,656	175	283	600	600	0.1	1.1	2,000	42	0.2	$12/SF	$7,200	$6,545	C
GC-2.1	Glen Street Train Station - parking	MTA	Tree Trench/Boxes	10,788	711	1,150	1,600	1,600	0.5	3.6	1,094	125	0.5	$20/SF	$32,000	$8,889	C
GC-4.1	Vacant Property off Stanco St.	Private	Rain Garden	8,950	590	955	600	600	0.5	3.9	1,215	147	0.6	$12/SF	$7,200	$1,846	D
GC-7.2	Road end of Carney St.	ROW County	Rain Garden	11,960	790	1,276	1,000	1,000	0.6	5.0	2,200	189	0.8	$12/SF	$12,000	$2,400	D
GC-4.3	Vacant Property at corner of Grove and Capobianco	Private	Rain Garden	5,760	380	614	700	700	0.3	2.4	1,133	91	0.4	$12/SF	$8,400	$3,500	D
GC-4.4	Townhomes off of Grove St.	Private	Rain Garden	5,290	350	564	400	400	0.2	1.1	23	42	0.2	$10/SF	$4,000	$3,636	D
GC-2.2	4 Cedar Swamp Rd. (front)	Private	Tree Trench/Boxes	7,900	520	843	1,000	1,000	0.4	2.6	1,060	90	0.4	$25/SF	$25,000	$9,615	D

Note: * The cost figures are for preliminary budgetary purposes only. Costs may be more or less depending on the bidding process and local factors. Costs may be reduced through use of in-kind services, if available.

** Cost per pound of Nitrogen removed annually. (Cost/TN)

*** Reductions of phosphorous, nitrogen, total suspended solids, and bacteria are shown in the columns above labeled TP, TN, TSS, and Bacteria, respectively

APPENDIX C
RAIN GARDEN GENERAL PLANT LIST

APPENDIX C: RAIN GARDEN GENERAL PLANT LIST

Trees and Shrubs:
Sweet Bay Magnolia – *Magnolia virginiana*
Serviceberry – *Amelnachier laevis*

Black Chokeberry – *Aronia melanocarpa*
Blueberry – *Vaccinium coymbosum*
Inkberry – *Ilex glabra*
Winterberry – *Ilex verticillata*
New Jersey Tea – *Ceanothus americanus*

Flowers and Grasses:
Mace Sedge – *Carex grayi*
Shenandoah Switchgrass – *Panicum virgatum 'Shenandoah'*
Blazingstar – *Liatris spicata*
New York Ironweed – *Veronia noveborascensis*
Showy Goldenrod – *Solidago speciose*
Blue False Indigo – *Baptisia australis*
Butterflyweed – *Asclepias tuberosa*
Marsh Milkweed – *Asclepias incarnata*
Boneset – *Eupatoirum perfoliatum*
Smooth Blue Aster – *Aster laevis*
New York Aster – *Aster novae-belgii*
Common Ox-eye Daisy – *Helianthus helianthoides*
Blue Flag Iris – *Iris versicolor*
Sneezeweed – *Helenium autumnale*

APPENDIX D
RECOMMENDED STREET TREE SPECIES LIST

APPENDIX D: RECOMMENDED STREET TREE SPECIES LIST

Ginkgo – *Ginkgo biloba*
Sweetgum – *Liquidambar styraciflua*
Dawn Redwood – *Metasequoia glyptostroboides*
Bald Cypress – *Taxodium distichum*
American Linden – *Tilia americana*
Little-leaf Linden – *Tilia cordata*
Coffeetree – *Gymnociadus doicus*
Honeylocust – *Gleditsia triacanthos var. inermis*
Northern Red Oak – *Quercus rubra*
Swamp White Oak – *Quercus bicolor*
Shingle Oak – *Quercus imbricaria*
Pin Oak – *Quercus palustris*
Willow Oak – *Quercus phellos*
Hackberry – *Celtis occidentalis*
Green Ash – *Fraxinus pennsylvanica*

APPENDIX F

RENEWABLE ENERGY ANALYSIS

Orchard Brownfield Opportunity Area
City of Glen Cove
Implementation Strategy

Renewable Energy Analysis

Introduction

The scope of this Implementation Strategy calls for an analysis of renewable energy options for potential redevelopment projects for properties on Sea Cliff Avenue in the Orchard BOA. Renewable energy presents significant economic, environmental, and community benefits, and aligns with the environmental and revitalization goals of the Strategy. Based on information from several governmental sources, there is potential for renewable energy generation at the Pall Corporation, Pass and Seymour, Photocircuits, and Day Care properties. This renewable energy analysis identifies this potential; types of likely suitable renewable technologies such as small-scale solar, wind, and geothermal; the benefit of these technologies; and governmental incentives and resources to support their development. Site/environmental conditions and redevelopment plans for the Sea Cliff Avenue properties may limit the scale of possible renewable energy generation or technical/financial feasibility. Further property-specific analysis would, therefore, be required by the properties' private redevelopers or owners to understand specific limitations and opportunities.

The City of Glen Cove is a Clean Energy Community, designated by the New York State Energy Research and Development Authority (NYSERDA). It earned its designation by completing several high-impact action items, including streamlining the City's approval processes for solar projects, having its Code Officer complete energy code enforcement training on best practices in energy code enforcement, and installation of a public electric vehicle charging station. These efforts and the City's designation help advance renewable energy development in Glen Cove and New York State's goal of having half of the State's electricity come from renewable energy resources by 2030. The implementation of renewable energy as part of redevelopment of the Sea Cliff Avenue sites would support these initiatives.

Renewable Energy Potential for Strategic Sites

The Pall Corporation, Pass and Seymour, Photocircuits, and Day Care properties located on Sea Cliff Avenue are four of the strategic sites identified in this Implementation Strategy. The former three are contaminated sites registered in the New York State Site Remediation program. The United States Environmental Protection Agency (EPA) has a publicly accessible "RE-Powering Mapper," an online interactive web application created as part of the agency's RE-Powering America's Land Initiative, which allows users to visualize EPA's information about renewable

energy potential on contaminated lands, landfills, and mine sites. Data on renewable energy potential for the Pall Corporation, Pass and Seymour, and Photocircuits sites are available in this mapper, and were included in this analysis and summarized in Table 1. The Day Care site, which is owned by the City of Glen Cove, is not included in this data set.

Name of Site	Size (acres)	Estimated solar photovoltaic (PV) capacity in megawatts (MW) based on acreage	Site can support 1-2 wind turbines and off-grid wind based on acreage (Yes/No)	Site can support geothermal heat pump (Yes/No)
Pall Corporation	2	0.38	Yes	Yes
Pass and Seymour	6	1.02	Yes	Yes
Photocircuits	10	1.72	Yes	Yes

Table 1. Renewable Energy Capacity for Strategic Sites on Sea Cliff Avenue

Site capacity for solar, wind, and geothermal energy. Source: EPA RE-Powering America's Land Initiative Mapper Tool (RE-Powering Mapper)[1]

The renewable energy potential for the Pall Corporation, Pass and Seymour, and Photocircuits properties is supported by the EPA's RE-Powering Mapper data. All three properties have adequate acreage to support solar photovoltaic and small-scale wind installation, and are identified as being able to support geothermal energy generation using geothermal heat pumps (Table 1). The estimated solar photovoltaic capacity is measured in megawatts. The acreage of the Day Care property, which is 3.29 acres according to City of Glen Cove records, is also adequate for small-scale solar and wind. Further analysis of renewable energy options and feasibility for the properties, including the Day Care property, is broken down by renewable energy technology below.

Solar

Solar Energy Options and Considerations

Rooftop or ground-mounted solar panels are the two main types of solar installations. Property owners can decide which option is most advantageous based on where conditions are best for panels to operate on their property. If redevelopment of the Sea Cliff Avenue sites involves the

[1] EPA. (2017, October). *RE-Powering Mapper Data.* Retrieved from https://www.epa.gov/re-powering/re-powering-mapper

construction of new buildings, rooftop solar may be a suitable option. Benefits of ground-mounted solar is that panels can be installed wherever conditions are best on a property, and they can be installed with tracking capabilities to better harness the power of the sun.[2]

Current redevelopment plans for the Pall Corporation site include construction of a new three-story building for self-storage, with parking and landscaping on the portions of the site not covered by the building. The new building may be a suitable location for installation of rooftop solar panels. Solar carports, which are solar panel installations installed above parking, are a type of ground-mounted solar that may be an option for the site. Solar carports provide the benefits of solar while providing a dual purpose of parking and shade for vehicles. Solar carports have been installed at several notable Long Island locations such as Farmingdale State College, the H. Lee Dennison Building in Hauppauge, and the Deer Park Long Island Rail Road station.[3] Future redevelopment or further environmental cleanup of the Pall Corporation site should be considered in determining the feasibility and desirability of solar carport installation, as the need for site flexibility may conflict with long-term ground-mounted solar installations. This concern may be relevant for the other strategic sites as well.

The likely combined redevelopment scenario for the Pass and Seymour and Photocircuits sites includes big box retail space, pad sites, parking, landscaping, and green infrastructure. This development will likely consist primarily of new construction. Rooftop solar on new buildings and solar carports on the parking lot portions of the property, as described above regarding the Pall Corporation site, are likely the primary solar installation options for the redevelopment.

The Day Care property has constraints regarding wetlands, limited access, and environmental quality. There is potential for the property to be sold and the day care operation relocated. Depending on the redevelopment outcome, rooftop solar may be applicable for existing or new buildings and ground-mounted solar or solar carports feasible for areas of the site not covered by buildings.

Scale

The NY Solar Map, an interactive online map managed by the City University of New York, supports the analysis that there is solar photovoltaic potential for the Sea Cliff Avenue properties.[4] The map shows relatively high solar radiation on the sites, especially on the rooftops of buildings currently on the Pass and Seymour, Photocircuits, and Day Care sites.[5] This

[2] NY-Sun. (2018). *Solar For Your Business.* Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/NY-Sun/Solar-for-Your-Business/How-to-Go-Solar/Options

[3] SUNY Farmingdale. (2013, September). *Solar Carport Unveiled at Farmingdale State College*. Retrieved from https://www.farmingdale.edu/news/news-2013/solar-carport-9-13.shtml

[4] The City University of New York (CUNY). (2018). *Sustainable CUNY.* Retrieved from *http://www1.cuny.edu/sites/sustainable/solar/ny-solar-map-and-portal/*

[5] The City University of New York (CUNY). (2018). *NY Solar Map.* Retrieved from https://nysolarmap.com/

suggests that solar in general is viable, especially rooftop solar on buildings constructed as part of redevelopment projects.

According to the EPA RE-Powering data, the Pall Corporation, Pass and Seymour, and Photocircuits properties are not able to support utility-scale and large-scale solar, but are able to support off-grid solar. In other words, the sites are able to support smaller-scale solar installations, with the energy generated from installations intended primarily for on-site use. This would also likely be the case for the Day Care property, given its size.

Resources and Incentives

Solar Contractors-

The NY-Sun Initiative, a NYSERDA program, publishes a list of Participating Contractors specializing in solar installations for larger commercial and industrial businesses. Contractors can help review property site conditions to determine the best system size and placement options, assist with paperwork for applying to New York State incentive programs and financing options, perform installation and produce associated paperwork, and assist with paperwork for applying to interconnect the solar system with the local utility.[6] The resources offered by the NY-Sun Initiative are relevant not only for the redevelopers or future owners of the Sea Cliff Avenue strategic sites, but also the other property and business owners in the Sea Cliff Avenue Corridor and the entire Orchard BOA.

NY-Sun's Participating Contractor list for Small Commercial Solar Contractors, which lists contractors that install solar electric systems up to 200 kilowatts (kW), can serve as a resource for small-business and property owners in the Sea Cliff Avenue Corridor and the entire Orchard BOA.

Financial Assistance-

NY-Sun currently offers a variety of incentives and financing options to support commercial solar. Owners of larger commercial and industrial buildings may be eligible for Energize NY financing, which offers Property Assessed Clean Energy (PACE) financing up to 100 percent of the cost of solar and energy efficiency projects of all sizes, including solar panels.[7] New York State tax credits may also be available for the redevelopers and business/property owners of the subject Sea Cliff Avenue properties.[8]

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[6] NYSERDA. (2018). *Participating Commercial & Industrial Solar Contractors*. Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/NY-Sun/Solar-for-Your-Business/How-to-Go-Solar/Find-a-contractor/Commercial-Installer

[7] NYSERDA. (2018). *Incentives and Financing*. Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/NY-Sun/Solar-for-Your-Business/Financial-Support/Incentives-and-Financing

[8] NYSERDA. (2018). *Tax Credit*. Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/NY-Sun/Solar-for-Your-Business/Financial-Support/Tax-Credit

Federal incentives such as the Renewable Energy Production Tax Credit and Business Energy Investment Tax Credit are also currently available for solar photovoltaic installations.

Wind

Wind Energy Options and Considerations

Wind turbines and wind energy projects vary in size, configuration, and generating capacity depending on factors such as wind resources, land-use restrictions, project area, and site conditions.[9] Small-scale wind can encompass turbines with nameplate capacities (maximum rated electricity output) ranging from 10 kilowatt hours (kWh) to over 100 kWh. This is the scale most likely suitable for the Sea Cliff Avenue properties.

New York State is a member of the Interstate Advisory Council (ITAC). This Council is established under the Clean Energy States Alliance. NYSERDA requires turbines of less than 100 kW to be on ITAC's Unified List of Wind Turbines to be eligible for incentives. For turbines over 100 kWh, NYSERDA provides its own list of turbines eligible for incentives. These turbines are commercially available with a proven track record for power performance, reliability, safety, and acoustics.[10]

If the developers or owners of the Sea Cliff Avenue strategic sites are interested in developing wind energy using New York State incentives, assuming wind energy generation is technically feasible at the sites, a NYSERDA-approved wind turbine must be used. Suitable locations for a wind energy installation would likely be dependent on where the most favorable wind resources are on the sites, where there is space available based on proposed redevelopment plans, and other environmental and regulatory considerations.

Scale

According to NYSERDA, there are several basic requirements for small wind technologies to be successful, including: the availability of at least one acre of land, appropriate annual wind speed determined by an analysis, and local governmental approval for the wind turbine tower. The Pall Corporation, Pass and Seymour, Photocircuits, and Day Care sites on Sea Cliff Avenue fulfill the acreage criteria for small-scale wind. A report was generated for the Day Care property from New York State's *Small windExplorer*, an online wind map published by NYSERDA. Given the Day Care property is similar in elevation and in close proximity to the other Sea Cliff Avenue strategic sites, it is assumed the wind resources on the property are very similar to the other strategic sites. The report shows that the average annual wind speeds for the property at altitudes of 100 and 120 feet are 10.04 mph (4.49 m/s) and 10.67 mph (4.77m/s), respectively. The *Small*

[9] NYSERDA. (2017). *New York Wind Energy Guide for Local Decision Makers*. Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Siting/Wind-Guidebook

[10] NYSERDA. (2018). *Eligible Small Wind Turbines.* Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/Small-Wind-Program/Eligible-Wind-Turbines

windExplorer report classified the wind energy potential of the site as "below average." This recommendation is based on atmospheric models and historical weather data speeds. Terrain, location obstacles, and turbine selection could impact this potential as well. For further consultation the *Small windExplorer* report recommends contacting a NYSERDA eligible installer.[11]

According to a NYSERDA case study document on small-scale wind, wind speed of at least 10 mph (4.5 m/s) is considered the minimum average annual wind speed necessary to make an installation economically feasible.[12] Given that the wind speeds present at the Day Care property are above the threshold for economically feasible wind turbine installations, wind energy may be viable despite the site's "below average" wind energy potential rating. Further analysis of the site is needed to make this determination and to understand the appropriate scale for a wind turbine if wind energy is viable.

