Conceptual Build-Out of the 1 Garvies Point Road Property or Konica Minolta Property

Application for PUD Amendment Garvies Point Mixed-Use Waterfront Development Project, City of Glen Cove

PREPARED FOR

RXR Glen Isle Partners LLC

PREPARED BY



VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. 100 Motor Parkway Suite 350 Hauppauge, NY 11788 631.787.3400

March 2021

Table of Contents

1	Desci	Description of the Proposed Action			
	1.1	Introduction	1		
	1.2	Description of the 1 GPR and Konica Properties	4		
2	Envir	onmental Review	6		
	2.1	Land Use, Zoning and Public Policy	6		
	2.2	Soils and Topography	11		
	2.3	Subsurface Environmental Conditions	15		
	2.4	Water Resources	17		
	2.5	Ecology	19		
	2.6	Transportation and Parking	20		
	2.7	Air Quality (Including Construction-Related Air Quality)	27		
	2.8	Noise (Including Construction-Related Noise)	29		
	2.9	Community Facilities and Services			
	2.10	Utilities			
	2.11	Economics			
	2.12	Demographics			
	2.13	Aesthetics			
	2.14	Cultural Resources			
	2.15	Construction Impacts	40		
	2.16	Use and Conservation of Energy	40		

Appendices

Appendix A	Part 1 – Environmental Assessment Form (EAF)
Appendix B	Conceptual Full Build-Out of 1 GPR Property and Konica Property
Appendix C	Correspondence from Roux Associates regarding status of remediation at the One Garvies Point Road and Konica Minolta properties
Appendix D	Water use and sewage flow calculations prepared by Paulus, Sokolowski and Sartor Engineering, P.C. (PS&S), dated February 24, 2021
Appendix E	Traffic Impact Study prepared by VHB, dated March 2021

List of Tables

Table No.	Description	Page
Table 1 – Cons	istency with the Bulk and Dimensional Requirements of the PUD	9
Table 2 – 1 GP	R Property - Population and Public School-Aged Children Generation (Rut Study)	tgers 32
Table 3 – Konio	ca Property - Population and Public School-Aged Children Generation (Ru Study)	tgers 32
Table 4 – 1 GP	R Property + PUD Population and Public School-Aged Children Generatio (Rutgers Study)	n 34
Table 5 – Konio	ca Property + PUD Population and Public School-Aged Children Generation (Rutgers Study)	on 35

List of Figures

Figure No.	Description	Page
Figure 1 – Sit	e Location Map	2
Figure 2 – Su	rrounding Area Land Use	
Figure 3 – 1 C	SPR and Konica Property Soils	
Figure 4 – 1 C	SPR Property Topography	
Figure 5 – Ko	nica Property Topography	14
Figure 6 - Stu	dy Intersections	21



Description of the Proposed Action

1.1 Introduction

This document is a Supplemental Analysis that has been prepared to assess the potential impacts of the Proposed Action, which involves an amendment to the previously approved Planned Unit Development (PUD) Master Development Plan for the Garvies Point Mixed-Use Waterfront Development Project (the "Project"). The current PUD, portions of which is are currently under construction, is located on approximately 56 acres situated on the north side of Glen Cove Creek (the "Subject Property" or the "Site") in the City of Glen Cove (the "City"), New York. The Proposed Action includes the amendment of the current PUD to incorporate various changes to the Master Development Flan at Blocks A, D, E, F, and J, and the relocation of a workforce housing component from Block F of the current PUD to one of two properties located contiguous to the existing PUD. These two properties specifically include the property at 1 Garvies Point Road (the "1 GPR Property"), which measures approximately 6.3 acres; and the former Konica Minolta property (the "Konica Property"), which measures approximately 17.6 acres. The current PUD and these two properties are identified on Figure 1.







RXR Garvies Point PUD Amendment Glen

t Glen Cove, NY Site Location Map

Garvies Point Road and Herb Hill Road City of Glen Cove Nassau County, New York

Source Info: ESRI (2016); NYS Civil Boundaries, NYS Office of Information Technology Services GIS Program Office (GPO) An application for the amendment of the PUD to include one of these properties will be submitted in the future, after it is determined by the Applicant which of the properties will be pursued for the relocation of the workforce housing component of the current PUD. It was raised by the lead agency that either parcel, once incorporated into the PUD, would likely have additional development potential, above and beyond the relocated workforce housing. Accordingly, for the purposes of comprehensive environmental review, as required by the State Environmental Quality Review Act (SEQRA) and requested by the City, conceptual plans have been developed to determine a reasonable worst-case development of the entirety of each property. Subsequently, an environmental impact analysis of the conceptual full build-out of the 1 GPR and Konica Properties is provided below.

It should be noted that a consistency analysis memorandum for the proposed reconfiguration on Blocks A, D, E, F, and J with thresholds and criteria established by the prior environmental review, conducted in connection with the previously approved PUD Master Plan, was submitted for lead agency review on March 9, 2021 (the Technical Memorandum for Application for PUD Amendment – REVISED, or the "Tech Memo"). The memorandum addresses the potential environmental impacts of the proposed amendment within the context of the SEQRA Findings Statement adopted for the PUD on December 19, 2011. This Supplemental Analysis and the corresponding Part 1 – Environmental Assessment Form (EAF) (Appendix A) further evaluates the proposed PUD Amendment, but with an emphasis on the potential expansion of the PUD area to incorporate either of the two adjacent properties. Because only conceptual plans are available for the future build-out of the 1 GPR and Konica Properties, the environmental impacts of this component is evaluated on a generic basis (i.e., to a similar extent as the overall current PUD was evaluated to support the prior Findings Statement). Together, the March 9, 2021 Tech Memo, the Part 1 – EAF, and this Supplemental Analysis comprehensively assess the potential for environmental impacts associated with all components of the proposed PUD Amendment (the Amended PUD Master Plan).

This Supplemental Analysis document is divided into two sections. The first section, of which this is a part, provides a detailed description of the Proposed Action and a detailed description of the two properties being analyzed. The second section provides a description of the environmental setting, analyses of the potential environmental impacts associated with implementation of the Proposed Action, and cumulative impacts for the inclusion of the two properties within the overall PUD Amendment. Specifically, this Supplemental Analysis evaluates the following environmental and planning issues:

Land Use, Zoning and Public Policy Soils and Topography Subsurface Environmental Conditions Water Resources Ecology Transportation and Parking Air Quality (Including Construction-Related Air Quality) Noise (Including Construction-Related Noise) Community Facilities and Services Utilities Economics Demographics Aesthetics Cultural Resources Construction Impacts Use and Conservation of Energy

1.2 Description of the 1 GPR and Konica Properties

As described above, the amendments planned at Blocks A, D, E, F, and J of the current PUD are evaluated in detail in the March 9, 2021 Tech Memo prepared by VHB, and detailed descriptions of the changes to those components of the PUD are presented therein. Either the 1 GPR Property or the Konica Property will support the workforce housing component of the PUD to be relocated from Block F of the current PUD. The Applicant intends to plan and design these workforce housing to be integrated into an upcoming phase of market-rate development, rather than remain in a stand-alone, isolated building on Block F as approved by the current PUD Plan. The result of the workforce housing relocation is an increase in the total number of housing units above the total 1,110 units identified in the previously approved PUD Master Plan. Under this amendment, a total of 1,125 units would be constructed within the current PUD area. The 1 GPR and Konica Properties, once incorporated into the PUD, will likely have remaining development potential above and beyond the relocation of the workforce housing component. Conceptual plans for the buildout of each property has been developed for the purpose of this analysis. Total unit numbers for the conceptual full build-outs of each property were calculated based on the total acreage and permitted density, less 15 units to balance the proposed overage within the current PUD area described above. Descriptions of the 1 GPR and Konica Properties, and the conceptual plans for the build-out of each, are presented below.

1 GPR Property

The 1 GPR Property measures approximately 6.3 acres, and is located along the north side of Garvies Point Road, to the immediate west of PUD Block D. This property is currently improved with a range of commercial and industrial uses, e.g., warehouse, office and outdoor storage uses. The conceptual build-out of the 1 GPR Property (see plan in Appendix B) would include a total of 105 multifamily rental units, consisting of 12 studios, 71 one-bedrooms units, and 22 two-bedroom units. Of this total, 68 units would be designated for workforce housing, in satisfaction of the minimum 10-percent requirement for the PUD. The conceptual full build-out would also incorporate 7,700 GSF of retail space.

Konica Property

The Konica Property measures approximately 17.6 acres, and is located at 71 Charles Street, on the north side of Herb Hill Road, to the immediate east of PUD Block I. This overall property is comprised of three associated properties (marked "A," "B" and "C" on the conceptual Plan described below [see Appendix B]), whereas the largest "A" is located as described above; "B" is located opposite "A" along the north side of The Place; and "C" is located opposite "A" along the east side of Charles Street. The Konica Property is virtually vacant, with areas of pavement and various vestiges of its former industrial use present throughout much of the site. The conceptual plan developed for the build-out of the Konica Property (see Appendix B) would include 336 units, including 101 townhome condos and 235 multi-family rental units with a total of 92 workforce units. The conceptual full build-out would also include 19,982 SF of retail space, 15,000 SF of office space, as well as publicly accessible open space to be located just south of The Place.

Although RXR is pursuing the purchase of both of these parcels (i.e., the 1 GPR and Konica Properties), negotiations are ongoing, and neither parcel is presently in RXR's ownership. Therefore, as introduced above, the analysis of this component of the proposed PUD Amendment includes a generic evaluation of the potential candidate sites for relocation of the workforce housing units to demonstrate their feasibility for the proposed use and the potential for significant environmental impacts related to such development. This Supplemental Analysis evaluates a conceptual full build-out of each of these properties at the request of the City of Glen Cove Planning Board and for the purposes of comprehensive environmental review of the PUD amendment pursuant to SEQRA regulations. It is anticipated that the Applicant will apply for an amendment to the PUD boundary to accommodate the additional development within the PUD, subsequent to RXR obtaining ownership interest in the parcel(s). The Planning Board is empowered with the authority under the City Zoning Code, at §280-73.2.C(3), to approve such extensions of the PUD boundary. It is also understood that a detailed, site-specific analysis would be conducted as necessary at the time of application for site plan review for development of either the 1 GPR or Konica Properties.

2

Environmental Review

The following presents an analysis of the expansion of the PUD area to include either the 1 GPR Property or the Konica Property (i.e., resulting from the proposed PUD Amendment and relocation of the workforce housing component from Block F) for its potential to have significant adverse impacts not already identified in the Findings Statement and the environmental review that was conducted in connection with the previously approved PUD Master Plan. Analyses and conclusions are arranged by the environmental topics that are covered in the Findings Statement. For all topics, the proposed expansion of the PUD area to include either the 1 GPR Property or the Konica Property, including the relocation of the workforce housing component onto either of those properties and the conceptual full build-out of either property, is evaluated for its potential to have significant adverse impacts within that environmental topic area. Additionally, the evaluation considers the potential for cumulative impacts of the proposed amended PUD and the additional properties, as appropriate.

2.1 Land Use, Zoning and Public Policy

As detailed above, the workforce housing component that was approved for Block F under the current PUD would be relocated to an alternate, adjacent location under the proposed PUD Amendment, on either the 1 GPR Property or the Konica Property. The provisions of the MW 3 Zoning District (within which both the 1 GPR and Konica Properties are located) provide the Planning Board with the authority under the City Code to approve extensions of the geographic boundaries of the PUD area to include either of the parcels under consideration, which would allow the proposed relocation of workforce housing units to occur entirely within the framework of the PUD Master Plan. Further, future development of these parcels would allow the workforce units to be integrated within an upcoming phase of the project, rather than sit in a stand-alone location, isolated from the greater Garvies Point project.

Land Use

Extension of the PUD area to incorporate either the 1 GPR or Konica Property would enhance the overall benefits of the PUD to redevelop former contaminated industrial properties to create a vibrant waterfront community at a prominent location along the north side of Glen Cove Creek. Further remediation would be carried out on both the 1 GPR and Konica Properties pursuant to ongoing EPA and DEC regulatory programs. Similar to the Findings Statement conclusions for the current PUD area, the conceptual redevelopment of either of these properties with new residential, commercial, and open spaces and public amenities would replace blighted and underutilized former industrial areas with compatible land uses (see Figure 2).

Zoning

The proposed amended PUD Master Plan, including the conceptual build-out scenarios on the 1 GPR and Konica Properties, would meet the various PUD requirements set forth in the MW-3 Zoning District regulations (City of Glen Cove City Code, §280-73.2) or established by the Planning Board for the PUD Master Plan. The incorporation of either of these properties into the PUD Master Plan in connection with the relocation of workforce housing would make that property subject to the bulk and dimensional requirements of the PUD zoning district, as summarized below in Table 1. The Applicant recognizes that the proposed development at either property would be governed by the regulations set forth in City of Glen Cove City Code.

As previously noted, detailed site plans have not yet been developed and the conceptual plans are subject to change upon the Applicant's discretion. Further review of the Project's consistency with the PUD regulations will take place upon completion of the site plans for either property, during the Site Plan Review process.





0 1250 2500 5000 Feet
Konica Minolta Property

1 Garvies Point Road Property



RXR Garvies Point PUD Amendment Garvies Point, New York

Multi-Family Residential Open Space Transporation Vacant **Surrounding Land Uses** Garvies Point Road and Herb Hill Road City of Glen Cove Nassau County, New York

Source: ESRI; Long Island Index

Dimension	Permitted/Required	1 GPR Property	Konica Property
Maximum Residential Density	20 units per acre	105 units (17 units per acre) ¹	336 units (19 units per acre) ¹
Minimum Workforce housing	10% of dwelling units	64.8% (68 units) ²	27.4% (92 units) ²
Maximum Height ³		3 stories	4 stories of residential above 2 stories of parking (partially below grade)
Required Off-Street Parking	> 1.65 spaces per rental unit	Required: 202 spaces	Required: 706 spaces
	ightarrow 1.85 spaces per owned unit	Provided: 262 spaces	Provided: 802 spaces
	> 1 space per 265 SF of retail		
	> 3.65 spaces per 1,000 SF of office		
Required Minimum Open	25%	41%	41.3%

Table 1 – Consistency with the Bulk and Dimensional Requirements of the PUD

¹ Units per acre are less than maximum permitted to balance the proposed 15-unit density overage on Blocks E/F

² Includes the 56 relocated workforce housing units from Block F

³ Maximum height to be established by the Planning Board during site plan review.

⁴ Required off-street parking set forth in the Findings Statement

Public Policy

The mix of uses as set forth in the concept plans for the two adjacent properties are consistent with the various policy and planning documents that guide development in the area, including the City of Glen Cove Master Plan (the Master Plan) and Third Amended Urban Renewal Plan for Garvies Point Urban Renewal Area. Both the 1 GPR and Konica Properties were included within the area designated for redevelopment within the Master Plan. The Master Plan, adopted in May 2009, states that generally these lots should pursue development that is coordinated or complementary to the Glen Cove Creek waterfront redevelopment. Therefore, incorporation of either of these parcels into the larger redevelopment plan would be consistent with this guidance.

Though both parcels are located just outside the Urban Renewal Area boundary as set forth in the Third Amended Urban Renewal Plan, which was revised in July 2005, the conceptual build-out of these parcels as proposed would be consistent with the objectives of the Marine Waterfront (MW-3) zoning. These objectives, as set forth in the Urban Renewal Plan, include eliminating blighting conditions and permitting a range of water dependent and water enhanced uses appropriate for its strategic location near the waterfront and proximate to the downtown area. The conceptual redevelopment of either of these parcels would strengthen the connection between the Glen Cove Creek waterfront and the downtown by filling in currently underutilized parcels along the primary roadways connecting the two areas, and providing additional amenities including open space and retail. The additional residential uses would provide complementary uses, building a larger market demand for on-site retail and downtown businesses. Overall, no significant adverse impacts related to public policy would result from the expansion of the PUD area to one of the two adjacent properties under consideration.

Cumulative Assessment

<u>50 Percent Rental Cap</u> – The 2011 Findings Statement establishes a cap on the number of rental units at 50 percent of the total number of residential units in the PUD Master Plan. With an as-approved total of 1,110 total residential units within the previously approved PUD Master Plan, a 50 percent rental cap would allow for a total of 555 rental units. Expansion of the residential yield under the proposed PUD Amendment, including both the 15 additional units within Blocks D, E, and F, and the conceptual build-out of either the 1 GPR or Konica Properties (including the 64 workforce units to be relocated, would increase the total, Project-wide number of units to a maximum of 1,461 (conservatively assuming the inclusion of the Konica Property), with 730 rental units representing the 50 percent cap.

The number of rental units that have been approved to-date totals 541, not including the revisions to the development plan that are the subject of the proposed PUD Amendment (i.e., the proposed changes on Blocks A, E and F, and the 1 GPR and Konica Properties). When also accounting for the housing that would be constructed under the proposed PUD Amendment, rental housing would increase by 306 units – i.e., 71 market-rate rental units within the current PUD area (which encompasses the proposed 15-unit increase above the 1,110-unit maximum, and is accounted for within the 172 units currently proposed for Blocks E and F) plus 235 additional rental units (conservatively assuming inclusion of the Konica Property); the 346 residences on Block A remain entirely owner-occupied. Thus, under the proposed PUD Amendment, the residential rental total would be increased to 847 units, which exceeds by 117 units the aforementioned 730-unit cap on total rental units allowable. Therefore, as part of the proposed PUD Amendment, the Applicant is requesting the Planning Board's approval to exceed the 50 percent rental cap.

The Findings Statement is clear that the 50 percent rental cap is subject to the Applicant's ability in the future to seek discretionary approval from the Planning Board to exceed the cap based on current market conditions, provided that the Applicant has proceeded with implementation of earlier phases of development in good faith and in compliance with other conditions set forth by the Findings. The Applicant may seek approval from the Planning Board to exceed the 50 percent rental cap; however, in no instance may the number of rental units exceed 65 percent of the total residential unit count.

If the proposed PUD Amendment is approved, the resulting 847 rental units would compose approximately 58 percent of the 1,461 total residential yield, which is below the 65 percent threshold established by the Findings Statement. Moreover, the Applicant submits that it has proceeded with implementation of earlier phases of development in good faith and in compliance with other conditions set forth by the Findings Statement; and, as discussed previously, the proposal to exceed the 50 percent cap by 8 percent is in response to current market conditions, which show a strong current demand for market rate rental units. Therefore, conditional to the granting of a waiver to exceed the 50 percent rental cap, while remaining below the 65 percent threshold established by the Findings Statement, the proposed PUD Amendment would be consistent with the Findings Statement in regard to the rental cap.

<u>Cumulative Land Use, Zoning and Public Policy Assessment</u> - The overall set of revisions included as part of the proposed PUD Amendment provides an updated development plan

of integrated, mixed uses for the amended PUD area that responds to current market conditions and other essential considerations – e.g., the need for additional public parking to be satisfied by the current proposal for the development of Blocks D and J, and the enhancement of public open spaces throughout the Site. The total gross aggregate floor area excluding parking, measures 1.804 million square feet, and including an allowance for changes in unit geometry of 26,103 sf, the total gross floor area would reach 1.828 million square feet. This figure is the same as shown in the Current PUD Plan. Including the larger of the two potential adjacent development sites, the Konica Property, for which the total conceptual build-out would include 603,427 GSF not including parking, total gross floor area would reach 2.431 million square feet.

As discussed throughout this analysis, the Proposed Action would be no less protective of the environment than the plan on which the Findings Statement, as amended by the previously approved PUD Master Plan, was based. Importantly, inclusion of either the 1 GPR Property or Konica Property, which would be integrated into the PUD, would maintain the requisite number of workforce housing units for the PUD Master Plan, thereby ensuring that the project continues to incorporate this important element as intended in the Planning Board's approval. Further, more detailed analysis of the land use, zoning and public policy objectives of the Findings Statement would occur during the Planning Board's review of Applicant's submissions for approval of each individual site plan on a parcel-by-parcel basis.

2.2 Soils and Topography

As with the current PUD area, the 1 GPR Property and the Konica Property are both previously disturbed areas. According to the United States Department of Agriculture (USDA) Soil Survey,¹ soils within the 1 GPR Property include Urban land (Ug) and Udorthents, refuse substratum (Uf). Soils within the Konica Property include Ug, Urban land – Montauk complex (UnB and UnC), and Urban land – Riverhead complex (UrB), see to Figure 3. Soils found within the 1 GPR and Konica Properties are generally consistent with the remainder of the PUD area and do not present new soil limitations that would cause a significant adverse impact in connection with their future development.

Topographic profiles of each of the properties were reviewed using USGS Long Island 2014 LiDAR Collection data. As illustrated in Figure 4,the 1 GPR Property increases in elevation in a northerly direction, with an elevation of approximately 8 feet above mean sea level (msl) at the south end of the property along Garvies Point Road and approximately 34 feet above msl at the north end of the property. Similarly, the Konica Property contains elevations that increase in a northerly direction, from approximately 20 feet to over 60 feet above msl, see Figure 5. Specifically, the conceptual build-out of the Konica Property indicates that future development would be accommodating of the topographic changes on the site. See Appendix B for a site section diagram of the conceptual development.

¹ United States Department of Agriculture, SSURGO Soil Database accessed via the Web Soil Survey, February 2021





Soil	Cla	ssi	fica	tions	5
					-

- Udorthents, refuse substratum (Uf)
- Urban Land (Ug)
- Urban Land Montauk complex (UnB)
- Urban Land Montauk complex (UnC)
- Urban Land Riverhead complex (UrB)

Soil Survey Garvies Point Road and Herb Hill Road City of Glen Cove

Nassau County, New York

Source: ESRI; USDA Soil Survey SSURGO







RXR Garvies Point PUD Amendment | Garvies Point, New York Topography – 1 Garvies Point Road Property

1 Garvies Point Road City of Glen Cove Nassau County, New York

Source: ESRI; USDA SSURGO Soil Database





Konica Minolta Property 2-foot topographic contours XR Garvies Point PUD Amendment | Garvies Point, New York Topography – Konica Minolta Property 71 Charles Street City of Glen Cove Nassau County, New York

Source: ESRI; USDA SSURGO Soil Database

As with the existing PUD, site-specific grading plans would be developed and presented for review by the City of Glen Cove for either the 1 GPR or Konica Properties, at the time of Site Plan application, which would detail the specific grading strategy and any measures needed to address the particular layout proposed at that time. However, based on a review of the conceptual plans and the above-referenced site section diagram (Appendix B), the existing site topography can be accommodated by appropriate site planning and design, along with the use of modest retaining walls in limited areas of existing slopes where necessary.

As both the 1 GPR Property and the Konica Property have experienced previous site disturbance, the proposed expansion of the PUD area to include either of these properties would not result in significant adverse impacts associated with on-site soil types or to topography.

As part of the site plan package for the development of parcels covered under the proposed PUD Amendment, a Soil Erosion and Sediment Control Plan(s) would be prepared by the Applicant's site engineer to provide site-specific control measures that would be implemented throughout construction and remain in effect until disturbed areas are permanently stabilized. Additionally, a geotechnical report would be prepared for submission to the City to demonstrate the suitability of on-site soils to support the proposed development. Upon the implementation of the Soil Erosion and Sediment Control Plan(s) and the recommendations of the geotechnical report(s), development under the proposed PUD Amendment, including on either the 1 GPR Property or the Konica Property, would be consistent with the requirements of the Findings Statement with respect to soils and topography. Therefore, no significant adverse impacts to Soils and Topography are anticipated that have not already been identified and addressed in the Findings Statement.

2.3 Subsurface Environmental Conditions

The Applicant realizes that this is an important issue to the Planning Board, the IDA and others. The intent is to ensure that the proposal to phase-in the provision of required workforce housing approved for Block F is realistic and not open-ended, that one or more specific properties have been identified for this housing, and that site investigations establish that the environmental condition of these properties (i.e., the 1 GPR Property or Konica Property) either presently is suitable or reasonably can be made suitable for the type of housing proposed. As discussed below, both properties under consideration have been subject to extensive environmental investigation and remediation and, as indicated, both are suitable candidates for the type of development contemplated under the proposed PUD Amendment.

Konica Property

This parcel was used for various industrial purposes, starting in the early 1900s, including manufacturing of photographic equipment and supplies. On-site discharges of hazardous and industrial wastes occurred, which contained toluene, ethylbenzene, ethyl acetate, and other residues from the formulation of printing inks, among other chemicals

Correspondence from Roux Associates Inc. (Roux), the environmental remediation consultant for the Konica Property, is included in Appendix C. As indicated, "the site has been investigated and remediated under the Resource Conservation and Recovery (RCRA) Closure Program and the NYSDEC Inactive Hazardous Waste Disposal Site (IHWDS) (also known as the State Superfund) Program. A Site Management Plan (SMP) was prepared for the Site and was approved by NYSDEC on May 15, 2017. The SMP says that '[t]he property may be used for restricted residential use (commercial and industrial uses allowed, per zoning)." The executive summary from the SMP and approval letter is included in Appendix C.

1 GPR Property

This parcel was occupied by former industrial owners General Dynamics and Lunn Industries, which conducted operations from 1959 through 1988. These operations included machining for military machines/materials, and involved the generation of large quantities of hazardous waste and the use of large quantities of solvents for parts cleaning. This site subsequently has been occupied by multiple commercial operations from at least 2003 through the present.

Correspondence from Roux, the environmental consultant leading the remediation effort for the 1 GPR Property, is included in Appendix C. Roux confirms that in September 2017, the site was entered into the New York State Brownfield Cleanup Program (BCP – Site No. C130223) and was intended for multifamily residential and commercial uses. NYSDEC's approval of the Brownfield Cleanup Agreement is included in Appendix C. As indicated, a Remedial Investigation (RI) has been performed at the site and Roux is currently in the process of revising its Remedial Investigation Report (RIR). The RIR confirms that the proposed remedy to be detailed in the Remedial Action Work Plan will include addressing impacted soil, groundwater, and soil vapor using excavation, cover system installation, and other engineering controls to ensure that the site is safe for residential uses. Roux confirms that the site can be safely completed in a manner acceptable to the NYSDEC through these measures.

As indicated above, the existing information indicates that both of the adjacent parcels under consideration for the relocation of workforce housing are suitable candidates for multi-family housing, consistent with the planned use of these parcels under the proposed PUD Amendment. Furthermore, the intended use of these parcels is consistent with the reuse of formerly contaminated lands throughout the current PUD area, which have also been required to undergo remediation to make them suitable for residential development. Both of the adjacent parcels being considered for development under the proposed Amendment would be subject to the same requirements during construction and operation that have been established in the Findings Statement for the lands within the current PUD area, as discussed above with respect to Blocks A, D, E, F and J, thereby assuring the protection of human health and safety, and the environment.

As discussed above, the Findings Statement establishes comprehensive requirements to address subsurface environmental conditions in a manner that ensures the health and safety of construction workers and nearby sensitive receptors during site disturbance activities, and of residents and other site occupants and visitors during long-term project operations, and also protects the environment. These requirements would be extended to either of the adjacent location(s) that ultimately will accommodate the workforce housing relocated from Block F under the proposed PUD Amendment, thereby indicating that this upcoming phase of PUD development will be governed by the same provisions that have been established in the Findings Statement for the current PUD area. The environmental site assessment information for the 1 GPR and Konica Properties, as summarized above, establishes that they are feasible for occupancy with multifamily housing, thereby demonstrating that RXR's intended acquisition of these lands would realistically serve the planned purpose of allowing the PUD Master Plan, as amended under the current application, to provide the requisite workforce housing (and their potential additional build-out).

2.4 Water Resources

As discussed previously, the two parcels being considered as sites for the relocated workforce housing – i.e., 1 Garvies Point Road and the Konica Minolta Site – have already been essentially fully disturbed and developed, conditions which help to facilitate the implementation of standard stormwater management measures that are specified in the Findings Statement for all areas of development within the current PUD area. The stormwater management strategy, detailed below for each property, is consistent with measures set forth in the original PUD Master Plan. Such measures, detailed below for each property, would help to minimize development-related surface water impacts. The incorporation of either of these properties into the PUD in connection with the relocation of workforce housing and conceptual full-build outs under the proposed PUD Amendment would also subject them to the requirements of the Findings Statement for stormwater management during construction, including the preparation of a SWPPP (or incorporation into the existing SWPPP for the PUD Master Plan) and the associated preparation of a site-specific Erosion and Sediment Control Plan, which would mitigate the potential for construction activities to adversely impact Glen Cove Creek and Hempstead Harbor.

1 GPR Property

The applicant's civil engineer for the PUD Master Development Plan, PS&S, has reviewed available information for the existing 1 GPR Property and provided a conceptual stormwater management feasibility analysis for the full build-out of the site, included in Appendix D.

As this property was not incorporated into the original stormwater management design for the current PUD Plan, the assessment conservatively assumes that direct runoff associated with the 1 GPR Property (and the Konica Property detailed below) would be managed as an independent system with limited reliance on the City's storm sewers. The stormwater strategy for the conceptual full build-out of the 1 GPR Property would follow the same methodology implemented for the current PUD Plan. Specifically, the proposed system would achieve the 2-inch water quality requirement by utilizing subsurface detention/irrigation chambers and a "Jellyfish" water quality device, which provides stormwater treatment. Stormwater runoff would be detained on-site to limit overflow during peak rainfall events. It is anticipated that the overflow sewer would then connect to an existing storm sewer system and outfall within Crescent Park. PS&S, designer of the stormwater management system for the current PUD Plan, is confident that the proposed design can accommodate the necessary stormwater infrastructure to comply with water quality requirements. The full stormwater system design, including design details and locations of the facilities, will be prepared at the time of the detailed site plan application, and will take into account the amount of impervious surface and other relevant stormwater design factors. The system will be designed in accordance with the New York State Pollutant Discharge Elimination (SPDES) System *General Permit for Stormwater Discharges from Construction Activity* (GP-0-20-001 or later).

Konica Property

PS&S has also reviewed available information for the existing Konica Property (Parcels A, B, and C) and provided a conceptual feasibility analysis for the full build-out of the site, included in Appendix D.

As detailed, drainage improvements for Parcels B and C would be designed as standalone systems. Subject to conformance to the site remediation goals and restrictions (see Section 2.3, above), it is anticipated that these parcels would utilize on-site infiltration through a series of drywells. The respective collection systems and storage volumes would be designed in compliance with Nassau County standards.

Parcel A will utilize on-site detention/irrigation and "Jellyfish" water quality treatment devices to achieve the 2-inch water quality volume requirement. The conceptual stormwater system would likely necessitate a new sewer connection across Herb Hill Road and an additional outfall to Glen Cove Creek. Permit requirements for the future outfall as well as related drainage calculations would be included as part of the preliminary site design.

