DRAFT ENVIRONMENTAL IMPACT STATEMENT
APPLICATION OF SOUTHAMPTON DAY CAMP REALTY, LLC
PROPOSED CHANGE FROM ONE NON-CONFORMING USE TO ANOTHER AND ASSOCIATED SITE IMPROVEMENTS
655 MAJORS PATH
HAMLET OF NORTH SEA, TOWN OF SOUTHAMPTON
SUFFOLK COUNTY, NEW YORK

PROJECT LOCATION: 17.28±-acre Parcel at 665 Majors Path, within the Town of Southampton, Suffolk County.

SUFFOLK COUNTY TAX MAP NUMBERS: District 0900 – Section 097.00 – Block 03.00 – Lot 017.001

APPLICANT: Southampton Day Camp Realty, LLC

Contact: Wayne Bruyn, Esq.
O'Shea Marcincuk & Bruyn LLP
250 North Sea Road
Southampton, New York 11968

LEAD AGENCY: Town of Southampton
Planning Board
116 Hampton Road
Southampton, New York 11968

Contact: Kyle P. Collins, AICP
Town Planning / Development Administrator
(631) 702-1800

PREPARER & CONTACT: This Draft Environmental Impact Statement was prepared by:

VHB Engineering, Surveying and Landscape Architecture, P.C.
100 Motor Parkway, Suite 135
Hauppauge, New York 11788

Contact: David M. Wortman
Senior Environmental Manager
(631) 787-3400

With technical input from:

Landscape Architect
Marshall Paetzel Landscape Architecture, P.C.
8595 Cox Lane – Suite 7
Cutchogue, New York 11935

Civil Engineer
Jeffrey T. Butler, P.E., P.C.
P.O. Box 634
Shoreham, New York 11786

Transportation Engineer
Dunn Engineering Associates, P.C.
66 Main Street
Westhampton Beach, New York 11978

Water Resources Consultants
P.W. Grosser Consulting, Inc.
630 Johnson Avenue, Suite 7
Bohemia, New York 11716

Lombardo Associates, Inc.
188 Church Street
Newton, Massachusetts 02458

Project Attorney
O'Shea Marcincuk & Bruyn LLP
250 North Sea Road
Southampton, New York 11968

DATE OF PREPARATION: April 2016, Revised September 2016

AVAILABILITY OF DOCUMENT:

DATE OF ACCEPTANCE:

DEADLINE FOR COMMENTS:

Table of Contents

List of Appendices

List of Appendices (Cont'd)

List of Figures

List of Tables

List of Tables, (Cont'd)

1.0

Executive Summary

This document is a Draft Environmental Impact Statement (DEIS) prepared in accordance with the State Environmental Quality Review Act (SEQRA) and its implementing regulations at 6 NYCRR Part 617 for the action contemplated herein, and is based upon the Final Scope that was issued by the Town of Southampton. This DEIS evaluates potential adverse impacts associated with the proposed action, which consists of a change from one non-conforming use to another non-conforming use; from the existing tennis club and/or tennis camp to a day camp and tennis club on the 17.28±-acre property, known on the Suffolk County Tax Map (SCTM) as District 0900 – Section 097.00 – Block 03.00 – Lot 017.001 (the "subject property"). The proposed project, known as Southampton Racquet Club and Camp, consists of various site improvements designed to provide more diversified camp activities, as well as improve site access, parking and accommodations. The site address is 665 Majors Path in the hamlet of North Sea, Town of Southampton, Suffolk County.

This DEIS evaluates the following issues, based on the Positive Declaration and the Final Scope issued by the Planning Board:

- Geology
- Groundwater Resources
- Surface Waters
- Ecology
- Visual and Aesthetic Resources and Community Character
- Transportation
- Land Use and Zoning
- Community Facilities and Services
- Noise

This Executive Summary is designed solely to provide an overview of the proposed action, a brief summary of the potential adverse impacts identified and the mitigation measures proposed, as well as alternatives considered. Review of the Executive Summary is not a substitute for the full evaluation of the proposed action performed in Sections 2.0 through 8.0 of this DEIS.

Introduction

The proposed action involves a change from one pre-existing, non-conforming use (tennis club and/or tennis camp) to another non-conforming use (a day camp and tennis club). The applicant, Southampton Day Camp Realty, LLC, is currently operating the existing tennis club and/or tennis camp in accordance with existing Certificates of Occupancy and Certificates of Compliance issued by the Town of Southampton. The proposed action would not increase the intensity of use of the subject property, but rather would diversify the recreational activities available to campers by eliminating two existing tennis courts and replacing them with two pools and a basketball court, constructing a new play area, and reallocating building square-footage, among other improvements. Tennis activities would still be offered at the subject property, as seven existing tennis courts would remain. The proposed day camp use would offer a range of camp activities, including tennis, but would offer programs that are less focused on tennis than the programs currently offered, and may offer some programs that accommodate campers that do not wish to play tennis.

The proposed action has been significantly scaled down since the Town of Southampton Planning Board, as lead agency, issued a Positive Declaration for the "2012 Renovation Plan" on October 11, 2012 requiring the preparation of this DEIS. For example: the new plan calls for fewer existing tennis courts to be removed; no longer proposes a swimming pool, patio and changing shed complex near adjoining residences at the north-northwest portion of the site; and no longer contains a new internal driveway through a wooded portion of the site joining the southern parking area to the main driveway loop. Additionally, several enhancements were made to the existing facility to improve operations from an environmental perspective (e.g., abandonment of aged sanitary systems and replacement with modern sanitary systems with septic tank pretreatment, installation of public water supplies, and removal of oil storage tanks). This DEIS is prepared in accordance with the Positive Declaration and Final Scope issued for the prior plan, despite the significant reduction in scope of the proposed action.

Project Description

The improvements and facilities that comprise the existing Southampton Racquet Club and Camp support a tennis club and a tennis camp program for children of various ages. Consistent with the historic use of the subject property and with other tennis camps offered throughout the region, the existing camp programs offer tennis instruction, as well as other activities to its campers (e.g., swimming, basketball, arts and crafts, and field games). As with the existing Southampton Racquet Club and Camp operation, the proposed day camp and tennis club would be seasonal, with overnight accommodations used by employees and camp counselors. There would be

no overnight accommodations for campers. As with the tennis camp element of the existing use, the proposed day camp would accommodate children ages 2.5 through 14 years old, and would operate for a ten-week period on weekdays between mid-June and early September. Staff arrival and departure would occur at approximately 7:30 a.m. and 4:15 p.m., respectively, and camp activities would occur between approximately 9:30 a.m. and 3:30 p.m. (i.e., camper arrival and departure). No significant change in the nature or level of off-hours activity (e.g., associated with seasonal staff residing at the site) would result from the proposed action. The tennis club activities would continue daily for a 22-week season, from early May through early October, between the hours of 8:00 a.m. and 6:00 p.m.

For the 2016 season, Southampton Racquet Club and Camp has 90 tennis club members, 280 campers, and a total staff of 66, including 53 staying overnight in the existing cottages and residence. It is anticipated that under the proposed action, the maximum projected future day camp enrollment, staff and tennis club members at the site would be 360 campers, 90 staff (including 65 overnight), and 90 tennis club members. It is noted that an increase in the number of campers at the existing tennis club and/or tennis camp may be expected, even absent the proposed action. That is, an increase in the popularity of the existing tennis club and/or tennis camp may continue to occur, as it has over the past several years, and the proposed action would not necessarily result in an increase in the capacity of the subject property to accommodate members, campers and staff. It should be noted that the range of activities that would be offered as part of the proposed day camp programming is very similar to the range of activities offered at other facilities in the region that identify themselves as tennis camps.

The proposed day camp would offer a range of recreational activities, including, but not limited to, tennis, swimming, music, arts and crafts, Zumba, nature walks, climbing, cooking, basketball, soccer, Gaga, 9 square, wiffleball, dance, cheerleading, train, free play, parachute games, dodgeball, kickball, field games. These activities would follow a structured schedule throughout the day, with campers separated into groups enabling efficient use of the facilities.

The subject property is currently improved with 12 cottages, a caretaker's office, a kitchen and dining hall, a one-and-one-half story residence, a clubhouse, a maintenance shed and a maintenance shop building, a basketball court, nine tennis courts, a swimming pool, gravel parking, and decking and patios (both attached to buildings and freestanding). The subject property is adjacent to Little Fresh Pond, and contains associated freshwater wetlands within the northwest portion of the site. There are no improvements located in the vicinity of Little Fresh Pond.

The proposed action includes various improvements to the existing tennis club and/or tennis camp, as follows:

Cottage 4: The existing 355 SF cottage and 85 SF deck would be removed.

Cottage 5: The existing 358 SF cottage and 196 SF deck would be removed.

Cottage 9: The existing 166 SF detached deck would be removed.

Cottage 10: The existing 119 SF detached deck would be removed.

Cottage 12: The existing 598 SF building and 314 SF deck would remain and be used as a Health Center.

New Cottage: One new, 562 SF cottage with a 152 SF deck would be constructed to the south of existing Cottage 11.

Pump House (Well House): The existing 135 SF pump house (well house) would be removed.

Storage Shed/Shop: The existing 180 SF storage shed/shop would be relocated within the site.

Dining Hall: The existing 286 SF deck at the Dining Hall would be replaced by a 665 SF deck.

Changing Sheds: Two new changing sheds are proposed. Each shed is approximately 190 SF, for a total of 380 SF.

Garden Shed: The existing 94 SF garden shed would be removed.

The total floor area of all existing buildings is 11,998± SF. As noted above, the proposal includes the elimination of certain buildings and the addition of new buildings to modernize the facility. Upon implementation of the proposed action, the square footage of all buildings would be the same as that which currently exists (i.e., 11,998± SF proposed) such that no expansion is proposed. The area of buildings represents 1.6± percent of the total lot area.

There is no proposed increase in the total area of decks and patios on the property. A total of 4,035 SF of decking/patio currently exists, and, upon completion of the project, a total of 4,035 SF of decking/patio would continue to exist.

The plan proposes to repair, renovate or replace sports courts on the subject property. The northerly-most tennis court, which extends approximately two feet beyond the northerly property line, would be partially removed and revegetated (such that it would no longer extend off of the site), and a 5,361± SF basketball court would occupy the southern portion of this former tennis court area. A 2,380± SF play area is proposed to be located between the existing clubhouse and Cottage 3. The existing tennis court, located just north of the existing parking area and adjacent to an existing swimming pool and patio, is proposed to be converted to two new 1,600± SF pools with an associated patio. The existing basketball court would remain and continue to be used as a multi-purpose sports court.

There is currently 59,213± SF of sports court area on the subject property. The seven existing tennis courts on the southerly part of the subject property would remain. Upon completion of the proposed repairs and site improvements, a total of 59,213± SF of sports court area would remain (inclusive of all swimming pools and pool patios).

With respect to site coverages, the proposed action would result in the removal of 0.79± acre of vegetation at the 17.28±-acre subject property (i.e., 4.6 percent of the property). Approximately 0.21± acre of existing and new cleared area would be revegetated with native species, such that there would be a net decrease of 0.58± acre of vegetated area (i.e., 3.4 percent of the subject property). A nominal (0.03±-acre) increase in impervious surface area would also result from implementation of the proposed action.

Site access would be modified, such that the two most northern of the five existing curb cuts along Majors Path would be eliminated, and the small associated driveway loop revegetated with native species. The existing enter-only driveway for the main driveway loop would remain in its current location, but the associated exit-only driveway would be relocated approximately 57 feet to the south, to improve sight distances and safety. Similarly, the southernmost driveway, which provides access to the southern parking lot, would be relocated approximately 100 feet to the south, also to improve sight distances and safety.

Existing parking areas would be improved and additional parking spaces would be created to provide 74 total parking spaces on-site. An additional 37 spaces would be landbanked within areas of existing lawn or gravel. The 74 proposed spaces are expected to accommodate the demand for on-site parking adequately. Bussing would continue to be provided to all campers.

As under existing conditions, the Suffolk County Water Authority (SCWA) would provide potable water to the subject property. Existing on-site sanitary systems, which were recently upgraded by the applicant in accordance with modern Suffolk County Health Department standards to handle existing on-site facilities, would accommodate sanitary waste. One existing system would be abandoned, and one new

system would be installed for a new cottage. Electricity would continue to be provided by PSEG Long Island. Liquid propane would continue to be used for hot water heating at the existing and proposed swimming pools, and no new tanks are proposed. An existing 235-gallon heating oil tank within the on-site residence would remain.

There is currently no stormwater management infrastructure at the existing Southampton Racquet Club and Camp facility. Upon implementation of the proposed action, a comprehensive stormwater management system consisting of leaching pools (and natural infiltration) would be installed. The proposed system is designed to meet and exceed all relevant requirements, such that 100 percent of all stormwater runoff generated at improved site areas from a two-inch rainfall event, would be contained and recharged on-site. The proposed improvements would minimally alter land surfaces (i.e., a 0.03±-acre increase in impervious surface area), such that there would be no significant increase in stormwater runoff generation.

Purpose, Need and Benefits

The purpose of the proposed action is to modify the defined use of the subject property from one non-conforming (tennis club and/or tennis camp) use to another non-conforming use (day camp and tennis club) and improve the existing facilities. This change is needed to transition from the existing tennis club and/or tennis camp use to a use that incorporates a day camp program providing a broader range of camp activities. The proposed action would not necessarily increase the intensity of use of the subject property, but rather, would diversify the recreational activities available to campers by eliminating two existing tennis courts and replacing them with two pools and a basketball court (increasing the number of pools on site to three pools, and the number of basketball courts to two courts), constructing a new play area, and reallocating building square-footage, among other improvements. The existing tennis camp program has a tennis focus, while also offering a range of other camp activities (e.g., swimming). The proposed day camp use would continue to offer tennis-related camp activities, but would also offer a diversity of programs to accommodate campers who do not wish to play tennis. It should be noted that the range of activities that would be offered, as part of the proposed day camp programming, is very similar to the activities offered at other camps in the region that identify themselves as tennis camps (see examples in Section 2.2.1 [Page 7] of this DEIS).

Since beginning to operate the subject property in 2013, the applicant has made several beneficial improvements to the tennis club and/or tennis camp to rehabilitate the existing facilities, as well as to install public water service from the SCWA within Majors Path such that water service is now available for the connection of other nearby properties. Additionally, the former outdated sanitary systems on the subject

property were abandoned and replaced with modern systems with septic tank pretreatment (where none existed previously) and with a grease trap for kitchen waste. Existing oil storage tanks were also removed from the subject property. These improvements have benefitted the community from the perspective of groundwater quality.

The proposed action would benefit the surrounding community in several ways, including:

- Providing a recreational use (day camp and tennis club) to its patrons that reside within the community.
- Improving drainage conditions. There is no existing stormwater management infrastructure present at the site, and stormwater runoff is permitted to flow overland. The proposed action includes the installation of drainage structures to contain and recharge 100-percent of stormwater runoff on-site, representing an additional water quality benefit as compared with existing conditions.
- Replacement of the existing tennis court that encroaches upon the residences to the north with a smaller basketball court, and the establishment of a vegetated buffer along the site boundary.
- Improving sight distances and safety along Majors Path via the closure of two site driveways and the relocation of two other existing site driveways.

As the subject property is located within the R-20 Residence zoning district, the potential exists for the property to be subdivided and developed as-of-right with 22 single-family residences. This alternative (which is evaluated in detail within this DEIS) would result in various potential adverse impacts, which the proposed action would preclude by maintaining the existing character and extent of development at the subject property (such that the proposed action represents a benefit). Ways in which such development would have greater impacts than the proposed action may include, but may not be limited to, the following:

- increased clearing of natural vegetation to accommodate a subdivision roadway and clearing within individual lots for homesites, driveways, yards, and amenities
- increased water usage and sanitary waste discharge to on-site sanitary systems on a year-round basis, and closer to Little Fresh Pond
- potential reduction in vegetative buffer along Majors Path and adjacent to existing, neighboring residences
- greater construction-related impacts
- greater extent of soil disturbance and grading activities
- greater total area of impervious surfaces (and associated quantities of stormwater runoff)
- increased burden on community service providers, including public education costs due to school-aged children generation

Additionally, under the proposed action, the subject property would be managed and maintained by a single entity, rather than several individual homeowners or occupants that may utilize a broad range of maintenance practices, such as fertilizer and pesticide application, etc.

Construction

The improvements proposed could be implemented within an overall five-month period, if implemented all together. However, it is likely that the proposed improvements would be implemented over time, to accommodate construction seasons and camp seasons. For example, the proposed play area and the basketball court may be constructed first (e.g., in the Spring of 2017), followed by improvements to internal drives and parking areas, the construction of one swimming pool, and improvements to some or all changing cabins in the following Fall or Spring, then the balance of the cabin improvements and second pool may follow in the next season. With respect to environmental impact, the net effect is that (at any one time) the intensity of construction activity at the site would be significantly reduced, the area of land disturbance (i.e., exposed soil) would be reduced, and potential construction-related noise would be minimized. The actual construction schedule would also be permit-dependent. Regardless of the specific schedule or phasing of the proposed projects, construction activity would be scheduled to occur only between the hours of 7:00 a.m. and 7:00 p.m., so as not to occur during sensitive overnight hours consistent with the noise regulations set forth at §235-4(A)(2) of the Town of Southampton Town Code (the "Town Code").

Required Permits and Approvals

The following permits and approvals are required for implementation of the proposed action:

Agency	Required Permit/Approval
Town Planning Board	Site Plan; Stormwater Pollution Prevention Plan (SWPPP)
Town Zoning Board of Appeals	Variance for change from one non-conforming use to another
Town Highway Department	Road Opening
Suffolk County Department of Health Services	Water supply, on-site sanitary system, swimming pool
New York State Department of Environmental Conservation	SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002); SWPPP/Notices; Determination of No Jurisdiction (Freshwater Wetlands)

Probable Impacts of the Proposed Action

Geology

According to the United States Department of Agriculture *Soil Survey of Suffolk County, New York* (the "*Soil Survey*"), soils within the developed portions of the subject property and within project areas consist of Plymouth loamy sand, 3 to 8 percent slopes (PlB) and Carver and Plymouth sands, 15 to 35 percent slopes (CpE). The predominant soil type at the subject property is the PlB soil type, which occupies approximately 73 percent of the subject property. The *Soil Survey* indicates moderate limitations for the siting of streets and parking lots due to slopes; moderate limitations for athletic fields and intensive play areas due to slopes and a sandy surface layer; and severe limitations for the siting of lawns and landscaping, due to a sandy surface layer. The CpE soils comprise approximately 27 percent of the subject property, and present severe limitations for sewage disposal fields, homesites, streets and parking lots, siting of lawns and landscaping, and for athletic fields and intensive play areas, due to slopes and/or a sandy surface layer. However, based on the locations of the proposed improvements within the site (e.g., the location of proposed Cottage 14 and a new sanitary system on an area of PlB soils, which has no moderate or severe limitations for the siting of homesites or sewage disposal fields), the potential limitations identified within the *Soil Survey* are not expected to affect the proposed improvements. No areas of steep slopes at the subject property would be affected by the proposed improvements. Moreover, the project engineer has confirmed, based on the results of soil test holes, that the on-site soils are suitable for the proposed improvements. Topsoil would be applied to disturbed land surfaces, as needed, to support the establishment of vegetation in accordance with the *Planting Plan*. It is not expected that any significant soil amendment would be needed, as the proposed plantings would consist of native species to the maximum extent practicable.

There are no changes to existing site elevations being considered as part of the proposed action, which range from approximately nine to 60 ± feet above mean sea level (amsl). Minor grading would be performed in the field area where Cottages 4 and 5 and storage sheds would be removed. A minor quantity of natural material (i.e., 625± cubic yards) would be excavated and removed from the subject property to accommodate the proposed stormwater management infrastructure and sanitary system improvements.

The proposed improvements are expected to result in the disturbance of approximately 3.06 acres of land surfaces at the 17.28±-acre subject property. A Stormwater Pollution Prevention Plan (SWPPP) would be developed and implemented during construction, in accordance with Town of Southampton requirements and the provisions of the New York State Department of Environmental

Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) *General Permit for Stormwater Discharges from Construction Activity* (GP-0-15-002). Various erosion and sedimentation controls would be implemented in accordance with the SWPPP, which are expected to include:

- Protecting of existing vegetation to remain.
- Scheduling of clearing and grading activities to minimize the total area of land disturbed at any one time.
- Limiting the length of time areas are exposed by establishing pavement and plantings at exposed areas as soon as practicable.
- Installing sediment barriers (e.g., silt fence, hay bales) along the limits of disturbance for the duration of work. No sediment from the site would be permitted to wash onto adjacent properties, wetlands or roads.
- Stabilizing graded and stripped areas and stockpiles via temporary seeding or other effective cover.
- Protecting drainage inlets through the use of sediment barriers, sediment traps, etc., to prevent sediment buildup (details provided on *Proposed Storm Drainage Plan*).
- Controlling fugitive dust (e.g., covering of stockpiles, temporary seeding, use of a water truck during extended dry periods).
- Establishing a stabilized construction entrance to prevent soil and loose debris from being tracked onto local roads (details provided on *Proposed Storm Drainage Plan*).

Based on the foregoing, no significant adverse geologic impacts to soils or topography are expected to result from implementation of the proposed action.

Groundwater Resources

Published data from the United States Geological Survey (USGS) suggests that regional groundwater movement in the vicinity of the subject property is to the west-northwest, where it ultimately discharges into the Great Peconic Bay. Site-specific groundwater monitoring was conducted in August and November 2015. Four monitoring wells were located at the site (MW-01 through MW-04) to represent upgradient water quality, water quality in the vicinity of the on-site sanitary waste disposal systems, at a point that allows for the triangulation of groundwater levels beneath the subject property, and at a location that identifies groundwater quality and levels in the vicinity of Little Fresh Pond, which is adjacent to the northwest portion of the subject property. The data collected at the four monitoring wells allowed for the analysis of groundwater quality and the determination of localized groundwater flow direction. Surface water elevation data was also collected for Little Fresh Pond.

The data collected also shows that the surface water elevation of Little Fresh Pond is higher than the groundwater elevations of all the monitoring wells installed as part of the investigation. The surface water elevation is, on average, 6-inches higher than the groundwater elevation of monitoring well No. 4, which is the closest monitoring well to Little Fresh Pond (170 ft. approximately). Since Little Fresh Pond has no surface water outlets to discharge the incoming stormwater and runoff, the higher surface water elevation of the pond creates a vertical hydraulic gradient that recharges vertically and radially to groundwater. Although the regional groundwater flow suggests that the groundwater beneath the site flows toward Little Fresh Pond, the pond's vertical hydraulic gradient reverses the localized flow away from the pond. This data is further supported by a groundwater budget analysis and the groundwater quality data.

A groundwater budget analysis was performed based on the area of Little Fresh Pond (i.e., 19.3± acres), average precipitation for the area (i.e., approximately 44 inches per year), the tributary drainage area of the pond (i.e., approximately 118 acres), an evaporation rate of approximately 34 inches per year, and a conservative estimate that only 10 percent of precipitation in the drainage area reaches Little Fresh Pond. The results indicate that Little Fresh Pond provides a net recharge to the groundwater system of 19 million gallons per year, and that the net yearly groundwater flow is away from the pond.

Groundwater quality sampling was performed in August and November 2015. The samples analyzed for common water chemistry and compared to the New York State Class GA groundwater standards. The results of the first round of sampling indicated that levels in groundwater were below the standards for most parameters tested. Certain parameters found above the standards include Iron, Manganese, Dissolved Sodium and Chlordane. Chlordane is a pesticide used in agricultural and other applications, which was banned from use in the United States in the 1970's and 1980's for most uses, and tends to stay in soil for long periods of time (over 20 years). As the subject facility is connected to the SCWA water distribution system, Chlordane mitigation is not necessary. If irrigation wells are to be used, the wells would be sampled. Additionally, the laboratory results may reflect Chlordane attached to soil particles, not soluble in groundwater, as the first round of samples were unfiltered for sediment. The high concentration of Sodium found in MW-01 is believed to originate from road salting, as the well is adjacent to Majors Path. The second round of samples included filtered samples (to avoid the collection of soil sediments) that were tested for Nitrogen and Phosphorus compound parameters. The results indicated minor and negligible Nitrogen and Phosphorus levels well below the applicable standards, or levels too low to be detected by the laboratories' method detection limits.

The proposed action would utilize the existing sanitary systems at the subject property, which were recently upgraded by the applicant to meet modern standards of the Suffolk County Department of Health Services (SCDHS). One existing system

would be abandoned (as it is associated with a cottage that would be demolished), and one new system would be constructed in the vicinity of proposed Cottage 14. Pursuant to Article 6 of the Suffolk County Sanitary Code. The maximum permitted discharge to on-site sanitary systems for land within Groundwater Management Zone V is 300 gallons per day (GPD) per acre, or 5,184 GPD for the 17.28±-acre subject property. However, the subject property has a "grandfathered" sanitary flow of 9,450 GPD. Based on the existing and expected future levels of site occupancy at the subject property, sanitary waste generation is expected to increase from 5,440 GPD (existing) to 6,800 GPD in the future. The future quantity of sanitary waste to be discharged to on-site systems is well below the maximum permitted "grandfathered" flow established by the SCDHS Office of Wastewater Management for the previously-developed property. It is important to note that the proposed day camp use would operate for only 10 weeks per year, whereas the permitted sanitary flow pursuant to Article 6 would allow discharge at a rate of 6,600 GPD year-round.

An analysis of the nitrogen loading of the proposed day camp and tennis club use was performed to compare same with what would be permitted pursuant to Article 6. The results indicate that the estimated future nitrogen loading generated from the proposed use would equate to only 25 percent of the nitrogen that would otherwise be allowed under Article 6 density criteria, and 14 percent of that allowed by the facility's grandfathered flow. The increase of flow as per the proposed site improvements is not expected to produce any significant effect on the regional or local groundwater quality. To further evaluate the potential groundwater-related impacts of the proposed action with respect to nitrogen inputs (including nitrogen in sanitary waste discharge, fertilizers, and various other sources), a Nitrogen Load Model was developed and a BURBS model computation was performed for existing and proposed conditions at the subject property. The modeling results indicate that the proposed action would increase the mass of nitrogen recharged to groundwater by approximately 34.28 pounds per year, and that the concentration of nitrogen in recharge would increase minimally from 2.06 mg/L to 2.39 mg/L. The expected concentration is well below the US Environmental Protection Agency maximum concentration limit of 10 mg/L, and is below the unofficial concentration of 2.5 mg/L for protection of the waters of Peconic Bay from nitrogen loadings.

The applicant retained Lombardo Associates, Inc., to further review and confirm the groundwater analyses, and to explore possible nitrogen and phosphorus reduction measures if determined necessary. Lombardo Associates, Inc., concluded that groundwater at the subject property does not flow into Little Fresh Pond, and that groundwater beneath the subject property was found to be of high quality, with no indication of materially significant impacts of wastewater. The Water Quality Impact Evaluation states that "[w]hile we cannot say with certainty which properties around [Little Fresh Pond] are responsible for its degradation, we can say, for certain, that the [subject property] is not a contributor…"

The subject property is currently supplied potable water by the SCWA. There are three SCWA community supply well fields near Little Fresh Pond, the closest of which is located 0.6 mile east of the subject property (Edge of Woods Road well field). No influence on the water table elevation or direction of flow is expected in the vicinity of the subject property due to the operation of these supply wells. The minimal incremental increased demand for potable water that would result upon reaching the maximum anticipated future occupancy of the proposed day camp and tennis club would not be expected to result in a significant adverse impact upon community water supplies, and no new connections are proposed.

Analyses of potential groundwater-related impacts of swimming pool water, including increased pool water discharge due to the addition of two new pools, conclude that the continued use of calcium hypochlorite (a chlorine derivative) for pool disinfection and normal maintenance in accordance with all relevant regulations (e.g., New York State Department of Heath Sanitary Code Part 6, Subpart 6-1) would not be expected to adversely affect the environment. With respect to the potential impacts of fertilizers, pesticides and other chemicals, the applicant would closely monitor the landscaping subcontractors to incorporate the relevant requirements and restrictions of New York State law with respect to fertilization practices, and the continued treatment of the property with a cedar oil-based pesticide for mosquito and tick control would not be expected to produce any harmful effect on the regional or local groundwater quality.

Three low flow water wells are located at the subject property. Any use of these wells would not be expected to produce any significant effect on the regional or local groundwater flow or direction.

Overall, no significant adverse impacts upon groundwater resources, including groundwater-related impacts to Little Fresh Pond, are expected to result upon implementation of the proposed action.

Surface Waters

Little Fresh Pond is a 19.3±-acre surface water body located adjacent to the northwest of the subject property. Little Fresh Pond has historically been used by the existing tennis club and/or tennis camp facility for various purposes. There is no use of the pond related to the existing facility operations, with the potential exception of supervised nature walks near the pond, and no changes are proposed. No improvements are proposed within the pond, associated wetlands, or the regulated 100-foot buffer surrounding same. The pond has no surface water contributors (e.g., streams) and its surface level is directly influenced by rainwater and runoff from the watershed. It is designated as a Class B wetland, identified as wetland “SH-4”on the NYSDEC Freshwater Wetland Map. The USFWS NWI Map identifies Little Fresh

Pond as a Freshwater Pond and defines it as a Palustrine, Unconsolidated Bottom, Permanently Flooded (PUBH) water body. It is also listed on the 2014 New York State Section 303(d) Lists of Impaired/Total Maximum Daily Load (TMDL) Waters. It has been listed in the NYS 303(d) list (Part 3a) for high concentrations of phosphorus since 2012. Part 3a designation is a subcategory that defers the development of TMDLs until verification of impairment.

Surface waters of Little Fresh Pond were sampled in July 2015. The samples were analyzed for common water chemistry and the results were compared to the New York State Ambient Water Quality Standards (AWQS) – Class B. The data collected as part of the surface water quality investigation of Little Fresh Pond reveals a concentration of phosphorous higher than the guidance value (20 ug/l). High concentration of phosphorus in the pond may be responsible for the algae growth typical in summer months. Historical data obtained from the CSLAP 2011 report shows that there have been multiple occasions since the availability of the data (1989) that the pond has had similar or higher concentrations. Those higher than the guidance value concentrations appear to be cyclical and reoccurring mainly around the summer months (May – September). Pesticide concentrations were non-detect.

The subject property is partially within a "Critical area of environmental concern" as identified within §157-10 of the Town Code entitled, "Critical Areas" due to its location within a state-regulated Freshwater Wetland and the associated 100-foot adjacent area. No portion of the subject property is located within a Critical Environmental Area (CEA) pursuant to SEQRA (6 NYCRR §617.14(g)).

The proposed action would result in minor changes in site coverages. Specifically, a net reduction of 0.58±-acre in wooded area (after revegetation of 0.21± acre), a nominal increase in impervious surface area (i.e., 0.03± acre) and a 0.25±-acre increase in total gravel surface. In general, increases in impervious surface area increase stormwater runoff potential. However, the proposed action includes the installation of a comprehensive stormwater management system, where currently no on-site controls or infrastructure exist. The proposed system, which would consist of drywells strategically located at low points throughout the improved portion of the site, are designed to accommodate all stormwater runoff from a two-inch rainfall event. This is a significant improvement over the existing condition, where stormwater is permitted to runoff overland. With the proposed stormwater management system installed, no significant adverse impacts to surface water resources associated with stormwater runoff are expected to result from implementation of the proposed action. In fact, the proposed action represents a net benefit with respect to stormwater runoff.

Stormwater runoff during construction would have the potential to convey sediments toward low-lying areas, and to generate soil erosions with construction-related pollutants that could ultimately end-up in surface waters. This is particularly

challenging to manage in areas of steep slopes or impervious surface. Coverage under NYSDEC SPDES *General Permit for Stormwater Discharges from Construction Activities* (GP-0-15-002) would be required prior the commencement of construction activities. Various erosion and sediment control measures would be implemented during construction, as part of an approved SWPPP, to minimize or preclude any potential relevant impacts upon surface waters, including Little Fresh Pond.

Consultations were undertaken with NYSDEC regarding the proposed action. By correspondence dated July 17, 2015, the NYSDEC was advised of the proposed action, and a jurisdictional determination was requested regarding same. In response, NYSDEC issued a letter of No Jurisdiction dated September 3, 2015, confirming that no Freshwater Wetlands permit would be required for the proposed action. As indicated in the aforementioned letter of No Jurisdiction, "all construction, clearing and/or ground disturbance must remain more than 100 feet from the freshwater wetland boundary." There are no improvements existing or proposed within 100 feet of the wetland, and no construction, clearing and/or ground disturbance is proposed within these regulated areas.

Based on the various groundwater and surface water analyses, water budget calculations and other information described within this DEIS, groundwater discharges at the subject property (e.g., sanitary waste discharge to on-site sanitary systems) do not reach or adversely affect water quality in Little Fresh Pond. As such, no adverse effects of the continued use of on-site sanitary systems would be expected to adversely impact this surface water resource.

A Water Quality Impact Evaluation was prepared by Lombardo Associates, Inc. to evaluate, among other things, potential impacts to Little Fresh Pond. The analysis concluded that the subject property does not contribute to the degraded condition of Little Fresh Pond (e.g., via sanitary waste discharges to groundwater at the subject property). Lombardo Associates, Inc. indicated that future recommendations regarding nitrogen or phosphorus reduction efforts would require further investigation of off-site contributing sources.

Overall, based on the foregoing, no significant adverse impacts on surface waters are expected to result from implementation of the proposed action.

Ecology

Existing ecological conditions at the 17.28±-acre subject property were assessed through a review of US Fish & Wildlife Service (USFWS) and NYSDEC maps and records. In addition, a field inspection of the subject property was performed by a VHB project scientist on June 18, 2015. The field inspection included a habitat evaluation, vegetation and wildlife species inventories and rare/protected species assessments for the entire subject property, while focusing specifically on those areas

that are proposed to be impacted by the proposed action. Field investigations were supplemented, where appropriate, by literature reviews to develop inventories of vegetation and wildlife species (e.g., the *New York State Breeding Bird Atlas*, the New York State Amphibian and Reptile Atlas Project, etc.).

As observed during the field inspection, the subject property supports the following ten developed and undeveloped habitat types:

- Pitch Pine-Oak Forest
- Coastal Oak-Hickory Forest
- Costal Oak-Beech Forest
- Mowed Lawn
- Mowed Lawn with Trees
- Unpaved Road/Path
- Paved Road/Path
- Urban Structure Exterior
- Red Maple-Black Gum Swamp
- Shallow Emergent Marsh

The wooded habitats that dominate the subject property comprise a mosaic of ECNYS forested communities, including the Pitch Pine-Oak Forest, Coastal Oak-Hickory Forest and Coastal Oak-Beech Forest ecological communities. As observed during the field inspection, those woodland communities within or adjacent to the developed portions of the subject property have been disturbed through anthropogenic activities (e.g., tree removal, clearing of understory vegetation, establishment of pathways, etc.) associated with historic and ongoing site usage. The freshwater wetlands adjacent to Little Fresh Pond at the northern portion of the subject property are representative of the Red Maple-Black Gum Swamp and Shallow Emergent Marsh ecological communities. The developed portions of the subject property include the Mowed Lawn, Mowed Lawn with Trees, Unpaved Road/Path, Paved Road/Path and Urban Structure Exterior ecological communities. Those portions of the subject property where clearing and associated disturbance are proposed comprise four vegetated and one unvegetated ECNYS communities located within and adjacent to the developed portions of the site.

No federally-listed or New York State endangered, threatened or special concern plants or wildlife, or significant natural communities, were observed at the subject property at the time of the June 18, 2015 field inspection.

Of the six federally-listed species that appear on the USFWS Trust Resources List for the subject property, suitable habitat to support five species does not exist at or in the immediate vicinity of the subject property, such that these species would not be expected at the site (and were not observed during the field inspection). The sixth species is the northern long-eared bat (*Myotis septenrionalis*), which is listed as

federally threatened by USFWS under section 4(d) of the federal Endangered Species Act of 1973. Correspondence from the New York Natural Heritage Program (NYNHP) indicates that no agency records currently exist for northern long-eared bat hibernacula or roost trees at or in the vicinity of the site.

Consultations with NYNHP regarding rare or State-listed wildlife, plants or significant natural communities indicate that records currently exist for two such vascular plants, one butterfly species, and one significant natural community, as follows:

- Small Floating Bladderwort (*Utricularia radiata*) – Threatened in NYS
- Atlantic White Cedar (*Chamaecyparis thyoides*) – Threatened in NYS
- Hessel's Hairstreak (*Callophrys hesseli*) – Endangered in NYS
- Coastal Plain Atlantic White cedar Swamp (community)

All four records described above are for off-site locations, and neither the Atlantic white cedar trees or the Atlantic White Cedar Swamp ecological community occur on the subject property. The respective records indicate these locations on the northern side of Little Fresh Pond, away from the subject property. The Hessel's Hairstreak butterfly occurs exclusively in the Atlantic White Cedar Swamp ecological community, such that it would not be expected to occur at the subject property. Small floating bladderwort was not observed on the site, including within the only suitable habitat for this species (i.e., the wetlands within the northwestern portion of the site), such that it is not expected to occur on the site.

The NYSDEC-regulated Freshwater Wetland SH-4 (Little Fresh Pond) is partially located within the northwest portion of the subject property. The USFWS National Wetlands Inventory (NWI) map does not identify a wetland within the subject property, although the adjacent wetlands associated with Little Fresh Pond are shown.

Under existing conditions, 6.37± acres of the 17.28±-acre subject property are cleared of natural vegetation, while the remaining 10.91± acres is vegetated with forested and wetland habitats, as detailed above. Upon implementation of the proposed action, an additional 0.79± acre would be cleared (e.g., to widen the internal driveway, to relocate curb cuts for safety, etc.), and a total of 0.21± acre would be revegetated with native trees, shrubs and herbaceous plants. The net effect is an increase in cleared area of 0.58± acre. The proposed 0.79± acre of clearing would occur within Pitch Pine Oak Forest, Coastal Oak-Hickory Forest, Mowed Lawn and Mowed Lawn with Trees ecological communities within and adjacent to the existing tennis club and/or tennis camp facilities. It is anticipated that the minimal proposed clearing (0.79± acre) of disturbed forest communities and maintained lawn areas, which are abundant at the subject property and surrounding properties, would have a negligible effect on local habitat diversity and individual plant species populations. Furthermore, 0.21± acre of

revegetation with native trees, shrubs and herbaceous plants is proposed, further reducing the potential for impact. As such, no significant adverse impacts to local habitats or vegetative species are anticipated as a result of implementation of the proposed action.

Regarding wildlife populations, the subject property represents habitat for a variety of avian, mammal and herpetofuana species. The clearing of 0.79± acre of vegetated habitat would occur within and adjacent to the existing tennis club and camp facilities, rather than within the undisturbed forested or wetland habitats that occupy 10.91± acres of the subject property. Furthermore, 0.21±-acre of revegetation of wildlife habitats with native vegetation is proposed as mitigation. Overall, the proposed improvements represent minimal alterations within and adjacent to developed portions of the subject property that are already in use as a tennis club/camp. As such, no significant adverse impacts to resident wildlife populations or their habitat are anticipated as a result of the proposed action.

No federally-listed or New York State endangered, threatened or special concern plants or wildlife, or significant natural communities, were observed at the subject property at the time of the June 18, 2015 field inspection. Furthermore, as habitat for five of the six federally-listed plant and wildlife species that appear on the USFWS Trust Resources List for the subject property does not exist at or in the immediate vicinity of the subject property, these species are not expected to occur at the site, and no significant adverse impacts for the five species are anticipated as a result of the proposed action. With respect to the one remaining species on the USFWS Trust Resources List, the predominantly wooded subject property represents potential summer roosting and foraging habitat for northern long-eared bat, which is listed as threatened by both the federal government and NYS. The provisions of the USFWS final 4(d) rule for northern long-eared bat (effective February 16, 2016) are applicable to the subject property. Pursuant to the final 4(d) rule, the limited tree removal activities (i.e., clearing of 0.79± acre of disturbed forest and maintained lawn areas) at the subject property associated with the proposed action would not result in a prohibited incidental take of northern long-eared bat, and the proposed action can proceed without USFWS consultation of permitting for this species.

With respect to ecological impacts upon wetlands, the proposed limits of clearing are located 388± feet from the limits of delineated wetlands at the northern portion of the subject property. As such, no significant adverse impacts to wetlands are anticipated, and no federal, New York State or local wetland permits would be required. The on-site wetland represents a portion of the larger Alewife Creek/Big and Little Fresh Pond Significant Coastal Fish and Wildlife Habitat (SCFWH), as designated by the NYSDEC. The NYSDEC assessment form lists impacts to water quality and fish and wildlife habitat through stormwater discharges, barriers to fish migration and/or vegetative clearing within or adjacent to the habitat, as the chief threats to the Alewife Creek/Big and Little Fresh Pond. As the limits of clearing for the proposed action are

located 235± feet from the SCFWH and no such actions are proposed, no significant adverse impacts to the Alewife Creek/Big and Little Fresh Pond SCFWH are anticipated as a result of the proposed action.

Overall, no significant adverse ecological impacts are expected to result from implementation of the proposed action.

Visual and Aesthetic Resources and Community Character

As presently developed, the subject property includes several structures, tennis courts, a basketball court, swimming pool, gravel parking areas, lawns, landscaping and natural areas. The existing improvements are situated on the subject property such that they are primarily obscured from view by the existing wooded areas that occupy the perimeter of the subject property. The proposed improvements have been designed such that the overall aesthetic character of the developed portions of the subject property would not be altered, as further discussed below. In addition, the perimeter of the subject property would remain natural (i.e., wooded), minimizing the potential for the alteration of views from the surrounding areas.

The proposed site access improvements (e.g., the closure of two curb cuts and the relocation of two others) would result in minor impacts to views of the subject property. The relevant disturbed areas would be revegetated with native species to maintain the existing views of the subject property from along Majors Path, as well as to increase the natural buffer at the northern portion of the subject property where the gravel curb cuts are to be removed.

Revegetation would also occur along the northern property boundary, adjacent to single-family residential uses. The existing tennis court in this area currently extends approximately two feet beyond the property line. As part of the proposed action, the southern portion of this tennis court would be converted into a smaller basketball court, and the remainder would be revegetated. The playing surface would no longer encroach onto the adjacent property, and a minimum 20-foot-8±-inch vegetated buffer would be created, thus reducing the visual impact of the subject property on the adjacent residential uses to the north, as compared with existing conditions.

A limited number of improvements would occur within the eastern portion of the site, which may minimally alter views from surrounding areas (e.g., the gravel parking area and expended access driveway). However, a minimum 40±-foot vegetative buffer would remain, and would be supplemented with landscaping (using native species) to screen the improved areas, such that any adverse visual impacts would be minimized. The remaining areas to be cleared, including the proposed play area and changing sheds, are substantially set back from adjacent properties, and would have

no adverse visual impact upon the surrounding neighborhood. There are no officially designated scenic areas in the vicinity of the subject property, and the proposed improvements would not be visible from nearby open space parcels.

A *Lighting Plan* was prepared by Marshall Paetzel Landscape Architecture, P.C., that depicts the location of the existing and proposed exterior lighting. The proposed light sources on the subject property would be shielded and projected downward to prevent skyglow and light trespass, and is designed to conform to the Town's non-residential lighting requirements. The light fixtures would be extinguished no later than 11:30 pm during camp season, and existing wall sconces would be replaced with full cut-off wall sconces. As indicated on the *Lighting Plan*, the proposed outdoor lighting improvements would result in measurements of 0.0 (zero) foot-candles at all points along the perimeter of the subject property. Additionally, exterior lighting would be installed in accordance with a final lighting plan to be submitted or the Town's review and approval as part of Site Plan review, in accordance with Article XXIX of the Town Code. Accordingly, the proposed action would not be expected to result in significant adverse impacts on visual and aesthetic resources and/or community character as a result of exterior lighting components.

Transportation

A Traffic Impact Study (TIS) was performed to provide a comprehensive evaluation of the potential traffic impacts associated with the proposed action. Evaluation of the transportation impacts requires a thorough understanding of the current transportation system in the project study area. Existing transportation conditions include roadway characteristics, unsignalized and signalized intersections, traffic volumes, and accident records. The TIS evaluated a maximum of 390 campers and 95 staff, which would be conservative, as the proposed day camp use is expected to have a maximum of 360 campers and 90 staff (including 65 overnight staff), as evaluated throughout this DEIS.

The table below identifies the anticipated amount of additional traffic that would be generated upon completion of the project and the site at full occupancy.

Additional Site Generated Traffic

	Weekday A.M. Peak Hours		Weekday P.M. Peak Hours	
	Enter	Exit	Enter	Exit
Camp Entrance/Exit	41	18	5	27
Tennis Club/Staff Parking Area	17	0	1	9
Total	58	18	6	36

The existing camp has experienced continued enrollment growth in the last few years, since the applicant began operating the site. This growth in enrollment and staff is expected to continue, even absent the proposed action. Thus, the projected additional site generated traffic depicted in the table above represents a conservative assessment, as the actual increase in enrollment cannot be entirely attributed to the proposed action.

The additional future site-generated traffic was distributed onto the roadway network, and capacity analyses performed for the study intersections. The results are as described below

Unsignalized Intersections

Unsignalized intersection capacity analyses were performed to determine the ability of vehicles to safely negotiate turning movements. A total of seven unsignalized intersections were evaluated within the TIS. The unsignalized capacity analyses was performed at these locations to examine traffic operations during the Weekday A.M. arrival period (8:30 to 9:00 a.m.) and the Weekday P.M. dismissal period (3:00 to 4:00 P.M.). The unsignalized intersection capacity analysis methodology evaluates the average control delay per vehicle to determine Level-of-Service (LOS). According to the TIS, among the seven unsignalized intersections studied, the additional traffic resulted in only one LOS change for one movement at the intersection at Major's Path with Little Fresh Pond Road/Edge of Woods Road for the combined westbound approach of Edge of Woods Road to Major's Path. The LOS change was due to a minor three tenths of a second delay increase during the P.M. Peak period only. Such an increase in delay is negligible.

Signalized Intersections

One signalized intersection was investigated in the TIS and a signalized intersection capacity analysis was performed. Signalized capacity analyses were conducted at North Sea Road (C.R. 38) at Sandy Hollow Road (C.R. 52) to examine traffic operations during the Weekday A.M. and Weekday P.M. peak hours of the site arrival and departure periods. Results indicate that there would be no changes in individual movement LOS during any of the peak periods. However, during the Weekday P.M. peak hour of flow, the overall intersection LOS does change due to the increase in traffic generated by the proposed site. The change in LOS results from a minor three tenths of a second increase in overall intersection delay. However, as provided within the TIS, the increase in delay is minimal and does not represent a significant adverse impact.