Resources and Incentives

NYSERDA's Small Wind Turbine Program currently offers incentives for installation of wind turbines. Incentive amounts vary by the Annual Net Energy production projected for the turbine. Incentives are only available to NYSERDA-approved wind turbine installers. Incentives must be passed onto the owner of the wind system. Applicants for the program can include residential, commercial, institutional or government users. The maximum equipment size is 2 MW per site per customer, and the incentive cannot exceed 50 percent of the total installed cost of the system. Although the purpose of the program is for the wind system to produce energy for the project site ("behind the meter"), the system must be connected to the electric grid.[13]

Federal incentives such as the Renewable Energy Production Tax Credit and Business Energy Investment Tax Credit are also currently available for small wind turbine installations.

<u>Geothermal</u>

Geothermal Energy Options and Considerations

Geothermal heat pumps, also referred to as ground source heat pumps, are used to provide space heating and cooling as well as hot water for residential and commercial buildings. They work by using an indoor heat pump unit and a heat exchanging ground loop, which is usually buried

[11] Small windExplorer. (2018, 3 August). *Customer Wind Resource Report, City of Glen Cove, 1 Glen Cove Arterial Highway.* Retrieved from http://nyswe.awstruepower.com/

[12] NYSERDA. (2016, August). *Case Study, On-Site Power, Small Wind: Ledge Farms harnesses the wind to produce 100 percent of its electricity needs*. Retrieved from www.nyserda.ny.gov

[13] NYSERDA. (2018). *Small Wind Turbine Program*. Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/Small-Wind-Program

underground or underwater, to transfer thermal energy between and amongst the ground and the building.[14]

Closed-loop, open-loop, and direct exchange systems are the primary types of geothermal heat pump systems. Closed-loop systems use a ground loop of piping to circulate water or antifreeze to exchange heat with the ground or a groundwater source. Open loop systems circulate water directly from local groundwater sources, and direct exchange systems circulate a refrigerant through a copper pipe instead of a ground loop.[15] The Long Island Commission for Aquifer Protection's 2017 report entitled "Use of Long Island's Groundwater Resources for Geothermal Heating and Cooling" states there are around 4,000 to 5,000 geothermal heat pump systems in use in Nassau and Suffolk Counties, with roughly 70 percent open loop and 30 percent closed loop.

Geothermal heating systems offer many benefits such as long life expectancy, low operating cost, no required exposed outdoor equipment, no on-site combustion, level seasonal electric demand, low cost integrated water heating, and relatively low environmental impact.[16] Risks of geothermal heat pump systems include potential contamination of groundwater from return water in open loop systems containing refrigerants and potential contamination of groundwater by the working fluid of closed loop systems leaking through plastic pipes.[17] These potential risks are relevant for the City of Glen Cove, as several of the City's public water supply wells have faced Freon contamination. Given such concerns, open loop systems would not be desirable for the Sea Cliff Avenue Corridor sites. Other local groundwater contamination issues, regulations for Long Island's aquifers, geotechnical considerations, and site-specific contamination related to past industrial uses may also impact the analysis of which of these systems would be technically feasible, permissible, and/or desirable for the Sea Cliff Avenue strategic sites.

Scale

The Pall Corporation, Pass and Seymour, and Photocircuits sites, according to the EPA RE-Powering Mapper data, can support geothermal heat pump technology. Heat pumps can be installed for new or existing buildings, and can be sized for buildings of all sizes- ranging from single family homes to large commercial or office buildings. If a geothermal heat pump system

[14] NYSERDA. (2018). *Ground-Source Heat Pump*. Retrieved from https://www.nyserda.ny.gov/Researchers-and-Policymakers/Geothermal-Heat-Pumps
[15] NYSERDA. (2018). *Ground-Source Heat Pump*. Retrieved from https://www.nyserda.ny.gov/Researchers-and-Policymakers/Geothermal-Heat-Pumps
[16] Ibid.
[17] Rhyner, John. (2017). *Use of Long Island's Groundwater Resources for Geothermal Heating and Cooling.* Retrieved from http://www.liaquifercommission.com/images/Geothermal_Heating_and_Cooling_Report.pdf

were implemented at one of the Sea Cliff Avenue strategic sites, the scale of the system would vary based on technical factors including building size.[18]

Resources and Incentives

New York State currently offers a Ground Source Heat Pump rebate to eligible ground source heat pump designers and installers approved by NYSERDA. Property owners looking to install a ground source heat pump system and benefit from this rebate should work with a NYSERDA-approved designer and installer to evaluate and execute their project.[19]

Federal incentives such as the Renewable Energy Production Tax Credit and Business Energy Investment Tax Credit are also currently available for geothermal heat pump system installations.

Electric Vehicle Charging Stations

In 2017, the City of Glen Cove installed an electric vehicle charging station in a public parking garage in its downtown to support zero emission vehicle ownership, reduce greenhouse gas emissions for climate change mitigation, and increase environmental consciousness in the community. Electric vehicle charging stations, technically known as electric vehicle supply equipment (EVSE), are available in a range of configurations and charging capacities. EVSE could feasibly be installed in parking lots of the Sea Cliff Avenue strategic sites, once redeveloped, with environmental and community benefit in mind. The environmental impact of the EVSE would be amplified if the electricity used at the stations were to come directly from renewable energy generated on the strategic sites.

A financial incentive currently available for businesses installing EVSE is the New York State Tax Credit for Public and Workplace Charging. A Municipal Zero Emission Vehicle (ZEV) Rebate Program has also been offered by the New York State Department of Environmental Conservation in 2016, 2017, and 2018.[20] The City of Glen Cove received a rebate from this program for the purchase of its charging station. PSEG Long Island currently has a Workplace Charging Rebate program that offers rebates for installation of EVSE to eligible businesses that are customers of the utility.[21]

[18] NYSERDA. (2018). *Ground-Source Heat Pump*. Retrieved from https://www.nyserda.ny.gov/Researchers-and-Policymakers/Geothermal-Heat-Pumps

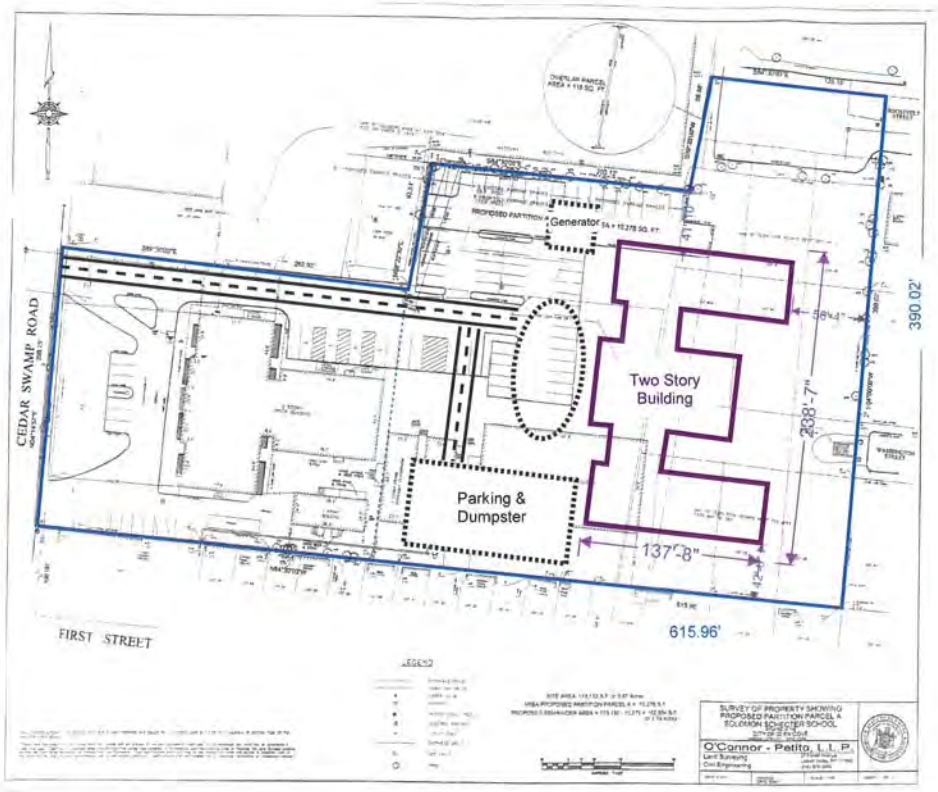
[19] NYSERDA. (2018). *Ground Source Heat Pump Rebate.* Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/Ground-Source-Heat-Pump-Rebate

[20] NYSERDA. (2018). *Charging Station Programs*. Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/ChargeNY/Charge-Electric/Charging-Station-Programs

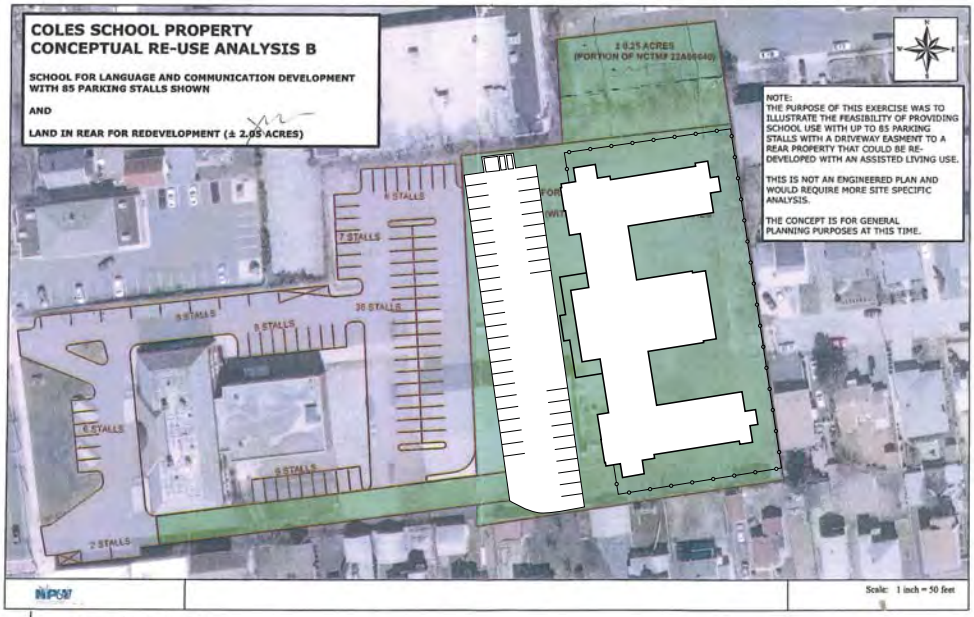
[21] PSEG Long Island. (2018). *Workplace Charging Rebate*. Retrieved from https://www.psegliny.com/saveenergyandmoney/solarrenewableenergy/workplacechargingrebateprogram