The conceptual stormwater systems would be fully designed during detailed site plan review to accommodate the necessary stormwater infrastructure to comply with water quality requirements. This would be achieved by incorporating many of the same strategies utilized elsewhere within the current PUD Plan (i.e. subsurface irrigation/detention chambers, water quality treatment devices) and introducing a new outfall to Glen Cove Creek. The stormwater systems would follow all code requirements and demonstrate no adverse drainage effects to the Konica Property or adjacent parcels.

The stormwater systems for both the 1 GPR and Konica Properties would be designed in accordance with the requirements specified in the Findings Statement. Where possible, the detailed site plans would identify green infrastructure opportunities. Similar to the current PUD Plan sites, the package of detailed site plans for these parcels also would include landscape and grading/drainage plans, which would address on a site-specific basis the relevant information pertaining to the protection of water resources as required by the Findings Statement.

As noted previously, the site plan package for the development of parcels covered under the proposed PUD Amendment would include a Soil Erosion and Sediment Control Plan, prepared by the Applicant's site engineer to provide site-specific control measures that would be implemented throughout construction and remain in effect until disturbed areas are permanently stabilized. Each site plan submission will also include site-specific details

regarding stormwater management, including the integration of the new infrastructure to be installed on the given parcel into the overall system for collecting and treating runoff prior to discharge into the ground or via overflow to surface waters (e.g., "jellyfish" devices and outfalls that are already in-place, along with new structures of a similar nature that may be needed to accommodate drainage from the expanded development area). Upon the implementation of these plans, development under the proposed PUD Amendment would be consistent with the requirements of the Findings Statement with respect to the protection of water resources.

2.5 Ecology

The 1 GPR and Konica Properties have already been essentially fully disturbed and developed, and lack significant ecological resources, similar to conditions on the adjacent lands contained within the current PUD boundary. Therefore, similar to the current PUD, relocation of the workforce housing component of the PUD onto either of these properties would not be expected to result in a significant adverse impact on ecological resources. The 1 GPR Property conceptual build-out anticipates the construction of two, three-story buildings and one, one-story building, which are low-scale in comparison to buildings planned for Block A and Blocks E and F. Therefore, ecological impacts due to shading on the Garvies Point Preserve are not anticipated. Given the location of the Konica Property at a significant distance from the Preserve, there would be no significant shadow impacts resulting from the build-out of that property. It is expected that the development of either of these parcels as part of the PUD would be conducted in a manner akin to the existing PUD area, namely, to avoid the use of large exterior glass walls, incorporate architectural embellishments and articulations, and use native and non-invasive trees and shrubs for the landscaped areas. Therefore, it is similarly expected that expansion of the current PUD boundary to include either the 1 GPR Property or the Konica Property would not result in a significant ecological impact not already identified and addressed in the Findings Statement.

In summary, the entire land area involved in the proposed PUD Amendment is extensively developed and devoid of significant ecological resources. The Findings Statement requires "that the potential for an increased abundance of exotic or invasive species in the Garvies Point Preserve shall be minimized by the use of native, naturalized, and non-invasive trees and shrubs for the landscaped areas..." Conformance with this requirement would be ensured by the Planning Board's review of landscaping plans that are required to be included in the drawing packages submitted for site plan approval. Accordingly, it is expected that the redevelopment of the PUD area, including either the 1 GPR or Konica Properties, would result in a slight improvement in ecological conditions on the site.

2.6 Transportation and Parking

A Traffic Impact Study (TIS) was prepared to evaluate potential traffic and parking impacts of the Proposed Action. The study methodology for the analysis is set forth in the TIS, included as Appendix E of this Supplemental Analysis. Key aspects of the TIS are summarized below.

Roadway and Intersection Conditions

To determine the potential traffic impacts of the Proposed Action, the following roadways and intersections were identified for analysis.

Singalized Intersections:

- 1. Glen Cove Avenue/Brewster Street at Pratt Boulevard (NYS Route 107)/Charles Street
- 2. Brewster Street at Mill Hill Road/Herb Hill Road
- 3. Glen Cove Avenue at Charles Street
- 4. Charles Street at Herb Hill Road

Unsingalized Intersections:

- 5. Garvies Point Road/Dickson Street at Herb Hill Road
- 6. The Place at Charles Street
- 7. Hill Street/Coles Court at Mill Hill Road/The Place

It should be noted that the first five intersections were previously analyzed in the Tech Memo. The data associated with the previous study were utilized for these intersections in this analysis. The last two intersections (The Place at Charles Street and Hill Street/Coles Court at Mill Hill Road/The Place) were not studied previously but are included due to their proximity to the Konica Property, and therefore data collection efforts were undertaken for those locations.





Study Intersections (TIS Figure 2)

Existing Operations

Intersection turning movement counts utilized were collected on Thursday February 25, 2021 between 7:00 a.m. and 9:30 a.m. (for weekday a.m. peak) and between 4:00 p.m. and 6:30 p.m. (for weekday p.m. peak) and on Saturday February 27, 2021 between 11:00 a.m. and 3:00 p.m. (for Saturday midday peak) at the two additional intersections analyzed under this TIS (The Place at Charles Street and Hill Street/Coles Court at Mill Hill Road/The Place). These traffic counts were conducted during these times to coincide with the data collected for the previously conducted study analyzed in the Tech Memo.

Detailed turning movement count figures refenced from the previous study and summaries of the collected turning movement counts can be found in the complete TIS (Appendix E).

Future Conditions

An analysis was performed to evaluate the effect of the proposed PUD Amendment on future traffic conditions in the area. The 2016 background traffic volumes obtained from the previous study, as well as the data collected at the two additional intersections in 2021, were projected to the year 2025, reflecting the year when construction associated with the proposed PUD Amendment is expected to be completed and buildings operational.

2025 Background Traffic Condition

The 2025 Background Traffic condition, which excludes the Garvies Point Mixed-Use Waterfront Development Project, was developed to project background traffic to the future 2025 analysis year and includes background traffic growth and any other significant planned developments in the immediate vicinity of the PUD area.

While the background volumes utilized from the previous study included other planned developments at that time of that study, any additional projects outside of those developments were also considered. Based on the files received previously from the City of Glen Cove, one additional other planned project was identified:

 Glen Cove Village Square, a mixed-use development located between School Street and Brewster Street consisting of 146 residential apartments, retail space, and medical office space. This project is projected to generate 74 trips (28 entering, 46 exiting) during the weekday a.m. peak hour, 132 trips (71 entering, 61 exiting) during the weekday p.m. peak hour, and 142 trips (72 entering, 70 exiting) during the Saturday midday peak hour.

This traffic was assigned to the study area in accordance with the previously performed traffic assessment for the project.

To account for increases in general population and background growth not related to the proposed PUD Amendment, an annual growth factor was applied to the traffic volumes. Based on the New York State Department of Transportation published information, the growth rate anticipated for the Town of Oyster Bay, which includes the City of Glen Cove, is 0.6 percent per year. This methodology accounts for any other planned developments in the vicinity of the Site that may have been overlooked. A total growth rate of 4.5 percent (9 years

at 0.6 percent per year) was applied to the 2016 traffic data to develop the background traffic based on the anticipated Build Year of 2025. Similarly, a total growth rate of 2.4 percent (4 years at 0.6 percent per year) was applied to the counted 2021 traffic data to develop those intersections to the anticipated Build Year of 2025.

After applying the growth factor to the traffic volumes, the resulting 2025 Background Traffic volumes for the weekday a.m., p.m. and Saturday midday peak hours are shown in the TIS (Appendix E).

2025 Build Condition with Previously Approved PUD

To estimate the traffic impact associated with the proposed PUD Amendment, the traffic volumes expected to be generated by the previously approved PUD Master Plan and the traffic conditions which would exist in 2025 without the proposed PUD Amendment. To be consistent with trip generation rates of the previous study, the Institute of Transportation Engineers (ITE), *Trip Generation Manual*, *7*th *Edition* was used. The total net trip generation for the previously approved PUD Master Plan was estimated to be 691 trips (259 entering, 432 exiting) during the weekday a.m. peak hour, 954 trips (520 entering, 434 exiting) during the weekday p.m. peak hour, and 892 trips (479 entering, 413 exiting) during the Saturday midday peak hour.

2025 Build Condition with Amended PUD

In order to estimate the number of new trips that would be generated from development at either property (i.e., the 1 GPR Property or the Konica Property) and to be consistent with trip generation rates of the previous study, the ITE, *Trip Generation Manual, 7th Edition* was used (see Appendix E for the Land Use Codes used). In addition, a 'worst case' scenario of the development of either the 1 GPR Property or the Konica Property was determined. Specifically, in comparison to the 1 GPR Property, the conceptual development at the Konica Property would generate 183 more trips during the weekday a.m. peak period, 330 more trips during the weekday p.m. peak period, and 275 more trips during the Saturday midday peak period. Therefore, for conservative analysis purposes, the TIS assumed the Konica Property would be included within the PUD area.

With the inclusion of the Konica Property, the proposed PUD Amendment would generate a total of 709 trips (202 entering, 507 exiting) during the weekday a.m. peak hour, 1,152 trips (667 entering, 485 exiting) during the weekday p.m. peak hour, and 1,141 trips (605 entering, 536 exiting) during the Saturday midday peak hour. During the weekday a.m. peak hour, the proposed PUD Amendment would generate 18 more trips in comparison with the previously approved PUD Master Plan. Similarly, during the weekday p.m. peak hour, the PUD Amendment would generate 198 more trips, and during the Saturday midday peak hour, the PUD Amendment would generate 249 more trips, both in comparison with the previously approved PUD Master Plan.

Trip Distribution and Assignment

In order to assign the trips associated with the PUD Amendment to the roadway network, a review was undertaken of the distribution associated with the previous study, along with the

modified development plan. In doing so, the percentages of trips to individual areas of the overall PUD area were redistributed to account for the differing locations of the proposed development. The overall global directional distribution to locations outside of the immediate PUD area were kept in common with the previously approved PUD Master Plan. These were then applied to the peak hour trips and the resulting Amended PUD site generated traffic volumes for the weekday a.m., p.m., and Saturday midday peak hours.

To determine the future 2025 Build Condition with Amended PUD intersection traffic volumes, the project-generated trips were added to the 2025 traffic volumes at the key intersections. The resulting traffic volumes for the weekday a.m., p.m., and Saturday midday peak hours are shown in Appendix E.

Traffic Operations Analysis

To assess quality of traffic flow associated with the Proposed Action, roadway capacity analyses were conducted with respect to the 2025 Build Condition with Previously Approved PUD and 2025 Build Condition with Amended PUD. These capacity analyses provide an indication of the adequacy of the roadway facilities to serve the anticipated traffic demands based on the incremental increase associated with the modified development plan.

The evaluation criteria used to analyze area intersections in this traffic study are based on the *Highway Capacity Manual 6th Edition (HCM*). The term 'level of service' (LOS) is used to denote the different operating conditions that occur at an intersection under various traffic volume loads. The capacity analyses were done using the traffic analysis software Synchro, version 10, a computer program developed by Trafficware Ltd. Synchro is a complete software package for modeling and optimizing traffic signal timing. Synchro adheres to and implements the guidelines and methods set forth in the HCM. This analysis methodology was used to evaluate the ability of an intersection or roadway to efficiently handle the number of vehicles using the facility. Synchro was used to model and analyze the conditions at the key intersections.

Level of Service Analysis - Signalized Intersections

LOS analyses were conducted for the 2025 Build Condition with Previously Approved PUD and 2025 Build Condition with Amended PUD conditions for the key study intersections. The results of the capacity analyses for each of the signalized intersections in the two conditions are provided within Tables 9, 10, and 11 of the TIS. The detailed Synchro capacity analysis worksheets are also contained within the TIS (Appendix E).

Weekday A.M. Peak Hour

During the weekday a.m. peak hour, the results in the 2025 Build Condition with Amended PUD are consistent with the results in the 2025 Build Condition with Previously Approved PUD, for all locations, with only minor increases in delay. Therefore, the Proposed Action is anticipated to have minimal effect on the roadway network during the a.m. peak period and no mitigation is warranted or proposed. It should be noted that the results of the analysis for the intersection of Glen Cove Avenue/Brewster Street and Charles Street indicate an improvement in LOS from the 2025 Build Condition with Previously Approved PUD to the 2025 Build Condition with Amended PUD, despite the increase in traffic.

Weekday P.M. Peak Hour

The results in the 2025 Build Condition with Amended PUD are consistent with the results in the 2025 Build Condition with Previously Approved PUD for the following intersections:

- Glen Cove Avenue/Brewster Street at Pratt Boulevard (NYS Route 107)/Charles Street
- Brewster Street at Mill Hill Road/Herb Hill Road
- Glen Cove Avenue & Charles Street
- Charles Street at Herb Hill Road

However, it was found that there was a change in the LOS at the Glen Cove Avenue/Brewster Street at Charles Street, Glen Cove Avenue at Charles Street, and Charles Street at Herb Hill Road intersections warranting mitigation.

Saturday Midday Peak Hour

During the Saturday midday peak hour, the all the intersection LOS results in the 2025 Build Condition with Amended PUD are consistent with the 2025 Build Condition with Previously Approved PUD except at the Glen Cove Avenue/Brewster Street at Charles Street. A change in LOS was identified warranting mitigation.

Level of Service Analysis – Unsignalized Intersections

The results of the capacity analyses for each of the unsignalized intersections in the study area for the 2025 Build Condition with Previously Approved PUD and 2025 Build Condition with Amended PUD conditions are provided within Tables 12, 13, and 14 of the TIS. The detailed Synchro capacity analysis worksheets are also contained within the TIS (Appendix E). It is important to note that the recently constructed roundabout at the intersection of Garvies Point Road and Herb Hill Road is reflected in both conditions.

The TIS indicates that the newly constructed roundabout at the intersection of Garvies Point Road and Herb Hill Road operates with low delays in both conditions in all peak hours evaluated. Moreover, during the relevant peak hours, the results in the 2025 Build Condition with Amended PUD are consistent with the results in the 2025 Build Condition with Previously Approved PUD for all turning movements at the unsignalized intersections.

Mitigation

No capacity changes have been recommended at any of the intersections warranting mitigation due to change in LOS. However, proposed mitigation measures presented in Table 15 of the TIS include changes to cycle length/split changes/signal progression to improve the future condition. Additionally, no mitigation measures were determined to be necessary during the a.m. peak hours.

Tables 16 and 17 in the TIS (Appendix E) indicate the mitigation results for the 2025 Build Condition with Previously Approved PUD, 2025 Build Condition with Amended PUD, and 2025 Build Condition with Amended PUD Mitigation Scenarios. With the implementation of said mitigation measures, the signalized intersections that were reanalyzed operate at the same overall LOS as the 2025 Build Condition with Previously Approved PUD condition during the time-periods analyzed. Based on the detailed evaluation of the potential impacts of the proposed PUD Amendment, upon the implementation of the signal timing changes detailed above, the traffic impacts associated with the Amended PUD Master Plan are mitigated to provide traffic service consistent with those associated with the PUD which was previously approved.

Project Mitigation Status

The previously issued Findings Statement sets forth thresholds whereby specific mitigation was to be in place based on the level of development as the Project was built out. As the size of the project means that the build-out will occur over a number of years, these thresholds allow for a phased implementation of the required mitigation based on the stage of the build-out over time.

To date, all mitigation required for the current stage of the Project's occupancy has been constructed. The next threshold to be reached will trigger the need for implementation of improvements at the intersection of Glen Cove Road at Glen Head Road. These improvements are currently in the design process and review process with the New York State Department of Transportation with a resubmission to address comments to occur soon. The threshold at which these improvements are required to be in place is the occupancy of 407 residential units. Currently 312 units will be occupied by early April 2021. Therefore, the project remains below the threshold for this improvement which is expected to be in place prior to the threshold being reached.

Conclusions

Based on the results of the analyses conducted for the purpose of this report, the TIS offers the following conclusions:

- The Findings Statement established maximum trip generation thresholds for any future modifications. These thresholds were 691 trips (259 entering and 432 exiting) during the weekday a.m. peak hour, 954 trips (520 entering and 434 exiting) during the weekday p.m. peak hour, and 892 trips (479 entering and 413 exiting) during the Saturday midday peak hour.
- The traffic generated by the previously approved PUD Master Plan was determined to be accommodated on the adjacent roadways and intersections after the implementation of required mitigation measures. This includes the installation of a 1 lane roundabout at the intersection of Garvies Point Road/Division Street and Herb Hill Road.
- Two parcels are under consideration for inclusion in the Amended PUD Master Plan to serve as a site to construct workforce housing units: the 1 GPR and Konica Properties. It is understood that the construction of the workforce housing units on either of these sites would likely result in development beyond the housing units alone.
- Of these two properties, the conceptual development plan for the Konica Property was determined to be significantly larger and potentially more impactful, with more traffic generated in comparison with 1 GPR Property. As a result, this property was selected for inclusion to represent the 'worst case' scenario with regards to the traffic generated.

- Based on the same methodologies used to develop the aforementioned trip generation thresholds, the proposed PUD Amendment, including the Konica Property, would generate 709 trips (202 entering and 507 exiting) during the weekday a.m. peak hour, 1,152 trips (667 entering and 485 exiting) during the weekday p.m. peak hour, and 1,141 trips (605 entering and 536 exiting) during the Saturday midday peak hour.
- The capacity analysis performed shows that the project generated traffic associated with the proposed PUD Amendment will result in no significant impact on the majority of the intersections identified for this study in comparison to the capacity analysis performed for the roadway network with the traffic for the previously approved PUD Master Plan. Those study intersections will continue to operate similarly with minimal increases in overall delay and no changes in LOS.
- The impacts to the intersections of Glen Cove Avenue/Brewster Street at Charles Street, Glen Cove Avenue at Charles Street, and Charles Street at Herb Hill Road are easily mitigated via signal timing and phasing modifications. As a result, no modifications to the roadway network would be required in comparison with the conditions which were established by the previously approved PUD Master Plan.
- The traffic levels of service with the PUD Amendment would remain consistent with the traffic operations associated with the previously approved PUD Master Plan, upon the implementation of the recommended signal timing mitigation. These mitigation measures would not be implemented until the Applicant applies for an amendment to the PUD boundary to accommodate one or the other of the adjacent parcels within the PUD, at which time the Applicant would submit for site plan review. Mitigations measures would be coordinated prior to site occupancy.

2.7 Air Quality (Including Construction-Related Air Quality)

1 GPR Property

Similar to the proposed use of Blocks A, D, E, F, and J as discussed in the Tech Memo, the proposed use of the 1 GPR Property for residential and retail uses would not involve activities that are associated with the potential for significant air quality impacts during operation. As with the existing PUD area, construction of the 1 GPR Property would have the potential to adversely affect air quality as a result of diesel emissions and fugitive dust. However, as detailed below, development on the 1 GPR Property would be required to incorporate the same construction-related air quality mitigation measures listed in the Findings Statement, including, but not limited to, reduction in the use of diesel equipment to the maximum extent practicable, idle time restrictions, locating emission sources far from existing sensitive uses, and implementation of fugitive dust control plans.

As discussed in Section 2.6 above, increases in trips generated by the full build-out of the 1 GPR Property are anticipated to be minimal compared with the existing build-out of the full PUD Master Plan, and are anticipated to have minimal effect on the roadway network. Projected intersection volumes and levels of service indicate that significant adverse impacts from mobile sources resulting from build-out of the 1 GPR Property are not anticipated

Konica Property

The proposed use of the Konica Property for residential, office, and retail uses would not involve activities that are associated with the potential for significant air quality impacts during operation.

Similar to the 1 GPR Property, construction on the Konica Property would have the potential to adversely affect air quality as a result of diesel emissions and fugitive dust. However, the same construction-related air quality mitigation measures listed in the Findings Statement and summarized above would be implemented during construction, and therefore significant adverse construction-related air quality impacts are not anticipated.

As discussed in Section 2.6 above, increases in trips generated by the full build-out of the Konica Property are anticipated to have minimal effect on the surrounding roadway network. The additional intersections analyzed at The Place/Charles Street and The Place/Mill Hill Road have the capacity to accommodate full build-out of the property. Projected intersection volumes and levels of service for the full network indicate that significant adverse impacts from mobile sources resulting from build-out of the Konica Property are not anticipated.

Cumulative Assessment (including Construction-Related Air Quality)

Air quality was not found to be a significant environmental issue in the evaluation of the PUD Master Plan or the Findings Statement. However, all development under the PUD Master Plan is required to incorporate the construction-related air quality mitigation measures listed in the Findings Statement, as well as project-specific measures, including air monitoring of suspended particulates, watering of all trucks and exposed excavation areas, dust control measures, proper maintenance of construction vehicles, conformance to the Site Management Plan and Soil Management Plan, etc. All buildings constructed on the Subject Property would employ systems and equipment and would be constructed in a manner that ensures compliance with the applicable requirements of the Findings Statement for minimizing air emissions during operation.

Since the proposed PUD Amendment and inclusion of either the 1 GPR Property or the Konica Property would cumulatively result in a marginal increase in vehicular trip generation during operation, as compared to the development scenario on which the Findings Statement was based, as discussed above in Section 2.6, associated mobile air emissions would not be significantly increased.

Previous environmental review of the PUD Master Plan, as summarized in the Findings Statement, included an assessment of nearby industrial sources as well as project-related greenhouse gas emissions. As the five nearby industrial sources are either further from or equidistant to the 1 GPR and Konica Properties compared with the current PUD area, no significant adverse industrial source air quality impacts are anticipated. In addition, similar measures to reduce the carbon footprint of the PUD area outlined in the Findings Statement, such as the use of energy efficient HVAC systems, would be employed on the 1 GPR and Konica Properties. Overall, no significant adverse air quality impacts are anticipated as a result of the cumulative build-out of the proposed PUD Amendment, including either the 1 GPR Property or the Konica Property.

2.8 Noise (Including Construction-Related Noise)

1 GPR and Konica Properties

Similar to the proposed uses within the current PUD area as discussed in the Tech Memo, the conceptual build-out of the 1 GPR and Konica Properties for residential, retail, and limited office uses would not involve activities that are associated with the potential for significant noise impacts during operation. Similar to the current PUD area blocks, build-out on either of these two properties would comply with the City of Glen Cove Noise Code (Chapter 196 of the City Code).

In addition, as discussed in Section 2.6 above, increases in vehicular trips generated by the full build-out of the 1 GPR and Konica Properties would be marginal as compared to the development scenario on which the Findings Statement was based, and would have minimal effect on the surrounding roadway network. Therefore, it is not anticipated that the PUD Amendment would result in significant traffic-related noise impacts at locations not already identified as having the potential for impacts. However, the environmental analysis summarized in the Findings Statement did identify one location (Herb Hill Road just west of Charles Street) as having the potential for significant traffic-related noise increases to affect nearby sensitive noise receptors within the PUD area. As this identified location is at the southeast corner of the Konica Property, there is the potential for the PUD Amendment to result in significant adverse noise impacts to future residential buildings on the Konica Property.

However, as outlined in the Findings Statement, the Applicant will monitor conditions at this location during future construction, and will implement similar mitigation measures identified previously, including: installation of double-glazed windows or storm windows with good sealing properties which result in a minimum of 27 dBA window/wall attenuation; and inclusion of alternative means of ventilation on the Konica Property buildings. As with the current PUD area sites, further measures for noise mitigation would be identified and evaluated during the site plan review process for each property.

With the implementation of these mitigation measures, it is not anticipated that the conceptual build-out of either the 1 GPR or Konica Properties would result in significant traffic-related noise impacts, or impacts not already identified and addressed in the Findings Statement.

Cumulative Assessment (including Construction-Related Noise)

The environmental analysis summarized in the Findings Statement did not find that there would be a significant adverse noise impact. However, recommendations were provided to further reduce potential noise associated with future development; and all such development would comply with the applicable requirements of the Findings Statement,

including construction-related noise abatement measures, architectural noise attenuation features, and compliance with relevant provisions of the City's noise ordinance.

Since the proposed PUD Amendment would cumulatively result in a marginal increase in vehicular trip generation during operation, as compared to the development scenario on which the Findings Statement was based, as discussed above in Section 2.6 above, traffic-related noise levels would not be significantly increased. Conditions leading to potential significant adverse impacts already identified along Herb Hill Road just west of Charles Street would be monitored and mitigated during full build-out of the proposed PUD Amendment. Overall, no significant adverse noise impacts are anticipated as a result of the cumulative build-out of the proposed PUD Amendment, including either the 1 GPR Property or the Konica Property.

2.9 Community Facilities and Services

As with the current PUD area, the 1 GPR Property and Konica Property are currently or formerly developed with industrial uses, such that the Proposed Action would not result in the physical alteration or displacement of any community facilities.

Police

Like the current PUD area, the two properties contemplated for the relocation of workforce housing are located within the jurisdiction of the City of Glen Cove Police Department. It is expected that the City of Glen Cove Police Department would be able to provide service to the two properties, as uses similar to those that the police department currently services are being proposed (i.e., multi-family residential units and commercial). Consultations will be undertaken with the police department upon inclusion of either property into the PUD area to discuss service to the proposed developments. Additionally, any proposed development would be equipped with on-site security features similar in nature to the remainder of the PUD Master Plan, including key-card access and closed-circuit cameras. Moreover, either developed property would benefit from the greater Garvies Point development security measures that are provided by the Master Association, including roving patrols. These measures would alleviate any additional demand on the police department for security and emergency services.

Harbor Patrol

As with the current PUD area, the 1 GPR Property and Konica Property are located proximate to the Hempstead Harbor and Long Island Sound, both of which are patrolled by the City of Glen Cove's Harbor Patrol. It is expected that residents and visitors of either development are likely to use the beach and/or waterway. However, no significant adverse impacts associated with the previously approved PUD Master Plan's demand for Harbor Patrol services were identified as part of the environmental review process. As the proposed uses and nature of development would be similar on either of the two adjacent parcels, associated increased call volumes or need for additional Harbor Patrol hours and equipment is not anticipated to be significant. Additionally, it is anticipated that the City could use a

portion of the taxes generated by the development on either the 1 GPR or Konica Properties to offset any additional costs associated to the Harbor Patrol

Fire, EMS/Ambulance

The 1 GPR and Konica Properties are both located within the jurisdiction of the City of Glen Cove Volunteer Fire Department, as well as the Glen Cove Volunteer Emergency Medical Services Corps. As the proposed uses and nature of development on either of these parcels would be similar to the previously approved PUD Master Plan, it is expected that the fire department and Volunteer Emergency Medical Services Corps would be able to provide fire protection and emergency medical services to the two properties. Consultations will be undertaken with the fire department and Volunteer Emergency Medical Services Corps to discuss service protection to either proposed development.

Hospitals

There are several health care facilities located within the City of Glen Cove in close proximity to the two properties. As outlined in the Findings Statement, the previously-approved PUD Master Plan was estimated to result in an increase of approximately 8 hospital beds to serve the additional population, out of approximately 1,066 available beds in Nassau County, and as such, no significant adverse impacts to health care facilities was identified. Using the same factor of 4 hospital beds per 1,000 new residents, the proposed conceptual development at the 1 GPR Property and Konica Property would result in a demand for 0.76 beds and 2.1 beds to serve the projected population, respectively.

Schools

Like the current PUD area, the 1 GPR and Konica Properties are located within the Glen Cove City School District (the School District), which contains four elementary schools, one middle school, and one high school. Per the New York State Education Department, in the 2018-2019 school year (latest enrollment data provided), the School District had an enrollment of 3,162, a decrease in total enrollment from the previous school year by approximately 28 students (2017-2018: 3,190).² Several private education facilities are also located within the City of Glen Cove, including the Solomon Schechter High School and All Saints Regional High School.

The conceptual development on the 1 GPR Property includes 105 multi-family residential units, which would include 12 studios, 71 one-bedrooms units, and 22 two-bedroom units. Anticipated impacts of the conceptual development at the 1 GPR Property were analyzed using multipliers developed by the Rutgers University Center for Urban Policy Research (Rutgers Study), published in 2006.³ The multipliers are shown below in Table 2; calculations were rounded up to the nearest whole number.

² New York State Education Department. Glen Cove City School District Enrollment. Available at: <u>2019 | GLEN COVE CITY</u> <u>SCHOOL DISTRICT - Enrollment Data | NYSED Data Site</u>. February 2021.

³ Burchell, Robert W., David Listokin and William Dolphin, *Residential Demographic Multipliers, Estimates of the Occupants of New Housing (Residents, School-Age Children, Public School-Age Children) by State, Housing Type, Housing Size, and Housing Price – New York State, Center for Urban Policy Research, Edward J. Bloustein School of Planning and Public Policy (June 2006).*

Type of Unit	Unit Count	Total	Projected	PSAC Multipliers	PSAC
		Persons	Total		Generation
		Multiplier	Persons		
Studio*	12	1.67	21	0.07	1
One-Bedroom	71	1.67	119	0.07	5
Two-Bedroom	22	2.31	51	0.16	4
Total	105		191		10

Table 2 – 1 GPR Property	Population and Public School-A	ged Children Generation	(Rutgers Study)
			· · · · · · · · · · · · · · · · · · ·

*The Rutgers Study does not have a multiplier for studios for this residential type (5+ units, rental). Therefore, the multiplier for one-bedroom units was used.

As illustrated in the table above, conceptual full build-out at the 1 GPR Property would generate 10 public school-aged children across 13 grades (kindergarten through grade 12), equating to less than one student per grade.

The Konica Property conceptual full build-out would include 336 units including 101 townhome condos consisting of two-and three-bedroom units and 235 multi-family rental units including 23 studios, 118 one-bedroom units, and 94 two-bedroom units. Similar to the analysis above for the 1 GPR Property, multipliers were used from the Rutgers Study and are illustrated in Table 3 below.

Table 3 – Konica Property	- Population and	l Public School-Aged Child	en Generation (Rutgers Study)

Type of Unit	Unit Count	Total Persons Multiplier	Projected Total Persons	PSAC Multipliers	PSAC Generation
Owned					
Two-bedroom	51	1.88	96	0.05	3
Three-bedroom	50	3.00	150	0.49	25
Total Owned	101		246		28
Rental					
Studios*	23	1.67	39	0.07	2
One-Bedroom	118	1.67	198	0.07	9
Two-Bedroom	22	2.31	51	0.16	4
Total Rental	235		288		15
Total	336		534		43

*The Rutgers Study does not have a multiplier for studios for this residential type (5+ units, rental). Therefore, the multiplier for one-bedroom units was used.

As illustrated in the table above, conceptual full build-out at the Konica Property would generate 43 public school-aged children across over 13 grades (kindergarten through grade 12), equating to approximately 3 students per grade.