Under the proposed action, the site would be served by three access driveways along Majors Path. Sight distance availability measurements were performed for safety and efficiency during operations. According to the American Association of State

Highway Transportation Officials' (AASHTO), Policy on Geometric Design of Highways and Streets, the recommended site distance with a design speed of 40 mph is 305 feet. Based on calculations provided in the TIS, field measurements of the sight distance at the ingress/egress points on Major's Path were performed.

Field measurements indicate that sufficient site distance would be available at the north driveway to meet AASHTO guidelines. At the center (exit only) driveway, sight distance to the north was found to be somewhat lower than recommended. Therefore, the center driveway would be relocated 50+ feet to the south to provide adequate site distance in both directions. Finally, at the southernmost driveway, which was previously intended to provide access and egress for camp employee vehicles and tennis club patrons, sight distance to the north was found to satisfy the guidelines. However, due to the existing horizontal and vertical curvature on Major's Path, sight distance to the south is somewhat limited, to approximately 250 feet. Relocation of this driveway to the south by 100 feet results in significant improvement to the available stopping sight distance to the south. Overall, the proposed changes to the site access driveways would improve the safety and operating efficiency of the site.

With respect to accidents, the addition of the very small estimated increase in traffic due to the proposed action should not result in any increase in accident experience at this location, and the recommended access arrangement should further enhance the safe operation of the roadway.

The proposed *Site Plan* provides a total of 74 parking spaces. The Town Code does not provide a relevant parking requirement for the existing or proposed use of the subject property. If applied to the proposed action, the parking requirements that are most similar to the proposed use (i.e., for "school" and "golf course") would require 111 parking spaces. Based on actual and expected facility operation, and a review of various published parking factors for similar uses, the 74 proposed spaces are expected to accommodate the demand for parking adequately. The remaining 37 spaces would be landbanked (i.e., the spaces would not be improved) within areas currently containing lawn and gravel.

Based on the results of the analyses conducted in the TIS, the following has been determined:

- Traffic generated by the proposed action would have a minimal impact on the surrounding roadway network.
- The proposed changes to the site access driveways would improve the safety and operating efficiency of the site.
- Growth in attendance at the camp is expected even absent the proposed action.
- The subject property would use three access driveways, which presently serve the site. Improvements would be made to the internal driveways to better serve and circulate the traffic flow associated with the site's operation. Improvements for

available stopping sight distance would meet and/or exceed AASHTO requirements and provide safer access.

- The addition of the minimal estimated traffic increase due to the proposed action is not expected to result in any increase in accident experience at this location, and the proposed access arrangement should further enhance the safe operation of the roadway.
- The proposed Southampton Racquet Club and Camp would generate traffic during a two- month period from late June until early September, and only on weekdays. Weekend traffic would be limited to that generated by the staff living on the property.

Land Use and Zoning

The 17.28±-acre subject property is currently improved with several structures associated with the preexisting non-conforming use as a tennis club and/or tennis camp. The existing improvements include 12 cottages, a caretaker's office, a kitchen and dining hall, a one-and-one half story residence, a clubhouse, a maintenance shed and a maintenance shop building, a basketball court, nine tennis courts, a swimming pool, gravel parking, and decking and patios (both attached to buildings and freestanding). The current use of the subject property as a tennis club and/or tennis camp is not permitted within the underlying R-20 zoning district. However, the current use and development of the subject property is considered a nonconforming use, as it predates the adoption of the zoning regulations.

As an element of the existing land use, Southampton Racquet Club and Camp operates a camp for children ages 2.5 years of age through 14 years old, for a ten week period, on weekdays, between mid-June and early September. Consistent with the historic use of the site and with other tennis camps operating throughout the region, the tennis camp component of the existing use offers tennis instruction as well as other activities to its campers (e.g., swimming, basketball, arts and crafts, and field games). Camp activities begin at approximately 7:30 a.m. with staff arrivals, and finish at approximately 4:15 p.m. with staff departures. Southampton Racquet Club and Camp also provides overnight staff accommodations in several of the cottages during the camp season. As of the summer of 2016, 53 staff members use these overnight accommodations. The tennis club is open daily during a 22-week season from early May through early October.

The requested variance for a change from one non-conforming use (a tennis club and/or tennis camp) to another non-conforming use (a day camp and tennis club) would allow for various improvements at the subject property that would enable the applicant to offer a broader mix of camp activities without altering the overall character of the subject property. The proposed action is designed such that there would be no net change to the total existing building floor, deck/patio or court surface

(including courts, pools and pool patios) areas associated with the preexisting non-conforming use. With respect to site coverages, the proposed improvements would result in a 0.58±-acre net reduction in the area of natural vegetation at the 17.28±-acre subject property, and a nominal (0.03±-acre) increase in impervious surface area. Lawn and landscaping (including revegetation areas) and gravel-surfaced areas would increase by 0.51± acre and 0.25± acre, respectively, and there would be no change to the 0.53±-acre portion of the site occupied by wetland areas.

Upon implementation of the proposed action, site operations would be substantially similar to the use that has occupied the subject property for over four decades. Southampton Racquet Club and Camp would continue to offer seasonal recreational opportunities to the community as a day camp and tennis club. The application for a change in nonconforming use is necessary for the applicant to address the demand for a greater variety of day camp activities. The proposed changes to recreational amenities at the subject property include the construction of two swimming pools to replace an existing tennis court, conversion of a tennis court to a basketball court and addition of a play area. The existing row of seven tennis courts, located on the southern portion of the subject property would remain for use by the tennis club as well as the day camp. No significant change in the nature or level of off-hours activity (e.g., associated with seasonal staff residing at the site) would result from the proposed action.

There are currently no zoning restrictions with regard to occupancy of the subject property as presently developed, other than as a function of a maximum permitted "grandfathered" sanitary flow of 9,450 GPD. The anticipated future occupancy of the subject property under the proposed action would result in a sanitary flow of 6,800 GPD. Thus, the projected increase in occupancy at the subject property (which would not necessarily be entirely attributable to the proposed action), is well below the maximum that would be acceptable to the SCDHS based on sanitary flow.

The proposed action is designed to meet the objectives of the project sponsor (the applicant) without expanding the existing total floor area (11,998± SF), deck area (4,035± SF) or court area (59,213± SF). The physical facilities that support the existing tennis club and/or tennis camp use would be modified as described throughout this DEIS, upon implementation of the proposed action. However, the same physical facilities that characterize the existing use would also characterize the proposed use. There would be two fewer tennis courts and two additional pools, as compared to existing conditions, among other changes. However, the types of activities and the proposed operations (including the weeks that comprise the camp season, the hours of arrival and departure, the rotation of campers among activities throughout the day, and the general types of activities offered at the camp) would be approximately the same as under existing conditions. As such, the character of the proposed use is nearly indistinguishable from the existing use in terms of its physical features and general operation.

The land use pattern in the immediate vicinity of the subject property is dominated by single-family residential development and undeveloped open space, with a limited number of other uses (e.g., nursery/greenhouse, automotive junkyard, a delicatessen) interspersed. The proposed change from one non-conforming use to another at the subject property would not adversely affect surrounding land uses, and would not change the overall character of the existing land use pattern throughout the area.

There are several facilities throughout the area surrounding the subject property that offer a range of activities similar to that proposed at Southampton Racquet Club and Camp. Accordingly, day camp uses are an established element of the land use pattern and neighborhood character. Additionally, these facilities are present throughout a range of the Town's zoning districts. These include, but are not limited to, the following:

- Sandy Hollow Day Camp – 117 Sandy Hollow Road, Tuckahoe (approximately 0.7 mile southwest of the subject property)
- Southampton Town Recreation Center (Future Stars Summer Camp – Southampton) – 1370A Majors Path, North Sea (approximately 1.0 mile northeast of the subject property)
- SPORTIME Quogue – 2571 Quogue-Riverhead Road, East Quogue (approximately 11.5 miles southwest of the subject property)

Overall, the proposed action does not represent a significant increase in the intensity of the land use, as there are no net increases in floor area, deck area or court area, only a minor amount of clearing of existing natural area is proposed, and any increased camper enrollment attributable to the proposed action would be incremental to the enrollment increases already occurring and expected absent the proposed action. The wooded character of the site and the presence of perimeter vegetative buffers would be retained. The physical characteristics and general operations associated with the proposed use are very similar to the existing use, and the proposed use is an established element of the surrounding community. As demonstrated throughout this DEIS, the proposed land use is not expected to result in a significant adverse impact (incremental to the existing use, or otherwise). Therefore, overall, no significant adverse land use impacts are expected to result from the proposed action.

With respect to zoning, the proposed action requires a variance for a change from one non-conforming use (i.e., a tennis club and/or tennis camp) to another (i.e., a day camp and tennis club). The proposed improvements would not result in an increase in the degree of non-conformity with existing zoning, and all proposed improvements would be consistent with the bulk and dimensional requirements of the prevailing R-20 Residence District of the Town of Southampton.

The criteria for granting of the requested variance are set forth in the Town Code at Section 330-166(B), as well as Section 330-167(B)(3). The proposed action would be

consistent with the specific criteria related to a change from one non-conforming use to another, as follows:

> *(3) To grant a certificate of occupancy for a change in a nonconforming use, provided that:*
>
> *(a) The Board of Appeals shall have made a determination that such change will be beneficial to the general neighborhood.*
>
> *(b) Such change is made subject to such reasonable conditions and safeguards as the Board of Appeals may stipulate.*

It is respectfully submitted that the proposed change from one non-conforming use to another would not adversely affect the general neighborhood, as demonstrated by the various impact analyses presented in this DEIS. Moreover, the proposed action is expected to result in benefits to the general neighborhood. Specifically, the proposed action would diversify the recreational activities available to patrons that reside within the community, and would allow for the maintenance of the existing facility over time. In addition to the various improvements that the applicant has already undertaken at the site to benefit groundwater quality in the area (i.e., installation of public water service, replacement of various outdated sanitary systems with modern systems, and the removal of oil storage tanks), the proposed action would also include the installation of stormwater management infrastructure to collect and recharge stormwater on-site, where currently stormwater runoff is permitted to flow overland. The proposed action also includes the replacement of the existing tennis court that encroaches upon the residences to the north with a smaller basketball court and the establishment of a vegetated buffer along the site boundary. Additionally, the proposed action would result in the closure and/or relocation of existing site driveways to improve safety on Majors Path. These various benefits are related to the applicant's ability to operate the camp as proposed. It should also be noted that the operation of the proposed day camp and tennis club use would preclude the development of the subject in accordance with prevailing zoning, which would result in various greater adverse environmental impacts than the proposed action (e.g., increased clearing, increased annual sanitary waste discharge to on-site systems, etc.).

The proposed action is consistent with the relevant goals and objectives of the *Town of Southampton Master Plan* (1970), the *Southampton Tomorrow – Comprehensive Plan Update Implementation Strategies* (1999), and the *Southampton 400+ Sustainability Element* (2013).

Community Facilities and Services

The subject property is within the service areas of the North Sea Fire Department (NSFD), the Southampton Volunteer Ambulance (SVA), and the Southampton Town Police Department (STPD). The proposed action involves a change from one non-conforming use (a tennis club/camp) to another non-conforming use (a day camp and tennis club), and would not substantially alter the existing site operations. It is noted that enrollment has been increasing at the camp since 2013 (i.e., from 104 to 280 campers for the summer of 2016), and would continue to increase incrementally above the existing enrollment, even absent the implementation of the proposed action. The incremental increase in camp enrollment would result in a negligible increase in demand for emergency services. Notwithstanding the existing, active use at the subject property, the proposed single day camp and tennis club facility would be situated within a well-established community already containing similar uses and with approximately 3,276 housing units (i.e., the North Sea Census Designated Place), such that the demand for community-provided services would not be substantial. Additionally, as the use of the subject property would continue to be non-residential, no school-aged children would be introduced to the population of the Southampton Union Free School District as a result of the proposed action. Overall, the proposed action would not result in significant adverse impacts to the fire protection, ambulance service, police protection or educational facilities that serve the subject property.

Noise

A Noise Study was performed to provide information on existing sound levels at the subject property, and sound levels that would be expected upon implementation of the proposed action ("with-action" sound levels) under construction period and operational conditions. The study provides background information on applicable noise regulations and criteria, results of sound level monitoring that was conducted to characterize the existing environment of the tennis club and/or tennis camp, predictions of future sound levels associated with the proposed use and construction-period activity, and an assessment of potential noise impact and mitigation recommendations. Noise impacts were evaluated within the analysis based upon the NYSDEC Noise Program Policy (a guidance policy) and with respect to the relevant provisions of the Town of Southampton Noise Ordinance (Chapter 235 of the Town Code).

The NYSDEC policy indicates that receptor locations may be either at the property line of the parcel on which the facility is located or at the location of common use or inhabitance on adjacent property. With respect to this guidance, sound levels for existing and future with-action conditions for the proposed action are reported at

receptors located near the property line and also near the buildings (i.e., residences on properties contiguous to the subject property).

The Town of Southampton Noise Ordinance prohibits persons from creating sound, when measured on the property line of a residential district, exceeding an overall level of 65 dBA between the hours of 7:00 a.m. and 7:00 p.m. The noise ordinance has an overall sound level limit of 50 dBA at residential receptors for the night time period between 7:00 p.m. and 7:00 a.m.

Sound level measurements were conducted at the subject property on August 14, 2015, and August 18, 2015 adjacent to the swimming pool, basketball court, and tennis courts to obtain reference level information. Based on the existing sound level measurements, the number of existing and future campers and staff, and the proposed location and size of the facilities, sound levels generated by the camp under the proposed action were predicted throughout the neighborhood. Noise exposure contours were computed using the Cadna-A™ prediction software. For the potential increase in the number of campers from 215 existing campers to an anticipated maximum future level of 360 campers, a given activity would have approximately 67% more participants and sound generated from the activity would increase 2.6 dB. This approach is relatively conservative, since with greater enrollment there is greater potential for some of the additional campers to be observing activities rather than actively participating (e.g., there would not necessarily be a greater number of campers on the same court at the same time generating sound for a given activity). Noise levels resulting from the proposed action were predicted for swimming, tennis, basketball (two courts) and soccer activities at their respective planned locations.

The results of the Noise Study indicate that that existing sound levels are up to 60 dBA at receptors near the adjacent residences and near the property line. With-action sound levels near the adjacent residences are predicted to be 61 dBA or lower and 65 dBA or lower near the property line. Sound levels are predicted to increase up to two decibels at most receptors. For receptors at to the north end of the property, sound levels immediately adjacent to the property boundary (e.g., within the private driveway surface) are predicted to increase up to five decibels due to the introduction of the new basketball court (at the location of the former encroaching tennis court).

The impact assessment results show that future with-action sound levels do not exceed the Southampton Noise Ordinance daytime limit of 65 dBA for residential land use and, therefore, there would be no significant adverse impact. Additionally, the increase in sound would be less than six decibels at all receptors and, therefore, noise mitigation would not be needed for residential receptors, according to the NYSDEC program policy.

Construction Period Activities

Construction associated with the proposed action would generally include small equipment such as a backhoe for moving earth, a generator, a paver and hand tools for constructing buildings. The Southampton Noise Ordinance does not limit sound generated from construction activities between the hours of 7:00 a.m. and 7:00 p.m. Construction activities would be limited in accordance with the Town of Southampton requirements, and would be of relatively short duration (i.e., construction noise would cease upon project completion).

Proposed Mitigation

This section discusses the proposed mitigation measures that have been incorporated into the proposed action to avoid, minimize or eliminate potential environmental impacts of the project, as detailed within this DEIS.

Geology

No significant adverse soil or topographic impacts are expected to result from the implementation of the proposed action. Notwithstanding this, the follow mitigation measures have been incorporated into the proposed action to minimize potential soil impacts:

- Applying topsoil (as needed) to address potential soil limitations.
- Protecting the existing vegetation to remain.
- Scheduling of clearing and grading activities to minimize the total area of land disturbed at any one time.
- Limiting the length of time areas are exposed by establishing pavement and plantings at exposed areas as soon as practicable.
- Installing sediment barriers (e.g., silt fence, hay bales) along the limits of disturbance of the work. No sediment from the site would be permitted to wash onto adjacent properties, wetlands or roads.
- Stabilizing graded and stripped areas and stockpiles via temporary seeding or other effective cover.
- Protecting drainage inlets through the use of sediment barriers, sediment traps, etc., to prevent sediment buildup.
- Controlling fugitive dust (e.g., covering of stockpiles, temporary seeding, use of a water truck during extended dry periods).
- Establishing a stabilized construction entrance to prevent soil and loose debris from being tracked onto local roads.

It should be noted that several of the erosion measures to be implemented would minimize the potential for adverse construction-related air quality impacts, as follows:

- Limiting of the total area of soil exposed at any given time.
- Paving or planting of exposed areas as soon as practicable to minimize the duration of soil exposure.
- Covering and/or temporary seeding of stockpiles.
- Establishing stabilized construction entrances.
- Providing a water truck on-site during dry periods to dampen exposed soils.

Groundwater Resources

As a result of the groundwater investigation, it was determined that the proposed project would not adversely impact the hydrogeology or water budget in the vicinity of the facility, nor does it adversely affect the quality or quantity of the surface waters of Little Fresh Pond. The proposed facility would adhere to the environmental regulations having jurisdiction on the site, such that no additional mitigation is proposed.

Surface Waters

As demonstrated above, the proposed project would not result in adverse impacts on surface waters. The potential for flooding, soil erosion and stormwater runoff would be contained and managed on-site. Therefore, no mitigation is necessary, beyond those measures included in the comprehensive stormwater management system. While no significant adverse impacts to local water resources from the proposed action have been identified, all construction work associated with the proposed site improvements would be conducted as per the SWPPP to be developed and submitted for approval to the Town of Southampton, utilizing the recommended NYS erosion and sediment control techniques.

Ecology

In order to mitigate for the proposed clearing of 0.79±acres of vegetation and wildlife habitat at the subject property, 0.21± acre of native revegetation is included in the proposed action. As detailed on the *Planting Plan*, the proposed revegetation includes the installation of 211 native trees and shrubs of the following species: American beech (*Fagus grandifolia*), northern red oak (*Quercus rubra*), American dogwood (*Cornus florida*), American holly (*Ilex opaca*), serviceberry (*Amelanchier canadensis*), mountain laurel (*Kalmia latifolia*) and northern bayberry (*Myrica pensylvanica*). In addition, 3,480 herbaceous plants of the following species would also be installed:

cinnamon fern (*Osmundastrum cinnamomeum*), Christmas fern (*Polystichum acrostichoides*), Pennsylvania sedge (*Carex pensylvanica*), little bluestem (*Schizachyrium scoparium*), switchgrass (*Panicum virgatum*).

The aforementioned trees, shrubs and herbaceous plants would be installed in groupings at various locations at the subject property, including the areas of the existing and relocated driveways and curb cuts from Majors Path, along the northern property boundary with the adjacent single-family residential uses and at selected locations within the subject property interior. It is anticipated that the native plantings would create or enhance existing wildlife habitat at the subject property, while also maintaining or improving the existing natural buffers along the subject property boundaries with Majors Path and adjacent residential uses.

Visual and Aesthetic Resources and Community Character

While no significant adverse impacts to visual and aesthetic resources and community character have been identified, the following mitigation measures have been incorporated into the design of the proposed action to minimize or preclude potential impacts:

- Natural buffers would be retained along the perimeter of the subject property to obscure views of the facility, including the revegetation of areas along Majors Path.
- Revegetating the northernmost portion of the existing tennis court to be converted to a basketball court, providing a buffer along the adjacent private drive.
- All proposed lighting fixtures would be shielded and downward-facing to prevent light spillover.
- Existing exterior wall sconce lighting would be replaced with full cut-off fixtures.

Transportation

No significant adverse traffic impacts to the subject property or highway networks in the surrounding area are expected to result from the implementation of the proposed action. Notwithstanding the above, the proposed action includes the relocation of site access driveways to improve safety, and on-site improvements resulting in beneficial circulation and parking conditions.

Land Use and Zoning

The proposed action is not expected to result in significant adverse impacts to land use and zoning, such that no mitigation measures are proposed. Nonetheless, the tennis court that currently encroaches approximately two feet beyond the northern property line would be replaced by a smaller basketball court that would be setback a minimum of 20-feet-8±-inches, thus creating increased separation between this recreational use and the adjacent residential use. The setback area would be re-vegetated with native species to provide a buffer, as a benefit to the neighboring properties.

Furthermore, it is noted that the proposed action is designed to be consistent with the goals and objectives of the Town of Southampton's *1970 Master Plan* and *1999 Comprehensive Plan Update.*

Community Facilities and Services

No significant adverse impacts to community facilities and services are anticipated as a result of the proposed action. Therefore, no mitigation measures would be necessary.

Noise

The results of the assessment show that there would be no noise impact associated with the proposed action according to NYSDEC program policy or the Southampton Noise Ordinance, such that no noise mitigation is required. Even though no impacts have been identified, Best Management Practices (BMPs) may be considered to minimize noise generating activities at the camp or during construction.

BMPs for reducing noise from camp activities could include not reproducing amplified music, or using public announcement equipment on the camp. Yelling, hooting or screaming could be limited through general counseling of the campers and/or signage near the property lines.

BMPs for construction activities could include performing noisy operations only during periods of the day with less potential for annoyance to abutters, increasing the setback distance of construction equipment (such as portable generators) to sensitive receptors as feasible, using smaller and/or quieter equipment, altering construction methods (i.e. using a small bull dozer rather than a large bull dozer), and making sure equipment such as backhoes have functioning mufflers.

Alternatives and Their Impacts

A total of six alternatives to the proposed action are evaluated within this DEIS, as follows:

- No-Action Alternative
- Residential Yield Plan
- Planned Residential Development with 25 Percent Open Space
- 100-Foot Setback Alternative
- Alternative Sanitary Technology
- Reduced Scale Alternative (25 Percent)

No-Action Alternative

The No-Action alternative involves leaving the subject property in its present state. Specifically, the subject property would remain in use as a seasonal tennis club and/or tennis camp. As the proposed action would maintain the essential character of the subject property, this alternative is similar to the proposed action, although the minimal impacts associated with the disturbance of the subject property would be avoided, and the various benefits associated with the proposed action would be foregone. The No Action alternative does not achieve the objective of the project sponsor to improve facilities at the existing camp and operate a day camp and tennis club at the subject property.

Under the No-Action alternative, enrollment at the Southampton Racquet Club and Camp is expected to continue to increase above the current level, based on the consistent growth observed over the recent years since the subject property has been in operation by Southampton Racquet Club and Camp. The ultimate maximum camp enrollment under the No-Action alternative may differ from that under the proposed action (i.e., 360 anticipated campers), but cannot be specifically determined. However, camp enrollment is not "capped" by any maximum occupancy.

If the No-Action alternative is implemented, there would be no construction-related impacts. Because no physical improvements would occur in connection with implementation of this alternative, there would be no potential new impacts to soils and topography, visual and aesthetic resources, community character, land use and zoning, or ecology. However, due to the increase in enrollment that may continue to occur absent the proposed action, the No-Action alternative would still have potential effects on transportation, water resources (potable water usage and sanitary waste generation), noise and community facilities.

With respect to impacts related to stormwater, the No-Action alternative would forego the proposed drainage improvements at the subject property, which would contain and recharge all stormwater runoff at the subject property. Under this alternative, stormwater runoff would remain uncontrolled.

The proposed removal of a tennis court along the northern property boundary, installation of a smaller basketball court, and the establishment of a vegetative buffer to the neighboring property, is expected to represent a positive visual impact of the proposed action. The No-Action alternative would not include these improvements.

The No-Action alternative would also not include the closure of curb cuts and the relocation of other curb cuts to improve sight distances of the existing operating driveways along Majors Path.

Residential Yield Plan

The Residential Yield Plan is an alternative development, whereby the subject property would be developed in accordance with the prevailing R-20 Residence zoning district (including the use, bulk and dimensional regulations of that district). The prevailing R-20 Residence zoning would allow for the development of a 22-lot single-family residential subdivision, resulting in the demolition of all existing improvements, and requiring clearing of the subject property to a greater extent than the proposed action. The *Sketch Plan of R-20 Yield* prepared for this alternative depicts 23 separate lots, including one lot to be preserved as open space (92,748± SF). The 22 lots that would be developed with residences would range in area from 20,014± SF to 69,397± SF, with an average lot size of 26,509± SF. The residential lots were assigned theoretical improvements based on the zoning requirements for principal structures (the residences), and based on typical site improvements and accessory structures (e.g., driveways, tennis courts and swimming pools).

It is noted that Article 6 of the Suffolk County Sanitary Code would normally limit sanitary waste discharge to on-site systems to 300 GPD per acre (for properties in Groundwater Management Zone V), or a total of 5,184 GPD for the 17.28±-acre subject property. However, the subject property has a "grandfathered" sanitary flow of 9,450 GPD, which would allow the future development of the subject property to achieve the full yield of the site (i.e., 22 single-family residences) in accordance with the prevailing R-20 Residence zoning.

As compared to the proposed action, this alternative would result in the disturbance of a greater land surface area (i.e., 10.05± acres instead of 3.06± acres). The proposed action has been designed to retain the existing site topography and require removal of only 625± cubic yards of natural material. By comparison, for this alternative, the development of 115,930± SF of single-family residences with foundations, 105,408± SF

of paved driveways, pools, tennis courts and roadways, and various supporting infrastructure (e.g., sanitary disposal systems, underground stormwater containment piping and structures, etc.), could result in significantly greater disturbances to on-site soils and topography than the proposed action, and may require material removal for off-site disposal (and potential adverse impacts associated therewith [e.g., truck traffic]). The period of disturbance from construction activity would be expected to be significantly longer than that expected under the proposed action, and thus, the potential for erosion and sedimentation impacts could be greater.

With respect to water use and sanitary discharge, this alternative would be expected to create a demand of 300 GPD of potable water/sanitary discharge for each of the 22 single-family residences, for a total of 6,600 GPD. On a daily basis, this alternative has a marginally lesser potential to affect groundwater quality and available water supplies than the proposed action, which would use 7,153 GPD of potable water and generate 6,800 GPD of sanitary waste. However, the proposed action would be seasonal (i.e., the day camp element of the proposed use would operate for only 10± weeks per year). After adjusting for the potential seasonal nature of the residences that would be constructed under this alternative (recognizing that 42 percent of households in the North Sea neighborhood are classified for seasonal, recreational or occasional use), the proposed action would be significantly less impactful on water resources, using nearly 1.2 million fewer gallons of water per year, and generating nearly 1.2 million fewer gallons of sanitary waste than the residential yield alternative.

Based on a conservative estimate that each of the 22 residential lots under this alternative would be cleared to 50 percent of their lot area (where no maximum clearing limit is established in the Town Code), and accounting for necessary clearing for an access road, etc., this alternative would be expected to result in a total cleared area of 10.05± acres at the 17.28±-acre subject property. This is a conservative estimate, as there is no maximum amount of clearing set forth in the Town Code. It is, in fact, a very conservative estimate, as even in the Town's Aquifer Protection Overlay District (APOD) which does not include the subject property, the protective clearing limits for residential lots between 30,001 and 60,000 square feet in size allow up to 60 percent of the lot area to be cleared (see Section 330-67.A[4]). As compared with the proposed action, which proposes a net reduction in wooded area of only 0.58± acre, resulting in a total cleared area of 6.96± acres, this alternative would require a substantially greater amount of clearing and would retain less wooded habitat at the subject property. Accordingly, this alternative would have greater ecological impacts than the proposed action.

With respect to visual impacts, the residential yield alternative would alter views both from within and surrounding the subject property by removing all existing structures and site improvements, clearing an additional 3.09± acres of natural vegetation (above post-development conditions with the proposed action, after revegetation), and

constructing 22 single-family residences and associated improvements, including a 1.76±-acre circular right-of-way with two access points along Majors Path. This alternative would locate six residential lots along the Majors Path right-of-way, which would be expected to alter views and change the visual character of the site. The proposed action proposes to retain vegetated buffers along all property boundaries, which would not be required under this alternative.

Development of the subject property under this alternative would result in the generation of fewer vehicular trips to-and-from the subject property than would the proposed action. The proposed action involves seasonal use of the subject property, with the camp operating for a 10-week period on weekdays between mid-June and early September, and tennis club activities taking place daily over a 22-week period from early May to early October. For the remainder of the year, the subject property would not be active and would not generate any significant number of vehicular trips. The residential yield alternative, however, would be expected to generate trips year-round. Overall, no significant adverse traffic-related impacts would be expected to result from this alternative or the proposed action.

With respect to land use and zoning, this alternative would not be out of character with this surrounding neighborhood, which predominantly contains single-family residences, and would not result in adverse zoning impacts as it is designed to be "as-of-right" and consistent with all applicable dimensional and use requirements of the prevailing R-20 Residence District. Additionally, although developing the subject property with 22 single-family residences would not be out of character with the surrounding neighborhood, and would remove a non-conforming use, doing so would remove an established seasonal recreational use which has occupied the subject property for over four decades and is a part of the established land use character of the area.

It is anticipated that community facilities and services, including the Town of Southampton Police Department, North Sea Fire Department, Southampton Volunteer Ambulance and Southampton Union Free School District would be able to provide service to the 22 single-family residence that would be built on the subject property as part of this alternative. It is noted that a minor increase in the number of school-aged children could be expected from a single-family residential development. An estimated 18 school-age children could be generated by this alternative. This would represent a cost to the local school district of approximately $422,208 per year, based on a per-pupil expenditure of approximately $23,456 (2013-14 school year). By comparison, the proposed action would not generate any school aged children.

The noise environment of the subject property, if developed under this alternative, would be generally consistent with the surrounding area, and would be governed by the relevant provisions of the Town of Southampton Noise Ordinance. Temporary construction-related noise would be expected to occur for the duration of the

demolition of the existing site improvements and the construction of the homes, which could occur over a greater construction period than for the proposed action (i.e., the construction period would depend on a variety of factors, such as whether the homes are built out altogether, sold for individual custom home construction, etc.). It is noted that the proposed action is a seasonal use, and that the Noise Study performed for the proposed action does not identify any significant adverse noise impacts.

Planned Residential Development with 25-Percent Open Space

In addition to the *Sketch Plan of R-20 Yield* alternative described above, an additional residential yield alternative has been created which increases the amount of open space to be preserved at the subject property from 92,748± SF to 188,170± SF, or 25 percent of the overall subject property (see *Sketch Plan of 25% Open Space, Clustered* in Appendix I). It should be noted that this alternative does not achieve the objective of the project sponsor to improve facilities at the existing camp and operate a day camp and tennis club at the subject property. As compared to the *Sketch Plan of R-20 Yield* alternative, this alternative would reduce the number of potential single-family residences from 22 to 21, to comply with the R-20 Residence zoning district regulations while maintaining 25-percent open space.

This alternative would result in an increase in impervious surfaces and lawns/landscaping as compared to the proposed action while reducing the amount of natural (wooded) area at the site (i.e., there would be greater clearing under this alternative). However, by maintaining a 25-percent contiguous open space area, this alternative would be marginally less impactful to soils and topography, water use, sanitary waste discharge, ecology, aesthetics, transportation, land use, community facilities and services and noise, than the full residential build-out (i.e., with 22 single-family residences).

Compared to the proposed action, this 25-percent open space residential yield alternative would result in greater disturbances to soils and topography, year-round water use and sanitary waste generation and clearing of natural areas. Additionally, this alternative would alter the existing visual character of the site and would remove the established seasonal recreational use. With regard to trip generation, this alternative would result in year-round trips for a portion of the homes, whereas trip generation related to the proposed action would be seasonal. This alternative would not place an increased burden on police, fire and ambulance services, but would be expected to generate school-age children, whereas the proposed action would generate none. Similar to the full yield alternative, construction-related noise impacts would be expected to occur over a longer time-period with this alternative than with

the proposed action. As such, this alternative is not favorable to the proposed action in terms of potential adverse environmental impacts.

100-foot Setback Alternative

The Town Code includes Special Permit standards that apply to campgrounds, summer camps, day camps or health camps. Among the requirements is that all buildings would be set back 100 feet from any property line, and that a minimum 100 foot landscape buffer be provided adjacent to any property line. The existing camp and tennis club at the subject property is an established non-conforming use that has occupied the site for decades. The proposed action does not contemplate the need for a Special Exception permit from the Town of Southampton. Nonetheless, a 100-foot setback alternative is analyzed within this DEIS.

In order to attempt to reflect these two selected requirements, a substantial amount of overall site disturbance would be necessary, as several of the existing and proposed site improvements fall within the 100-foot setback and would require relocation or removal, including:

- Cottages 9, 10, 11 and the proposed Cottage 14;
- The existing tennis court (proposed basketball court) on the north side of the subject property;
- The existing basketball court on the north side of the subject property;
- Three of the seven existing tennis courts on the south side of the subject property;
- 16 parking spaces in the existing southern gravel parking lot;
- 23 proposed gravel parking spaces (including existing parking) in front of the residence; and
- A portion of one of the two pools proposed to replace the existing tennis court north of the tennis club gravel parking lot.

The various amenities that would require relocation out of the 100-foot buffer would likely be moved to areas that are currently vegetated, including wooded areas that currently buffer the site from adjacent residential development and Little Fresh Pond. The planting that would be required within the 100-foot buffer would be offset by the additional clearing that would likely be required within the interior of the site to maintain the current and proposed level of amenities. Due to the extensive site disturbance (and cost) that would be involved in establishing a 100-foot landscaped buffer around the perimeter of the subject property, while maintaining a high standard of day camp and tennis club amenities, it is not feasible for the project sponsor to implement this alternative.

Alternative Sanitary Technology

The impacts and benefits of an Alternative Sanitary Technology alternative to the proposed action that incorporates an active denitrification system or an alternative sanitary technology (acceptable to the SCDHS) to address potential impacts to groundwater impacts and/or Little Fresh Pond were analyzed in this DEIS.

Aside from the typical on-site sanitary systems (i.e., septic tanks and leaching pools), the SCDHS also currently approves sanitary treatment technologies (i.e., modified subsurface sewage disposal systems and small community sewage systems) capable of achieving a nitrogen discharge concentration of 10 mg/L for systems discharging between 1,000 and 15,000 GPD. Pursuant to Article 6 of the SCSC (see §760-607), community sewerage systems are required under certain conditions, such as where a project is located within GMZ-V and the population density equivalent is greater than 300 GPD per acre. Modified subsurface sewage disposal systems, as a method of sewage disposal, may be approved by SCDHS for such projects, subject to the several conditions enumerated at §760-607.C of the SCSC.

The subject property is allowed a "grandfathered" flow of 9,450 GPD of sanitary waste, which far exceeds the anticipated future sanitary flow of 6,800 GPD under the proposed action. Therefore, the requirement for a community method of sewage disposal, based on population density equivalent, would not apply to the proposed action.

The SCDHS sets forth various standards that would apply to the design of a modified subsurface sewage disposal system, such as an active denitrification system. These standards include a wide range of design considerations, several of which relate to the minimum setbacks of system components from development and environmental features. Compliance with these separation distances would limit the available locations on the subject property where an alternative system could be located. The seasonal nature of the use also presents practical difficulties that may preclude the reasonable use of such alternative systems. There is little-to-no sanitary waste flow occurring at the subject property in the spring, fall and winter. The systems take approximately two-to-three months to achieve a steady state, and the proposed facility is only open for approximately 90 days, such that the system would likely only treat sewage for a period of 30 days or less.

Depending on the particular features of the active denitrification system that would be installed under this alternative, property range of environmental impacts could result. In order to construct and install a system that meets the relevant separation distances required by the SCDHS, the clearing of naturally-vegetated areas may be required. Any such clearing would reduce the available ecological habitat at the site, also potentially reducing the vegetated buffers that currently screen the facility from view from surrounding residential development. Additionally, grading activities and

excavation associated with the system installation and the establishment of necessary service access would result in impacts to soils and topography. While not necessarily significant (particularly assuming that all required separation distances are met), the operation of an active denitrification system at the site may have the potential to generate noise and odors.

With respect to innovative or alternative systems, at this time, the SCDHS' study is ongoing and no changes to the standards are available, such that it is unclear when (if at all) alternative systems may be found acceptable to the SCDHS for facilities such as that proposed. Also, the design and performance characteristics of any such system cannot be accurately predicted.

It is noted that the various groundwater and surface water quality investigations confirm that sanitary waste discharges at the subject property do not adversely impact water quality at Little Fresh Pond. Moreover, groundwater beneath the subject property was found to be of excellent quality, and, when adjusting for the seasonal nature of the day camp and tennis club use, the proposed action would discharge only 25 percent of the nitrogen that would be allowed under Article 6, and only 17 percent of what would be allowed under the maximum grandfathered sanitary flow. Therefore, there is no significant adverse impact for which mitigation – in the form of an active denitrification system, alternative sanitary waste treatment system, or permeable reactive barrier – would be necessary.

Reduced Scale Alternative (25 Percent)

This section examines a reduced scale alternative, whereby the population potential of the subject property is reduced by 25 percent. As discussed throughout this DEIS, there is currently no maximum number of campers or occupants of the subject property that applies to the existing facility, with the exception of the SCDHS grandfathered sanitary flow. The occupancy of the site is technically limited by the allowable discharge to on-site sanitary systems, for which a grandfathered flow rate of 9,450 GPD was calculated during the approval process for the existing sanitary systems (based on the pre-existing development of the subject property). A 25 percent reduction in the allowable sanitary flow would be 7,085.5 GPD.

The anticipated occupancy of the subject property in accordance with the proposed action (i.e., by 360 campers and 90 staff [including 65 overnight staff]) would result in a sanitary flow of 6,800± GPD. Therefore, a 25-percent reduction of the maximum allowable sanitary flow of 9,450 GPD (i.e., 7,087.5 GPD) would, in fact, allow a greater occupancy than that proposed. In addition to increases in water demand and the volume of sanitary waste to be discharged to groundwater, the greater occupancy that this alternative would allow would also have the potential to result in greater noise and transportation impacts, as compared to the proposed action. The existing on-site

sanitary systems are oversized for the anticipated maximum occupancy with the proposed action, and would be capable of accommodating the sanitary flow under this 25 percent reduction alternative (i.e., 7,087.5 GPD). Thus, this alternative would not require additional improvements to sanitary systems at the subject property. Other site improvements would be the same as those anticipated under the proposed action (only minor additional improvements may be needed to accommodate the additional campers under this alternative). Therefore, the impacts to soils and topography, ecology, visual and aesthetic resources, land use, zoning or community character, would not be notably different from the proposed action.

With respect to water resources, transportation, community facilities and noise, the higher maximum occupancy permitted under this alternative (as compared with the proposed action) would result in a corresponding higher quantity of sanitary waste generation, potable water use, demand for community facilities, and noise levels.

Overall, the implementation of this alternative would not reduce or eliminate any of the expected impacts of the proposed action. In fact, this alternative would have slightly greater impacts related to occupancy, as the proposed action anticipates a future occupancy that is more than 25 percent less than the maximum occupancy that would be permitted on the site.

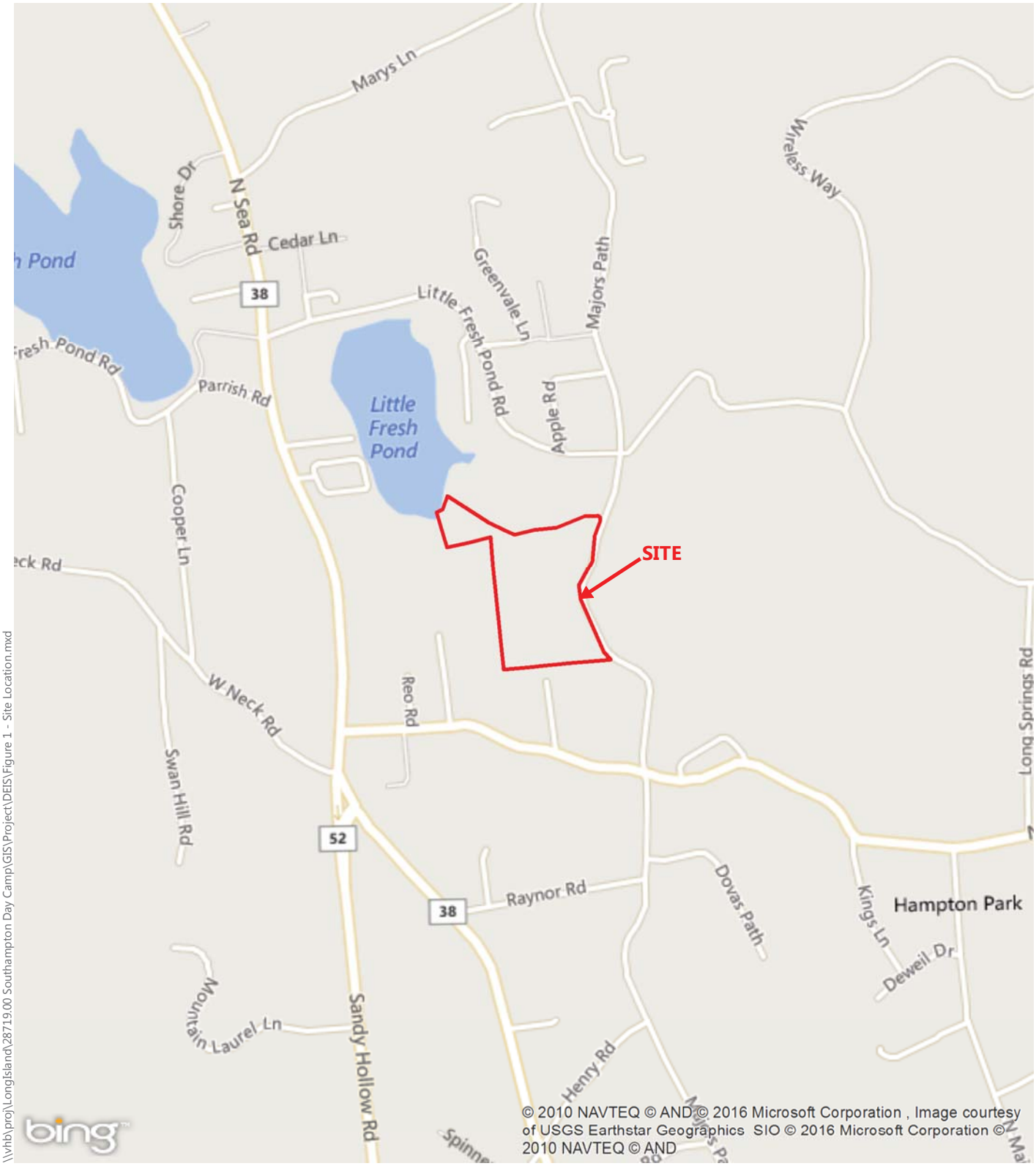
2.0

Description of the Proposed Action

2.1 Introduction

This document is a Draft Environmental Impact Statement (DEIS) prepared in accordance with the State Environmental Quality Review Act (SEQRA) and its implementing regulations at 6 NYCRR Part 617 for the action contemplated herein, and is based upon the Final Scope that was issued by the Town of Southampton (see Appendix A). This DEIS evaluates potential adverse impacts associated with the proposed action, which consists of a change from one non-conforming use to another non-conforming use; from the existing tennis club and/or tennis camp to a day camp and tennis club on the 17.28±-acre property, known on the Suffolk County Tax Map (SCTM) as District 0900 – Section 097.00 – Block 03.00 – Lot 017.001 (the "subject property"). The proposed project, known as Southampton Racquet Club and Camp, consists of various site improvements as detailed in Section 2.3, below, which are designed to provide more diversified camp activities, as well as improve site access, parking and accommodations. The site address is 665 Majors Path in the hamlet of North Sea, Town of Southampton, Suffolk County. A site location map is included as Figure 1, and an excerpt of the Suffolk County Tax Map is included as Figure 2.

This DEIS is divided into nine sections, the first of which is the Executive Summary. This section, Section 2.0, provides a brief discussion of existing site and surrounding area conditions, and provides a description of the components of the proposed action, including the change of non-conforming use, proposed site layout, a brief history of the site, the project's purpose, need and benefits, proposed construction plan and the required permits and approvals.



\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 1 - Site Location.mxd

0 500 1000 2000 Feet

Southampton Racquet Club & Camp | Town of Southampton, NY

Subject Property

Site Location
665 Majors Path, North Sea

Sources: Town of Southampton Parcel Data (Suffolk County, 2013)

\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 2 - Suffolk County Tax Map Excerpt.mxd

Southampton Racquet Club & Camp | Town of Southampton, NY

Subject Property

Suffolk County Tax Map Excerpt
665 Majors Path, North Sea

Sources: Suffolk County Real Property Tax Service Agency (2013)

Section 3.0 of this DEIS provides a discussion of the environmental setting for the project, by topic. Within each section, the existing conditions, potential impacts that are likely to occur upon project implementation, and proposed mitigation measures that reduce or eliminate those impacts are discussed. Alternatives and their impacts are discussed in Section 4.0 of this DEIS. Among these alternatives is the "No Action" alternative that is required to be discussed pursuant to SEQRA and its implementing regulations at 6 NYCRR Part 617. Section 5.0 discusses unavoidable adverse impacts. Section 6.0 discusses irreversible and irretrievable commitment of resources. Section 7.0 discusses growth inducing aspects. Section 8.0 discusses the use and conservation of energy resources. References are included in Section 9.0 of this DEIS.

As further detailed in Section 2.4 of this DEIS – Project and Site History – the proposed action has been significantly scaled down since the Town of Southampton Planning Board, as lead agency, issued a Positive Declaration for the "2012 Renovation Plan" on October 11, 2012 requiring the preparation of this DEIS. For example, the new plan calls for fewer existing tennis courts to be removed; no longer proposes a swimming pool, patio and changing shed complex near adjoining residences at the north-northwest portion of the site; and no longer contains a new internal driveway through a wooded portion of the site joining the southern parking area to the main driveway loop. Additionally, several enhancements were made to the existing facility to improve operations from an environmental perspective (e.g., abandonment of aged sanitary systems and replacement with modern sanitary systems with septic tank pretreatment, installation of public water supplies, and removal of oil storage tanks). For comparison, a copy of the prior 2012 Renovation Plan site plan is included in Appendix J. This DEIS is prepared in accordance with the Positive Declaration and Final Scope issued for the prior plan, despite the significant reduction in the scope of the proposed action.