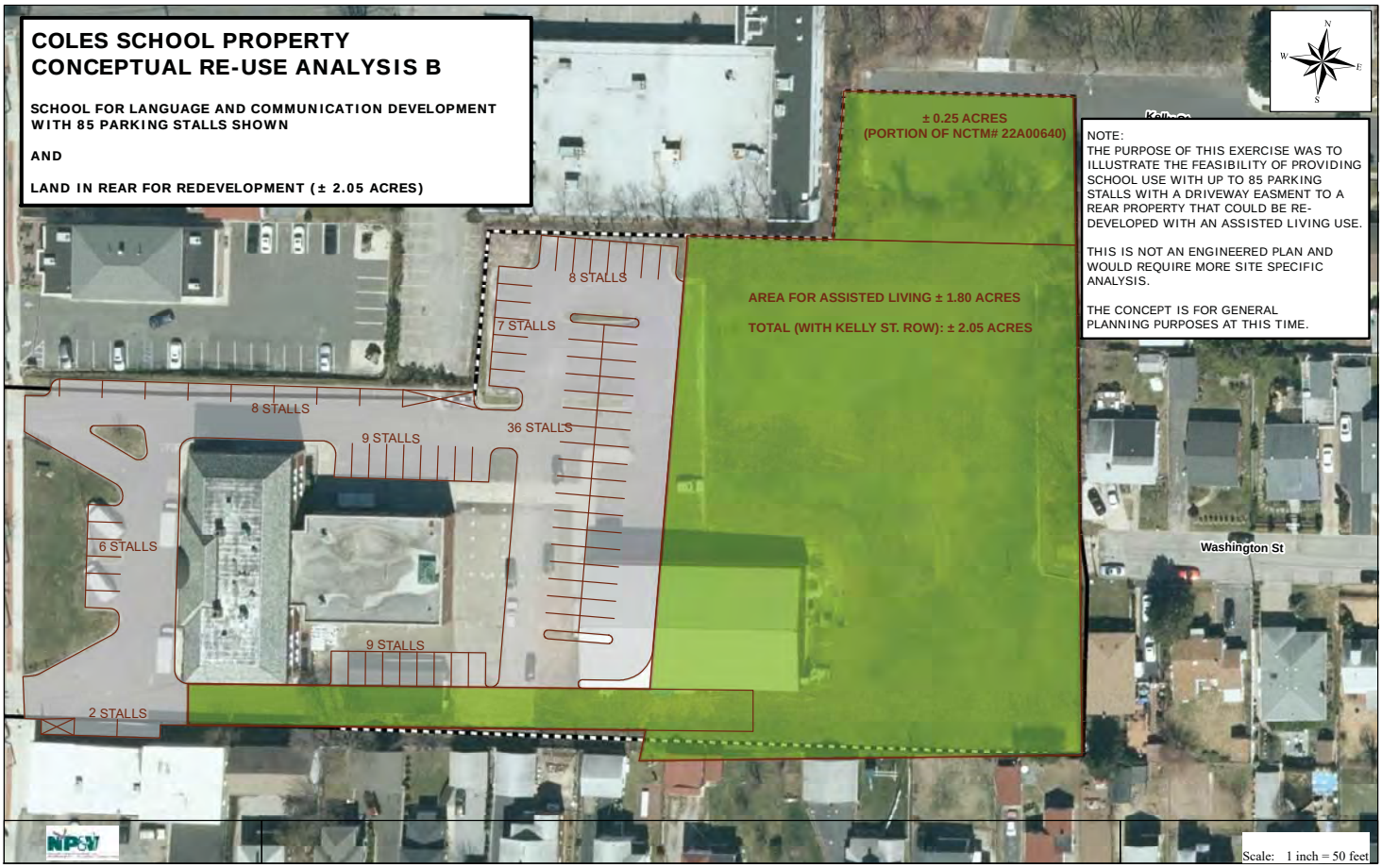
APPENDIX G

COLES SCHOOL PROPERTY CONCEPTS



Two Story NJ Prototype A 64 Units




COLES SCHOOL PROPERTY
CONCEPTUAL RE-USE ANALYSIS B
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 85 PARKING STALLS SHOWN
AND
LAND IN REAR FOR REDEVELOPMENT (± 2.05 ACRES)
± 0.25 ACRES
(PORTION OF NCTM# 22A00640)
AREA FOR ASSISTED LIVING ± 1.80 ACRES
TOTAL (WITH KELLY ST. ROW): ± 2.05 ACRES
8 STALLS
7 STALLS
8 STALLS
9 STALLS
36 STALLS
6 STALLS
9 STALLS
2 STALLS
NOTE:
THE PURPOSE OF THIS EXERCISE WAS TO ILLUSTRATE THE FEASIBILITY OF PROVIDING SCHOOL USE WITH UP TO 85 PARKING STALLS WITH A DRIVEWAY EASMENT TO A REAR PROPERTY THAT COULD BE RE-DEVELOPED WITH AN ASSISTED LIVING USE.
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
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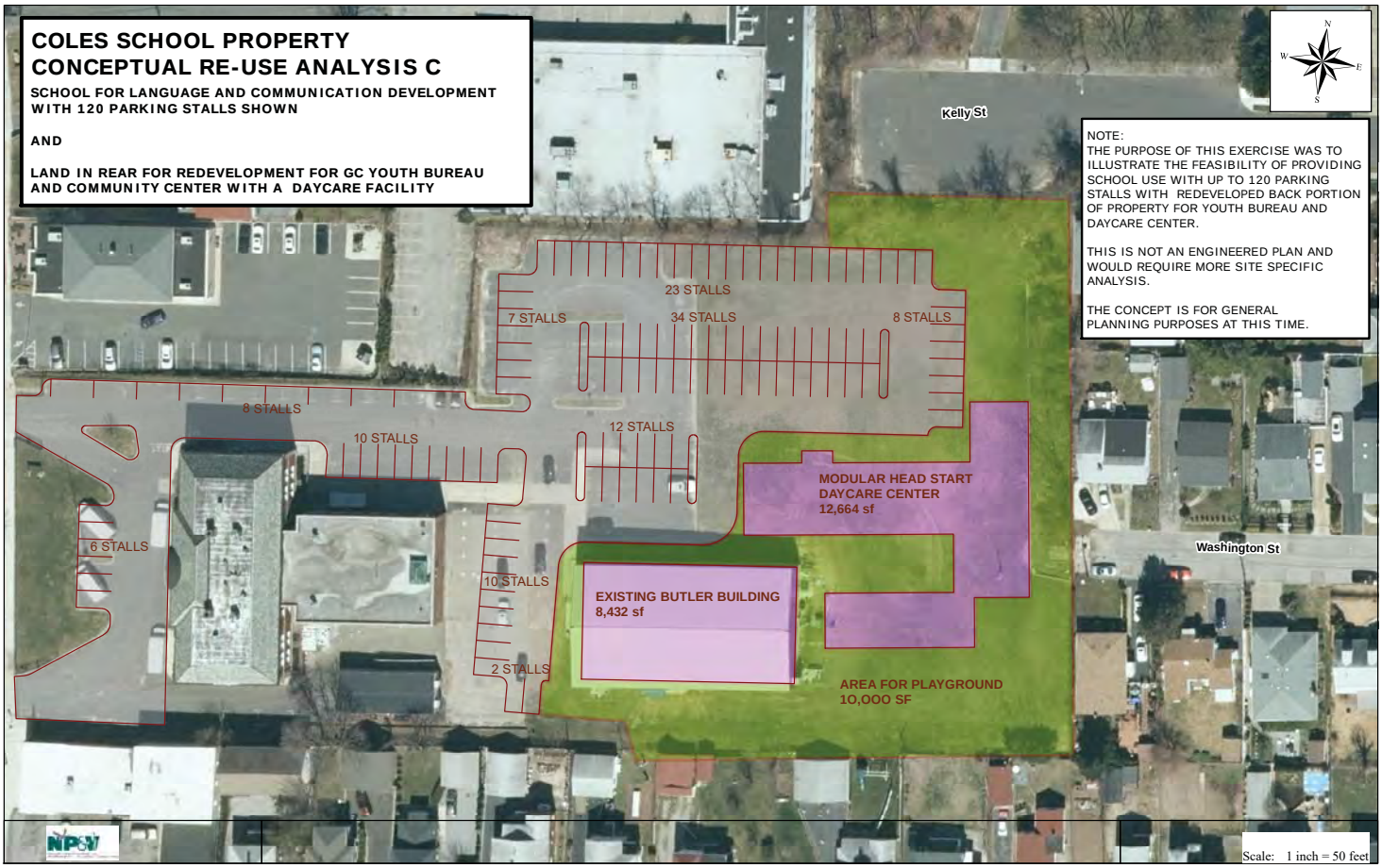
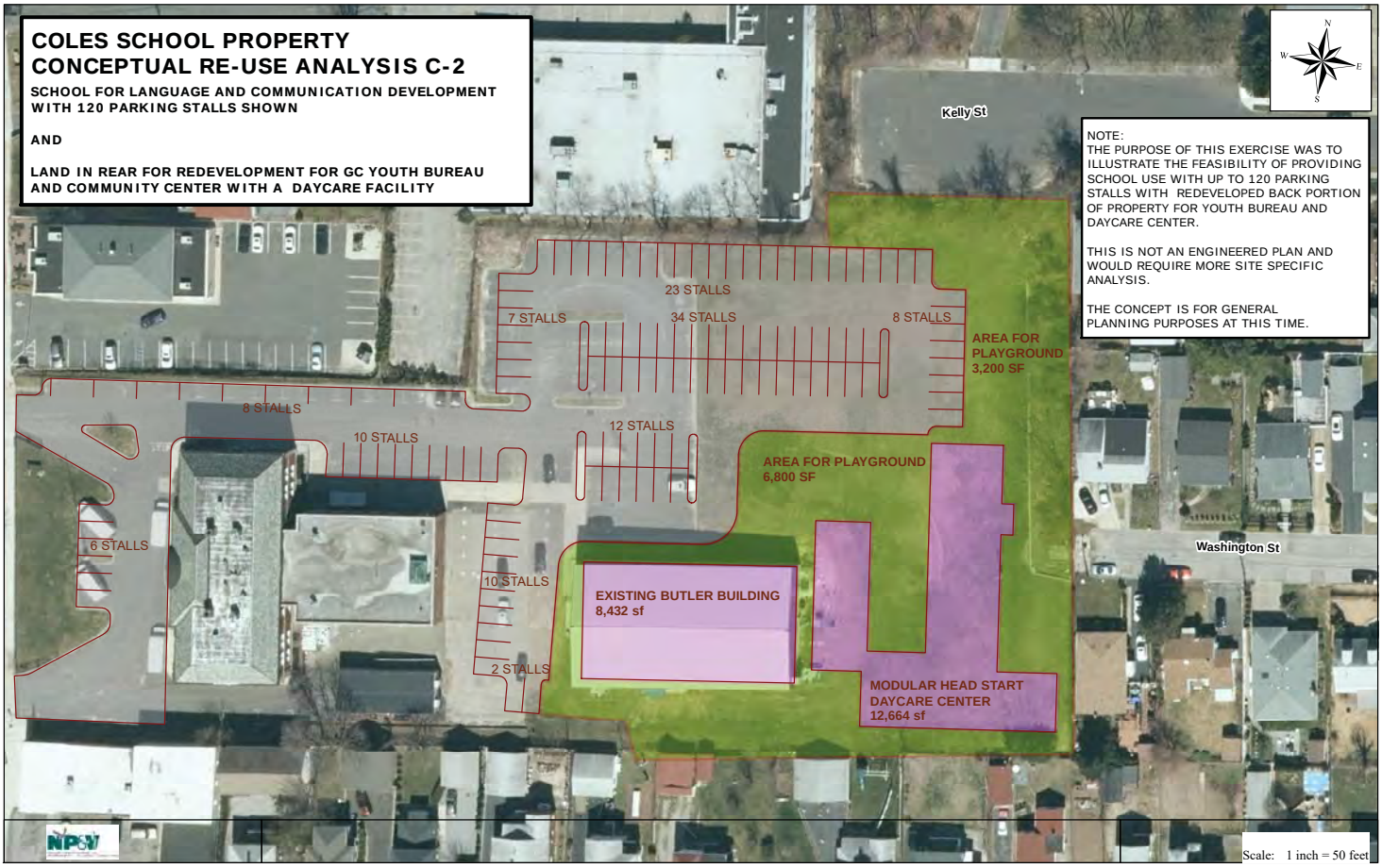
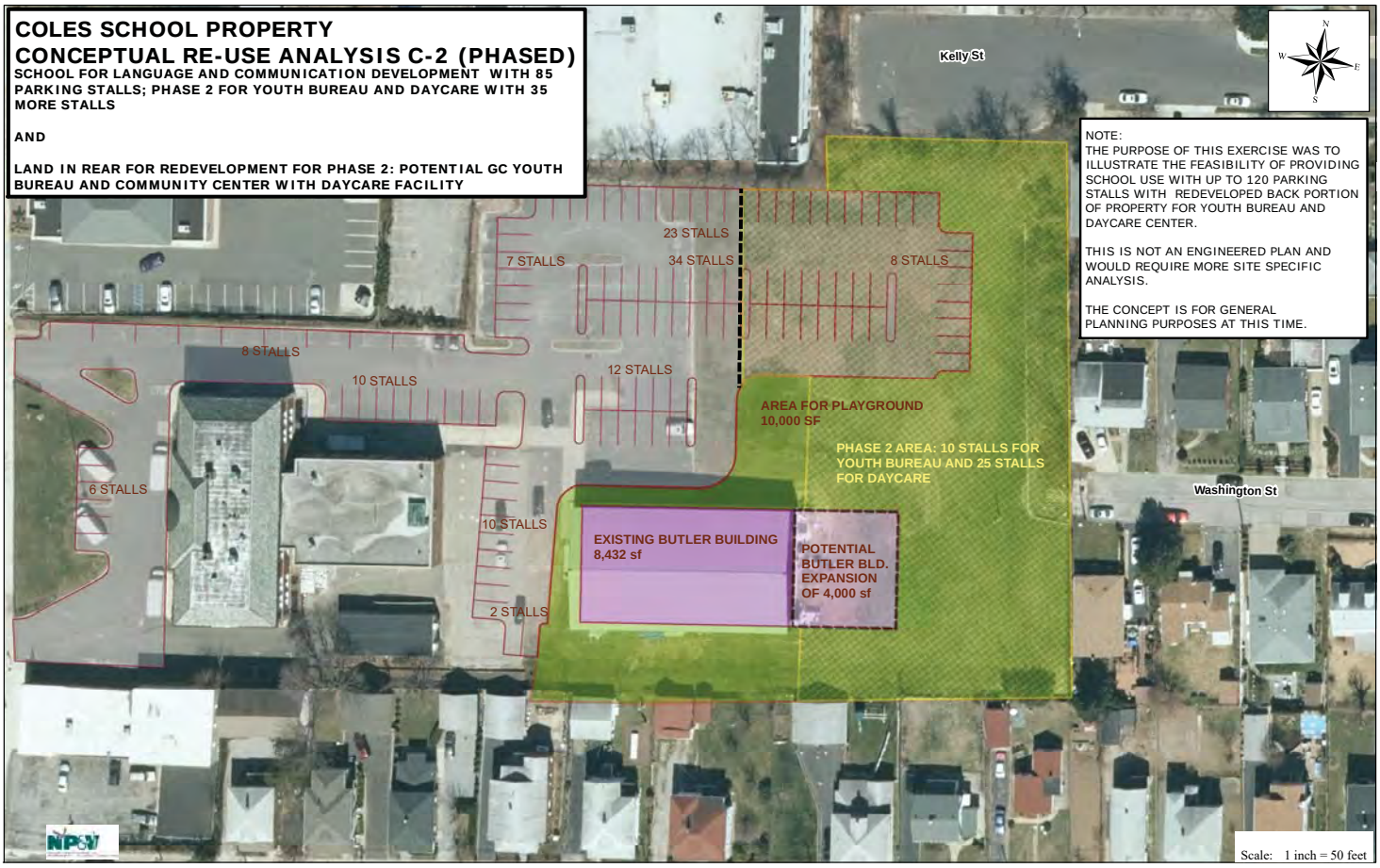
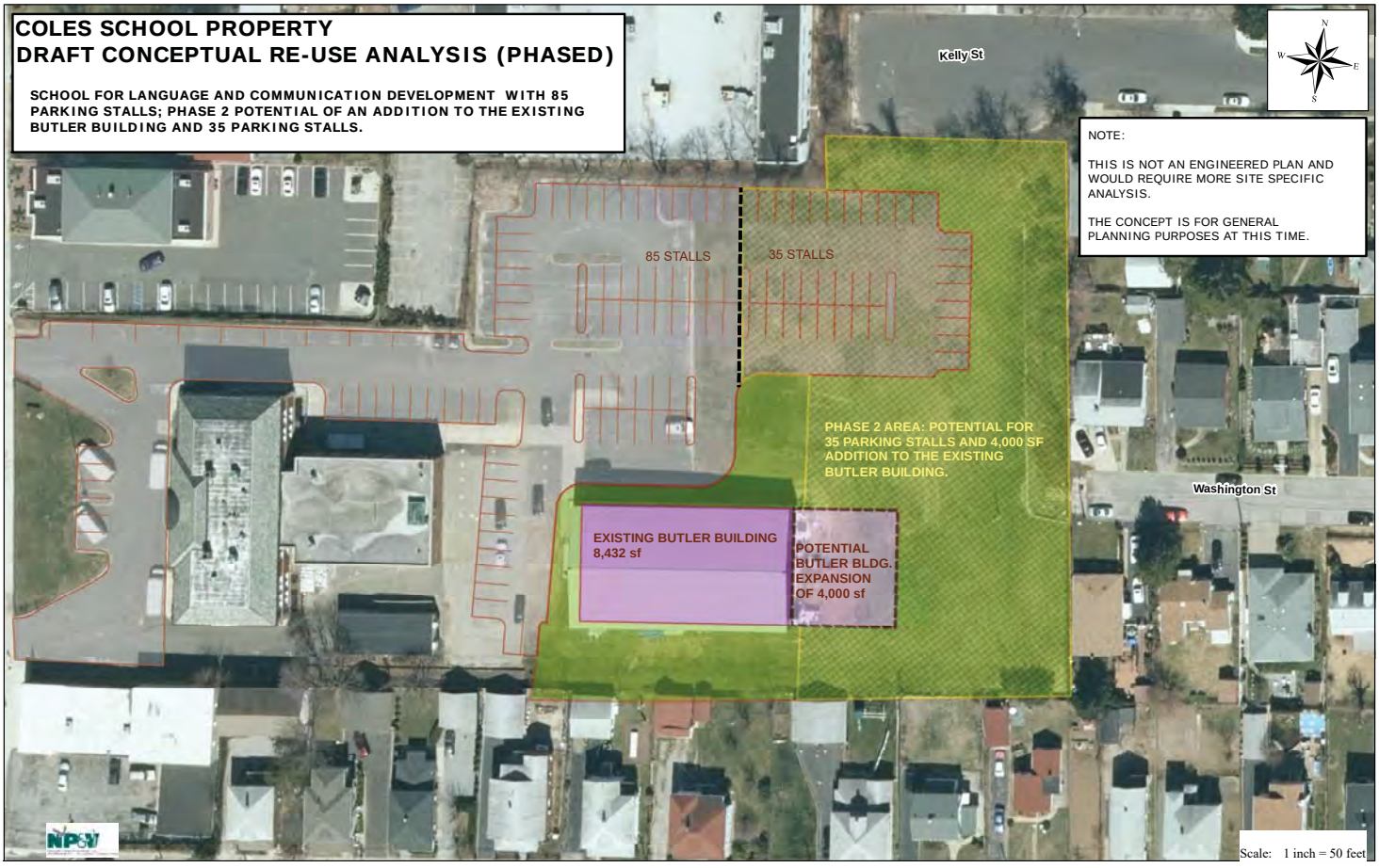
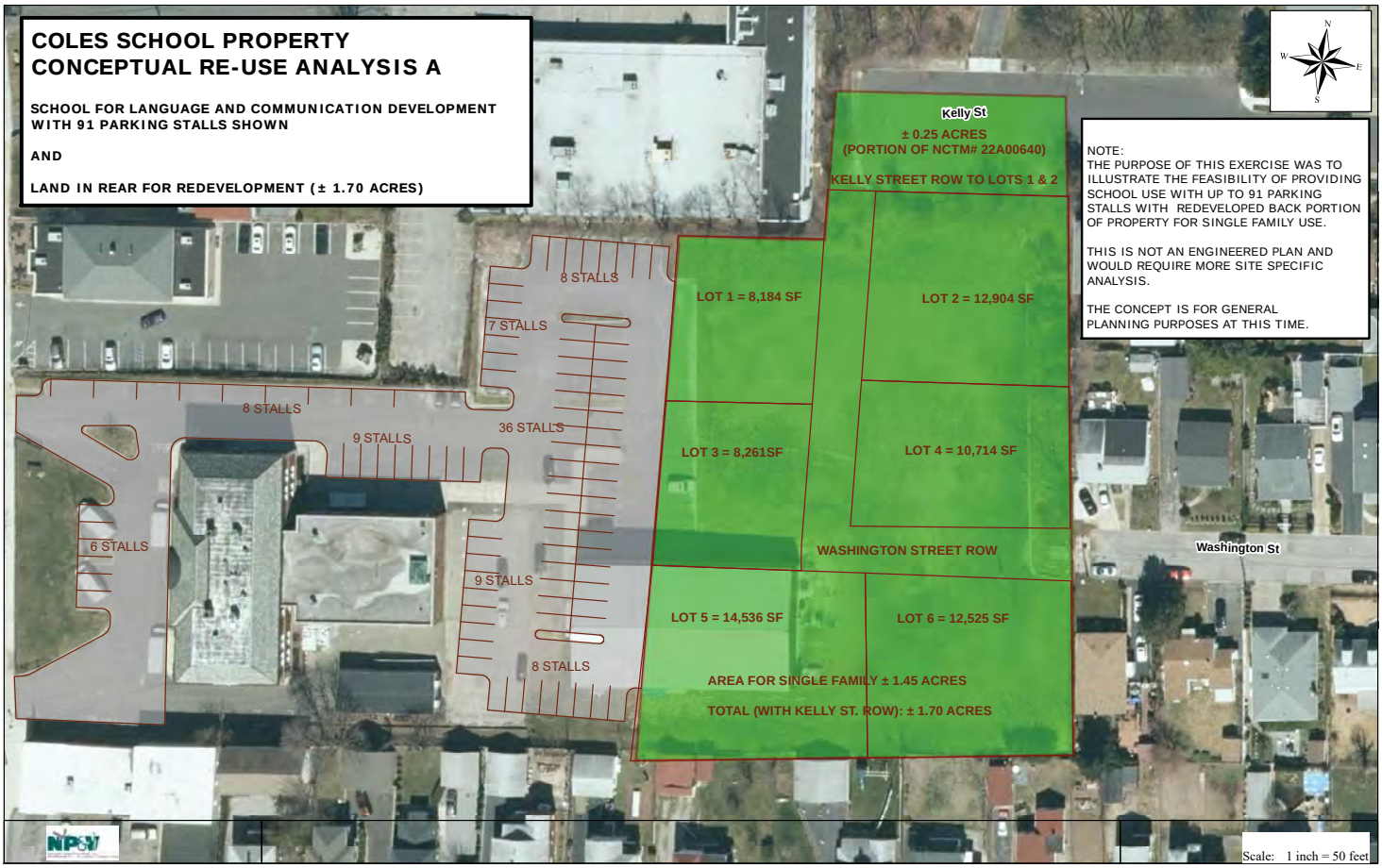
Washington St
Scale: 1 inch = 50 feet