Parks, Recreation, and Open Space

The two properties are surrounded by many public parks, preserves, and beaches located within the City of Glen Cove, including 29.5± acres of open space incorporated within the current PUD area, which are likely to serve future residents generated by the Proposed

Action. In addition to these open space amenities, the conceptual development of the Konica Property would include both private and publicly-accessible open space to be located just south of The Place and within the building courtyard space. In total, the development on the Konica Property would increase landscaping and open space by approximately 4.8 acres. This would introduce public access to a site that has been historically used for private industry.

Overall, given the significant proposed improvements to open spaces which are already constructed or planned for future phases of the PUD Master Plan, it is not anticipated that development at either site would adversely impact existing public parks, recreation and open space amenities.

Solid Waste

Similar to the current PUD area, the 1 GPR Property and the Konica Property are both located within the jurisdiction of the City of Glen Cove's Department of Public Works for the collection of residential, certain commercial, and small amounts of industrial garbage materials. A majority of these materials collected are brought to the Glen Cove Waste Transfer Facility. The conceptual development at the 1 GPR Property is estimated to generate approximately 13.14 tons per month or approximately 0.4 tons per day of solid waste.⁴ The conceptual development at the Konica Property is estimated to generate approximately 38.7 tons per month or 1.27 tons per day of solid waste.⁵ As stated in the Findings Statement, the transfer station collects an average of 330 tons daily and has a capacity of approximately 600 tons per day. Therefore, the addition of a maximum of 1.27 tons per day of solid waste under the conceptual development at the Konica Property is well within the available capacity at the municipal transfer station.

Cumulative Assessment

Under the proposed PUD Amendment, there would be a maximum 351-unit increase in the total number of residential units (conservatively assuming inclusion of the Konica Property and the 15-unit increase on Blocks E and F), an approximately 32 percent increase above the approved 1,110 units Site-wide, offset by the removal of the 50,000-square foot office building that was approved for Block D.

When accounting for the housing that would be constructed under the proposed PUD Amendment, rental housing would increase by 306 units – i.e., 71 market-rate rental units within the current PUD area (which encompasses the proposed 15-unit increase above the 1,110-unit maximum, and is accounted for within the 172 units currently proposed for Blocks E and F) plus 235 additional rental units (conservatively assuming inclusion of the Konica Property).

⁴ Residential and Retail use: Environmental Engineering, 5th Edition 2003 edited by Joseph A. Salvato, Nelson L. Nemerow and Franklin J. Agardy.

⁵ Office, Residential and Retail use: Environmental Engineering, 5th Edition 2003 edited by Joseph A. Salvato, Nelson L. Nemerow and Franklin J. Agardy.
The tables below show the cumulative anticipated population and public school-aged children generation associated with the proposed PUD Amendment, with the inclusion of either the 1 GPR Property or Konica Property. As shown, the total anticipated population of the PUD including the 1 GPR Property would be 2,546, with approximately 151 school-aged children (see Table 4 below). The total anticipated population of the PUD including the Konica Property would be approximately 3,055 with approximately 171 public school-aged children (see Table 5 below).

As set forth in the Findings Statement, the environmental review conducted in association with the previously approved PUD Master Plan analyzed a worst-case scenario of 239 additional school children generated by the proposed development, and concluded that the School District would have sufficient capacity to accommodate this scenario. Therefore, it can be concluded that the estimated 151 public school-aged children, considerably less than threshold of 239 set forth in the Findings Statement, would not result in significant adverse impacts to the School District.

Table 4 – 1 GPR Property + PUD Population and Public School-Aged Children Generation (Rutgers Study)

Type of Unit	Unit Count	Total	Projected	PSAC Multipliers	PSAC
		Persons	Total		Generation
		Multiplier	Persons		
Owned					
Two-Bedroom*	569	1.88	1,070	0.09	52
Total Owned	569		1,070		52
Rental					
Studio**	12	1.67	21	0.07	1
One-Bedroom	71	1.67	119	0.07	5
Two-Bedroom*	578	2.31	1,336	0.16	93
Total Rental	661		1,476		99
Total	1,230		2,546		151

*Though the existing PUD area development contains a mix of studio, one-bedroom, and two-bedroom units, for conservative analysis purposes, this assessment considers all units (with the exception of the 1 GPR Property) as two-bedroom units to provide a conservative cumulative estimate

**The Rutgers Study does not have a multiplier for studios for this residential type (5+ units, rental). Therefore, the multiplier for one bedroom units was used.

Type of Unit	Unit Count	Total Persons Multiplier	Projected Total Persons	PSAC Multipliers	PSAC Generation
Owned					
Two-bedroom*	620	1.88	1,166	0.05	31
Three-bedroom	50	3.00	150	0.49	25
Total Owned	670		1,316		56
Rental					
Studios**	23	1.67	39	0.07	2
One-Bedroom	118	1.67	198	0.07	9
Two-Bedroom*	650	2.31	1,502	0.16	104
Total Rental	791		1,739		115
Total	1,461		3,055		171

Table 5 – Konica Property + PUD Population and Public School-Aged Children Generation (Rutgers Study)

*Though the existing PUD area development contains a mix of studio, one-bedroom, and two-bedroom units, for conservative analysis purposes, this assessment considers all units (with the exception of the 1 GPR Property) as two-bedroom units to provide a conservative cumulative estimate

**The Rutgers Study does not have a multiplier for studios for this residential type (5+ units, rental). Therefore, the multiplier for one-bedroom units was used.

Hospitals

Using the same factor of 4 hospital beds per 1,000 new residents that was applied during the environmental review for the previously approved PUD Master Plan, the cumulative generated demand for hospital beds, conservatively assuming the inclusion of the Konica Property into the PUD area, would be approximately 12 beds for the proposed PUD Amendment. This equates to approximately 1 percent of the total available beds in Nassau County identified in the Findings Statement. Therefore, no significant adverse impacts to health care facilities are anticipated.

Solid Waste

As detailed above, the conceptual build-out of the Konica Property is estimated to generate approximately 38.7 tons of solid waste per month, or 1.27 tons per day. The cumulative estimated generation for the proposed PUD Amendment, conservatively assuming the inclusion of the Konica Property into the PUD area, is approximately 6.7 tons per day.⁶ As mentioned above, it was identified in the Findings Statement that the transfer station collects an average of 330 tons daily and has a capacity of approximately 600 tons per day. Therefore, the projected solid waste generated by the proposed PUD Amendment is well within the available capacity at the municipal transfer station.

⁶ Office, Residential and Retail use: Environmental Engineering, 5th Edition 2003 edited by Joseph A. Salvato, Nelson L. Nemerow and Franklin J. Agardy.

Thus, it is not expected that the proposed PUD Amendment would alter the Findings Statement conclusion that the overall PUD development would not result in significant adverse impacts with respect to community facilities and services.

The Findings Statement evaluation regarding this parameter focused on measures that should be implemented during the site plan approval process, including a requirement for the installation of sprinklers and automated external defibrillators, the need to consult with the Fire Department to obtain input regarding potential emergency response limitations, and details regarding solid waste management. All site plans submitted for development within the PUD area under the proposed PUD Amendment would comply with these requirements.

2.10 Utilities

1 GPR and Konica Properties

To demonstrate a maximally conservative estimate of water consumption and sewage flows for the proposed PUD Amendment, PS&S provides calculations that include the conceptual full build-out of both the 1 GPR and Konica Properties. The future development at 1 Garvies Point Road would correspond to 21,802 GPD for water and 19,820 GPD for sewer demand. The utility demands for the A, B and C parcels of the Konica Property are 96,963 GPD for water and 88,148 GPD for sewer. Relocation of the 64-unit workforce housing component of the PUD onto either of these properties would equate to a daily utility demand of 19,690 GPD and 17,900 GPD for water and sewer respectively. Existing and recently constructed water and sewer mains within Herb Hill Road and Garvies Point Road account for, and would allow for, connections to serve this these two properties – see PS&S's engineering evaluation in Appendix D.

In addition, at the time that initial outreach with utility providers was made for the PUD Master Plan on which the Findings Statement was based, the Applicant provided National Grid/LIPA with a conservative estimate for future build-out of the full MW-3 Zoning District to make local utilities aware of this overall zone build-out potential. No issues were raised by LIPA or National Grid the time of this initial outreach (around 2008/2009). The Applicant will continue outreach to National Grid and PSE&G in connection with the relocation of the workforce housing units to determine if any improvements are necessary to provide service to either the 1 GPR or Konica Properties.

Cumulative Assessment

PS&S has performed calculations of the cumulative projected water use and sewage flow (i.e., "running tallies") for the PUD Master Development Plan under the proposed PUD Amendment, for comparison to the volumes on which the Findings Statement was based. These calculations are contained in a memo prepared by PS&S – see Appendix D.

The Findings Statement included various scenarios of water demand for the PUD Master Plan development at build-out, ranging between 647,545 GPD and 662,063 GPD. The average daily demand estimated by PS&S for build-out under the proposed PUD Amendment,

including conceptual build-out of both the 1 GPR and Konica Properties is 480,061 GPD, which is only 74.1± percent of the lower end of the range of volumes analyzed in the Findings Statement.

PS&S estimates the average daily sewage flow for full build-out under the proposed PUD Amendment, including conceptual build-out of both the 1 GPR and Konica Properties, at 436,419 gallons per day (GPD), with a total projected peak flow of approximately 1.484 million gallons per day (MGD). These quantities are well below the average daily demand of 493,270 GPD originally anticipated per the Findings Statement, and well below the sewage demand utilized for design of the pump station (i.e., 80.2± percent of both the 544,118 GPD design average daily flow and 1.85 MGD design peak flow).

Follow-up evaluations of potential project-related impacts on water supply and sewage systems, as well as gas and electric service demands, will be conducted during the site plan review phase of the application process to demonstrate continuing compliance with the relevant thresholds and criteria of the Findings Statement prior to the commencement of construction on any given development parcel.

2.11 Economics

The Findings Statement does not identify significant issues with respect to economics. However, it is noted that implementation of the proposed PUD Amendment would continue the overall repurposing of the Subject Property as well as the 1 GPR or Konica Properties and the associated revitalization of the Glen Cove Creek waterfront.

As noted previously, the proposed PUD Amendment reflects the Applicant's response to current conditions in the residential real estate market and, more specifically, is directed at addressing the strong demand for market-rate rental units that is evidenced by the high absorption rate of new units of this type which recently have been constructed in the Glen Cove Creek area. Conversely, there has been a well-documented decline in demand for office space on Long Island, accelerated by conditions brought on during the COVID-19 pandemic. This is evidenced by declining absorption rates and overall increased availability in the office market across Long Island. The CBRE Long Island Office Q4 2020 MarketView report notes that "Long Island posted negative 325,000 sq. ft. of net absorption in Q4 2020, the third consecutive guarter of negative absorption, raising Long Island's availability rate to 12.4%. Space additions in Q4 of 895,000 sq. ft. greatly outpaced the guarter's limited leasing activity."⁷ Being responsive to these market trends would help the project maintain its momentum and promote its continuing success, while also advancing the economic and fiscal benefits being realized by the City. The proposed PUD Amendment, including potential inclusion of either the 1 GPR or Konica Properties, would maintain a smaller future office component within the PUD compared with the current PUD Plan (i.e., the 50,000 SF of office use would no longer be planned for Block D), to allow for the potential that office market conditions continue to change. As acknowledged by the Findings Statement, build-out of the project components be will driven by a response to market opportunities.

⁷ https://www.cbre.us/research-and-reports/Long-Island-Office-MarketView-Q4-2020

Similar to the current PUD Plan, the PUD Amendment (including the relocation of workforce housing and potential build-out of the 1 GPR and Konica Properties) would contribute significant economic benefits from construction of the project, as well as ongoing operational benefits including on-site employment, property tax revenues, and on-site retail sales. Any PILOT is subject to consideration and approval by the IDA.

Overall, the proposed PUD Amendment would be consistent with the Findings Statement, and no significant adverse economic impacts are anticipated as a result.

2.12 Demographics

The Findings Statement does not identify significant adverse impacts with respect to demographics. Although the proposed amended PUD Master Plan would relocate the workforce housing component that had been identified for construction on Block F, this important residential component of the PUD Master Plan would still be retained, to be relocated to an appropriate adjacent location (i.e., the 1 GPR Property or Konica Property). Therefore, similar to that of the current PUD, these units would increase the diverse housing stock within the PUD and overall City.

The Findings Statement establishes caps on the total population (at 2,539) and the number of public school-aged children (PSAC, at 239) generated by the PUD Master Plan. As illustrated in Table 4, the cumulative population generated by the PUD Amendment, assuming inclusion of the 1 GPR Property, would be 2,546 with approximately 151 school-aged children. The cumulative population generated by the PUD Amendment, assuming inclusion of the Konica Property, would be 3,055 with 171 school-aged children (see Table 5). Anecdotally, the Applicant has indicated that there are very few school children in the approximately 350 occupied residential units that have already been constructed within the PUD.

As indicated above, the cumulative demographic totals including either the 1 GPR Property or Konica Property would be higher than the thresholds in the Findings Statement. However, it should be noted that the Findings Statement was based on development within the boundaries of the current 56-acre PUD area, whereas the conceptual development of either the 1 GPR Property or Konica Property under the proposed PUD Amendment would be located outside the current boundaries of the PUD area. As detailed in Section 2.1 above, either of these properties would be developed in accordance with the current 20 units/acre residential density regulations, thereby adhering to the preferred level of density for the PUD.

Furthermore, as analyzed throughout this document, the increase in population would not result in associated significant adverse impacts to other environmental topic areas, such as utility services or community facilities to be used by the new residents. Similar to the of the Current PUD, development on the 1 GPR or Konica Properties would generate jobs during construction as well during operation of the various components presented under the conceptual full build-outs (i.e., permanent jobs from the retail, office and residential). Overall, the proposed PUD Amendment is not anticipated to cause significant adverse impacts on demographics.

2.13 Aesthetics

The Findings Statement establishes requirements for the aesthetic characteristics of future development under the PUD Master Plan. As part of the proposed PUD Amendment, RXR has prepared suitable conceptual drawings to show that the PUD Amendment is consistent with the conclusions and requirements of the Findings Statement and the subsequent environmental review conducted in connection with the previously approved PUD Master Plan, as they relate to aesthetic resources and related parameters.

This component of the proposed developments at either of the two properties (i.e., the 1 GPR Property and Konica Property) being considered is presented in terms of a preliminary feasibility analysis. Full design would not be available until RXR acquires one of the target properties and formulates a more detailed development strategy that includes the required workforce housing component. However, any such development plan would be subject to the aesthetic requirements that have been established for all construction within the PUD area, as discussed elsewhere in this analysis.

Overall, the development under the proposed PUD Amendment would be harmonious with the prior concepts that were considered in the Findings Statement and incorporated into the previously approved PUD Master Plan. As indicated in the Tech Memo, the revised plans submitted for the proposed PUD Amendment show general aesthetic consistency with the previous plans for the respective, individual parcels involved (i.e., Blocks A, D, E, F and J), as well as with the broader themes that are being expressed across the Subject Property. Development of either of the adjacent parcels that are being considered for incorporation into the PUD would be subject to similar guidelines to ensure a high level of aesthetic quality.

In addition to a package of site plan drawings and renderings that would demonstrate consistency with the aesthetic character objectives promulgated in the Findings Statement, all future site plan submissions in furtherance to the proposed PUD Amendment would be required to include lighting plans to similarly show such consistency, including compliance with the City's exterior lighting regulations, as well as signage plans to demonstrate compliance with the signage package approved for the overall PUD Master Plan, and landscaping plans to soften the appearance of the new development and integrate it into the natural environment.

2.14 Cultural Resources

As detailed in the Findings Statement, the Phase IA archaeological assessment conducted for the previously approved PUD Master Plan revealed several locations of archaeological sensitivity within the Subject Property, however recent environmental remediation activities in these areas indicate that the archaeological sensitivity has largely been eliminated. The proposed modifications for Blocks A, D, E, F, and J would not cause new disturbance to any identified area of sensitivity.

The two adjacent parcels that are being considered for the relocation of workforce housing (i.e., the 1 GPR and Konica Properties) are similarly situated as the current PUD area.

According to the New York State Historic Preservation Office's Cultural Resources Information System (CRIS), these properties do not contain listed historical resources, and having previously been essentially fully developed, they are not likely to contain significant archaeological resources. A site-specific review through the New York State Historic Preservation Office (SHPO) would be undertaken, along with other necessary investigations, once a specific parcel(s) has been identified for development by the Applicant.

2.15 Construction Impacts

The conceptual development of either the 1 GPR Property or Konica Property would entail similar construction activities, and be governed by the same mitigation provisions, as apply to the components of the proposed PUD Amendment within the current PUD area discussed in the Tech Memo. Site-specific Construction Management Plans and Soil Erosion and Sediment Control Plans would be included with the site plan applications for either of the adjacent properties, and construction activities would adhere to the restrictions specified in the City's noise ordinance. These mitigation measures would ensure that there would be no significant adverse impacts related to air quality due to diesel emissions and activities that generate fugitive dust; construction noise; and erosion and sedimentation; and vehicular and pedestrian access to the waterfront.

Overall, construction of the improvements encompassing the proposed PUD Amendment entails temporary potential impacts, which would be adequately mitigated by the implementation of proper best management practices, as set forth in the Findings Statement and discussed above.

It is anticipated as a general matter that the development under the proposed PUD Amendment would be implemented in sequential phases, as has been the case for the ongoing construction within the PUD area. Such phasing helps to limit the extent of site disturbance and construction activities occurring at any given time, which moderates the overall magnitude of the associated potential for construction-related impacts. These details would be worked out during the site plan review phase of the application process on a block by block basis.

2.16 Use and Conservation of Energy

All components of the proposed development under the PUD Amendment would include measures and features to minimize energy consumption. As discussed in the Findings Statement, these measures may include, but are not necessarily limited to:

- Natural gas heating
- Energy recovery ventilators (ERV) in the HVAC systems
- Domestic water heating with a minimum thermal efficiency of 90 percent
- Energy Star-compliant appliances, including refrigerators and dishwashers
- Energy-efficient lighting fixtures, which meet Energy Star standards as applicable

- Outdoor lighting that meets, but does not exceed, lighting needs and is "Dark Skies"compliant
- Use of photo and/or motion sensors to control lighting, where practicable
- Use of energy-efficient building components, such as glazing, insulation, and roofing materials
- Orienting buildings to maximize natural lighting and passive solar energy
- Minimizing the quantity of cement and iron/steel needed for construction
- Utilizing locally produced or extracted materials during construction, to the extent practicable
- Utilizing recycled construction materials and/or materials with recycled content, to the extent practicable
- Utilizing recovered wood or wood that is certified in accordance with the Sustainable Forestry Initiative or the Forestry Stewardship Council's Principles and Criteria, to the extent practicable.

Energy conservation measures will be determined on a parcel-specific basis during the site plan review phase of the application process to demonstrate continuing compliance with the relevant thresholds and criteria of the Findings Statement prior to the commencement of construction on any given parcel.



Appendix A

Part 1 - Environmental Assessment Form

Full Environmental Assessment Form Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project:		
Project Location (describe, and attach a general location map):		
Brief Description of Proposed Action (include purpose or need):		
Name of Applicant/Sponsor:	Telephone:	
	E-Mail:	
Address:		
City/PO:	State:	Zip Code:
Project Contact (if not same as sponsor; give name and title/role):	Telephone:	
	E-Mail:	
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone:	
	E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship.	("Funding"	'includes grants,	loans, tax rel	lief, and any c	other forms	of financial
assistance.)						

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, □ Yes or Village Board of Trustees	□ No	
b. City, Town or Village □ Yes Planning Board or Commission	□ No	
c. City, Town or Village Zoning Board of Appeals	□ No	
d. Other local agencies	□ No	
e. County agencies	□ No	
f. Regional agencies	□ No	
g. State agencies	□ No	
h. Federal agencies	□ No	
i. Coastal Resources.<i>i</i>. Is the project site within a Coasta	l Area, or the waterfront area of a Designated Inland Wa	tterway? □ Yes □ No
<i>ii.</i> Is the project site located in a con <i>iii.</i> Is the project site within a Coasta	nmunity with an approved Local Waterfront Revitalization Erosion Hazard Area?	on Program? \Box Yes \Box No \Box Yes \Box No

C. Planning and Zoning

C.1. Planning and zoning actions.	
 Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? If Yes, complete sections C, F and G. If No, proceed to question C.2 and complete all remaining sections and questions in Part 1 	□ Yes □ No
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?	□ Yes □ No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located?	□ Yes □ No
 b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) If Yes, identify the plan(s): 	□ Yes □ No
 c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? If Yes, identify the plan(s): 	□ Yes □ No

C.3. Zoning	
a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district?	□ Yes □ No
b. Is the use permitted or allowed by a special or conditional use permit?	□ Yes □ No
c. Is a zoning change requested as part of the proposed action?If Yes,<i>i</i>. What is the proposed new zoning for the site?	□ Yes □ No
C.4. Existing community services.	
a. In what school district is the project site located?	
b. What police or other public protection forces serve the project site?	
c. Which fire protection and emergency medical services serve the project site?	
d. What parks serve the project site?	

٦

D. Project Details n 1. Pr А, d Potential De

L

D.1. Proposed and Potential Development	
a. What is the general nature of the proposed action (e.g., residential, industrial, components)?	al, commercial, recreational; if mixed, include all
b. a. Total acreage of the site of the proposed action?	acres
b. Total acreage to be physically disturbed?	acres
c. Total acreage (project site and any contiguous properties) owned	
or controlled by the applicant or project sponsor?	acres
c. Is the proposed action an expansion of an existing project or use?	\Box Yes \Box No
<i>i</i> . If Yes, what is the approximate percentage of the proposed expansion and	id identify the units (e.g., acres, miles, housing units,
square feet)? % Units:	
d. Is the proposed action a subdivision, or does it include a subdivision?	\Box Yes \Box No
If Yes,	
<i>i</i> . Purpose or type of subdivision? (e.g., residential, industrial, commercial;	if mixed, specify types)
<i>ii.</i> Is a cluster/conservation layout proposed?	□ Yes □ No
<i>iii</i> . Number of lots proposed?	
<i>iv</i> . Minimum and maximum proposed lot sizes? Minimum M	laximum
e. Will the proposed action be constructed in multiple phases?	\Box Yes \Box No
<i>i</i> . If No, anticipated period of construction:	months
<i>ii.</i> If Yes:	
 Total number of phases anticipated 	
• Anticipated commencement date of phase 1 (including demolition)	month year
 Anticipated completion date of final phase 	monthyear
 Generally describe connections or relationships among phases, inclu 	iding any contingencies where progress of one phase may
determine timing or duration of future phases:	

f. Does the project include new res	idential uses?			\Box Yes \Box No
If Yes, show numbers of units pro-	posed.			
One Family	<u>Two Family</u>	<u>Three Family</u>	Multiple Family (four or more)	
Initial Phase				
At completion				
of all phases				
a Doos the proposed action include	a now non residenti	al construction (inclu	ding expansions)?	
g. Does the proposed action method If Yes	ie new non-residentia	a construction (men	iding expansions):	
<i>i</i> . Total number of structures				
<i>ii</i> . Dimensions (in feet) of largest	proposed structure:	height;	width; andlength	
iii. Approximate extent of buildin	g space to be heated	or cooled:	square feet	
h. Does the proposed action include	le construction or oth	er activities that wil	l result in the impoundment of any	□ Yes □ No
liquids, such as creation of a wa	ter supply, reservoir	, pond, lake, waste la	agoon or other storage?	
If Yes,			0	
<i>i</i> . Purpose of the impoundment:				
<i>ii.</i> If a water impoundment, the pr	incipal source of the	water:	□ Ground water □ Surface water stream	ns \Box Other specify:
iii. If other than water, identify the	type of impounded/	contained liquids and	d their source.	
<i>iv</i> . Approximate size of the propo	sed impoundment.	Volume:	million gallons: surface area:	acres
v. Dimensions of the proposed da	m or impounding str	ructure:	height; length	
vi. Construction method/materials	for the proposed da	m or impounding st	ructure (e.g., earth fill, rock, wood, conc	crete):
D.2. Project Operations				
a. Does the proposed action includ	e any excavation, mi	ining, or dredging, d	uring construction, operations, or both?	\Box Yes \Box No
(Not including general site prepa	aration, grading or in	stallation of utilities	or foundations where all excavated	
materials will remain onsite)				
If Yes:				
<i>i</i> . What is the purpose of the exca	vation or dredging?		1 16 1 20	
<i>ii.</i> How much material (including)	rock, earth, sediment	s, etc.) is proposed t	o be removed from the site?	
• Volume (specify tons of a	cubic yards):			
• Over what duration of the	tics of materials to h	a avaguated or drade	rad and plans to use manage or dispose	of them
<i>m</i> . Describe nature and characteris	stics of materials to b	e excavaled of dreug	ged, and plans to use, manage of dispose	e of them.
iv. Will there be onsite dewaterin	g or processing of ex	cavated materials?		\Box Yes \Box No
If yes, describe.				
v. What is the total area to be dre	dged or excavated?		acres	
vi. What is the maximum area to l	be worked at any one	e time?	acres	
vii. What would be the maximum	depth of excavation of	or dredging?	feet	
viii. Will the excavation require bl	asting?			\Box Yes \Box No
<i>ix.</i> Summarize site reclamation go	als and plan:			
b Would the proposed action cause	e or result in alteration	on of increase or de	crease in size of or encroachment	□ Yes □ No
into any existing wetland. wate	rbody, shoreline, bea	ich or adjacent area?	crease in size or, or encroaciment	- 105 - 110
If Yes:	, , ,			
<i>i</i> . Identify the wetland or waterb	ody which would be	affected (by name, v	vater index number, wetland map numb	er or geographic
description):				

<i>ii.</i> Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placem alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in sq	ent of structures, or uare feet or acres:
<i>iii.</i> Will the proposed action cause or result in disturbance to bottom sediments?	Yes □ No
<i>iv</i> Will the proposed action cause or result in the destruction or removal of aquatic vegetation?	□ Ves □ No
If Yes:	
acres of aquatic vegetation proposed to be removed:	
expected acreage of aquatic vegetation remaining after project completion:	
purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):	
• proposed method of plant removal:	
• if chemical/herbicide treatment will be used, specify product(s):	
v. Describe any proposed reclamation/mitigation following disturbance:	
. Will the proposed action use, or create a new demand for water?	\Box Yes \Box No
<i>i</i> . Total anticipated water usage/demand per day: gallons/day	
<i>ii.</i> Will the proposed action obtain water from an existing public water supply?	\Box Yes \Box No
f Yes:	
Name of district or service area:	
• Does the existing public water supply have capacity to serve the proposal?	\Box Yes \Box No
• Is the project site in the existing district?	\Box Yes \Box No
• Is expansion of the district needed?	\Box Yes \Box No
• Do existing lines serve the project site?	\Box Yes \Box No
<i>ii.</i> Will line extension within an existing district be necessary to supply the project?	\Box Yes \Box No
Describe extensions or capacity expansions proposed to serve this project:	
• Source(s) of supply for the district:	
<i>iv.</i> Is a new water supply district or service area proposed to be formed to serve the project site? f, Yes:	□ Yes □ No
Applicant/sponsor for new district:	
Date application submitted or anticipated:	
Proposed source(s) of supply for new district:	
v. If a public water supply will not be used, describe plans to provide water supply for the project:	
<i>vi</i> . If water supply will be from wells (public or private), what is the maximum pumping capacity:	gallons/minute.
. Will the proposed action generate liquid wastes?	□ Yes □ No
f Yes:	
<i>i</i> . Total anticipated liquid waste generation per day: gallons/day	
<i>ii.</i> Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe a	ll components and
<i>ii.</i> Will the proposed action use any existing public wastewater treatment facilities?	□ Yes □ No
If Yes:	10
Name of wastewater treatment plant to be used:	
Name of district:	
• Does the existing wastewater treatment plant have capacity to serve the project?	\Box Yes \Box No
• Is the project site in the existing district?	\Box Yes \Box No
• Is expansion of the district needed?	\Box Yes \Box No

• Do existing sewer lines serve the project site?	\Box Yes \Box No
• Will a line extension within an existing district be necessary to serve the project?	\Box Yes \Box No *
If Yes:	
• Describe extensions or capacity expansions proposed to serve this project:	
<i>iv.</i> Will a new wastewater (sewage) treatment district be formed to serve the project site?	\Box Yes \Box No
If Yes:	
• Applicant/sponsor for new district:	
• Date application submitted or anticipated:	
What is the receiving water for the wastewater discharge?	
<i>v</i> If public facilities will not be used describe plans to provide wastewater treatment for the project including speci	fving proposed
receiving water (name and classification if surface discharge or describe subsurface disposal plans).	ing proposed
recerring when (name and endomention in barrace discharge of describe subsurface disposal plans).	
<i>vi.</i> Describe any plans or designs to capture, recycle or reuse liquid waste:	
e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point	\Box Yes \Box No
sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point	
source (i.e. sheet flow) during construction or post construction?	
If Yes:	
<i>i</i> . How much impervious surface will the project create in relation to total size of project parcel?	
Square feet or acres (impervious surface)	
Square feet or acres (parcel size)	
<i>ii.</i> Describe types of new point sources	
<i>iii.</i> Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent pi	operties,
groundwater, on-site surface water or off-site surface waters)?	
• If to surface waters, identify receiving water badies or water de	
• If to surface waters, identify receiving water bodies of wettands:	
Will stormwater runoff flow to adjacent properties?	
iv Does the proposed plan minimize impervious surfaces use pervious materials or collect and re-use stormwater?	\Box Yes \Box No
<i>iv.</i> Does the proposed plan minimize impervious surfaces, use pervious materials of concert and re-use stormwater.	
I. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel	\Box Yes \Box No
computition, waste incineration, or other processes or operations?	
IT Yes, identify:	
<i>i</i> . Mobile sources during project operations (e.g., neavy equipment, neet or derivery venicles)	
ii Stationary sources during construction (e.g. nower concretion, structural heating, batch plant, cruchers)	
<i>u</i> . Stationary sources during construction (e.g., power generation, structural nearing, batch plant, crushers)	
iii Stationary sources during operations (e.g. process emissions large boilers electric generation)	
<i>m</i> . Stationary sources during operations (e.g., process emissions, large boners, electric generation)	
g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit,	\Box Yes \Box No
or Federal Clean Air Act Title IV or Title V Permit?	
<i>i</i> . Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet	\sqcup Yes \sqcup No
ambient air quality standards for all or some parts of the year)	
<i>u</i> . In addition to emissions as calculated in the application, the project will generate:	
• Tons/year (short tons) of Carbon Dioxide (CO ₂)	
•Tons/year (short tons) of Nitrous Oxide (N ₂ O)	
•Tons/year (short tons) of Perfluorocarbons (PFCs)	
•Tons/year (short tons) of Sulfur Hexafluoride (SF ₆)	
Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)	
•Tons/year (short tons) of Hazardous Air Pollutants (HAPs)	

 h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? If Yes: <i>i</i>. Estimate methane generation in tons/year (metric):	□ Yes □ No enerate heat or
 i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): 	□ Yes □ No
 j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? If Yes: <i>i</i>. When is the peak traffic expected (Check all that apply): □ Morning □ Evening □ Weekend □ Randomly between hours of to <i>ii</i>. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump truck) 	□ Yes □ No s):
 <i>iii.</i> Parking spaces: Existing Proposed Net increase/decrease <i>iv.</i> Does the proposed action include any shared use parking? <i>v.</i> If the proposed action includes any modification of existing roads, creation of new roads or change in existing <i>vi.</i> Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? <i>vii</i> Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? <i>viii.</i> Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? 	Yes No access, describe: Yes No Yes No Yes No Yes No
 k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? If Yes: <i>i</i>. Estimate annual electricity demand during operation of the proposed action: <i>ii</i>. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/l other): <i>iii</i>. Will the proposed action require a new, or an upgrade, to an existing substation? 	□ Yes □ No ocal utility, or □ Yes □ No
1. Hours of operation. Answer all items which apply. ii. During Construction: iii. During Construction: iii. During Operations: iii. During Operations: iii. During Operations: Sunday: iii. During Operatio	