2.2 Existing Conditions

2.2.1 Site Layout and Use

The 17.28±-acre subject property is currently developed and in use as a tennis club and/or tennis camp. The improvements and facilities that comprise the Southampton Racquet Club and Camp (as further detailed within this section) support a tennis club and a tennis camp program for children of various ages. Consistent with the historic use of the subject property and with other tennis camps offered throughout the region, the camp programs offer tennis instruction as well as other activities to its campers (e.g., swimming, basketball, arts and crafts, and field games).

The existing improvements at the subject property include 12 cottages, a caretaker's office, a kitchen and dining hall, a one-and-one half story residence, a clubhouse, a garden shed, a basketball court, nine tennis courts, a swimming pool, gravel parking, and decking and patios (both attached to buildings and freestanding). Certificates of Occupancy and Certificates of Compliance exist for these improvements (see Appendix C). The total building area at the subject property is 11,998± square feet (SF), divided amongst the following structures:

- One-and-one-half-story residence: **1,857± SF**
- Dining Hall: **2,470± SF**
- Cottage 1: **670± SF**
- Cottage 2: **932± SF**
- Cottage 3: **507± SF**
- Cottage4: **355± SF**
- Cottage 5: **358± SF**
- Cottage 6: **556± SF**
- Cottage 7: **419± SF**
- Cottage 8: **535± SF**
- Cottage 9: **483± SF**
- Cottage 10: **478± SF**
- Cottage 11: **574± SF**
- Cottage 12: **598± SF**
- Cottage 13 (Caretaker's Office): **137± SF**
- Shed: **180± SF**
- Garden Shed: **94± SF**
- Pump House: **135± SF**
- Clubhouse: **660± SF**

TOTAL 11,998± SF

The cottages and residence are currently used during the summer months as overnight accommodations for staff. The dining hall contains a kitchen and serves as the dining area for the facility. The clubhouse, situated on the north side of the southernmost existing tennis courts, provides additional indoor space for club members.

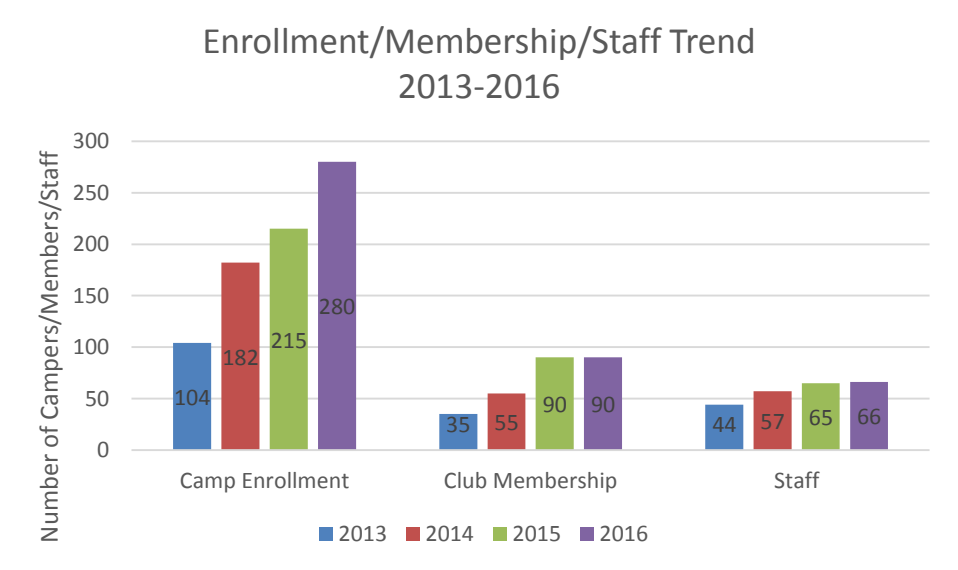
Existing site coverage data for the subject property is described in the table below:

Table 1 – Site Coverage: Existing Conditions

Site Coverage	Acres	Percent
Roads, buildings, and other paved or impervious surfaces	1.65±	9.6±
Decks (Pervious)	0.08±	0.5±
Gravel	1.18±	6.8±
Lawn/Landscaping/Mulch Areas and Paths	3.46±	20.0±
Wooded	10.38±	60.0±
Wetlands	0.53±	3.1±
TOTAL	17.28±	100.0±

As of the 2015 season, the Southampton Racquet Club and Camp had 90 tennis club members, 215 campers, and 65 staff (22 of whom stay overnight throughout the summer in the existing cottages). For the 2016 season, Southampton Racquet Club and Camp has 90 tennis club members, 280 campers and 66 staff (including 53 overnight staff). The increase is attributable to the facility's increasing popularity and its becoming more established over time.

Southampton Racquet Club and Camp has seen a steady increase in membership since 2013, as indicated below.



As indicated above, the current tennis camp activities occurring at the subject property are consistent with those of other tennis camps operating in the region. A review of the programs and offerings of a sampling of other tennis camps is summarized below:

SPORTIME Quogue[1]
2571 Quogue-Riverhead Road, East Quogue, New York

Daily tennis camp activities include:

- Strength and Conditioning
- Multi-sport games

Hampton Racquet at Green Hollow[2]
172 Buckskill Road, East Hampton, New York

Daily tennis camp activities include:

- Soccer
- Basketball
- Martial arts
- Magic shows
- Baseball and tee ball
- Art and crafts
- Yoga
- Chess
- Ping pong
- Volleyball

Future Stars Summer Camp – Southampton[3]
1370A Majors Path, Southampton, New York

Daily tennis camp activities include:

- Field play and fitness
- Swimming

Future Stars Summer Camp – Farmingdale[4]
2350 Broadhollow Road, Farmingdale, New York

Daily tennis camp activities include:

- Off-court tennis and fitness
- Water park activities

2.2.2 Site Access and Parking

The subject property currently has a total of five curb cuts along the west side of Majors Path. The two curb cuts farthest to the north are unpaved/gravel and are not regularly utilized for site access. The central two curb cuts serve as a one-way loop for buses and cars entering and exiting the camp portion of the site, with the northern of the two being the entrance and the southern being the exit. This loop also provides

▼

[1] http://www.sportimeny.com/summercamps/quo/programs/tennis, accessed March 2016.
[2] http://hamptonracquet.com/, accessed March 2016.
[3] http://www.fscamps.com/location_based_program/Tennis_47.html, accessed March 2016.
[4] http://www.fscamps.com/location_based_program/Tennis_34.html, accessed March 2016.

access to an internal gravel parking area, proximate to the existing residence, with capacity for five vehicles (spaces are not formally marked). The fifth, southernmost curb cut at the subject property serves as an entrance/exit for a gravel parking area containing capacity for approximately 40 vehicles, with no formally marked spaces.

2.3 Project Description

The proposed action involves a change from one pre-existing, non-conforming use (tennis club and/or tennis camp) to another non-conforming use (a day camp and tennis club). The applicant, Southampton Day Camp Realty, LLC, is currently operating the existing tennis club and/or tennis camp in accordance with existing Certificates of Occupancy and Certificates of Compliance issued by the Town of Southampton. The proposed action would not increase the intensity of use of the subject property, but rather would diversify the recreational activities available to campers by eliminating two existing tennis courts and replacing them with two pools and a basketball court (increasing the number of pools on site to three pools, and the number of basketball courts to two courts), constructing a new play area, and reallocating building square-footage, among other improvements. Tennis activities would still be offered at the subject property, as seven existing tennis courts would remain. The existing tennis camp program has a tennis focus, while also offering a range of other camp activities (e.g., swimming). The proposed day camp use would continue to offer tennis-related camp activities, but would also offer a diversity of programs to accommodate campers who do not wish to play tennis.

The subject property is currently improved with 12 cottages, a caretaker's office, a kitchen and dining hall, a one-and-one half story residence, a clubhouse, a maintenance shed and a maintenance shop building, a basketball court, nine tennis courts, a swimming pool, gravel parking, and decking and patios (both attached to buildings and freestanding). Certificates of Occupancy and Certificates of Compliance exist for these improvements.

As with the existing operations, the proposed day camp and tennis club would be seasonal, with overnight accommodations used by employees and camp counselors. There would be no overnight accommodations for campers. The applicant would continue to operate the camp activities for children ages 2.5 through 14 years old, for a ten-week period, on weekdays between mid-June and early September. The tennis club activities would continue daily for a 22-week season, from early May through early October.

The proposed action includes various improvements to the existing tennis club and/or tennis camp, as follows:

Cottage 4: The existing 355 SF cottage and 85 SF deck would be removed.

Cottage 5: The existing 358 SF cottage and 196 SF deck would be removed.

Cottage 9: The existing 166 SF detached deck would be removed.

Cottage 10: The existing 119 SF detached deck would be removed.

Cottage 12: The existing 598 SF building and 314 SF deck would remain and be used as a Health Center.

New Cottage: One new, 562 SF cottage with a 152 SF deck would be constructed to the south of existing Cottage 11.

Pump House (Well House): The existing 135 SF pump house (well house) would be removed.

Storage Shed/Shop: The existing 180 SF storage shed/shop would be relocated within the site.

Dining Hall: The existing 286 SF deck at the Dining Hall would be replaced by a 665 SF deck.

Changing Sheds: Two new changing sheds are proposed. Each shed is approximately 190 SF, for a total of 380 SF.

Garden Shed: The existing 94 SF garden shed would be removed.

The total floor area of all existing buildings is 11,998± SF. As noted above, the proposal includes the elimination of certain buildings and the addition of new buildings to modernize the facility. Upon implementation of the proposed action, the square footage of all buildings would be the same as that which currently exists (i.e., 11,998± SF proposed) such that no expansion is proposed. The area of buildings represents 1.6± percent of the total lot area.

There is no proposed increase in the total area of decks and patios on the property. A total of 4,035 SF of decking/patio currently exists, and, upon completion of the project, a total of 4,035 SF of decking/patio would continue to exist. This represents 0.5± percent of the total lot area.

The plan proposes to repair, renovate or replace sports courts on the subject property. The northerly-most tennis court, which extends approximately two feet beyond the northerly property line, would be partially removed and revegetated (such that it would no longer extend off the site), and a 5,361± SF basketball court would occupy the southern portion of this former tennis court area. A 2,380± SF play area is proposed to be located between the existing clubhouse and Cottage 3. The existing tennis court, located just north of the existing parking area and adjacent to an existing swimming pool and patio, is proposed to be converted to two new 1,600± SF pools with an associated patio. The existing basketball court would remain and continue to be used as a multi-purpose sports court.

There is currently 59,213± SF of sports court area on the subject property. The seven existing tennis courts on the southerly part of the subject property would remain. Upon completion of the proposed repairs and site improvements, a total of 59,213± SF of sports court area would remain (inclusive of all swimming pools and pool patios). This represents 7.9± percent of the total lot area.

2.3.1 Site Data

Based on the proposed *Site Plan* (see Appendix B), the existing and proposed site data are as follows:

Table 2 – Site Coverage: Existing Conditions and Post-Development

Site Coverage	Existing (Acres)	Proposed (Acres)
Roads, buildings, and other paved or impervious surfaces	1.65±	1.68±
Decks (Pervious)	0.08±	0.08±
Gravel	1.18±	1.43±
Lawn/Landscaping/Mulch Areas and Paths	3.46±	3.97±
Wooded	10.38±	9.59±
Wetlands	0.53±	0.53±
TOTAL	17.28±	17.28±

As indicated on the *Site Plan*, the proposed action would result in the clearing of 34,528± SF (0.79± acre) of natural area, and the revegetation of 9,163± SF (0.21± acre). Thus, the post-development total clearing at the subject property would be 302,970± SF (6.96± acres), including 277,605± SF (6.37± acres) of existing cleared area (i.e., a net decrease of 0.59± acre of vegetation) at the 17.28±-acre subject property.

2.3.2 Site Access and Parking

The proposed action includes improvements to site access and parking at the subject property, as follows.

The two northernmost curb cuts, which currently serve as access and parking for Cottage 11, would be eliminated, reducing the number of curb cuts from the five that currently exist to three.

The two remaining northerly curb cuts would serve as a one-way loop for the proposed shuttle bus service, which would pick-up and drop-off the campers, and incidental parent drop-off and pick-up. The northernmost curb cut to remain would serve as the ingress, and the central of the three curb cuts to remain would serve as the egress. The egress would be relocated approximately 57 feet to the south to improve sight distances and safety. Similarly, the southernmost curb cut that serves the southern parking lot would be relocated approximately 100 feet to the south to improve sight distances and safety.

The existing gravel-surfaced southern parking lot would remain, but would be minimally reconfigured to accommodate approximately 47 spaces. A proposed gravel-surfaced parking area within the driveway loop would provide 23 spaces where approximately five unmarked spaces currently exist. Four additional new parallel parking spaces would be provided along the loop itself. These 27 spaces are proposed to provide convenience to patrons, visitors or the incidental camper drop-off or pick-up vehicles that would otherwise be required to park at the southern gravel parking area, away from the camp arrival/departure operations. The total number of parking spaces proposed at the property is 74. There may be some increased demand for parking as camp enrollment and staff increase over time. The 74 spaces are expected to adequately accommodate the demand for on-site parking, as some employees would reside on the grounds (seasonally) and others would travel via the vans (buses) that transport campers to-and-from the camp. In addition to the 74 parking spaces to be provided, areas have been planned to accommodate another 37 spaces that are proposed to be landbanked for future use, as needed. Thus, the total number of parking spaces provided for on the proposed *Site Plan* is 111 spaces. The landbanked parking spaces are located in areas of existing maintained lawn or gravel, and, if developed, would not require additional clearing of natural vegetated areas (see *Site Plan* in Appendix B). As the applicant provides bussing for all campers, and as staff generally reside on site or are bussed to the site, there is no anticipated need to build the landbanked parking spaces shown on the *Site Plan*.

As occurs under existing conditions, shuttle buses would continue to pick up campers at designated stops throughout the community and drop campers off using the modified circular bus loop. The facility staff would continue to manage the routing of buses and a local bus company would be contracted to provide both buses and

drivers. Additionally, along the morning route, each bus picks up a camp counselor before picking up any campers. Aside from providing transportation for some camp counselors, this ensures that the campers are supervised and entertained on their way to the camp. A similar routine is employed in the afternoon, where counselors use the bus service as transportation home, but also supervise and entertain campers along the ride. On weekends, traffic would be limited to that which is generated by seasonal staff and the tennis club activities.

2.3.3 Utilities and Stormwater Management

Potable Water

Potable water would continue to be supplied by the Suffolk County Water Authority (SCWA). The subject property is currently served by an eight-inch water main connection to an existing main beneath Majors Path. Auxiliary lines connect the various structures throughout the subject property to the eight-inch main. The proposed improvements at the site include the abandonment of water lines at the two cottages to be removed, and the addition of a water line to connect to the proposed cottage on the northeast portion of the subject property. There are existing on-site groundwater wells, which are utilized for irrigation purposes only. Upon implementation of the proposed action, the subject property is expected to use an estimated 7,153 gallons per day (GPD) of potable water (including 353± GPD kitchen flow from the dining hall).

Sanitary Waste

Sanitary waste would continue to be directed to several existing on-site septic systems, which were installed in 2013 to replace and upgrade the former substandard sewage disposal systems. The existing on-site sanitary systems utilize septic tank pretreatment and a grease trap for kitchen waste meeting current Suffolk County Department of Health Services (SCDHS) standards. One sanitary system would be abandoned and an additional septic tank would be installed to service the new cottage. Upon implementation of the proposed action, the subject property is expected to generate approximately 6,800 GPD of sanitary waste. The anticipated quantity of sanitary waste generation is significantly below the SCDHS "grandfathered" flow rate of 9,450 GPD.

Electricity

Electricity would continue to be provided to the subject property by PSEG Long Island via existing service connections.

Heating

Liquid propane is used on-site to provide hot water heating for the existing swimming pool at the subject property. The existing 1,000-gallon liquid propane tank would continue to be used for this purpose (pool heating) upon implementation of the proposed action, and no changes (i.e., new tanks or tank removal) are proposed. An existing 235-gallon heating oil tank within the residence would remain.

Stormwater Management

Under existing conditions, the subject property contains 1.65± acres of impervious surface area (buildings, play courts, etc.), 1.18± acres of gravel-surfaced drives and parking areas, and 3.46± acres of lawn, mulch paths, and landscaped areas. There is currently no stormwater management infrastructure at the subject property, such that stormwater runoff generated at these and other land surfaces at the site is permitted to run overland, uncontrolled.

Upon implementation of the proposed action, a comprehensive stormwater management system consisting of leaching pools (and natural infiltration) would be installed. The proposed system is designed to meet and exceed all relevant requirements, such that 100 percent of all stormwater runoff generated at improved site areas from a two-inch rainfall event would be contained and recharged on-site. The proposed improvements would minimally alter land surfaces (i.e., a 0.03±-acre increase in impervious surface area), such that there would be no significant increase in stormwater runoff generation. Overall, the proposed action would result in a benefit with respect to stormwater management.

2.3.4 Project Operations and Management

As with the tennis camp element of the existing use, the proposed day camp would accommodate children ages 2.5 through 14, and would operate for a ten-week period on weekdays between mid-June and early September. The tennis club activities would continue daily for a 22-week season, beginning in early May and ending in early October. As of 2015, the total number of campers enrolled at the Southampton Racquet Club and Camp was 215, and the total number of tennis club members was 90, with 65 staff (including counselors). For the current 2016 season, the tennis club and/or tennis camp has 90 members 280 campers, and a total staff of 66, including 53 staying overnight in the existing cottages and residence. It is anticipated that under the proposed action, the maximum projected future day camp enrollment, staff and tennis club members at the site would be 360 campers, 90 staff (including 65 overnight), and 90 tennis club members. It is noted that an increase in the number of campers at the existing tennis club and/or tennis camp may be expected, even absent the proposed action. That is, an increase in the popularity of the existing tennis club

and/or tennis camp may continue to occur, as it has over the past several years, and the proposed action would not necessarily result in an increase in the capacity of the subject property to accommodate members, campers and staff. It should be noted that the range of activities that would be offered as part of the proposed day camp programming is very similar to the range of activities offered at other facilities in the region that identify themselves as tennis camps (see examples in Section 2.2.1 [Page 7] of this DEIS).

The proposed day camp would operate on weekdays between the hours of 7:30 a.m. and 4:15 p.m., similar to the existing tennis club and/or tennis camp operation. No significant change in the nature or level of off-hours activity (e.g., associated with seasonal staff residing at the site) would result from the proposed action. A typical daily day camp operations schedule (which may vary over time) is outlined below:

- **7:30 a.m.** – Leadership staff arrive for morning meeting
- **8:00 a.m.** – Tennis courts open for play/lessons/clinics
- **8:30 a.m.** – General staff (non-housed) arrive via shuttles (12 seat buses)
- **9:00 a.m.** – Camper arrival via buses (24 seat buses)
- **9:00 a.m. - 9:15 a.m.** – Small number of campers arrive by car
- **9:30 a.m.** – Camper arrival over and camp day starts
- **11:30 a.m. - 1:00 p.m.** – 90 minute lunch serving period (approximately three servings in dining hall and three servings outside on picnic tables)
- **3:00 p.m.** – Buses (24 seats) arrive into camp to prepare for afternoon camper dismissal
- **3:30 p.m. - 3:45 p.m.** – Buses depart camp
- **3:45 p.m. - 4:00 p.m.** – Remaining campers picked up by car
- **4:00 p.m. - 4:15 p.m.** – Staff shuttles depart camp

The proposed day camp would offer a range of recreational activities, including, but not limited to, tennis, swimming, music, arts and crafts, Zumba, nature walks, climbing, cooking, basketball, soccer, Gaga, 9 square, wiffleball, dance, cheerleading, train, free play, parachute games, dodgeball, kickball, field games. As compared with the existing tennis club and/or tennis camp operation, the proposed day camp would offer programs that are less focused on tennis, and may offer programs to accommodate campers that do not wish to play tennis. These activities would follow a structured schedule throughout the day, with campers separated into groups enabling efficient use of the facilities.

The tennis club element of the proposed use would continue to operate seven days per week for 22 weeks, beginning in early May and ending in early October. The hours of operation for the tennis club are 8:00 a.m. to 6:00 p.m.

Maintenance Chemicals

On-site lawns would be maintained by local contractors, which would be closely monitored to ensure that any fertilizer use is consistent with the relevant restrictions established by the U.S. Environmental Protection Agency (EPA) and the New York State Department of Conservation (NYSDEC), including the 2010 New York State Dishwasher Detergent and Nutrient Runoff Law restrictions on phosphorous fertilizers. Cedar oil is applied approximately four times per year for mosquito and tick control. The proposed action includes the increase in the number of swimming pools at the subject property from one to three (i.e., two additional swimming pools are proposed). Pool maintenance would require the storage of approximately 200 pounds of Calcium Hypochlorite tablets as well as approximately five-to-15 gallons of liquid chlorine. Minor amounts of gasoline would be used to power turf maintenance equipment. Complete discussions of pool chemical and fertilizer usage are provided in Sections 3.2.2.7 and 3.2.2.8, respectively.

Safety Plan and Emergency Response

The applicant has developed an Emergency Action Plan, outlining procedures to protect campers and staff in the event of an emergency (e.g., fire, medical emergency, weather related emergencies, natural disasters and active shooters). Such procedures include, for a given emergency situation, specific congregation, evacuation, notification procedures. The Emergency Action Plan designates the camp directors as the security officers/emergency coordinators through whom all information would be filtered in the event of an emergency. Other key personnel identified in the Emergency Action Plan include an emergency reporter, incident coordinator, medical coordinator and media coordinator. Basic security measures include staff-specific shirts, mandatory visitor sign-in/sign-out and visitor name tags.

The subject property is located within the service areas of the following emergency response providers:

- Ambulance: Southampton Volunteer Ambulance Corps
- Fire: North Sea Volunteer Fire Department
- Police: Southampton Town Police Department

Future Upgrades

The proposed improvements at the subject property are designed to serve the needs of the camp and club for the projected future enrollment of 360 campers, 90 club members and 90 staff (including 65 overnight staff). No significant future upgrades to the on-site facilities are proposed or anticipated at this time, and no future upgrades

to area infrastructure (e.g., water service, transportation infrastructure) are expected to be needed to accommodate the proposed use in the future.

2.4 Site and Project History

As introduced in Section 2.1, and as further detailed below, the current proposed action represents a significantly scaled-down version of a prior Renovation Plan that was previously being considered by the applicant. The Town of Southampton Planning Board issued a Positive Declaration requiring the preparation of this DEIS on October 11, 2012 (see Appendix A) based on the prior plan, which included a number of project elements that are no longer included in the current proposed action. Below is a history of the usage of the subject property, recent improvements to the existing facility, and the application itself, with references to relevant approvals and legal decisions.

The subject property has been in operation with a variety of recreational activities since the 1930s, and in 1965 is known to have been improved with numerous structures, including a dwelling, over a dozen cottages and cabins, a dining hall, stable and riding facilities, basketball court, tennis and other sports courts, ball fields, including a football field and a baseball field, and a catwalk and floating swimming raft in Little Fresh Pond. On June 8, 1995, the Town of Southampton Zoning Board of Appeals (ZBA) granted the then-owner of the property (New Horizons Camp, Inc.) variances for improvements made without a building permit (i.e., conversion of a horse stable to clubhouse, construction of tennis courts), and permitted two additional tennis courts. On December 2, 1998, the Town of Southampton Building Department issued Certificates of Occupancy/Compliance for a tennis camp, based upon the 1995 ZBA decision, for the several structures and facilities that existed on the subject property at that time.

The subject property was conveyed to the applicant (Southampton Day Camp Realty, LLC) on October 28, 2010, and, in February 2011, the applicant made an application to the ZBA for a 50-percent floor area expansion. The applicant reconsidered the request, and in August 2011, upon the request of the applicant, the Town of Southampton Building Inspector determined that no variances were needed for the then-proposed "2012 Renovation Plan," which proposed to maintain a camp use and did not involve any floor area expansion. Although there was no floor area expansion, the plan called for the removal of all but two tennis courts in exchange for a softball field, a swimming pool complex (a second swimming pool complex was also proposed), a playground, and other facilities. The applicant voluntarily withdrew the ZBA application and pursued site plan approval. In September 2011, neighbors appealed the Building Inspector's determination to the ZBA claiming that the pre-existing nonconforming tennis club and/or tennis camp was abandoned (among other things).

On March 15, 2012, the ZBA determined that the pre-existing nonconforming tennis club and/or tennis camp was not abandoned, but that the applicant's specific Renovation Plan constituted a change from one nonconforming use to another nonconforming use requiring a variance. On June 15, 2012, the applicant applied to the ZBA for a change from one nonconforming use (i.e., a tennis club and/or tennis camp) to another nonconforming use (i.e., a day camp and tennis club).

The Town of Southampton Planning Board, as lead agency, adopted a Positive Declaration on October 11, 2012, requiring the preparation of a Draft Environmental Impact Statement (DEIS) to analyze potential significant environmental impacts of the proposed change from one nonconforming use to another. Since that time, several enhancements have been made to the existing facility to improve, from an environmental (e.g., groundwater quality) perspective, the impacts of operation of the existing facility. These improvements have included the abandonment of all existing sanitary systems in accordance with SCDHS protocols, and replacement of same with modern systems with septic tank pretreatment (where none existed previously), and a grease trap for kitchen waste, in accordance with current SCDHS standards. Additionally, public water service was extended onto the subject property, replacing private wells (which remain for irrigation purposes), and existing oil storage tanks were removed (with the exception of a 235-gallon tank within the on-site residence).

Other improvements have been undertaken at the subject property, which has continued to operate as a tennis club and/or tennis camp, to maintain its existing structures, as well as to install a 1,445-SF swimming pool in place of an existing tennis court. All necessary approvals were obtained for same, which was determined to be a customary accessory structure and use to the tennis camp and tennis club. This determination by the Building Inspector was affirmed by the ZBA in its decision of December 20, 2012 (Decision No. D013123), that "the modification and replacement of a tennis court with a swimming pool … is not an impermissible expansion of a nonconforming use or a change of use requiring a variance … [and is] customary and incidental to Southampton Day Camp Realty's pre-existing nonconforming 'tennis club and/or tennis camp' use." Several neighbors requested a Temporary Restraining Order and preliminary Injunction to prevent the construction of a swimming pool (see *Matter of Little Fresh Pond Association, et.al. v. Town of Southampton ZBA, et.al.*, Supreme Court, Suffolk County), which was denied by the Honorable Joseph C. Pastoressa, Justice of the Supreme Court, Suffolk County, on April 10, 2013. Neighbors also requested a Temporary Restraining Order and Preliminary Injunction to prevent the use of the subject property as a tennis camp and/or tennis club (see *Matter of Barona, et.al. v. Southampton Day Camp Realty, LLC, et.al.*, Supreme Court, Suffolk County), which was denied by the Honorable Joseph C. Pastoressa, Justice of the Supreme Court, Suffolk County, on June 19, 2013.

During the time of the pool construction, several neighbors requested an inspection of the subject property (see *Matter of Barona, et.al. v. Southampton Day Camp Realty, LLC, et.al.*, Supreme Court, Suffolk County), which was denied by the Honorable Daniel Martin, Associate Justice of the Supreme Court, Suffolk County, on August 12, 2013. Neighbors also filed an Article 78 proceeding challenging the ZBA's decision permitting the swimming pool, which was dismissed by the Honorable Joseph C. Pastoressa, Justice of the Supreme Court, Suffolk County on February 24, 2014 (see *Matter of Little Fresh Pond Association, et.al. v. Town of Southampton ZBA, et.al.*, Supreme Court, Suffolk County).

As indicated above, the applicant has continued to operate the subject property as a tennis club and/or tennis camp in accordance with all existing permits and approvals. Neighbors recently claimed that the applicant was moving forward with plans to operate a children's day camp at the site without the necessary approval(s) required for same as determined by the ZBA in its March 15, 2012 decision (see *Matter of Barona et.al. v. Southampton Day Camp Realty LLC and Southampton Country Day Camp LLC*, Supreme Court, Suffolk County). In a decision dated December 19, 2014, the Honorable Jeffrey Arlen Spinner, Justice of the Supreme Court, denied the neighbor's application. Relevant to the proposed action, the decision notes that the neighbors failed to substantiate that SDCR's use of the subject property results in increased noise, traffic, reduction of property values, or a public nuisance.

On February 5, 2015, the neighbors filed a Notice of Appeal of Justice Spinner's decision. This appeal has not been perfected by the Plaintiffs.

It should be noted that the scope of site and building improvements associated with the proposed action has been significantly reduced since the time that the Positive Declaration was issued, in response to changing needs of the facility, as well as concerns raised by the Town and community. The prior site plan is included in Appendix J, for comparison. The changes include, but are not limited to, the elimination of a planned swimming pool, patio and changing sheds complex in the northwest portion of the site, nearest to Little Fresh Pond and adjacent residential uses to the north; the maintenance of existing tennis courts instead of the removal of one and the establishment of a new basketball court at the southwestern portion of the site currently containing wooded areas; the elimination of a planned internal driveway through a wooded portion of the site (joining the southern parking lot to the main driveway loop); and a reduction in the total area of natural vegetation to be cleared. The on-site driveways are now proposed to be gravel-surfaced, rather than paved in asphalt, as previously contemplated.

A public scoping session for this DEIS was held on February 26, 2015, after which written comments were accepted until March 20, 2015. The Planning Board adopted a final scope for this DEIS on March 26, 2015, based on the public comments received at the public hearing and during the provided comment period.

2.4.1 Existing Permits and Approvals

Following is a detailed list of the existing permits and approvals issued in connection with the subject property:

- Building Permit No. 003127, issued June 1967, for the addition of four tennis courts.
- Certificate of Occupancy No. 5121, dated April 27, 1967 for a 1 ½ story house.
- Zoning Board of Appeals (ZBA) Decision No. 9667, June 8, 1995, grants variances to legalize the conversion of the house stable to a clubhouse, three tennis courts previously built without a building permit and two additional tennis courts.
- Planning Board site plan approval for the changes to the premises including the addition of the two tennis courts permitted by the 1995 ZBA decision (above), October 26, 1995.
- Certificates of Occupancy/Compliance for the tennis camp, based upon the 1995 ZBA decision (above), including the following:

  A. Certificate of Occupancy No. C018937, dated December 2, 1998, for: "A tennis camp with the following structures: twelve cottages, one, two story house, a basketball court, two decks between cottages 9 and 10, pump house and a shed/shop building and one caretakers office. Other structures approved by the following certificates: A017603 – Kitchen and dining hall, A017604 – Garden shed, A017602 – Ten tennis courts and A017601 – Cabin with patio and clubhouse with deck."
  B. Certificate of Compliance No. A017604, dated December 2, 1998 for a garden shed.
  C. Certificate of Compliance No. A017602, dated December 1, 1998 for "ten (10) tennis courts per BZA decision 9667."
  D. Certificate of Compliance No. A017601, dated December 1, 1998 for "cabin with patio and new clubhouse with deck."
  E. Certificate of Compliance No. A017603, dated December 1, 1998 for "kitchen and dining hall."

- Administrative Site Plan approval by Department of Land Management for approval of a swimming pool, dated February 12, 2013.
- Building Permit No. P068872 for "heated gunite swimming pool" issued March 25, 2013.

- SCDHS approves the as-built construction of the replacement and upgrade of the former substandard sewage disposal systems (2013). Additionally, SCDHS accepts the abandonment of the existing wells and the extension of public water mains and water service lines for the water supply to the premises.

- Certificate of Compliance No. A130710 for "heated gunite swimming pool," issued June 28, 2013.

- Certificate of Compliance No. A160152 for "conversion of laundry room to 2 bathroom".

2.5 Project Purpose, Need and Benefits

The purpose of the proposed action is to modify the defined use of the subject property from one non-conforming (tennis club and/or tennis camp) use to another non-conforming use (day camp and tennis club) and improve the existing facilities. This change is needed to transition from the existing tennis club and/or tennis camp use to a use that incorporates a day camp program providing a broader range of camp activities. The proposed action would not necessarily increase the intensity of use of the subject property, but rather, would diversify the recreational activities available to campers by eliminating two existing tennis courts and replacing them with two pools and a basketball court, constructing a new play area, and reallocating building square-footage, among other improvements. Tennis activities would still be offered at the camp, as seven existing tennis courts would remain. The existing tennis camp program has a tennis focus, while also offering a range of other camp activities (e.g., swimming). The proposed day camp use would continue to offer tennis-related camp activities, but would also offer a diversity of programs to accommodate campers who do not wish to play tennis. It should be noted that the range of activities that would be offered as part of the proposed day camp programming is very similar to the activities offered at other facilities in the region that identify themselves as tennis camps (see examples in Section 2.2.1 [Page 7] of this DEIS).

The proposed action would benefit the surrounding community by continuing to provide a recreational use (day camp and tennis club) to its patrons. Since beginning to operate the subject property in 2013, the applicant has made several beneficial improvements to the tennis club and/or tennis camp to rehabilitate the existing facilities, as well as to extend public water service from the Suffolk County Water Authority (SCWA) down Majors Path, such that water service is now available for the connection of other nearby properties. Additionally, the former outdated sanitary systems on the subject property were abandoned and replaced with modern systems with septic tank pretreatment (where none existed previously), and with a grease trap for kitchen waste. Existing oil storage tanks were also removed from the subject property. These improvements have benefitted the community from the perspective

of groundwater quality. As part of the proposed action, drainage conditions would be improved at the subject property. There is no existing stormwater management infrastructure present at the site, and stormwater runoff is permitted to flow overland. The proposed action includes the installation of drainage structures to contain and recharge 100-percent of stormwater runoff on-site, representing an additional water quality benefit as compared with existing conditions.

The proposed action includes the replacement of the existing tennis court that encroaches upon the property to the north with a smaller basketball court and the establishment of a vegetated buffer along the site boundary. Additionally, the proposed action would result in the closure and/or relocation of existing site driveways to improve safety on Majors Path.

As the subject property is located within the R-20 Residence zoning district, the potential exists for the property to be subdivided and developed as-of-right with 22 single-family residences. This alternative, discussed in detail in Section 4.2 of this DEIS, would result in various potential adverse impacts, which the proposed action would preclude by maintaining the existing character and extent of development at the subject property (such that the proposed action represents a benefit). Ways in which such development would have greater impacts than the proposed action may include, but may not be limited to, the following:

- increased clearing of natural vegetation to accommodate a subdivision roadway and clearing within individual lots for homesites, driveways, yards, and amenities
- increased water usage and sanitary waste discharge to on-site sanitary systems on a year-round basis, and closer to Little Fresh Pond
- potential reduction in vegetative buffer along Majors Path and adjacent to existing, neighboring residences
- greater construction-related impacts
- greater extent of soil disturbance and grading activities
- greater total area of impervious surfaces (and associated quantities of stormwater runoff)
- increased burden on community service providers, including public education costs due to school-aged children generation

Additionally, under the proposed action, the subject property would be managed and maintained by a single entity, rather than several individual owners or occupants that may utilize a broad range of maintenance practices, such as fertilizer and pesticide application, etc.

2.6 Construction

Based on information provided by the applicant, the improvements proposed as part of the proposed action could be implemented within an overall five-month period, if implemented all together. However, it is likely that the proposed improvements would be implemented over time, to accommodate construction seasons and camp seasons. For example, the proposed play area and the basketball court may be constructed first (e.g., in the Spring of 2017), followed by improvements to internal drives and parking areas, the construction of one swimming pool, and improvements to some or all changing cabins in the following Fall or Spring, then the balance of the cabin improvements and second pool may follow in the next season. With respect to environmental impact, the net effect is that (at any one time) the intensity of construction activity at the site would be significantly reduced, the area of land disturbance (i.e., exposed soil) would be reduced, and potential construction-related noise would be minimized. The actual construction schedule would also be permit-dependent. Regardless of the specific schedule or phasing of the proposed projects, construction activity would be scheduled to occur only between the hours of 7:00 a.m. and 7:00 p.m., so as not to occur during sensitive overnight hours consistent with the noise regulations set forth at §235-4(A)(2) of the Town of Southampton Town Code (the "Town Code"). It is anticipated that construction activities would adhere to prevailing regulations with respect to construction worker health and safety.

As indicated on the *Proposed Storm Drainage Plan* (see Appendix B), various controls would be implemented during construction to preclude or minimize potential impacts associated with construction activities. These include, but are not limited to: stabilized construction entrances, installation of silt fence along the limits of disturbance, installation of inlet protection at all open stormwater drainage covers, establishment of a dedicated area for the staging and storage of materials (along the internal driveway loop), and controlled construction equipment and delivery circulation.

2.7 Required Permits and Approvals

The permits and approvals required for implementation of the proposed action are listed in Table 3, below. Other approvals that are ministerial in nature (e.g., building permits for individual structures) would also be required, but are not listed.

Table 3 – Required Permits and Approvals

Agency	Required Permit/Approval
Town Planning Board	Site Plan; Stormwater Pollution Prevention Plan (SWPPP)
Town Zoning Board of Appeals	Variance for change from one non-conforming use to another
Town Highway Department	Road Opening
Suffolk County Department of Health Services	Water supply, on-site sanitary system, swimming pool
New York State Department of Environmental Conservation	SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002), SWPPP/Notices; Determination of Non-Jurisdiction (Freshwater Wetlands)

The proposed action is subject to all relevant requirements of SEQRA and its implementing regulations at 6 NYCRR Part 617. As set forth at 6 NYCRR §617.3(a), no agency may approve the proposed action until it has complied with the provisions of SEQRA. Following acceptance of this DEIS by the lead agency (i.e., the Planning Board), a Notice of Completion must be prepared, filed and published, and a public comment period must be provided for review of the DEIS. The Planning Board, as lead agency, may elect to hold a hearing on the DEIS, which can be combined with a public hearing on the requested Site Plan approval. If, based on the DEIS and public comments made thereon, the proposed action is determined not to result in a significant adverse environmental impact, a Negative Declaration would be adopted by the Planning Board, thereby concluding the SEQRA process. Otherwise, a Final Environmental Impact Statement (FEIS) must be prepared and filed in accordance with 6 NYCRR §617.9(a)(5). If the proposed action is the subject of an FEIS, the Planning Board must issue written findings prior to making a final decision to approve the proposed action. Additionally, all involved agencies must also make written SEQRA findings prior to their respective decisions to approve the proposed action.

3.0

Existing Conditions, Potential Impacts and Proposed Mitigation

3.1 Geology

3.1.1 Existing Conditions

3.1.1.1 Soils

Soil Survey of Suffolk County

Soils are classified according to distinct characteristics and placed (according to these characteristics) into "series" and "mapping units." A "series" is a group of mapping units formed from particular disintegrated and partly weathered rocks that lie approximately parallel to the surface and that are similar in arrangement and differentiating characteristics such as color, structure, reaction, consistency, mineralogical composition and chemical composition. "Mapping units" differ from each other according to slope, and may differ according to characteristics such as texture.

According to the *Soil Survey of Suffolk County, New York* (USDA, 1975) ("*Soil Survey"*), the soils at the subject property as Plymouth loamy sand, 3 to 8 percent slopes (PlB); Carver and Plymouth sands, with 15 to 35 percent slopes (CpE); and Swansea muck, with 0 to 1 percent slopes, coastal lowland (Mu) (see Figure 3). to the PIB and CpE soil series and mapping units are described below. Mu soils are located at the extreme northwest corner of the subject property, represent less than one percent of the soil profile, and would not be disturbed as a result of the proposed action. Therefore, this soil type is not evaluated for engineering and planning limitations.

\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 3 - Soil Survey of Suffolk County.mxd

0 95 190 380 Feet

Southampton Racquet Club & Camp | Town of Southampton, NY

Subject Property

Soil Type: PlB - Plymouth loamy sand, 3 to 8 percent slopes
CpE - Carver and Plymouth sands, 15 to 35 percent slopes
Mu - Swansea muck, 0 to 1 percent slopes, coastal lowland
W - Water

Soil Survey of Suffolk County
665 Majors Path, North Sea

Sources: USDA Natural Resources Conservation Service, Web Soil Survey (2014)

Plymouth Series

The Plymouth series consists of deep, excessively drained, coarse-textured soils that formed in a mantle of loamy sand or sand over thick layers of stratified coarse sand and gravel. These nearly level to steep soils are found throughout Suffolk County on broad, gently sloping to level outwash plains and on undulating to steep moraines. Native vegetation associated with these soils includes white oak, black oak, pitch pine, and scrub oak.

In a representative profile, the surface layer of the Plymouth Series is very dark grayish-brown loamy sand, about 4 inches thick, in wooded areas. In cultivated areas, the surface layer is mixed with material formerly in the upper part of the subsoil, and there is a brown to dark-brown plow layer of loam about 10 inches thick. The subsoil is yellowish- brown and brown, very friable and loose loamy sand to a depth of about 27 inches. The substratum, to a depth of about 58 inches, is yellowish-brown, loose gravelly coarse sand.

Plymouth soils have low to very low available moisture capacity. Natural fertility is low. The response of crops to lime and fertilizer is fair. Reaction is strongly acidic to very strongly acidic throughout the profile of most of these soils, but it is strongly acidic to medium acidic in the lower substratum of soils in the silty substratum phase. The root zone is confined mainly to the upper 25 to 35 inches of these soils. Internal drainage is good. Permeability is rapid in all of these soils except in those of the silty sub- stratum phase. Permeability is moderate in the silty layer of soils in the silty substratum phase.

Plymouth loamy sand, three-to-eight percent slopes ("PIB")

This soil is found on moraines and outwash plains. Slopes are undulating, or they are single along the sides of intermittent drainage ways. The undulating areas generally are large. The areas along intermittent drainageways are narrow and long, and they follow the course of the drainage channel.

Included with this soil in mapping are small areas of Riverhead soils that are marginal to loamy sand in texture. Also included are loamv sands that have profiles similar to those of soils in the Carver series. Other inclusions on moraines are Montauk loamy sand, sandy variant soils that have a weak fragipan, or areas that are too small to map separately. These are intergrades between Plymouth loamy sand and Montauk loamy sand, which are sandy variant soils. Small gravelly areas less than about 2 acres in size are included in this soil type, particularly on Fishers Island, that are dominantly fine sand.

The hazard of erosion for this soil type is slight and the soils tends to be droughty.

PIB soils are fairly well suited to the crops commonly grown in Suffolk County. Some areas of PlB soils were formerly used for farming, but most such areas are in brush or are idle. In the western part of Suffolk County, PIB soils are mainly found supporting housing developments.

Carver Series

The Carver series consists of deep, excessively drained, coarse-textured soils. These soils are nearly level to steep and are found throughout Suffolk County on rolling moraines and broad outwash plains. Slopes range from 0 to 35 percent. Native vegetation associated with this soil type includes white oak, black oak, scrub oak, and pitch pine.

In a representative profile, a thin layer of leaf litter and partly decayed organic matter is found on the surface of the Carver Series soils. Below this is the surface layer of dark-gray sand, about 3 inches thick. The subsurface layer is gray or light-gray loose sand to a depth of 8 inches. The subsoil is loose sand to a depth of about 22 inches. It is brown in the upper part and strong brown in the lower part. The sub- stratum, to a depth of 60 inches, is loose sand that contains some gravel. It is light yellowish brown to brownish yellow to a depth of 31 inches. Below this, it is light yellowish brown.

Carver soils have very low available moisture capacity. Further, natural fertility is very low, the response of crops to applications of lime and fertilizer is fair, permeability is rapid throughout, and the root zone is mainly in the upper- most 30 to 40 inches.

Carver and Plymouth sands, fifteen-to-thirty five percent slopes ("CpE")

These soils are found almost exclusively on moraines, except for a few steep areas on side slopes along some of the more deeply cut drainage channels on outwash plains. On morainic landforms, these areas are large, and slopes generally are complex, especially on the Ronkonkoma moraine. On the outwash plains, the areas are in long, narrow strips parallel to the drainage channels. Some areas are made up entirely of Carver sand, others entirely of Plymouth sand, and still others of a combination of the two soils.

The Carver soil in this mapping unit has a profile similar to the profile described as representative of that series, except that the gravel content is greater, and gravel makes up as much as 15 percent, by volume, of the soil in some places. The Carver soil in this unit generally is a few inches thinner to the substratum than the soil described as representative. The Plymouth soil in this unit is similar to the soil described as representative of the Plymouth series, except that its texture is sand rather than loamy sand. Also, it has a higher content of gravel, and gravel makes up as much as 15 percent, by volume, of the soil in some places.

Included with these soils in mapping are small areas of loamy sand and small areas of Carver and Plymouth sands, 0 to 3 percent slopes, or 3 to 15 percent slopes. Also, on moraines, some areas of this unit contain as much as 30 percent gravel and a few cobblestones. Such areas generally are small and are in a mixed pattern with soils that contain less gravel. Also included are areas of Montauk loamy sand, sandy variant, 15 to 35 percent slopes, that have a weakly developed fragipan or a fragipan that is at a depth of more than about 4 feet. Also included in this soil type are soils that are similar to Carver soils that have dark iron and humus coatings on the sand grains in the upper part of the subsoil. Soils with small areas of Haven and Riverhead soils that have slopes of more than 15 percent are also included in this unit.

The hazard of erosion is moderate to severe on the soils in this unit. These soils are droughty, and natural fertility is low. Moderately steep to steep slopes are a limitation to use.

The soils of this unit are poorly suited to crops commonly grown in Suffolk County. These soils are not cleared for farming. Instead, a few areas in the western part of Suffolk County, along the north shore, are being used as homesites.

The *Soil Survey* includes the potential engineering and planning limitations for each mapping unit described above, as they relate to the siting of various uses. The relevant limitations offered for each of the on-site mapping units are summarized in Table 4, below.