COLES SCHOOL PROPERTY
CONCEPTUAL RE-USE ANALYSIS C
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 120 PARKING STALLS SHOWN
AND
LAND IN REAR FOR REDEVELOPMENT FOR GC YOUTH BUREAU AND COMMUNITY CENTER WITH A DAYCARE FACILITY
Kelly St
NOTE:
THE PURPOSE OF THIS EXERCISE WAS TO ILLUSTRATE THE FEASIBILITY OF PROVIDING SCHOOL USE WITH UP TO 120 PARKING STALLS WITH REDEVELOPED BACK PORTION OF PROPERTY FOR YOUTH BUREAU AND DAYCARE CENTER.
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
23 STALLS
7 STALLS
34 STALLS
8 STALLS
8 STALLS
10 STALLS
12 STALLS
6 STALLS
10 STALLS
2 STALLS
MODULAR HEAD START DAYCARE CENTER 12,664 sf
EXISTING BUTLER BUILDING 8,432 sf
AREA FOR PLAYGROUND 10,000 SF
Washington St
Scale: 1 inch = 50 feet


COLES SCHOOL PROPERTY
CONCEPTUAL RE-USE ANALYSIS C-2
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 120 PARKING STALLS SHOWN
AND
LAND IN REAR FOR REDEVELOPMENT FOR GC YOUTH BUREAU AND COMMUNITY CENTER WITH A DAYCARE FACILITY
Kelly St
NOTE:
THE PURPOSE OF THIS EXERCISE WAS TO ILLUSTRATE THE FEASIBILITY OF PROVIDING SCHOOL USE WITH UP TO 120 PARKING STALLS WITH REDEVELOPED BACK PORTION OF PROPERTY FOR YOUTH BUREAU AND DAYCARE CENTER.
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
23 STALLS
7 STALLS
34 STALLS
8 STALLS
AREA FOR PLAYGROUND 3,200 SF
8 STALLS
10 STALLS
12 STALLS
AREA FOR PLAYGROUND 6,800 SF
6 STALLS
10 STALLS
2 STALLS
EXISTING BUTLER BUILDING 8,432 sf
MODULAR HEAD START DAYCARE CENTER 12,664 sf
Washington St
Scale: 1 inch = 50 feet


COLES SCHOOL PROPERTY
CONCEPTUAL RE-USE ANALYSIS C-2 (PHASED)
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 85 PARKING STALLS; PHASE 2 FOR YOUTH BUREAU AND DAYCARE WITH 35 MORE STALLS
AND
LAND IN REAR FOR REDEVELOPMENT FOR PHASE 2: POTENTIAL GC YOUTH BUREAU AND COMMUNITY CENTER WITH DAYCARE FACILITY
Kelly St
NOTE:
THE PURPOSE OF THIS EXERCISE WAS TO ILLUSTRATE THE FEASIBILITY OF PROVIDING SCHOOL USE WITH UP TO 120 PARKING STALLS WITH REDEVELOPED BACK PORTION OF PROPERTY FOR YOUTH BUREAU AND DAYCARE CENTER.
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
23 STALLS
7 STALLS
34 STALLS
8 STALLS
8 STALLS
10 STALLS
12 STALLS
AREA FOR PLAYGROUND 10,000 SF
PHASE 2 AREA: 10 STALLS FOR YOUTH BUREAU AND 25 STALLS FOR DAYCARE
6 STALLS
Washington St
10 STALLS
EXISTING BUTLER BUILDING 8,432 sf
POTENTIAL BUTLER BLD. EXPANSION OF 4,000 sf
2 STALLS
Scale: 1 inch = 50 feet


COLES SCHOOL PROPERTY
DRAFT CONCEPTUAL RE-USE ANALYSIS (PHASED)
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 85 PARKING STALLS; PHASE 2 POTENTIAL OF AN ADDITION TO THE EXISTING BUTLER BUILDING AND 35 PARKING STALLS.
Kelly St
NOTE:
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
85 STALLS
35 STALLS
PHASE 2 AREA: POTENTIAL FOR 35 PARKING STALLS AND 4,000 SF ADDITION TO THE EXISTING BUTLER BUILDING.
Washington St
EXISTING BUTLER BUILDING 8,432 sf
POTENTIAL BUTLER BLDG. EXPANSION OF 4,000 sf
Scale: 1 inch = 50 feet


COLES SCHOOL PROPERTY
CONCEPTUAL RE-USE ANALYSIS A
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 91 PARKING STALLS SHOWN
AND
LAND IN REAR FOR REDEVELOPMENT (± 1.70 ACRES)
Kelly St
± 0.25 ACRES
(PORTION OF NCTM# 22A00640)
KELLY STREET ROW TO LOTS 1 & 2
LOT 1 = 8,184 SF
LOT 2 = 12,904 SF
LOT 3 = 8,261SF
LOT 4 = 10,714 SF
WASHINGTON STREET ROW
LOT 5 = 14,536 SF
LOT 6 = 12,525 SF
AREA FOR SINGLE FAMILY ± 1.45 ACRES
TOTAL (WITH KELLY ST. ROW): ± 1.70 ACRES
8 STALLS
7 STALLS
8 STALLS
9 STALLS
36 STALLS
6 STALLS
9 STALLS
8 STALLS
Washington St
NOTE:
THE PURPOSE OF THIS EXERCISE WAS TO ILLUSTRATE THE FEASIBILITY OF PROVIDING SCHOOL USE WITH UP TO 91 PARKING STALLS WITH REDEVELOPED BACK PORTION OF PROPERTY FOR SINGLE FAMILY USE.
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
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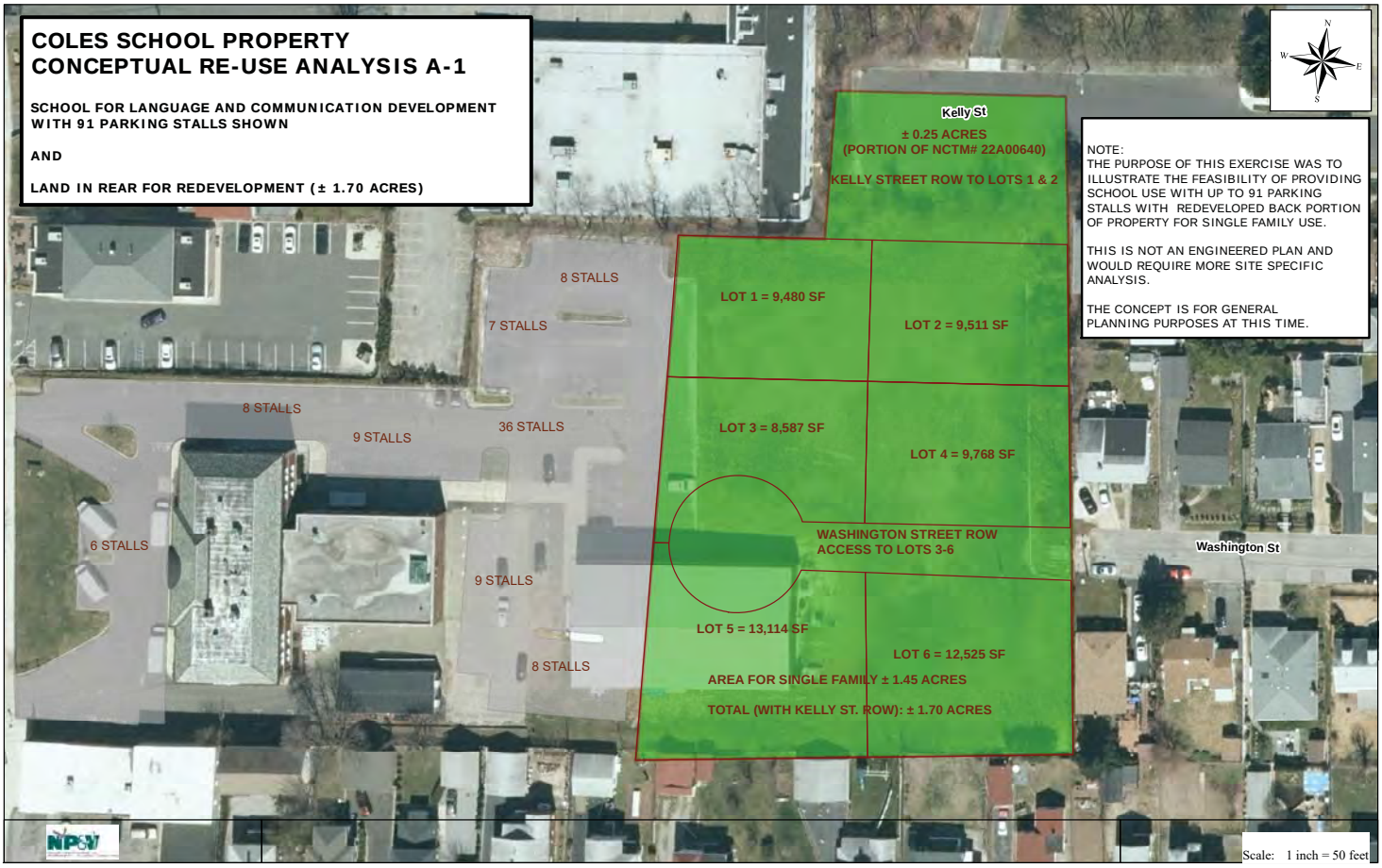
Scale: 1 inch = 50 feet