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction,	\Box Yes \Box No
If yes:	
<i>i</i> . Provide details including sources, time of day and duration:	
<i>ii.</i> Will the proposed action remove existing natural barriers that could act as a noise barrier or screen?	\Box Yes \Box No
n. Will the proposed action have outdoor lighting?	□ Yes □ No
If yes: <i>i</i> Describe source(s) location(s) height of fixture(s) direction/aim and proximity to pearest occupied structures:	
. Deserve source(s), rocation(s), neight of fixture(s), ancedon ann, and proximity to nearest occupied structures.	
<i>ii.</i> Will proposed action remove existing natural barriers that could act as a light barrier or screen?	\Box Yes \Box No
Describe:	
o. Does the proposed action have the potential to produce odors for more than one hour per day?	\Box Yes \Box No
occupied structures:	
p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage?	\Box Yes \Box No
If Yes:	
<i>i.</i> Product(s) to be stored	
<i>iii.</i> Generally, describe the proposed storage facilities:	
q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides,	□ Yes □ No
If Yes:	
<i>i</i> . Describe proposed treatment(s):	
<i>ii.</i> Will the proposed action use Integrated Pest Management Practices?	□ Yes □ No
r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal	\Box Yes \Box No
of solid waste (excluding hazardous materials)? If Yes:	
<i>i</i> . Describe any solid waste(s) to be generated during construction or operation of the facility:	
Construction: tons per (unit of time)	
• Operation : tons per (unit of time)	
 <i>ii.</i> Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waster Construction: 	:
• Operation:	
iii. Proposed disposal methods/facilities for solid waste generated on-site:	
Construction:	
Operation:	

s. Does the proposed action include construction or modification of a solid waste management facility?				
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): 				
<i>ii.</i> Anticipated rate of disposal/processing:				
• Tons/month, if transfer or other non-combustion/thermal treatment, or				
• Tons/hour. if combustion or thermal treatment				
iii. If landfill, anticipated site life: years				
t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous \Box Yes \Box No waste?				
If Yes:				
<i>i</i> . Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility:				
<i>ii.</i> Generally describe processes or activities involving hazardous wastes or constituents:				
<i>iii.</i> Specify amount to be handled or generated tons/month				
iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents:				
v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? □ Yes □ No If Yes: provide name and location of facility:				
If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:				
E. Site and Setting of Proposed Action				

E.1. Land uses on and surrounding the project site			
a. Existing land uses. <i>i</i> . Check all uses that occur on, adjoining and near the project site. □ Urban □ Industrial □ Commercial □ Residential (suburban) □ Rural (non-farm) □ Forest □ Agriculture □ Aquatic □ Other (specify):			
b. Land uses and covertypes on the project site.			
Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non- agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
Other Describe:			

c. Is the project site presently used by members of the community for public recreation? <i>i</i> . If Yes: explain:		
 d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? If Yes, i Identify Equilities 	□ Yes □ No	
a Does the project site contain an existing dam?		
If Yes:		
Dam height: feet		
Dam length: feet		
• Surface area:acres		
Volume impounded: gallons OR acre-feet		
<i>ii.</i> Dam's existing hazard classification:		
iii. Provide date and summarize results of last inspection:		
f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facil If Yes:	□ Yes □ No ity?	
<i>i</i> . Has the facility been formally closed?	□ Yes □ No	
If yes, cite sources/documentation:		
<i>ii</i> . Describe the location of the project site relative to the boundaries of the solid waste management facility:		
<i>iii.</i> Describe any development constraints due to the prior solid waste activities:		
g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? If Yes:	□ Yes □ No	
<i>i</i> . Describe waste(s) handled and waste management activities, including approximate time when activities occurre	ed:	
 h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? If Yes: 	□ Yes □ No	
<i>i</i> . Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply:	\Box Yes \Box No	
□ Yes – Spills Incidents database Provide DEC ID number(s):		
 Yes – Environmental Site Remediation database Provide DEC ID number(s):		
<i>ii</i> . If site has been subject of RCRA corrective activities, describe control measures:		
If yes, provide DEC ID number(s):	\Box res \Box No	
<i>iv.</i> If yes to (i), (ii) or (iii) above, describe current status of site(s):		

v. Is the project site subject to an institutional control limiting property uses?		
If yes, DEC site ID number:		
 Describe the type of institutional control (e.g., deed restriction or easement): Describe any use limitations: 		
 Describe any engineering controls: 		
• Will the project affect the institutional or engineering controls in place?	\Box Yes \Box No	
• Explain:		
E.2. Natural Resources On or Near Project Site		
a. What is the average depth to bedrock on the project site?		
b. Are there bedrock outcroppings on the project site?	\Box Yes \Box No	
"In res, what proportion of the site is comprised of bedrock outcroppings?%		
c. Predominant soil type(s) present on project site:	_%	
	_% _%	
d. What is the average depth to the water table on the project site? Average: feet		
A Drainage status of project site soils: □ Well Drained: % of site		
□ Moderately Well Drained:% of site		
□ Poorly Drained% of site		
f. Approximate proportion of proposed action site with slopes: 0-10%: % of site		
$\Box 10-15\%: \qquad \qquad \ \ \ \ \ \ \ \ \ \ \ \ $		
□ 15% or greater:% of site		
g. Are there any unique geologic features on the project site?	\Box Yes \Box No	
h. Surface water features. i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers,	🗆 Yes 🗆 No	
ponds or lakes)?		
<i>ii.</i> Do any wetlands or other waterbodies adjoin the project site?	\Box Yes \Box No	
If Yes to either <i>i</i> or <i>ii</i> , continue. If No, skip to E.2.i.		
<i>iii.</i> Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency?	\Box Yes \Box No	
<i>iv.</i> For each identified regulated wetland and waterbody on the project site, provide the following information:		
Streams: Name Classification		
Lakes or Ponds: Name Classification		
Wetlands: Name Approximate Size Wetland No. (if regulated by DEC)		
<i>v</i> . Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired	\Box Yes \Box No	
waterbodies'?		
i. Is the project site in a designated Floodway?	\Box Yes \Box No	
j. Is the project site in the 100-year Floodplain?	\Box Yes \Box No	
k. Is the project site in the 500-year Floodplain?	\Box Yes \Box No	
1. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer?	\Box Yes \Box No	
If Yes:		

m Identify the predominant wildlife species that occupy or use the project site.		
in identify the predominant when especies that occupy of use the project site.		
n. Does the project site contain a designated significant natural community?	\Box Yes \Box No	
If Yes: Describe the hebitet/community (commonition function and hesis for designation):		
<i>i</i> . Describe the habital/community (composition, function, and basis for designation): _		
<i>ii.</i> Source(s) of description or evaluation:		
<i>iii</i> . Extent of community/habitat:		
Currently: acre	S	
Following completion of project as proposed: acre	s	
• Gain or loss (indicate + or -):acre	8	
• Door project site contain any species of plant or animal that is listed by the federal gas	Tormont or NVS of UNA	
o. Does project she contain any species of plant of annual that is listed by the federal gov endangered or threatened, or does it contain any areas identified as habitat for an endan	\sim represented species?	
the second	igered of uncatched species:	
<i>i</i> Species and listing (endangered or threatened):		
. Species and isting (chaungered of uneucoida).		
p. Does the project site contain any species of plant or animal that is listed by NYS as ra	re, or as a species of \Box Yes \Box No	
special concern?		
If Yes:		
<i>i</i> . Species and listing:		
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell	l fishing? \Box Yes \Box No	
If yes, give a brief description of how the proposed action may affect that use:		
E 2 Designated Dublis Descurress On on Near Draiset Site		
E.S. Designated Public Resources On or Near Project Site	· · · · · · · · · · · · · · · · · · ·	
a. Is the project site, or any portion of it, located in a designated agricultural district certi	thed pursuant to \Box Yes \Box No	
Agriculture and Markets Law, Article 25-AA, Section 303 and 304?		
b. Are agricultural lands consisting of highly productive soils present?	\Box Yes \Box No	
<i>i.</i> If Yes: acreage(s) on project site?		
<i>u</i> . Source(s) of soil rating(s):		
c. Does the project site contain all or part of, or is it substantially contiguous to, a register	$\square Yes \square No$	
Natural Landmark?		
If Yes:		
i. Nature of the natural landmark: ii Biological Community ii Geological Community ii Biological Community ii Geological Community ii Geol	cal Feature	
<i>n</i> . Provide brief description of fandmark, including values benind designation and appr		
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area	? \Box Yes \Box No	
If Yes:		
<i>i.</i> UEA name:		
<i>ii</i> . Designating agency and date:		
<i>ui</i> . Designating agency and date		

 e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissio Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Pla If Yes: i. Nature of historic/archaeological resource: i. Nature of historic/archaeological resource: i. Archaeological Site i. Historic Building or District ii. Name: iii. Brief description of attributes on which listing is based: 	□ Yes □ No oner of the NYS ces?
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	□ Yes □ No
 g. Have additional archaeological or historic site(s) or resources been identified on the project site? If Yes: <i>i</i>. Describe possible resource(s): <i>ii</i>. Basis for identification: 	□ Yes □ No
 h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? If Yes: <i>i</i>. Identify resource: <i>ii</i>. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or setc.): 	□ Yes □ No scenic byway,
<i>iii.</i> Distance between project and resource: miles.	
 i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? If Yes: i. Identify the name of the river and its designation: ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? 	□ Yes □ No
in to the weating consistent with development restrictions contained in or () exter (at 000)	- 103 - 110

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name _____

_____ Date_____

Signature_

Title_____ 1



Planned Unit Development Area

Konica Minolta Property

1 Garvies Point Road Property

Source Info: ESRI (2016); NYS Civil Boundaries, NYS Office of Information Technology Services GIS Program Office (GPO)

Garvies Point Road and Herb Hill Road

City of Glen Cove

Nassau County, New York

Supplemental Analysis – Conceptual Build-Out of the 1 Garvies Point Road Property or Konica Minolta Property Garvies Point Mixed-Use Waterfront Development Project City of Glen Cove, Nassau County

Part 1 – Environmental Assessment Form

Attachment

Page 1.A., Project and Applicant/Sponsor Information.

Brief Description of Proposed Action (include purpose or need):

This application is being made to amend the previously approved PUD Master Plan for the mixed-use development of an approximately 56-acre property located on the north side of Glen Cove Creek. The proposed PUD Amendment includes a reconfiguration of the existing PUD Master Plan on Blocks A, D, E, F, and J, as well as enhancements to open space throughout the Project. Specifically, the proposed PUD Amendment includes: (1) reconfiguration of the residential development on Block A, while maintaining the approved 346-unit residential yield; (2) reconfiguration of the development layout on Block J to provide additional parking and open space without altering the previously approved public amenity elements or building floor area for retail space; (3) elimination of the 50,000-square-foot approved office building on Block D and replacement with surface parking; (4) revision of the approved plan for the multibuilding development of Blocks E and F to include a single building accommodating 172 units; and (5) relocation of 56 workforce housing units that were approved for Block F to one of two potential properties adjacent to the 56±-acre PUD area. The two properties contemplated for the workforce housing relocation include the property at 1 Garvies Point Road, encompassing approximately 6.3 acres on the north side of Garvies Point Road and west of its intersection with Herb Hill Road, and the former Konica Minolta property, which includes three separate parcels measuring a total of 17.6 acres located at the intersection of The Place and Charles Street (see attached Site Location Map). The proposed relocation would require an expansion of the previously approved 56-acre PUD area.

It should be noted that a consistency analysis memorandum for the proposed reconfiguration on Blocks A, D, E, F, and J with thresholds and criteria established by the prior environmental review, conducted in connection with the previously approved PUD Master Plan, was submitted for lead agency review on March 9, 2021 (the Technical Memorandum for Application for PUD Amendment – REVISED, or the "Tech Memo"). The memorandum addresses the potential environmental impacts of the proposed amendment within the context of the SEQRA Findings Statement adopted for the PUD on December 19, 2011. This Supplemental Analysis and the corresponding Part 1 – Environmental Assessment Form (EAF) further evaluates the Proposed PUD Amendment, but with an emphasis on the potential expansion of the PUD area to incorporate either of the two adjacent properties. Because only conceptual plans are available for the future build-out of the 1 Garvies Point Road and Konica Minolta properties, the environmental impacts of this component is evaluated on a generic basis (i.e., to a similar extent as the overall current PUD was evaluated to support the prior Findings Statement). Together, the March 9, 2021 Tech Memo, the Part 1 – EAF, and this Supplemental Analysis assess the potential for environmental impacts associated with all components of the proposed PUD Amendment (the Amended PUD Master Plan). Responses to the Part 1 EAF included herein pertain to the entirety of the PUD area, including the 1 Garvies Point Road and Konica Minolta properties, unless otherwise noted.

For the purposes of comprehensive environmental review, as required by the State Environmental Quality Review Act (SEQRA), conceptual plans have been developed to determine a reasonable worst-

Supplemental Analysis – Conceptual Build-Out of the 1 Garvies Point Road Property or Konica Minolta Property Garvies Point Mixed-Use Waterfront Development Project City of Glen Cove, Nassau County

Part 1 – Environmental Assessment Form

Attachment

case development of the 1 Garvies Point Road and Konica Minolta properties, individually. Conceptual full build-out of the 1 Garvies Point Road property would include 105 multifamily rental units, of which 68 units would be designated for workforce housing, and 7,700 SF of retail space. Conceptual full build-out of the Konica Minolta property would include 336 units, including 101 townhome condos and 235 multi-family rental units with a total of 92 workforce housing units. The conceptual full build-out would also include 19,982 SF of retail space, 15,000 SF of office space, as well as publicly-accessible open space. A more detailed description of the concept plans for the 1 Garvies Point Road and Konica Minolta properties is provided in the attached EEA.

Part 1 EAF Questions and Responses

The table below includes responses to various EAF questions indicated in Column 1. This table is formatted to provide a comparison between the PUD Master Plan with the reconfiguration of Blocks A, D, E, F, and J (Column 2), the conceptual build-out of the 1 Garvies Point Road property and cumulative Amended PUD Master Plan with 1 Garvies Point Road (Columns 3a and 3b, respectively), and the conceptual build-out of the Konica Minolta property and cumulative Amended PUD Master Plan with the Konica Minolta Property (Columns 4a and 4b, respectively).

Supplemental Analysis – Conceptual Build-Out of the 1 Garvies Point Road Property or Konica Minolta Property Garvies Point Mixed-Use Waterfront Development Project

City of Glen Cove, Nassau County

Part 1 – Environmental Assessment Form

Attachment

Part 1 EAF Questions and Responses

EAF Question (1)	Amended PUD Master Plan (with Blocks A, D, E, F, and J Reconfiguration) (2)	1 Garvies Point Road (3a)	1 Garvies Point Road + Amended PUD Master Plan (3b)	Konica Minolto (4a)
A.1. – Property Owner	See Applicant information.	Pecora Family 1 Garvies Point Road Glen Cove, NY 11542		Konica Minolta Holdings 100 Williams Drive Ramsey, New Jersey 0744
D.1.b.a – Total acreage of the site of the proposed action?	56.3± acres	6.3± acres	62.6± acres	17.6± acres
D.1.b.b – Total acreage to be physically disturbed?	56.3± acres	6.3± acres	62.6± acres	17.6± acres
D.1.b.c – Total acreage owned or controlled by the applicant or project sponsor?	56.3± acres	parcel would be purchased prior to inclusion into the PUD area		parcel would be purchase into the PUD area
D.1.f – Does the project include new residential uses?	 1,189 total units at completion of all phases 	 105 Multiple Family residential units at completion of all phases 	 1,230 Multiple Family residential units at completion of all phases 	>235 Multiple Family reside >101 Townhouse (One Fan >336 total units at complet
 D.1.g - Does the proposed action include new non-residential construction (including expansions)? > Total number of structures > Dimensions in feet of largest structure > Approximate extent of building space to be heated or cooled 	 Block E&F: 7,000 SF (commercial space to be located in mixed-use buildings) 7,000 SF to be heated and cooled 	 1 structure 1 story in height 7,700 SF to be heated and cooled 		 19,982 SF (commercial sp. a mixed-use building) 19,982 SF to be heated ar
D.2.c – Will the proposed action use, or create a new demand for water? i. Total anticipated water usage/demand per day	361,296 gallons/day	21,802 gallons/day	383,098 gallons/day	96,963 gallons/day
D.2.d – Will the proposed action generate liquid wastes? Total anticipated liquid waste generation per day	328,451 gallons/day	19,820 gallons/day	348,271 gallons/day	88,148 gallons/day
E.2.c – Predominant soil type(s) present on project site:	Ug – 65% Sc – 20% Uf – 14% MfD – 1%	MkD – 0.1%* Uf – 65.4% Ug – 34.5%		Ug – 77.4%* UnB – 5.3% UnC – 14.8% UrB – 2.5%
E.2.f – Approximate proportion of proposed action site with slopes:	0-15% - 89.7% 15% or greater – 10.3%	0-10% = 90.1% 10-15% = 5.1% >15% = 4.8%		Detailed survey data is no the Konica Minolta prope adjustments will be made detailed site design to be steep slopes.

*mapping units are based on the USDA Web Soil Survey, Web Soil Survey - Home (usda.gov)

a Property	Konica Minolta Property + Amended PUD Master Plan (4b)
U.S.A., Inc.	
6	
	73.9± acres
	73.9± acres
d prior to inclusion	
ential units nily) units tion of all phases	 1,461 total units at completion of all phases
ace to be located in	
nd cooled	
	458,259 gallons/day
	416,599 gallons/day
t yet available for rty. Necessary at the time of sensitive to existing	



Appendix B

Conceptual Full Build-Out of 1 GPR Property and Konica Property

7,700 GSF





MASTER PLAN - EXISTING GLEN COVE, NY 2021.02.12



SCALE - 1/64" = 1'-0" (22" x 34") 02 00 01 04





February 12, 2021

TORTI GALLAS + PARTNERS

©2021 Torti Gallas + Partners | 1300 Spring Street, 4th Floor | Silver Spring, Maryland 20910 | 301.588.4800

Illustrative Concept Plan Konica Minolta Site GARVIES POINT



February 12, 2021

TORTI GALLAS + PARTNERS

Program

Parcel A		
Retail		19,982 SF
Office		15,000 SF
Multifamily		295,865 SF 235 DU
	Gross Avg. SF/DU	1.259 SF
	Net Avg. SF/DU	1,070 SF
Townhomes		57 DU
Parcel B		
Townhomes		14 DU
Parcel C		
Townhomes		30 DU
Total		
Retail		19,982 SF
Office		15,000 SF
Multifamily		295,865 SF 235 DU
Townhomes		101 DU

Parking Tabulation

Mixed-Use	Ratio	Req'd	Provided
Office	3.65/1,000 SF	55	
Retail	1/265 SF	76	
Multifamily	1.65/DU	388	
Total		519	600
Townhomes	1.85/DU	187	202







The Pl

Parcel C Townhomes

February 12, 2021



©2021 Torti Gallas + Partners | 1300 Spring Street, 4th Floor | Silver Spring, Maryland 20910 | 301.588.4800

GLEN ISLE PARTNERS, LLC



30 DU





©2021 Torti Gallas + Partners | 1300 Spring Street, 4th Floor | Silver Spring, Maryland 20910 | 301.588.4800



February 12, 2021



Site Section Konica Minolta Site GARVIES POINT



Appendix C

Correspondence from Roux Associates



February 16, 2021

Mr. John Swagerty Senior Vice President, Development RXR Development Services 75 Rockefeller Plaza Suite 1500 New York, New York 10019

Re: Environmental Status and Eligibility for Restricted Residential Development 1 Garvies Point, Glen Cove, New York 11542

Dear Mr. Swagerty:

1 Garvies Point LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in September 2017 as a Volunteer to investigate, remediate, and redevelop a 6.4-acre site located at 1 Garvies Point Road within the City of Glen Cove, Nassau County, New York (Site). The Brownfield Cleanup Program (BCP) Site is known as the 1 Garvies Point Site, BCP Site No. C130223. The BCP Application approved by the NYSDEC indicated that the anticipated use for the Site post remediation will include multifamily residential and commercial uses, and therefore, all comparisons of soils at the Site have been made to the NYSDEC Subpart 375-6 Restricted Residential Soil Cleanup Objectives (RRSCOs)¹. In accepting the Site into the BCP, and throughout review of subsequent documents, the NYSDEC has made no objection to the intended use of the Site containing a residential component. Appendix B of the BCA Application is included as Attachment 1 to this letter. The signed BCA, which signifies NYSDEC approval of the BCA Application, is included as Attachment 2 to this letter.

A Remedial Investigation (RI) was performed at the Site by Roux Environmental Engineering and Geology, D.P.C. (Roux) between January and February 2020. A draft Remedial Investigation Report (RIR), documenting the findings of the RI, was submitted to NYSDEC in June 2020. The NYSDEC provided comments on the RIR dated January 11, 2021. Roux is currently in the process of revising the RIR to address NYSDEC's comments before the RIR is resubmitted as final. The draft RIR further confirms that the contemplated uses of the Site will include residential buildings, and that the proposed remedy to be detailed in the Remedial Action Work Plan will include addressing impacted soil, groundwater, and soil vapor using excavation, cover system installation, and other engineering controls to ensure that the Site is safe for residential uses. Further, it is our professional opinion that the future intended residential use of the Site can be safely completed in a manner acceptable to the NYSDEC through these measures, which is consistent with what has been successfully done at the adjoining parcels where residential developments have been built on remediated Federal and State Superfund sites.

¹ RRSCOs apply to developments with a "Restricted-Residential use," which is the land use category that shall only be considered when there is a common ownership or a single owner/managing entity for the housing development.

Mr. John Swagerty February 16, 2021 Page 2

Should you have any questions regarding the information presented above, please don't hesitate to contact the undersigned at 631-232-2600.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

frow reser

Frank Cherena, P.G. Principal Geologist

Attachments:

- 1. Appendix B of the BCP Application for 1 Garvies Point
- 2. Signed BCA for 1 Garvies Point

cc: Mr. Shashank Nemichand, RXR Development Services

Environmental Status and Eligibility for Restricted Residential Development 1 Garvies Point, Glen Cove, New York 11542

ATTACHMENT 1

Appendix B of the BCP Application for 1 Garvies Point
Appendix B – Project Description

1 Garvies Point BCP Application – Section II, Question 4

The 1 Garvies Point LLC property is identified as Section 21, Block A, Lots 216, 468, and 507 on the Nassau County tax map, located at 1 Garvies Point Road in Glen Cove, New York (herein referred to as the "Property"). The Property encompasses approximately 6.4 acres (Figures 1 and 2 for the location of the BCP limits). The Property is currently improved with six buildings used for commercial purposes including warehouse space, office space, and other business uses. The existing Site conditions are presented on an aerial as shown on a Site Plan in Figure 3 and Figure 4.

The proposed project is a mixed-use redevelopment with three new buildings (to replace current structures), including a hotel with approximately 140 rooms, a recreational center of approximately 50,000 square feet that will include a retail space and restaurants, and a multi-family condominium residence building with approximately 80 units, with associated parking and landscaping. All construction will be slab on grade with no sub-grade levels.

The project is starting at the investigation stage. The proposed investigation is anticipated to include the advancement of soil borings, the installation of monitoring wells, and the installation of soil vapor monitoring points and sub slab soil vapor points. Sampling from existing onsite monitoring points and utilizing existing onsite data from previous work completed by TRC for the Mattiace Former Petrochemical Superfund Site (EPA ID NYD000512459) will be conducted as a cost savings benefit, where feasible.

Submit BCP Application and CPP and begin review by NYSDEC	August 2016
Comment Period on BCP Application	September 2016
Implement Remedial Investigation	October 2016
Implement Remedial Action / Initiate Property Redevelopment	Mid 2017
Remediation Complete – Anticipated issuance of Certificate of Completion.	June 2019

Projected Schedule

Environmental Status and Eligibility for Restricted Residential Development 1 Garvies Point, Glen Cove, New York 11542 ATTACHMENT 2

Signed BCA for 1 Garvies Point

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation 625 Broadway, 12th Floor, Albany, New York 12233-7011 P: (518) 402-9706 | F: (518) 402-9020 www.dec.ny.gov

1 Garvies Point LLC ATTN: Antonino Pecora c/o TPEC LLC 35-15 Farrington Street Flushing, NY 11454

Miriam E. Villani, Esq. Sahn Ward Coschignano, PLLC 333 Earle Ovington Blvd, Suite 601 Uniondale, NY 11553

RE: Site Name: 1 Garvies Point Site No.: C130223 Location of Site: 1 Garvies Point Road, Nassau County, Glen Cove, NY 11542

Dear Mr. Pecora,

To complete your file, attached is a fully executed copy of the Brownfield Cleanup Agreement for the 1 Garvies Point Site.

If you have any further questions relating to this matter, please contact the project attorney for this site, Rosalie Rusinko, Esq., NYS Department of Environmental Conservation, Office of General Counsel, 100 Hillside Avenue, Suite 1W White Plains, NY 10603-2860, or by email at <u>rosalie.rusinko@dec.ny.gov</u>.

Sincerely

Robert W. Schick, P.E. Director Division of Environmental Remediation

Enclosure

- ec: H. Dudek, Project Manager
- cc: R. Rusinko, Esq. A. Guglielmi, Esq. /M. Mastroianni



Department of Environmental Conservation SEP 11 2017

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION BROWNFIELD CLEANUP PROGRAM ECL §27-1401 et seq.

In the Matter of a Remedial Program for

BROWNFIELD SITE CLEANUP AGREEMENT Index No. C130223-01-17

1 Garvies Point DEC Site No.: C130223 Located at: 1 Garvies Point Road Nassau County Glen Cove, NY 11542

Hereinafter referred to as "Site"

by:

1 Garvies Point LLC

1 Garvies Point Road, Glen Cove, NY 11542

Hereinafter referred to as "Applicant"

WHEREAS, the Department of Environmental Conservation ("Department") is

authorized to administer the Brownfield Cleanup Program ("BCP") set forth in Article 27, Title 14 of the Environmental Conservation Law ("ECL"); and

WHEREAS, the Applicant submitted an application received by the Department on June 17, 2016; and

WHEREAS, the Department has determined that the Site and Applicant are eligible to participate in the BCP.

NOW, THEREFORE, IN CONSIDERATION OF AND IN EXCHANGE FOR THE MUTUAL COVENANTS AND PROMISES, THE PARTIES AGREE TO THE FOLLOWING:

I. Applicant Status

The Applicant, 1 Garvies Point LLC, is participating in the BCP as a Volunteer as defined in ECL 27-1405(1)(b).

II. Tangible Property Tax Credit Status

The Site is not located in a City having a population of one million or more. It is therefore presumed that the Site is eligible for tangible property tax credits.

III. Real Property

The Site subject to this Brownfield Cleanup Agreement (the "BCA" or "Agreement") consists of approximately 6.340 acres, a Map of which is attached as Exhibit "A", and is described as follows:

IV. Communications

A. All written communications required by this Agreement shall be transmitted by United States Postal Service, by private courier service, by hand delivery, or by electronic mail.

1. Communication from Applicant shall be sent to:

Heide-Marie Dudek New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway Albany, NY 12233-7017 heidi.dudek@dec.ny.gov

Note: one hard copy (unbound) of work plans and reports is required, as well as one electronic copy.

Krista Anders (electronic copy only) New York State Department of Health Bureau of Environmental Exposure Investigation Empire State Plaza Corning Tower Room 1787 Albany, NY 12237 krista.anders@health.ny.gov

Rosalie Rusinko, Esq. (correspondence only) New York State Department of Environmental Conservation Office of General Counsel 100 Hillside Avenue Suite 1W White Plains, NY 10603-2860 rosalie.rusinko@dec.ny.gov

2. Communication from the Department to Applicant shall be sent to:

1 Garvies Point LLC ATTN: Antonino Pecora c/o TPEC LLC 35-15 Farrington Street Flushing, NY 11454 egreco@tpecllc.com With a copy to: Miriam E. Villani, Esq. Sahn Ward Coschignano, PLLC 333 Earle Ovington Blvd, Suite 601 Uniondale, NY 11553 mvillani@swc-law.com

B. The Department and Applicant reserve the right to designate additional or different addressees for communication on written notice to the other. Additionally, the Department reserves the right to request that the Applicant provide more than one paper copy of any work plan or report.

C. Each party shall notify the other within ninety (90) days after any change in the addresses listed in this paragraph or in Paragraph III.

V. Miscellaneous

A. Applicant acknowledges that it has read, understands, and agrees to abide by all the terms set forth in Appendix A - "Standard Clauses for All New York State Brownfield Site Cleanup Agreements" which is attached to and hereby made a part of this Agreement as if set forth fully herein.

B. In the event of a conflict between the terms of this BCA (including any and all attachments thereto and amendments thereof) and the terms of Appendix A, the terms of this BCA shall control.