Table 4 – Planning and Engineering Limitations of On-Site Soils

Symbol	Mapping Unit	Slopes	Sewage disposal fields	Homesites	Streets and Parking Lots	Lawns, landscaping and golf fairways	Athletic fields and intensive play areas
CpE	Carver and Plymouth sands	15-35%	Severe (A)	Severe (A)	Severe (A)	Severe (A)(B)	Severe(A)(B)
PlB	Plymouth loamy sand	3-8%	Slight	Slight	Moderate (A)	Severe (B)	Moderate(A)(B)

Reasons for limitations:
(A) Slopes.
(B) Sandy surface layer.
Source: *Soil Survey of Suffolk County, New York (USDA, 1975)*

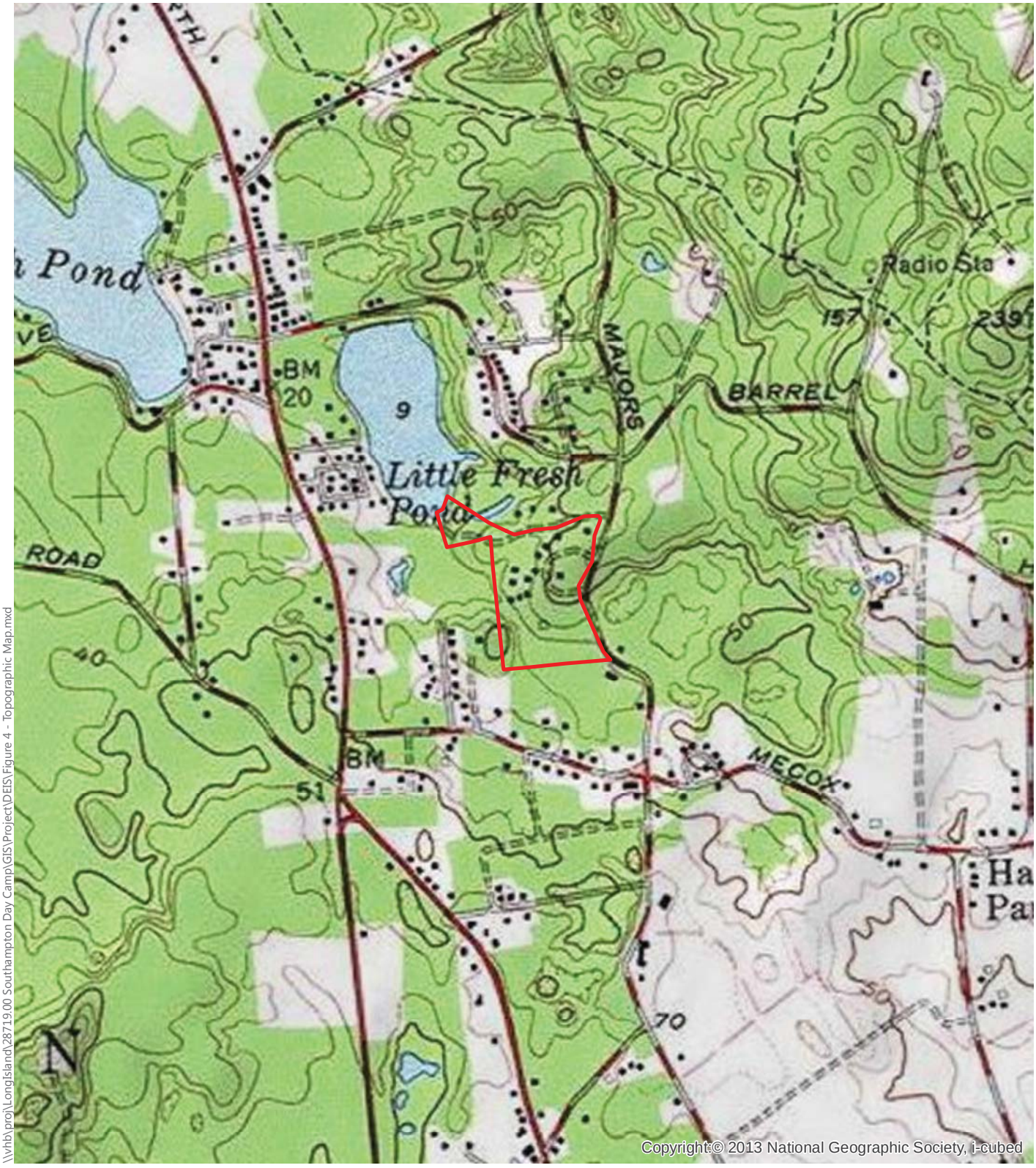
Subsurface

To supplement the soil characteristics information contained in the *Soil Survey*, on-site soil investigations were performed by McDonald Geoscience of Southold, New York. Site-specific test holes were drilled at six locations across the subject property to depths of 21 feet below grade surface (bgs) (two test holes), 23 feet bgs (two test holes), 27 feet bgs (one test hole) and 36 feet bgs (one test hole). The test hole locations were selected by the project engineer to be representative of specific on-site conditions, and are identified on the *Proposed Storm Drainage Plan* in Appendix B.

Four test holes were dug on November 16, 2010, and two test holes were advanced on July 26, 2011. According to this investigation, the subject property is blanketed by soils ranging from silty sand to clayey sand and loam. The upper layer of soil ranges from a depth of 0.5 foot to four feet, and is underlain by predominantly sandy layers with silt and clay also present. Groundwater was encountered at 15.5 feet bgs in Test Hole 6 on the southeast portion of the subject property, and at 27 feet bgs in Test Hole 4 on the central-western portion of the subject property. No groundwater was detected in the other four test holes.

3.1.1.2 Topography

According to the 2013 United States Geological Survey (USGS) Topographic Map, Southampton Quadrangle (see Figure 4), topography in the area surrounding the subject property generally slopes upward from sea level at the shorelines of the Atlantic Ocean and the Peconic Bay (3.2± miles south and 2.6± miles north of the subject property, respectively) toward the inland portion of the South Fork of Long Island. The highest local elevation occurs 0.7± mile northeast of the subject property, north of Edge of Woods Road and east of Wireless Way, where the elevation reaches 210± feet above mean sea level (amsl). The USGS Topographic Map indicates that elevations at the subject property range from 10± to 60± feet amsl, generally sloping down from the eastern portion of the site, northwest toward Little Fresh Pond.



\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 4 - Topographic Map.mxd

0 500 1000 2000 Feet

Southampton Racquet Club & Camp | Town of Southampton, NY

Subject Property

Topographic Map
665 Majors Path, North Sea

Sources: Town of Southampton Parcel Data (Suffolk County, 2013)
USGS Topographic Map, Southampton, NY 15-Minute Quadrangle (1956)

Site-specific topographic contours are presented on the *Site Plan* (see Appendix B). The existing contours indicate that elevations at the subject property vary, with several low and high points ranging from approximately nine feet to 60± feet amsl. Existing elevations are lowest near the northwestern property boundary, along Little Fresh Pond, where the site's elevation is 9± feet amsl. The highest elevation occurs along the eastern property boundary, near the existing camp entrance on Majors Path, at a height of 60± feet amsl. The steepest elevation changes occur on the undeveloped western portion of the subject property. On the developed portion of the subject property, the elevation generally increases from south to north and from west to east.

The improved portions of the subject property are relatively flat to gently sloping, although steeper slopes are present along the north side of the existing tennis courts in the southern portion of the property, and the gravel parking lot. As provided by the project engineer, approximately 85 percent of the subject property includes slopes ranging from zero to 10 percent, and 15 percent of the subject property includes slopes ranging from 10 to 15 percent.

3.1.2 Potential Impacts

3.1.2.1 Soils

As indicated in the existing conditions section above, the *Soil Survey* classifies the soils at the subject property as PlB and CpE soils. Following is a discussion of the relevant limitations for both of these soil types (see Table 4, above), and the measures incorporated into the project design to overcome such limitations.

The predominant soil type at the subject property is the PlB soil type, which occupies approximately 73 percent of the subject property. The PlB soils present slight limitations for the siting of sewage disposal fields and homesites, moderate limitations for the siting of streets and parking lots (due to slopes) and athletic fields and intensive play areas (due to slopes and a sandy surface layer), and severe limitations for the siting of lawns, landscaping and golf fairways (due to a sandy surface layer).

Carver and Plymouth sands, 15 to 35 percent slopes (CpE) occupy approximately 27 percent of the subject property. The CpE soil type presents severe limitations due to slopes for the siting of sewage disposal fields, homesites and streets and parking lots, and severe limitations due to slopes and a sandy surface layer for the siting of lawns, landscaping and golf fairways, as well as athletic fields and intensive play areas.

Although the *Soil Survey* indicates that there are moderate to severe soil limitations due to slopes and a sandy surface layer, it is noted that many of the proposed

improvements at the subject property would not be affected by such limitations. For example, the proposed Cottage 14, two new changing sheds and one relocated shed, would all be in the portion of the subject property identified on the *Soil Survey* as within PlB soils, which have no moderate or severe limitations for homesites. Similarly, the on-site sanitary system to be installed proximate to the proposed Cottage 14 is within an area of PlB soils, which has no moderate or severe limitations for sewage disposal fields.

As necessary, the proposed action would include mitigating measures to overcome the aforementioned limitations for the siting of streets and parking lots, lawns, landscaping and golf fairways, and athletic fields and intensive play areas. Specifically, topsoil would be applied to disturbed land surfaces, as needed, to support the establishment of vegetation in accordance with the *Planting Plan*. It is not expected that any significant soil amendment would be needed, as the proposed plantings would consist of native species to the maximum extent practicable.

The proposed action does not call for any significant re-grading of the existing site. All project areas would approximate the existing finished grade upon implementation of the proposed action. Minimal shaping of the site (if any) could occur within the field area in the vicinity of Cottages 4 and 5 and storage sheds, which would be removed under the proposed action.

The project engineer has confirmed, based on the results of soil test holes, that the on-site soils are suitable for the proposed improvements.

Based on the foregoing, as the engineering and planning limitations for on-site soils are either not applicable to the proposed action, or would be overcome by mitigation measures incorporated into the project design, no significant adverse impacts associated with soil limitations are anticipated.

Erosion and Sedimentation

The disturbance of soils for construction activities increases the potential for erosion and sedimentation. In order to minimize the potential for adverse erosion and sedimentation impacts during construction, an Erosion and Sediment Control Plan would be implemented at the subject property (see preliminary *Proposed Storm Drainage Plan* in Appendix B). The NYSDEC requires coverage under the State Pollutant Discharge Elimination System (SPDES) *General Permit for Stormwater Discharges from Construction Activity* (GP-0-15-002) for construction projects that would involve soils disturbance of one or more acres.[5] As the proposed action would disturb more than one acre (i.e., approximately 3.06 acres), a Storm Water Pollution

[5] http://www.dec.ny.gov/chemical/43133.html

Prevention Plan (SWPPP) acceptable to the Town of Southampton would be developed and submitted to both the Town of Southampton and the NYSDEC (Notice of Intent), prior to the commencement of construction activity. It is expected that the erosion and sedimentation controls to be implemented during construction as part of an approved SWPPP would include:

- Protecting of existing vegetation that would remain.
- Scheduling of clearing and grading activities to minimize the total area of land disturbed at any one time.
- Limiting the length of time areas are exposed by establishing pavement and plantings at exposed areas as soon as practicable.
- Installing sediment barriers (e.g., silt fence, hay bales) along the limits of disturbance for the duration of work. No sediment from the site would be permitted to wash onto adjacent properties, wetlands or roads (details provided on *Proposed Storm Drainage Plan* in Appendix B)
- Stabilizing graded and stripped areas and stockpiles via temporary seeding or other effective cover.
- Protecting drainage inlets through the use of sediment barriers, sediment traps, etc., to prevent sediment buildup (details provided on *Proposed Storm Drainage Plan*).
- Controlling fugitive dust (e.g., covering of stockpiles, temporary seeding, use of a water truck during extended dry periods).
- Establishing a stabilized construction entrance to prevent soil and loose debris from being tracked onto local roads (details provided on *Proposed Storm Drainage Plan*).

The above measures are designed to be consistent with the relevant portions of the *New York State Stormwater Management Design Manual* (NYSDEC, 2010) and the *New York Standards and Specifications for Erosion and Sediment Control* (NYSDEC, 2005) as required by Town Code Chapter 285 – *Stormwater Management and Erosion and Sediment Control,* and would be regularly inspected and maintained (e.g., removal of accumulated sediment and debris from drainage structures, repair of damaged sediment barriers, etc.) by a qualified inspector to ensure proper function in accordance with an approved SWPPP. Sediment barriers and other erosion control measures would remain in place until upland disturbed areas are permanently stabilized. Paved areas would be cleaned, and the drainage system cleaned and flushed as necessary to remove silt and debris. With the aforementioned control measures employed, no significant adverse erosion or sedimentation related impacts are expected.

As discussed in this section, on-site soils present moderate-to-severe limitations on development due to the presence of slopes and a sandy surface layer. The project areas to be affected by the proposed improvements do not contain any areas of severe slope, such that this limitation does not apply. Additionally, limitations associated

with a sandy surface layer would be overcome by the application of topsoil, as needed. During construction, erosion and sedimentation controls would be implemented to minimize the potential for soil-related impacts associated with the disturbance of land surfaces at the site. Overall, based on the above, no significant adverse soil-related impacts are expected to result from implementation of the proposed action.

3.1.2.2 Topography

As discussed in Section 3.1.1, the existing site elevations at the subject property range from 9± feet amsl to 60± feet amsl. There are no changes to existing site elevations proposed as part of the proposed action. Minor grading would be performed in the field area where Cottages 4 and 5 and storage sheds are proposed to be removed, but proposed grades would mimic the existing grades, and this activity is not expected to require any cut or fill. As such, there would be no need to import or export substantial quantities of material to achieve final grades across the 3.06± acres of land surface area to be disturbed. The quantity of natural material to be excavated and removed from the subject property is minor (i.e., 625± cubic yards), and is associated with the installation of stormwater management infrastructure (e.g., drywells) and sanitary system improvements. The proposed drainage system design locates stormwater collection and recharge structures in existing low points, precluding the need for any significant site grading activities. As such, the proposed action would not alter the existing topography of the subject property, and there would be no significant adverse impacts to topography as a result of the proposed action.

3.1.3 Mitigation Measures

3.1.3.1 Soils

No significant adverse soil impacts are expected to result from the implementation of the proposed action. Notwithstanding this, the follow mitigation measures have been incorporated into the proposed action to minimize potential soil impacts:

- Applying topsoil (as needed) to address potential soil limitations.
- Protecting the existing vegetation to remain.
- Scheduling of clearing and grading activities to minimize the total area of land disturbed at any one time.
- Limiting the length of time areas are exposed by establishing pavement and plantings at exposed areas as soon as practicable.

- Installing sediment barriers (e.g., silt fence, hay bales) along the limits of disturbance of the work. No sediment from the site would be permitted to wash onto adjacent properties, wetlands or roads.
- Stabilizing graded and stripped areas and stockpiles via temporary seeding or other effective cover.
- Protecting drainage inlets through the use of sediment barriers, sediment traps, etc., to prevent sediment buildup.
- Controlling fugitive dust (e.g., covering of stockpiles, temporary seeding, use of a water truck during extended dry periods).
- Establishing a stabilized construction entrance to prevent soil and loose debris from being tracked onto local roads.

It should be noted that several of the erosion measures to be implemented would minimize the potential for adverse construction-related air quality impacts, as follows:

- Limiting of the total area of soil exposed at any given time.
- Paving or planting of exposed areas as soon as practicable to minimize the duration of soil exposure.
- Covering and/or temporary seeding of stockpiles.
- Establishing stabilized construction entrances.
- Providing a water truck on-site during dry periods to dampen exposed soils.

3.1.3.2 Topography

The proposed action would not result in any significant adverse impacts to topography, and the *Proposed Storm Drainage Plan* has been designed to minimize the quantities of cut and fill. No mitigation measures for impacts to topography are warranted.

3.2 Groundwater Resources

The information contained in this Groundwater Resources section of the DEIS has been prepared by PW Grosser Consulting (with input from VHB, Jeffrey T. Butler, P.E., P.C. and Lombardo Associates, Inc.) in accordance with the Final Scope provided by the Town of Southampton (see Appendix A of this DEIS). The extent of this study is limited in scope and includes supporting information to clearly define the hydraulic relationship between the site to groundwater and to Little Fresh Pond and the surrounding wetlands. Additionally, consistent with the purpose of this DEIS, this section evaluates potential impacts of the proposed action. This study does not comprise an extensive hydrogeological investigation of Little Fresh Pond and would not try to define the hydrological framework of Little Fresh Pond, its entire watershed, or the existing sources of water quality deterioration of Little Fresh Pond.

3.2.1 Existing Conditions

3.2.1.1 Hydrogeology

Groundwater on the South Fork of Long Island results from precipitation that enters the soil in the form of recharge. This precipitation passes through an unsaturated zone to a level below where all the strata are saturated; this level is known as the water table. The main water-bearing layers beneath the subject property are the Upper Glacial, Magothy, and Lloyd Aquifers.[6,7] These three aquifers rest on the bedrock underlying Long Island. The groundwater table in this area corresponds to the sea level on the north and south shores of the South Fork and rises in elevation beneath the moraine deposit (Ronkonkoma Drift) on the north center of the South Fork, which creates groundwater mounds.[8] A hydraulic gradient is produced by the changes in elevation of the water table, which causes groundwater to flow in a perpendicular direction to the contour lines of equal elevation. In the vicinity of the subject property, the highest water table elevation corresponds to a groundwater mound formed beneath sections of the Ronkonkoma Moraine, with recorded groundwater elevations of up to 65 feet in northern Bridgehampton. From this highest water table elevation, groundwater elevation decreases in all directions towards the south and north shore.

▼

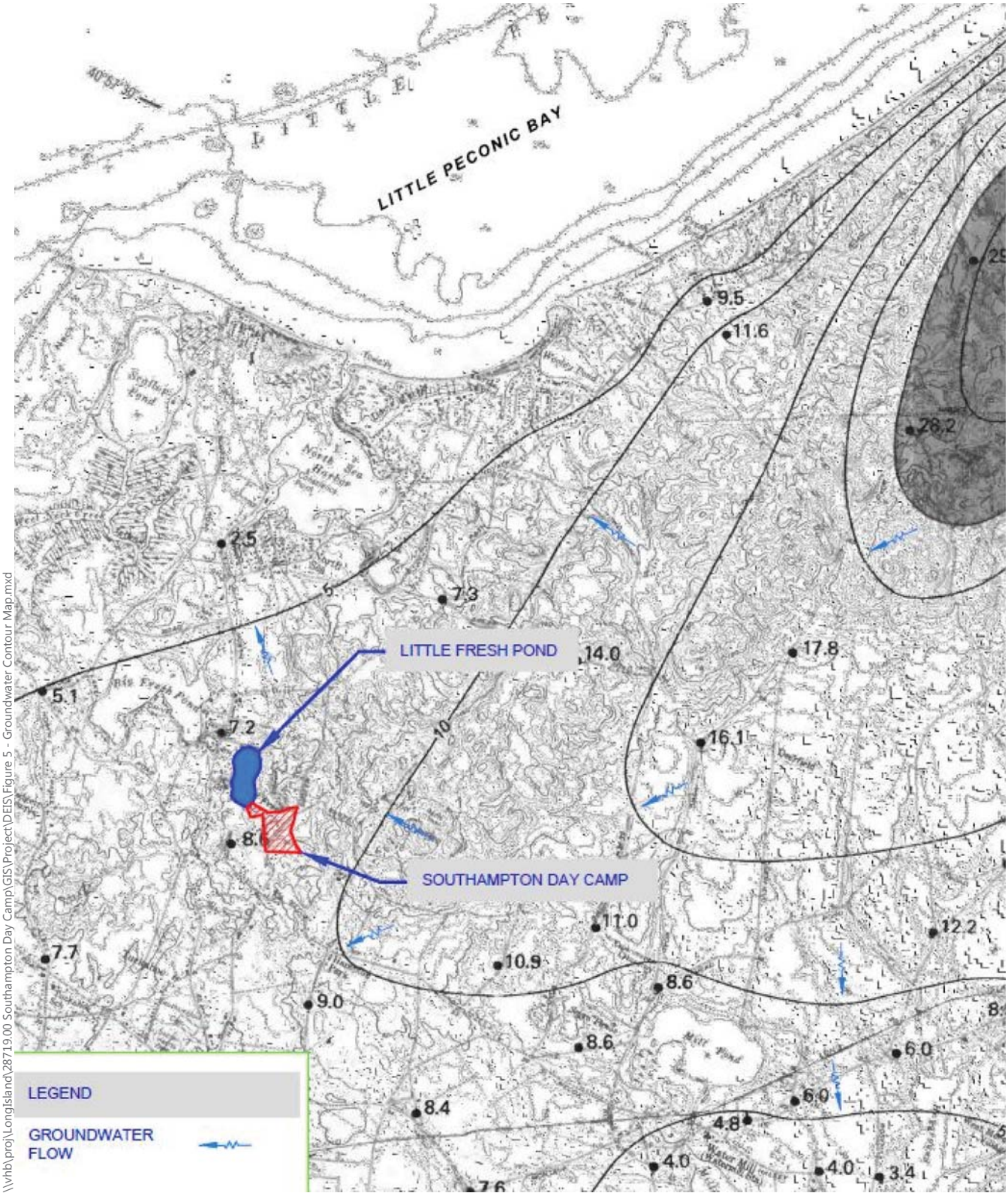
[6] Jensen, H.M. and Soren, Julian, 1974. Hydrogeology of Suffolk County, Long Island, New York, Hydrologic Investigations Atlas. Department of the Interior, U.S. Geological Survey, Washington, DC.
[7] Smolensky, D.A., Buxton, H.T., and Shernoff, P.K., 1989. Hydrologic Framework of Long Island, New York. Hydrologic Investigation Atlas, Department of the Interior, U.S. Geological Survey, Washington, DC.
[8] Nemickas, B., & Koszalka, E. J. (1982). Geohydrologic Appraisal of Water Resources of the South Fork, Long Island, New York. Washington, D.C.: U.S. Geological Survey.

The USGS has a system of observation wells that are used to infer groundwater contour lines, which help in determining the general direction of groundwater flow within the aquifer. In an aquifer where the conductivity is the same in both the horizontal and vertical directions (known as an isotropic aquifer), groundwater moves perpendicular to the contour lines.[9] Despite the fact that the hydrogeologic units on Long Island are not isotropic, this principle may be used to determine the approximate direction of groundwater flow. Based on the USGS map excerpt shown in Figure 5, the subject property is located southwest of the groundwater mound and the regional movement of groundwater beneath the site is to the west and northwest, where it ultimately discharges into the Great Peconic Bay.

3.2.1.2 Groundwater Flow

Groundwater monitoring was conducted at the site in August 2015 and November 2015. Four, two-inch diameter monitoring wells were installed in July 2015 to monitor the groundwater levels at the site. In addition, a surface water gage (SWG) was installed along the shores of Little Fresh Pond (LFP) to gage the level of the pond. Figure 6 shows the location of these monitoring wells. The monitoring well specifications and the groundwater data collected during the investigation are shown below in Table 5. The monitoring wells were placed to provide data on groundwater levels to establish groundwater flow patterns on the site and groundwater quality at key points. MW-01 was placed to represent upgradient groundwater quality. MW-02 and MW-03 were placed to represent water quality in the vicinity of the on-site sanitary waste disposal systems. In addition, MW-03 was placed to provide a point allowing for triangulation of the groundwater levels beneath the subject property. MW-04 was placed to determine the groundwater quality and water levels in the vicinity of LFP.

[9] Freeze, Allan R. and Cherry, John A., 1979. Groundwater, Engelwood Cliffs, New Jersey: Prentice-Hall, Inc.



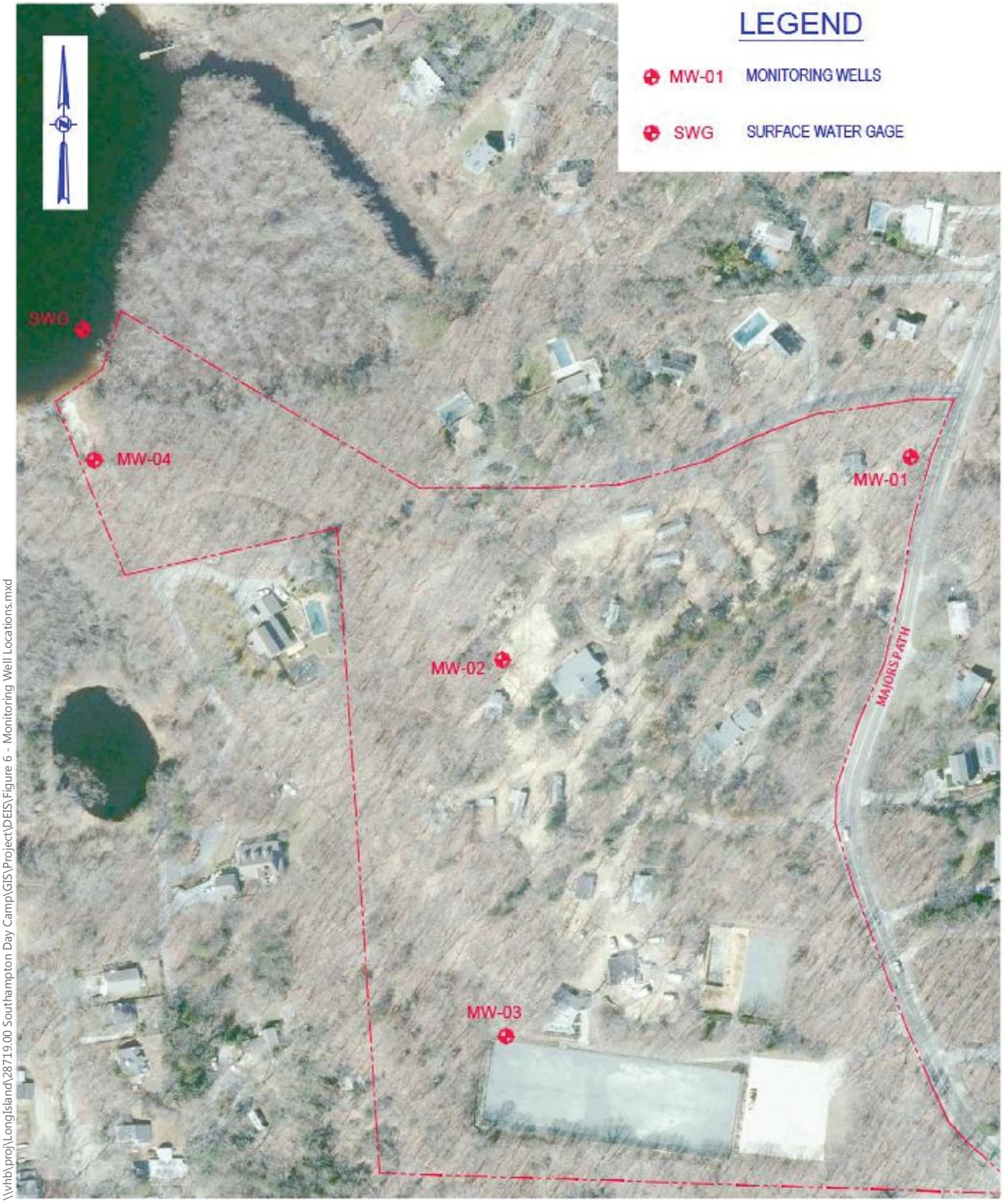
\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 5 - Groundwater Contour Map.mxd

↑ **SCALE: NOT TO SCALE**

Southampton Racquet Club & Camp | Town of Southampton, NY

Groundwater Contour Map
665 Majors Path, North Sea

Source: P.W. Grosser Consulting, Inc. (Figure 1-1)
Geohydrologic Appraisal of Water Resources of the South Fork of Long Island, New York (1982)



\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 6 - Monitoring Well Locations.mxd

↑ **SCALE: NOT TO SCALE**

Southampton Racquet Club & Camp | Town of Southampton, NY

Monitoring Well Locations
665 Majors Path, North Sea

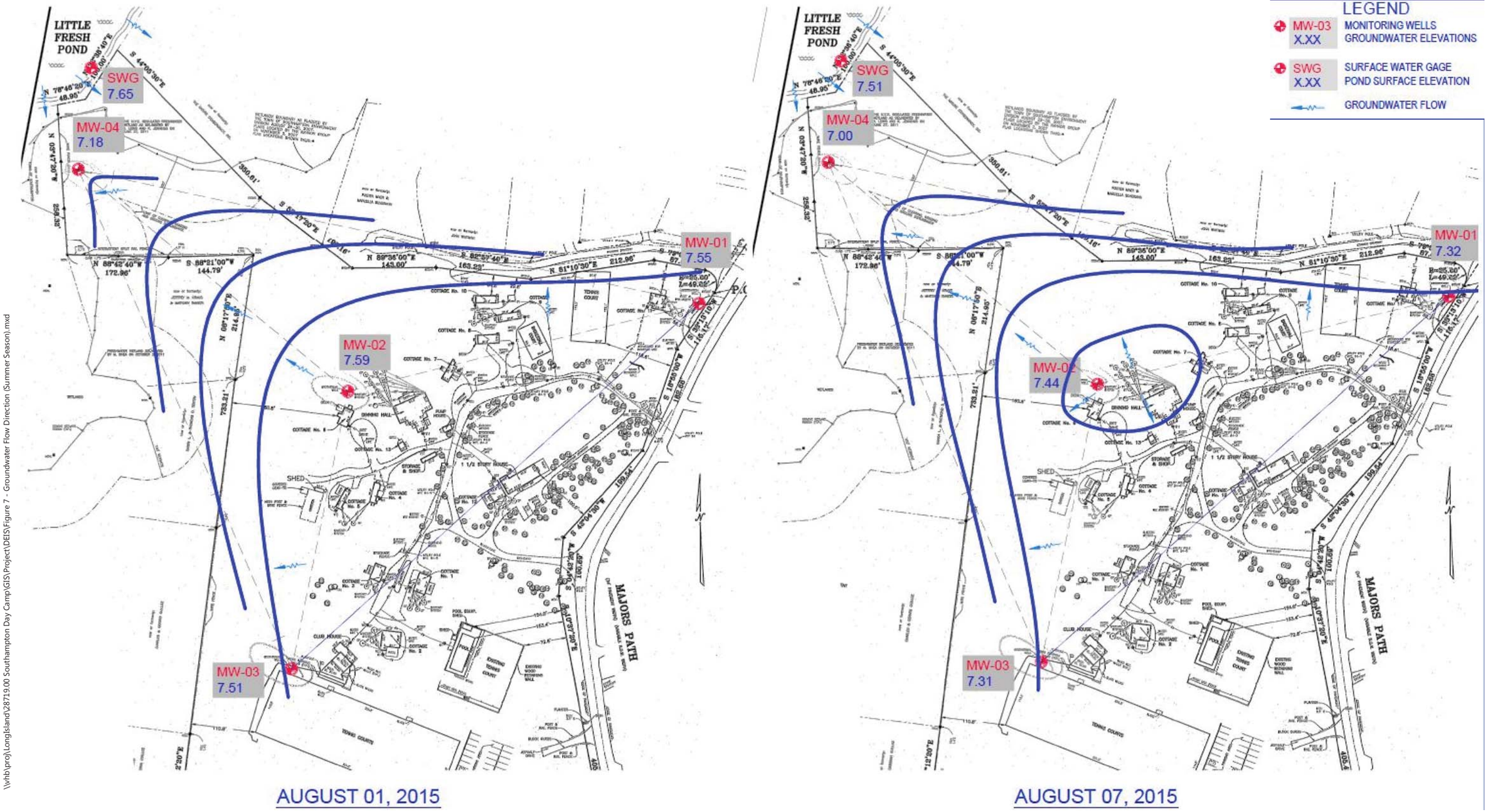
Source: P.W. Grosser Consulting, Inc. (Figure 1-2)

Table 5 – Groundwater Monitoring Well and Elevation Data

Groundwater Monitoring Wells Data									Surface Water Monitoring	
	MW-01		MW-02		MW-03		MW-04		SWG	
Top of Well Elev.	55.72'		41.26'		26.46'		20.95'		10.29'	
Screen Interval Elev.	10.29' -0.29'		10.74' - 0.74'		16.76' - 6.76'		11.61' - 1.61'		-	
Screen Length	10.0'		10.0'		10.0'		10.0'		-	
Groundwater Elevations									**Surface Water Elevation**	
Date	Depth (BGS)	Elev. (Feet.)	Depth (BGS)	Elev. (Feet.)	Depth (BGS)	Elev. (Feet.)	Depth (BGS)	Elev. (Feet.)	Gage Reading	Elev. (Feet.)
7/13/15	-	-	-	-	-	-	-	-	2.25	8.04
7/18/15	-	-	-	-	-	-	-	-	2.35	7.94
7/25/15	-	-	-	-	18.75	7.71	13.59	7.36	-	-
8/1/15	48.17	7.55	33.67	7.59	18.95	7.51	13.77	7.18	2.64	7.65
8/7/15	48.4	7.32	33.82	7.44	19.15	7.31	13.95	7.00	2.78	7.51
11/10/15	48.83	6.89	34.35	6.91	19.71	6.75	14.31	6.64	3.01	7.28
11/17/15	48.79	6.93	34.29	6.97	19.65	6.81	14.24	6.71	2.99	7.3
11/24/15	48.68	7.04	34.2	7.06	19.57	6.89	14.11	6.84	2.92	7.37

* MW – Monitoring Well
* SWG – Surface Water Gage
* BGS – Depth to Water (Below Grade Surface)
Note: Well elevations stablished by S.H.W. & S Land Surveyors, P.C. (Oct. 21, 2015)

The data presented in Table 5 confirms that the general groundwater flow direction beneath the subject property is to the west/northwest. This is consistent with previous studies that show the regional flow towards the Great Peconic Bay. The data shows a flat hydraulic gradient of the water table in the general vicinity of the site. The estimated velocity of the groundwater flow beneath the site is 0.83 feet per day (ft/day) at an average hydraulic conductivity of 350 ft/day (Nemickas & Koscalka 1982). There appears to be a small localized groundwater mound directly below the center of the facility, which is believed to be attributed to the discharge of wastewater of the existing main sanitary system. Figure 7 depicts the groundwater flow direction observed during the summer season, and Figure 8 depicts the observed groundwater flow direction during the fall season, based on the field measurements collected. It is estimated that the annual hydrological contribution from the existing sanitary systems' discharge to the groundwater is no more than 5.3 percent, or 0.44 million gallons per year (MGY), of the total annual groundwater recharge from the site. In terms of daily flow, the existing sanitary flow of 5,440 GPD equals a continuous flow of 3.7 gallons per minute (GPM).



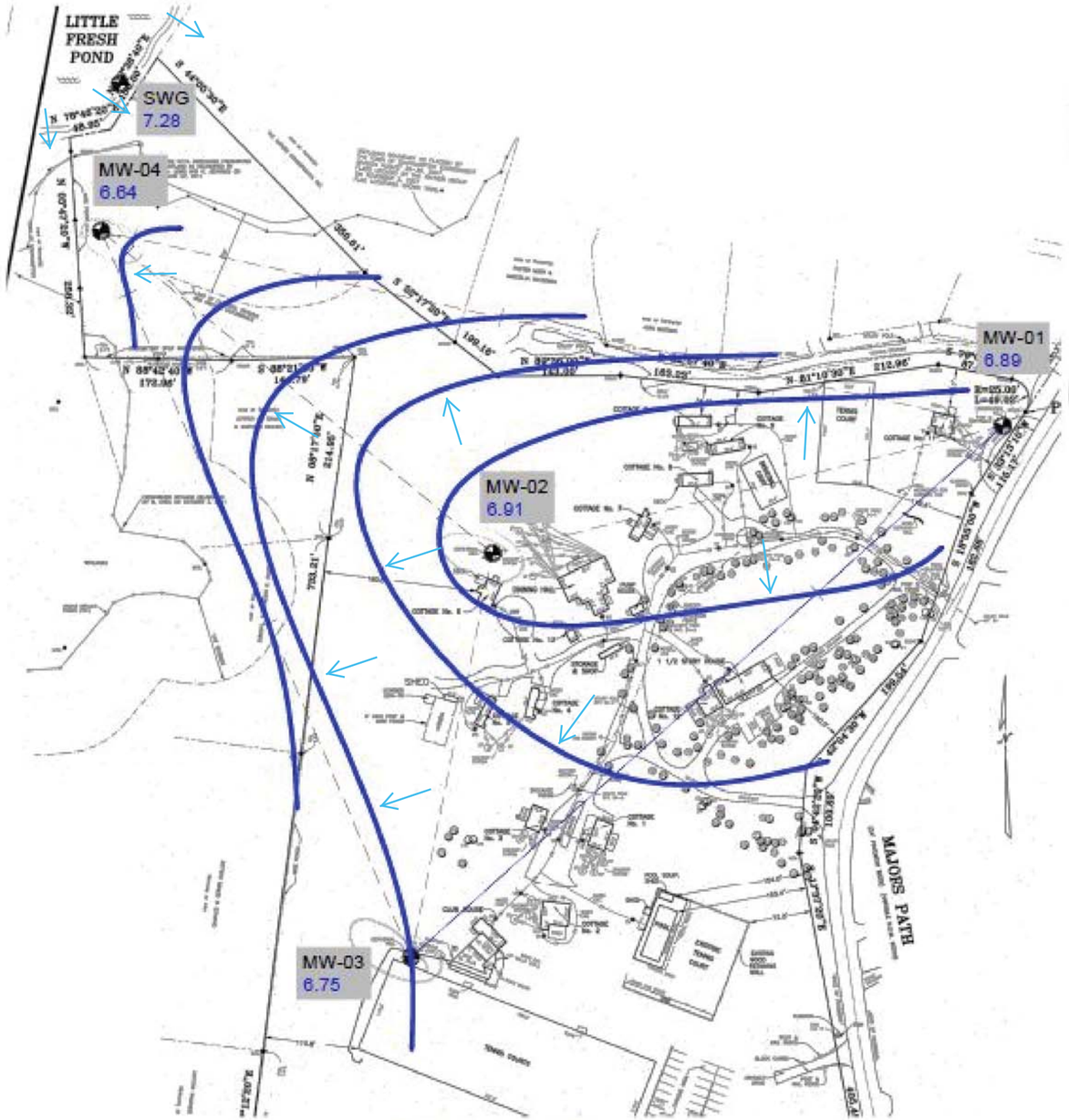
↑ **SCALE: NOT TO SCALE**

Southampton Racquet Club & Camp | Town of Southampton, NY

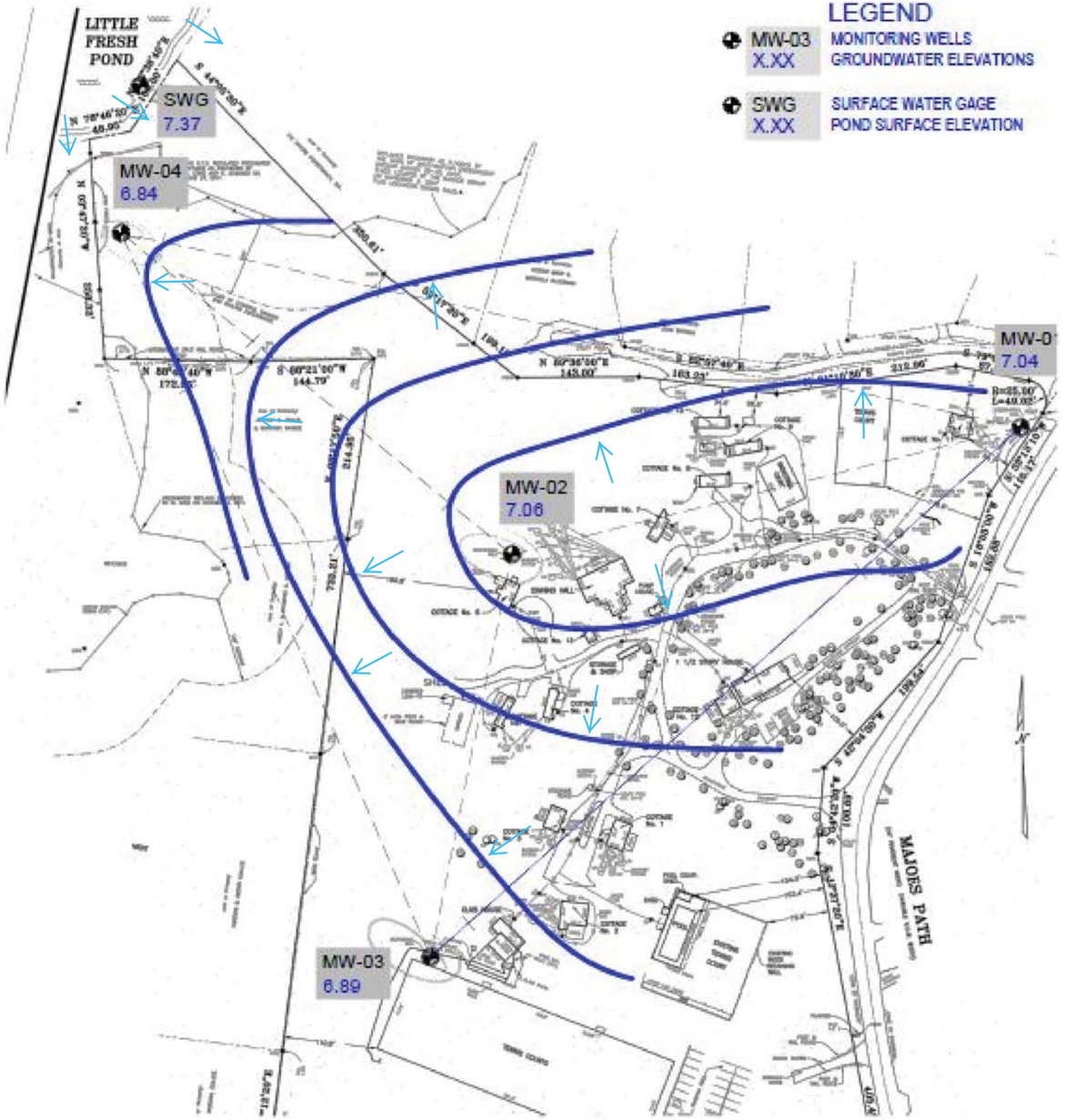
Groundwater Flow Direction (Summer Season)
665 Majors Path, North Sea

Source: P.W. Grosser Consulting, Inc. (Figure 1-3A)

\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 7 - Groundwater Flow Direction (Summer Season).mxd



NOVEMBER 10, 2015



NOVEMBER 24, 2015

↑ **SCALE: NOT TO SCALE**

Southampton Racquet Club & Camp | Town of Southampton, NY

Groundwater Flow Direction (Fall Season)
665 Majors Path, North Sea

Source: P.W. Grosser Consulting, Inc. (Figure 1-3B)

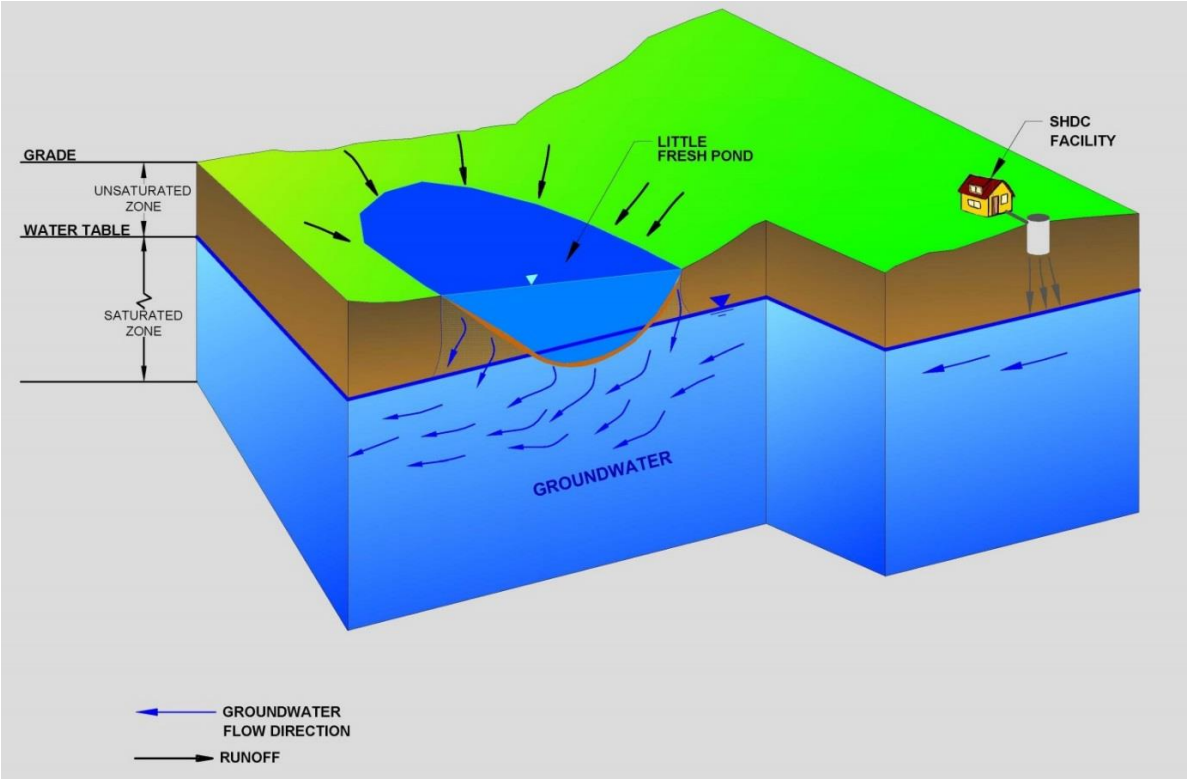
\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 8 - Groundwater Flow Direction (Fall Season)_Aug16.mxd

At this discharge rate, any groundwater mounding attributed to the sanitary flow is minimal and does not affect the overall local water table elevation.

Site Recharge = 8.26 MGY (see groundwater budget Section 3.2.1.3)
Existing Sanitary Flow = (5,440 GPD x 80 days)/10^6 = 0.44 MGY

The data collected also shows that the surface water elevation of LFP is higher than the groundwater elevations of all the monitoring wells installed as part of the investigation. The surface water elevation is, on average, 6-inches higher than the groundwater elevation of monitoring well No. 4, which is the closest monitoring well to LFP (170 ft. approximately). Since LFP has no surface water outlets to discharge the incoming stormwater and runoff, the higher surface water elevation of the pond creates a vertical hydraulic gradient that recharges vertically and radially to groundwater. A visualization of the relationship between the regional groundwater flow and localized flow around LFP is presented as Figure 9. Although the regional groundwater flow suggests that the groundwater beneath the site flows toward LFP, the pond's vertical hydraulic gradient reverses the localized flow away from the pond. This data is further supported by the groundwater budget analysis and the groundwater quality data discussed in Section 3.2.1.3 (Groundwater Budget) and Section 3.2.1.6 (Groundwater Quality) of this DEIS.