COLES SCHOOL PROPERTY
CONCEPTUAL RE-USE ANALYSIS A-1
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 91 PARKING STALLS SHOWN
AND
LAND IN REAR FOR REDEVELOPMENT (± 1.70 ACRES)
Kelly St
± 0.25 ACRES
(PORTION OF NCTM# 22A00640)
KELLY STREET ROW TO LOTS 1 & 2
LOT 1 = 9,480 SF
LOT 2 = 9,511 SF
LOT 3 = 8,587 SF
LOT 4 = 9,768 SF
WASHINGTON STREET ROW
ACCESS TO LOTS 3-6
LOT 5 = 13,114 SF
LOT 6 = 12,525 SF
AREA FOR SINGLE FAMILY ± 1.45 ACRES
TOTAL (WITH KELLY ST. ROW): ± 1.70 ACRES
8 STALLS
7 STALLS
8 STALLS
9 STALLS
36 STALLS
6 STALLS
9 STALLS
8 STALLS
Washington St
NOTE:
THE PURPOSE OF THIS EXERCISE WAS TO ILLUSTRATE THE FEASIBILITY OF PROVIDING SCHOOL USE WITH UP TO 91 PARKING STALLS WITH REDEVELOPED BACK PORTION OF PROPERTY FOR SINGLE FAMILY USE.
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
N
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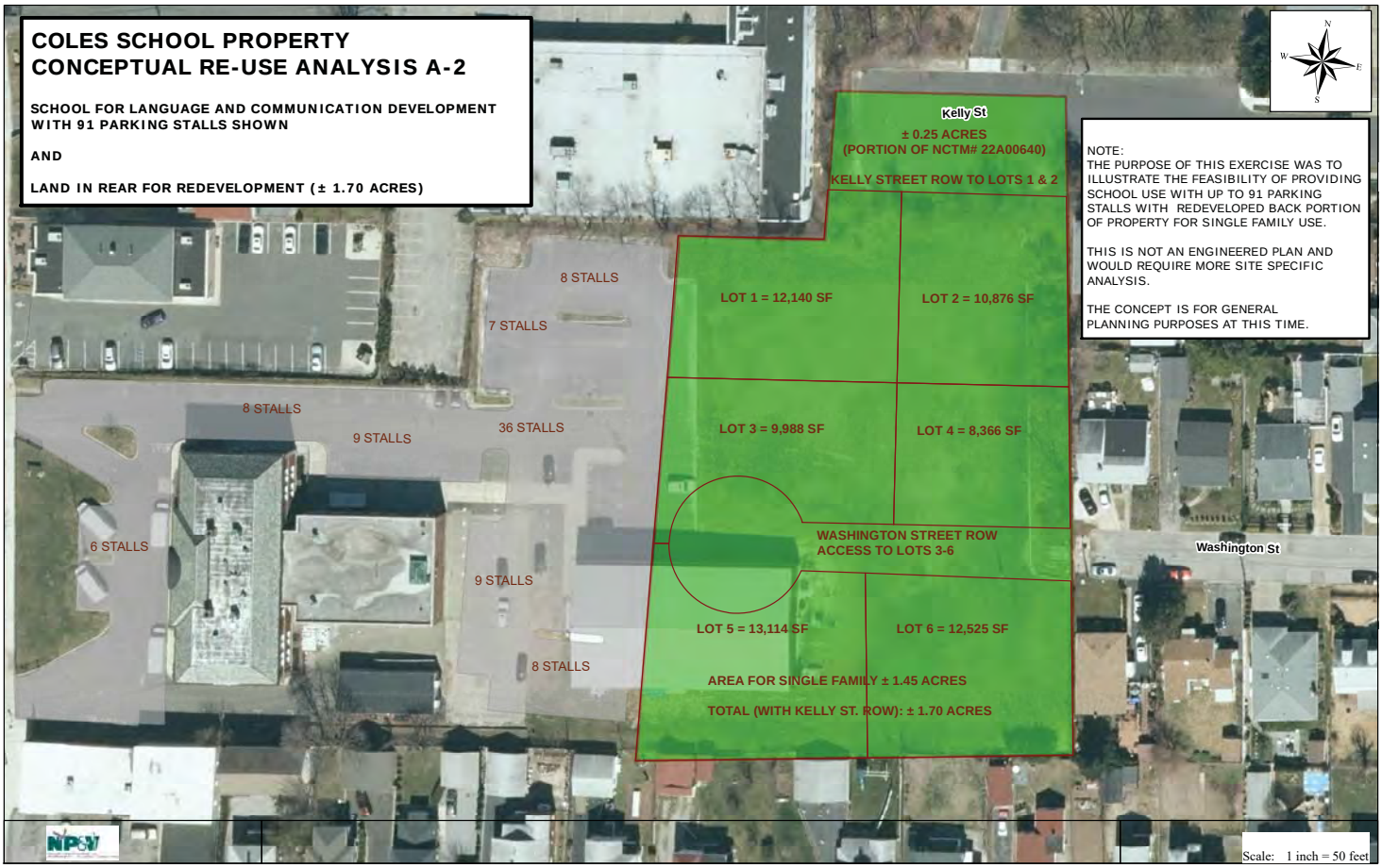
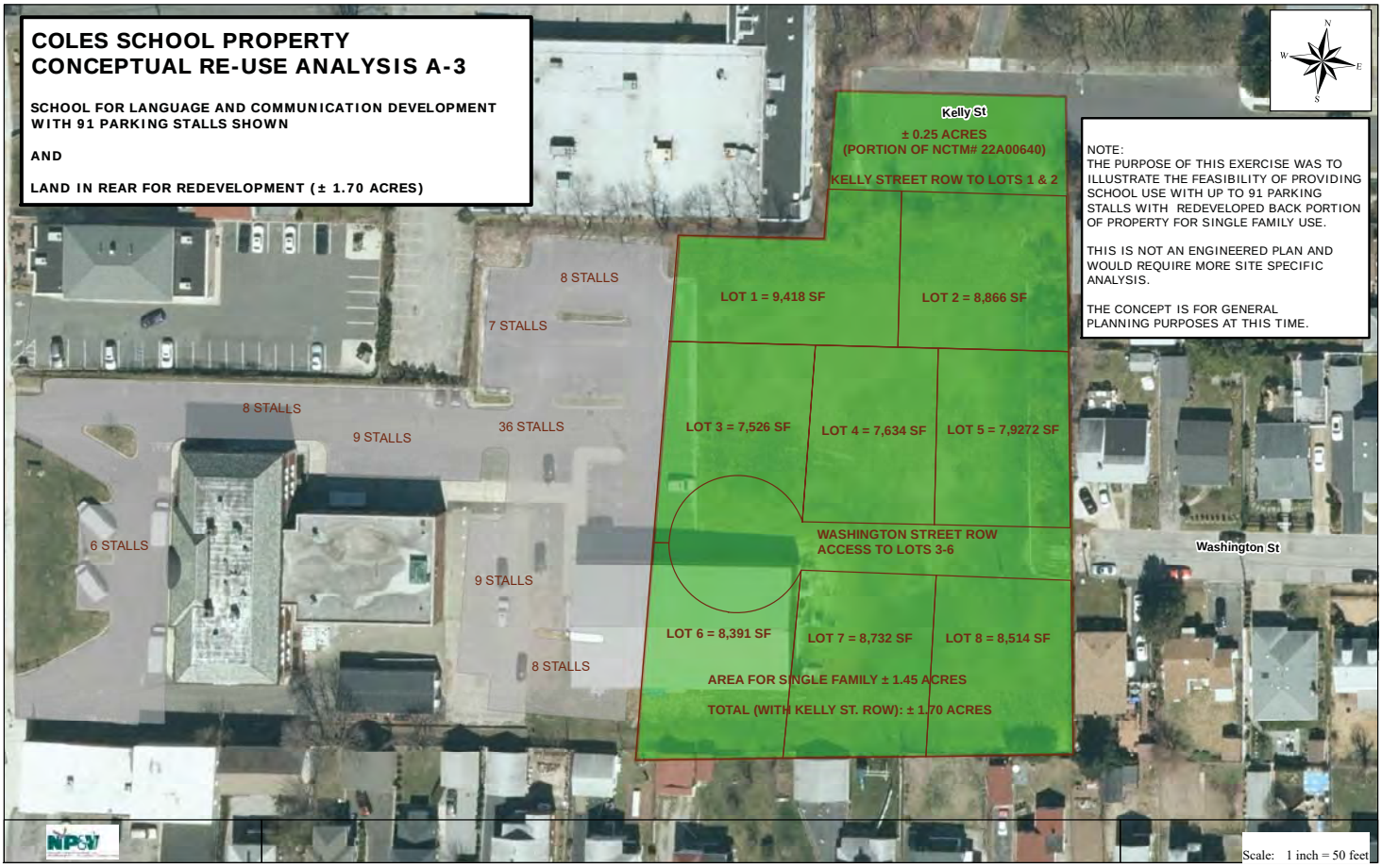
Scale: 1 inch = 50 feet


COLES SCHOOL PROPERTY
CONCEPTUAL RE-USE ANALYSIS A-2
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 91 PARKING STALLS SHOWN
AND
LAND IN REAR FOR REDEVELOPMENT (± 1.70 ACRES)
Kelly St
± 0.25 ACRES
(PORTION OF NCTM# 22A00640)
KELLY STREET ROW TO LOTS 1 & 2
LOT 1 = 12,140 SF
LOT 2 = 10,876 SF
LOT 3 = 9,988 SF
LOT 4 = 8,366 SF
WASHINGTON STREET ROW
ACCESS TO LOTS 3-6
LOT 5 = 13,114 SF
LOT 6 = 12,525 SF
AREA FOR SINGLE FAMILY ± 1.45 ACRES
TOTAL (WITH KELLY ST. ROW): ± 1.70 ACRES
8 STALLS
7 STALLS
8 STALLS
9 STALLS
36 STALLS
6 STALLS
9 STALLS
8 STALLS
Washington St
NOTE:
THE PURPOSE OF THIS EXERCISE WAS TO ILLUSTRATE THE FEASIBILITY OF PROVIDING SCHOOL USE WITH UP TO 91 PARKING STALLS WITH REDEVELOPED BACK PORTION OF PROPERTY FOR SINGLE FAMILY USE.
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
N
W
E
S
Scale: 1 inch = 50 feet


COLES SCHOOL PROPERTY
CONCEPTUAL RE-USE ANALYSIS A-3
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 91 PARKING STALLS SHOWN
AND
LAND IN REAR FOR REDEVELOPMENT (± 1.70 ACRES)
Kelly St
± 0.25 ACRES
(PORTION OF NCTM# 22A00640)
KELLY STREET ROW TO LOTS 1 & 2
LOT 1 = 9,418 SF
LOT 2 = 8,866 SF
LOT 3 = 7,526 SF
LOT 4 = 7,634 SF
LOT 5 = 7,9272 SF
WASHINGTON STREET ROW
ACCESS TO LOTS 3-6
LOT 6 = 8,391 SF
LOT 7 = 8,732 SF
LOT 8 = 8,514 SF
AREA FOR SINGLE FAMILY ± 1.45 ACRES
TOTAL (WITH KELLY ST. ROW): ± 1.70 ACRES
8 STALLS
7 STALLS
8 STALLS
9 STALLS
36 STALLS
6 STALLS
9 STALLS
8 STALLS
Washington St
NOTE:
THE PURPOSE OF THIS EXERCISE WAS TO ILLUSTRATE THE FEASIBILITY OF PROVIDING SCHOOL USE WITH UP TO 91 PARKING STALLS WITH REDEVELOPED BACK PORTION OF PROPERTY FOR SINGLE FAMILY USE.
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
N
W
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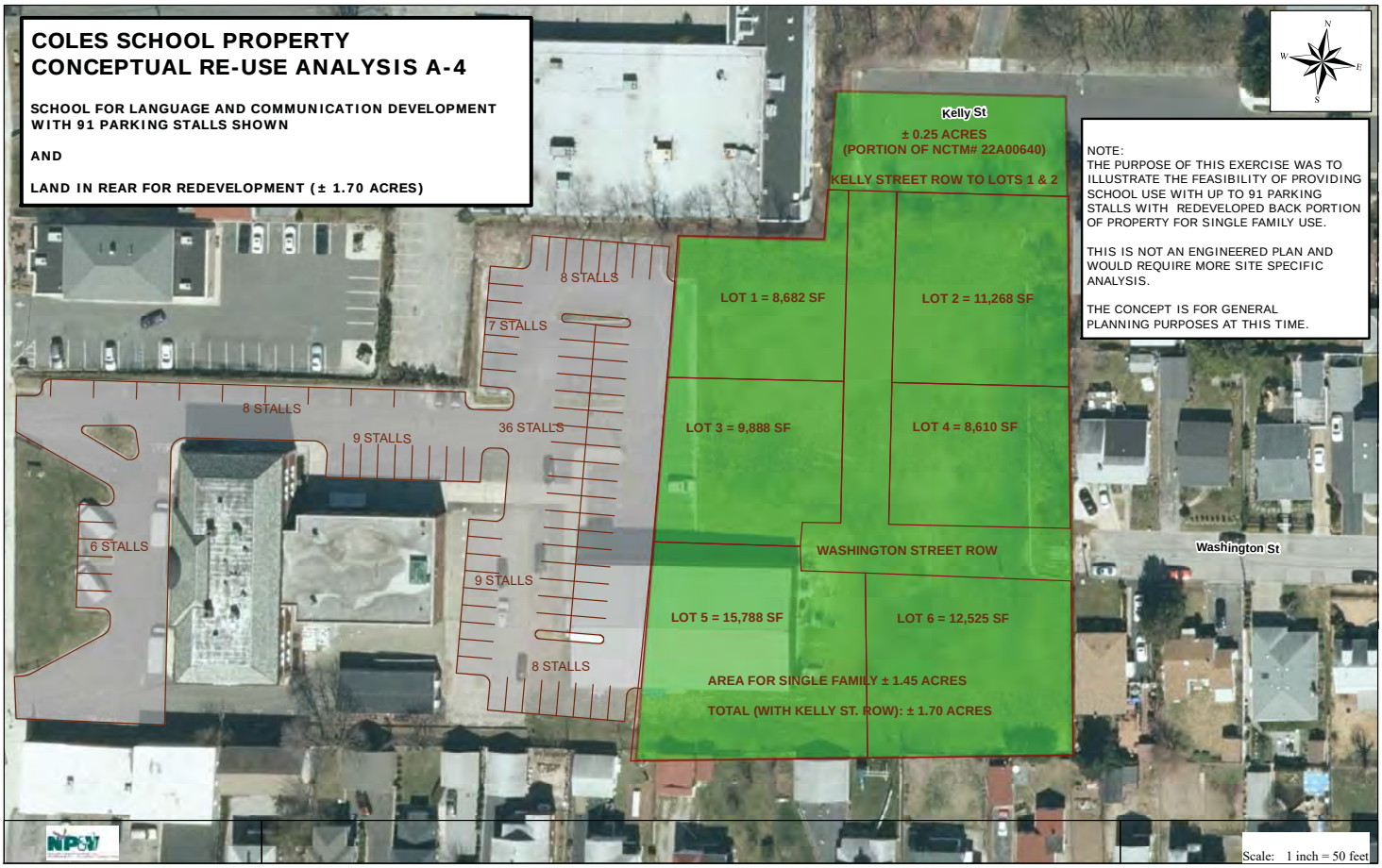
S
Scale: 1 inch = 50 feet


COLES SCHOOL PROPERTY
CONCEPTUAL RE-USE ANALYSIS A-4
SCHOOL FOR LANGUAGE AND COMMUNICATION DEVELOPMENT WITH 91 PARKING STALLS SHOWN
AND
LAND IN REAR FOR REDEVELOPMENT (± 1.70 ACRES)
N
W
E
S
Kelly St
± 0.25 ACRES
(PORTION OF NCTM# 22A00640)
KELLY STREET ROW TO LOTS 1 & 2
NOTE:
THE PURPOSE OF THIS EXERCISE WAS TO ILLUSTRATE THE FEASIBILITY OF PROVIDING SCHOOL USE WITH UP TO 91 PARKING STALLS WITH REDEVELOPED BACK PORTION OF PROPERTY FOR SINGLE FAMILY USE.
THIS IS NOT AN ENGINEERED PLAN AND WOULD REQUIRE MORE SITE SPECIFIC ANALYSIS.
THE CONCEPT IS FOR GENERAL PLANNING PURPOSES AT THIS TIME.
8 STALLS
7 STALLS
8 STALLS
9 STALLS
36 STALLS
6 STALLS
9 STALLS
8 STALLS
LOT 1 = 8,682 SF
LOT 2 = 11,268 SF
LOT 3 = 9,888 SF
LOT 4 = 8,610 SF
WASHINGTON STREET ROW
Washington St
LOT 5 = 15,788 SF
LOT 6 = 12,525 SF
AREA FOR SINGLE FAMILY ± 1.45 ACRES
TOTAL (WITH KELLY ST. ROW): ± 1.70 ACRES
Scale: 1 inch = 50 feet

APPENDIX H

COLES SCHOOL REMEDIATION ESTIMATES

EAST COAST ENVIRONMENTAL RESTORATION
136 Allen Blvd, Farmingdale NY 11735
P. (631) 600-2000 F. (631) 390-9443
ecerestoration.com
Water Damage • Mold Remediation • Fire Restoration
"Cleaning The World One Disaster at a Time"

MOLD REMEDIATION CONTRACTOR
License No. 00693

Mayor's Office of Contract Services
VENDOR No. VS00012425

License No's.:

NYC GENERAL CONTRACTOR – 613027
NEW YORK – 2001338-DCA
NASSAU – H0105920000
SUFFOLK COUNTY – 50648-H
WESTCHESTER COUNTY – WC-26425-H13
CITY OF YONKERS – 5704
COUNTY OF ROCKLAND – H-12051-B6-00-00
CONNECTICUT – HIC.0636538
NEW JERSEY – 13BH08195700
MOLD REMEDIATION CONTRACTOR
NYC VENDOR

Asbestos Abatement Proposal

February 2, 2017

Client: Coles School

Job Site Location: 27 Cedar Swamp Road Glen Cove, NY 11542

Re: The following proposal is based on a site inspection at the above referenced location, conducted By Edwin Rincon.