C. The effective date of this Agreement is the date it is signed by the Commissioner or the Commissioner's designee.

DATED: September 11, 2017 THIS BROWNFIELD CLEANUP AGREEMENT IS HEREBY APPROVED, Acting by and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:

Robert/W. Schick, P.E., Director Division of Environmental Remediation Applicant hereby consents to the issuing and entering of this Agreement, waives Applicant's right to a hearing herein as provided by law, and agrees to be bound by this Agreement.

1 Garvi	es Point LLC	
By:	A P	
Title:	MESIDENT	
Date:	7/31/17	
	/ /	

STATE OF NEW YORK)
) ss:
COUNTY OF).

On the <u>3</u> day of <u>J/y</u> in the year 20<u>17</u>, before me, the undersigned, personally appeared <u>Antonino</u> <u>Pecora</u>, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

ELIANA ARITA Notary Public - State of Florida Commission # GG 073854 My Comm. Expires Feb 15, 2021

Signature and Office of Individual taking acknowledgment

EXHIBIT A

SITE MAP





February 16, 2021

Mr. John Swagerty Senior Vice President, Development RXR Development Services 75 Rockefeller Plaza Suite 1500 New York, New York 10019

Re: Environmental Status and Eligibility for Restricted Residential Development 71 Charles Street, Glen Cove, New York 11542

Dear Mr. Swagerty:

The property identified as the Former Powers Chemco/Konica-Minolta site is located at 71 Charles Street in the City of Glen Cove, County of Nassau, and State of New York (Site). The Site has been investigated and remediated under the Resource Conservation and Recovery (RCRA) Closure Program and the NYSDEC Inactive Hazardous Waste Disposal Site (IHWDS) (also known as the State Superfund) Program. A Site Management Plan (SMP) was prepared for the Site and was approved by NYSDEC on May 15, 2017. The SMP says that "[t]he property may be used for restricted residential use (commercial and industrial uses allowed, per zoning)." The executive summary from the SMP and approval letter is being submitted to the Planning Board for your review.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

heren

Frank Cherena, P.G. Principal Geologist

Attachments:

- 1. Executive Summary from SMP
- 2. SMP Approval Letter from NYSDEC

cc: Mr. Shashank Nemichand, RXR Development Services

Environmental Status and Eligibility for Restricted Residential Development 71 Charles Street, Glen Cove, New York 11542

ATTACHMENT 1

Executive Summary from SMP

ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification:	USEPA ID No: NYD002056679 / NYSDEC Site # 130028
	Former Konica Minolta / Powers Chemco Facility
	71 Charles Street
	Glen Cove, New York

Institutional Controls:	1. The property may be used for restricted residential use (commercial and industrial uses allowed, per local zoning);		

2. Institutional Controls

- Compliance with the Environmental Easement and this SMP;
- The property may only be used for restricted residential use (commercial and industrial uses allowed, per local zoning);
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP;
- All future activities on the property that will disturb remaining contaminated material or potentially contaminated materials and any surface and underground piping must be conducted in accordance with this SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) or the Nassau County Department of Health;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Vegetable gardens and farming on the property are prohibited;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP.

Site Identification:

USEPA ID No: NYD002056679 / NYSDEC Site # 130028 Former Konica Minolta / Powers Chemco Facility 71 Charles Street Glen Cove, New York

Monitoring to assess the performance • and effectiveness of the remedy must be performed as defined in this SMP; Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP: Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement: and, The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

Site Identification:

	3. All ECs must be inspected at a frequency and in a manner defined in the SMP.		
Engineering Controls:	1. Cover system		
Inspections:		Frequency	
1. Cover Inspection		Annually	
2. Security Fencing		Annually	
Monitoring:			
1. RCRA Area Well MWR-18		Once, then review data with NYSDEC	
2. Groundwater Monitoring MW-01, MW-06, MW-08, MW-12, MW-101R, MW-102R, MW-103, MW-201, MW-202, MW-203, MW-204, MW-205, MW-206, MW-207, MW-208, MW-209, MW-210, MW-211 (North Lot Area)		Semi-Annually until Groundwater Objectives have been reached	
Maintenance:			
1. Cover		As needed	
2. Security Fencing		As Needed	
Reporting:			
1. Periodic Review Report		Annually	

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Former Konica Minolta / Powers Chemco Facility located in the City of Glen Cove, New York (hereinafter referred to as the "site"). See Figure 1. The site is currently in the New York State (NYS) Inactive Hazardous Waste Disposal Site No. 130028 and Resource Conservation and Recovery Act (RCRA) USEPA ID No. NYD002056679, both of which are administered by New York State Department of Environmental Conservation (NYSDEC).

- Order on Consent, Index No. AI-Q653-11-10, Site No. 130028, which was executed on August 24, 2011; and,
- Order on Consent and Administrative Settlement Index No. 1-20170320-79, Sites No. 130028 and 130028A; Site Management and RCRA Requirements, which was executed on April 20, 2017.

An Amended Record of Decision (AROD) was issued on March 2014 with the **NYSDEC to remediate** the North Lot Area of the site. The remaining portion of the former Konica Minolta facility was addressed under the NYSDEC RCRA requirements for Closure as regulated in New York State in 6 New York Code of Rules and Regulations (NYCRR) Part 373-3.7. This portion of the site has been assigned USEPA ID No. NYD002056679. A figure showing the site location and boundaries of this site is provided in Figure 2. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in Appendix A.

As per the AROD, a Site Management Plan is required, which must include the following:

Konica Minolta Holdings U.S.A., Inc. entered into two Orders on Consent pertinent to this Site Management Plan, including:



After completion of the remedial work, some contamination was left at this site, which is hereafter referred to as "remaining contamination". Institutional and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Nassau County Clerk, requires compliance with this SMP and all ECs and ICs placed on the site.

This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the Order on Consent (Index AI-Q653-11-10; Site #130028) / USEPA ID No. NYD002056679 for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in Appendix **B** of this SMP.

This SMP was prepared by Apex Companies, LLC, on behalf of Konica Minolta Holdings U.S.A., Inc., in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May, 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the Environmental Easement for the site.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager(s). Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shut-down of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the site conditions. In accordance with the Environmental Easement for the site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER -10 for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the AROD, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the AROD, and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 1 on the following page includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix B.

Table 1: Notifications*

Name	Contact Information
Girish Desai	(631) 444-0243 / girish.desai@dec.ny.gov
Carl Fritz	(631) 444-0232 / carl.fritz@dec.ny.gov
Walter Parish	(631) 444-0240 / walter.parish@dec.ny.gov
James Harrington	(518) 402-9625 / james.harrington@dec.ny.gov

* Note: Notifications are subject to change and will be updated as necessary.

Environmental Status and Eligibility for Restricted Residential Development 71 Charles Street, Glen Cove, New York 11542 ATTACHMENT 2

SMP Approval Letter from NYSDEC

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 1 SUNY @ Stony Brook, 50 Circle Road, Stony Brook, NY 11790 P: (631) 444-0240 | F: (631) 444-0248 www.dec.ny.gov

June 2, 2017

Mr. Daniel Haug Environmental Scientist 2 Apex Companies, LLC 120-D Wilbur Place Bohemia, New York 11716

Re: Site Management Plan

Konica Minolta / Powers Chemco Facility 71 Charles Street, Glen Cove, New York EPA ID No. NYD002056679

Dear Mr. Haug:

The New York State Department of Environmental Conservation ("Department") has received and reviewed the modified Site Management Plan ("SMP") for the referenced facility. The SMP was modified to incorporate the Department's December 2016 comments. The SMP is now approved. The Institutional Controls, inspections, monitoring and reporting must be completed as detailed in the SMP.

If you have any questions or need additional information to respond to this letter, please contact me at 631-444-0232.

Sincerely,

Carl Fritz, PE Professional Engineer I



Department of Environmental Conservation

RCRA LARGE QUANTITY GENERATOR

CLOSURE DOCUMENT

Konica Minolta Graphic Imaging Glen Cove, Nassau County Site No. 130028A EPA ID NYD002056679 November 2016

Statement of Purpose and Basis

This RCRA Large Quantity Generator (LQG) Closure presents the actions approved by the Department of Environmental Conservation (Department) for the above referenced site, pursuant to Article 27, Title 9 of the Environmental Conservation Law (ECL), and 6 NYCRR Parts 370–374 and 376 for closure of LQGs located over sole source aquifers. Closure addresses any contamination associated with the regulated storage areas for hazardous waste or any releases from other areas of the facility that may have occurred while in LQG status. An LQG is a facility that generates 1,000 kilograms or more of non-acute hazardous waste in a month, or stores 6,000 or greater kilograms of non-acute hazardous waste at any one time in designated and regulated storage areas. For acute hazardous wastes, an LQG is one that generates 1 kilogram per month or stores 1 or more kilograms of that waste.

Site Description: There are two properties that are subject to the RCRA Closure requirements. The first is a 13.6 acre portion of the 15 acre parcel that was last operated by the Konica Minolta Graphic Imaging Company. This does not include the 1.4 acre inactive hazardous waste disposal site (Site No.130028). This property is located on Charles Street in the City of Glen Cove, Nassau County, New York. This property is bounded to the south by Herb Hill Road and the Crown Dykman State Superfund site (Site No. 130054), to the east by Charles Street, to the west by the Li Tungsten Parcel B, a USEPA Superfund site (Site No. 130046), and to the north by the Place, a public roadway. The second property is located at 46 Charles Street in the City of Glen Cove, Nassau County, New York. It is 1.7 acres and. consists of 3 tax lots. Building 9 (also known as the Annex Building) was located on this property. It is bounded on the west by Charles Street, on the north by The Place, on the south and east by townhouses.

Site Features: The properties are currently vacant. All former buildings have been razed to grade leaving foundation slabs in place.

Current Zoning: The properties are zoned MW3 – Marine Waterfront.

Past Use of the Site: The properties were first developed in the early 1900's and occupied by the Ladew Belting Factory. The Powers Brothers purchased a portion of the site 1925 and 1931, and began operating Powers Chemco, which manufactured photographic film, paper, developers and fixers. At the same time, Columbia Ribbon and Carbon Company purchased the remainder of the property and began the production of blue printing inks, carbon paper and

typing ribbons. Powers Chemco purchased the Columbia site in 1979. Konica Minolta acquired Powers Chemco in 1987 and continued existing operations at the site from 1987 until 2007. The site has been unoccupied since 2007.

Geology/Hydrogeology: There are three principal aquifers in the area. These are the Upper Glacial, Magothy, and Lloyd aquifers. The site and its surrounding areas are underlain by the Harbor Hill ground moraine which consists of a mixture of sand, silt, clay and boulders. The soil beneath the site consists of layers ranging from medium to coarse sand and gravel to hard, dense silt and clay. The presence of a shallow, perched water table zone was noted beneath most of the site. The depth to water in the perched zone ranges from 6 to 14 feet. The groundwater flow in the perched zone varies from southeast to southwest. Based upon regional hydrogeological data, groundwater in the shallow upper glacial aquifer flows to the south towards Glen Cove Creek. The Magothy aquifer is the principal source of drinking water in the area. The City of Glen Cove draws water from the 200-300 foot zone of the Magothy from public supply wells located east of the site.

Nature and Extent of Contamination

Soil contamination was identified during the Closure Investigation. While significant contamination has been removed, and no sources of contamination (as defined by Part 375) remain, contamination exists beneath concrete slabs and some additional areas which requires a RCRA closure remedial program to address the contamination (see below).

Nature of contamination: The Closure Investigation identified the presence of various metals and polyaromatic hydrocarbons (PAHs) in soils in 41 specific areas of concern. Contaminants of concerns include arsenic, cadmium, chromium, copper, lead, manganese, nickel, silver, selenium, mercury and PAHs.

Extent of contamination: Groundwater is mostly uncontaminated. Two monitoring wells beneath the former plant site have detections marginally above the standards. Prior to remediation, levels of mercury in soil were up to 1.5 ppm, chromium up to 126 ppm, copper up to 397 ppm, lead up to 600 ppm, silver up to 290 ppm and cadmium up to 40.2 ppm. Subsequent to the remedial program, most contaminant concentrations in soil were below the commercial use soil cleanup objectives.

Description of the RCRA Closure

The Department has selected the following actions for the RCRA Closure of this LQG site. The components of the remedy, are as follows:

1. A site cover currently exists and will be maintained to allow for restricted residential use of the site. Any site redevelopment must maintain a site cover, which may consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).

- 2. 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 Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
 - allows the use and development of the controlled property for restricted residential as defined by Part 375-1.8(g), 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; and
 - requires compliance with the Department approved Site Management Plan.
- 3. A Site Management Plan is required, which includes the following:
 - a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 2 above.

Engineering Controls: Maintenance of the site cover system discussed in Paragraph 1.

This plan includes, but may not be limited to: an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

- a provision for further investigation to refine the nature and extent of any contamination beneath the slabs of the former manufacturing buildings and to address that contamination appropriately;
- descriptions of the provisions of the environmental easement including any land use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

9

Declaration

°,

The closure selected is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action and will allow for the identified use of the site.

November 14, 2016

Date

Jab H.TT

James B. Harrington, P.E. Director, Remedial Bureau A Division of Environmental Remediation



Appendix D

Water Use and Sewage Flow Calculations prepared by PS&S, dated February 24, 2021



December 4, 2020 Rev. February 24, 2021 03610-009

Education Energy Utility	Chair City o 9 Gler Glen	man DiMascio and Members of the Planning Board of Glen Cove n Street Cove, New York 11542
Healthcare	Re:	Garvies Point – Amended PUD
Public Works		Utility Demand Analysis - Revised

Real Estate

Science & Technology

Dear Chairman DiMascio and Members of the Planning Board:

RXR Glen Isle Partners (RXRGIP) (Applicant) previously prepared and submitted an application for the proposed Amended PUD Master Development Plan for the Garvies Point project. The amended design plans and tabulation sheets reflected the current programming for the overall PUD, including the reconfiguration of Block A, Blocks D, E and F, and Block J.

The prior Utility Demand Analysis memorandum demonstrated that the total project utility demands would be consistent with the "SEQRA Findings Statement for the 2011 Master Plan" (the Findings) and "Garvies Point PUD Master Plan." This included an assessment that existing infrastructure at Garvies Point would have adequate capacity to accommodate the development program being proposed. The study of utility demands also accounted for future workforce housing (64 total units).

The City requested that these studies be further expanded in scope as part of the Planning Board's review of the 2020 Amended PUD application. The comprehensive utility demand analysis herein encompasses the three main phases of the Garvies Point Redevelopment, and conservatively includes both potential offsite lots, 1 Garvies Point Road and Konica Parcels A, B and C, under consideration for future mixed-use development. As shown on the Master Plan - Existing, prepared by BHC Architects, 1 Garvies Point Road includes three proposed mixed-use buildings totaling 83 one-BR units, 22 two-BR units and 7,700 sf of retail. Per the Illustrative Landscape Plan - Konica Minolta Site, prepared by Torti Gallas and Partners, the Konica Minolta parcels include 141 one-BR units, 145 two-BR units, 50 three-BR units, 19,982 sf of retail and 15,000 sf of office space.

Water:

The SEQRA Findings for the overall Garvies Point project (i.e. PUD Master Plan) included various scenarios with water demand ranging between 647,545 GPD and 662,063 GPD. The estimated average daily demand for water per the Phase I, Phase II and Phase III improvements is 361,296 GPD. The projected water demand for the full buildout, including both future offsite parcels, is approximately 480,061 GPD. This average projected flow is considerably less than the demand originally anticipated per the Garvies Point PUD Master Plan.

3 Mountainview Road PO Box 4039 Warren, NJ 07059

t. 732.560.9700

www.psands.com



Sewer:

The Findings included various scenarios with sewer demand for the overall Garvies Point Waterfront Redevelopment project of 493,270 GPD. The Findings included requirements for the Applicant to prepare a study of the existing pump station and force main which was subsequently prepared and included threshold limits under which the existing pump station and force main had the capacity to serve the proposed development. Since that time, a new pump station and force main was designed, approved, and constructed. This new pump station was put into service in 2019 and was designed to handle the proposed sanitary flows from the (overall) development.

The total projected peak sewer flow associated with the current design for the overall Garvies Point Redevelopment is approximately 1.117 MGD (average daily demand = 328,451 GPD). The full buildout as proposed under this Amended PUD application, and including <u>both</u> potential future offsite developments, is approximately 1.484 MGD (average daily demand = 436,419 GPD). This is well below the average daily demand originally anticipated per the Garvies Point SEQRA Findings (493,270 GPD) and well below the sewage demand utilized for design of the pump station (1.85 MGD peak / 544,118 GPD average daily).

Water Resources:

The stormwater management strategy for the proposed Project is consistent with the original PUD Master Plan, 2011 SEQRA Findings and Stormwater Pollution Prevention Plan (SWPPP) reports (titled "Garvies Point Waterfront Redevelopment – Phase 1," last revised February 2017 and "Garvies Point Waterfront Redevelopment – Phase IIA," last revised September 2017). Most of the overall drainage infrastructure for the Project has been constructed as part of Phase I improvements, Phase IIA improvements and the Garvies Point Roadway Project. The as-built drainage system includes bulkhead outfalls, water quality devices and underground detention/irrigation systems. The proposed Block J (Phase III) improvements will connect to the existing outfall constructed under Phase I and will include additional water quality treatment devices. Revised drainage calculations for the distinct sub-watersheds across Phase I, Phase II and Phase III demonstrate compliance with the storm sewer conveyance and water quality requirements (see enclosed Water Quality Drainage Area Map and Drainage Calculations).

The parcels currently under consideration for future mixed-use development were not included in the original stormwater design for the overall project. However, a similar methodology will be implemented to comply with the applicable drainage and water quality requirements. Site-specific utility information for the two offsite parcels is summarized below.

Future Offsite Developments:

Summary

The original utility demand calculations for the 2020 Amended PUD included estimated flows for an additional 64 offsite workforce housing units. The proposed 64 workforce housing units equated to a daily utility demand of 19,690 GPD and 17,900 GPD for water and sewer respectively. The utility demand analysis has been updated to reflect the full developments as conceptualized for a future phase.



The proposed design for the 1 Garvies Point Road parcel and the Konica Minolta site total 441 residential units, 28,000 sf of retail and 15,000 sf of office space. The future development at 1 Garvies Point Road would correspond to 21,802 GPD for water and 19,820 GPD for sewer demand. The utility demands for the A, B and C parcels of the Konica Minolta site are 96,963 GPD for water and 88,148 GPD for sewer. The overall utility demand analysis demonstrates that there should be adequate water and sewer availability to accommodate the proposed future phases based on the current planning numbers for the Garvies Point Redevelopment as included in the SEQRA approval for the overall development. The original assessment of the overall Project water and sanitary availability included conservative flow values (126,088 GPD for water and 114,625 GPD for sewer) for each of these two potential future phases (future MW-3). It thus appears that these future developments can connect to the recently-constructed water and sewer mains within Garvies Point Road and Herb Hill Road.

With regards to drainage, it is unclear whether existing public infrastructure located in the adjacent public rights-of-way includes accommodations for the 1 Garvies Point Road and Konica Minolta sites. The parcels under consideration for future development were not incorporated into the original stormwater management design for the overall Garvies Point Project. It is therefore conservatively assumed that direct runoff associated with these lots will be managed as their own systems with limited reliance on the City's storm sewers. However, it is expected that the proposed improvements would reduce the total site impervious coverage.

1 Garvies Point Road

The 6-acre mixed-use site will be located on the north side of Garvies Point Road. The stormwater strategy for the future development would follow the same methodology implemented for the Garvies Point Redevelopment project. Specifically, the proposed system would achieve the 2" water quality requirement by utilizing subsurface detention/irrigation chambers and a Jellyfish® water quality treatment device. Stormwater runoff would be detained on site to limit overflow during peak rainfall events. It is anticipated that the overflow sewer would then connect to an existing storm sewer system and outfall within Crescent Park.

The Project Team has reviewed available information for the existing 1 Garvies Point Road project site as part of an initial feasibility study. This included drainage considerations for the proposed concept plan and stormwater strategy. The Team is confident that the proposed design can accommodate the necessary stormwater infrastructure to comply with water quality requirements, and by applying a similar approach as those utilized elsewhere at Garvies Point (i.e. subsurface irrigation/detention chambers, water quality treatment devices). The full stormwater system design will be prepared at the time of the detailed site plan application. The stormwater management strategy will follow all code requirements and demonstrate no adverse drainage effects to the 1 Garvies Point Road site or adjacent parcels.

Konica Minolta

The 17.6-acre site includes mixed-use development on parcels A, B and C on the north side of Herb Hill Road and east of Dickson Street. Parcel A will utilize onsite detention/irrigation and Jellyfish® water quality treatment devices to achieve the 2" water quality volume. The proposed stormwater system would likely necessitate a new sewer connection across Herb Hill Road and an additional outfall to Glen Cove Creek. This assumes that onsite infiltration would not be permitted due to



environmental restraints. Any permit requirements for the future outfall as well as related drainage calculations would be included as part of the preliminary site design.

Drainage improvements for Parcels B and C would be designed as standalone systems and analyzed independently. Barring the presence of known environmental contaminants, these parcels would utilize onsite infiltration through a series of drywells. The respective collection systems and storage volumes would be designed in compliance with Nassau County standards.

The Project Team has reviewed available information for the existing Konica Minolta project site (Parcels A, B and C) as part of an initial feasibility study. This included grading and drainage considerations for the proposed concept plan. Based on certain site assumptions, the Team is confident that the proposed design can accommodate the necessary stormwater infrastructure to comply with water quality requirements. This would likely be achieved by incorporating many of the same strategies utilized elsewhere at Garvies Point (i.e. subsurface irrigation/detention chambers, water quality treatment devices) and introducing a new outfall to Glen Cove Creek. The full stormwater system design will be prepared at the time of the detailed site plan application. The stormwater management strategy will follow all code requirements and demonstrate no adverse drainage effects to the Konica Minolta site or adjacent parcels.

We trust that this information addresses the Project's compliance with the Utilities and Water Resources components of the original PUD Master Plan.

Should you have any questions, please feel free to contact us.

Sincerely yours,

PAULUS, SOKOLOWSKI AND SARTOR ENGINEERING, PC

Patricia A. Ruskan

Patricia A. Ruskan, P.E. Vice President

PAR/bsl Encl.



Appendix – Key Maps of Potential Future Offsite Developments

Concept Plan – 1 Garvies Point Road, prepared by BHC Architects



Program – Konica Minolta Site, prepared by Torti Gallas and Partners





Paulus, Sokolowski and Sartor Engineering, PC 67A Mountain Blvd. Ext. Warren, NJ 07059 Tel: 732-560-9700 Fax: 732-764-6565

PROPOSED DOMESTIC WATER DEMAND (PHASE I, II & III)

1/18/2016
10/4/2016, 3/11/2020, 8/12/2020, 10/19/2020, 12/3/2020, 2/24/2021
03610-009
Garvies Point Waterfront Development - Phase 1, 2 & 3
City of Glen Cove, Nassau County, NY
JMM/BSL

WEST PARCEL - GARVIES POINT ROAD - PHASE 2

		Unit Daily Demand ⁽¹⁾	Average Daily Demand/Block
	# of Units/Size	(gpd)	<u>(qpd)</u>
RESTAURANT AT POINT			
Postouront Sooto	250	20 5	12 475
Restaurant Seats	350	30.0	13.475 and
PARK/BEACH			13,475 gpu
Public Restroom (visitors)	100	Б Б ⁽⁴⁾	550
	(estimated)	0.0	550 and
BLOCK A1: Condominium Units	(Colimated)		550 gpu
1 Bedroom	25	165	4,125
2 Bedroom	87	330	28,710
3 Bedroom	24	440	10,560
	136		43,395 gpd
BLOCK A2: Condominium Units			
1 Bedroom	14	165	2,310
2 Bedroom	48	330	15,840
3 Bedroom	13	440	5,720
	75		23,870 gpd
BLOCK A3: Condominium Units			
1 Bedroom	25	165	4 125
2 Bodroom	25	220	4,125
2 Bedroom	10	440	20,710
5 Bedioon	135	440	42 955 and
BLOCK B: Condominium Units	100		42,000 gpu
1 Bedroom	36	165	5,940
2 Bedroom	102	330	33,660
3 Bedroom	29	440	12,760
Marina Support Building at Ferry			,
Terminal (sf)	804	0.11 ⁽²⁾	88
	167		52,448 gpd
Average Daily Demand:	WEST P	ARCEL SUB-TOTAL =	176.693 gpd (average)
		Residential	162,668 gpd (average)
		Commercial	14,025 gpd (average)
Peak Daily Demand			
(Peak Factor = 3.4) ⁽³⁾ :	WEST P	ARCEL SUB-TOTAL =	600,758 gpd (peak)
		Residential	553,073 gpd (peak)
		Commercial	47,685 gpd (peak)

EAST PARCEL - PHASE 2 & FUTURE PHASE			
		Unit Daily Demand ⁽¹⁾	Average Daily Demand/Block
	# of Units/Size	<u>(gpd)</u>	<u>(gpd)</u>
BLOCK E-F: Rental Units			
1 Bedroom	41	165	6,765
2 Bedroom	111	330	36,630
3 Bedroom	20	440	8,800
	172	1	52,195 gpd
BLOCK E RESTAURANT			
Destourant Sasta	105	20 5	7 508
Restaurant Seats	190	0.00	7,500 and
PLOCK C: Workforce Units	190		7,508 gpu
BLOCK G. WORIDICE ONIS			
1 Bedroom	14	165	2 310
2 Bedroom	31	330	10.230
3 Bedroom	10	440	4.400
	55		16.940 apd
MW-3: Konica Parcel A-B-C (future)			
1 Bedroom	141	165	23,265
2 Bedroom	145	330	47,850
3 Bedroom	50	440	22,000
Retail (sf)	19.982	0.11 ⁽⁵⁾	2.198
Office (sf)	15,000	0 11 ⁽⁶⁾	1 650
	10,000	0.11	06.963 and
MW-3: 1 Garvies Pt Rd (future)			50,000 gpa
1 Bedroom	83	165	13.695
2 Bedroom	22	330	7.260
Rotail (sf)	7 700	0.11 ⁽⁵⁾	847
	1,100	0.11	21 802 and
۱			21,002 990
Average Daily Demand:	EAST PARCE	L PH 2 SUB-TOTAL =	195.408 gpd (average)
		Residential	183,205 gpd (average)
		Commercial	12,203 gpd (average)
Peak Daily Demand			
(Peak Factor = 3.4) ⁽³⁾ :	EAST PARCE	L PH 2 SUB-TOTAL =	664,386 gpd (peak)
,		Residential	622,897 gpd (peak)
		Commerciai	41,489 дра (реак)
PHASE 2 - PRO		DEMAND TOTAL =	372 101 and
			572,101 gpu
PHASE 2 -	PROJECT PEAK	DEMAND TOTAL =	1,265,143 gpd

NOTES:

(1) Unit Daily Flows taken from "Design Standards for Wastewater Treatment Works" from NYSDEC, dated 1988, plus 10% for general rule of thumb for water demand (water-in is generally 10% more than water-out).

(2) Use shopping center criteria = 0.1 gpd/sf of space plus 10%.

(3) Peak factor taken from "Recommended Standards for Wastewater Facilities", (10 States Standards), 2004 Edition, Figure 1.
(4) Use parks criteria (per picnicker, restroom only) = 5 gpd/picnicker plus 10%.

EAST PARCEL - PHASE 1 & PHASE 3			
		Unit Daily Demand ⁽¹⁾	Average Daily Demand/Block
	# of Units/Size	<u>(gpd)</u>	<u>(gpd)</u>
BLOCK H: Rental Units			
1 Bedroom	94	165	15,510
2 Bedroom	83	330	27,390
Retail (sf)	2,985	0.11 ⁽⁵⁾	328
			43,228 gpd
BLOCK I: Condominium Units			
1 Bedroom	114	165	18,810
2 Bedroom	94	330	31,020
	208		49,830 gpd
ANGLER'S CLUB			
square feet	2,170	0.11 ⁽⁶⁾	239
	2,170		238.7 gpd
BREWERY & MARINA SUPPORT			
Restaurant Seats	363	38.5	13,976
	363		13,976 gpd
BLOCK J: Commercial/Cultural			
Retail (sf)	6,250	0.11 ⁽⁶⁾	688
	6,250	-	688 gpd
Average Daily Flow:	FAST PARCE	I PH 1 SUB-TOTAL =	107 960 and (average)
		Residential	92 730 gpd (average)
		Commercial	15 230 gpd (average)
Peak Daily Flow (Peak	EAST PARCE	L PH 1 SUB-TOTAL =	367.064 gpd (peak)
Eactor $= 3.4$ ⁽³⁾ .		Residential	315,282 gpd (peak)
Factor = 3.47 .		Commercial	51,782 gpd (peak)
PHASE 1 - PRO	DJECT AVERAGE	DEMAND TOTAL =	107,960 gpd
PHASE 1	- PROJECT PEAK	DEMANDTOTAL =	367.064 apd

NOTES:

(5) Use shopping center criteria = 0.1 gpd/sf of space plus 10%.
(6) Use office space criteria = 0.1 gpd/sf of space plus 10%.