Figure 9 – Little Fresh Pond Surface Water Flow



3.2.1.3 Groundwater Budget

A groundwater budget is used to determine the total recharge volume that a site generates. The budget indicates that not all precipitation that falls onto land is recharged to groundwater. The loss in recharge is represented by the sum of evapotranspiration (the sum of evaporation and plant transpiration) and overland runoff. The groundwater budget for an area is defined by the hydrologic budget equation, which states that recharge equals precipitation minus evapotranspiration and minus overland runoff.[10] The equation is expressed as follows:

$$R = P - (E + Q)$$

Where:
R = Recharge
P = Precipitation
E = Evapotranspiration
Q = Overland Runoff

The site recharge of the subject property is as follows:

Site Area = 17.28 acres (752,716 SF)
Precipitation = 20.6 MGY (44 inches per year)
Evaporation = 10.3 MGY (22 inches per year)
Overland Runoff = 2.1 MGY (10% of tributary)
Recharge = 20.6 MGY – (10.3 MGY + 2.1 MGY) = 8.26 MGY

This water budget equation can be used to determine the total recharge volume that LFP generates. However, the equation must be modified to apply to a water body. In this scenario, there would only be water evaporation (E_{va}), and there would not be overland runoff losses. In addition, the overland runoff of areas tributary to LFP must be added to the total recharge volume since this runoff volume ultimately discharges to LFP. The equation is expressed as follows:

$$R = (P + Q_{ad}) - E_{va}.$$

Where:
R = Recharge
P = Precipitation
E_{va} = Evapotranspiration
Q_{ad} = Overland Runoff of adjacent areas

The total water budget for LFP is shown below:

Pond Area = 19.3 acres (840,000 Sq. Ft.)

[10] Suffolk County Department of Health Services, 1987. Suffolk County Sanitary Code – Article 6 Realty Subdivisions, Development and Other Construction Projects, Amended March 4, 1987, Code of Administrative Regulations, Hauppauge, New York. p5-29.

Precipitation	= 23.0 MGY (44 inches per year)
Evaporation	= 17.8 MGY (34 inches per year)
Overland Runoff	= 14.0 MGY (10% of tributary)
Recharge	= (23.0 MGY + 14.0 MGY) - 17.8 MGY = 19.2 MGY

The surface area of Little Fresh Pond is approximately 19.3 acres. The pond has surface water contributors and no outlet. Inflows to the pond consist of precipitation falling on the surface of the pond and overland stormwater flow from the surrounding area that finds its way to the pond. Precipitation in the Southampton area averages slightly more than 44 inches per year[11] or approximately 23 MGYover the 19.3-acre pond surface. The tributary drainage area of the pond is approximately 118 acres and about 10 percent of the precipitation falling on this area travels to the pond (see Figure 10). This 10 percent runoff is a conservative estimate of the total rainfall volume, in part justified by the sandy soil conditions and woodland leaf litter in portions of the watershed. The actual runoff volume would depend on multiple factors such as rainfall intensity, land use and land slope.[12] The runoff from precipitation contributes approximately 14 MGYfor a total inflow to the pond of 37 MGY. Outflows from the pond consist of evaporation from the surface of the pond and recharge to the groundwater system. Evaporation from surface waters on Long Island is estimated to be 34 inches per year.[13] As such, based on the area of the pond, the evaporation of Little Fresh Pond accounts for approximately 17.8 MGY. Recharge to the local groundwater accounts for the difference between the total inflows minus the evaporation (approximately 19 MGY). These values indicate that Little Fresh Pond provides a net recharge to the groundwater system and that the net yearly flow is away from the pond.

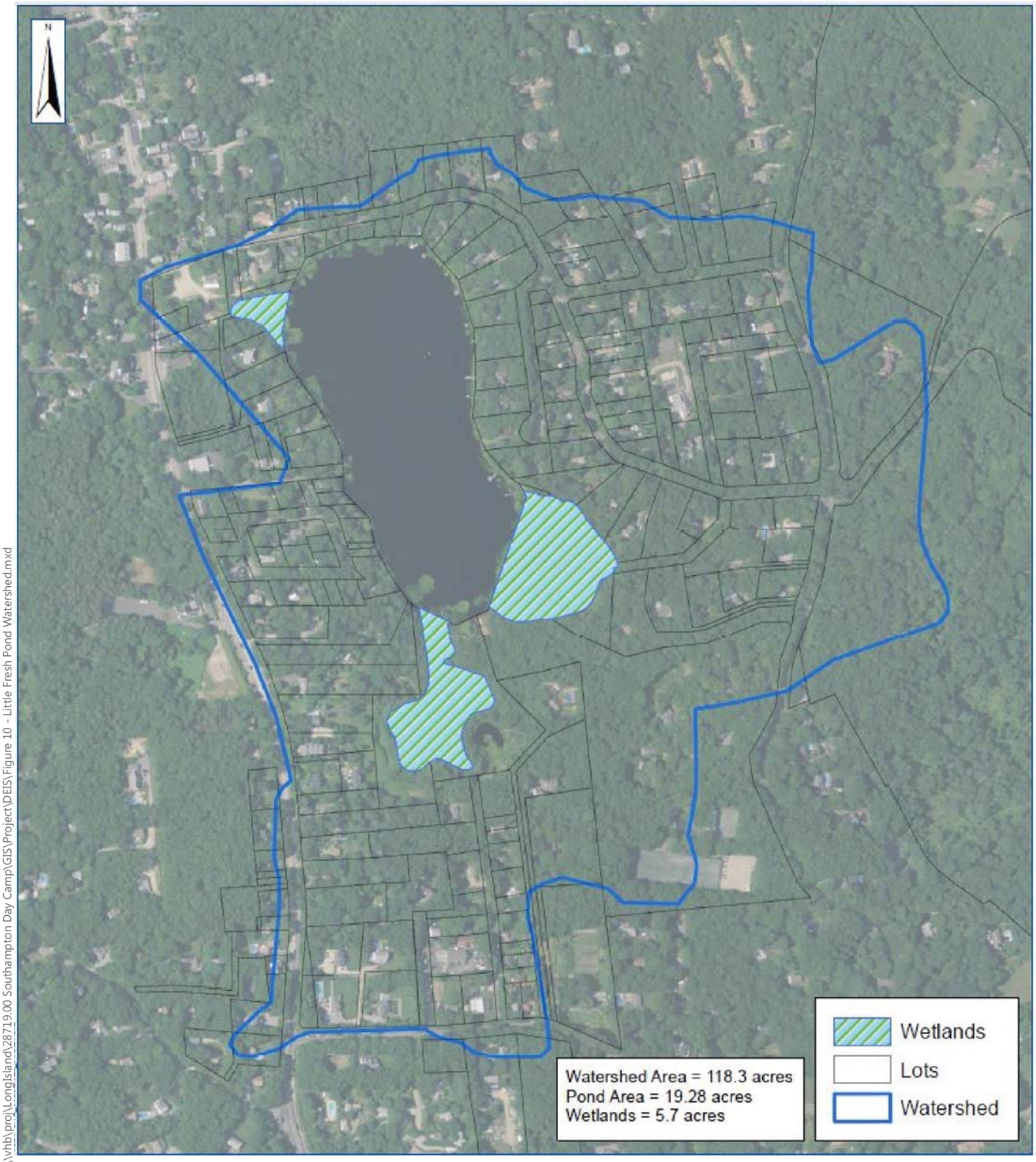
It is recognized that seasonal variations in rainfall and evaporation can change the water flux between the pond and the groundwater system. During prolonged periods of little or no rainfall and high evaporation, pond levels may fall to the point where groundwater inflow is induced to Little Fresh Pond. However, the groundwater monitoring performed over the summer months was conducted during a prolonged period of little rain and warm temperatures. Yet, the data showed that there is an outflow of the pond's surface water to the groundwater system.

▼

[11] Cohen, P., Franke, O., & Foxworthy, B. (1968). An Atlas of Long Island's Water Resources. U.S. Geological Survey in cooperation with the New York State Water Resources Commission.

[12] Ven Te Chow, P. (1964). Handbook of Applied Hydrology. In P. Ven Te Chow, Handbook of Applied Hydrology (pp. 14-8). McGraw-Hill, Inc.

[13] Pluhowski, E., & Kantrowitz, I. (1964). Hydrology of the Babylon-Islip Area, Suffolk County, Long Island, New York. Washington DC: U.S. Geological Survey.



\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 10 - Little Fresh Pond Watershed.mxd

↑ **SCALE: NOT TO SCALE**

Southampton Racquet Club & Camp | Town of Southampton, NY

Little Fresh Pond Watershed
665 Majors Path, North Sea

Source: P.W. Grosser Consulting, Inc. (Figure 1-5)

3.2.1.4 Groundwater Management Plans

Long Island Comprehensive Waste Treatment Management Plan (208 Study) – In 1978, under a program funded by Section 208 of the 1972 Federal Water Pollution Control Act Amendments, the Long Island Regional Planning Board, in association with other agencies, prepared a management plan for Long Island groundwater resources. The purpose of the "208 Study" was to investigate best practices for groundwater and surface water protection and investigate waste disposal options. Based on the groundwater flow patterns and quality, the study formulated a management plan defined by Hydrogeologic Zones. These definitions were the basis for the designation of Groundwater Management Zones (GMZ) by the SCDHS and have been used to establish the Suffolk County Sanitary Code (SCSC) Article 6 standards that apply to sanitary wastewater treatment. This article was enacted to limit the nitrogen concentration in groundwater that is discharged from on-site sanitary systems. Under SCSC Article 6, a Population Density Equivalent for the subject site must be determined to define the required type of sewage disposal system for the proposed action. The Population Density Equivalent (or total density flow) is compared to the design sewage flow for the project and, if the project's proposed design sewage flow exceeds the total density flow, an on-site sewage treatment system is required. If the project's proposed design sewage flow is lower than the population density equivalent, a conventional subsurface sewage disposal system (i.e. a septic system) may be used, contingent upon the system complying with current design standards and the unavailability of a community sewerage system.

The subject property is in GMZ-V. The SCDHS has established discharge limits for each GMZ. GMZ-V has a limit of 300 GPD per acre (GPD/acre) of sewage discharge to on-site sanitary systems. Based on the size of the subject property, the discharge limit of wastewater to the ground would be 5,184 GPD (i.e., 17.28 acres x 300 gallons/acre). Currently, the facility has an SCDHS approved permit to discharge up to 5,440 GPD of wastewater to on-site septic systems. The facility is allowed to discharge in excess of the Article 6 amount because it holds a grandfathered sewage flow of up to 9,450 GPD, as discussed further in this DEIS. Section 3.2.2.3 of this DEIS provides a detailed analysis of the wastewater discharge from the site, the grandfathered flow, and compliance with applicable SCDHS regulations.

Nationwide Urban Runoff Program (NURP) – Stormwater, as runoff, is the means by which pollutants and contaminants move across the ground surface to surface waters or through the soil to groundwater. Pollutants accumulate and are disposed of on land and improved surfaces. Sources of pollutants include:

- Sediment,
- Pesticides and nutrients from lawns and gardens,
- Road deicers (such as salt),
- Oil, grease, and toxic chemicals from motor vehicles,

- Viruses, bacteria, and nutrients from pet waste and failing septic systems,
- Heavy metals from roof shingles, motor vehicles, and other sources.

The Nationwide Urban Runoff Program is a research project that was conducted by the USEPA between 1979 and 1983, with the Long Island Segment having been prepared in 1982 by the Long Island Regional Planning Board (LIRPB). The program determined the potential pollutants associated with stormwater based on different types of land uses. Among other things, the program attempted to address the following:

- The actual proportion of the total pollutant loading that can be attributed to stormwater runoff, given the presence of other point and non-point sources and conditions within the receiving waters.

The project was carried out by the USGS to determine the following on Long Island:

- The type, quantity, source, and fate of pollutants in stormwater runoff routed to recharge basins,
- The extent to which these pollutants are or are not attenuated as they percolate through the unsaturated zone.

Five recharge basins in areas with distinct land use types were selected for intensive monitoring during and immediately following storm events (specifically precipitation events) in order to accomplish the project's objectives. Three basins in Nassau County and two basins in Suffolk County were chosen for study based on the type of land use from which they received stormwater. The following is a list and description of each drainage area:

Site Location	Land Use
Centereach	Strip Commercial
Huntington	Shopping Mall, Parking Lot
Laurel Hollow	Low Density Residential (1 acre zoning)
Plainview	Major Highway
Syosset	Medium Density Residential (1/4 acre zoning)

Based on the sampling performed, the NURP study reached the following conclusions, among others:

Conclusion: Most of the runoff into recharge basins is derived from rain that falls directly on impervious surfaces, except during storms of high intensity, high volume and/or long duration (when additional runoff can be derived from rainfall on permeable surfaces).

Conclusion: In general, with the exception of lead and chloride, the concentrations of inorganic chemicals measured in stormwater runoff do not have the potential to adversely affect the groundwater quality.

Conclusion: Coliform and fecal streptococcal indicator bacteria are removed from stormwater as it infiltrates through soil.

3.2.1.5 Drinking Water Supply

There are three Suffolk County Water Authority (SCWA) community supply well fields in the North Sea area. The closest well field to the subject property is 0.6 mile east of the subject property (Edge of Woods Road well field). This well field has three individual supply wells; two are screened in the Upper Glacial Aquifer (#1 & #2) and the third one is screened in the Magothy Aquifer. The highest estimated average daily flow from these wells is between 200 to 300 GPM and the estimated peak flow does not exceed 630 GPM. No influence on the water table elevation or direction of flow is expected in the vicinity of the site due to the operation of these supply wells.

The SCWA has an existing public water distribution network in the vicinity of Little Fresh Pond and all the properties within the watershed area have access to public water. However, the SCWA records show that only 48 percent of the properties within the watershed are connected to public water and the remaining are assumed to have private water wells. Private wells for residential applications are typically shallow, low flow (5 – 10 GPM) wells and are operated intermittently throughout the day. The area around the subject property and Little Fresh Pond is mainly low to medium density residential lots with minimal groundwater extraction from on-site private water wells. A SCWA Freedom of Information Request revealed that most of the properties adjacent to the subject property are not connected to the SCWA drinking water distribution network, and therefore, are assumed to have their own private water wells. All of the existing sanitary systems on the subject property are located more than 150 feet away from private water wells as required by the SCDHS. These private water wells are shown on the SCDHS approved sanitary system upgrade plan in Appendix C of this DEIS.

The facilities on the subject property are connected to the SCWA distribution system. The subject property has three low flow water wells that were previously used for drinking water supply. After the connection of the facilities' plumbing system to the SCWA distribution system in 2013, the wells were repurposed to be used as irrigation wells.

As explained throughout this DEIS, enrollment at the Southampton Racquet Club and Camp is has increased for the 2016 season, absent the proposed action (i.e., to 280 campers and 66 staff [including 53 overnight staff]). Based on applicable SCDHS

design sewage flow rates for factor of 5 GPD per capita for campers and day staff and 75 GPD for overnight staff, water usage at the subject property is approximately 5,440 GPD during the 2016 camp season. It is noted that water usage could increase, even absent the proposed action.

3.2.1.6 Groundwater Quality

NYSDEC classifies the groundwater of Long Island as Class GA, which means that the best use of these waters is as a source of potable water supply. Groundwater and surface water samples were collected as part of the groundwater quality assessment beneath the subject property. The samples were tested for common water chemistry and the results were compared to the New York State Class GA groundwater standards.

Two sets of tests were performed as part of the assessment. The groundwater samples were collected from the monitoring wells installed onsite in July 2015 as shown in Figure 6 (see Page 39 of this DEIS). The primary set of tests was conducted in August 2015 and additional testing for Nitrogen and Phosphorus compounds were conducted in November 2015. The groundwater samples collected in August 2015 were unfiltered and contained soil sediments that entered the well casings during the surging caused by the collection bailer. Typical laboratory testing procedures used the entire sample, including the sediments, and therefore those results may not properly represent groundwater quality. These attached compounds may have increased the total concentrations of certain parameters in the first set of tests. The second set of testing (Nitrogen and Phosphorus only) was conducted with filtered samples to isolate only the chemicals soluble in groundwater and not those attached to soil particles. The NYSDEC publication, "Sampling Guides & Protocols" specifies that, where there are cases of wells with extremely high concentrations of sediments, most of the samples intended for metals analysis must be filtered. The results of the August and November sampling events are shown below in Table 6 and Table 7, respectively:

Table 6 – Groundwater Analytical Results (August 7, 2015)

CLIENT SAMPLE ID			MW-01		MW-02		MW-03		MW-04	
	NY-AWQS Standards (GA)*	Units		Qual		Qual		Qual		Qual
General Chemistry										
Alkalinity, Total		mg CaCO3/L	20.7		13		36.9		5.3	
Chloride	250	mg/l	35		16		33		14	
Nitrogen, Ammonia	2	mg/l	0.105	U	0.398	J	0.105	U	0.119	J
Nitrogen, Nitrite	1	mg/l	0.032	J	0.028	J	0.033	J	0.027	J
Nitrogen, Nitrate	10	mg/l	0.598		0.253		0.018	U	0.018	U
Total Nitrogen	-***	mg/l	2.8		2.7		6.6		2.7	
Nitrogen, Total Kjeldahl		mg/l	2.14		2.43		6.56		2.71	
Phosphorus, Total		mg/l	6.68		9.12		23.9		7.96	
Phosphate, Total		mg/l	20		28		73		24	
Total Hardness by SM 2340B										
Hardness		mg/l	130		130		180		73	
Dissolved Metals										
Iron, Dissolved	0.3	mg/l	0.638		0.352		3.07		0.663	
Manganese, Dissolved	0.3	mg/l	0.2354		0.4054		0.1927		1.14	
Potassium, Dissolved		mg/l	1.09		0.992		0.685		0.872	
Sodium, Dissolved	20	mg/l	20.6		8.15		5.87		8.82	
Polychlorinated Biphenyls										
Aroclor 1016	0.09	ug/l	0.055	U	0.055	U	0.055	U	0.055	U
Aroclor 1221	0.09	ug/l	0.053	U	0.053	U	0.053	U	0.053	U
Aroclor 1232	0.09	ug/l	0.031	U	0.031	U	0.031	U	0.031	U
Aroclor 1242	0.09	ug/l	0.06	U	0.06	U	0.06	U	0.06	U
Aroclor 1248	0.09	ug/l	0.051	U	0.051	U	0.051	U	0.051	U
Aroclor 1254	0.09	ug/l	0.034	U	0.034	U	0.034	U	0.034	U
Aroclor 1260	0.09	ug/l	0.032	U	0.032	U	0.032	U	0.032	U
Aroclor 1262	0.09	ug/l	0.029	U	0.029	U	0.029	U	0.029	U
Aroclor 1268	0.09	ug/l	0.038	U	0.038	U	0.038	U	0.038	U
PCBs, Total		ug/l	0.029	U	0.029	U	0.029	U	0.029	U

Table 6, Continued

CLIENT SAMPLE ID			MW-01		MW-02		MW-03		MW-04	
	NY-AWQS Standards (GA)*	Units		Qual		Qual		Qual		Qual
Organochlorine Pesticides										
4,4'-DDD	0.3	ug/l	0.005	U	0.005	U	0.005	U	0.005	U
4,4'-DDE	0.2	ug/l	0.004	U	0.004	U	0.004	U	0.004	U
4,4'-DDT	0.2	ug/l	0.004	U	0.004	U	0.004	U	0.004	U
Aldrin	ND	ug/l	0.002	U	0.002	U	0.002	U	0.002	U
Alpha-BHC	0.01	ug/l	0.004	U	0.004	U	0.004	U	0.004	U
Beta-BHC	0.04	ug/l	0.006	U	0.006	U	0.006	U	0.006	U
Chlordane	0.05	ug/l	0.046	U	0.572		0.148	J	0.046	U
cis-Chlordane		ug/l	0.007	U	0.033		0.022		0.007	U
Delta-BHC	0.04	ug/l	0.005	U	0.005	U	0.005	U	0.005	U
Dieldrin	0.004	ug/l	0.004	U	0.004	U	0.004	U	0.004	U
Endosulfan I		ug/l	0.003	U	0.003	U	0.003	U	0.003	U
Endosulfan II		ug/l	0.005	U	0.005	U	0.005	U	0.005	U
Endosulfan sulfate		ug/l	0.005	U	0.005	U	0.005	U	0.005	U
Endrin	ND	ug/l	0.004	U	0.004	U	0.004	U	0.004	U
Endrin ketone	5	ug/l	0.005	U	0.005	U	0.005	U	0.005	U
Heptachlor	0.04	ug/l	0.003	U	0.031		0.003	U	0.003	U
Heptachlor epoxide	0.03	ug/l	0.004	U	0.004	U	0.004	U	0.004	U
Lindane	0.05	ug/l	0.004	U	0.004	U	0.004	U	0.004	U
Methoxychlor	35	ug/l	0.007	U	0.007	U	0.007	U	0.007	U
Toxaphene	0.06	ug/l	0.063	U	0.063	U	0.063	U	0.063	U
trans-Chlordane		ug/l	0.007	J	0.047		0.02		0.008	J

* Water Class GA – NYSDEC Part 701

*** No NY-AWQS for Total Nitrogen. Groundwater Effluent Limitations = 10 mg/l.

J = Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). These estimated values are not used when adding all the compounds of the same family.

U = Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

= Above Standard

= Guidance Value

The results of the first set of groundwater quality investigation reveals that most of the parameters tested are below the 6 NYCRR Part 701 Class GA standards. However, certain parameters found above the standards include Iron, Manganese, Dissolved Sodium, and Chlordane. Other parameters that were found below the standards, but still in higher than average concentrations or in higher concentrations than expected in the area include Total Phosphorus and Total Nitrogen.

According to the results of the first set of samples, total phosphorus concentrations found in the groundwater at the site are higher than the normal ambient groundwater quality. The source of phosphorus in groundwater is typically from untreated

wastewater and naturally occurring organic phosphorus in soils. Inorganic phosphorus is found mainly in cleaning products and detergents disposed in wastewater, while organic phosphorus originates from food remains. The use of phosphorus in detergents was banned from use in New York State in 2010 to reduce the potential surface water contamination and associated algae blooms. The highest concentration of total phosphorus and total phosphate were found in monitoring well No. 3 with a value of 23.9 mg/l and 73 mg/l respectively. This monitoring well is located downstream of existing on-site sanitary systems. Typical phosphorus concentrations in residential areas with on-site septic systems are found to the range of 0.2 mg/l to 32 mg/l with average concentrations of 10.4 mg/l (National Environmental Services Center, 2013). The highest concentration of 23.0 mg/l found in monitoring well No. 3, is higher than average values and somewhat higher than expected from this predominately one-half acre residential area.

Total Nitrogen levels found during the first set of testing were below the groundwater ambient quality standards. Total Kjeldahl Nitrogen (TKN) values were found higher than normal and that which was expected.

Chlordane was encountered in monitoring wells No. 2 and No. 3 in concentrations above the NYSDEC standards. This compound is a pesticide used in agricultural applications, lawns, gardens and as a termite treatment product. Chlordane was banned from use in the United Sates in the 70's and 80's for most uses. Chlordane tends to stay in soil for long periods of time (over 20 years). At the present time, since the facility is connected to the SCWA water distribution system, there are no reasons to conduct Chlordane mitigation. If the facility intends to use the irrigation wells, they would be sampled for Chlordane. Typical low flow wells are screened 40 feet below the static groundwater in comparison to the samples collected as part of this investigation that were collected from the first couple of feet of the water table. At the well screen depth, there is a possibility that the groundwater is not impacted with Chlordane. Furthermore, since the samples were unfiltered, the laboratory results may be of Chlordane attached to soil particles and not soluble in groundwater.

The high concentration of Sodium found in monitoring well No. 1 is believed to originate from Sodium Chloride (common road salt) due to road winter de-icing operations, as this well is located adjacent to Majors Path.

Table 7 – Groundwater Analytical Results (November 24, 2015)

CLIENT SAMPLE ID			MW-01		MW-02		MW-03		MW-04	
	NY-AWQS Standards (GA)*	Units		Qual		Qual		Qual		Qual
General Chemistry										
Nitrogen, Ammonia	0.045	mg/l	0.030	J	0.026	J	ND	U	0.045	J
Nitrogen, Nitrite	0.019	mg/l	0.012	J	0.012	J	ND	U	0.019	J
Nitrogen, Nitrate	0.625	mg/l	0.526		0.098	J	0.044	J	0.625	
Total Nitrogen	0.620	mg/l	0.530		0.098	J	0.044	J	0.620	
Nitrogen, Total Kjeldahl	0.620	mg/l	0.530		ND	U	ND	U	0.620	
Phosphorus, Total	0.162	mg/l	0.176	J	ND	U	0.116	J	0.162	J
Phosphate, Total	0.003	mg/l	0.004	J	ND	U	ND	U	0.003	ND

* Water Class GA – NYSDEC Part 701

*** No NY-AWQS for Total Nitrogen. Groundwater Effluent Limitations = 10 mg/l.

J = Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). These estimated values are not used when adding all the compounds of the same family.

U = Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

= Above Standard

= Guidance Value

For the second set of groundwater testing (November 2015), the water samples collected were filtered at the site using a laboratory supplied manual filtering pump. The intent of the sample filtering was to avoid the collection of soil sediments present in the turbid groundwater samples that could have attached organic compounds. The second set of tests included only Nitrogen and Phosphorus compounds parameters. The results, as shown in Table 7, show substantially lower concentrations between the first and second sets of test confirming that organic compounds were most likely attached to the soil sediments of the first set of samples. The Phosphorus compounds concentrations in most of the samples had non-detect results (MW-1& MW-4), while the other two samples (MW-2 & MW-3) show negligible estimated concentration values significantly below the NYS standards. Similar results are noted for the Nitrogen compounds. There are multiple non-detect results as well as some minor estimated values which are below the standards. The estimated values (J qualifiers) do not add to the total concentration of Nitrogen (TN) or Phosphorus (TP). The concentrations of these J-flagged compounds are considered estimates, below the quantitation Limit (RL), but above the laboratories' Method Detection Limit (MDL).

In addition to the groundwater and surface water testing, the facility undertook a substantial upgrade to their sanitary systems in 2013. As part of this upgrade, fourteen sanitary leaching structures at the site were tested prior to their removal. This environmental study was conducted as per the SCDHS Office of Pollution Control's standards. Sludge samples from the bottom of the structures were collected and sent to an approved laboratory to be tested for the list of contaminants required by SCDHS. Only one sample (Sample No. 6) had levels above the county's action

levels for Toluene, and four other samples (Sample Nos. 1, 2, 4 and 8) had levels of metals above the county's cleanup objectives, but below the action levels. Leaching Structure No. 6 was remediated as per Suffolk County's standards prior to being removed. See Appendix L for the complete sanitary leaching structure sampling and analysis report by Eastern Environmental Solutions, Inc..

3.2.1.7 Regulatory Requirements

The State of New York through the Environmental Conservation Law (ECL), allows the NYSDEC to implement and enforce environmental regulations to protect public health and safety. Chapter X (Division of Water) of the state environmental law lists the various regulations related to water resources.

Freshwater Wetlands Permits Program

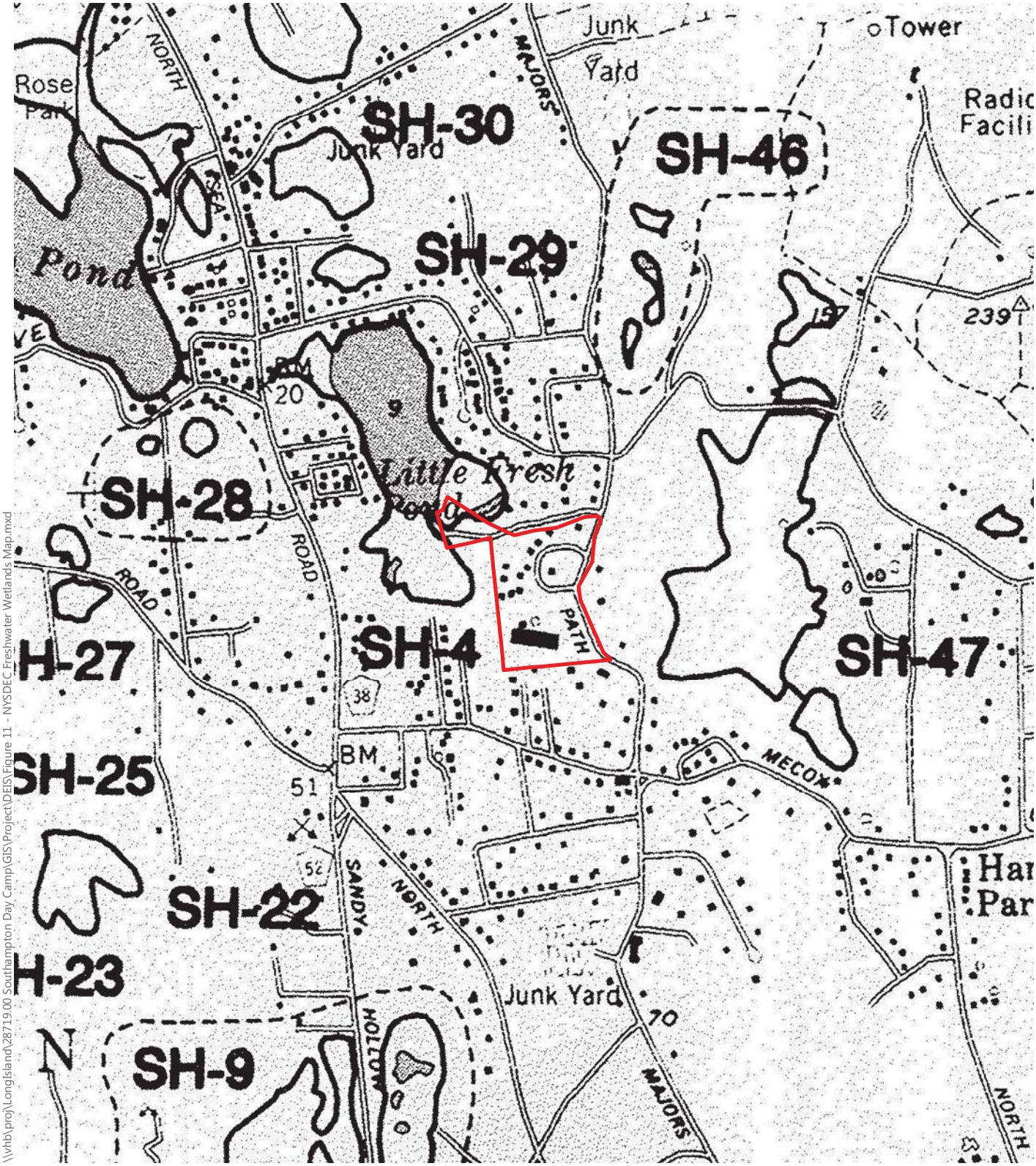
Under the Freshwater Wetlands Program (NYSDEC Article 24 of the ECL), any previously designated "wetlands" by the state are subject to permits for regulated activities. The NYSDEC Region 1 office in Stony Brook administers the wetlands permit process for the Long Island Region. Activities occurring within wetlands and areas adjacent to wetlands (within 100 feet of the wetland boundary) inflicting a substantial effect are subject to regulation.

Little Fresh Pond and the surrounding wetlands areas are a 34.9±-acre, Class 2 regulated NYSDEC Freshwater Wetland (Wetland ID No. SH-4)[14] (see Figure 11). There are some adjacent areas to the pond that are also recognized as wetlands. These areas may or may not have standing water during all seasons of the year, according to the US Fish & Wildlife Services (USFWS) National Wetlands Inventory (NWI) guidance material (see Figure 12). Under existing conditions, the subject property does not have any improvements within regulated wetlands or in the adjacent 100-feet buffer zone, including any sanitary systems discharging to groundwater.

State Pollutant Discharge Elimination System (SPDES) Permit Program

The SPDES regulation seeks to eliminate the pollution of New York waters by controlling point source discharges of wastewater and stormwater to surface waters and groundwater. A general permit (GP-0-05-002) is required for minor SPDES projects and is applicable to sanitary sewage discharges from private, commercial or institutional establishments with design flows in excess of 1,000 and less than 10,000 GPD to groundwater (excluding industrial waste). The site currently has an approved SPDES permit for sewage discharge into the ground. This permit was issued in 2013 by the Suffolk County Office of Wastewater Management. The existing SPDES permit is based on a sewage discharge flow of 5,440 GPD.

[14] http://www.dec.ny.gov/imsmaps/ERM/viewer.htm



\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 11 - NYSDEC Freshwater Wetlands Map.mxd

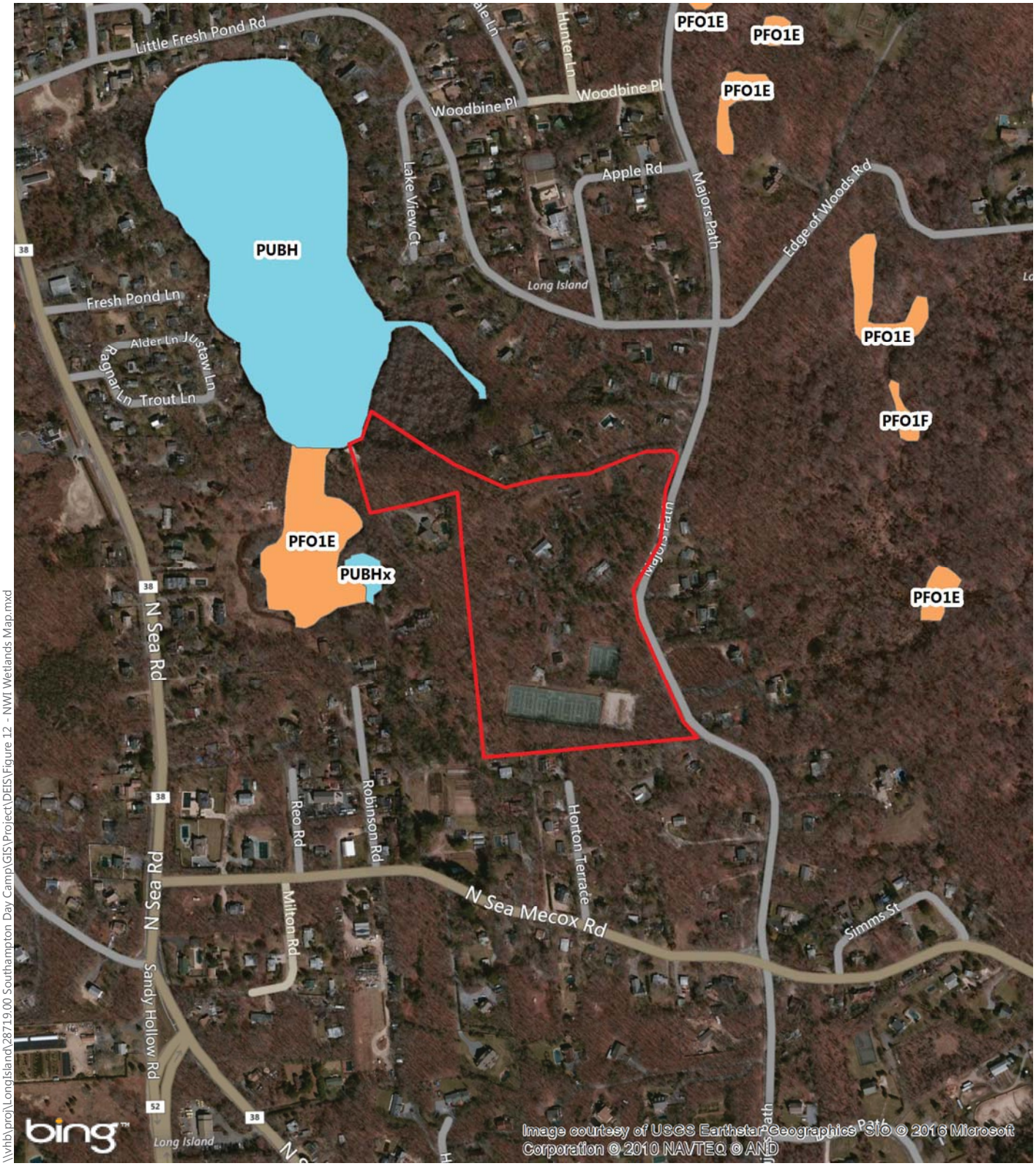
0 500 1000 2000 Feet

Subject Property

Southampton Racquet Club & Camp | Town of Southampton, NY

NYSDEC Freshwater Wetlands Map
665 Majors Path, North Sea

Sources: Town of Southampton Parcel Data (Suffolk County, 2013)
NYSDEC Freshwater Wetlands Map, Suffolk County Map 20 of 39, Southampton Quadrangle (1991)



\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 12 - NWI Wetlands Map.mxd

0 250 500 1000 Feet

Subject Property

Freshwater Forested/Shrub Wetland

Freshwater Pond

Southampton Racquet Club & Camp | Town of Southampton, NY

NWI Wetlands Map
665 Majors Path, North Sea

Sources: Town of Southampton Parcel Data (Suffolk County, 2013)
USFWS National Wetlands Inventory

3.2.2 Potential Impacts

3.2.2.1 Hydrogeology

Upon completion of the proposed action, sub-surface drainage structures – sized and located in suitable leaching soils – would distribute recharge throughout the site. The design and construction of the drainage systems would be in accordance the Town of Southampton requirements to ensure a properly-functioning drainage system that filters typical surface water contaminants. Overall, it is not anticipated that the proposed action would adversely impact the hydrogeologic conditions.

3.2.2.2 Groundwater Flow

As discussed in Section 3.2.1.2 above, it is estimated that the annual hydrological contribution from the existing sanitary systems' discharge to the groundwater is no more than 5.3 percent, or 0.44 million gallons per year (MGY), of the total annual groundwater recharge from the site. The proposed sanitary system discharge would account for up to 6.6 percent, or 0.54 MGY, of the total annual groundwater recharge from the site. In terms of daily flow, the existing sanitary flow of 5,440 GPD would equal a continuous flow of 3.7 gallons per minute (GPM), and a flow of 4.7 GPM for the proposed sanitary flow. At these discharge rates, any groundwater mounding attributed to the sanitary flow is minimal and would not affect the overall local water table elevation.

Site Recharge – 8.26 MGY (see groundwater budget Section 3.2.1.3)

Existing Sanitary Flow = (5,440 GPD x 80 days)/10^6 = 0.44 MGY

Proposed Sanitary Flow = (6,800 GPD x 80 days)/10^6 = 0.54 MGY

3.2.2.3 Long Island Comprehensive Waste Treatment Management Plan (208 Study)

As stated previously, the subject property is in GMZ-V as defined by the SCDHS based on the "208 Study". As indicated in Section 3.2.1.4, the total density flow permitted by SCSC Article 6 for the 17.28-acre subject property is 5,184 GPD, based on a factor of 300 GPD per acre (GPD/acre). Currently, the facility has an SCDHS approved permit to discharge up to 5,440 GPD of wastewater to on-site septic systems. The facility is allowed to discharge in excess of the Article 6 amount because it holds a grandfathered sewage flow of up to 9,450 GPD.

The site's "grandfathered" sewage flow discharge limit of 9,450 GPD was established by the SCDHS Office of Wastewater Management for the reason that the subject site was previously developed. Grandfathered flows are established by the SCDHS Office of Wastewater Management for properties previously developed and that currently exceed the density limits of Article 6 of the SCSC. In this scenario, the facility had 12 existing cottages with an occupancy load of 122 occupants, and an existing residential dwelling. At a rate of 75 GPD per person (SCDHS Commercial Standards), the flow from the cottages would be 9,150 GPD and 300 GPD for the dwelling. The total grandfathered flow would equal 9,450 GPD. The sanitary flow calculations are shown on the SCDHS stamped approved plans attached in Appendix C of this DEIS. In accordance with current SCDHS regulations, the site can discharge a sanitary flow equal to or less than the grandfathered sanitary flow, provided that an appropriately sized sewage disposal system is provided.

In general, the sewage disposal systems are designed to treat the raw sewage being generated by a facility and recharge it back to the aquifer. The basic sewage disposal system consists of two parts; a septic tank and a leaching pool. The septic tank provides primary and secondary treatment of the raw sewage. The septic tank is comprised of two compartments, separated by a baffle wall with a single opening near the middle of the baffle wall. This design allows heavier material (solids) to sink to the bottom of the tank and the lighter materials to rise to the top of the tank while the majority of the liquid wastes are kept in the middle. As water passes through the opening of the baffle wall, it is allowed to settle again in this compartment, completing the primary treatment portion of the system, which requires settling of raw sewage. The required outlet drop tee also prevents floating material from leaving the tank. The solid wastes accumulated in the bottom of the tank are decomposed by anaerobic bacteria, which feed on the solid material. This action partially completes the secondary portion of the treatment process.

Once the sewage leaves the septic tank, it is conveyed via underground piping to the leaching pool, where the clarified sewage is recharged through sandy material back into the groundwater. The sandy material at the bottom of the leaching pool acts as a natural filter and home for additional bacteria. These bacteria also feed on the sewage and, as a byproduct of their reactions, reduce the nitrogen concentrations in the sewage.

The SCDHS Office of Wastewater Management has developed standards for the approval and construction of sewage disposal systems. This standard provides density loading rates for different occupancy categories to be used for the development of the site-specific density flow. Based on the current 2016 camp enrollment and staff count and the relevant SCDHS protocol factors, the existing facility generates 5,440 GPD of sanitary waste discharged to on-site systems. Absent the proposed action, the existing quantity of sanitary waste generation could increase while remaining compliant with the grandfathered sanitary flow of 9,450 GPD. Based

on a future expected occupancy of the site by 360 campers and 90 staff (including 65 overnight staff), the proposed sanitary flow would be 6,800 GPD (see calculations in Table 8).

Table 8 – Existing and Proposed Density Flow Calculation

EXISTING CONDITIONS (i.e., 2016 Occupancy)[A]				
STRUCTURE USE	**SF, # SEATS, OR # UNITS**	**POPULATION DENSITY LOAD**		
		GPD/SEAT/UNIT		
CAMPERS + DAY STAFF	293	5	1,465	GPD
OVERNIGHT STAFF	49	75	3,675	GPD
RESIDENCE / DWELLING	1 (4 OVERNIGHT STAFF)	300	300	GPD
		TOTAL	**5,440**	**GPD**
PROPOSED CONDITIONS				
STRUCTURE USE	**SF, # SEATS, OR # UNITS**	**POPULATION DENSITY LOAD**		
		GPD/SEAT/UNIT		
CAMPERS + DAY STAFF	385	5	1,925	GPD
OVERNIGHT STAFF	61	75	4,575	GPD
RESIDENCE / DWELLING	1 (4 OVERNIGHT STAFF)	300	300	GPD
		TOTAL	**6,800**	**GPD**

Note: (A) Existing sanitary waste generation could increase, even absent the proposed action, while remaining compliant with the SCDHS grandfathered flow of 9,450 GPD.

The current density flows match the current SPDES discharge permit. The proposed density flow is less than the "grandfathered" flow. The subject site is currently served by multiple on-site sanitary systems that were upgraded in 2013 to meet current design standards.

The camp activities occur only during the summer months (80 days per year). As such, the total annual discharge of the current facility and the proposed site improvements would be significantly lower than that allowed by Article 6 (see Table 9).

Table 9 – Existing and Proposed Annual Flow Calculation

Sanitary Flow	Daily (Gallons)	Annual (Gallons)	
Allowed	5,184	1,892,160	SCSC Article 6 (17.28 acres X 300 GPD/Acre X 365 days)
Existing (2016)	5,440	435,200	Based on 80 days of camp activities per year (5,440 GPD X 80 days)
Proposed	6,800	544,000	Based on 80 days of camp activities per year (6,800 GPD X 80 days)

As per the proposed site improvements, there would only be a 25 percent increase between the current (2016) and proposed future density flows. Even with this increase, the total annual proposed flow generated from the site would be approximately 71 percent lower than the allowed flow by SCSC Article 6 as calculated on an annual basis.

3.2.2.4 Sanitary System Impact

The current (2016) occupancy load of the facility includes 346 occupants between staff and campers (refer to Table 8, above). The proposed site improvements are anticipated to include a total of 450 occupants. Recent sanitary system upgrades at the site would ensure that the wastewater can be treated by the latest sub-surface sanitary disposal system technology. By calculating the total nitrogen input into groundwater, a comparison can be established between the existing and proposed sewage discharge flow rates. The calculations of the nitrogen impact can be viewed in detail in Appendix K (Nitrogen Load Model).

After the proposed site improvements have been completed, it is estimated that there would be an approximately 17 percent increase (34.28lbs/year) on an annual basis of nitrogen discharge into groundwater. However, when the camp activities duration is considered (80 days per year), the proposed nitrogen loading generated from the site would still be significantly below that allowed under Article 6 density criteria and that allowed by the facility's grandfathered flow. These calculations demonstrate actual expected nitrogen discharge, and do not relate to regulatory compliance (i.e., compliance with SCDHS standards) as already discussed in detail above. The increase of flow as per the proposed site improvements is not expected to produce any significant effect on the regional or local groundwater quality.

In order to further assess potential adverse impacts associated with sanitary waste generation and discharge at the subject property, the applicant retained Lombardo Associates, Inc. for the preparation of a Water Quality Impact Evaluation (see Appendix D). This evaluation further considered the potential contributing factors to

the existing degraded condition of Little Fresh Pond, and the potential for same to be adversely affected by groundwater.

Based on a review of published resources of the USGS and SCDHS (including groundwater mapping and modeling data), and based on an analysis of the groundwater and Little Fresh Pond surface water and water quality data collected by PW Grosser Consulting, Inc., the following conclusions were offered by Lombardo Associates, Inc.:

- Groundwater at the subject property does not flow towards Little Fresh Pond. Rather, based upon the site data, it flows towards the west-northwest;
- Groundwater at the four on-site wells was found to be of high quality and did not indicate any materially significant impact of wastewater, and was indicative of relatively pristine water quality.

Moreover, the Water Quality Impact Evaluation states that, "[w]hile we cannot say with certainty which properties around [Little Fresh Pond] are responsible for its degradation, we can say, for certain, that the [subject property] is not a contributor…" Therefore, the existing facility and the proposed action would not adversely impact Little Fresh Pond, particularly with respect to groundwater discharges occurring at the subject property. No further data collection is warranted or needed in order to evaluate potential impacts of the proposed action upon water quality in Little Fresh Pond.

As a separate matter, Lombardo Associates, Inc. considered the condition of Little Fresh Pond and potential impacts to same due to sanitary waste discharge to groundwater from off-site sources (i.e., other than the subject property, unrelated to the proposed action). Lombardo Associates, Inc. indicates that a watershed-based data collection program, a bathymetric and sediment thickness survey of the pond, and other pond reconnaissance efforts would be needed to assess the pond and identify the contributing factors to the pond's condition. Pond water quality restoration efforts focus on reducing phosphorus contributions to the pond, typically from wastewater and stormwater contributors. There is currently insufficient data to identify with certainty which properties within the watershed (i.e., other than the subject property) should receive wastewater remediation in order to improve water quality in Little Fresh Pond. The subject property has already been ruled out as a contributor, as discussed in detail in this DEIS.

Overall, the Water Quality Impact Evaluation confirms that groundwater discharges at the subject property do not affect water quality in Little Fresh Pond.