Recommended Scope of Work: The following protocol is a reflection required services, to abate Approx. 1,022 sq. ft. of Air Cell pipe insulation, VAT (floor tiles) 4,150 SF, and 5,000 SF of Buildup Rood Tar. See breakdown below:

Location	Material	Approx. Quantity
Basement, 1st and 2nd floor	Air Cell Pipe Insulation	1,022 LF/$28.00 per LF
Basement, 1st and 2nd floor	VAT (Floor Tiles)	4,150 SF/$10.00 per SF
Roof	Build Up Roof Tar	5,000 SF/$50,000

Breakdown: Flooring Alternatives

Basement, 1st and 2nd floor-

1- Vinyl Plank flooring
2- Sheathing- Plywood
3,900 SF $ 36,687.01

3- Carpet with a material allowance of $20 a sq. yard
4- Padding – average grade
5- Sheathing- Plywood
3,900 SF $ 32,029.12

6- Oak #1 Common
7- Sand/Finish Natural
8- Sheathing- Plywood
3,900 SF $ 63,037.00

9- Oak #1 Common
10- Sand/Stain/Finish Natural
11- Sheathing- Plywood
3,900 SF $ 66,426.36

SCOPE OF WORK.

- Mobilization of equipment and materials.
- Set up Decontamination System.
- Set Critical Barriers & area plastization following the NYS regulations.
- Remove & Proper Disposal from the ground premises all the ACM material Following the EPA Law.
- Demobilized the decontamination system & equipment after project air monitoring final inspection.

General conditions

- Foam machine has to be used at all the times to prevent any fiber release.
- All contaminated waste products of the cleaning to be contained, transported, and properly disposed of.

COST CONSIDERATIONS:

LABOR (Remediation):

- Asbestos Project supervisor
- Asbestos Abatement Technicians

EQUIPMENT:

- HEPA Vacuums
- Foam Machine
- Box Truck with tools
- Scaffolds
- Ladders
- Misc. Hand tools

MATERIALS:

- Spray Adhesive
- HEPA cartridges
- Duct Tape
- PPE – Personal Protective Equipment
- ACM Lettered Bags
- 6 Mil. Polyethylene plastic
- Surfactant Solution
- Miscellaneous Materials –rags, paper towels, etc.

WASTE TRANSPORTATION AND DISPOSAL: 90 Yard Dumpster.

NYS Permits	**$ 2,000.00**
ACM Disposal	**$ 6,000.00**
Labor, Equipment, Material	
Mobilization & Demobilization	**$ 172,000.00**
Grand Total	**$ 180,000.00**

Direct Billing: Payments are to be made as follows, unless other specific arrangements are contracted. 40% deposit due upon receipt of signed proposal. Invoice balance due upon completion. A finance charge of 1.5% (18% per annum) will be charged on all balances not paid upon completion.

If you should have any questions regarding this proposal, please do not hesitate to contact us at your earliest convenience, either way, please give me a call upon your review. It is important to move forward in order to restore your space back to pre-loss condition. East Coast Environmental Restoration, Inc. Cell # (516) 754-0377 Office (631) 600-2000

If you would like to proceed with this project, please return an executed copy of this proposal via fax or US Mail. The budgeted estimate is limited to the scope of work. Actual cost is based on services provided.

PROPOSAL ACCEPTANCE:

_____	_____
Name (Print)	Title
_____	_____
Name (Signature)	Address
	_____

136 Allen Blvd. Farmingdale, NY 11735
Office (631) 600-2000 Fax (631) 390-9443 Direct (516) 754-0377
erincon@ecerestoration.com
www.ecerestoration.com

EAST COAST ENVIRONMENTAL RESTORATION
136 Allen Blvd, Farmingdale NY 11735
P. (631) 600-2000 F. (631) 390-9443
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Water Damage • Mold Remediation • Fire Restoration
"Cleaning The World One Disaster at a Time"

MINORITY BUSINESS MBE CERTIFIED ENTERPRISE

STATE OF NEW YORK DEPARTMENT OF LABOR
MOLD REMEDIATION CONTRACTOR
License No. 00693

NYC Mayor's Office of Contract Services
VENDOR No. VS00012425

License No's.:

NYC GENERAL CONTRACTOR – 613027
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NASSAU – H0105920000
SUFFOLK COUNTY – 50648-H
WESTCHESTER COUNTY – WC-26425-H13
CITY OF YONKERS – 5704
COUNTY OF ROCKLAND – H-12051-B6-00-00
CONNECTICUT – HIC.0636538
NEW JERSEY – 13BH08195700
MOLD REMEDIATION CONTRACTOR
NYC VENDOR

Mold Remediation

February 10, 2017

Client: Coles School

Job Site Location: 27 Cedar Swamp Road Glen Cove, NY 11542

Re: Mold Remediation Service

This budget estimate is based on a site inspection in the Coles School conducted by Edwin Rincon. The following scope of work is to address the mold growth of the entire basement and water damage in the first floor in the auditorium behind the stage. Parts affected in the basement and first floor are the following:

1- Walls (sheetrock material and concrete walls)
2- Ceiling (suspended ceiling tiles and ceiling above the suspended ceiling tile)
3- Floor (Tile floor & carpet, *if any*)
4- First floor auditorium area affected by water (possible mold growth).

All mentioned parts of basement must be treated due to product material affected by visible mold growing colonies (MGC).

See project protocol below:

SCOPE OF WORK remediation and sanitizing

- Mobilization of equipment and materials.
- Install HEPA air filtration equipment to remove dust, mold and bacteria particles down to .03 microns in size.
- Set-up negative pressure containment to avoid cross contamination
- Remove entire affected sheetrock walls.
- Remove all affected suspended tiles.
- Remove any plaster behind the suspended ceiling tiles in order to access the deck.
- Clean concrete walls using wire brush or power wash.
- Remove affected carpet, *if any*.
- Remediate affected area in the first-floor auditorium caused by water damage. (Possible mold growth).
- HEPA vacuum, Spray & sanitize walls, ceilings and floor.
- Install Dehumidifier in the containment to get building materials back to normal moisture content 7 to 10 % moister content.
- Encapsulate areas already abated with antimicrobial paint coating.

General conditions

- Install critical barriers to prevent cross contamination and insure containment of the affected areas.
- Clean and sanitize the affected areas where mold is present.
- All contaminated waste by products of the cleaning to be contained, transported, and properly disposed.
- Air scrubbers will be set-up to remove airborne particles down to .03 microns in size.

All material is guaranteed. All work to be completed in a workman like manner according to standard environmental practices. We will do whatever is necessary to accommodate your needs while providing you with the highest quality of service.

COST CONSIDERATIONS:

Project Duration:

- This project will take about three (3) to four (4) weeks, with approximately Ten (10) to fifteen (15) labor technicians daily.

Equipment:

- HEPA Vacuums
- Air scrubbers
- Van
- Ladders
- Misc. Hand tools
- Airless paint sprayer

Material:

- Sanitizer
- Antimicrobial coating
- Duct Tape
- Blue tape
- PPE – Personal Protective Equipment
- Contaminated Material Bags
- 6 Mil. Polyethylene plastic
- Miscellaneous Hand tools –rags, paper towels, Duct Tape Rolls, ladders, etc.

WASTE TRANSPORTATION AND DISPOSAL (90 yards)

Labor, Equipment, Material, Disposal	
Mobilization & demobilization	$242,000
Total	**$242,000**

NOTE:
Price above doesn't include:

* Third Party Consultant Testing.
* No Rebuild is Include on this estimate.
* Prices are subject to change.

Direct Billing: Payments are to be made as follows, unless other specific arrangements are contracted. 40% deposit due upon receipt of signed proposal. Invoice balance due upon completion. A finance charge of 1.5% (18% per annum) will be charged on all balances not paid upon completion.

If you should have any questions regarding this proposal, please do not hesitate to contact us at your earliest convenience, either way, please give me a call upon your review. It is important to move forward in order to restore your space back to pre-loss condition. East Coast Environmental # (631) 600-2000

If you would like to proceed with this project, please return an executed copy of this proposal to East Coast Environmental Restoration, Inc via fax or US Mail. The budgeted estimate is limited to the scope of work. Actual cost is based on services provided.

PROPOSAL ACCEPTANCE:

_____ _____
Name (Print) Title

_____ _____
Name (Signature)
_____
Address

136 Allen Blvd. Farmingdale, NY 11735
Office (631) 600-2000 Fax (631) 390-9443 Direct (516) 754-0377
erincon@ecerestoration.com
www.ecerestoration.com

APPENDIX I

PROPOSED CODE AMENDMENTS

Appendix I-1
Lot Area Variance Memorandum to Zoning Board of Appeals

M E M O R A N D U M

TO: DONNA MCNAUGHTON, CHAIRPERSON
MEMBERS, GLEN COVE ZONING BOARD OF APPEALS

FROM: MAXIMILIAN STACH, AICP
KATHY EISEMAN, AICP

SUBJECT: LOT AREA VARIANCES IN THE ORCHARD

DATE: SEPTEMBER 28, 2018

CC: HON. TIM TENKE, MAYOR - CITY OF GLEN COVE
ANN FANGMANN, AICP, GLEN COVE CDA/IDA
RICHARD SUMMA, DIRECTOR OF BUILDING DEPT.

* *

As you may know, the City has prepared and adopted a Brownfield Opportunity Area Step 2 Nomination Study and is in the process of preparing a Step 3 Implementation Strategy. One of the implementation measures proposed will be amendments to the Orchard Neighborhood Redevelopment Incentive Overlay (RIO-ON) District regulations to further incentivize the assembly and redevelopment of deteriorated or obsolete properties.

It is understood that over the last ten to twenty years, the Zoning Board of Appeals has provided relief for properties within the Orchard to allow for higher density than is permitted by zoning in part with the perspective that doing so encourages investment in the area and in part because two-family homes on undersized lots are already present in the neighborhood fabric. Unfortunately, while that additional density may have been effective at promoting short-term investment and immediate improvement to neighborhood quality, over the long-term these improvements have waned as many of these two-family structures have fallen back into disrepair or are not well maintained. Additionally, the permission of two-family residences on undersized lots has also led to a further demand on on-street parking, which is already limited in supply.

The granting of additional density is the principal incentive underpinning the Orchard Neighborhood Redevelopment Incentive Overlay Zoning District – to allow more density in modern structures with the assemblage of property and the provision of community amenities. With average lot sizes around 5,000 square feet, the current permitted density in the Orchard is approximately 6.7 units per acre (single-family homes on 6,500 square feet). The actual density of households, based on Census information, is closer to 17 households per acre and was achieved in the Orchard based on pre-existing non-conforming structures, variances, and through illegal conversion and over-occupancy.

RIO-ON incentives were therefore calibrated to allow additional density beyond 17 households per acre as landowners accumulate property. The first increase under the recommended amended RIO-ON District as proposed in the BOA Step III Implementation Strategy is to allow four townhouse or three townhouses and a flat to be constructed with the assembly of two typical Orchard Neighborhood lots.

Under R-4 zoning, assembly of two lots would have only permitted one two-family home. Therefore allowing four townhouses will provide an improved incentive for redevelopment. However, should the Zoning Board of Appeals allow area variances for two-family homes on single-Orchard lots, this incentive will be undermined as two Orchard lots in separate ownership would yield four units – similar to the density permitted by the amended RIO-ON District as is recommended.

It will therefore be critical, in order to induce investment and transformation in the Orchard, for the Zoning Board of Appeals to only provide relief for two-family and more dense residences on undersized lots under the most extraordinary of circumstances. While two-family and more dense housing exists throughout the Orchard, continuing to allow this pattern will result in a detriment to nearby properties and will have an adverse effect on the physical condition of the neighborhood by undermining the comprehensive redevelopment incentives provided through the RIO-ON.

We thank you for your consideration and ask that you share this memorandum and perspective with new ZBA members as they may be appointed to the Board.

Appendix I-2
Proposed I-1/I-2 Zoning District Amendments & Memorandum

Recommended Amendments to the I-2 Light Industrial District Code
And amendment to clarify special use defined in the I-1 District Code
November 7, 2018

§280-69 **I-1 Light Industrial District**

F. Special uses permitted at discretion of the Planning Board

(3) Business enterprise or membership club conducting leisure time activity, including but not limited to amusement arcades, go-cart tracks, trampoline park, rock-climbing gym, batting cages, racquet ball, soccer, tennis, swimming and health clubs, which make their facility available to members, customers or clients on a seasonal or hourly basis and which can include incidental sales of food ~~snacks~~, incidental sales or rental of sports equipment and clothing, repair of equipment and nursery facilities under the following conditions:

a) All such activities shall be carried on indoors except as hereinafter provided.

b) Maximum coverage of the parcel and maximum height of structures shall be the same as required for principal uses in this district.

c) Minimum setbacks, lot size and yards shall be the same as required for principal uses in the district.

d) Parking requirements: as required by this district but in no case less than six spaces per court plus one space per employee on the largest shift; for swimming and health club: one space per two lockers plus one space per employee on the largest shift.

e) Outdoor facilities may be provided so long as the facility is totally fenced in, no fence is closer to a property line than is permitted in Subsection C above. No outdoor lighting or loudspeaker system may be permitted after 9:00 p.m. where such facility borders on a residential district.

f) All other applicable provisions of this chapter, including approval of a site plan and landscaping plan shall be adhered to by the developer.

§ 280-70 **I-2 Light Industrial District.**

A. Permitted principal uses. Same as I-1 District.

B. The following uses are specifically prohibited. Same as I-1 District.

C. Lot area and building requirements for principal uses.

(1) Minimum lot area: one acre.

(2) Minimum width: 100 feet.

(3) Minimum frontage: 50 feet.

(4) Minimum setback from front property line: 35 feet.

(5) Minimum rear yard: 10 feet.

(6) Minimum interior side yard: 10 feet.

(7) Minimum corner side yard: 35 feet.

(8) Maximum height: except as provided hereinafter, no part of any buildings shall be erected to a height greater than two stories and in no event exceed 35 feet.

D. Accessory uses. Same as for I-1 District.

E. Lot and building requirements for accessory uses.

(1) Minimum distance to front property line: 50 feet.

(2) Minimum rear yard: same as for principal uses.

(3) Minimum side yard: same as for principal uses.

(4) Maximum height: 20 feet.

(5) Maximum coverage: the total lot coverage of all buildings principal and accessory shall be 50%.