EAST PARCEL - SUBTOTAL		
Average Daily Flow:	EAST PARCEL PH 2 SUB-TOTAL =	195,408 gpd (average)
	EAST PARCEL PH 1 SUB-TOTAL =	107,960 gpd (average)
	EAST PARCEL OVERALL SUB-TOTAL =	303,368 gpd (average)
Peak Daily Flow (Peak	EAST PARCEL PH 2 SUB-TOTAL =	664,386 gpd (average)
Factor = 3.4) ⁽³⁾ :	EAST PARCEL PH 1 SUB-TOTAL =	367,064 gpd (average)
	EAST PARCEL OVERALL SUB-TOTAL =	1,031,450 gpd (average)

OVERALL PROJECT (PHASE 1, PHASE 2, PHASE 3 & FUTURE PHASE)					
Projected Average Demand	Phase 2	Phase 1	Total		
Residential	345,873	92,730	438,603		
Commercial	26,228	15,230	41,458		
Total	372,101	107,960	480,061		
Projected Peak Demand	Phase 2	Phase 1	Total		
Residential	1,175,970	315,282	1,491,252		
Commercial	89,174	51,782	140,956		
Total	1,265,143	367,064	1,632,207		

PS°S

Paulus, Sokolowski and Sartor Engineering, PC 67A Mountain Blvd. Ext. Warren, NJ 07059 Tel: 732-560-9700 Fax: 732-764-6565

PROPOSED SANITARY SEWER SYSTEM PROJECTED FLOWS (PHASE I, II & III)

DATE: REVISED: PROJECT NO.: PROJECT NAME: PROJECT TOWN: PREPARED BY: 1/18/2016 10/4/2016, 10/30/2017, 1/6/2020, 8/12/2020, 10/19/2020, 12/3/2020, 2/24/2021 03610-009 Garvies Point Waterfront Development - Phase 1, 2 & 3 City of Glen Cove, Nassau County, NY JMM/BSL/GY

WEST PARCEL - GARVIES POINT ROAD - PHASE 2

		Unit Daily Flow ⁽¹⁾	Average Daily Flow/Block	
	# of Units/Size	(gpd)	(gpd)	Peak
BLOCK A RESTAURANT				
Destaurant Casta	250	25	10.050	
Restaurant Seats	350	30	12,250 and	11 650
PARK/BEACH			12,250 gpa	41,000
		-(4)		
Public Restroom (visitors)	100	5(*)	500	
	(estimated)		500 gpd	1,700
BLOCK A1: Condominium Units				
1 Bedroom	25	150	3 750	
2 Bedroom	87	300	26 100	
3 Bedroom	24	400	9,600	
	136	-	39.450 apd	134.130
BLOCK A2: Condominium Units				
1 Bedroom	14	150	2.100	
2 Bedroom	48	300	14,400	
3 Bedroom	13	400	5,200	
	75		21,700 gpd	73,780
BLOCK A3: Condominium Units				
1 Bedroom	25	150	3,750	
2 Bedroom	87	300	26,100	
3 Bedroom	23	400	9,200	
	135		39,050 gpd	132,770
BLOCK B: Condominium Units				
1 Bedroom	36	150	5,400	
2 Bedroom	102	300	30,600	
3 Bedroom	29	400	11,600	
Marina Support Building at Ferry	004	0 1(2)	00	
Terminal (ST)	804	0.1*7	47.000 and	160 110
	167		47,680 gpd	102,113
Average Daily Flow:	WEST PA	ARCEL SUB-TOTAL =	160,630 apd (average)	
		Residential	147,880 gpd (average)	
		Commercial	12,750 gpd (average)	
Peak Daily Flow (Peak				ĺ
Factor = 3.4) ⁽³⁾ :	WEST PA	ARCEL SUB-TOTAL =	546,143 gpd (peak)	
		Residential	502,793 gpd (peak)	
		Commercial	43,350 gpd (peak)	
EAST PARCEL - PHASE 2 & FUTUF	REPHASE			
------------------------------------	------------------------	--------------------------------	--------------------------	
		Unit Daily Flow ⁽¹⁾	Average Daily Flow/Block	
	<u># of Units/Size</u>	<u>(gpd)</u>	<u>(gpd)</u>	
BLOCK E-F: Rental Units				
1 Bedroom	41	150	6 150	
2 Bedroom	111	300	33 300	
3 Bedroom	20	400	8 000	
	172	100	47 450 apd	
BLOCK E RESTAURANT			11,100 gpa	
	105	05	0.005	
Restaurant Seats	195	35	6,825	
BLOCK G: Workforce Units	195		6,825 gpd	
1 Bedroom	14	150	2,100	
2 Bedroom	31	300	9,300	
3 Bedroom	10	400	4,000	
	55		15,400 gpd	
MW-3: Konica Parcel A-B-C (future)				
1 Bedroom	141	150	21,150	
2 Bedroom	145	300	43,500	
3 Bedroom	50	400	20,000	
Retail (sf)	19,982	0.1 ⁽⁵⁾	1,998	
Office (sf)	15,000	0.1 ⁽⁶⁾	1,500	
	.0,000		88.148 gpd	
MW-3: 1 Garvies Pt Rd (future)				
1 Bedroom	83	150	12 450	
2 Bedroom	22	300	6,600	
Retail (sf)	7 700	0 1 ⁽⁵⁾	770	
	7,700	0.1	19,820 gpd	
Average Daily Flow			1776/3 and (average)	
Average Daily 110W.	LAUIFANCE	Residential	166.550 gpd (average)	
		Commercial	11.093 gpd (average)	
Peak Daily Flow (Peak				
Factor = 3.4) ⁽³⁾ :	EAST PARCE	L PH 2 SUB-TOTAL =	603.987 gpd (peak)	
, _		Posidontial	566 270 and (poak)	
		Commercial	37 717 and (peak)	
		Commercial	Si,iii ghu (heak)	
			220 274 and	
PHASE 2 - Ph	COJECT AVERAC	SE FLOW IUTAL =	338,214 gpa	
PHASE 2	2 - PROJECT PE	K FLOW TOTAL =	1,150,130 gpd	

NOTES:

(1) Unit Daily Flows taken from "Design Standards for Wastewater Treatment Works" from NYSDEC, dated 1988.

(2) Use shopping center criteria = 0.1 gpd/sf of space.
(3) Peak factor taken from "Recommended Standards for Wastewater Facilities", (10 States Standards), 2004 Edition, Figure 1.

(4) Use parks criteria (per picnicker, restroom only) = 5 gpd/picnicker.

EAST PARCEL - PHASE 1 & PHAS	E 3		
		Unit Daily Flow ⁽¹⁾	Average Daily Flow/Block
	# of Units/Size	<u>(gpd)</u>	<u>(gpd)</u>
BLOCK H: Rental Units			
1 Bedroom	94	150	14,100
2 Bedroom	83	300	24,900
Retail (sf)	2,985	0.1 ⁽⁵⁾	299
BLOCK I: Condominium Units			39,299 gpu
1 Bedroom	114	150	17 100
2 Bedroom	94	300	28,200
	208		45,300 gpd
ANGLER'S CLUB			
square feet	2,170 2,170	0.1 ⁽⁶⁾	217 217 apd
BREWERY & MARINA SUPPORT	_,		<u> </u>
Restaurant Seats	363	35	12,705
	363		12,705 gpd
BLOCK J: Commercial/Cultural		(6)	
Retail (sf)	6,250 6,250	0.1%	625 625 apd
Average Daily Flow:	EASI PARCE	Posidential	84.300 gpd (average)
		Commercial	13 846 gpd (average)
Peak Daily Flow (Peak	EAST PARCE	L PH 1 SUB-TOTAL =	333,695 gpd (peak)
Factor = 3.4) ⁽³⁾ :		Residential	286,620 gpd (peak)
		Commercial	47,075 gpd (peak)
PHASE 1 - PI	ROJECT AVERAC	GE FLOW TOTAL =	98,146 gpd
PHASE ²	1 - PROJECT PE	K FLOW TOTAL =	333,695 gpd

NOTES:

(5) Use shopping center criteria = 0.1 gpd/sf of space plus 10%.
(6) Use office space criteria = 0.1 gpd/sf of space plus 10%.

EAST PARCEL - SUBTOTAL		
Average Daily Flow:	EAST PARCEL PH 2 SUB-TOTAL =	177,643 gpd (average)
	EAST PARCEL PH 1 SUB-TOTAL =	98,146 gpd (average)
	EAST PARCEL OVERALL SUB-TOTAL =	275,789 gpd (average)
Peak Daily Flow (Peak	EAST PARCEL PH 2 SUB-TOTAL =	603,987 gpd (average)
Factor = 3.4) ⁽³⁾ :	EAST PARCEL PH 1 SUB-TOTAL =	333,695 gpd (average)
	EAST PARCEL OVERALL SUB-TOTAL =	937,682 gpd (average)

OVERALL PROJECT (PHASE 1, PHASE 2, PHASE 3 & FUTURE)								
Projected Average Flow	Phase 2	Phase 1	Total					
Residential	314,430	84,300	398,730					
Commercial	23,843	13,846	37,689					
Total	338,274	98,146	436,419					
Projected Peak Flow	Phase 2	Phase 1	Total					
Residential	1,069,063	286,620	1,355,683					
Commercial	81,067	47,075	128,142					
Total	1,150,130	333,695	1,483,825					

Paulus, Sokolowski and Sartor Engineering, PC



3 Mountainview Road Warren, NJ 07059 Tel: 732-560-9700 Fax: 732-764-6565

Drainage Storage Required/Provided per Nassau County

2/17/2021

Last Rev.: PROJECT NO .: PROJECT NAME:

Date:

03610-0002

PROJECT TOWN: PREPARED BY:

Garvies Point Garvies Point Waterfront Redevelopment - PHASE I-II-III City of Glen Cove, NY BSL

	P-DA-1a	P-DA-1b	P-DA-1c (Rooftop A)	P-DA-1d	P-DA-1 (1a, 1b, 1c & 1d)	P-DA-2a	P-DA-2b	P-DA-2c (Rooftop B)	P-DA-2 (2a, 2b & 2c)	P-DA-3a	P-DA-3b	Total P-DA-3 (3a & 3b)
Pervious Area (sq. ft.)	106,010	90,171		9,148	205,329	38,770	33,980		72,750	3,485	25,270	28,755
Green Roof (sq. ft.)			63,392		63,392			37,030	37,030			
Impervious Area (incl imper. roof)	26,503	38,645	117,729	5,663	188,539	77,540	21,780	60,550	159,870	25,700	39,630	65,330
Total Area (sq. ft.)	132,513	128,816	181,121	14,810	457,260	116,310	55,760	97,580	269,650	29,185	64,900	94,085
Total Area (ac.)	3.04	2.96	4.16	0.34	10.50	2.67	1.28	2.24	6.19	0.67	1.49	2.16
Weighted Coefficient (C)	0.43	0.50	0.79	0.55	0.60	0.73	0.55	0.78	0.71	0.87	0.70	0.75
2" Storage of Rainfall (ft.)	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167
Storage Required ($V = A \times C \times 2^{"}$)					45,401				32,036			11,782
Total Water Quality (WQv) Required	9,497	10,627	23,923	1,354	45,401	14,216	5,148	12,673	32,036	4,243	7,538	11,782
Irrigation Required (cf):			15,093					8,132				
Irrigation Provided (cf):			15,100		15,100			12,235	12,235			
WQ Treated with Rain Garden (cf):	1,090	2,390			3,480							
Volume To be Treated by Jellyfish(cf)	8,407	8,237	23,923	1,354		14,216	5,148	12,673				11,782
Qa = WQv/A (inches)	0.76	0.77	1.59	1.10		1.47	1.11	1.56				1.50
CN=1000/[10+5P+10Qa-10(Qa2 + 1.25 Qa P)½]	84	84	96	90		95	90	96				95
la/P	0.186	0.184	0.040	0.111		0.055	0.109	0.044				0.050
qu	660	660	660	660		660	660	660				660
Converted to Q wq (cfs)	2.39	2.34	6.80	0.38		4.04	1.46	3.60				3.35
QwqProvided (cfs)	2.94	4.90	5.88	1.96		4.90	1.96	4.90				3.12
Volume provided with Jellyfish (cf.)	10,349	17,248	20,698	6,899	55,194	17,248	6,899	17,248	41,395			10,982
Total Water Quality (WQv) Provided					73,774				53,630			10,982
Water Quality Units ID (Jellyfish Filter)	WQ113	WQ142	WQ 165	WQ115		WQ221	WQ236	WQ256				WQ518
Jellyfish Unit and Model Number	JF 8'x8'	JF 8'x11'	JF 8'x12'	JF 8'x6'		JF 8'x11'	JF 8'x6'	JF 8'x11'				JF 8'x12'
Bypass Flow												
Routed flow $(Q = C \times A \times 4.8 \text{ in/hr})$	6.28	7.03	15.82	0.90		9.40	3.40	8.38				7.79
Bypass flow (cfs)	3.89	4.69	9.94	0.51		5.36	1.94	3.48				4.44
Bypass Capacity (cfs)	8.00	8.00	8.00	4.00		8.00	5.00	8.00				8.00
Total Capacity (cfs)	10.94	12.9	13.88	5.96		12.90	6.96	12.9				11.12

Equivalent Rainfall

Total Water Quality (WQv) Required (2")	9,497	10,627	23,923	1,354	45,401	14,216	5,148	12,673	32,036	4,243	7,538	11,782
Total Water Quality (WQv) Provided					73,774				53,630			10,982
Equivalent Rainfall (inches)					3.25				3.35			1.86
Water Quality (WQv) Required (1.5")	7,123	7,970	17,942	1,015	34,051	10,662	3,861	9,505	24,027	3,183	5,654	8,836
WQ Provided by Rain Garden & Jellyfish					58,674				41,395			10,982
Equivalent Rainfall (inches)					2.58				2.58			1.86
Outfall ID					OF 146				OF 238			OF 519

References / Notes:

- 1. Impervious Coefficient (C_R) = 0.95, Pervious Coefficient (CP) = 0.30, Pervious Roof Coefficient (CP) = 0.50
- 2. Surface area is including 1' thick walls
- 3. Nassau County Department of Public Works Drainage Requirements
- Storage Volume = Area x Coefficent x Runoff Storage
- 4. Water and wetland areas are not included in drainage area calculations since they cannot be captured
- 5. Required irrigation volume based on 1" rainfall for building area (Full impervious area, no green roof reduction)
- 6. Water quality volume (c.f.) and equavalent rainfall (inches) provided per watershed and outfall.
- 7. Jellyfish water quality flow provided based on as-built calculations by manufacturer



	P-DA-4a	P-DA-4b (Rooftop E)	P-DA-4c (Rooftop D)	Total P-DA-4 (4a, 4b & 3c)	P-DA-5a	P-DA-5b	P-DA-5c (Rooftop H)	Total P-DA-5 (5a, 5b & 5c)	P-DA-6	P-DA-4, 5 &6	P-DA-7a (Rooftop I & MSB 1)	P-DA-7b	P-DA-7c	Total P-DA-7 (7a, 7b & 7c)	Total Project Site (Ph I & Ph II)	P-DA-8a	P-DA-8b	Total P-DA-8 (8a & 8b)	Total Project Site (Ph I, Ph II & Ph III)
Pervious Area (sq. ft.)	200,812			200,812	0	15,230		15,230	71,500	287,542		14,680		14,680	614,111	42,400	53,580	95,980	710,091
Green Roof (sq. ft.)		19,454	17,723	37,177			30,060	30,060		67,237	30,930			30,930	204,836				204,836
Impervious Area (incl imper. roof)	43,996	36,130	32,913	113,039	0	3,500	41,820	45,320	34,350	192,709	68,500	68,900	4,970	142,370	646,669	47,200	10,900	58,100	704,769
Total Area (sq. ft.)	244,807	55,584	50,636	351,027	0	18,730	71,880	90,610	105,850	547,487	99,430	83,580	4,970	187,980	1,907,490	89,600	64,480	154,080	2,061,570
Total Area (ac.)	5.62	1.28	1.16	8.06	0.00	0.43	1.65	2.08	2.43	12.57	2.28	1.92	0.11	4.32	43.79	2.06	1.48	3.54	47.33
Weighted Coefficient (C)	0.42	0.79	0.79	0.53	0.00	0.42	0.76	0.69	0.51	0.55	0.81	0.84	0.95	0.83	0.47	0.64	0.41	0.55	0.48
2" Storage of Rainfall (ft.)	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167	0.167
Storage Required ($V = A \times C \times 2^{"}$)				31,036				10,442	9,014	50,492				25,853	150,165			13,998	164,163
Total Water Quality (WQv) Required	17,007	7,342	6,688	31,036	0	1,316	9,127	10,442	9,014	50,492	13,423	11,643	787	25,853	119,379	9,593	4,405	13,998	133,377
Irrigation Required (cf):		4,632	4,220				5,990				8.286								
Irrigation Provided (cf):			3,463				12,582			16,045	8,505			8,505	34,608				51,885
WQ Treated with Rain Garden (cf):						1.090			1.600	2.690					2.180				6.170
Volume To be Treated by Jellyfish(cf)						,			,	34,447	13,423	11.643	787		,	9,593	4,405	13,998	
Qa = WQv/A (inches)										0.76	1.62	1.67	1.90			1.28	0.82	1.09	
CN=1000/[10+5P+10Qa-10(Qa2 + 1.25 Qa P)½]										84	96	97	99			93	85	90	
la/P										0.187	0.037	0.031	0.009			0.080	0.170	0.112	
<i>qu</i>										640	660	660	660			660	660	660	
Converted to Q wq (cfs)										9.49	3.81	3.31	0.22			2.73	1.25	3.98	
QwgProvided (cfs)										16.20	3.12	4.22	0.45			3.12	1.96		
Volume provided with Jellyfish (cf.)										58,806	10,982	14,854	1,584	27,421	141,596	10,982	6,899	17,882	159,478
Total Water Quality (WQv) Provided										77,541				35,926	151,315			17,882	169,196
Water Quality Units ID (Jellyfish Filter)		Treated	Treated				Treated			WQ390	WQ 445	WQ459	WQ482			WQ410	WQ425		
Jellyfish Unit and Model Number										22'x20'	JF 8'x12'	JF 8'x12'	4'Ø			JF 8'x12'	JF 8'x6'		
Bypass Flow																			
Routed flow ($Q = C \times A \times 4.8 \text{ in/hr}$)										33.38	8.87	7.70	0.52			6.34	2.91	9.25	
Bypass flow (cfs)										23.89	5.75	4.39	0.30			3.62	1.66	5.28	
Bypass Capacity (cfs)										166.00	8.00	8.00	2.50			8.00	8.00	8.00	
Total Capacity (cfs)										180.42	11.12	12.22	2.95			11.12	9.96	8	

Equivalent Rainfall

Total Water Quality (WQv) Required (2")	17,007	7,342	6,688	31,036	0	1,316	9,127	10,442	9,014	50,492	13,423	11,643	787	25,853	119,379	9,593	4,405	13,998	133,377
Total Water Quality (WQv) Provided										77,541				35,926	151,315			17,882	169,196
Equivalent Rainfall (inches)										3.07				2.78	2.54			2.55	2.54
Water Quality (WQv) Required (1.5")	12,755	5,506	5,016	23,277	0	987	6,845	7,832	6,760	37,869	10,068	8,732	590	19,390	89,534	7,195	3,304	10,499	100,033
WQ Provided by Rain Garden & Jellyfish										61,496				27,421	120,170			17,882	138,051
Equivalent Rainfall (inches)										2.44				2.12	1.60			2.55	1.68
Outfall ID										OF 395				OF 484				OF 484	

References / Notes:

1. Impervious Coefficient (C_R) = 0.95, Perv

 Surface area is including 1' thick walls
 Nassau County Department of Public W Storage Volume = Area x Coefficent

4. Water and wetland areas are not includ

5. Required irrigation volume based on 1"

6. Water quality volume (c.f.) and equavale

7. Jellyfish water quality flow provided base

Includes Rooftop E & H







Appendix E

Traffic Impact Study prepared by VHB, dated March 2021

Application for PUD Amendment

Garvies Point Mixed-Use Waterfront

Development Project

City of Glen Cove, New York

PREPARED FOR

RXR Glen Isle Partners, LLC

PREPARED BY



VHB Engineering, Surveying Landscape Architecture and Geology, P.C. 100 Motor Parkway Suite 350 Hauppauge, NY 11788 631.787.3400

March 2021

Table of Contents

Introduction	1
Project Description	2
Study Methodology	5
Existing Conditions	7
Roadway and Intersection Conditions	7
Garvies Point Road	7
Herb Hill Road	8
Glen Cove Avenue/Brewster Street	8
Pratt Boulevard (NYS Route 107)	8
Charles Street	8
The Place	9
Mill Hill Road	9
Hill Street	9
Study Intersections	9
Glen Cove Avenue/Brewster Street at Pratt Boulevard (NYS Route 107)/Charles Street	12
Brewster Street at Mill Hill Road/Herb Hill Road	13
Glen Cove Avenue at Charles Street	14
Charles Street at Herb Hill Road	
Garvies Point Road/Dickson Street at Herb Hill Road	
The Place at Charles Street	1/
Hill Street/Coles Court at Mill Hill Road/The Place	18
Traffic volume Data	19
Future Conditions	20
2025 Background Traffic	20
Other Planned Developments	21
Background Traffic Growth	21
2025 Build Condition with Approved PUD	23
Development Details – Approved PUD	23
Project-Generated Traffic Volumes – Approved PUD	23
Trip Distribution and Assignment	24
2025 Build Condition with Amended PUD	
Development Details – Additional Parcels	
Generated Traffic Volumes – Additional Sites	
Development Details – Amended PUD	31
Project-Generated Traffic Volumes – Amended PUD	ا ک
The Distribution and Assimption	
ו רוף טוגדוט וויט rip וויט and Assignment	

Traffic Operations Analysis	
Level of Service and Delay Criteria	
Software	
Level of Service Analysis	
Analysis Results	
Unsignalized Intersection Analysis Results	47
Mitigation – Signalized Intersections	
Traffic Service Conclusions	51
Project Mitigation Status	51
Conclusions	53

List of Tables

Table No.	Description	Page
Table 1 - Propos	ed Development Mix	23
Table 2 – Net Tr	ip Generation - Approved 2015 Planned Unit Development	24
Table 3 - Potent	ial Development Mix – 1 Garvies Point Road	28
Table 4 - Potent	ial Development Mix – Konica Minolta	28
Table 5 – Trip G	eneration Estimates – 1 Garvies Point Road	29
Table 6 – Trip G	eneration Estimates – Konica Minolta	30
Table 7 - Propos	ed Development Mix – Amended PUD	31
Table 8 – Overa	I Adjusted Trip Generation Estimate – Amended PUD	32
Table 9 - LOS Su	mmary – Signalized Intersections – AM Peak Hour 1 of 2	40
Table 9 - LOS Su	mmary – Signalized Intersections – AM Peak Hour 2 of 2	41
Table 10 - LOS S	ummary – Signalized Intersections – PM Peak Hour 1 of 2	42
Table 10 - LOS S	ummary – Signalized Intersections – PM Peak Hour 2 of 2	43
Table 11 - LOS S	ummary – Signalized Intersections – Saturday Midday Peak Hour 1 of 2 .	45
Table 11 - LOS S	ummary – Signalized Intersections – Saturday Midday Peak Hour 2 of 2 .	46
Table 12 - LOS S	ummary – Unsignalized Intersections – AM Peak Hour	47
Table 13 - LOS S	ummary – Unsignalized Intersections – PM Peak Hour	47
Table 14 - LOS S	ummary – Unsignalized Intersections – Saturday Midday Peak Hour	48
Table 15 – Ident	ified Mitigation	49
Table 16 – LOS S	ummary – Mitigation – PM Peak Hour	50
Table 17 – LOS S	ummary – Mitigation – Saturday Midday Peak Hour	51

List of Figures

Figure No.	Description	Page
Figure 1 - Projec	t Location Map	4
Figure 2 - Study I	Intersections	11
Figure 3 – 2025 I	Background Traffic Volumes	22
Figure 4 – 2015 /	Approved PUD Distribution	25
Figure 5 – 2015 /	Approved PUD Project Volumes	
Figure 6 – 2025 I	Build with Approved PUD Peak Hour Volumes	27
Figure 7 – Amen	ded PUD Trip Distribution	
Figure 8 – Amen	ded PUD Project Volumes	
Figure 9 – 2025 I	Build with Amended PUD Peak Hour Volumes	

Appendices

- Appendix A RXR Glen Isle Turning Movement Count Figures
- Appendix B LOS Definitions
- Appendix C Synchro Capacity Analysis Worksheets



Introduction

This study summarizes the comprehensive evaluation of the potential traffic impacts associated with the proposed amendment to the Master Plan for the Planned Unit Development (PUD) for the Garvies Point Mixed-Use Waterfront Development Project. Specifically, this document evaluates the potential traffic impacts associated with the incorporation of one of two additional properties into the PUD. The purpose of this study is to determine if there are any significant traffic impacts due to the proposed amendment and to evaluate and propose mitigation measures, if required. This report summarizes the data collection process, traffic analysis procedures, and study conclusions and presents the findings of the traffic study.

Based on the results of the study, more completely described herein, it has been concluded that the proposed action will not have a significant impact on the study intersections or roadway network given the traffic signal timing changes identified herein to mitigate changes in traffic volumes.

Project Description

RXR Glen Isle Partners LLC are proposing to amend the current PUD Master Development Plan for the Garvies Point Mixed-Use Waterfront Development Project The current PUD, portions of which are presently under construction, is approximately 56 acres in size and was previously approved by the City of Glen Cove Planning Board in October of 2015. At the time of that approval, trip generation thresholds were established for any future modifications to the development within the PUD. These thresholds were based on a project which would include 705 apartment units, 380 condominium/townhouse units, a 125 unit hotel, a marina with 85 berths, an 50,000 sf general office building, 20,000 sf of retail space, and 5,000 sf of restaurant space.

As a part of this proposed amendment, the PUD would be modified to incorporate 509 apartment units, 680 condominium/townhouse units, 84 marina berths, 9,235 sf of retail space, 19,379 sf of restaurant, and a 2,000 sf concierge spa/wellness center. The PUD would also be modified to incorporate one of two additional properties, either the property at 1 Garvies Point Road or the former Konica Minolta property. Due to changes within the current PUD in regards to Blocks A, D, E, F, and J, the work-force housing units are proposed to be relocated to either the 1 Garvies Point Road site or the Konica Minolta site outside the current PUD boundary. This would likely induce development on either of those sites beyond only the work-force housing units. This study evaluates the effects on traffic conditions that the changes to date within the PUD, as well as the development of either the 1 Garvies Point Road or Konica Minolta sites would have in the context of previous approvals, traffic studies and identified mitigation.

Accordingly, Conceptual Plans have been prepared for each of these two potential development sites which include the required workforce housing units as well as a realistic yield of other uses on the balance of these sites were the PUD and its zoning to be expanded onto either of the sites. This traffic impact study has been prepared to assess the impact of the 'worst case" scenario whereby the site with the greatest potential to produce traffic impacts is developed.

As depicted on the Conceptual Plans, 1 Garvies Point Road development could include the construction of 105 rental apartment units and 7,700 sf of retail/general commercial space. The potential development of the Konica Minolta site could include the construction of 235 rental apartments, 101 condo/townhouse units, 15,000 sf of general office space, and 19,982 sf of retail/general commercial space. At this time, it is important to note that it is the intention of the developer to expand the PUD to include one or the other of these two properties; both are not contemplated for development at this time.

The project location is shown in Figure 1.

It is noted that the current circumstances in the area surrounding the site are unique. Ongoing construction on several parcels of land on and near Garvies Point Road due to the development of the Waterfront Development Project is having a significant impact on traffic conditions and circulation in the Garvies Point area. With several large buildings under construction and associated roadway and infrastructure improvements underway, there is a presence of construction activity and workers that bring with them construction vehicle activity and parking conditions that are not the norm. These conditions, as well as the ongoing impacts that the COVID-19 Pandemic will have on 'typical' traffic conditions, preclude the performance of a Traffic Impact Study in the traditional manner.

In order to account for these circumstances, and provide relevant information on the potential impacts of the proposed PUD amendment, this Traffic Impact Study was prepared using future conditions projected in the environmental studies and findings for the Garvies Point Mixed-Use Waterfront Development Project, as well as limited traffic counts conducted in the present day and adjusted to account for the factors that were previously mentioned. These conditions were further adjusted to account for a later build year and serve as the "Existing" conditions to which the potential impacts of the proposed PUD amendments are gauged.





Project Location Map Garvies Point Mixed-Use Development PUD Update Glen Cove, New York

Figure 1

Study Methodology

The following describes the methodology used in this traffic study:

- > The project site plan and related documents were reviewed to obtain an understanding of the project scope and layout.
- > A review was made of the adjacent roadway system and the key intersections that might be significantly impacted by the proposed project were identified.
- > Field inventories were made to observe the number and direction of travel lanes at the key intersections.
- > Based on the level of ongoing construction work observed within the study area, it was determined that conducting observations to determine the existing level of traffic would not be relevant to future conditions. To account for this, a detailed review was conducted of the DEIS, FEIS, and Findings statement prepared for the Garvies Point Mixed-Use Waterfront Development Project.
- > Counted turning movement data utilized to prepare the traffic analysis contained within the aforementioned EIS for the project was used here to represent the background traffic volumes (2016) on a typical weekday during the a.m., p.m. and Saturday midday peak periods.
- Supplemental turning movement counts were conducted at selected relevant intersections which were not included in the original traffic study for the Mixed -Use development. The data which was collected was reviewed and compared with the future projections associated with the EIS to apply adjustments as appropriate.
- > The 'existing' traffic volumes at the key intersections were then expanded to the future No-Build year (assumed to be 2025).
- The traffic associated with the previously approved PUD was distributed along the adjacent roadway network for the projected 2025 traffic volumes to represent the '2025 Build with Approved PUD'. The distribution was consistent with that which was utilized in the previously approved traffic studies.
- > The traffic generated by the PUD as it is presently amended was estimated based on recognized engineering practices consistent with previous traffic studies for the Waterfront Development District. Additionally, the traffic generated by both the 1 Garvies Point Road and Konica Minolta properties was projected and a comparison was made to determine the 'worst case' scenario. The total traffic for the 'worst case' of these two parcels and the amended PUD as combined and adjusted consistent with the factors utilized for the original approval.
- The site-generated volumes associated with this scenario (amended PUD) were distributed along the adjacent roadway network and were added to the projected 2025 traffic volumes, which did not include the volumes for the approved PUD, to produce the proposed '2025 Build with Amended PUD' volumes.
- Capacity analyses were performed for the key intersections for the 2025 Build with Approved PUD condition. This included the mitigation measures identified in the FEIS and Finding Statement for the Waterfront Development District.

- Capacity analyses were performed again for the key intersections for the 2025 Build with Amended PUD condition to evaluate conditions with the PUD amendments and development on one of the two additionally considered sites.
- > The results of the analyses for were compared to assess any significant traffic impacts due to the proposed PUD Amendments relative to the level of traffic operations associated with the previously approved PUD.
- The need for traffic mitigation measures beyond those identified in the FEIS and Findings Statement for the Garvies Point Mixed-Use Waterfront Development Project was evaluated.

2

Existing Conditions

Evaluation of the transportation impacts associated with the proposed project requires a thorough understanding of the current transportation system in the project study area. The existing transportation conditions include roadway geometry, traffic control devices, peak hour traffic volumes, roadway operating characteristics, and parking availability. However, due to the ongoing construction associated with the Garvies Point Mixed-Use Waterfront Development Project, it was determined that preparing an inventory of the local roadways and traffic control measures in place via conventional means would not be relevant to the future condition. As a result, based on the data which could be collected, supplemented with the description of the future conditions associated with the RXR development, the following sections present a summary of the existing roadway network studied.

Roadway and Intersection Conditions

The principal roadways and intersections in the project area are described below. The descriptions of the roadways and key intersections include the geometric conditions and traffic control characteristics.