3.2.2.5 Nationwide Urban Runoff Program (NURP)

An on-site drainage system would be provided for the proposed action that would retain all stormwater generated on-site for recharge. On-site stormwater would be recharged to the aquifer through leaching pools, in accordance with a stormwater management plan designed to meet all applicable requirements of the Town of Southampton. All stormwater runoff generated by the improved portions of the site from a two-inch rainfall event would be accommodated via the proposed stormwater management system.

The conclusions of the NURP study have been taken into consideration for the on-site stormwater system design. The proposed stormwater system would utilize a series of drainage structures that would collect and retain the estimated runoff volume to be generated upon implementation of the proposed action.

3.2.2.6 Drinking Water Supply Impacts

The proposed facility is expected to continue to be served by the potable water supplies of the SCWA. The minimal incremental increase in water demand that would result upon reaching the maximum anticipated future occupancy at the proposed day camp and tennis club, as compared with the existing conditions, would not be expected to have a significant adverse effect on the community water supply. No improvements to existing water supplies are proposed, as the day camp and tennis club would utilize the existing water supply connection(s) at the subject property.

As discussed in Section 3.2.1.5 above, most of the neighbors' properties adjacent to the subject property are not connected to the SCWA drinking water distribution network, and therefore, are assumed to have their own private water wells. It is noted that all of the existing sanitary systems on the subject property are located more than 150 feet away from private water wells, as required by the SCDHS. The proposed sanitary system "H," and other appurtenances, as shown on the *Proposed Storm Drainage Plan* in Appendix B of this DEIS, would also exceed the SCDHS minimum horizontal separation distances.

3.2.2.7 Impacts of Pool Water

The Final Scope promulgated by the Town of Southampton (see Appendix A) requires a review of the potential impacts on ecology at the site that may result from the operations of the Southampton Racquet Club and Camp. The study extends itself to review the impacts of applied fertilizers, pesticides, and other chemicals proposed to be utilized on-site. Currently, Southampton Racquet Club and Camp operates one

swimming pool, which utilizes treatment chemicals for the health and safety of the swimmers.

P.W. Grosser Consulting Inc. assessed the use of treatment chemicals used by Southampton Racquet Club and Camp and compared it with the governing regulations. It was observed that while the Town of Southampton and SCDHS maintain jurisdiction over the property of the Southampton Day Camp Realty, LLC, aside from additional building codes and the issuing of operating permits, these two agencies refer to the New York State Department of Health's Sanitary Code Part 6, Subpart 6-1 for the written regulations and treatment of swimming pools.

Disinfection products were examined for this analysis because of their potential for negative ecological impacts. Common treatment disinfectants outlined by the New York State Sanitary Code for swimming pools include chlorine gas, calcium hypochlorite, sodium hypochlorite, bromine, and ozone. According to Southampton Racquet Club and Camp staff, the treatment chemical used is calcium hypochlorite.

Calcium hypochlorite, a chlorine derivative, is a volatile compound that readily evaporates into the air. This reduces the concentration of chlorine dissolved in water over time. According to Southampton Racquet Club and Camp staff, treatment of the swimming pool with this disinfectant is on an as-needed basis to keep the swimming pool water quality within the Suffolk County Guidelines of 1.5-5.0 mg/L of free chlorine residual when pH is between 7.8 and 8.2. Typical pool maintenance at SCDC includes backwashing operations of the sand filters every 10-14 days and pool clean-up and winterization at the end of each season.

Typical backwashing operations of the existing swimming pool are conducted for 15 minutes, and the water is discharged to leaching pools located approximately 30 feet to the north of the swimming pool and approximately 1,100 feet from Little Fresh Pond. It is estimated that the backwashing operation uses approximately 100-300 gallons per event, at a standard flow rate of 25 gallons per minute. The total chlorine contained in the backwash waters discharged to the leaching field is not significant enough to pose an environmental concern. Even with the two additional pools, the volume of backwash waters discharged to the leaching system would not be substantial to pose an impact to the groundwater.

With respect to the annual pool clean-up and winterization, the NYSDEC General Guidelines for Swimming Pool Discharges recommends that pool water should have less than 0.1 part per million total chlorine concentration levels prior to discharge to the ground. A 10-day holding period after the last chemical treatment is recommended, as a general rule, to allow for natural dissipation of chlorine. SCDC would follow these guidelines when the water from the swimming pools is discharged at the end of the summer season. Chlorine test kits are readily available on the market to confirm chlorine levels are safe to discharge to the leaching field. By

following these guidelines, the addition of the two proposed swimming pools would not cause adverse environmental effects to the hydrogeology of the area.

3.2.2.8 Impacts of Fertilizers, Pesticides and Other Chemicals

Surface water and groundwater have the potential to be contaminated from chemicals used as pesticides and fertilizers. These chemicals are typically transported by excess stormwater and surface runoff into waterbodies which could be used for drinking water, natural habitats and general recreation. High levels of phosphorus or nitrogen-containing fertilizers can lead to algal blooms and weed growth which reduces the oxygen content of the waterbody and threatens other aquatic life. High concentrations of pesticides in drinking water can pose health risks to those exposed. The NYSDEC and EPA are involved in setting the concentration limits for different waterways as well as regulating product applications. In 2010, the NYS Dishwasher Detergent and Nutrient Runoff Law was enacted putting into effect restrictions on fertilizers that use phosphorus. According to the law, use of phosphorus fertilizer on lawns or non-agricultural turf is restricted to 0.67 percent by weight. Products greater than 0.67 percent by weight can only be used to establish new lawns or if a soil test indicates that it is necessary. Otherwise, any fertilizer applied to 'flower or vegetable gardens, pasture, hayland, trees, shrubs, turf grown on turf farms, or any form of agricultural product' is not restricted and the fertilizer may be applied at any time.

The Southampton Racquet Club and Camp facility would closely monitor the landscaping subcontractors to incorporate the requirements of the NYS Dishwasher Detergent and Nutrient Runoff Law when selecting an appropriate lawn fertilizer. A comprehensive evaluation of the additional fertilizer impact (related to nitrogen input) as a consequence of the proposed upgrades is presented in Section 3.2.2.10. The net increase of landscaped areas to be fertilized is approximately 0.5 acre. The increase in fertilizer use due to the proposed changes is not anticipated to cause damage to the local or regional environment.

The property is treated four times each summer with a cedar oil-based pesticide for mosquito and tick control. Cedar oil was deregulated by the EPA in 1996 since it was found to pose little or no risk to human health or the environment. Cedar oil is also not listed as a hazardous substance or toxic pollutant in the Clean Water Act. In addition, no documented occurrences of adverse effects on the environmental were found. The use of this product is not expected to produce any harmful effect on the regional or local groundwater quality.

3.2.2.9 Impacts of Wells for Irrigation

The land use of the northern section of the South Fork is predominantly residential and open space areas and is not likely to contain a large number of irrigation wells. Irrigation wells are used on agricultural areas which, on the South Fork, are located towards the east and southeast of the site. If irrigation wells are used on residential properties, these would most likely be shallow, low flow wells with screens in the Upper Glacial Aquifer. These wells would typically be used sporadically during the day and mostly in summer months. No influence of the groundwater or flow direction near the site is expected due to irrigation wells.

There are three existing low flow water wells located at the site. These wells were previously used as water supply for human consumption until the facility was connected to the SCWA distribution system. These wells are believed to be screened at the lower portions of the Upper Glacial Aquifer. These wells have been used intermittently for irrigation purposes, mainly in the summer months. The use of these wells is not expected to produce any significant effect on the regional or local groundwater flow direction or elevations.

3.2.2.10 Nitrogen Mass Balance Prediction

PWGC has evaluated the expected nitrogen loading to groundwater from the proposed development using the BURBS model. The BURBS model, developed at Cornell University by Hughes et al. (1985), is a computer simulation program that computes the potential impact of a proposed development on groundwater within a community due to nitrogen. Cornell University has developed this model for a specific application on Long Island. For comparative purposes, PWGC has prepared a BURBS computation for the existing conditions and proposed development. Based on PWGCs experience, this program would predict a conservative estimate of nitrogen recharged to groundwater. The BURBS model calculates loadings from wastewater, turf, natural land, atmospheric deposition, and runoff from impervious surfaces.

The BURBS model predicts nitrogen leached to groundwater independent of land area (i.e., lbs N/acre/year). In order to calculate the estimated mass of nitrogen leached to groundwater, the total acreage the project is multiplied by the model output, yielding pounds of nitrogen per year. The parameters used in the BURBS model include:

1. Fraction of land in turf
2. Fraction of land which is impervious
3. Average persons per dwelling
4. Housing density

5. Precipitation rate
6. Water recharged from turf
7. Water recharged from natural land
8. Evaporation from impervious surface
9. Runoff from impervious surface recharged
10. Home water use per person
11. Nitrogen concentration in precipitation
12. Nitrogen concentration in water used
13. Turf fertilization rate
14. Fraction of nitrogen leached from turf
15. Fraction of wastewater nitrogen lost as gas
16. Wastewater fraction removed by sewer
17. Nitrogen per person in wastewater
18. Nitrogen removal rate of natural land

Each of these parameters is discussed and model inputs are defined in the complete Nitrogen Load Model **(**see Appendix K).

The summarized results from the existing conditions and the proposed development are shown in Table 10, below. The detailed model calculations are included as Appendix K.

Table 10 – Summary of Nitrogen Loading

	lbs N/yr	N Conc. In Recharge (mg/L)
Existing Conditions(A)	195.33	2.06
Proposed Development	229.61	2.39
Net Change	34.28	0.34

Note: (A) The existing sanitary waste generation could increase absent the proposed action (resulting in an increase in the quantity of nitrogen discharged to groundwater) absent the proposed action, while remaining compliant with the SCDHS grandfathered flow of 9,450 GPD.

The modeling results indicate that the proposed development would increase the mass of nitrogen recharged to groundwater by approximately 34.28 pounds per year. The concentration of nitrogen in recharge would increase from 2.06 mg/L to approximately 2.39 mg/L.

The current MCL for nitrogen set by USEPA is 10 mg/L. An unofficial concentration of 2.5 mg/l of nitrogen has been used to protect the waters of Peconic Bay from nitrogen loadings resulting from groundwater. Based on the estimated mass of nitrogen added to the groundwater system, and the increased concentration of nitrogen in groundwater recharge, and taking into consideration existing background conditions,

the proposed development would not be expected to have adverse impacts on groundwater quality or surrounding water bodies.

3.2.3 Proposed Mitigation

As a result of the groundwater investigation, it was determined that the proposed project would not adversely impact the hydrogeology or water budget in the vicinity of the facility, nor does it adversely affect the quality or quantity of the surface waters of Little Fresh Pond. The proposed facility would adhere to the environmental regulations having jurisdiction on the site, such that no additional mitigation is proposed.

3.3 Surface Waters

3.3.1 Existing Conditions

Little Fresh Pond (sometimes also referred to herein as "LFP") is a 19.3±-acre surface water body located adjacent to the northwest of the subject property. Approximately 90 percent of the perimeter of the pond abuts residential properties, with the remaining abutting undeveloped wetlands and other natural areas. The pond has no surface water contributors (e.g., streams) and its surface level is directly influenced by rainwater and runoff from the watershed. The NYSDEC retains jurisdiction over activities that occur within freshwater wetland areas, as well as within 100 feet of the defined wetland boundary. The USFWS NWI Map[15] identifies Little Fresh Pond as a Freshwater Pond and defines it as a Palustrine, Unconsolidated Bottom, Permanently Flooded (PUBH) water body (see Figure 12 on Page 57 of this DEIS).

Little Fresh Pond is designated as a Class B[16] wetland, identified as wetland "SH-4"on the NYSDEC Freshwater Wetland Map (see Figure 11 on Page 56 of this DEIS). As such, the pond is subject to regulations under Article 24 – Freshwater Wetlands Act (FWA) of the New York ECL. A permit is required when conducting regulated activities within the wetland or the 100-foot Adjacent Area. Such activities include, but are not limited to, drainage, excavation, removal of soils and other materials from a freshwater wetland, erecting of structures or roads, sewage discharge, and installing a septic system (a detailed list of regulated actions is provided under Article 24). The subject property is currently developed with multiple wood framed structures, various sports courts and fields, gravel driveways, and other improvements. There are no existing structures within the wetland or the surrounding 100-foot regulated adjacent area, nor do any activities occur within these areas. Little Fresh Pond has historically been used by the existing tennis club and/or tennis camp facility for various purposes. There is no use of the pond related to the existing facility, with the potential exception of supervised nature walks near the pond.

Little Fresh Pond is listed on the 2014 New York State Section 303(d) Lists of Impaired/Total Maximum Daily Load (TMDL) Waters. These 303(d) lists are created by the state in response to the Federal Clean Water Act (CWA) that mandates individual states to monitor the quality of the water bodies and determine if they are deemed suitable for their intended use. Little Fresh Pond has been listed in the NYS 303(d) list (Part 3a) for high concentrations of phosphorus since 2012. Part 3a

▼

[15] http://www.fws.gov/wetlands/Data/Mapper.html
[16] NYSDEC - Classification B indicates a best usage for swimming and other contact recreation, but not for drinking water.

designation is a subcategory that defers the development of the TMDLs until verification of impairment.

Investigation of the pond watershed area reveals the existence of stormwater inlets at the roads in direct proximity to LFP. These roads include Lake View Court to the east, Fresh Pond Lane to the west, and Little Fresh Pond Road to the north and east. No direct stormwater point source outfall was visible at the time of the investigation. However, due to the topography of the area (Little Fresh Pond at the lowest elevation), it is estimated that at least 10 percent[17] of the total precipitation inside the watershed travels as overland flow to the pond. The facilities at the subject property do not have any point source outfall discharging to LFP.

Little Fresh Pond is part of the Citizens Statewide Lake Assessment Program (CSLAP), which is managed by the NYSDEC and the New York State Federation of Lake Association (NYSFOLA). The Little Fresh Pond Association is a local community volunteer group that monitors the quality of surface waters of Little Fresh Pond. The Little Fresh Pond Association conducts occasional water sampling of the pond and the data is used to by CSLAP to report on the water quality of the pond. The data is also used to compare the water quality to past reports and to evaluate changes in the conditions of the pond. During the latest CSLAP report conducted in 2011, a scorecard was developed to summarize the findings of the water quality, lake perception, biological condition, and lake uses. The results of the water sampling were overall favorable (as further discussed below) with the exceptions of total phosphorus, nitrate + nitrite, and ammonia, which were found in higher than normal concentrations. The report states that these higher than normal concentrations are not an indication of clear long trends and that it is likely that the small changes in each of the limnological indicators has been within the normal range of variability in the lake.[18] Table 11 provides a summary of the CSLAP 2011 scorecard.

▼

[17] Ven Te Chow, P. (1964). Handbook of Applied Hydology. In P. Ven Te Chow, Handbook of Applied Hydology (pp. 14-8). McGraw-Hill, Inc.

[18] Citizens Statewide Lake Assessment Program. (2011). CSLAP 2011 Lake Water Quality Summary: Little Fresh Pond

Table 11 – CSLAP 2011 Lake Water Quality Summary: Little Fresh Pond

CSLAP 2011 Lake Water Quality Summary: Little Fresh Pond		
Water Quality		
	2011	**All Years**
Trophic Status	Poor	Poor
pH Balance	Good	Good
Deepwater Oxygen	Good	Good
Lake Perception		
	2011	**All Years**
Water Quality	Excellent	Good
Aquatic Plants	Good	Excellent
Recreation	Good	Good
Biological Health		
	2011	**Previous**
Invasive Plants	Unfavorable	Unfavorable
Harmful Algae	Threatened	Unfavorable
Invasive Animals	Good	Good
Fisheries Quality	Threatened	Good
Plant Diversity	Threatened	Good
Benthic Organisms	Threatened	Good
Lake Use		
	2011	**All Years**
Potable Water	Not Applicable	Not Applicable
Swimming	Impaired	Impaired
Boating / Fishing	Good	Threatened
Aquatic Life	Threatened	Threatened
Aesthetics	Threatened	Threatened
Fish Consumption	Good	Good

P.W. Grosser Consulting Inc. sampled the surface waters of Little Fresh Pond in July 2015. The samples were analyzed for common water chemistry and the results were compared to the New York State Ambient Water Quality Standards (AWQS) – Class B (see Table 12).

Table 12 – Little Fresh Pond Surface Water Analytical Results: NY AWQS

Little Fresh Pond Surface Water Analytical Results New York Ambient Water Quality Standards.				
CLIENT SAMPLE ID			**LAKE**	
SAMPLING DATE			**07-08-15**	
	NY-AWQS Standards (B)*	**Units**		**Qual**
General Chemistry				
Alkalinity, Total		mg CaCO3/L	4	
Chloride	-	mg/l	11	
Nitrogen, Ammonia		mg/l	0.049	J
Nitrogen, Nitrite	0.1	mg/l	0.024	J
Nitrogen, Nitrate	-	mg/l	0.018	U
Total Nitrogen	-	mg/l	0.64	
Nitrogen, Total Kjeldahl		mg/l	0.645	
Phosphorus, Total	0.02	mg/l	0.044	
Phosphate, Total		mg/l	0.14	
Total Hardness by SM 2340B				
Hardness		mg/l	8.6	
Dissolved Metals				
Iron, Dissolved	0.3	mg/l	0.167	
Manganese, Dissolved	0.3	mg/l	0.0057	
Potassium, Dissolved		mg/l	0.745	
Sodium, Dissolved	-	mg/l	7.23	
Polychlorinated Biphenyls				
Aroclor 1016	0.09	ug/l	0.055	U
Aroclor 1221	0.09	ug/l	0.053	U
Aroclor 1232	0.09	ug/l	0.031	U
Aroclor 1242	0.09	ug/l	0.06	U
Aroclor 1248	0.09	ug/l	0.051	U
Aroclor 1254	0.09	ug/l	0.034	U
Aroclor 1260	0.09	ug/l	0.032	U
Aroclor 1262	0.09	ug/l	0.029	U
Aroclor 1268	0.09	ug/l	0.038	U
PCBs, Total		ug/l	0.029	U

Table 12, Continued

	NY-AWQS Standards (B)*	Units		Qual
Organochlorine Pesticides				
4,4'-DDD	0.3	ug/l	0.005	U
4,4'-DDE	0.2	ug/l	0.004	U
4,4'-DDT	0.2	ug/l	0.004	U
Aldrin		ug/l	0.002	U
Alpha-BHC	0.002	ug/l	0.004	U
Beta-BHC	0.007	ug/l	0.006	U
Chlordane	$2x10^{-5}$	ug/l	0.046	U
cis-Chlordane		ug/l	0.007	U
Delta-BHC	0.008	ug/l	0.005	U
Dieldrin	$6x10^{-7}$	ug/l	0.004	U
Endosulfan I		ug/l	0.003	U
Endosulfan II		ug/l	0.005	U
Endosulfan sulfate		ug/l	0.005	U
Endrin	0.002	ug/l	0.004	U
Endrin ketone	-	ug/l	0.005	U
Heptachlor	$2x10^{-4}$	ug/l	0.003	U
Heptachlor epoxide	$3x10^{-4}$	ug/l	0.004	U
Lindane	0.05	ug/l	0.004	U
Methoxychlor	0.03	ug/l	0.007	U
Toxaphene	$6x10^{-6}$	ug/l	0.063	U
trans-Chlordane		ug/l	0.006	U
*Water Class B – NYSDEC Part 701				
J = Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).				
U = Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.				

= Above Standard

= Guidance Value

The data collected as part of the surface water quality investigation of Little Fresh Pond reveals a concentration of phosphorous higher than the guidance value (20 ug/l). High concentration of phosphorus in the pond may be responsible for the algae growth typical in summer months. Historical data obtained from the CSLAP 2011 report shows that there have been multiple occasions since the data is available (1989) that the pond has had similar or higher concentrations. Those higher than the guidance value concentrations appear to be cyclical and reoccurring mainly around the summer months (May – September). The 21 pesticides analyzed for were non-

detectable by the analytical laboratory. It should be noted that the laboratory detection limits were higher than the New York Ambient Water Quality Standards (NY-AWQS) concentrations for seven of the specific pesticide compounds.

3.3.1.1 Critical Environmental Areas

The subject property is partially within a "Critical area of environmental concern" as identified within §157-10 of the Town Code entitled, "Critical Areas." This code section lists multiple critical areas within the township, including "Freshwater wetlands and adjacent areas currently subject to regulations by NYSDEC pursuant to Article 24 of the Environmental Conservation Law of the State of New York. [Added 5-8-1990 by L.L. No. 13-1990]" (see Town Code §157-10.B(3). Accordingly, the portion of the subject property within Freshwater Wetland SH-4 and its 100—foot adjacent area fall within this local designation.

According to the publicly-accessible resources of the NYSDEC,[19] no portion of the subject property is located within a Critical Environmental Area (CEA) pursuant to SEQRA (6 NYCRR §617.14(g)).

3.3.2 Potential Impacts

There are no changes to the existing, minimal level of usage of Little Fresh Pond related to the proposed action (i.e., potential supervised nature walks near the pond), and no improvements are proposed within the pond, associated wetlands, or the regulated 100-foot buffer surrounding same. Therefore, the analyses of potential impacts presented herein are focused on stormwater runoff and groundwater quality.

As indicated on the proposed *Site Plan* (see Appendix B), and as identified in Table 2 of this DEIS, the proposed action would involve a 0.79±-acre reduction in wooded area and a 0.51±-acre increase in lawn, landscaping and mulch areas (including 0.21±-acre to be revegetated with native plantings). This would result in a minor increase in the total impervious surface (0.03±-acre), and a minor increase in the total gravel surface (0.25±-acre). The proposed clearing is primarily to accommodate the relocated gravel site driveways, improvement of internal drives and paths, creation of a new play area surface, and (to a limited extent) to accommodate stormwater management infrastructure. Most areas would be established in pervious surfaces (e.g., gravel drives, wood chip paths), and some existing impervious areas are proposed to be converted to either lawn areas or other landscape uses which would reduce potential runoff from the site.

[19] http://www.dec.ny.gov/permits/25153.html, accessed March 1, 2016.

In general, increases in impervious surface area increase stormwater runoff potential. However, the proposed action includes the installation of a comprehensive stormwater management system, where currently no on-site controls or infrastructure exist (see *Proposed Storm Drainage Plan* in Appendix B). The proposed system, which would consist of drywells strategically located at low points throughout the improved portion of the site, are designed to accommodate all stormwater runoff from a two-inch rainfall event. This is a significant improvement over the existing condition, where stormwater is permitted to runoff overland. With the proposed stormwater management system installed, no significant adverse impacts to surface water resources associated with stormwater runoff are expected to result from implementation of the proposed action. In fact, the proposed action represents a net benefit with respect to stormwater runoff.

Stormwater runoff during construction would have the potential to convey sediments towards low-lying areas, and to generate soil erosions with construction-related pollutants that could ultimately end-up in surface waters. This is particularly challenging to manage in areas of steep slopes or impervious surface. Coverage under NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002) would be required prior the commencement of construction activities. The general permit (permit) is issued pursuant to Article 17, Titles 7, 8 and Article 70 of the New York ECL, and it seeks to reduce the transportation and collection of stormwater runoff related pollutants to surface waterbodies. The permit is required when the proposed construction activities would disturb one or more acres of soil and it would require the development of a SWPPP (also see discussion of soil erosion impacts in Section 3.1 of this DEIS). During construction, the applicant would ensure adherence to the required permits and processes, and implementation of the measures required therein, to reduce potential for adverse impacts to surface waters, from runoff.

Consultations were undertaken with NYSDEC regarding the proposed action. By correspondence dated July 17, 2015, VHB, on behalf of the applicant, advised NYSDEC of the proposed action, and requested a jurisdictional determination regarding same. In response, NYSDEC issued a letter of No Jurisdiction dated September 3, 2015 (see Appendix E), confirming that no Freshwater Wetlands permit would be required for the proposed action. As indicated in the aforementioned letter of No Jurisdiction, "all construction, clearing and/or ground disturbance must remain more than 100 feet from the freshwater wetland boundary." There are currently no improvements on-site within 100 feet of the wetland, and no construction, clearing and/or ground disturbance is proposed within these regulated areas, as shown on the *Site Plan* in Appendix B. Moreover, no changes in the use of the pond are proposed as part of the proposed action. If requested by the Town, prior to implementation of the proposed action, an updated determination would be sought from NYSDEC based on the final project design.

As discussed in detail in Section 3.2 of this DEIS, based on the various groundwater and surface water analyses, water budget calculations and other information described therein, groundwater discharges at the subject property (e.g., sanitary waste discharge to on-site sanitary systems) do not reach or adversely affect water quality in Little Fresh Pond. As such, no adverse effects of the continued use of on-site sanitary systems would be expected to adversely impact this surface water resource.
As discussed in Section 3.2 of this DEIS, a Water Quality Impact Evaluation was prepared by Lombardo Associates, Inc. to evaluate, among other things, potential impacts to Little Fresh Pond (see Appendix D). The analysis concluded that the subject property does not contribute to the degraded condition of Little Fresh Pond (e.g., via sanitary waste discharges to groundwater at the subject property). Lombardo Associates, Inc. indicates that a watershed-based data collection program, a bathymetric and sediment thickness survey of the pond, and other pond reconnaissance efforts should be performed, as there is currently insufficient data to identify with certainty which properties within the watershed (i.e., other than the subject property) should receive wastewater remediation in order to improve water quality in Little Fresh Pond. It is noted that any such study or future implementation of mitigating measures would not necessarily be relevant to the proposed action.

Overall, based on the foregoing, no significant adverse impacts on surface waters are expected to result from implementation of the proposed action.

3.3.3 Proposed Mitigation

As demonstrated above, the proposed project would not result in adverse impacts on surface waters. The potential for flooding, soil erosion and stormwater runoff would be contained and managed on-site. Therefore, no mitigation is necessary, beyond those measures included in the comprehensive stormwater management system described in Section 3.3.2 of this DEIS. While no significant adverse impacts to local water resources from the proposed action have been identified, all construction work associated with the proposed site improvements would be conducted as per the SWPPP to be developed and submitted for approval to the Town of Southampton, utilizing the recommended NYS erosion and sediment control techniques.

3.4 Ecology

3.4.1 Existing Conditions

Existing ecological conditions at the 17.28±-acre subject property were assessed through a review of USFWS and NYSDEC maps and records. In addition, a field inspection of the subject property was performed by a VHB project scientist on June 18, 2015. The field inspection included a habitat evaluation, vegetation and wildlife species inventories and rare/protected species assessments for the entire subject property, while focusing specifically on those areas that are proposed to be impacted by the proposed action.

3.4.1.1 Habitats/Vegetation

Currently, the subject property is dominated by wooded habitat, interspersed with buildings, sports courts, driveways, parking areas, pathways and other cleared areas associated with the existing tennis club and camp facilities. As observed during the field inspection, the subject property supports the following ten developed and undeveloped habitat types, as identified in the New York Natural Heritage Program[20] (NYNHP) publication "Ecological Communities of New York State"[21] (ECNYS):

- Pitch Pine-Oak Forest
- Coastal Oak-Hickory Forest
- Coastal Oak-Beech Forest
- Mowed Lawn
- Mowed Lawn with Trees
- Unpaved Road/Path
- Paved Road/Path
- Urban Structure Exterior
- Red Maple-Black Gum Swamp
- Shallow Emergent Marsh

The wooded habitats that dominate the subject property comprise a mosaic of ECNYS forested communities, including the Pitch Pine-Oak Forest, Coastal Oak-Hickory Forest and Coastal Oak-Beech Forest ecological communities. As observed during the

▼

[20] The New York Natural Heritage Program is a partnership between the New York State Department of Environmental Conservation and the State University of New York College of Environmental Science and Forestry.

[21] Edinger, G.J., et al. (editors). 2014. *Ecological Communities of New York State*. Second Edition. New York Natural Heritage Program, NYSDEC.

field inspection, those woodland communities within or adjacent to the developed portions of the subject property have been disturbed through anthropogenic activities (e.g., tree removal, clearing of understory vegetation, establishment of pathways, etc.) associated with historic and ongoing site usage. The freshwater wetlands adjacent to Little Fresh Pond at the northern portion of the subject property are representative of the Red Maple-Black Gum Swamp and Shallow Emergent Marsh ecological communities. The developed portions of the subject property include the Mowed Lawn, Mowed Lawn with Trees, Unpaved Road/Path, Paved Road/Path and Urban Structure Exterior ecological communities.

Those portions of the subject property where clearing and associated disturbance are proposed comprise four vegetated and one unvegetated ECNYS communities located within and adjacent to the developed portions of the site. The following narrative provides a description of these communities, based on their respective ECNYS accounts and supplemented with field observations from the site.

Forested areas within and adjacent to the existing camp facilities include the following two ECNYS communities:

Pitch Pine-Oak Forest

> *"A mixed forest that typically occurs on well-drained, sandy soils of glacial outwash plains or moraines; it also occurs on thin, rocky soils of ridge tops.*
>
> *The dominant trees are pitch pine (Pinus rigida) mixed with one or more of the following oaks: scarlet oak (Quercus coccinea), white oak (Q. alba), red oak (Q. rubra), or black oak (Q. velutina). The relative proportions of pines and oaks are quite variable within this community type. At one extreme are stands in which the pines are widely spaced amidst the oaks, in which case the pines are often emergent above the canopy of oak trees. At the other extreme are stands in which the pines form a nearly pure stand with only a few widely spaced oak trees.*
>
> *The shrub layer is well-developed with scattered clumps of scrub oak (Quercus ilicifolia) and a nearly continuous cover of low heath shrubs such as blueberries (Vaccinium pallidum, V. angustifolium) and black huckleberry (Gaylussacia baccata).*
>
> *The herbaceous layer is relatively sparse; characteristic species are bracken fern (Pteridium aquilinum), wintergreen (Gaultheria procumbens), and Pennsylvania sedge (Carex pensylvanica)..."*

The Pitch Pine-Oak Forest ecological community is ranked by the NYNHP as G4G5, S4. According to the NYNHP, G4 indicates a community that is considered "Apparently secure globally, though it might be quite rare in parts of its range, especially at the periphery." G5 is indicative of a community that has been designated as "Demonstrably secure globally, though it might be quite rare in parts of its range,

especially at the periphery". The S4 ranking denotes a community that is considered "Apparently secure in New York State."

Coastal Oak-Hickory Forest

> *"A hardwood forest with oaks (Quercus spp.) and hickories (Carya spp.) codominant that occurs in dry well-drained, loamy sand of knolls, upper slopes, or south-facing slopes of glacial moraines of the Atlantic Coastal Plain. The forest is usually co-dominated by two or more species of oaks, usually white oak (Q. alba), black oak (Quercus velutina) and chestnut oak (Q. montana). Scarlet oak (Quercus coccinea) is also a common associate. Mixed with the oaks, usually at moderate densities, are one or more of the following hickories: pignut (Carya glabra), mockernut (C. tomentosa), and sweet pignut (C. ovalis). These hickories can range from nearly pure stands to as little as about 25% cover. There is typically a subcanopy stratum of small trees and tall shrubs including flowering dogwood (Cornus florida) and highbush blueberry (Vaccinium corymbosum). The shrub layer and ground layer flora may be diverse. Common low shrubs include maple-leaf viburnum (Viburnum acerifolium), blueberries (Vaccinium angustifolium, V. pallidum) and huckleberry (Gaylussacia baccata).*
>
> *Characteristic ground layer herbs are Swan's sedge (Carex swanii), panic grass (Panicum dichotomum), poverty grass (Danthonia spicata), cow-wheat (Melampyrum lineare), spotted wintergreen (Chimaphila maculata), rattlesnake weed (Hieracium venosum), white wood aster (Aster divaricatus), false Solomon's seal (Smilacina racemosa), Pennsylvania sedge (Carex pensylvanica), and white goldenrod (Solidago bicolor)…"*

The Coastal Oak-Hickory Forest ecological community has been assigned a rarity ranking of G4, S3 by the NYNHP. According to the NYNHP, the S3 ranking is defined as "Typically 21 to 100 occurrences, limited acreage or miles of stream in New York State."

As indicated previously, the forested areas within and adjacent to existing tennis club and camp facilities have experienced various historic and ongoing disturbances, including selective tree removal, clearing of understory vegetation and the establishment of pathways. In particular, the characteristic well-developed heath shrub understories of these two communities detailed in the ECNYS descriptions were observed to be sparse to non-existent during the field inspection, especially in areas adjacent to existing buildings and driveways. At many of these locations, the herbaceous groundcover stratum has been colonized by turf grasses and/or by non-native/invasive vegetation (e.g., multiflora rose [*Rosa multiflora*]). As a result, though representative oak, hickory and pitch pine trees still occupy the canopy stratum of the Pitch Pine-Oak Forest and Coastal Oak-Hickory Forest communities, the understory strata are no longer present or have been significantly degraded. Furthermore, the canopy stratum is discontinuous, due to the presence of the existing facility buildings,

driveways, pathways, etc. Additionally, atypical tree species (i.e., eastern white pine [*Pinus strobus*] and Norway spruce [*Picea abies*], have colonized or been planted in these areas and are present within the canopy stratum. In summary, though representative tree and shrub species of the Pitch Pine-Oak Forest and Coastal Oak-Hickory Forest communities still remain, their overall ecological value has been impaired and degraded, in comparison with other examples of these two ECNYS communities located within undisturbed portions of the subject property.

The various maintained turf grass areas within the developed portions of the subject property are representative of the following two anthropogenic (created or altered by humans) ECNYS community types:

Mowed Lawn

> *"Residential, recreational, or commercial land, or unpaved airport runways in which the groundcover is dominated by clipped grasses and there is less than 30% cover of trees. Ornamental and/or native shrubs may be present, usually with less than 50% cover. The groundcover is maintained by mowing."*

Mowed Lawn with Trees

> *"Residential, recreational, or commercial land in which the groundcover is dominated by clipped grasses and forbs, and it is shaded by at least 30% cover of trees. Ornamental and/or native shrubs may be present, usually with less than 50% cover. The groundcover is maintained by mowing."*

The NYNHP describes the Mowed Lawn and Mowed Lawn with Trees ecological communities as being distributed throughout New York State, with a rarity rankings of G5, S5. According to the NYNHP, S5 describes a community that is "demonstrably secure in New York State."

As indicated in the above ECNYS descriptions, vegetation within the two lawn communities is dominated by ornamental turf grasses and "weedy" herbaceous plants, as well as native and ornamental trees.

The majority of the existing interior driveways at the subject property are unpaved, gravel-surfaced features that are best described by the following ECNYS community description:

Unpaved Road/Path

> "*A sparsely vegetated road or pathway of gravel, bare soil, or bedrock outcrop. These roads or pathways are maintained by regular trampling or scraping of the land surface. The substrate consists of the soil or parent material at the site, which may be modified by the addition of local organic material (woodchips, logs, etc.) or sand and gravel. One characteristic plant is path rush (Juncus tenuis)…"*

The NYNHP has assigned a rarity rankings of G5, S5 to the Unpaved Road/Path ecological community.

As indicated in the above ECNYS description, the existing interior driveways at the subject property are essentially unvegetated, including those within areas where clearing or other disturbance is proposed.

Plant Species List

The following list provides an inventory of terrestrial/upland and wetland vegetation observed during the June 18, 2015 field inspection of the subject property. This plant species list is not intended to be an all-inclusive inventory of the vegetative species present at the subject property.

Trees

Norway maple	*Acer plantanoides*
red maple	*Acer rubrum*
gray birch	*Betula populifolia*
pignut hickory	*Carya glabra*
mockernut hickory	*Carya tomentosa*
flowering dogwood	*Cornus florida*
American beech	*Fagus grandifolia*
American holly	*Ilex opaca*
eastern redcedar	*Juniperus virginiana*
black gum	*Nyssa sylvatica*
Norway spruce	*Picea abies*
red spruce	*Picea rubens*
pitch pine	*Pinus rigida*
eastern white pine	*Pinus strobus*
big-tooth aspen	*Populus grandidentata*
black cherry	*Prunus serotina*
white oak	*Quercus alba*
scarlet oak	*Quercus coccinea*
northern red oak	*Quercus rubra*
black oak	*Quercus velutina*
black locust	*Robinia pseudoacacia*
sassafras	*Sassafras albidum*

Shrubs and Vines

bearberry	*Arctostaphylos uva-ursi*
barberry	*Berberis sp.*
Asiatic bittersweet	*Celastrus orbiculatus*
buttonbush	*Cephalanthus occidentalis*
sweet pepperbush	*Clethra alnifolia*
autumn olive	*Elaeagnus umbellata*
forsythia	*Forsythia sp.*

black huckleberry	*Gaylussacia baccata*
mountain laurel	*Kalmia latifolia*
privet	*Ligustrum sp.*
Japanese honeysuckle	*Lonicera japonica*
Tatarian honeysuckle	*Lonicera tatarica*
maleberry	*Lyonia ligustrina*
staggerbush	*Lyonia mariana*
bayberry	*Myrica pensylvanica*
Virginia creeper	*Parthenocissus quinquefolia*
multiflora rose	*Rosa multiflora*
brambles	*Rubus spp.*
wineberry	*Rubus phoenicolasius*
red raspberry	*Rubus idaeus*
roundleaf greenbrier	*Smilax rotundifolia*
arborvitae	*Thuja occidentalis*
poison ivy	*Toxicodendron radicans*
highbush blueberry	*Vaccinium corymbosum*
lowbush blueberries	*Vaccinium spp.*
southern arrowwood	*Viburnum dentatum*
grapes	*Vitis sp.*

Herbaceous Plants

common yarrow	*Achillea millefolium*
garlic mustard	*Allaria petiolata*
field garlic	*Allium vineale*
common ragweed	*Ambrosia artemisafolia*
broomsedge	*Andropogon virginicus*
hemp dogbane	*Apocynum cannabinum*
common mugwort	*Artemisia vulgaris*
common milkweed	*Asclepias syriaca*
water arum	*Calla palustris*
Pennsylvania sedge	*Carex pensylvanica*
tussock sedge	*Carex stricta*
crown vetch	*Coronilla vari*a
umbrella sedge	*Cyperus eragrostis*
Queen Anne's lace	*Daucus carota*
deertongue grass	*Dichanthelium clandestinum*
crabgrasses	*Digitaria* spp.
spike rush	*Eleocharis sp.*
common fleabane	*Erigeron philadelphicus*
fescues	*Festuca* spp.
bedstraw	*Galium* sp.
wintergreen	*Gaultheria procumbens*
mouse ear	*Hieracium pilosella*
field hawkweed	*Hieracium pratense*
soft rush	*Juncus effusus*
ryegrasses	*Lolium* spp.
white water lily	*Nymphaea odorata*
wood sorrel	*Oxalis acetosella*
switch grass	*Panicum virgatum*

timothy grass	*Phleum pratense*
pokeweed	*Phytolacca americana*
narrowleaf plantain	*Plantago lanceolata*
broadleaf plantain	*Plantago major*
bluegrasses	*Poa* spp.
smartweed	*Polygonum* sp.
dwarf cinquefoil	*Potentilla canadensis*
bracken fern	*Pteridium aquilinum*
little bluestem	*Schizachyrium scoparium*
wool grass	*Scirpus cyperinus*
giant foxtail	*Setaria faberi*
sweet goldenrod	*Solidago odora*
rough-stemmed goldenrod	*Solidago rugosa*
goldenrod	*Solidago* sp.
perennial sowthistle	*Sonchus arvensis*
common chickweed	*Stellaria media*
common dandelion	*Taraxacum officinale*
marsh fern	*Thelypteris palustris*
red clover	*Trifolium pratense*
white clover	*Trifolium repens*
common mullein	*Verbascum thapsus*
New York ironweed	*Vernonia noveboracensis*
vetch	*Vicia* sp.
common violet	*Viola sororia*

Wildlife

In addition to the June 18, 2015 field inspection, and in order to further investigate the potential on-site species assemblage, VHB consulted with the NYNHP and performed research of NYSDEC and USFWS records regarding the potential presence or absence of particular species on and in the vicinity of the subject property. Based on these resources and the field inspections, a summary of the birds, mammals and herpetofauna (amphibians and reptiles) observed or expected on the subject property follows.

Birds

Avian species are the most common form of wildlife observed and expected at the subject property. The 28 species listed below were observed at or over the site during the June 18, 2015 field inspection.

northern cardinal	*Cardinalis cardinalis*
red-winged blackbird	*Agelaius phoeniceus*
tufted titmouse	*Baeolophus bicolor*
Canada goose	*Branta canadensis*
red-tailed hawk	*Buteo jamaicensis*
northern flicker	*Colaptes auratus*
American crow	*Corvus brachyrhynchos*

blue jay	*Cyanocitta cristata*
gray catbird	*Dumetella carolinensis*
common yellowthroat	*Geothlypis trichas*
herring gull	*Larus argentatus*
belted kingfisher	*Megaceryle alcyon*
red-bellied woodpecker	*Melanerpes carolinus*
song sparrow	*Melospiza melodia*
house sparrow	*Passer domesticus*
northern mockingbird	*Mimus polyglottos*
great-crested flycatcher	*Myiarchus crinitus*
downy woodpecker	*Picoides pubescens*
black-capped chickadee	*Poecile atricapillus*
yellow warbler	*Setophaga petechia*
white-breasted nuthatch	*Sitta carolinensis*
chipping sparrow	*Spizella passerine*
Carolina wren	*Thryothorus ludovicianus*
house wren	*Troglodytes aedon*
robin	*Turdus migratorius*
red-eyed vireo	*Vireo olivaceus*
mourning dove	*Zenaida macroura*
eastern wood-peewee	*Contopus virens*

The New York State Breeding Bird Atlas[22] was reviewed to identify other avian species that may occur at the subject property. According to this resource, a total of 72 bird species were identified between 2000 and 2005 within the two survey blocks in which the subject property is located (Block 7153C). Of these species, 34 are confirmed as breeding, 23 are listed as probable breeders, and 15 are listed as possibly breeding (a copy of the atlas report for Block 7153C is included in Appendix F). It is important to note that Block 7153C totals 9 square miles in area and supports a diverse range of habitats that are not supported at the subject property (e.g., tidal wetlands, native grasslands, old fields, agricultural habitats, etc.). As such, some of the avian species recorded for Block 7153C require breeding and non-breeding habitats that are not supported at the subject property, and, therefore, these birds are not expected to use the site.

The majority of the birds on the atlas block list are known to occur within the forested, wetland, and developed habitats that are supported at the subject property, including those noted during the field inspection. The forested portions of the subject property represent habitat for reclusive woodland species observed during the field inspection and/or recorded within Block 7153C, including ovenbird (*Seiurus aurocapilla*), red-eyed vireo, great-crested flycatcher, pine warbler (*Dendroica pinus*) and others.

▼

[22]McGowan, K.J. and K. Corwin, eds. 2008. *The Atlas of Breeding Birds in New York State*. Cornell University Press. Data also available online at http://www.dec.ny.gov/animals/51030.html . Accessed May 16, 2014.

Similarly, the on-site wetlands and adjacent lacustrine habitat of Little Fresh Pond provide habitat for Block 7153C species such as belted kingfisher, mallard (*Anas platyrhynchos*) and green heron (*Butorides virescens*). Habitat for common avian species adapted to developed settings and human presence occurs within the developed portions of the subject property. These include several Block 7153C species that were frequently observed by sight and/or sound during the field inspection, including robin, mourning dove, song sparrow and house sparrow. These species, along with chipping sparrow, black-capped chickadee, tufted titmouse, gray catbird, downy woodpecker, red-bellied woodpecker, blue jay and northern cardinal represent the most commonly observed birds within the developed portions of the subject property during the field inspection.

Based on the foregoing observations, the subject property is best-suited for avian species that occur within wooded and wetland habitats, as well as a variety of common songbirds that were observed in and around the camp facilities during the field inspection.

Mammals

Three mammal species were observed at the subject property during the field inspection: eastern gray squirrel (*Sciurus carolinensis*), eastern chipmunk (*Tamias striatus*) and whitetail deer (*Odocoileus virginianus*). In order to determine other mammal species that may use the subject property, existing surveys of Long Island mammal populations, including *The Mammals of Long Island, New York*[23] (Connor, 1971) and the *Final Small Mammal and Herpetile Field Sampling and Summary Report for the South Shore of Long Island, New York*[24] were consulted. Based on these resources, as well as an evaluation of existing ecological conditions, the following mammal species have been identified as potentially using the subject property. However, this list is not intended to be an all-inclusive inventory of on-site mammals.

short-tailed shrew	*Blarina brevicauda*
bats	*Chiroptera spp.*
star-nosed mole	*Condylura cristata*
Virginia opossum	*Didelphis virginialis*
woodchuck	*Marmota monax*
striped skunk	*Mephitis mephitis*
meadow vole	*Microtus pennsylvanicus*
house mouse	*Mus musculus*
whitetail deer	*Odocoileus virginianus*
white-footed mouse	*Peromyscus leucopus*
raccoon	*Procyon lotor*
Norway rat	*Ratus norvegicus*

▼

[23] Connor, Paul F. 1971. *The Mammals of Long Island. New York* State University of New York, New York Museum and Science Service.

[24] United States Army Corps of Engineers. 2002. *Final Small Mammal and Herpetile Field Sampling and Summary Report for the South Shore of Long Island, New York.*

eastern mole	*Scalopus aquaticus*
eastern gray squirrel	*Sciurus carolinensis*
masked shrew	*Sorex cinerus*
eastern cottontail	*Sylvilagus floridanus*
eastern chipmunk	*Tamias striatus*
red fox	*Vulpes vulpes*

Due to resource limitations, it is not anticipated that all of the species listed above actually use the subject property. Species adapted to woodland settings, including the smaller rodent species listed above (e.g., mice, moles and shrews) are expected to be the most abundant mammals at the subject property. However, due to their diminutive sizes and predominantly subterranean life histories, these species are not easily observed. Along with eastern gray squirrel, the three mammals observed during the field inspection are anticipated to be the most commonly occurring mammal species at the subject property. Eastern cottontail and woodchuck are likely within and adjacent to the brushy edge habitats that occur along the site perimeter and between the tennis club and camp facilities and surrounding wooded areas.

With respect to the camp facilities in particular, raccoon and house mouse are expected to occur within or adjacent to the existing buildings, along with the three species noted on-site at the time of the field inspection.

Herpetofauna

During the field inspection, a bullfrog (*Rana catesbeiana*) was observed within the wetland area at the northern portion of the subject property.

In order to identify other herpetofauna that may use the site, an evaluation of existing site conditions was performed and the New York State Amphibian and Reptile Atlas Project (NYSARAP)[25] was consulted. According to the NYSARAP data (collected from 1990 to 1999), 21 amphibian and reptile species have been identified within the area covered by the Southampton, New York Quadrangle within which the subject property is located (species list included in Appendix F).