F. Special uses permitted at discretion of the Planning Board.

(1) Same as for I-1 District and,

(2) Regional Commercial Center, defined as a tract of land with buildings or structures planned as a whole, intended for three or more tenant spaces in which at least one single-tenant space is at least 50,000 square feet in size, intended to serve a regional market, that meets the following Special Use Permit Criteria:

a. Minimum lot size for the entire parcel is 10 acres;

b. No single tenant space or pad site shall be less than 4,000 square feet, except that the Planning Board may permit tenant spaces as small as 2,500 square feet, where the use includes a drive-through facility as an integral component of the use;

c. Tenant spaces or pad sites shall be used for retail stores, grocery stores, restaurants (including fast-food or take-out), commercial recreation, personal service shops, gasoline filling stations, hotels and any other uses authorized in the district;

d. Nothing shall be construed to limit tenant spaces under single ownership or leasehold from being used for multiple permitted and traditionally complementary uses including but not limited to gasoline filling stations with convenience stores; hotels with restaurants and convenience markets or gift shops; or retail stores with coffee shops (restaurants);

e. The parcel must provide direct access to the northbound and southbound lanes of a State Highway; and,

f. Sufficient off-street parking will be provided to satisfy the mix of proposed uses and the proposed mix of uses will not result in significant traffic impacts as demonstrated upon submission of a parking demand study and traffic capacity analysis by a qualified traffic engineer.

G. Parking and loading. Same as for I-1 District (§ **280-69G**).

H. Other provisions and requirements. Same as for I-1 District (§ **280-69H**).

Appendix I-3
Proposed RIO-ON Zoning District Amendments

§ 280-73.4 **Orchard Neighborhood Redevelopment Incentive Overlay (RIO-ON) District.**
[Added 8-24-2010] as amended January 4, 2019 to indicate recommended revision.

A. Purpose.

(1) The purpose of this district is to permit and encourage the redevelopment of vacant and/or deteriorated commercial, industrial and residential properties within the Orchard Neighborhood in a manner that will improve the character of the nearby environs which include an established neighborhood important to the character of the City; remove vacant, obsolete, incompatible, underutilized and marginal structures which are poorly maintained and present opportunities for illegal activities and have a blighting influence on the surrounding area; ensure an attractive entryway into the City of Glen Cove downtown from adjacent communities; and to promote additional housing opportunities which do not currently exist in this area. It is the intent of this chapter to require the demolition or stabilization of vacant, obsolete, incompatible, underutilized and marginal structures which are poorly maintained, and to encourage the maintenance of such structures pending redevelopment. The area to be included in the Orchard Neighborhood Redevelopment Incentive Overlay (RIO-ON) District is reflected on the RIO-ON Overlay Map, prepared by the Turner Miller Group, dated August 23, 2010, on file in the office of the Glen Cove City Clerk.

(2) In order to eliminate existing blight, blighting influences and incompatible uses, it is recognized that the vast majority of the area covered by this district was historically built as one- and two-family housing, but has undergone significant increases in density (both legally and illegally) over the years, taxing the existing infrastructure in the area, especially the street system; it is necessary to provide incentives and relief in order to promote redevelopment of the area in a manner that is protective of public safety and respectful of the historic importance of this area.

(3) It is the further purpose of this district to create an attractive gateway into the downtown and to encourage development that maximizes pedestrian-friendly and view-enhancing design features, to provide "eyes on the street" for an area historically characterized by loitering and illegal activities.

(4) The area encompassing this incentive overlay district has been found by the City Council, after evaluating the effect of potential incentives, which are possible by virtue of community amenities, to contain adequate resources, environmental quality and public facilities, including adequate transportation, water supply, waste disposal and fire protection, and that in designating this district, there will be no significant environmentally damaging consequences and that such incentives are compatible with the development otherwise permitted.

B. Applicability.

(1) The Orchard Neighborhood Redevelopment Incentive Overlay District shall comprise those areas within the boundary of the district as indicated on the City of Glen Cove Zoning Map.

(2) The provisions contained herein are additive to any requirements of the underlying zoning provisions. To the extent that conflicts may exist with the overlay district, the provisions of the overlay district shall govern those applications authorized for the development of incentive uses.

C. Permitted principal uses. Any use permitted by the underlying zoning district subject to all the restrictions, including bulk restrictions, as prescribed therein.

D. Permitted accessory uses.

(1) Any accessory use permitted by the underlying zoning district subject to all the restrictions, including bulk restrictions as prescribed therein.

(2) As an accessory to multiple dwellings, condominium dwellings and townhouses, the following uses may also be authorized:

(a) Real estate office for the marketing and sales of the units and signs related thereto, provided such signs comply with the City of Glen Cove Sign Ordinance.

(b) Indoor and outdoor recreation facilities, including indoor swimming pools, spas, tennis courts, clubhouse, pool house, recreation and/or fitness centers, business centers and meeting spaces, provided that such facilities are planned as an integral part of the principal use and are for the use of residents of such principal use and their guests.

(c) Off-street parking areas or garages.

(d) Guard booth.

(e) Management office.

E. Prohibited accessory uses. No material used in the conduct of commerce or intended for sale, including but not limited to building supplies, plumbing supplies, electrical supplies, bulk pavers, bulk tiles, bulk stone, soil stockpiles, gravel stockpiles, vehicles, or auto parts shall be stored on any residential lot.

F. Special uses. Any special use permitted by the underlying zoning district subject to all the restrictions, including bulk restrictions, as prescribed therein.

G. Usable recreational yard requirements. Each unit of any residential use other than a single-family detached residence shall be provided a usable unoccupied recreational yard area of at least ~~400~~ 200 contiguous square feet in a side or rear yard for the enjoyment of occupants. A single joint yard for multiple units may be provided, but such yard shall be no less than the sum of that required for each. Neither driveways, parking areas, areas under fire escapes, nor areas used for storage count toward usable recreational yard area. Areas used for on-site recreational amenities such as playgrounds, patios, tennis courts, clubhouses, fitness equipment, and swimming pools shall count toward usable recreational yard requirements.

H. Incentive uses permitted by special use permit at the discretion of the Planning Board.

(1) Townhouses (single-family attached dwellings) subject to the following:

(a) A minimum lot size of 15,000 square feet is required.

(b) A minimum of ~~3,000~~ 2,350 square feet of gross lot area shall be required per townhouse unit.

(c) ~~Townhouse units shall be unlike adjacent units in the same structure in exterior design and appearance. In determining that townhouses are unlike adjacent units in the same structure in design and appearance, the criteria of § **280-45B** shall be applied.~~

(d) Each townhouse unit will occupy an entire vertical space between foundation and roof, except where a flat is located below the townhouse unit pursuant to § **280-73.4H(2)**.

(e) Each unit shall provide at least two off-street parking spaces. Spaces may be stacked where one is located within a garage and one in a driveway. Where a front yard is provided, parking may be located within it.

(f) Maximum impervious coverage shall be 75%.

(g) The height of the building shall not exceed 2 1/2 stories or 35 feet except where a flat is located below the Townhouse unit pursuant to § 280-73.4H(2) , or where the ground floor is utilized for garage parking for two vehicles, in which case the height of the building shall not exceed 3 stories or 42 feet, and as determined to be in character with properties surrounding the site.

(h) A minimum side yard of 10 feet is required.

(i) A minimum rear yard of ~~15~~ 10 feet is required.

(j) A front yard of no more than 20 feet shall be provided along each public right-of-way, except where a townhouse fronts on a public right-of-way, a covered unenclosed front porch extending at least five feet from the front of the building and spanning at least 50% of the width of the unit may be located within a required front yard.

(k) No ~~residential~~ detached structures shall be located closer than 15 feet to each other and the Planning Board may require greater than 15 feet where it deems necessary.

(l) A homeowners' association with rules approved by the Planning Board upon advice of the Planning Board Attorney or other arrangement acceptable to the Planning Board shall be established to ensure maintenance of all required improvements, exterior walls and common lands. Additionally, the homeowners' association shall include irrevocable provisions in its charter that shall require maintenance of exterior walls, windows, sidewalks, garages, parking areas, interior drives, landscaping, roofing or other surfaces/structures visible from a public right-of-way or common area within 90 days of receipt of a request for such maintenance by the City of Glen Cove City Council.

(m) The minimum lot area per unit, as provided in § **280-73.4H(1)(b)** herein, may be reduced to 2,000 square feet of gross lot area per unit as an incentive at the discretion of the Planning Board, where the following amenities are included in the project:

[1] On-site active recreational amenities, including but not limited to playgrounds, tennis courts, clubhouses, fitness equipment, and/or swimming pools with a total area comprising no less than 10% of the total lot area and available to all occupants. In providing this increase in density, the Planning Board shall make a determination that the recreational amenities are substantial and superior to what is typically offered for residents of townhouses in the City of Glen Cove.

[2] Each townhouse unit is provided at least one parking space within an attached garage.

[3] In addition to satisfying the parking requirement of § **280-73.4H(1)(e)** herein, the applicant shall also provide one additional off-street parking space for each two townhouse units for use by visitors.

[4] Each unit (inclusive of flats where proposed) is provided a patio, porch or terrace area of no less than 50 square feet.

(2) Where townhouses meeting all special permit requirements of the RIO-ON Overlay District are proposed, flats may be proposed to be located in the same structure as the proposed townhouses subject to the following:

(a) A maximum of one flat is permitted for each three townhouses.

(b) A minimum lot size of 25,000 square feet is required.

(c) The flat shall be designed to seamlessly blend into the appearance of the townhouse structure, and its presence shall not be overtly distinguishable except by the presence of an additional door.

(d) The flat shall have no more than two bedrooms.

(e) At least two off-street parking spaces shall be provided for each flat. Parking for the flat need not be provided in an attached garage, but at least one of the off-street parking spaces shall be assigned specifically to the flat.

(f) No unit shall have a livable space of less than 600 square feet.

(g) The height of the building shall not exceed three stories or 42 feet.

(h) On-site recreational amenities shall be provided including, but not limited to playgrounds, tennis courts, clubhouses, fitness equipment, and/or swimming pools with a total area comprising no less than 10% of the total lot area and available to all occupants. If applicable this provision shall be inclusive of, not additive to any similar provision for townhouses in the RIO-ON district.

~~(i) Reduced usable recreational yard requirement. The usable recreational yard standards of § **280-73.4G** shall be provided as follows: not less than 200 square feet for each efficiency unit; 300 square feet for each one-bedroom unit; 350 square feet for each two-bedroom unit.~~

(3) Multifamily residential buildings,

(a) A minimum lot size of 40,000 square feet is required.

(b) Each dwelling unit shall have no more than two bedrooms.

(c) Minimum livable floor area for residential uses shall be as follows:

[1] Five hundred fifty square feet per efficiency dwelling unit.

[2] Six hundred fifty square feet per one-bedroom dwelling unit.

[3] Eight hundred square feet per two-bedroom dwelling unit.

(d) The minimum lot area per residential unit shall be as follows; provided, further, that all coverage, height and setback requirements are satisfied:

[1] One thousand eight hundred square feet per efficiency or one-bedroom unit.

[2] Two thousand five hundred square feet per two-bedroom unit.

(e) Each residential unit shall provide the following minimum off-street parking:

[1] One space per efficiency unit

[2] One and one-half spaces per one-bedroom unit, except that units that prohibit occupancy by persons under the age of 18 shall provide one space per unit.

[3] Two spaces per unit with two bedrooms, except that units that prohibit occupancy by persons under the age of 18 shall provide 1 1/2 spaces per unit.

(f) Maximum impervious coverage shall be 75%.

(g) The height of the building shall not exceed 3 1/2 stories or 45 feet.

(h) A minimum distance from property line: 10 feet.

(i) A front yard of no more than 20 feet and no less than 10 feet shall be provided along each public right-of-way. No off-street parking shall be provided between the building and the street. No structured parking shall be visible from any public street.

(j) On-site recreational amenities shall be provided, including but not limited to playgrounds, tennis courts, clubhouses, fitness equipment, and/or swimming pools with a total area comprising no less than 10% of the total lot area and available to all occupants and acceptable to the Planning Board.

(k) Reduced usable recreational yard requirement. The usable recreational yard standards of § **280-73.4G** shall be provided as follows: not less than 100 square feet for each efficiency unit; 150 square feet for each one-bedroom unit; 200 square feet for each two-bedroom unit.

(l) At least 30 square feet per unit of improved parkland available to the general public is provided and irrevocably offered for dedication to the City of Glen Cove. Parkland shall be improved with playground equipment, landscaped sitting areas, outdoor fitness equipment, and/or other facilities acceptable to the Planning Board and the Glen Cove City Recreation Director. This improved parkland may be located off site but must be located within 750 feet of the proposed site and within the RIO-ON Overlay District. This parkland may be counted toward the satisfaction of on-site recreational amenities and usable recreational yards.

(4) Mixed-use commercial and residential structures. Multifamily residential structures are permitted on upper stories over commercial uses subject to the following criteria:

(a) All special permit criteria applicable to multifamily residential structures.

(b) The ground-story commercial use is a permitted use in the underlying zoning district; or is a special permit use adhering to all required special permit criteria.

(c) The Planning Board makes a determination that any nonresidential uses contained in the structure are compatible with residential occupancy and do not pose a risk to the health, safety or general welfare of occupants therein.

(d) The full parking requirement for all uses are met on the site.

(5) Transit-oriented mixed-use commercial and residential structures. Where a mixed-use commercial and residential structure is proposed within 500 feet of the Glen Street train station platform, the permissible density of units shall be increased to 40 units per acre where the following standards are met:

(a) A minimum lot size of 40,000 square feet is required.

(b) The ground-story commercial use is a permitted use in the underlying zoning district; or is a special permit use adhering to all required special permit criteria.

(c) The Planning Board makes a determination that any nonresidential uses contained in the structure are compatible with residential occupancy and do not pose a risk to the health, safety or general welfare of occupants therein.

(d) With no further density bonus, the project shall set aside 30% of units as affordable housing as follows:

[1] At least 10% of proposed units affordable to households earning less than 30% of area median income (AMI);

[2] 10% of proposed units affordable to households earning less than 50% of AMI;

[3] 10% of proposed units affordable to households earning less than 80% of AMI

(e) The project shall provide an easement and improved ADA-compliant pedestrian facilities allowing access from the point of the lot closes to Hazel Street out to Cedar Swamp Road to promote a pedestrian linkage to the Glen Street Train Station.

(f) The project shall meet all special permit requirements for multifamily residential dwellings, except as follows:

[1] At least 200 square feet of commercial floor area must be provided per unit in ground-floor spaces.

[2] Minimum lot areas per residential dwelling unit shall not apply, nor shall any incentive densities as detailed in §280-73.4(J) be awarded.

[3] Where on-site parkland is not practicable, the project shall provide money-in-lieu of parkland consistent with City policies.

(g) The total parking requirement for all on-site residential and commercial uses shall be provided, except that one required residential parking space may be eliminated for each 1,500 square feet of retail space proposed, and one required residential parking space may be eliminated for each 750 square feet of office space proposed.

(h) The project shall gain access directly from Cedar Swamp Road.