Garvies Point Road

Garvies Point Road is an east-west local roadway under the jurisdiction of the City of Glen Cove. Garvies Point Road is a dead-end road that runs slightly south and then west from its intersection with Herb Hill Road and provides direct access to the subject premises. North from its intersection with Herb Hill Road, the designation changes to Dickson Street. The posted speed limit within the study area is 30 mph

and on-street parking has been provided as a result of the ongoing construction within the study area.

Herb Hill Road

Herb Hill Road is a short east-west local roadway under the jurisdiction of the City of Glen Cove that runs east from Garvies Point Road to Brewster Street. It provides one travel lane in each direction and the posted speed limit within the study area is 30 mph. On-street parking is permitted on the roadway where space has been provided as a result of the ongoing construction activities closest to Garvies Point Road/Dickson Street. The New York State Department of Transportations (NYSDOT) Traffic Data Viewer forecast puts the AADT at approximately 2,841 vehicles per day.

Glen Cove Avenue/Brewster Street

Glen Cove Avenue/Brewster Street is a north-south arterial roadway under the jurisdiction of the Nassau County Department of Public Works (NCDPW). This thoroughfare changes its designation from Glen Cove Avenue to Brewster Street north of its intersection with Pratt Boulevard (NYS Route 107). It provides two travel lanes in each direction with turn lanes and center left turn lanes where appropriate. The posted speed limit within the study area is 30 mph and on-street parking is not permitted within the area considered as a part of this analysis. The New York State Department of Transportations (NYSDOT) Traffic Data Viewer forecast puts the AADT at approximately 19,146 vehicles per day.

Pratt Boulevard (NYS Route 107)

Pratt Boulevard (NYS Route 107) is a north-south arterial roadway under the jurisdiction of the New York State Department of Transportation (NYSDOT). This roadway primarily runs north-south but turns east-west in the area where it intersects with Glen Cove Avenue/Brewster Street. It provides two travel lanes in each direction with turn lanes where appropriate. The posted speed limit within the study area is 40 mph and on-street parking is not permitted on the roadway. The New York State Department of Transportations (NYSDOT) Traffic Data Viewer forecast puts the AADT at approximately 18,994 vehicles per day.

Charles Street

Charles Street is a short north-south local roadway under the jurisdiction of the City of Glen Cove that runs south from The Place south to Glen Cove Avenue. On-street parking is not permitted on the roadway and, south of its intersection with Herb Hill Road, the northbound and southbound travel lanes split so that it forms two separate intersections with Glen Cove Avenue. The New York State Department of Transportations (NYSDOT) Traffic Data Viewer forecast puts the AADT at approximately 8,352 vehicles per day.

The Place

The Place is a short east-west local roadway under the jurisdiction of the City of Glen Cove that runs east from Dickson Street to its intersection with Mill Hill Road/Hill Street. It provides one travel lane in each direction on-street parking is not permitted on the roadway.

Mill Hill Road

Mill Hill Road is a short one-way west local roadway under the jurisdiction of the City of Glen Cove that runs west from Brewster Street to Hill Street. It provides one travel lane for westbound traffic only. On-street parking is not permitted on the roadway.

Hill Street

Hill Street is a short north-south local roadway under the jurisdiction of the City of Glen Cove that runs south from Landing Road to its intersection with The Place/Mill Hill Road/Coles Court. It provides one travel lane in each direction and on-street parking is permitted where adequate shoulder width is provided. The New York State Department of Transportations (NYSDOT) Traffic Data Viewer forecast puts the AADT at approximately 2,922 vehicles per day.

Study Intersections

To determine the potential traffic impacts of the proposed project, the following study intersections were identified for analysis:

- Glen Cove Avenue/Brewster Street at Pratt Boulevard (NYS Route 107)/Charles Street (Signalized)
- o Brewster Street at Mill Hill Road/Herb Hill Road (Signalized)
- o Glen Cove Avenue at Charles Street (Signalized)
- o Charles Street at Herb Hill Road (Signalized)
- Garvies Point Road/Dickson Street at Herb Hill Road (Unsignalized -Roundabout)
- The Place at Charles Street (Unsignalized)
- o Hill Street/Coles Court at Mill Hill Road/The Place (Unsignalized)

The study intersections are shown on Figure 2. It should be noted that the first five intersections were included in the traffic study which was prepared for the previously approved PUD. As explained in detail later in this report, the data associated with the previous study were utilized for these common intersections. The final two intersections were not studied previously but are included due to their proximity to the Konica Minolta site which is considered for development here. As a result, new data collection efforts were undertaken for those locations.

Aerial views of the intersections and descriptions of same are included in the next section of this report.





Study Intersections Garvies Point Mixed-Use Development PUD Update Glen Cove, New York

Figure 2



Glen Cove Avenue/Brewster Street at Pratt Boulevard (NYS Route 107)/Charles Street

Glen Cove Avenue/Brewster Street at Pratt Boulevard (NYS Route 107)/Charles Street is a signalized four-legged intersection with three active approaches. The eastbound approach of Charles Street is a one-way and allows only westbound traffic away from the intersection. The westbound approach of Pratt Boulevard provides an exclusive left-turn lane, a shared left-turn and through lane, a shared through and right-turn lane, and an exclusive right-turn lane. There is a right-turn channel controlled by a signal on this approach. The northbound approach of Glen Cove Avenue provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane. The southbound approach of Brewster Street provides two exclusive left-turn lanes, a through lane, and a shared through and right-turn lane. Right-turns on Red are not permitted at this intersection. The intersection is controlled by a semi-actuated multi-phase signal. The phasing is as follows:

- Protected northbound and southbound left-turns with overlapping westbound right-turns
- > Northbound and southbound movement with permissive northbound leftturns
- > Protected westbound movement with overlapping northbound right-turns



Brewster Street at Mill Hill Road/Herb Hill Road

Brewster Street at Herb Hill Road/Mill Hill Road is a signalized four-legged intersection. The eastbound approach of Herb Hill Road provides a shared leftturn/through/right-turn lane. The westbound approach formed by the shopping center driveway provides a single shared left-turn/through/right-turn lane. The northbound approach of Brewster Street provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane. The southbound approach of Brewster Street provides an exclusive left-turn lane, and a shared through/ right-turn lane. Right-turns on Red are permitted on all approaches except the northbound approach. The intersection is controlled by a semi-actuated multi-phase signal. The phasing is as follows:

- > Protected northbound left turns with permitted northbound through movements
- > Northbound and southbound through movements with permitted left turns
- > Eastbound and westbound through movements with permitted left turns



Glen Cove Avenue at Charles Street

Glen Cove Avenue at Charles Street is a signalized four-legged intersection. The eastbound approach of Charles Street is a one-way in the eastbound direction only and provides an exclusive left-turn lane, a through lane, and an exclusive right-turn lane. The westbound approach of Charles Street provides a shared left-turn and right-turn lane. The northbound approach of Glen Cove Avenue provides a through lane and a shared through and right-turn lane. The southbound approach of Glen Cove Avenue provides an exclusive left-turn lane. The southbound approach of Glen Cove Avenue provides an exclusive left-turn lane. The southbound approach of Glen Cove Avenue provides an exclusive left-turn lane, and two through lanes. Right-turns on Red are permitted at this intersection.

This intersection is controlled by a two-phase traffic signal.



Charles Street at Herb Hill Road

Charles Street at Herb Hill Road is a signalized four-legged intersection. The eastbound approach of Herb Hill Road provides a shared left-turn and through lane and a channelized right-turn lane. The westbound approach of Herb Hill Road provides a shared left-turn/through/right-turn lane. The northbound approach of Charles Street provides an exclusive left-turn lane, a through lane, and an exclusive right-turn lane. The southbound approach of Charles Street provides an exclusive left-turn lane and a shared through/right-turn lane. Right-turns on Red are permitted on all approaches except the eastbound approach. The intersection is controlled by a semi-actuated multi-phase signal. The phasing is as follows:

- > East-west movement with permitted left-turns
- > Protected southbound movement
- > Protected northbound movement with overlapping eastbound right-turns



Garvies Point Road/Dickson Street at Herb Hill Road

Garvies Point Road/Dickson Street and Herb Hill Road form a three-legged intersection at which a roundabout is installed for the purposes of accommodating traffic. The roundabout, which was installed as a means of mitigation based on the findings of the traffic study for the previously approved PUD, is yield controlled on each of the approaches to the intersection.

The Place at Charles Street



The Place at Charles Street forms a three-legged unsignalized intersection with stop control installed only on the northbound approach to the intersection. The eastbound approach of The Place provides a shared through/right-turn lane and the westbound approach of The Place provides a shared left-turn/through lane. The northbound approach of Charles Street provides a shared left-turn/right-turn lane. No traffic control is present on the eastbound and westbound approaches to the intersection.



Hill Street/Coles Court at Mill Hill Road/The Place

Hill Street/Coles Court at Mill Hill Road/The Place forms a four-legged unsignalized, all-way stop controlled intersection. The eastbound approach of The Place provides a single shared left-turn/through/right-turn lane. The westbound approach of Mill Hill Road provides a single shared left-turn/through/right-turn lane. The southbound approach of Hill Street provides a dedicated left-turn lane and a shared through/right-turn lane. The northbound approach of Coles Court provides a single shared left-turn/through/right-turn lane. Immediately east of the intersection, Mill Hill Road provides for two-way traffic, which facilitates access to nearby residences, but beyond that allows only westbound traffic from Brewster Street. Traffic is not permitted to travel eastbound from this location to Brewster Street.

It should be noted that the stop sign for the eastbound approach to this intersection is located east of Coles Court, which is an unorthodox location due to it's location beyond the northbound approach. While the level of traffic at this location is low, relocating this sign west of the edge of pavement for Coles Court would serve to increase the level of traffic safety for the intersection.

Traffic Volume Data

As previously indicated, the significant level of ongoing construction activity in the area makes the conventional collection of turning movement data within the study area problematic. As a result, the data from the studies performed for the Glen Isle Waterfront Development project, which was collected for that study and projected forward to the predicted 2016 Build year for that project, was utilized to represent the base level of background traffic for the purposes of analysis. More specifically, the 'No Build' volumes from the Garvies Point Mixed-Use Waterfront Development Project Traffic study were utilized for the purposes of the preparing the traffic study contained herein for the following intersections:

- Glen Cove Avenue/Brewster Street at Pratt Boulevard (NYS Route 107)/Charles Street
- o Garvies Point Road/Dickson Street at Herb Hill Road
- o Brewster Street at Mill Hill Road/Herb Hill Road
- o Charles Street at Herb Hill Road
- o Glen Cove Avenue at Charles Street

As previously indicated, two additional intersections were identified that were not studied previously, due to the location of the Konica Minolta site in this evaluation. Accordingly, intersection turning movement counts utilized were collected on Thursday February 25, 2021 between 7:00 a.m. and 9:30 a.m. (for weekday a.m. peak) and between 4:00 p.m. and 6:30 p.m. (for weekday p.m. peak) and on Saturday February 27, 2021 between 11:00 a.m. and 3:00 p.m. (for Saturday midday peak) at the following locations:

- o The Place at Charles Street
- o Hill Street/Coles Court at Mill Hill Road/The Place

These traffic counts were conducted during these times to coincide with the data collected for the previously conducted study. However, due to the ongoing impacts associated with the COVID-19 Pandemic, as well as the significant level of ongoing construction in the study area, these traffic volumes were adjusted based on the level of activity projected at the adjacent intersections (balanced) in order to better represent conditions without the reductions due to the pandemic or any potential rerouting of traffic due to construction.

The turning movement count figures referenced from the Garvies Point Mixed-Use Waterfront Development Project are available in Appendix A along with the summaries of the collected turning movement counts.

3

Future Conditions

The analysis of future conditions with the Approved PUD and with the Proposed Amended PUD was performed to evaluate the effect of the PUD Amendment on future traffic conditions in the area. The 2016 background traffic volumes obtained from the original Garvies Point Mixed-Use Waterfront Development Project, as well as the data collected at the two additional intersections in 2021, were projected to the year 2025, reflecting the year when construction associated with the proposed PUD amendments are expected to be completed and operational.

2025 Background Traffic

The 2025 Background Traffic condition, without the Glen Isle Waterfront Development Project was developed to project background traffic to the future 2025 analysis year and includes background traffic growth and any other significant planned developments in the immediate vicinity of the project site. This is a theoretical future traffic condition without the Glen Isle Project that allows for the projection of the 2025 Condition with Approved PUD in the next section.

Other Planned Developments

While the background volumes utilized from the previously approved project included other planned developments at that time of that study, any additional projects outside of those developments were also considered. Based on the files of VHB, one additional other planned project was identified:

Glen Cove Village Square, is a mixed-use development located at between School Street and Brewster Street consisting of 146 residential apartment units, 15,607 sf of retail space and 1,900 sf of medical office. This project is projected to generate 74 trips (28 entering, 46 exiting) during the weekday a.m. peak hour, 132 trips (71 entering, 61 exiting) during the weekday p.m. peak hour, and 142 trips (72 entering, 70 exiting) during the Saturday midday peak hours.

This traffic was assigned to the study area in accordance with the previously performed traffic assessment for the project.

Background Traffic Growth

As indicated previously, the 2016 projected volumes from the previous study as well as the 2021 traffic volumes which were counted and adjusted to account for COVID were also projected forward to the future 'Build' year for the subject development. To account for increases in general population and background growth not related to the proposed project, an annual growth factor was applied to the traffic volumes. Based on the NYSDOT published information, the growth rate anticipated for the Town of Oyster Bay, which includes the City of Glen Cove is 0.6% percent per year.

This methodology accounts for any other planned developments in the vicinity of the project site that may have been overlooked and a total growth rate of 4.5% (9 years at 0.6% per year) was applied to the 2016 traffic data to develop the background traffic based on the anticipated Build year of 2025. Similarly, a total growth rate of 2.4% (4 years at 0.6% per year) was applied to the counted 2021 traffic data to develop those intersections to the anticipated Build Year of 2025.

After applying the growth factor to the traffic volumes, the resulting 2025 Background traffic volumes for the weekday a.m., p.m. and Saturday midday peak hours are shown in Figure 3.







2025 Background Traffic Volumes Garvies Point Mixed-Use Development PUD Update Glen Cove, New York

Figure 3

2025 Build Condition with Approved PUD

To estimate the traffic impact associated with the proposed PUD Amendment, it is necessary to determine the traffic volumes expected to be generated by the approved PUD and the traffic conditions which would exist in 2025 without the proposed amendment.

Development Details – Approved PUD

The development mix for the project at the time of the 2015 approval is shown in Table 1. It is important to note that the corresponding Land Use Codes from the Institute of Transportation Engineers ("ITE"), Trip Generation Manual are those utilized in the 7th Edition to be consistent with studies performed at that time.

Land-Use Component	Size/Density	ITE Reference		
Apartments	705 Units	Land Use Code # 220		
Condos/Townhouses	380 Units	Land Use Code # 230		
Hotel	125 Rooms	Land Use Code # 310		
Marina	85 Berths	Land Use Code # 420		
Office/Commercial	50,000 sf	Land Use Code # 710		
Retail Space	20,000 sf	Land Use Code # 820		
Quality Restaurant	5,000 sf	Land Use Code # 931		

Table 1 - Proposed Development Mix

Project-Generated Traffic Volumes – Approved PUD

Based on the above development scenario and the 7th Edition of the ITE Trip Generation Manual, the trip generation for the approved PUD was calculated. This data was adjusted to account for transit credits and internal trip capture consistent with the traffic studies performed that that time. Based on this, and as enumerated in detail in the FEIS and Findings Statement associated with the 2015 Approval for the Garvies Point Mixed-Use Waterfront Development Project, the total Net trip generation for the approved PUD is summarized in Table 2, below:

Total	AM Peak Hour Trips		PM Peak Hour Trips		Saturday Midday Trips	
	Entering	Exiting	Entering	Exiting	Entering	Exiting
	259	432	520	434	479	413
	691		954		892	

Table 2 – Net Trip Generation - Approved 2015 Planned Unit Development

Trip Distribution and Assignment

The trips originating from and destined to the overall project site were assigned to the based on the trip distribution utilized for the original Garvies Point Mixed-Use Waterfront Development Project. The trip distribution percentages for the 2015 Approved PUD are shown in Figure 4. These were then applied to the trips generated by the Approved PUD and the resulting site generated traffic volumes for the weekday a.m., p.m. and Saturday midday peak hours are shown in Figure 5.

To determine the future 2025 Build with Approved PUD intersection traffic volumes, the project-generated trips were added to the 2025 Background traffic volumes at the key intersections. The resulting 2025 Build with Approved PUD traffic volumes for the weekday a.m., p.m. and Saturday midday peak hours are shown in Figure 6.







2015 Approved PUD Distribution Garvies Point Mixed-Use Development PUD Update Glen Cove, New York

Figure 4






2015 Approved PUD Project Volumes Garvies Point Mixed-Use Development PUD Update Glen Cove, New York

Figure 5







2025 Build with Approved PUD Peak Hour Volumes Garvies Point Mixed-Use **Figure 6** Development PUD Update Glen Cove, New York

2025 Build Condition with Amended PUD

In order to determine the proposed condition for the Amended PUD against which the traffic conditions associated with the Approved PUD will be compared, the 'worst case' scenario of the development of either the 1 Garvies Point Road or Konica Minolta sites must first be determined. To do so, the development plan for each is considered below.

Development Details – Additional Parcels

Based on the conceptual site plans which have been prepared, the potential development mix for the 1 Garvies Point Road site is shown in Table 3 and the potential development mix for the Konica Minolta property is shown in Table 4. It is again important to note that the corresponding Land Use Codes from the Institute of Transportation Engineers ("ITE"), Trip Generation Manual are consistent with those utilized in the 7th Edition. As the study, at that time, utilized this data as the most up-to-date available, the current analysis efforts also refer to the same data for the purposes of remaining consistent

Table 3 - Potential Development Mix – 1 Garvies Point Road

Land-Use Component	Size/Density	ITE Reference			
Apartments	105 Units	Land Use Code # 220			
Retail Space	7,700 sf	Land Use Code # 820			

Table 4 - Potential Development Mix – Konica Minolta

Land-Use Component	Size/Density	ITE Reference	
Apartments	235 Units	Land Use Code # 220	
Condos/Townhouses	101 Units	Land Use Code # 230	
Office/Commercial	15,000 sf	Land Use Code # 710	
Retail Space	19,982 sf	Land Use Code # 820	

Generated Traffic Volumes – Additional Sites

In order to estimate the traffic that could be generated by the development of either of the two sites, a review was undertaken of available trip generation data published by the Institute of Transportation Engineers (ITE), *Trip Generation Manual*, *7*th Edition. This widely used reference source contains trip generation rates and equations for the uses that constitute each development that were utilized for the purposes of estimating the trips generated in the original Garvies Point Mixed-Use Waterfront Development Project TIS. In preparing this estimate, it is important to consider that the ITE data includes rates and equations for each of the relevant categories based on the dataset which has been compiled. To remain consistent with the original study, the estimate for each of the potential development sites utilized the same rate and/or equation for each of the common land uses as referenced in the

previous analyses. Table 5 summarizes the unadjusted, gross trip generation estimate for the 1 Garvies Point Road concept development plan and Table 6 summarizes the unadjusted, gross trip generation estimate for the Konica Minolta concept development plan.

Project Component	Comp Si	onent ze	AM Peak	Hour	PM Peak	Hour	Saturday Midday	
		Units	T=0.49(X)+3.73	T=0.55(X)	+ 17.65	T=0.41(X)	+ 19.23
			Entering	Exiting	Entering	Exiting	Entering	Exiting
Residential ITE # 220	105		20%	80%	65%	35%	50%	50%
Apartments			11	44	49	26	31	31
			Total =	55	Total =	75	Total =	62
	7,700	SF	Ln(T)=0.60 L	n(X)+2.29	Ln(T)=0.66 L	n(X)+3.40	Ln(T)=0.65 L	n(X)+3.77
Shopping Center			Entering	Exiting	Entering	Exiting	Entering	Exiting
ITE # 820			61%	39%	48%	52%	52%	48%
Ketali			21	13	55	60	85	78
			Total =	34	Total =	115	Total =	163
				our Trips	PM Peak H	our Trips	Saturday Mi	dday Trips
Total			Entering	Exiting	Entering	Exiting	Entering	Exiting
			32	57	104	86	116	109
			89		190)	225	

Table 5 – Trip Generation Estimates – 1 Garvies Point Road

Project Component	Compo Siz	onent :e	AM Peak	Hour	PM Peak	Hour	Saturday Midday		
			T=0.49(X)+3.73	T=0.55(X)	+17.65	T=0.41(X)	+19.23	
			Entering	Exiting	Entering	Exiting	Entering	Exiting	
Residential ITE # 220	235	Units	20%	80%	65%	35%	50%	50%	
Apartments			24	95	96	51	58	58	
			Total =	119	Total =	147	Total =	116	
			Ln(T)=0.80 L	n(X)+0.26	Ln(T)=0.82 L	n(X)+0.32	T=0.29(X)	+42.63	
			Entering	Exiting	Entering	Exiting	Entering	Exiting	
ITE # 230	101	Units	17%	83%	67%	33%	54%	46%	
Condos/Townhouse			9	43	41	20	39	33	
			Total =	52	Total =	61	Total =	72	
			Ln(T)=0.80 L	n(X)+1.55	T=1.12(X)	+78.81	Ln(T)=0.81	_n(X)-0.12	
Office	15,000		Entering	Exiting	Entering	Exiting	Entering	Exiting	
ITE # 710		SF	88%	12%	17%	83%	54%	46%	
General Office Building			36	5	16	80	4	4	
			Total =	41	Total =	96	Total =	8	
			Ln(T)=0.60 L	n(X)+2.29	Ln(T)=0.66 L	n(X)+3.40	Ln(T)=0.65 L	n(X)+3.77	
Shopping Center			Entering	Exiting	Entering	Exiting	Entering	Exiting	
ITE # 820	19,982	SF	61%	39%	48%	52%	52%	48%	
Ketali			37	23	104	112	158	146	
			Total =	60	Total =	216	Total =	304	
			AM Peak H	our Trips	PM Peak H	our Trips	Saturday Mi	dday Trips	
Total	Total			Exiting	Entering	Exiting	Entering	Exiting	
Ιοται			106	166	257	263	259	241	
	272	2	520	0	50	D			

Table 6 – Tri	p Generatio	n Estimates -	- Konica	Minolta
---------------	-------------	---------------	----------	---------

In comparison to the 1 Garvies Point Road site, the development of the Konica Minolta site would generate 183 more trips during the weekday a.m. peak period, 330 more trips during the weekday p.m. peak period, and 275 more trips during the Saturday midday peak period. Based on the fact that the traffic associated with the Konica Minolta site was significantly higher during each of the relevant peak periods, it was determined that the inclusion of that development into the overall Amended PUD would represent the 'worst-case' scenario with respect to the generated traffic. Accordingly, in the ensuing calculations, the total Amended PUD is assumed to include the development components associated with the Konica Minolta site.

Development Details – Amended PUD

The development mix for the project, inclusive of the proposed amendments to the PUD and including the development of the Konica Minolta site as per the prepared concept plan is shown in Table 7.

Land-Use Component	Size/Density	ITE Reference		
Apartments	744 Units	Land Use Code # 220		
Condos/Townhouses	781 Units	Land Use Code # 230		
Marina	84 Berths	Land Use Code # 420		
Office/Commercial	15,000 sf	Land Use Code # 710		
Concierge Spa/Wellness Center	2,000 sf	Land Use Code #720		
Retail Space	29,217 sf	Land Use Code # 820		
Quality Restaurant	19,379 sf	Land Use Code # 931		

Table 7 - Proposed Development Mix – Amended PUD

It should be noted that the 2,000 sf concierge spa/wellness center is intended to operate by appointment, more similar to a medical office rather than a typical gym/spa. As a result, ITE Land Use Code #720 was selected for the purposes of analysis, as it better represents how the use will operate in the future condition.

Project-Generated Traffic Volumes – Amended PUD

In order to estimate the project-generated traffic, the available trip generation data published by the Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 7^{th} *Edition* was again referenced. Similar to the calculations for 1 Garvies Point Road and Konica Minolta Sites, the rates or equations provided in the ITE Manual were utilized in common with the datasets utilized for the original Garvies Point Mixed-Use Waterfront Development Project traffic study.

For the overall Amended PUD, to remain consistent with the trip generation estimates in the original TIS, adjustment factors were also applied for each land use for transit mode and internal trip capture. In each case, these adjustments, which are summarized in Table 8 below, are again consistent with the percentages applied in the traffic study for the approved PUD. The total adjusted trip generation for the Amended PUD is summarized in Table 8, below:

									AM	Trip Reduc	tion	PM	Trip Reduc	tion	Saturd	lay Trip Red	luction			Net Exter	nal Trips		
Project Component	Compo Siz	onent :e	AM Pea	ak Hour	PM Pea	k Hour	Saturday	v Midday	Transit	Internal	Total	Transit	Internal	Total	Transit	Internal	Total	AM Peak	Hour	PM Peak	Hour	Saturday	Midday
			T=0.49((X)+3.73	T=0.55()	K)+17.65	T=0.41()	<)+19.23										10% Red	uction	13% Red	uction	5% Redu	uction
Residential			Entering	Exiting	Entering	Exiting	Entering	Exiting			1001		.					Enterina	Exitina	Enterina	Exitina	Enterina	Exitina
ITE # 220	744	Units	20%	80%	65%	35%	50%	50%	5%	5%	10%	5%	8%	13%	0%	5%	5%		265	242	120	454	454
Apartments			/4 Tatal	294	278 Tatal	149	162 Tatal	162										6/ Tatal	265	242 Tatal	130	154 Tatal	154
			Iotal =	308	Iotal =	421	T=0.200	324										10tal =	332	10tal =	372	IOTAI =	308
			Entering	Eriting	Entering	Eviting	Fotoring	Fyiting										10% Reu	uction	15% Reu	uction	5% Reul	
Residential	781	Units	17%	83%	67%	33%	54%	46%	5%	5%	10%	5%	8%	13%	0%	5%	5%	Entering	Exiting	Entering	Exiting	Entering	Exiting
Condos/Townhouse		entes	45	222	217	107	145	124	070	070	1070	070	070	10/0	0,0	3,0	070	41	200	189	93	138	118
			Total =	267	Total =	324	Total =	269										Total =	241	Total =	282	Total =	256
			Rate =	0.08	Rate =	0.19	Rate =	0.27										0% Redu	uction	5% Red	uction	5% Redu	uction
Marina			Entering	Exiting	Entering	Exiting	Entering	Exiting										Entering	Evitin a	Entering	Eviting	Entering	Evitin a
ITE # 420	84	Slips	33%	67%	60%	40%	44%	56%	0%	0%	0%	0%	5%	5%	0%	5%	5%	Entering	Exiting	Entering	Exiting	Entering	Exiting
Marina			2	5	10	6	10	13										2	5	10	6	10	12
			Total =	7	Total =	16	Total =	23										Total =	7	Total =	16	Total =	22
			Ln(T)=0.80	Ln(X)+1.55	T=1.12()	K)+78.81	Ln(T)=0.81	Ln(X)-0.12										0% Redu	uction	8% Red	uction	0% Redu	uction
Office	45 000	6-	Entering	Exiting	Entering	Exiting	Entering	Exiting	00/	09/	00/	09/	00/	00/	00/	09/	09/	Entering	Exiting	Entering	Exiting	Entering	Exiting
IIE # /10 General Office Building	15,000	SF	88%	12% F	17%	83%	54%	46%	0%	0%	0%	0%	8%	8%	0%	0%	0%	26	г. Г	1	74	4	4
			50 Total =	5 41	Total =	96	4 Total =	4 8										oc Total =	5 41	Total =	74 89	4 Total =	4 8
			Rate =	2.48	Rate =	3.72	Rate =	3.63										0% Redu	uction	8% Red	uction	0% Redu	uction
Concierge Spa/Wellness			Entering	Exiting	Entering	Exiting	Entering	Exiting															
Center	2,000	SF	79%	21%	27%	73%	57%	43%	0%	0%	0%	0%	0%	0%	0%	0%	0%	Entering	Exiting	Entering	Exiting	Entering	Exiting
Medical Office Building			4	1	2	6	5	3										4	1	2	6	5	3
			Total =	5	Total =	8	Total =	8										Total =	5	Total =	8	Total =	8
			Ln(T)=0.60	Ln(X)+2.29	Ln(T)=0.66	Ln(X)+3.40	Ln(T)=0.65	Ln(X)+3.77										10% Red	uction	8% Red	uction	10% Red	uction
Shopping Center			Entering	Exiting	Entering	Exiting	Entering	Exiting	.	1001	1001						100/	Enterina	Exitina	Enterina	Exitina	Enterina	Exitina
ITE # 820 Retail	29,217	SF	61%	39%	48%	52%	52%	48%	0%	10%	10%	0%	8%	8%	0%	10%	10%			Jan J			
Reldii			46	29	133	145	202	187										41 T ()	26	122	133	182	168
			Iotal =	75	Iotal =	278	Iotal =	10.92										Iotal =	67	10tal =	255	10tal =	350
Desteurent			Fotoring	U.O I Eviting	Fotoring	7.49 Evitina	Fotoring	TU.02 Exiting										0% Redi		10% Reu	uction	10% Red	uction
ITF # 931	19 379	SE	67%	33%	67%	33%	59%	41%	0%	0%	0%	0%	10%	10%	0%	10%	10%	Entering	Exiting	Entering	Exiting	Entering	Exiting
Quality Restaurant	10,010	0.	11	5	97	48	124	86	070	070	070	0,0	1070	10/0	0,0	-0/0	1070	11	5	87	43	112	77
			Total =	16	Total =	145	Total =	210										Total =	16	Total =	130	Total =	189
			AM Peak	Hour Trips	PM Peak	Hour Trips	Saturday Tri	v Midday ips										AM Peak H	lour Trips	PM Peak H	our Trips	Saturday Trip	Midday s
Total			Entering	Exiting	Entering	Exiting	Entering	Exiting	1									Entering	Exiting	Entering	Exiting	Entering	Exiting
			214	560	751	535	647	576	1									202	507	667	485	605	536
			7	74	1,2	86	1,2	23	J									70	9	1,15	52	1,14	1

Table 8 – Overall Adjusted Trip Generation Estimate – Amended PUD

Trip Generation Comparison

After a review of the information contained in Table 8, the proposed PUD Amendment would generate 709 total trips (202 entering, 507 exiting) during the weekday a.m. peak hour, 1,152 total trips (667 entering, 485 exiting) during the weekday p.m. peak hour, and 1,141 total trips (605 entering, 536 exiting) during the Saturday midday peak hour. By comparing the information contained in Table 2 to that in Table 8, it is shown that the proposed PUD Amendment, along with the considered development of the Konica Minolta site as per the developed Concept Plan, will result in more traffic being generated during each of the relevant peak hours. During the weekday a.m. peak hour, the Amended PUD would generate 18 more trips in comparison with the Approved PUD. Likewise, during the weekday p.m. peak hour, the Amended PUD would generate 249 more trips, both in comparison with the Approved PUD.