Taking into account the existing ecological conditions observed during the field inspection, it is not expected that the subject property is used by all of the herpetofauna on the NYSARAP list for the Southampton NY, Quadrangle, including several species of turtle that do not occur due to habitat limitations.

Based on the habitat conditions observed during the field inspection, the forested upland portions of the subject property are best suited for herpetofuana adapted to dry, open woodland conditions, including several that appear on the NYARAP list, such as eastern box turtle, eastern garter snake, northern redback salamander and

▼

[25] New York State Department of Environmental Conservation. 2014. Available online at: http://www.dec.ny.gov/animals/7140.html. Accessed July 28, 2015.

grey treefrog. In addition to the individual American bullfrog observed during the field inspection, the wetland and adjacent pond habitat (Little Fresh Pond) offers suitable breeding and/or non-breeding habitat for other semi- and fully- aquatic herpetofuana on the NYARAP list, including green frog, wood frog, spring peeper, Fowler's toad, red-spotted newt, spotted salamander, red-eared slider, painted turtle, common snapping turtle, and northern water snake (*Nerodia sipedon*). Overall, the wetland/pond complex may represent an important breeding area for many of the aforementioned species.

Given the existing developed/disturbed conditions (e.g., buildings, driveways, etc.) and human activity that occurs within and adjacent to the subject property, as well as the close proximity of the existing facilities and the wetland and adjacent pond, habitat for many of the aforementioned species is non-existent or limited within this area. Among the species included on the NYSARAP list, the following would be most likely to occur with regularity within the developed portions of the subject property: eastern garter snake, northern redback salamander, grey treefrog and Fowler's toad.

Rare/Protected Species

No federally-listed or New York State endangered, threatened or special concern plants or wildlife, or significant natural communities, were observed at the subject property at the time of the June 18, 2015 field inspection.

The six federally-listed species that appear on the USFWS Trust Resources List for the subject property[26] (see Appendix F) include three marine shorebirds for which habitat does not exist at the subject property. The two plant species on the list, sandplain gerardia (*Agalinis acuta*) and seabeach amaranth (*Amaranthus pumilus*), are plants of undisturbed native grass prairies and marine shorelines, respectively. As suitable habitat to support these five species does not exist at or in the immediate vicinity of the subject property, these species would not be expected at the site, and were not observed during the field inspection.

In addition to the five aforementioned federally-listed species, the USFWS Trust Resources List also includes the northern long-eared bat (*Myotis septenrionalis*). According to the USFWS Northern Long-Eared Bat Fact Sheet[27] (see Appendix F), this species is a brown colored, medium-sized bat, ranging in size from 3 to 3.7 inches, with a wingspan of 9 to 10 inches. Winter roosting habitat for northern long-eared bat occurs within caves, mines or similar habitats, while summer roosting habitat occurs either singly or in colonies, underneath the bark or in cavities or crevices of living or

▼

[26] United States Fish and Wildlife Service. 2015. Information Planning and Conservation System. Available online at: http://ecos.fws.gov/ipac/. Accessed July 25, 2015.

[27] United States Fish and Wildlife Service. April 2015. Northern Long-Eared Bat (*Myotis septenrionalis*) Fact Sheet. Available online at: https://www.fws.gov/Midwest/Endangered/mammals/nleb/nlebFactSheet.html. Accessed January 15, 2016.

dead trees. At dusk, the bats emerge from roosts to feed on insects, which they catch in flight using echolocation or glean from vegetation and water surfaces. Foraging habitat includes forested understories, as well as the surfaces of aquatic habitats. Based on the foregoing habitat description, the predominantly wooded subject property represents potential summer roosting and foraging habitat for northern long-eared bat.

The northern long eared bat is listed as federally threatened by the USFWS under section 4(d) of the federal Endangered Species Act of 1973, due to significant population declines as a result of the white-nose syndrome fungal disease.[28] According to the most recent USFWS white-nose syndrome zone map (Appendix F), Suffolk County is included among the counties containing hibernacula (winter hibernation sites) that are infected with white-nose syndrome. As such, the provisions of the USFWS final 4(d) rule for northern long-eared bat (effective February 16, 2016)[29] are applicable to Suffolk County and the subject property.

The final 4(d) rule includes certain prohibitions against incidental take, which is defined as killing, wounding, harassing or otherwise disturbing a species that would occur incidental to, and is not the purpose of, an otherwise lawful activity. Pursuant to the final 4(d) rule, incidental take of northern long-eared bat within white-nose syndrome zone counties (such as Suffolk County) is prohibited if it occurs within a hibernacula or if it results from tree removal activities that occur within 0.25 mile of a known, occupied hibernacula. Further, incidental take of northern long-eared bat is also prohibited if it results from cutting or destroying a known, occupied maternity roost tree or other trees within a 150-foot radius from a maternity roost tree during the pup season from (June 1 through July 31). Any proposed activity that would result in prohibited incidental take of northern long-eared bat as described above would require USFWS consultation and/or permitting. Activities that would not result in prohibited incidental take of northern long-eared bat as described above can proceed without USFWS consultation or permitting, provided that the activity does not require federal authorization, funding or approvals.

The final 4(d) rule further indicates that information on the locations of known, occupied hibernacula and maternity roost trees can be obtained from "*state Natural Heritage Inventory databases*." With respect to the subject property, correspondence from the NYNHP indicates that no agency records currently exist for northern long-eared bat hibernacula or roost trees at or in the vicinity of the site (see correspondence in Appendix F).

▼

[28] Federal Register Vol. 80, No. 63. Thursday, April 2, 2015.
[29] Federal Register Vol. 81, No. 9. Thursday, January 14, 2016.

As part of this existing conditions assessment, consultations were undertaken with NYNHP to determine whether records exist for known occurrences of rare or State-listed wildlife, plants or significant natural communities at or in the immediate vicinity (generally within one-half mile) of the subject property. In correspondence dated July 10, 2015 (copy included in Appendix F), the NYNHP reported that such records currently exist for two vascular plants, one butterfly species, and one significant natural community. As summarized in the table below, the NYNHP correspondence indicates that the four records are all from off-site locations.

Table 13 – Summary of NYNHP Records for the Subject Property and Vicinity

Record Type	Common Name	Scientific Name	NYS Legal Status	Record Date	Location
Vascular Plant	Small Floating Bladderwort	*Utricularia radiata*	Threatened	1984	Little Fresh Pond
Vascular Plant	Atlantic White Cedar	*Chamaecyparis thyoides*	Threatened	1984	North Sea Cedar Swamp, north of Little Fresh Pond
Butterfly	Hessel's Hairstreak	*Callophrys hesseli*	Endangered	1989	North Sea Cedar Swamp, north of Little Fresh Pond
Community	Coastal Plain Atlantic White cedar Swamp	N/A	N/A	N/A	North Sea Cedar Swamp, north of Little Fresh Pond

Furthermore, it is important to note that neither Atlantic white cedar trees nor the Atlantic White Cedar Swamp ecological community were observed at the subject property during the field inspection, and the locations provided in the NYNHP correspondence indicate that these off-site records are from the northern side of Little Fresh Pond. Notably, the Hessel's Hairstreak butterfly occurs exclusively within the Atlantic White Cedar Swamp ecological community, where the larvae feed exclusively on Atlantic white cedar trees.[30] Accordingly, given that the aforementioned ecological community and tree species were not observed on-site during the field inspection, it is not expected that Hessel's Hairstreak occurs at the subject property.

Regarding the final species record, the aquatic plant small floating bladderwort was not observed within the wetland community at the northwestern portion of the subject property during the field inspection, which represents the only potentially-suitable habitat for this species. Moreover, the NYNHP correspondence indicates that the species record is from Little Fresh Pond. Based on these considerations, it is not expected that small floating bladderwort occurs at the subject property.

[30] New York Natural Heritage Program. 2015. Hessel's Hairstreak Guide. Available online at: http://www.acris.nynhp.org/guide.php?id=7857. Accessed July 28, 2015.

Wetlands

As observed during the field inspection, a wetland habitat associated with Little Fresh Pond occurs at the northern portion of the subject property and continues off-site. Based on field observations, the wetland habitat is representative of the ECNYS Red Maple-Black Gum Swamp and Shallow Emergent Marsh ecological communities. The entire wetland complex, along with Little Fresh Pond, represents a portion of the larger Alewife Creek/Big and Little Fresh Pond Significant Coastal Fish and Wildlife Habitat (SCFWH), as designated by the NYSDEC.

According to the NYSDEC's SCFWH assessment form, last updated May 15, 2002 (copy included in Appendix F), this wetland/pond/stream complex contains a variety of freshwater habitats and is noteworthy for being free of barriers to fish migration between Peconic Bay and Big Fresh Pond. As a result, within the Peconic Bay watershed, Big Fresh Pond represents a major spawning area for alewife, which migrate to the pond from Peconic Bay (via Alewife Creek) to spawn each spring. Big Fresh Pond is known to support rare freshwater mollusk populations and is also considered an important habitat for several freshwater fish species, including largemouth bass, chain pickerel, yellow perch, white perch, pumpkinseed sunfish, brown bullhead, banded killifish and American eel. Collectively, the two ponds and Alewife Creek provide habitat for many bird species, including terns, gulls, herons and osprey. The SCFWH assessment form further indicates that Alewife Creek/Big and Little Fresh Pond SCFWH is noted for providing locally significant recreational fishing opportunities, as well as a limited commercial fishery during the spring alewife migration.

According to the NYSDEC habitat assessment, potential threats to water quality, fish and wildlife within the Alewife Creek/Big and Little Fresh Pond SCFWH include the following:

> "*Any activities that would further degrade water quality, increase turbidity, or alter water depths, would have significant impact on fish and wildlife species inhabiting Alewife Creek and Big and Little Fresh Ponds. Warm water fish species would be most sensitive April 1 through July 30, when spawning takes place.*
>
> *The small size of Alewife Creek above Noyack Road makes it particularly sensitive to disturbance. Improving water quality in Big Fresh Pond is largely dependent on the elimination of all point and non-point source discharges into the Pond. Any new developments should contain all stormwater to prevent any discharge into the pond. The Town of Southampton has undertaken extensive road drainage improvement projects in the Big Fresh Pond and Alewife Creek watersheds to mitigate urban runoff into these waterbodies.*

Creation of any barriers to fish migration, whether physical or chemical, would have significant effect on the biological resources of this area. Any substantial disturbance of the vegetative cover within or adjacent to these aquatic habitats and in the adjacent wetland areas would adversely affect water quality in Alewife Creek and Big and Little Fresh Ponds. However, access to the area for compatible recreational uses of the fish and wildlife resources should be maintained or enhanced. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values."

Based on a review of the NYSDEC Environmental Resource Mapper (ERM) website[31] and the NYSDEC Freshwater Wetland Map of Suffolk County, Southampton, NY Quadrangle (Map No. 20 of 39),[32] the on- and off-site portions of the aforementioned wetland are regulated by New York State as NYSDEC Freshwater Wetland SH-4 (see Figure 11 on Page 56 of this DEIS). The NYSDEC regulates and requires a permit for many uses and activities within New York State-regulated wetlands and the surrounding 100-foot adjacent area.

The USFWS NWI,[33] provides information to the public on the extent and status of the Nation's wetlands, and these maps are intended as guidance documents made available "*…to provide [USFWS biologists] and others with information on the distribution of wetlands to aid in wetland conservation efforts.*"[34] Furthermore, "*There is no attempt to define the limits of proprietary jurisdiction of any Federal, state, or local government, or to establish the geographical scope of the regulatory programs of government agencies.*"[35] The wetland feature located at the northern portion of the subject property is not depicted on the NWI maps (see Figure 12 on Page 57 of this DEIS), although the adjacent wetlands associated with Little Fresh Pond are shown. Therefore, the on-site wetland feature may be federally-regulated. In general, any proposed direct impacts (e.g., filling, draining, discharges, constructions of structures, etc.) within federally-regulated wetlands requires a permit from the United States Army Corps of Engineers (USACE).

Pursuant to Town code Chapter 325A, the Town regulates and requires a permit for many uses and activities within freshwater wetlands and the surrounding 100-foot adjacent area.

▼

[31] New York State Department of Environmental Conservation. 2013. Available online at: http://www.dec.ny.gov/imsmaps/ERM/viewer.htm Accessed July 28, 2015.
[32] New York State Department of Environmental Conservation New York State Freshwater Wetland Maps. 1975.
[33] United States Fish and Wildlife Service National Wetland Inventory Wetlands Mapper. 2015. Available online at: http://www.fws.gov/wetlands/Data/Mapper.html Accessed July 28, 2015.
[34] United States Fish and Wildlife Service. 2015. Available online at http://www.fws.gov/wetlands/NWI/index.html. Accessed July 28, 2015.
[35] United States Fish and Wildlife Service National Wetlands Inventory. 2015. Available online at: http://www.fws.gov/wetlands/Data/mapper.html. Accessed July 28, 2015.

3.4.2 Potential Impacts

Under existing conditions, 6.37± acres of the 17.28±-acre subject property are cleared of natural vegetation, while the remaining 10.91± acres is vegetated with forested and wetland habitats, as detailed above. Upon implementation of the proposed action, an additional 0.79± acre would be cleared (e.g., to widen the internal driveway, to relocate curb cuts for safety, etc.), and a total of 0.21± acre would be revegetated with native trees, shrubs and herbaceous plants (see Section 3.4.3 of this DEIS – Mitigation Measures). The net effect is an increase in cleared area of 0.58± acre.

A survey of the proposed areas to be cleared was performed to identify all trees of 6-inch caliper or greater. The *Tree Removal + Preservation Plan* contained in Appendix B identifies the existing and proposed limits of clearing, and all trees of 6-inch caliper or greater to be removed. As also identified on the *Tree Removal + Preservation Plan*, construction fencing is proposed to be installed (in the areas shown) to protect the existing trees to remain during construction activities.

The proposed 0.79± acre of clearing would occur within ECNYS Pitch Pine Oak Forest, Coastal Oak-Hickory Forest, Mowed Lawn and Mowed Lawn with Trees ecological communities within and adjacent to the existing tennis club and/or tennis camp facilities. Regarding the former two communities, both were observed to be common within the forested portions of the subject property, as well as on adjacent properties and in the general surrounding area. Moreover, the forested areas within and adjacent to existing facilities on the subject property have experienced various historic and ongoing disturbances, including selective tree removal, clearing of understory vegetation and the establishment of pathways. In particular, the characteristic well-developed heath shrub understories of these two communities detailed in their respective ECNYS descriptions were observed to be sparse to non-existent during the field inspection, especially in areas located adjacent to existing facility buildings and driveways. At many of these locations, the herbaceous groundcover stratum has been colonized by turf grasses and/or by non-native/invasive vegetation (e.g., multiflora rose). As a result, though representative oak, hickory and pitch pine trees still occupy the canopy stratum of the Pitch Pine-Oak Forest and Coastal Oak-Hickory Forest communities within and adjacent to the camp facilities, the understory strata are no longer present or have been significantly degraded. Furthermore, the canopy stratum is discontinuous, due to the presence of the existing facility buildings, driveways, pathways, etc. Several atypical tree species (e.g., eastern white pine and Norway spruce), have either colonized or been planted in these areas and are present within the oak-pine-hickory-dominated canopy stratum. In summary, though representative tree and shrub species of the Pitch Pine-Oak Forest and Coastal Oak-Hickory Forest communities still remain, their overall ecological value has been impaired and degraded, in comparison with other examples of these two ECNYS communities located within undisturbed portions of the subject property.

The remaining areas proposed to be cleared are occupied by anthropogenic Mowed Lawn and Mowed Lawn with Trees dominated by maintained turf grasses and weedy herbaceous plants, as well as native and ornamental tree species. According to the NYNHP, both communities are distributed throughout New York State, where they are considered demonstrably secure.

Based on the foregoing conclusions, it is anticipated that the minimal proposed clearing (0.79± acre) of disturbed forest communities and maintained lawn areas, which are abundant at the subject property and surrounding properties, would have a negligible effect on local habitat diversity and individual plant species populations. Furthermore, 0.21± acre of revegetation with native trees, shrubs and herbaceous plants is proposed, further reducing the potential for impact. As such, no significant adverse impacts to local habitats or vegetative species are anticipated as a result of implementation of the proposed action.

Regarding wildlife populations, the subject property represents habitat for a variety of avian, mammal and herpetofuana species, as detailed in Section 3.4.1. The clearing of 0.79± acre of vegetated habitat would occur within and adjacent to the existing tennis club and camp facilities, rather than within the undisturbed forested or wetland habitats that occupy 10.91± acres of the subject property. Given the developed conditions and high degree of human activity that currently occurs where clearing of vegetation is proposed, the existing vegetated and non-vegetated habitats are best-suited for wildlife species adapted to these conditions, including the common songbirds (e.g., northern cardinal, song sparrow, robin, etc.) and mammals (e.g., eastern chipmunk, eastern gray squirrel, raccoon, whitetail deer etc.) observed during the field inspection or expected to occur onsite, as noted in Section 3.4.1. Reclusive avian and mammal species of forest interior habitats were not observed or are expected within the area of the existing camp facilities, except perhaps as occasional transients. A few common herpetofauna species are also expected to occur within the project area (e.g., eastern garter snake, northern redback salamander, grey treefrog and Fowler's toad). However, taking into account the habitat requirements for the majority of the observed/expected herpetofuana discussed in Section 3.4.1, most of these species, if present, would be restricted to the wetland/aquatic habitats and immediately adjacent uplands located at and beyond the northern boundary of the subject property. As such, these herpetofauna species are not expected to occur within the proposed clearing areas. Furthermore, given the significant distance between the proposed clearing areas and the nearest portion of the wetland/pond complex (368 ± feet) no significant adverse impacts to resident herpetofauna populations or their habitat are anticipated as a result of the proposed action.

During the clearing and construction phases of the proposed action, it is expected that individuals of some wildlife species, (i.e., smaller, less-mobile animals or juveniles of certain species) would be impacted, particularly within tree-dominated areas. Nevertheless, the majority of wildlife present within or expected to use the site are

considered to be generally more mobile (i.e., black-capped chickadee, blue jay, whitetail deer, eastern chipmunk, etc.), and, therefore, would avoid elimination and be displaced. Particularly with respect to the treed areas, it is anticipated that individuals of some of these species would be displaced to the 10.91± acres of contiguous forested and wetland habitats located on-site, as to additional off-site contiguous forested habitats. In the short-term, it is anticipated that these habitats would experience a minimal temporary increase in wildlife populations during the clearing and construction phases of the proposed action, due to emigration of individuals from the cleared portions of the subject property. Subsequently, it is anticipated that inter- and intra-specific competition for available resources within these surrounding habitats would result in an insignificant net decrease in local population size for most species, until equilibrium between wildlife populations and available resources is achieved. Given the minimal amount of vegetated wildlife habitat that is proposed for clearing, the overall impact on local wildlife populations is expected to be negligible.

Following implementation of the proposed action, it is anticipated that the subject property would continue to function as habitat for reclusive wildlife species of undeveloped wooded and wetland habitats, as well as less reclusive species adapted to developed/disturbed conditions and human activity.

Overall, the proposed improvements represent minimal alterations within and adjacent to developed portions of the subject property that are already in use as a tennis club/camp, and the total building and impervious surface area would not change. The existing and extensive on- and off-site undisturbed forested and wetland habitats would not be cleared or otherwise disturbed Furthermore, 0.21± acre of revegetation of wildlife habitats with native vegetation is proposed as mitigation, as detailed below in Section 3.4.3 (Mitigation Measures). As such, no significant adverse impacts to resident wildlife populations or their habitat are anticipated as a result of the proposed action.

As detailed in Section 3.4.1 of this DEIS, no federally-listed or New York State endangered, threatened or special concern plants or wildlife, or significant natural communities, were observed at the subject property at the time of the June 18, 2015 field inspection. Furthermore, as habitat for five of the six federally-listed plant and wildlife species that appear on the USFWS Trust Resources List for the subject property does not exist at or in the immediate vicinity of the subject property, these species are not expected to occur at the site, and no significant adverse impacts for the five species are anticipated as a result of the proposed action.

With respect to the one remaining species on the USFWS Trust Resources List, the predominantly wooded subject property represents potential summer roosting and foraging habitat for northern long-eared bat, which is listed as threatened by both the federal government and NYS. The provisions of the USFWS final 4(d) rule for

northern long-eared bat (effective February 16, 2016) are applicable to the subject property. The final 4(d) rule includes certain prohibitions against incidental take, which is defined as killing, wounding, harassing or otherwise disturbing a species that occurs incidental to, and is not the purpose of, an otherwise lawful activity. Pursuant to the final 4(d) rule, incidental take of northern long-eared bat within white-nose syndrome zone counties (i.e., Suffolk County) is prohibited if it occurs within a hibernacula or if it results from tree removal activities that occur within 0.25-mile of a known, occupied hibernacula. Further, incidental take of northern long-eared bat is also prohibited if it results from cutting or destroying a known, occupied maternity roost tree or other trees within a 150-foot radius from a maternity roost tree during the pup season from (June 1 through July 31). Any proposed activity that would result in prohibited incidental take of northern long-eared bat as described above would require USFWS consultation and/or permitting. Activities that would not result in prohibited incidental take of northern long-eared bat as described above can proceed without USFWS consultation or permitting, provided that the activity does not require federal authorization, funding or approvals.

The final 4(d) rule further indicates that information for the locations of known, occupied hibernacula and maternity roost trees can be obtained from "*state Natural Heritage Inventory databases*." With respect to the subject property, correspondence from the NYNHP indicates that no agency records currently exist for northern long-eared bat hibernacula or roost trees at or in the vicinity of the site (Appendix B). Accordingly, pursuant to the final 4(d) rule, the limited tree removal activities (i.e., clearing of 0.79± acre of disturbed forest and maintained lawn areas) at the subject property associated with the proposed action would not result in a prohibited incidental take of northern long-eared bat, and the proposed action can proceed without USFWS consultation of permitting for this species.

NYNHP records for the subject property and vicinity reference two plant species, one butterfly species and one significant natural community (Atlantic white cedar, small floating bladderwort, Hassel's hairstreak and the Atlantic White Cedar Swamp community, respectively). The four NYNHP records are from off-site location including Little Fresh Pond and areas to the north. The three species and one community were not observed at the subject property during the field inspection. Moreover, the limits of clearing for the proposed action are located 700± feet from the surface waters of Little Fresh Pond. Accordingly, no significant impacts to the three New York State-listed plants and one community are anticipated as a result of the proposed action.

Similarly, as the proposed limits of clearing are located 388± feet from the limits of delineated wetlands at the northern portion of the subject property (see *Proposed Storm Drainage Plan* in Appendix B), no significant adverse impacts to wetlands are anticipated, and no federal, New York State or local wetland permits would be required.

As detailed in Section 3.4.1 of this DEIS, the on-site wetland represents a portion of the larger Alewife Creek/Big and Little Fresh Pond SCFWH, as designated by the NYSDEC. The NYSDEC assessment form lists impacts to water quality and fish and wildlife habitat through stormwater discharges, barriers to fish migration and/or vegetative clearing within or adjacent to the habitat as the chief threats to the Alewife Creek/Big and Little Fresh Pond. As the limits of clearing for the proposed action are located 235± feet from the SCFWH and no such actions are proposed, no significant adverse impacts to the Alewife Creek/Big and Little Fresh Pond SCFWH are anticipated as a result of the proposed action.

3.4.3 Mitigation Measures

In order to mitigate for the proposed clearing of 0.79±acres of vegetation and wildlife habitat at the subject property, 0.21± acre of native revegetation is included in the proposed action. As detailed on the *Planting Plan* prepared by Marshall Paetzel Landscape Architecture, P.C. (see Appendix B of this DEIS) the proposed revegetation includes the installation of 211 native trees and shrubs of the following species: American beech (*Fagus grandifolia*), northern red oak (*Quercus rubra*), American dogwood (*Cornus florida*), American holly (*Ilex opaca*), serviceberry (*Amelanchier canadensis*), mountain laurel (*Kalmia latifolia*) and northern bayberry (*Myrica pensylvanica*). In addition, 3,480 herbaceous plants of the following species would also be installed: cinnamon fern (*Osmundastrum cinnamomeum*), Christmas fern (*Polystichum acrostichoides*), Pennsylvania sedge (*Carex pensylvanica*), little bluestem (*Schizachyrium scoparium*), switchgrass (*Panicum virgatum*).

The aforementioned trees, shrubs and herbaceous plants would be installed in groupings at various locations at the subject property, including the areas of the existing and relocated driveways and curb cuts from Majors Path, along the northern property boundary with the adjacent single-family residential uses and at selected locations within the subject property interior. It is anticipated that the native plantings would create or enhance existing wildlife habitat at the subject property, while also maintaining or improving the existing natural buffers along the subject property boundaries with Majors Path and adjacent residential uses.

3.5 Visual and Aesthetic Resources and Community Character

3.5.1 Existing Conditions

Visual Character

The physical character of the subject property is defined by the improvements associated with the existing tennis club and camp within a wooded area. The camp's several buildings are dispersed throughout much of the property, laid out along winding roads and surrounded by dense woods. Recreational facilities such as the ballcourts, swimming pool, and fields are generally located around the periphery of the complex and are similarly surrounded by trees. The camp's wood-framed buildings are modest in scale and height, and exhibit an unadorned vernacular style. The small, one-story cottages vary greatly in form but share similar materials such as wood cladding and exterior trim; several have an attached patio or deck, and banks of windows to enjoy the surrounding scenery. Common buildings, including the dining hall, house, and clubhouse, have a more sprawling footprint but retain the low-scale height and vernacular style of the surrounding cottages. Natural vegetation both within and surrounding the subject property provides ample shade and screening from surrounding properties.

Views of the subject property from the surrounding area are limited by the wooded natural buffer along the perimeter of the site. The existing curb cuts along Majors Path offer limited glimpses into the interior of the subject property. Landscaping and natural vegetation throughout the interior of the site provide visual screening for a majority of the existing structures on the portion of the site currently used as a camp, and existing improvements are only partially visible and obscured from view. The gravel parking lot used by the tennis club is partially visible through vegetated areas from along Majors Path.

The tennis court on the northern portion of the subject property extends into the wooded buffer that is otherwise present along the site boundary, and reaches approximately two feet beyond the northern property line, such that it is visible along the east-west driveway on the adjacent property. The northernmost cottages may also be partially visible from the adjacent property.

The point where the subject property meets Little Fresh Pond is visible from a publicly accessible parcel on the north side of Little Fresh Pond, although all of the on-site development is well beyond the tree cover.

The scenic character of the area immediately surrounding the subject property reflects the prevailing single-family residential development and natural open space land uses; trees, lawns, driveways and houses comprise the landscape.

The subject property is not in the vicinity of any officially designated local, state or federal scenic areas. Natural areas near the site include a Town-owned parcel on the south side of Little Fresh Pond, a Nature Conservancy-owned parcel connecting Little Fresh Pond Road with the southeast side of Little Fresh Pond, and a Suffolk County-owned open space property on the east side of Majors Path. The improved portions of the camp facility are not expected to be visible from these natural areas.

Elsewhere within a half-mile radius surrounding the site, the scenic character varies with the land uses, and single-family residences are dominant. The residential property frontages, many of which contain vegetative buffers, give way to parking lots and storefronts within the commercial area on North Sea Road near its intersections with Little Fresh Pond and Parrish Roads. An automobile junkyard located south of the subject property on Majors Path is partially shielded from view by a fence and landscaping; yet in passing, there is a noticeable break in the otherwise residential character of this corridor.

Photographs documenting the visual character of the subject property from within, and from publicly accessible vantage points, are provided in Appendix G.

Outdoor Lighting

The Town of Southampton enumerates regulations for outdoor lighting at Section 330, Article XXIX of the Town Code. The purpose of these regulations is to

> "*protect the health, safety and welfare of the general public, conserve valuable energy resources, prevent light trespass from interfering with our quality of life, protect our ecological and natural resources, and preserve the ability to view the celestial features of the night sky for present and future generations*." (§330-340)

With regard to nonresidential properties, the Town Code requires that outdoor lighting shall not trespass onto neighboring properties, and be fully shielded and downward facing. A *Lighting Plan* (see Appendix B) has been developed for the proposed action, and the consistency of same with the relevant portions of the lighting regulations contained within the Town Code is discussed in Section 3.5.2 of this DEIS.

The existing outdoor lighting at the subject property consists of nine security lights/cameras (distributed throughout the subject property), one post light (located along the parking area proximate to the existing residence) and 10 directional lights (located proximate to the existing residence, dining hall and clubhouse). As shown on

the *Lighting Plan*, existing outdoor lighting at the subject property does not illuminate areas beyond the developed portions of the subject property.

The immediate vicinity of the subject property consists of heavily wooded, single-family residential development, and undeveloped natural areas. Thus, there are currently no significant sources of outdoor lighting which affect the character of the neighborhood.

3.5.2 Potential Impacts

Visual Character

As presently developed, the subject property includes several structures, tennis courts, a basketball court, swimming pool, gravel parking areas, lawns, landscaping and natural areas. The existing improvements are situated on the subject property such that they are primarily obscured from view by the existing wooded areas that occupy the perimeter of the subject property. The proposed improvements have been designed such that the overall aesthetic character of the developed portions of the subject property would not be altered, as further discussed below. In addition, the perimeter of the subject property would remain natural (i.e., wooded), minimizing the potential for the alteration of views from the surrounding areas.

As part of the proposed action, site access points along Majors Path would be altered to improve traffic safety and site aesthetics (see Section 3.6). Specifically, the northernmost two curb cuts, proximate to existing Cottage 11 and proposed Cottage 14, would be eliminated and revegetated. The curb cut which is currently (and would continue to be) used as the exit for the camp would be moved to the south, approximately 56 feet. The southernmost curb cut, which is currently (and would continue to be) used as the entrance and exit for the tennis club, would also be moved to the south, approximately 100 feet. The two curb cuts to be relocated would be revegetated, as would the natural area to be disturbed by the relocation of the camp exit curb cut. In total, 0.23± acre would be revegetated along Majors Path (including 0.07± acre in the right-of-way). This revegetation would serve to maintain existing views of the subject property from along Majors Path, as well as to increase the natural buffer at the northern portion of the subject property where the gravel curb cuts are to be removed.

In addition to the areas along Majors Path, revegetation would also occur along the northern property boundary, adjacent to single-family residential uses. The existing tennis court in this area currently extends approximately two feet beyond the property line. As part of the proposed action, the southern portion of this tennis court would be converted into a smaller basketball court, and the remainder would be revegetated. More specifically, 0.12± acre would be converted to a basketball court,

and 0.06± acre would be revegetated. As such, the playing surface would no longer encroach onto the adjacent property, and a minimum 20-foot-8±-inch vegetated buffer would be created, thus reducing the visual impact of the subject property on the adjacent residential uses to the north, as compared with existing conditions.

As detailed on the *Site Plan* (see Appendix B), the proposed action includes the clearing of select areas within the interior portion of the subject property, to accommodate the proposed improvements. Specifically, the proposed gravel parking area and expanded access driveway associated with the camp portion of the subject property would require vegetative clearing that would reduce the natural buffer between Majors Path and the existing access driveway/proposed parking area from approximately 66± feet (variable) to a minimum of 40± feet. It is expected that this buffer reduction would result in an incremental increase in the visibility of the internal camp driveway and parking spaces and associated vehicle circulation and parking from along Majors Path. These features are currently partially visible through the vegetated buffer, and the incremental change would not likely be significant as a 40±-foot vegetated buffer would be retained. Additionally, the proposed *Planting Plan* (see Appendix B) includes additional plantings along the interior (western) limit of the buffer, further screening the driveway and the gravel parking area and associated vehicle circulation and parking along same. It is noted that the camp is (and would continue to be) operational for a ten-week period, on weekdays between mid-June and early September, and would be inactive for the majority of the year. As such, the operational period of the camp coincides with the time of year when leaves would be on the trees, helping to obscure the improved portions of the site (including the driveway and parking spaces and associated vehicle circulation and parking) from view. Furthermore, the proposed parking area is for personal vehicles only; buses would be expected to generally use the one-way loop to the west of the proposed parking area (set back further from Majors Path).

The remaining areas to be cleared, including the proposed play area and changing sheds, are substantially set back from adjacent properties, and would have no adverse visual impact upon the surrounding neighborhood.

As discussed above, there are several properties in the vicinity of the subject property that, although not officially designated as scenic areas, are maintained as undeveloped open space. Under existing conditions, the developed portion of the subject property would not be visible from these open space areas. The proposed improvements at the subject property are located within areas that would not alter views from these open space parcels. As such, the scenic qualities of these parcels would be maintained upon implementation of the proposed action.

Overall, based on the foregoing, the proposed improvements would have no significant impact on visual or aesthetic resources and/or community character.

Outdoor Lighting

The site lighting has been designed to be consistent with the legislative intent and purpose of Article XXIX, *Outdoor Lighting*, of the Town Code. According to Section 330-344(A), *General standards for all outdoor lighting installations*, all new outdoor lighting must be designed to prevent the following:

(1) Nuisance lighting;
(2) Excessive lighting and energy consumption;
(3) Glare;
(4) Light trespass;
(5) Unnecessary skyglow;
(6) Unnecessary detriment to species in natural communities proximate to lighting locations;
(7) Interference with pedestrian or vehicular travel on streets, roadways and highways.

A *Lighting Plan* was prepared by Marshall Paetzel Landscape Architecture, P.C. (see Appendix B of this DEIS) that depicts the location of the existing and proposed lighting standards (poles, bollards, wall-mounts and security lights) as well as the associated photometrics (distribution of illumination levels across the property, as measured in foot-candles). Preliminary details for proposed fixtures are also provided. The proposed light sources on the subject property would be shielded and projected downward to prevent skyglow and light trespass, and is designed to conform to the Town's non-residential lighting requirements. The light fixtures would be extinguished no later than 11:30 p.m. during camp season, and existing wall sconces would be replaced with full cut-off wall sconces. As indicated on the *Lighting Plan*, the proposed outdoor lighting improvements would result in measurements of 0.0 (zero) foot-candles at all points along the perimeter of the subject property. Additionally, exterior lighting would be installed in accordance with a final lighting plan to be submitted or the Town's review and approval as part of Site Plan review, in accordance with Article XXIX of the Town Code. Accordingly, the proposed action would not be expected to result in significant adverse impacts on visual and aesthetic resources and/or community character as a result of exterior lighting components.

3.5.3 Mitigation Measures

While no significant adverse impacts to visual and aesthetic resources and community character have been identified, the following mitigation measures have been incorporated into the design of the proposed action to minimize or preclude potential impacts:

- Natural buffers would be retained along the perimeter of the subject property to obscure views of the facility, including the revegetation of areas along Majors Path.

- Revegetating the northernmost portion of the existing tennis court to be converted to a basketball court, providing a buffer along the adjacent private drive.

- All proposed lighting fixtures would be shielded and downward-facing to prevent light spillover.

- Existing exterior wall sconce lighting would be replaced with full cut-off fixtures.

3.6 Transportation

A Traffic Impact Study ("TIS") was performed to provide a comprehensive evaluation of the potential traffic impacts associated with the proposed action. Evaluation of the transportation impacts requires a thorough understanding of the current transportation system in the project study area. Existing transportation conditions include roadway characteristics, unsignalized and signalized intersections, traffic volumes, and accident records. The purpose of the TIS is to determine whether any significant traffic impacts would result from the proposed development and to propose and evaluate mitigation measures, if required. This section presents the findings of the TIS and summarizes the data collection process, traffic analysis, access examination and study conclusions. The complete TIS is included in the Appendix H of this DEIS.

3.6.1 Existing Conditions

The subject property is on the west side of Major's Path, north of North Sea Mecox Road and south of Little Fresh Pond Road. Major's Path currently provides direct access to the existing site. According to the TIS, in the surrounding area, Major's Path has both horizontal and vertical curvature, which has some impact on available sight distance. In order to determine the potential traffic impacts of the proposed project, seven unsignalized intersections were investigated in the TIS:

- Major's Path at Little Fresh Pond Road/Edge of Woods Road
- Major's Path at North Sea-Mecox Road
- Major's Path at North Sea Road (C.R. 38)
- North Sea Road (C.R. 38) at North Sea-Mecox Road
- Major's Path at the Site Access Entrance Drive
- Major's Path at the Site Access Exit Drive
- Major's Path at the relocated Southerly Access Drive

In addition, the North Sea Road (C.R. 38) at Sandy Hollow Road (C.R. 52) signalized intersection was investigated in the TIS. Lane configurations for each of the unsignalized intersections and for the signalized intersection at North Sea Road and Sandy Hollow Road are listed within the "Roadway Characteristics" section of the TIS (see Appendix H of this DEIS).

Existing Traffic Volumes Data

As stated in the TIS, no agency traffic volume data was found to be available for Major's Path. As a result, an Automatic Traffic Recorder (ATR) machine was used to

collect existing traffic volumes on Major's Path in the vicinity of the site. An ATR was placed just north of the proposed northernmost site driveway to record the 24-hour traffic volumes from Tuesday, August 20, 2013 through Thursday, August 22, 2013. Due to the highly seasonal traffic in Southampton, which incurs substantial peaks during the summer, the ATR counts conducted in the summer of 2013 were used without a seasonal adjustment. The ATR counts are provided in Appendix H of this DEIS.

Accident History

Information was obtained from the New York State Department of Transportation (NYSDOT) records regarding all accidents that occurred on Major's Path, in the immediate vicinity of the subject property, between April 1, 2007 and March 31, 2010. This data consisted of summaries of accident cases that occurred on the segment of Major's Path between North Sea Mecox Road on the south and Little Fresh Pond Road on the north. A total of four accidents occurred during this time, none of which involved injuries or fatalities. All the information from NYSDOT can be found in the appendix of the TIS in the section entitled "Accident Records.".

Furthermore, according to the TIS, the previous analysis was updated to include accident records from July 10, 2012 to September, 2014. In the 26-month study period there was a generally low level of accident occurrences. Two accidents occurred at the intersection of North Sea Road at North Sea-Mecox Road, two accidents occurred on North Sea-Mecox Road between North Sea Road and Major's Path, and one accident occurred on Major's Path between North Sea-Mecox Road and North Sea Road. No accidents occurred at the intersections of Major's Path with North Sea Road, North Sea-Mecox Road or Edge of Woods Road/Little Fresh Pond Road.

There were six accidents on Major's Path between North Sea-Mecox Road and Edge of Woods Road/Little Fresh Pond Road in the vicinity of the subject property. None of the six accidents appear to be linked to activity involving the Southampton Racquet Club and Camp. All accidents occurred at times when the camp was not operating (and would not be operating in the future). Summaries of the accidents can be found within the appendix of the TIS in the section entitled "Accident Records" (see Appendix H of this DEIS).

Site Trip Generation Analysis

In order to estimate the number of new vehicles added to the surrounding roadway network from the proposed development, a trip generation analysis was conducted. Traffic volume counts were taken during July of 2015 at the three access driveways to the site during the weekday 8:00 a.m. to 10:00 a.m. and 3:00 p.m. to 5:00 p.m peak hours of camp's drop-off and pick-up activity. Within those two-hour time periods the one-hour peak period was identified, which is represented in the table below.

Table 14 – Existing Site Generated Traffic (Summer 2015)

	Weekday A.M. Peak Hours		Weekday P.M. Peak Hours	
	Enter	Exit	Enter	Exit
Camp Entrance/Exit	50	22	6	33
Tennis Club/Staff Parking Area	37	0	2	20
Total	87	22	8	53

During the summer of 2015, the camp provided services to 215 children and was operated by 65 staff members.

During the summer of 2016, the camp operated with an enrollment of 280 campers and 72 staff members. Of the 70 staff members, 53 were housed on-site and the remaining staff was transported by 16 seat camp vans from off-site locations. Additional information can be found within the TIS in Appendix H of this DEIS.

3.6.2 Potential Impacts

In addition to documenting existing conditions, the TIS evaluates the future traffic conditions of the surrounding roadway network, and assesses the potential impacts of the proposed action upon same. Additionally, the proposed site access is evaluated. The salient portions of the TIS are summarized below.

Accident History

As indicated in the TIS, the addition of the very small estimated increase in traffic due to the proposed action should not result in any increase in accident experience at this location, and the recommended access arrangement should further enhance the safe operation of the roadway.

Site Trip Generation Analysis

The proposed action has been designed to provide a better camping experience to the users of the site, and to accommodate the offerings of a full service camp. The TIS evaluated a future condition in which the camp would support 390 campers and 95 staff members. The table below identifies the projected amount of traffic the site is anticipated to generate at that full occupancy. It should be noted since the site trip generation analysis was conducted the camper and staff projections have changed. The projected maximum enrollment at the camp is now 360 campers with 90 staff members (including 65 overnight staff). The reduced projections for campers and staff and the increased projection of the proportion of staff staying at the camp overnight would result in actual peak trip generation numbers that are lower than the results of

this analysis. Therefore, as a conservative approach, the site trip generation analysis was not revised to reflect the most current projections.

Table 15 – Future Site Generated Traffic at Full Occupancy

	Weekday A.M. Peak Hours		Weekday P.M. Peak Hours	
	Enter	Exit	Enter	Exit
Camp Entrance/Exit	91	40	11	60
Tennis Club/Staff Parking Area	54	0	3	29
Total	145	40	14	99

Figures 7 and 8 within the TIS (see Appendix H of this DEIS) present composite volume data for projected Weekday A.M and P.M. peak hours of the arrivals and departures at the site in 2017. Additional traffic is expected to be generated based on an increase in staff and transportation buses. Approximately 65 of the staff would be housed on-site, and other than the manager and assistant manager, the staff do not have autos. Most of the staff are visiting students either from other countries or other parts of the U.S. The remaining staff parks off-site at the Tuckahoe Elementary School through a lease agreement, and are transported to the site via two 16-seat camp-owned vans, which park in the staff lot when not in use. Under the proposed action, the facility would continue to operate in this manner. The table below identifies the anticipated amount of additional traffic that would be generated upon completion of the project and the site at full occupancy.

Table 16 – Additional Site Generated Traffic

	Weekday A.M. Peak Hours		Weekday P.M. Peak Hours	
	Enter	Exit	Enter	Exit
Camp Entrance/Exit	41	18	5	27
Tennis Club/Staff Parking Area	17	0	1	9
Total	58	18	6	36

The existing camp has experienced continued enrollment growth in the last few years, since the applicant began operating the site, as explained throughout this DEIS. This growth in enrollment and staff is expected to continue, even absent the proposed action. In fact, as of the summer of 2016, camp enrollment increased from 215 (in 2015) to 280 campers. Thus, the projected additional site generated traffic depicted in the table above represents a conservative assessment, as the actual increase in enrollment cannot be entirely attributed to the proposed action.

The additional future site-generated traffic was distributed onto the roadway network, and capacity analyses performed for the study intersections.

Intersection Capacity Analysis

Unsignalized Intersections

As previously mentioned in Section 3.6.1 above, seven unsignalized intersections were investigated in the TIS.

Unsignalized intersection capacity analyses were performed to determine the ability of vehicles to safely negotiate turning movements. The unsignalized capacity analyses was performed at these locations to examine traffic operations during the Weekday A.M. arrival period (8:30 to 9:00 a.m.) and the Weekday P.M. dismissal period (3:00 to 4:00 p.m.). The unsignalized intersection capacity analysis methodology evaluates the average control delay per vehicle to determine Level-of-Service (LOS). Further information on the methodology, intersection capacity analyses summaries, and results can be found within Appendix H of this DEIS. According to the TIS, among the seven unsignalized intersections studied, the additional traffic resulted in only one LOS change for one movement at the intersection at Major's Path with Little Fresh Pond Road/Edge of Woods Road for the combined westbound approach of Edge of Woods Road to Major's Path. The LOS change was due to a minor three tenths of a second delay increase during the P.M. Peak period only. Such an increase in delay is negligible.

Signalized Intersection

As previously stated, one signalized intersection was investigated in the TIS and a signalized intersection capacity analysis was performed. Signalized capacity analyses were conducted at North Sea Road (C.R. 38) at Sandy Hollow Road (C.R. 52) to examine traffic operations during the Weekday A.M. and Weekday P.M. peak hours of the site arrival and departure periods. Further information on the analysis methodology, intersection capacity analyses summaries and intersection capacity analyses results can be found in Appendix H of this DEIS. At the signalized intersection of North Sea Road at Sandy Hollow Road, there would be no changes in individual movement LOS during any of the peak periods. However, during the Weekday P.M. peak hour of flow, the overall intersection LOS does change due to the increase in traffic generated by the proposed site. The change in LOS results from a minor three tenths of a second increase in overall intersection delay. However, as provided within the TIS, the increase in delay is minimal and does not represent a significant adverse impact.

Access Examination

Under the proposed action, the site would be served by three access driveways along Majors Path. Sight distance availability measurements were performed for safety and efficiency during operations. Further information can be found under the "Access Examination" section of the TIS (see Appendix H of the DEIS). According to the American Association of State Highway Transportation Officials' (AASHTO), Policy

on Geometric Design of Highways and Streets, the recommended site distance with a design speed of 40 mph is 305 feet. Based on calculations provided in the TIS, field measurements of the sight distance at the ingress/egress points on Major's Path were performed and are presented in Table 17 – Available Stopping Site Distance below, along with the proposed changes to site access.

Table 17 – Available Stopping Site Distance

Location	Available Existing Sight Distance		Recommended Improvements to Available Sight Distance		Remarks
	To North	To South	To North	To South	
Major's Path at the Proposed Entrance Only (Northern) Site Access Driveway	570± ft	310± ft	570± ft	310± ft	Sight distance to the south is not a factor for entering traffic.
Major's Path at the Proposed Exit Only (Center) Site Access Driveway	290± ft	360± ft	320± ft	370± ft	Driveway relocated 50 feet from present location to improve sight distance.
Major's Path at the Proposed Staff and Tennis Club Entrance and Exit Site Access Driveway	420± ft	250± ft	435± ft	455± ft	Driveway relocated to the south 100 feet to improve sight distance.

The existing northern access driveway would be the main entrance of the day camp, and would function as a one-way road that would extend through the property and exit via the central exit-only driveway. Field measurements indicate that sufficient site distance would be available at the north driveway to meet AASHTO guidelines. At the center (exit only) driveway, sight distance to the north was found to be somewhat lower than recommended. Therefore, the center driveway would be relocated 50+ feet to the south to provide adequate site distance in both directions. Finally, at the southernmost driveway, which was previously intended to provide access and egress for camp employee vehicles and tennis club patrons, sight distance to the north was found to satisfy the guidelines. However, due to the existing horizontal and vertical curvature on Major's Path, sight distance to the south is somewhat limited, to approximately 250 feet. Relocation of this driveway to the south by 100 feet results in significant improvement to the available stopping sight distance to the south.