I. Waivers.

~~(1) Waiver of affordable housing. The City Council may waive any requirement by the City of Glen Cove for the set aside of affordable housing where adequate on-site and off-site improvements to the neighborhood are made which enhance the quality of life of affordable housing residents in the neighborhood, including, without limitation, landscaping improvements, mass transit improvements, facade improvements, and lighting and security improvements. The City Council shall determine that there is approximate equivalence between potential affordable housing lost or gained or that the City has or will take reasonable action to compensate for any negative impact upon the availability or potential development of affordable housing caused by the provisions of this section. In determining whether to waive affordable housing requirements, the City Council shall consider the following criteria in determining equivalence:~~

~~(a) The type(s) of on- and off-site neighborhood improvements proposed by the applicant.~~

~~(b) The manner and program followed by the applicant in relocating existing tenants of any affordable residences, which may have resided at the site prior to the applicant's purchase of all or a portion of the minimum lot area.~~

~~(c) The number of affordable housing residences in the neighborhood which would benefit from the on- and off-site neighborhood improvements being proposed by the applicant shall be at least five times the number of affordable housing units, which would otherwise be required under the Zoning Ordinance.~~

~~(d) The recommendation of the Planning Board.~~

(~~2~~1) Waiver of hillside protection provisions. In recognition of the topography in the RIO-ON District, the fact that the majority of the area is already developed and contains man-made steep slopes and retaining walls, and the density requirements necessary to incentivize redevelopment of this location, the ~~City Council~~Planning Board may waive the hillside protection provisions of the Zoning Ordinance, subject to the applicant satisfying the following criteria:

(a) The application of best management practices and their ability to mitigate impacts from stormwater runoff;

(b) The employment of engineering practices in stabilizing soils and man-made slopes;

(c) The ability of foundations and engineered walls to safely develop the site without impacting surrounding real property or roadways;

(d) The ability to secure the site and its walls and steep slopes in a way that insures the safety of future residents and other persons;

(e) The manner in which the project adapts to the terrain and its resulting appearance; and

(f) Whether or not a viable project would be achievable without waiver of the slope provisions.

J. Additional incentives and bonuses. An applicant may apply for an incentive adjustment to the lot area and bulk requirements of this chapter in exchange for one or more of the following incentives. Incentives and bonuses may be combined, but in no case shall the maximum residential density of the site exceed 35 units to the acre.

(1) Density bonus for structured parking. In recognition of the detracting character of large expanses of parking and asphalt associated with multifamily development, where an applicant proposes to accommodate at least 75% of the required parking within structured on-site parking, which is located out of substantial public view, the Planning Board may reduce the required minimum lot area per dwelling unit by up to 25%.

(2) Density bonus for streetscape improvements. In recognition of the narrow and deteriorated street conditions in the vicinity of the project site, where an applicant proposes significant improvements to the streetscape that would result in enhanced safety and appearance, the Planning Board may reduce the required minimum lot area per dwelling unit by up to 25%. In determining whether or not to grant this density bonus, the Planning Board shall consider the following:

(a) The extent and dollar value of off-site improvements to the surrounding streetscape;

(b) The public costs that would otherwise be required to effect the same improvements;

(c) The improvement to the safety and appearance of the immediate neighborhoods as well as the possible marketability of the downtown from the proposed improvements.

(3) Density for green building. The Planning Board may reduce the required minimum lot area per dwelling unit by up to 25% for units that it finds are located within a proposed structure eligible for a gold certification from the US Green Buildings Council under their Leadership in Energy and Environmental Design (LEED) Green Buildings rating system.

K. Money in lieu of community benefits or amenities.

(1) At the request of the applicant or on a determination by the Planning Board that the identified amenities and benefits to the City are not immediately feasible or otherwise not practical for the applicant to provide, the Planning Board may refer the application to the City Council, which may require, in lieu of incentives, a payment to the City of a sum determined by the City Council. In referring the matter to the City Council, the Planning Board shall include its recommendation. If cash is accepted in lieu of other community benefit or amenity, provision shall be made for such sum to be deposited in a trust fund to be used by the legislative body of the City exclusively for specific community benefits authorized by the City Council.

(2) Any money in lieu of community benefits or amenities must be received prior to issuance of a building permit for construction of the proposed residential development.

L. Procedure.

(1) An application for waiver, incentive special use and/or incentive bonus shall be in writing and submitted to the Planning Board ~~and to the City Council as required herein~~. The application shall include a conceptual site plan along with a narrative describing the proposed development program, including a statement as to the buildable yield of the proposed development parcel, an EAF or DEIS, and a boundary or topographic survey accurately depicting site conditions.

(2) The narrative shall describe the waivers, incentive special use, incentives and bonuses being applied for and address the criteria and considerations that the Planning Board ~~and/or City Council~~ must consider in deciding whether to grant such incentives and bonuses.

(3) The applicant may include in its narrative any further considerations of community benefit or amenities beyond those identified herein being provided by the project.

(4) Where the applicant is requesting to provide money in lieu of community benefits or amenities, the applicant shall provide a calculation and proposal of an appropriate payment. The City Council shall consider the proposal for payment by the applicant in determining whether the community benefits and amenities may be achieved.

(5) At the discretion of the applicant, a full site plan may be submitted in place of a conceptual site plan as a basis for the Planning Board ~~and/or City Council to make their~~ decision regarding authorization of incentives and bonuses.

(6) The application for authorization of a development under this section will be subject to the provisions of Article 8 of the Environmental Conservation Law.

M. Concept site plan required.

(1) ~~Within 45 days of receipt of a concept plan or, if a DEIS is required for the application pursuant to 6 NYCRR Part 617 (SEQR), within 45 days following a public hearing held on the DEIS, the Planning Board shall provide any required recommendations to the City Council with respect to the authorization of incentives and bonuses. This time period may be extended by consent of the applicant.~~

(2) The Planning Board shall consider the conceptual site plan against the following standards in determining whether to authorize waivers, incentive special uses, incentives or bonuses ~~and in making its recommendations to the City Council~~:

(a) Building scale and density should be balanced with the maximization of open space within the development, and the use of landscaping to mitigate and balance the visual impact of building size (including landscaped roof terraces to the extent practicable).

(b) The architectural treatment of buildings shall be such that when viewed from a distance, building masses are broken up visually through the use of techniques such as, but not limited to, stepping bays and recesses, balconies and terraces, and changes of material, to create a sense of scale and visual relief.

(c) The building scale and density shall be balanced with the maximization of concealed parking facilities within the development area, the use of landscaping, architectural treatments, roof gardens and courtyards, to conceal or mitigate the visual and environmental impacts of parking structures or surface lots on the site and the surrounding areas.

(d) The architectural treatment of those portions of buildings, in particular the facades of first and second floors, that face or adjoin pedestrian-oriented streets, sidewalks, open spaces and esplanades, is such that the quality of the pedestrian experience is maximized through the use of techniques such as, but not limited to, quality and variety of facade materials, architectural detail, variety in massing such as bays and recesses, location and scale of windows and doors, inclusion of features such as porches, steps, planters, awnings, etc.

(3) Public hearing required. The Planning Board ~~and/or City Council~~ shall hold a public hearing on the proposed application for development under the provisions of the RIO-ON prior to making any determinations on whether to authorize incentive special uses, ~~waivers~~ or additional incentives and benefits~~, including, without limitation, acceptance of money in lieu of incentives or benefits~~. Notice of the public hearing specifying the incentives and bonuses being sought, as well as the total number of units being proposed, shall be sent by mail to each owner or occupant of all parcels of property located within a radius of 300 feet measured from all points of the subject property line by ~~certified mail, return receipt requested~~registered mail. Said notice shall be postmarked no sooner than 20 days and no later than 10 days prior to the date set for the public hearing. An affidavit of mailing, together with the ~~certified letter~~ registered mail postal receipts, shall be filed with the Council. The hearing date shall also be advertised by posting of a sign stating the time, date and place of the public hearing to be held on the property which is the subject of an application. The sign shall be posted at least 10 days prior to the date of the hearing. The sign shall be visible from adjacent rights-of-way. If the subject property is on more than one right-of-way, a sign shall be posted facing each right-of-way. If the sign is destroyed or removed from the property, the owner of the subject property shall be responsible for replacing it. Ten days prior to the public hearing, the owner of the subject property shall execute and submit to the Department of Planning an affidavit of proof of the posting of the public notice sign(s) according to this subsection. If the owner of the subject property fails to submit the affidavit, the public hearing will be postponed until after the affidavit has been supplied. Where a full site plan has been submitted for consideration of authorization of incentives and bonuses, the Planning Board shall schedule its public hearing on the site plan jointly with the City Council's public hearing on the authorization of incentives and bonuses.

N. State Environmental Quality Review (SEQR). The generic environmental impact statement for the Glen Cove Master Plan served as the generic environmental impact statement (GEIS) required by § 81-d of the General City Law in enacting the incentive zoning district. That generic environmental impact statement identified no significant impacts as a result of granting incentive density. The GEIS required that an application for incentive redevelopment provide a site-specific environmental review subject to the requirements of SEQRA. Therefore, development under the provisions of the Residential Incentive Overlay District shall be deemed a Type 1 action pursuant to SEQRA, and any site-specific EIS must further address the consideration of § 81-d of the General City Law. When an application for development subject to the provisions of the Residential Incentive Overlay District requires the preparation of a draft environmental impact statement (DEIS) pursuant to SEQR, it is the intent of this chapter that any public hearing by ~~the City Council and/or~~ Planning Board to consider an application for waiver, incentive special use, incentives and bonuses hereunder shall be a joint hearing with the lead agency on the DEIS.

~~O. Action by City Council.~~

~~(1) The City Council shall not authorize any incentive or bonus pursuant to this section until the Planning Board files its report of recommendation, except in the instance where the Planning Board fails to convey its report to the City Council within the time frame specified by this section, in which case such failure to report shall be construed by the Council as a recommendation to approve.~~

~~(2) In determining whether to authorize incentives and bonuses as detailed herein, the City Council shall:~~

~~(a) Consider the recommendations of the Planning Board.~~

~~(b) Determine that the proposed redevelopment project satisfies the purpose and intent of the Orchard Neighborhood Redevelopment Incentive Overlay District.~~

~~(c) Determine that the proposed redevelopment project is in harmony with the recommendations of the City Master Plan.~~

~~(d) Find that authorization of the incentives and bonuses will not result in significant adverse environmental impacts, or that such impacts have been mitigated to the maximum extent practicable.~~

~~P~~O. Site plan approval required.

(1) Any development under the provisions of the Orchard Neighborhood Redevelopment Incentive Overlay District shall require full site plan review by the Planning Board.

(2) The Planning Board shall only approve a site plan which is substantially identical to the conceptual site plan submitted as part of the application for authorization of incentives and bonuses in terms of:

(a) Layout.

(b) Building heights.

(c) Architectural quality.

(d) Number of bedrooms and units.

(e) Number of parking spaces.

(f) Treatment of slopes.

~~Q~~P. Severability. Should any provision of this section be rendered invalid, such decision shall not affect the validity of this chapter as a whole or any part thereof, other than the part rendered invalid. Should the provisions governing the acceptable benefits and amenities listed herein be rendered invalid, the incentives and bonuses associated with such benefits and amenities are declared prohibited absent such benefits and amenities.

APPENDIX J

MARKETING PROFILES

BIANCONI FUNERAL HOME SITE

BOA Step III Strategic Site Profile

Site Address: 62 Cedar Swamp Road, Glen Cove, NY 11542

Property Size: 1.3 Acres

Owner: Range Rover

Land Owner Contact Information:

Zoning: B-2 Peripheral Commercial District

Current Land Use/Status: Currently being used for car dealership parking.

Use Potential/Potential Redevelopment Opportunities:

Environmental Considerations: Former funeral home was razed.

This profile was prepared with funds provided by the New York State Department of State through the Brownfield Opportunity Areas Program.

PALL CORPORATION SITE

BOA Step III Strategic Site Profile

Site Address: 30 Sea Cliff Avenue, Glen Cove, NY 11542

Property Size: 3.8 Acres

Owner: Pall Corporation, 25 Harbor Park Drive, Port Washington, NY 11050

Contract Vendee: Glen Cove 2017, LLC, 22 Maple Avenue, Morristown, NJ 07960

Zoning: I-2 Light Industrial District

Current Land Use/Status: Vehicle parking

Use Potential/Potential Redevelopment Opportunities: Site plan approved by Planning Board for redevelopment of the site as a storage facility.

Environmental Considerations: State Superfund Site under NYSDEC jurisdiction.

This profile was prepared with funds provided by the New York State Department of State through the Brownfield Opportunity Areas Program.

PHOTOCIRCUITS AND PASS & SEYMOUR SITES

BOA Step III Strategic Site Profile

Site Address: 45 & 31 Sea Cliff Avenue, Glen Cove, NY 11542

Property Size: 23 Acres

Title Holder: Nassau County Industrial Development Agency

Developer Contact Information: Nike Equities, LLC c/o Louis Lagios, 25A Hanover Rd, Ste. 350, Florham Park, NJ 07932
(973) 845-6444 lpl@nikeequities.com

Zoning: City of Glen Cove I-2 Light Industrial District and Oyster Bay LI Light Industry District

Current Land Use/Status: Abandoned industrial buildings

Use Potential/Potential Redevelopment Opportunities: Regional Commercial Center

Environmental Considerations: A portion of the site is a State Superfund Site under NYSDEC oversight. Developer is coordinating with NYSDEC regarding the redevelopment of the property.

This profile was prepared with funds provided by the New York State Department of State through the Brownfield Opportunity Areas Program.

TRANSIT-ORIENTED DEVELOPMENT (TOD) SITE

BOA Step III Strategic Site Profile

Site Address: 4 Cedar Swamp Road, Glen Cove, NY 11542

Property Size: 1.9 Acres

Owner: Fotis Maria Itilas

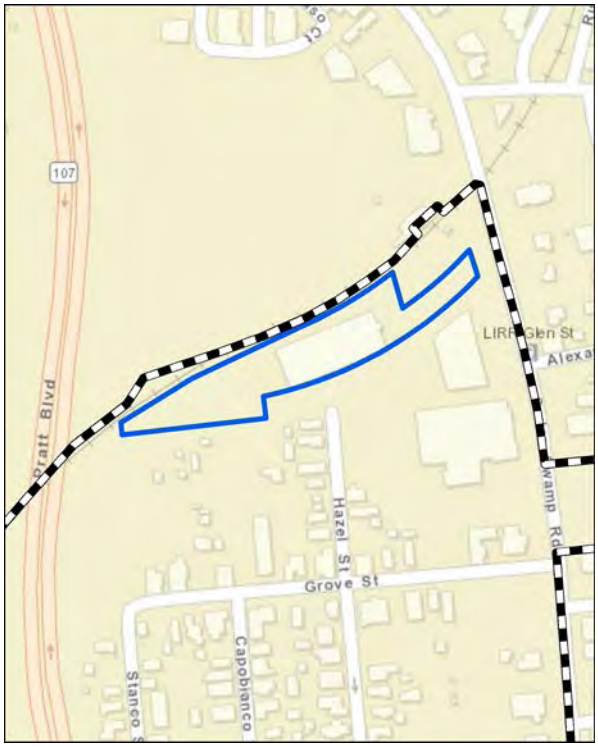
Land Owner Contact Information: (516) 625-2549

Zoning: I-2 Light Industrial District

Current Land Use/Status: Retro Fitness (long-term lease), Island Sports Physical Therapy, Be1st Bootcamp, Power Pals

Use Potential/Potential Redevelopment Opportunities: The BOA Step III includes an economic feasibility analysis for redevelopment of the site as a transit-oriented development, consisting of 80 residential units and a minor retail component.

Environmental Considerations: Unknown



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