Trip Distribution and Assignment

In order to assign the trips associated with the amended PUD to the roadway network, a review was undertaken of the distribution associated with the approved PUD, along with the modified development plan. In doing so, the percentages of trips to individual areas of the overall site were redistributed to account for the differing locations of the proposed development. The overall global directional distribution to locations outside of the immediate development area were kept in common with the 2015 Approved PUD. The trip distribution for the Amended PUD is shown in Figure 7. These were then applied to the peak hour trips shown in Table 8 above and the resulting Amended PUD site generated traffic volumes for the weekday a.m., p.m. and Saturday midday peak hours are shown in Figure 8.

To determine the future 2025 Build Condition with Amended PUD intersection traffic volumes, the project-generated trips were added to the 2025 traffic volumes at the key intersections. The resulting 2025 Build with Amended PUD traffic volumes for the weekday a.m., p.m. and Saturday midday peak hours are shown in Figure 9.







Amended PUD Trip Distribution Garvies Point Mixed-Use Development PUD Update Glen Cove, New York

Figure 7







Amended PUD Project Volumes Garvies Point Mixed-Use Development PUD Update Glen Cove, New York

Figure 8







2025 Build with Amended PUD Peak Hour Volumes Garvies Point Mixed-Use **Figure 9** Development PUD Update Glen Cove, New York

4 Traffic Operations Analysis

While the volume increase in traffic associated with the Amended PUD and the potential development of the Konica Minolta site has been demonstrated relative to the previously approved PUD, to assess quality of traffic flow associated with this action, roadway capacity analyses were conducted with respect to the 2025 Build with Approved PUD and 2025 Build with Amended PUD conditions. These capacity analyses provide an indication of the adequacy of the roadway facilities to serve the anticipated traffic demands based on the incremental increase associated with the modified development plan.

Level of Service and Delay Criteria

The evaluation criteria used to analyze area intersections in this traffic study are based on Highway Capacity Manual 6 (HCM). The term 'level of service' (LOS) is used to denote the different operating conditions that occur at an intersection under various traffic volume loads. It is a qualitative measure that considers a number of factors including roadway geometry, speed, travel delay and freedom to maneuver. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions.

In addition to LOS, vehicle delay time (expressed in seconds per vehicle) is typically used to quantify the traffic operations at intersections. For example, a delay of 15 seconds for a particular vehicular movement or approach indicates that vehicles on the movement or approach will experience an average additional travel time of 15

seconds. It should be noted that delay time has a range of values for a given LOS letter designation. Therefore, when evaluating intersection capacity results, in addition to the LOS, vehicle delay time should also be considered.

The level of service designations, which are based on delay, are reported differently for signalized and unsignalized intersections. For signalized intersections, the analysis considers the operation of all traffic entering the intersection and the LOS designation is for overall conditions at the intersection. For unsignalized intersections, however, the analysis assumes that traffic on the mainline is not affected by traffic on the side streets. Thus, the LOS designation is for the critical movement exiting the side street, which is generally the left-turn out of the side street or side driveway.

It should be noted that the analytical methodologies typically used for the analysis of unsignalized intersections use conservative parameters such as long critical gaps. Actual field observations indicate that drivers on minor streets generally accept shorter gaps in traffic than those used in the analysis procedures and therefore experience less delay than reported by the analysis software. The analysis methodologies also do not take into account the beneficial grouping effects caused by nearby signalized intersections. The net effect of these analysis procedures is the over-estimation of calculated delay at unsignalized intersections in the study area. Cautious judgment should therefore be exercised when interpreting the capacity analysis results at unsignalized intersections.

The level of service (LOS) definitions for both the signalized and unsignalized intersections can be found in Appendix B of the report.

Software

The capacity analyses were done using the traffic analysis software Synchro, version 10, a computer program developed by Trafficware Ltd. Synchro is a complete software package for modeling and optimizing traffic signal timing. Synchro adheres to and implements the guidelines and methods set forth in the Highway Capacity Manual. This analysis methodology was used to evaluate the ability of an intersection or roadway to efficiently handle the number of vehicles using the facility. Synchro was used to model and analyze the conditions at the key intersections.

Level of Service Analysis

LOS analyses were conducted for the 2025 Build with Approved PUD and 2025 Build with Amended PUD conditions for the key study intersections as follows:

- Glen Cove Avenue/Brewster Street at Pratt Boulevard (NYS Route 107)/Charles Street (Signalized)
- Brewster Street at Mill Hill Road/Herb Hill Road (Signalized)
- o Glen Cove Avenue at Charles Street (Signalized)

- Charles Street at Herb Hill Road (Signalized)
- Garvies Point Road/Dickson Street at Herb Hill Road (Unsignalized -Roundabout)
- The Place at Charles Street (Unsignalized)
- Hill Street/Coles Court at Mill Hill Road/The Place (Unsignalized)

In the preparation of these analyses, mitigation in the form of physical improvements that were required as a part of the original approvals were included in both conditions analyzed. In doing so, the incremental changes associated with the proposed amendment to the PUD as well as any further mitigation which would be required to accommodate the increase in traffic generated, could be determined.

Analysis Results

The results of the capacity analyses for the three signalized intersections in the 2025 Build with Approved PUD and 2025 Build with Amended PUD conditions are summarized in Tables 9, 10 and 11 below, for the weekday a.m., p.m. and Saturday midday peak hours, respectively. The detailed capacity analysis worksheets are contained in Appendix C.

Intersection	Approach	Lane	Build 2 Approved	025 d PUD	Build 2025 Amended PUD		
		Group	Delay	LOS	Delay	LOS	
		L	40.8	D	40.8	D	
		LTR	49.7	D	43.9	D	
	WB	R	11.5	В	11.4	В	
		Approach	38.2	D	34.9	С	
Glen Cove		L	14.0	В	13.0	В	
Avenue/Brewster	ND	TR	21.7	С	21.6	С	
Street at Pratt Boulevard (NYS Route 107)/Charles Street	NB	R	19.0	В	23.1	С	
		Approach	19.2	В	21.0	С	
		L	29.7	С	29.7	С	
	SB	TR	11.8	В	11.8	В	
		Approach	21.6	С	21.7	С	
	Ον	erall	25.3	С	25.0	C	
		LT	24.1	С	25.9	С	
	EB	R	4.7	А	4.6	А	
		Approach	15.1	В	16.4	В	
		LTR	17.2	В	15.6	В	
	VVB	Approach	17.2	В	15.6	В	
Brewster Street at Mill		L	5.8	Α	5.9	Α	
Road	NB	TR	5.6	А	5.7	А	
		Approach	5.6	А	5.7	А	
		L	13.2	В	13.5	В	
	SB	TR	17.2	В	17.2	В	
		Approach	17.1	В	17.1	В	
	Ον	erall	12.2	В	12.3	В	
		L	40.0	D	35.4	D	
	ER	Т	13.9	В	13.1	В	
	ED	R	11.9	В	11.1	В	
		Approach	27.5	С	24.9	С	
	\//P	LTR	8.6	А	8.2	А	
Glen Cove Avenue &	VVD	Approach	8.6	А	8.2	А	
Charles Street	NB	TR	19.9	В	23.4	С	
	ND	Approach	19.9	В	23.4	С	
		L	16.3	В	18.2	В	
	SB	Т	18.2	В	21.4	С	
		Approach	18.2	В	21.3	С	
	Ον	erall	21.5	С	22.9	С	

Table 9 - LOS Summary – Signalized Intersections – AM Peak Hour --- 1 of 2

Intersection	Approach	Lane	Build 2 Approved	025 1 PUD	Build 2025 Amended PUD	
		Group	Delay	LOS	Delay	LOS
		LT	29.4	С	29.0	С
	EB	R	0.4	А	0.4	А
		Approach	3.5	А	3.3	А
		LTR	28.1	С	29.6	С
	VVD	Approach	28.1	С	29.6	С
		L	28.7	С	24.5	С
Charles Street at		Т	18.1	В	18.8	В
	INB	R	0.0	А	0.0	А
		Approach	26.7	С	22.9	С
		L	22.9	С	23.3	С
	SB	TR	42.0	D	53.6	D
		Approach	37.8	D	47.2	D
	Ον	erall	22.7	С	25.6	с

Table 9 - LOS Summary – Signalized Intersections – AM Peak Hour --- 2 of 2

A review of Table 9 shows that during the weekday a.m. peak hour the results in the 2025 Build Condition with Amended PUD are consistent with the results in the 2025 Build Condition with Approved PUD. The overall intersection delay at all locations maintains the LOS with only minor increases in delay. All intersections would continue to operate at an overall intersection LOS C or better in the Build Condition, and no mitigation is required during this time period.

It should be noted that the results of the analysis for the intersection of Glen Cove Avenue/Brewster Street and Charles Street indicate an improvement in LOS from the 2025 Build with Approved PUD to the 2025 Build with Amended PUD, despite the fact that there would be an increase in traffic. This is due to the fact that the Synchro software calculates a weighted average delay. As a result, despite an increase in traffic, if additional capacity exists at the intersection, the delay for individual turning movements or the overall intersection may decrease.

Intersection	Approach	Lane	Build 2 Approve	025 d PUD	Build 2025 Amended PUD		
		Group	Delay	LOS	Delay	LOS	
		L	51.6	D	50.6	D	
	14/15	LTR	169.2	F	208.8	F	
	WB	R	15.0	В	15.3	В	
		Approach	108.0	F	131.3	F	
Glen Cove		L	22.4	С	30.0	С	
Street at Pratt	ND	TR	22.6	С	22.6	С	
Boulevard (NYS	NB	R	18.4	В	21.7	С	
Route 107)/Charles		Approach	20.9	С	23.7	С	
50.660		L	30.4	С	29.6	С	
	SB	TR	12.5	В	12.5	В	
		Approach	20.5	С	20.3	С	
	Ον	erall	49.2	D	59.5	Е	
		LT	33.1	С	33.0	С	
	EB	R	0.5	Α	0.5	А	
		Approach	26.3	С	26.3	С	
		LTR	22.2	С	20.2	С	
	WB	Approach	22.2	С	20.2	С	
Brewster Street at		L	17.3	В	17.2	В	
Hill Road	NB	TR	9.5	А	9.4	А	
		Approach	11.0	В	11.0	В	
		L	21.8	С	21.8	С	
	SB	TR	42.1	D	42.9	D	
		Approach	41.6	D	42.4	D	
	Ον	erall	24.5	С	24.7	С	
		L	49.8	D	55.7	Е	
	ED	Т	16.0	В	15.9	В	
	ED	R	16.7	В	16.4	В	
		Approach	34.1	С	37.5	D	
	\A/D	LTR	10.4	В	10.3	В	
Glen Cove Avenue	VVD	Approach	10.4	В	10.3	В	
& Charles Street	NR	TR	21.8	С	23.1	С	
	140	Approach	21.8	С	23.1	С	
		L	24.5	С	24.2	С	
	SB	Т	16.7	В	17.0	В	
		Approach	16.9	В	17.3	В	
	Ov	erall	23.3	С	25.1	С	

Table 10 - LOS Summary – Signalized Intersections – PM Peak Hour --- 1 of 2

Intersection	Approach	Lane	Build 2 Approved	025 1 PUD	Build 2025 Amended PUD		
		Group	Delay	LOS	Delay	LOS	
		LT	29.4	С	29.5	С	
	EB	R	0.7	А	0.7	А	
		Approach	4.7	А	4.6	А	
		LTR	23.9	С	27.4	С	
	VVD	Approach	23.9	С	27.4	С	
		L	97.9	F	126.4	F	
Charles Street at		Т	21.5	С	25.3	С	
	IND	R	0.0	А	0.0	А	
		Approach	78.1	Е	91.9	F	
		L	23.8	С	23.9	С	
	SB	TR	40.3	D	43.3	D	
		Approach	37.9	D	40.3	D	
	Ov	erall	42.7	D	52.2	D	

Table 10 - LOS Summary – Signalized Intersections – PM Peak Hour --- 2 of 2

A review of Table 10 shows that during the weekday p.m. peak hour the results in the 2025 Build Condition with Amended PUD are consistent with the results in the 2025 Build Condition with Approved PUD, with the following exceptions:

Glen Cove Avenue/Brewster Street at Charles Street: This intersection operates at an overall intersection LOS D during the weekday p.m. peak hour in the 2025 Build with Approved PUD Condition and changes to a LOS E in the 2025 Build with Amended PUD condition. Closer examination of the individual results at this intersection revealed that certain turning movements experience significant delays consistent with an LOS F in both conditions as well. As a result, mitigation was examined at this location during this time period and is discussed later in this analysis.

Glen Cove Avenue at Charles Street: This intersection operates at an overall intersection LOS C during the weekday p.m. peak hour in the 2025 Build with Approved PUD and 2025 Build with Amended PUD conditions. Closer examination of the individual results at this intersection revealed that eastbound left turns change from an LOS D to an LOS E in the 2025 Build with Amended PUD Condition. As a result, mitigation was examined at this location during this time period and is discussed later in this analysis.

Charles Street at Herb Hill Road: This intersection operates at an overall intersection LOS D during the weekday p.m. peak hour in the 2025 Build with Approved PUD and 2025 Build with Amended PUD conditions. Closer examination of the individual results at this intersection revealed that the Northbound approach changes from an LOS E to an LOS F in the 2025 Build with

Amended PUD Condition. As a result, mitigation was examined at this location during this time period and is discussed later in this analysis.

Intersection	Approach	Lane	Build 2 Approve	025 d PUD	Build 2025 Amended PUD		
		Group	Delay	LOS	Delay	LOS	
		L	50.8	D	50.2	D	
	14/2	LTR	88.8	F	118.0	F	
	WB	R	13.2	В	13.4	В	
		Approach	62.2	E	78.6	E	
Glen Cove		L	21.2	С	27.2	С	
Street at Pratt	ND	TR	24.2	С	23.9	С	
Boulevard (NYS	NB	R	20.4	С	31.6	С	
Route 107)/Charles		Approach	22.2	С	27.8	С	
50.660		L	31.0	С	30.6	С	
	SB	TR	12.5	В	12.5	В	
		Approach	21.1	С	21.0	С	
	Ον	erall	33.0	с	40.4	D	
		LT	25.1	С	24.9	С	
	EB	R	0.4	А	0.3	А	
		Approach	19.6	В	19.8	В	
		LTR	21.9	С	19.9	В	
	VVB	Approach	21.9	С	19.9	В	
Brewster Street at		L	8.7	А	9.2	А	
Hill Road	NB	TR	7.4	А	7.2	А	
		Approach	7.6	А	7.5	А	
		L	16.9	В	16.4	В	
	SB	TR	25.4	С	21.1	С	
		Approach	25.2	С	21.0	С	
	Ov	erall	16.6	В	14.7	В	
		L	45.1	D	49.2	D	
	гр	Т	15.5	В	15.2	В	
	ED	R	17.8	В	16.7	В	
		Approach	32.6	С	35.1	D	
		LTR	8.3	А	8.2	А	
Glen Cove Avenue	VVB	Approach	8.3	А	8.2	А	
& Charles Street	ND	TR	18.4	В	21.8	С	
	IND	Approach	18.4	В	21.8	С	
		L	16.8	В	19.8	В	
	SB	Т	17.3	В	19.9	В	
		Approach	17.2	В	19.9	В	
	Ov	erall	21.6	с	24.9	с	

Table 11 - LOS Summary – Signalized Intersections – Saturday Midday Peak Hour --- 1 of 2

Intersection	Approach	Lane Group -	Build 2 Approved	025 1 PUD	Build 2025 Amended PUD		
			Delay	LOS	Delay	LOS	
		LT	29.2	С	29.1	С	
	EB	R	0.4	А	0.4	А	
		Approach	3.5	А	3.4	А	
	WB	LTR	26.8	С	29.4	С	
		Approach	26.8	С	29.4	С	
	NB	L	38.1	D	46.6	D	
Charles Street at		Т	17.4	В	19.9	В	
		R	0.0	А	0.0	А	
		Approach	33.8	С	38.6	D	
		L	22.0	С	22.5	С	
	SB	TR	34.4	С	38.2	D	
		Approach	32.1	С	35.2	D	
	Overall		23.9	С	27.3	С	

Table 11 - LOS Summary – Signalized Intersections – Saturday Midday Peak Hour --- 2 of 2

A review of Table 11 shows that during the weekday p.m. peak hour the results in the 2025 Build Condition with Amended PUD are consistent with the results in the 2025 Build Condition with Approved PUD, with the following exception:

Glen Cove Avenue/Brewster Street at Charles Street: This intersection operates at an overall intersection LOS C during the weekday p.m. peak hour in the 2025 Build with Approved PUD Condition and changes to a LOS D in the 2025 Build with Amended PUD condition. Closer examination of the individual results at this intersection revealed that certain turning movements experience significant delays consistent with an LOS F in both conditions as well. As a result, mitigation was examined at this location during this time period and is discussed later in this analysis.

Unsignalized Intersection Analysis Results

The results of the capacity analyses for the unsignalized intersections in the study area for 2025 Build with Approved PUD and 2025 with Amended PUD conditions are summarized in Tables 12, 13 and 14 below for the weekday a.m., weekday p.m. and Saturday midday peak hours, respectively. Note that at the intersection of Garvies Point Road and Herb Hill Road, the recently constructed roundabout is reflected in both conditions. A discussion of the results for each location follows each table.

The detailed capacity analysis worksheets are contained in Appendix C.

Intersection	Approach/	Build 2 Approved	025 1 PUD	Build 2025 Amended PUD		
	wovement	Delay	LOS	Delay	LOS	
	EB	4.5	А	4.3	А	
Garvies Point Road/Dickson	WB	5.4	А	4.9	А	
Street at Herb Hill Road Roundabout	NB	5.5	А	5.7	А	
	SB	5.7	А	5.3	А	
	Overall	5.5	Α	5.3	Α	
The Discount Chaules Church	NB	16.0	С	16.2	С	
The Place at Charles Street	WB-L	8.6	А	8.7	А	
	EB-L	7.8	А	7.8	А	
	WB-L	7.2	А	7.2	А	
Hill Street/Coles Court at Mill Hill Road/The Place	NB	11.4	В	11.4	В	
	SB-LT	10.8	В	10.8	В	
	SB-R	9.8	А	9.8	А	

Table 12 - LOS Summary – Unsignalized Intersections – AM Peak Hour

Table 13 - LOS Summa	y – Unsignalized Inters	sections – PM Peak Hour
----------------------	-------------------------	-------------------------

Intersection	Approach/	Build 2 Approved	025 1 PUD	Build 2025 Amended PUD		
	Movement	Delay	LOS	Delay	LOS	
	EB	4.4	А	4.6	А	
Garvies Point Road/Dickson	WB	6.6	А	7.2	А	
Street at Herb Hill Road Roundabout	NB	7.5	А	7.5	А	
	SB	5.2	А	5.4	А	
	Overall	6.8	Α	7.1	Α	
	NB	14.5	В	14.9	В	
The Place at Charles Street	WB-L	7.9	А	7.9	А	
	EB-L	8.0	А	8.0	А	
	WB-L	7.2	А	7.2	А	
Hill Street/Coles Court at Mill Hill Road/The Place	NB	12.3	В	12.4	В	
	SB-LT	11.2	В	11.4	В	
	SB-R	10.1	В	10.2	В	

Intersection	Approach/	Build 2 Approved	025 1 PUD	Build 2025 Amended PUD		
	wovement	Delay	LOS	Delay	LOS	
	EB	4.9	А	5.1	А	
Garvies Point Road/Dickson	WB	7.1	А	7.7	А	
Street at Herb Hill Road Roundabout	NB	6	А	6.6	А	
	SB	5.9	А	6.3	А	
	Overall	6.6	Α	7.1	Α	
The Dises of Chaulas Church	NB	13.8	В	14.1	В	
The Place at Charles Street	WB-L	8.0	А	8.0	А	
	EB-L	7.8	А	7.8	А	
Hill Street/Coles Court at Mill Hill Road/The Place	WB-L	7.2	А	7.2	А	
	NB	0.0	А	0.0	А	
	SB-LT	10.4	В	10.5	В	
	SB-R	9.6	А	9.7	А	

Table 14 - LOS Summary – Unsignalized Intersections – Saturday Midday Peak Hour

Tables 10, 11, and 12 indicate that the roundabout recently constructed at the intersection of Garvies Point Road and Herb Hill Road operates well with low delays in both conditions in all peak hours evaluated. The roundabout will operate at a LOS A during the a.m., p.m., and Saturday peak hours, in both the 2025 Build with Approved PUD and 2025 Build with Amended PUD conditions.

A review of Tables 12 through 14 shows that during the relevant peak hours the results in the 2025 Build Condition with Amended PUD are consistent with the results in the 2025 Build Condition with Approved PUD for all turning movements at the intersections of Charles Street and the Place and The Place/Mill Hill Road and Hill Street/Coles Court

Mitigation – Signalized Intersections

Based on the detailed evaluation of potential impacts of the proposed PUD amendment, the majority of the study intersections were found to accommodate the additional site traffic with minimal impact to future operations. However, intersections that showed a drop in either the overall intersection LOS or individual movement LOS have been identified for potential mitigation to improve their overall operation. These measures are as indicated in Table 15:

		Peak Hour / Mitigation				
Intersection Existing Condition		AM	PM	Saturday Midday		
Glen Cove Avenue & Charles Street/Brewster Street	The intersection is on "Free Operation" with an approximate cycle of 105 seconds during all time periods		Adjust phase splits to correlate to the future volumes. Maintain 105 second cycle length.	Adjust phase splits to correlate to the future volumes. Maintain 105 second cycle length.		
Glen Cove Avenue & Charles Street	The intersection is a "hardwired master" signal which runs with an 80 second cycle length.	No Mitigation Needed	Adjust phase splits to correlate to the future volumes.	No Mitigation Needed		
Charles Street & Herb Hill Road	The intersection is on "Free Operation" with an approximate Road cycle of 83 seconds during all time periods		Increase Cycle length to 100 seconds. Adjust phase splits to correlate to the future volumes	No Mitigation Needed		

Table 15 – Identified Mitigation

No capacity changes have been recommended at any of the intersections. The proposed mitigation is limited to changes to cycle length/split changes /signal progression to improve the future condition. Additionally, no mitigation measures were determined to be necessary during the a.m. peak hours. Accordingly, Tables 16 and 17 indicate the mitigation results for the 2025 Build with Approved PUD, 2025 Build with Amended PUD, and 2025 Build with Amended PUD Mitigation Scenarios.

The detailed capacity analysis worksheets are contained in Appendix C

Table 16 – LOS Summary – Mitigation – PM Peak Hour

Intersection	Approach	Lane Group	Build 2025 Approved PUD		Build 2 Amended	025 1 PUD	Build 2025 Amended PUD with Mitigation	
		•	Delay	LOS	Delay	LOS	Delay	LOS
		L	51.6	D	50.6	D	42.5	D
		LTR	169.2	F	208.8	F	152.5	F
	VVB	R	15.0	В	15.3	В	14.8	В
		Approach	108.0	F	131.3	F	97.8	F
Glen Cove		L	22.4	С	30.0	С	34.0	С
Avenue/Brewster	ND	TR	22.6	С	22.6	С	24.0	С
Street & Charles	NB	R	18.4	В	21.7	С	21.3	С
Street		Approach	20.9	С	23.7	С	24.8	С
		L	30.4	С	29.6	С	31.1	С
	SB	TR	12.5	В	12.5	В	13.4	В
		Approach	20.5	С	20.3	С	21.4	С
	Ov	erall	49.2	D	59.5	E	48.8	D
	EB	L	49.8	D	55.7	Е	52.3	D
Glen Cove Avenue & Charles Street		Т	16.0	В	15.9	В	15.3	В
		R	16.7	В	16.4	В	16.3	В
		Approach	34.1	С	37.5	D	35.6	D
	WB	LTR	10.4	В	10.3	В	9.9	А
		Approach	10.4	В	10.3	В	9.9	А
	NB	TR	21.8	С	23.1	С	24.1	С
		Approach	21.8	С	23.1	С	24.1	С
	SB	L	24.5	С	24.2	С	25.0	С
		Т	16.7	В	17.0	В	17.5	В
		Approach	16.9	В	17.3	В	17.8	В
	Overall		23.3	С	25.1	c	25.2	С
		LT	29.4	С	29.5	С	37.7	D
	EB	R	0.7	А	0.7	А	0.7	А
		Approach	4.7	А	4.6	А	5.8	А
	\A/R	LTR	23.9	С	27.4	С	35.3	D
	VVD	Approach	23.9	С	27.4	С	35.3	D
		L	97.9	F	126.4	F	54.7	D
Charles Street & Herb Hill Road	ND	Т	21.5	С	25.3	С	22.2	С
	IND	R	0.0	А	0.0	А	0.0	А
		Approach	78.1	E	91.9	F	43.6	D
		L	23.8	С	23.9	С	29.4	С
	SB	TR	40.3	D	43.3	D	52.8	D
		Approach	37.9	D	40.3	D	49.1	D
	Ον	erall	42.7	D	52.2	D	32.3	С

Intersection	Approach	Lane Group	Build 2025 Approved PUD		Build 2025 Amended PUD		Build 2025 Amended PUD with Mitigation	
		· •	Delay	LOS	Delay	LOS	Delay	LOS
		L	50.8	D	50.2	D	42.7	D
		LTR	88.8	F	118.0	F	78.9	Е
	VVB	R	13.2	В	13.4	В	13.1	В
		Approach	62.2	Е	78.6	Е	55.4	Е
Glen Cove	NB	L	21.2	С	27.2	С	30.0	С
Avenue/Brewster		TR	24.2	С	23.9	С	25.2	С
Street & Charles		R	20.4	С	31.6	С	30.6	С
Street		Approach	22.2	С	27.8	С	28.4	С
		L	31.0	С	30.6	С	32.4	С
	SB	TR	12.5	В	12.5	В	13.4	В
		Approach	21.1	С	21.0	С	22.3	С
	Overall		33.0	С	40.4	D	34.4	С

Table 17 – LOS Summary – Mitigation – Saturday Midday Peak Hour

As seen in Tables 15 and 16, the signalized intersections that were reanalyzed operate at the same Overall LOS after the mitigation measures as the 2025 Build with Approved PUD condition during the time-periods analyzed.

Traffic Service Conclusions

Based on the detailed evaluation of the potential impacts of the proposed PUD Amendment, upon the implementation of the signal timing changes detailed above, the traffic impacts associated with the proposed amendment to the Garvies Points Mixed-Use Waterfront Development project are mitigated to provide traffic service consistent with those associated with the PUD which was approved in 2015.

Project Mitigation Status

The Findings Statement issued as part of the approval for the Glen Isle Mixed-Use Development Project set forth thresholds whereby specific mitigation was to be in place, based on the level of development as the project was built out. As the size of the project means that the build-out will occur over a number of years, these thresholds allow for a phased implementation of the required mitigation based on the stage of the build-out over time.

Currently, all mitigation required for the current stage of the project's occupancy has been constructed. The next threshold to be reached will trigger the need for implementation of improvements at the intersection of Glen Cove Road at Glen Head Road. These improvements are currently in the design process and review process with the New York State Department of Transportation with a resubmission to address comments to occur soon. The threshold at which these improvements are required to be in place is the occupancy of 407 residential units. Currently 312 units will be occupied by early April 2021. Therefore, the project remains below the threshold for this improvement which is expected to be in place prior to the threshold being reached.

6

Conclusions

Based on the results of the analyses conducted for the purpose of this report, the following conclusions have been developed.

- > Due to the extents of the construction activities for the Garvies Point Mixed-Use Waterfront Development Project, traffic counts within the study area would not yield a conventional traffic impact analysis. Accordingly, the turning movement data collected for that development was referenced in the preparation of this study, as discussed in detail previously, and only limited data was collected to supplement that information for intersections that were not previously included.
- In 2015, the Garvies Point Mixed-Use Waterfront Development Project was approved and the development mix established maximum trip generation thresholds for any future modifications. These thresholds were 691 trips (259 entering and 432 exiting) during the weekday a.m. peak hour, 954 trips (520 entering and 434 exiting) during the weekday p.m. peak hour and 892 trips (479 entering and 413 exiting) during the Saturday midday peak hour.
- > The traffic generated by the approved development was determined to be accommodated on the adjacent roadways and intersections after the implementation of required mitigation measures. This includes the installation of a 1 lane roundabout at the intersection of Garvies Point Road/Division Street and Herb Hill Road.

- > Two parcels are under consideration for inclusion in the Amended Planned Unit Development to serve as a site to construct workforce housing units: 1 Garvies Point Road and the Former Konica Minolta Property. It is understood that the construction of the workforce housing units on either of these sites would likely result in development beyond the housing units alone.
- Of these two properties, the conceptual development plan for the Konica Minolta site was determined to be significantly larger and potentially more impactful, with more traffic generated in comparison with 1 Garvies Point Road. As a result, this property was selected for inclusion to represent the 'Worst Case' scenario with regards to the traffic generated.
- Based on the same methodologies used to develop the aforementioned trip generation thresholds, the Amended PUD, including the Konica Minolta Site, would generate 709 trips (202 entering and 507 exiting) during the weekday a.m. peak hour, 1,152 trips (667 entering and 485 exiting) during the weekday p.m. peak hour and 1,141 trips (605 entering and 536 exiting) during the Saturday midday peak hour.
- The capacity analysis performed shows that the project generated traffic associated with the Amended PUD will result in no significant impact on the majority of the intersections identified for this study in comparison to the capacity analysis performed for the roadway network with the traffic for the Approved PUD. Those study intersections will continue to operate similarly with minimal increases in overall delay and no changes in LOS.
- > The impacts to the intersections of Glen Cove Avenue/Brewster Street at Charles Street, Glen Cove Avenue at Charles Street, and Charles Street at Herb Hill Road are easily mitigated via signal timing and phasing modifications. As a result, no modifications to the roadway network would be required in comparison with the conditions which were established by the Approved PUD.
- > The traffic levels of service with the Amended PUD would remain consistent with the traffic operations associated with the Approved PUD, upon the implementation of the recommended signal timing mitigation.

\\vhb.com\gb\proj\Hauppauge\20570.00 RXR Garvies Point PUD\Reports\TIS\20570_TIS_Confirmed Changes.docx