Overall, the proposed changes to the site access driveways would improve the safety and operating efficiency of the site.

Parking Considerations

The Southampton Town Code does not provide parking requirements for the proposed use of the site. As such, the most similar uses for which parking requirements are enumerated in the Town Code (Section 330-93.D) were used to determine the total required parking for the tennis club and camp. These uses are "school" and "golf course." According to the Town Code, the following parking requirements apply to schools and golf courses:

- School: The requirement is one per employee plus one per every eight students in the 12th grade and one for every three students for grades higher than 12. The maximum age of campers is 14 years of age and none would be permitted to drive by law. The requirements would therefore be one space for each employee (staff member). At full use, the camp is projected to have 90 staff members to supervise 360 campers. The 90 staff members would therefore require 90 parking spaces.

- Golf Course: Three spaces per hole plus one for each employee. While there are remarkable differences between a golf course and a tennis club, the standard of three spaces per court and one per employee is reasonable. Note that the staff that maintains and operates the tennis club is included in the camp staff of ultimately 90 employees, so no additional parking is required for employees. With the seven tennis courts, that translates to a need for 21 parking spaces to support the tennis club.

Based on the above calculations, a total of 111 parking spaces would be required at the subject property. As shown on the *Site Plan*, 47 parking spaces are to be provided in the parking lot adjacent to the southern tennis courts, and 27 spaces are to be provided in the passenger loop road, for a total of 74 spaces.

As explained in the discussion of camp operations, most of the staff employees housed on-site (53 in 2016 and 65 ultimately) do not have vehicles. In addition, other staff employees are transported to the camp via camp owned and operated 16-passenger vans. The lack of need for employee parking reduces the need for parking on site, such that 74 spaces would be adequate.

In addition to reviewing the Southampton Town Zoning Code for parking requirements, other sources were researched to find a better requirement for parking that fit the site of the Southampton Racquet Club and Camp. Most codes did not list either day camps or tennis courts in their parking requirements section. Some codes provided requirements based on gross square footage of space, but that is difficult to define in the subject property, as much space is unused. On that does provide requirements was the City of Yonkers, which requires one space per employee plus one per camp vehicle parked on site. The Yonkers Code also requires two spaces per tennis court plus one space per 100 SF of accessory structures. Using this calculation,

90 staff plus two camp vehicles generate a need for 92 spaces for the camp and seven courts with 500 SF of accessory space generating a need for 19 spaces. The total spaces required by the Yonkers Code would be 111.

Another code that had both uses was for Palm Beach County, Florida. The Palm Beach Code requires one space for every 10 campers plus one drop-off space per 20 campers. This, in turn, would translate into 36 parking spaces and 18 drop-off spaces. The tennis court requirement is 1.5 per court or an 11 space requirement. Thus, the total parking space requirement would be 47 parking spaces and 18 drop-off spaces. It should be noted that the current site plan for the Southampton Racquet Club and Camp provides more than 18 drop-off spaces in the bus circle and additional drop-off spaces in the inside loop for non-bus traffic.

Another source of information regarding parking for different land uses is the Institute of Transportation Engineers Reference Book Parking Generation, 4th Edition. Data is provided on tennis clubs (Land Use Code 491), but the data are based on only three study locations. The clubs studied often had swimming pools, whirlpools, saunas and weight rooms not available at the Southampton Racquet Club and Camp. Average weekday demand for parking was 3.56 spaces per court, or 25 spaces. The Reference Book also noted an 85th percentile demand of 4.13 spaces per court, or 29 spaces. The ITE provides no data on day camps, and the closest possible use is Land Use Code 565, Day Care Centers. Average demand was 0.24 spaces per student, or 87 spaces, while the 85th percentile demand was 0.33 spaces per student, or 119 spaces. Using the ITE peak parking demand at the 85th percentile confidence level, parking is calculated at 119 plus 29, or 148 parking spaces. Neither of the ITE-described land uses is a fit for the proposed Southampton Racquet Club and Camp. Both uses in the ITE reference are more intensive and do not operate with an operational plan that is aimed at minimizing the use of on-site parking and trip generation.

While it is anticipated that the current and future planned operation of the site would not require additional parking beyond the 74 proposed spaces, space on the *Site Plan* has been allocated for the construction of 37 additional spaces, should they be necessary. These parking spaces would be landbanked and can be constructed if the Town deems it necessary. Thus, of the 111 parking spaces that would be required, if the requirement was based on a school and a golf course, 74 spaces would be provided, and one-third of the 111 spaces, or 37 spaces, would be landbanked. However, as discussed above, 74 spaces would be adequate to serve the proposed operation.

Alternate Camp Operation without Bussing

It is noted that the current and proposed operation of the facility follows closely with that of other day camps operated by the owner, and has been developed based on years of practical experience. Currently, the fee for camp attendance includes transportation to and from the site via 16-to-24 passenger school buses. Transportation via the campers' caregivers is discouraged, although it is recognized that individuals may occasionally be picked up or dropped off due to unforeseen circumstances or scheduling. The bus operation reduces substantially the number of vehicles entering and exiting the site, reduces the number of parking spaces and queuing space required, and greatly eases the process of loading and unloading children, making for a much safer operation. As required by the Final Scope, below is a hypothetical discussion of camp operations without bussing.

The ultimate projected enrollment at the camp is 360 campers. It is not anticipated that under this hypothetical scenario that each camper would be transported to the camp individually, as there are often siblings enrolled together, or parents, for their own convenience, share transportation responsibilities with other parents. Based on these considerations, it is assumed that each parent would transport 1.5 campers. Further, while the maximum enrollment at the camp is 360 campers (in the future), not every camper attends each day, and it is estimated that on an average day, attendance is at 85 percent of the total enrollment, or 306 campers ultimately. Using the factor of 1.5 campers per vehicle, the number of trips anticipated to be generated under this hypothetical scenario is 204 trips. While it is anticipated that the morning arrival time would generate 204 entry and exiting movements, the afternoon peak would be less, as the young children's program ends several hours earlier than the main programs and other children are occasionally picked up early. It is anticipated that the afternoon dismissal period would hypothetically generate between 150 and 160 arrivals and departures.

The volume of traffic entering and exiting the site under this hypothetical scenario could not be readily accommodated on site, as there would not be sufficient queuing space to accommodate the vehicles if bussing was not provided. Of particular concern would be the afternoon pickup period, which despite the smaller number of vehicles to be accommodated, requires more waiting time on the site as parents arrive on site, wait for dismissal, and then wait for the child to find the vehicle. While staggered start and stop times may help smooth the process, the operation for the camp would be substantially more difficult. In addition, the volume of traffic entering and exiting the site would more than double. For these reasons, this hypothetical scenario does not work, and it is the standard practice of the applicant to provide bussing.

Conclusions

Based on the results of the analyses conducted in the TIS, the following has been determined (see Appendix H for the complete TIS conclusions):

- Traffic generated by the proposed action would have a minimal impact on the surrounding roadway network.
- The proposed changes to the site access driveways would improve the safety and operating efficiency of the site.
- Growth in attendance at the camp is expected even absent the proposed action.
- The subject property would use three access driveways, which presently serve the site. Improvements would be made to the internal driveways to better serve and circulate the traffic flow associated with the site's operation. Improvements for available stopping sight distance would meet and/or exceed AASHTO requirements and provide safer access.
- The addition of the minimal estimated traffic increase due to the proposed action is not expected to result in any increase in accident experience at this location, and the proposed access arrangement should further enhance the safe operation of the roadway.
- The proposed Southampton Racquet Club and Camp would generate traffic during a two- month period from late June until early September, and only on weekdays. Weekend traffic would be limited to that generated by the staff living on the property.

3.6.3 Mitigation Measures

No significant adverse traffic impacts to the subject property or highway networks in the surrounding area are expected to result from the implementation of the proposed action. Notwithstanding the above, the proposed action includes the relocation of site access driveways to improve safety, and on-site improvements resulting in beneficial circulation and parking conditions.

3.7 Land Use and Zoning

3.7.1 Existing Conditions

3.7.1.1 Land Use

The 17.28±-acre subject property, located on the west side of Majors Path, is currently improved with several structures associated with the preexisting non-conforming use as a tennis club and/or tennis camp (see *Site Plan* in Appendix B). The existing improvements include 12 cottages, a caretaker's office, a kitchen and dining hall, a one-and-one half story residence, a clubhouse, a maintenance shed and a maintenance shop building, a basketball court, nine tennis courts, a swimming pool, gravel parking, and decking and patios (both attached to buildings and freestanding).

As presently constituted, the majority of the subject property (i.e., 10.91± acres, or 63±-percent) is unimproved, and consists of wooded areas and wetlands associated with Little Fresh Pond. A trail runs generally west-northwest from the northern limit of clearing at the subject property toward Little Fresh Pond.

According to the Table of Use Regulations for Residence Districts in Section 330-10 of the Town Code, the current use of the subject property, as a tennis club and/or tennis camp, is not permitted within the underlying R-20 zoning district. However, the current use and development of the subject property is considered a nonconforming use, as it predates the adoption of the zoning regulations, pursuant to Section 330-113 and 115 of the Town Code. As such, the ongoing use of the subject property, as well as the various improvements which have taken place, as detailed in Section 2.4 (Site and Project History) of this DEIS, have been granted Certificates of Occupancy and Compliance from the Town (see copies in Appendix C). The ongoing activities at the subject property are summarized below.

As an element of the existing land use, Southampton Racquet Club and Camp operates a camp for children ages 2.5 years of age through 14 years old, for a ten week period, on weekdays, between mid-June and early September. Consistent with the historic use of the site and with other tennis camps operating throughout the region,[36] the tennis camp component of the existing use offers tennis instruction as well as other activities to its campers (e.g., swimming, basketball, arts and crafts, and field

[36] See discussion at Section 2.2.1 (Page 7) of this DEIS.

games). Camp activities begin at approximately 7:30 a.m. with staff arrivals, and finish at approximately 4:15 p.m. with staff departures.

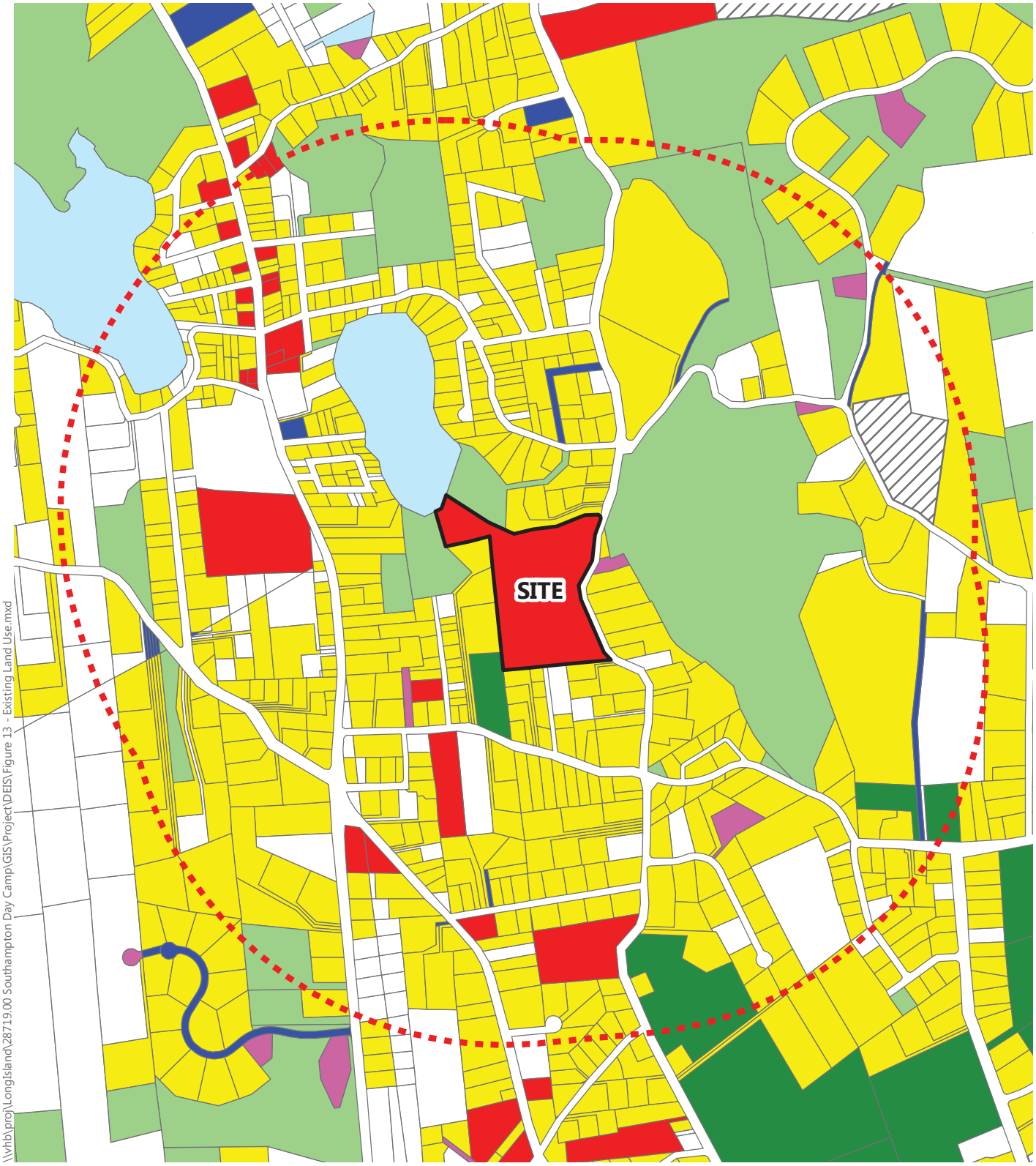
Southampton Racquet Club and Camp also provides overnight staff accommodations in several of the cottages during the camp season. As of the summer of 2016, 53 staff members use these overnight accommodations. The tennis club is open daily during a 22-week season from early May through early October.

Surrounding Land Use

Land uses within a one-half-mile radius surrounding the subject property include a mixture of single-family residential, open space, commercial, recreational, agricultural, utility, and community services. Photographs documenting the nature and character of surrounding land uses are provided in Appendix G, and the pattern of land uses is illustrated in Figure 13. Surrounding land uses are more particularly described as follows:

North: Land uses to the north of the subject property predominantly include single-family residences on less-than-one-acre lots. The subject property also adjoins Little Fresh Pond and undeveloped open space at the northwest corner. The Southampton Pistol & Rifle Club is located on the west side of Majors Path, approximately 0.4-mile north of the subject property. Along North Sea Road, north of Parrish Road, there is a mixture of commercial (retail, dining and office) and single-family residential uses. The southeastern portion of Big Fresh Pond is approximately 0.4-mile northwest of the subject property. Additional open space under public ownership is distributed throughout the area to the north of the subject property.

East: On the east side of Majors Path, opposite the subject property, there are single-family residences on lots ranging from approximately 0.25 to 2 acres. A 63±-acre open space property is situated adjacent to these residences. East of this open space, there are several residential properties on larger lots. A public drinking water supply tank is also located east of the subject property, on the north side of Edge of Woods Road.



\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 13 - Existing Land Use.mxd

0 500 1000 2000 Feet

Subject Property
Half-Mile Radius
Unknown
Agricultural
Residential
Vacant Land
Land Under Water
Commercial
Recreation & Entertainment
Community Services
Public Services
Open Space

Southampton Racquet Club & Camp | Town of Southampton, NY

Existing Land Use
665 Majors Path, North Sea

Sources: Town of Southampton Parcel Data (Suffolk County, 2013)

South: The area to the south of the subject property is predominantly single-family residential, with lots generally ranging from approximately 0.25 to 2 acres. Also adjoining the subject property is a nursery/greenhouse use on the north side of North Sea Mecox Road. A 5.7±-acre automobile junkyard is situated south of the subject property, and is surrounded by single-family residences and a horse farm. A few commercial properties, including retail and multiple use are distributed throughout the area south of the subject property. The Shinnecock Tennis Club and Sandy Hollow Day Camp are located on the edge of the half-mile radius surrounding the subject property, on the west side of Sandy Hollow Road.

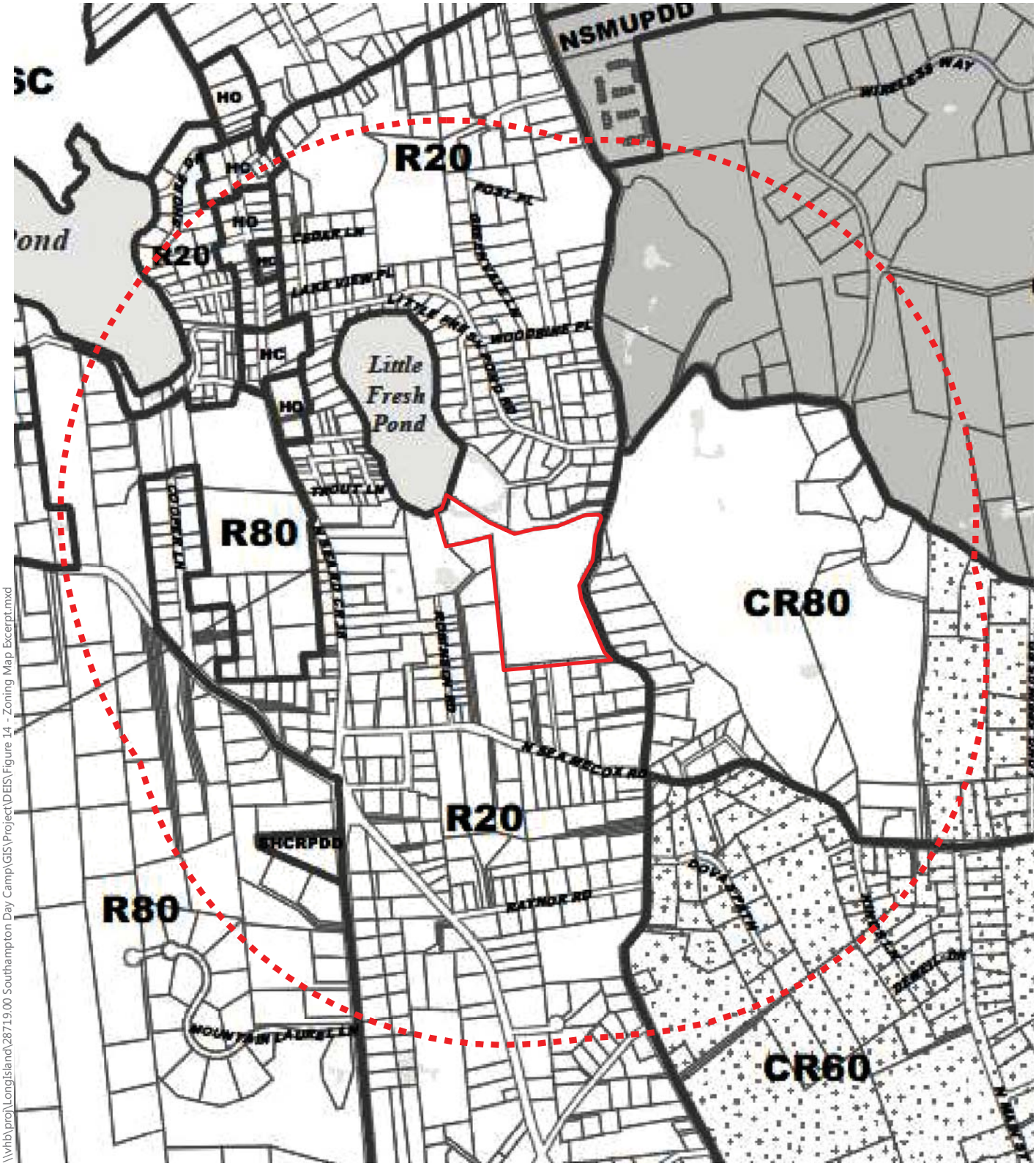
West: The land uses adjoining the subject property to the west include open space and single-family residences. The predominant land use to the west of the subject property is single-family residential, with a mixture of open space, community service (Southampton Volunteer Ambulance) and a vacant commercial property (former nightclub).

Open Space and Recreation

As identified on Figure 13, there are several undeveloped, open space parcels within a half-mile of the subject property, including, two adjoining parcels along Little Fresh Pond and one 63±-acre parcel on the east side of Majors Path. The open space parcels throughout the study area generally consist of woods and wetlands, and the majority do not facilitate active recreation. Recreational parcels near the subject property include the Southampton Pistol & Rifle Club and the North Sea Community Park (including the Southampton Town Recreation Center). These facilities are 0.4± mile and 1.0 mile from the subject property, respectively. The Southampton Pistol & Rifle Club is a privately-owned shooting range. The amenities and services offered at North Sea Community Park/Southampton Town Recreation Center include a youth camp, ball fields, playgrounds, picnic pavilion, indoor sports facility, year-round tennis courts and a community room.

3.7.1.2 Zoning

The subject property is within the R-20 Residence zoning district of the Town of Southampton (see Figure 14). The permitted uses within the R-20 Residence district include single-family residences; planned residential developments; community facilities (such as parks, fire stations, municipal offices and schools); agriculture; plant nurseries; and various accessory uses (Town Code §330-10). Several other uses are allowed within the R-20 Residence district as special exception uses.



\\vhb\proj\LongIsland\28719.00 Southampton Day Camp\GIS\Project\DEIS\Figure 14 - Zoning Map Excerpt.mxd

Southampton Racquet Club & Camp | Town of Southampton, NY

Subject Property
Half-Mile Radius

R80 – Residence (Minimum 80,000 SF)
SHCRPDD – Sandy Hollow Cove Residential Planned Development District

Zoning Map Excerpt
665 Majors Path, North Sea

CR60 – Country Residence
CR80 – Country Residence
CR200 – Country Residence
HC – Hamlet Commercial
HO – Hamlet Office/Residential
NSMUPDD – North Sea Mixed Use Planned Development District
R20 – Residence (Minimum 20,000 SF)

Sources: Town of Southampton Parcel Data (Suffolk County, 2013)
Town of Southampton Zoning Map, Sheet 4 of 5 (Revised August 14, 2012)

The zoning regulations stipulated at Section 330-6(A) of the Town Code state that "within any residence district, a building, structure, lot or land shall be used only for one of the uses indicated in §330-10, Residence Districts Table of Use Regulations…" It is noted that the subject property, as presently developed, is classified as a tennis club and/or tennis camp - - a nonconforming use within the R-20 Residence zoning district, as defined at Town Code Section 330-113. The status of the subject property as a nonconforming use has been recognized throughout its history by the Town of Southampton through the issuance of Certificates of Occupancy and Compliance, as well as site plan approval and variances, as follows (see documentation in Appendix C):

- Building Permit No. 003127, issued June 1967, for the addition of four tennis courts.

- Certificate of Occupancy No. 5121, dated April 27, 1967 for a 1 ½ story house.

- ZBA Decision No. 9667, June 8, 1995, grants variances to legalize the conversion of the house stable to a clubhouse, three tennis courts previously built without a building permit and two additional tennis courts.

- Planning Board site plan approval for the changes to the premises including the addition of the two tennis courts permitted by the 1995 ZBA decision (above), October 26, 1995.

- Certificates of Occupancy/Compliance for the tennis camp, based upon the 1995 ZBA decision (above), including the following:

  A. Certificate of Occupancy No. C018937, dated December 2, 1998, for: "A tennis camp with the following structures: twelve cottages, one, two story house, a basketball court, two decks between cottages 9 and 10, pump house and a shed/shop building and one caretakers office. Other structures approved by the following certificates: A017306 – Kitchen and dining hall, A017604 – Garden shed, A017602 – Ten tennis courts and A017691 – Cabin with patio and clubhouse with deck."
  B. Certificate of Compliance No. A017604, dated December 2, 1998 for a garden shed.
  C. Certificate of Compliance No. A017602, dated December 1, 1998 for "ten (10) tennis courts per BZA decision 9667."
  D. Certificate of Compliance No. A017601, dated December 1, 1998 for "cabin with patio and new clubhouse with deck."
  E. Certificate of Compliance No. A017603, dated December 1, 1998 for "kitchen and dining hall."

- Administrative site plan approval by Department of Land Management for approval of a swimming pool, dated February 12, 2013.

- Building Permit No. P068872 for "heated gunite swimming pool" issued March 25, 2013

- SCDHS approves the as-built construction of the replacement and upgrade of the former substandard sewage disposal systems. Additionally, SCDHS accepts the abandonment of the existing wells and the extension of public water mains and water service lines for the water supply to the premises.

- Certificate of Compliance No. A130710 for "heated gunite swimming pool," issued June 28, 2013.

- Certificate of Compliance No. A160152 for "conversion of laundry room to 2 bathroom"

The dimensional regulations applicable to the R-20 Residence zoning district are represented in Table 18, below.

Table 18 – Dimensional Regulations of the R-20 Residence Zoning District

Regulation	R-20 Residence Permitted
Minimum lot area[1]	20,000 square feet
Maximum lot coverage by main and accessory buildings	20 percent
Minimum lot width	120 feet
Maximum height[2]	2 stories / 32 feet
Minimum front yard, principal building[3]	40 feet
Minimum side yard, one side, principal building	20 feet
Minimum total side yard on interior lot, principal building	45 feet
Minimum side yard, abutting side street on corner lot, principal building	40 feet
Minimum rear yard, principal building	60 feet
Minimum Distance from street, accessory buildings and structures, except fences and retaining walls[4, 5]	50 feet
Minimum distance from side and rear lot lines, accessory buildings and structures, except fences and retaining walls	10 feet

Notes:
1. Where public sewerage is not available, no lot shall be built upon which has insufficient space for a private sanitary waste disposal system, as determined by the town and the Suffolk County Health Department.
2. Maximum height in any AE or VE Zone as shown on the applicable Flood Insurance Rate Map prepared by the Federal Emergency Management Agency for the Town of Southampton shall not exceed +40 feet NAVD (88) plus required Residential Code of New York State freeboard or the maximum height in feet as shown on this table, whichever is less.
3. Minimum yards may be modified pursuant to the provisions of § 330-45A or 330-83K.
4. Minimum yards for a residential storage shed may be modified pursuant to the provisions of § 330-77E.
5. Unroofed steps, decks, patios and terraces shall not be subject to distance from street regulations.

Several zoning districts exist in the immediate area surrounding the subject property, as follows (see Figure 14 on Page 117 of this DEIS):

North: R-20 Residence, CR-80 Country Residence, CR-200 Country Residence, North Sea Mixed Use Planned Development District (NSMUPDD), Hamlet Commercial, Hamlet Office/Residential. The CR-200 Country Residence and NSMUPDD districts are also within the Town's Aquifer Protection Overlay District.

East: CR-80 Country Residence (a portion of which is located within the Town's Agricultural Overlay District).

South: R-20 Residence, CR-60 Country Residence, Sandy Hollow Cove Residential Planned Development District (SHCRPDD), R-80 Residence. The CR-60 Country Residence zoning district is also within the Town's Agricultural Overlay District.

West: R-20 Residence, R-80 Residence.

As identified on the Zoning Map (see Figure 14 on Page 117 of this DEIS), and as described above, residential zoning districts comprise the vast majority of the area surrounding the subject property. The minimum lot areas of these residential zoning districts vary between 20,000 square feet and 200,000 square feet.

The SHCRPDD is designated as such for the future development of a 2.61± acre parcel with multi-family housing at a density of 28 units. This district is located on the west side of Sandy Hollow Road, 0.4± mile southwest of the subject property.

The NSMUPDD is on the east side of Majors Path, approximately 0.5-mile north of the subject property. This district consists of two parcels; the southern parcel is developed with a 50-unit multi-family residential development and the northern parcel is designated for development by the Southampton Union Free School District.

Commercial zoning districts are limited to a stretch of North Sea Road, west and north of Little Fresh Pond.

Board of Appeals

The proposed action requires a variance from the Board of Appeals for a change from one nonconforming use to another. As set forth at Section 330-167 of the Town Code, the Board of Appeals is empowered to grant a variance pursuant to the guiding principles and the general standards stated in Section 330-166(B), and listed below:

(B) Guiding Principles.

(1) Every decision by the Board of Appeals granting a variance shall clearly set forth the nature and extent of such variance.

(2) Every variance granted by the Board of Appeals may be subject to such conditions and safeguards as the Board shall deem to be applicable to the particular case. Violations of such conditions or safeguards that are a part of the Board's decision shall be deemed a violation of this chapter punishable under the provisions of §330-186.

(3) Any variance granted by the Board of Appeals pursuant to the provisions of this section shall be construed to be a nonconforming use.

In addition to the above-listed criteria, the specific variance required for the proposed action is subject to the following additional considerations, set forth at Section 330-167(B)(3) of the Town Code:

(3) To grant a certificate of occupancy for a change in a nonconforming use, provided that:

(a) The Board of Appeals shall have made a determination that such change will be beneficial to the general neighborhood.

(b) Such change is made subject to such reasonable conditions and safeguards as the Board of Appeals may stipulate.

A review of the proposed action's consistency with the relevant criteria above is provided in Section 3.7.2 of this DEIS, below.

3.7.1.3 Relevant Comprehensive Land Use Plans

Town of Southampton Master Plan (1970)

The *Town of Southampton Master Plan* (1970) (hereinafter the *"1970 Master Plan"*) was developed to provide the Town with long-term planning objectives to guide public and private development within the Town, in the face of increasing development pressures and a noted shift from seasonal to year-round residency of its housing stock. The *1970 Master Plan* provides in-depth inventories of the Town's resources, man-made and natural, to provide a basis for the various recommendations offered therein. Among the contents of the *1970 Master Plan*, Town-wide planning objectives are enumerated, and detailed "Hamlet Master Plans" and "Neighborhood Analyses"

are presented to address the unique characteristics of the hamlets and neighborhoods established at that time.

The relevant objectives contained within the *1970 Master Plan*, and the consistency of the proposed action therewith, are identified and discussed in Section 3.7.2 of this DEIS.

Southampton Tomorrow – Comprehensive Plan Update Implementation Strategies (1999)

The *Southampton Tomorrow – Comprehensive Plan Update Implementation Strategies* (adopted March 12, 1999) (hereinafter the *"1999 Comprehensive Plan Update"*) is the latest adopted revision of the *1970 Master Plan* and was prepared as a

> "*…Strategic and Capital Improvements Plan" that updated the first Comprehensive Plan completed for the Town in 1970 in the following areas: Natural Resources, Historic Resources, Scenic Resources, Greenways and Open Space, Affordable Housing, Community Facilities, Economic Sectors, Agriculture, Fisheries, Hamlet Business Areas, and Transportation*" (page 5).

The Vision, as expressed in the *1999 Comprehensive Plan Update* is as follows:

> *"The Southampton of the future will protect its valuable natural, historic and scenic resources; enhance public facilities; maintain and diversify the local economy; and provide more travel choices for local residents"* (Page 37).

The *1999 Comprehensive Plan Update* does not make any specific recommendations with respect to the subject property. However, there are several general recommendations and implementation strategies throughout the *1999 Comprehensive Plan Update* that are pertinent to the proposed action. The consistency of the proposed action with the relevant recommendations and strategies is discussed in Section 3.7.2 of this DEIS.

Southampton 400+ Sustainability Element (2013)

In 2013, the Town of Southampton adopted the *Southampton 400+ Sustainability Element* (hereinafter the *"Sustainability Element"*) as an addendum to the Town of Southampton Comprehensive Plan. This document incorporated sustainability planning into the *1999 Comprehensive Plan Update*, seeking to "sustain the beauty, culture and history that have made [the] Town among the most desirable places to live and vacation" (page 9). In addition to the existing vision goals of the *1999 Comprehensive Plan Update*, the *Sustainability Element* contains four Guiding Principles

– defined as the "sustainable precepts that will direct the Town of Southampton throughout its current and future circumstances, irrespective of changes in its goals, focus areas, tactics, or the leadership" (page 22). These Guiding Principles are: Healthy and Resilient Communities and Natural Systems, Sustainable Education and Literacy, Transparency, and Triple Bottom Line – an approach by which "each proposed action… contributes to, or leads towards, a greater environmental, social, or economic good" (page 21).

Under these guiding principles, an Action Plan was developed with ten Focus Areas, each of which contains numerous "recommended tactics for pursuing sustainability in all Town operations and municipal activities, as well as promoting sustainable private sector initiatives and lifestyles" (page 12). These focus areas are: Education, Water, Economics, Land Use, Transportation & Air Quality, Energy/Carbon, Green Buildings, Waste, Quality of Life and Stewardship.

It is noted within the *Sustainability Element* that:

> *"[t]he field of sustainability is growing and evolving, and this plan should grow and evolve with it… [as such,] the Action Plan section… has been crafted to provide flexibility, allow for updates on implementation and status, the incorporation of new reference material, and the addition, deletion or modification of recommended tactics"* (page 30).

To that end, the Town Board, in cooperation with the planning subcommittee of the Sustainable Southampton Green Committee, are tasked with management, implementation, tracking and updating of the *Sustainability Element*. Key to this task is the recommendation that "the Town Board should… [s]trive to make all Town Board actions consistent with the Sustainability Plan" (page 30).

The relevant goals and recommendations of the *Sustainability Element*, and the proposed action's consistency therewith, are discussed in Section 3.7.2 of this DEIS.

3.7.2 Potential Impacts

3.7.2.1 Land Use

The requested variance for a change from one non-conforming use (a tennis club and/or tennis camp) to another non-conforming use (a day camp and tennis club) would allow for various improvements at the subject property that would enable the applicant to offer a broader mix of camp activities without altering the overall character of the subject property. As detailed in Section 3.7.1 of this DEIS, the existing improvements at the subject property include 12 cottages, a caretaker's office, a

kitchen and dining hall, a one-and-one half story residence, a clubhouse, a maintenance shed and a maintenance shop building, a basketball court, nine tennis courts, a swimming pool, gravel parking, and decking and patios (both attached to buildings and freestanding). The proposed improvements at the subject property would not result in a net change to the total existing building floor, deck/patio or court surface (including courts, pools and pool patios) areas. The following tables present summaries of the existing and proposed areas.

Table 19 – Summary of Proposed Building Improvements

Building	Existing Area	Proposed Area
Cottage 1	670 SF	670 SF
Cottage 2	932 SF	932 SF
Cottage 3	507 SF	507 SF
Cottage 4	355 SF	0 SF
Cottage 5	358 SF	0 SF
Cottage 6	556 SF	556 SF
Cottage 7	419 SF	419 SF
Cottage 8	535 SF	535 SF
Cottage 9	483 SF	483 SF
Cottage 10	478 SF	478 SF
Cottage 11	574 SF	574 SF
Cottage 12	598 SF	598 SF
Cottage 13	137 SF	137 SF
Clubhouse	660 SF	660 SF
Dining Hall	2,470 SF	2,470 SF
Residence	1,857 SF	1,857 SF
Shed (Storage & Shop)	180 SF	180 SF (to be relocated)
Garden Shed	94 SF	0 SF
Pump House (Well House)	135 SF	0 SF
New Cottage (No. 14)	0 SF	562 SF
Changing Sheds (two)	0 SF	380 SF (total)
Total	**11,998 SF**	**11,998 SF**

Table 20 – Summary of Proposed Deck/Patio Improvements

Deck/Patio	Existing Area	Proposed Area
Cottage 1	202 SF	202 SF
Cottage 2	318 SF	318 SF
Cottage 3	147 SF	147 SF
Cottage 4	85 SF	0 SF
Cottage 5	196 SF	0 SF
Cottage 6	160 SF	160 SF
Cottage 7	190 SF	190 SF
Cottage 8	58 SF	58 SF
Cottage 9	47 SF	47 SF
Cottage 10	49 SF	49 SF
Cottage 11	77 SF	77 SF
Cottage 12	314 SF	314 SF
Cottage 13	43 SF	43 SF
Clubhouse	1,100 SF	1,100 SF
Dining Hall	357 SF	736 SF
Residence	407 SF	407 SF
Freestanding Deck West of Cottage 9	166 SF	0 SF
Freestanding Deck North of Cottage 9	119 SF	0 SF
New Cottage	0 SF	187 SF
Total	**4,035 SF**	**4,035 SF**

Table 21 – Summary of Existing and Proposed Court Surface Areas

Court Surface	Existing Area	Proposed Area
Pool Deck/Tennis Court Surface Area	12,497 SF	11,855 SF (tennis court to be converted to two pools, existing pool to remain)
Seven Tennis Court Surface	37,665 SF	37,665 SF
Existing Tennis Court to be Converted to Basketball Court	7,099 SF	5,361 SF (1,738 SF area to be revegetated)
Existing Basketball Court to Remain	1,952 SF	1,952 SF
Play Area	0 SF	2,380 SF
Total	**59,213 SF**	**59,213 SF**

A comparison of existing site coverages and those that would result from implementation of the proposed action is presented in Table 2 of this DEIS. There would be a 0.58±-acre overall reduction in wooded area (0.79± acre of existing wooded area would be removed and 0.21± acre would be revegetated with native plantings), and a 0.51±-acre increase in lawn, landscaping and mulch areas. There would be a minor increase in the total impervious surface (0.03±-acre), and a minor increase in the total gravel surface (0.25±-acre). The portion of the subject property classified as wetlands (0.53± acre) would remain undisturbed. Overall, these alterations to site coverage would not adversely impact the use subject property, which would continue to be used for recreational purposes (i.e., a day camp and tennis club); and, as described by the respective tables above, would not increase the areas devoted to building floors, decks/patios or court surfaces.

Site Operations

Upon implementation of the proposed action, site operations would be substantially similar to the use that has occupied the subject property for over four decades. Southampton Racquet Club and Camp would continue to offer seasonal recreational opportunities to the community as a day camp and tennis club. The application for a change in nonconforming use, pursuant to the guidelines set forth at Section 330-167(B)(3) of the Town Code, is necessary for the applicant to address the demand for a greater variety of day camp activities. As discussed in Section 2.3 of this DEIS, the proposed changes to recreational amenities at the subject property include the construction of two swimming pools to replace an existing tennis court, conversion of a tennis court to a basketball court and addition of a play area. The existing row of seven tennis courts, located on the southern portion of the subject property would remain for use by the tennis club as well as the day camp. No significant change in the nature or level of off-hours activity (e.g., associated with seasonal staff residing at the site) would result from the proposed action.

It is noted that enrollment at the existing tennis club and/or tennis camp has continued to increase in recent years since the applicant began operating the facility. Enrollment increased from 215 campers as of summer 2015 to 280 campers in the 2016 season. It is anticipated that enrollment would continue to increase absent the proposed action. While the precise future enrollment that could be achieved cannot be accurately predicted, it is important to note that an increase in enrollment up to the projected future enrollment of 360 campers under the proposed action would not be entirely attributable to the proposed change in use or site improvements. Any increase in enrollment that could be attributed to the proposed action would be incremental to the enrollment increases already occurring, absent the proposed action.

There are currently no zoning restrictions with regard to occupancy of the subject property as presently developed, other than as a function of a maximum permitted "grandfathered" sanitary flow of 9,450 GPD (see the Water Resources discussion in Section 3.2.2 of this DEIS). Both the existing and expected future use and occupancy of the subject property would result in a sanitary flow well below the maximum permitted "grandfathered" flow of 9,450 GPD. The anticipated future occupancy of the subject property under the proposed action would result in a sanitary flow of 6,800 GPD (see Section 3.2.2). Thus, the projected increase in occupancy at the subject property (which, as discussed above, would not necessarily be entirely attributable to the proposed action), is well below the maximum that would be acceptable to the SCDHS based on sanitary flow.

The proposed action is designed to meet the objectives of the project sponsor (the applicant) without expanding the existing total floor area (11,998± SF), deck area (4,035± SF) or court area (59,213± SF). The physical facilities that support the existing tennis club and/or tennis camp use would be modified as described throughout this DEIS, upon implementation of the proposed action. However, the same physical facilities that characterize the existing use would also characterize the proposed use. There would be two fewer tennis courts and two additional pools, as compared to existing conditions, among other changes. However, the types of activities and the proposed operations (including the weeks that comprise the camp season, the hours of arrival and departure, the rotation of campers among activities throughout the day, and the general types of activities offered at the camp) would be approximately the same as under existing conditions. As such, the character of the proposed use is nearly indistinguishable from the existing use in terms of its physical features and general operation.

Surrounding Area

As discussed in Section 3.7.1 of the DEIS, the land use pattern in the immediate vicinity of the subject property is dominated by single-family residential development and undeveloped open space, with a limited number of other uses (e.g., nursery/greenhouse, automotive junkyard, a delicatessen) interspersed. The proposed change in a nonconforming use and proposed improvements at the subject property would allow for a broader range of activities available at the camp, without expanding the overall capacity. The existing tennis club use element of the facility would be retained beyond implementation of the proposed action. These proposed changes would not adversely impact the surrounding land uses, and would not change the overall character of the existing land use pattern throughout the area.

With regard to the open space and recreational resources present within the area as identified in Section 3.7.1 (e.g., the Nature Conservancy and County-owned natural areas, the Southampton Pistol Rifle Club, North Sea Community Park, etc.), the proposed action would not encroach upon or otherwise hinder the use and enjoyment

of these areas, and the proposed improvements would not be visible from these properties. Furthermore, the proposed action would benefit the community by continuing to provide a tennis club and a day camp, which offers recreational opportunities to its patrons that live throughout the surrounding area.

There are several facilities throughout the area surrounding the subject property that offer a range of activities similar to that proposed at Southampton Racquet Club and Camp. Accordingly, day camp uses are an established element of the land use pattern and neighborhood character. These include, but are not limited to, the following:

- Sandy Hollow Day Camp – 117 Sandy Hollow Road, Tuckahoe (approximately 0.7 mile southwest of the subject property)
- Southampton Town Recreation Center (Future Stars Summer Camp – Southampton) – 1370A Majors Path, North Sea (approximately 1.0 mile northeast of the subject property)
- SPORTIME Quogue – 2571 Quogue-Riverhead Road, East Quogue (approximately 11.5 miles southwest of the subject property)

Each of these facilities is described in further detail, below.

Sandy Hollow Day Camp

Sandy Hollow Day Camp, located within the R-80 Residence District, is an approximately 2.5-acre day camp that offers a range of activities including, tennis, swimming, soccer, softball, volleyball, basketball and arts & crafts.[37] The camp was granted approval for a "day camp" use by the ZBA in 1968. Additionally, this camp is adjacent to Shinnecock Tennis Club, which is a private tennis club consisting of 14 tennis courts and associated structures.

Southampton Town Recreation Center (Future Stars Summer Camp – Southampton)

Southampton Town Recreation Center, located within the Open Space Conservation District, is an approximately 50.25-acre, Town-owned facility, which opened in 2003. A variety of recreational activities are available to members of the community within this facility. Future Stars Summer Camps operates a camp at this property during the summer. The camp offers multiple sports camp programs, including tennis, baseball, basketball, soccer, multi-sports and lacrosse. Each program consists of focused sports activities as well as swimming, and the multi-sports program blends a variety of sports activities. Future Stars also operates a year-round training facility at this site, with two inflatable domes with a turf field and indoor tennis courts.[38]

▼

[37] http://www.sandyhollowdaycamp.com/activities/
[38] http://fscamps.com/locations/Future_Stars_Southampton_Suffolk.html

SPORTIME Quogue

SPORTIME Quogue, located within the LI-200 Light Industrial District, is a year-round recreational facility on an approximately 14.1-acre property. The facility has both indoor and outdoor tennis courts, an outdoor pool, health and fitness club, multi-sport court and other amenities. SPORTIME Quogue offers tennis and multi-sport summer camps, which includes a range of activities, including, but not limited to, tennis, swimming, arts & crafts, basketball and Gaga ball.[39]

As can be seen from the above, facilities with similar recreational offerings to those at subject property are an established element of the community, and are present throughout a range of the Town's zoning districts. The proposed improvements would benefit the community by continuing to provide recreational opportunities that are not out of character with the existing use of the site or the similar established uses in the area.

Based on the foregoing, the proposed action does not represent a significant increase in the intensity of the land use, as there are no net increases in floor area, deck area or court area, only a minor amount of clearing of existing natural area is proposed, and any increased camper enrollment attributable to the proposed action would be incremental to the enrollment increases already occurring and expected absent the proposed action. The wooded character of the site and the presence of perimeter vegetative buffers would be retained. The physical characteristics and general operations associated with the proposed use are very similar to the existing use, and the proposed use is an established element of the surrounding community. As demonstrated throughout this DEIS, the proposed land use is not expected to result in a significant adverse impact (incremental to the existing use, or otherwise). Therefore, overall, no significant adverse land use impacts are expected to result from the proposed action.

3.7.2.2 Zoning

Implementation of the proposed action requires the following zoning approvals from the Town of Southampton:

- Variance to allow a change from one nonconforming use to another
- Site plan Approval

A discussion of each of these relevant zoning approvals follows.

[39] http://www.sportimeny.com/summercamps/quo/programs

Variance for a Change in a Nonconforming Use

As described in Section 3.7.1, the subject property is within the R-20 Residence District of the Town of Southampton. The current use of the subject property constitutes a pre-existing nonconforming use within the R-20 Residence District, as development of the site pre-dates the adoption of the Zoning Code. Certificates of Occupancy were issued separately for the existing one-and-one-half story residence and the remainder of the pre-existing structures in 1967 and 1998, respectively (see Appendix C). The proposed action seeks to make improvements to the subject property such that the overall floor, deck/patio, and court areas would not be increased (see Table 19 – Summary of Proposed Building Improvements, Table 20, and Table 21). These improvements would allow for the use of the subject property to be changed from a tennis club and/or tennis camp to a day camp and tennis club, without an increase in the degree of non-conformity with existing zoning. As such, the applicant seeks a variance from the Board of Appeals to grant a certificate of occupancy for a change in a nonconforming use. The criteria for granting such a variance are set forth in the Town Code at Section 330-166(B), as well as Section 330-167(B)(3). The specific criteria related to a change from one non-conforming use to another are as follows:

> *(3) To grant a certificate of occupancy for a change in a nonconforming use, provided that:*
>
> *(c) The Board of Appeals shall have made a determination that such change will be beneficial to the general neighborhood.*
>
> *(d) Such change is made subject to such reasonable conditions and safeguards as the Board of Appeals may stipulate.*

It is respectfully submitted that the proposed change from one non-conforming use to another would not adversely affect the general neighborhood, as demonstrated by the various impact analyses presented in this DEIS. Moreover, the proposed action is expected to result in benefits to the general neighborhood. Specifically, the proposed action would diversify the recreational activities available to patrons that reside within the community, and would allow for the maintenance of the existing facility over time. In addition to the various improvements that the applicant has already undertaken at the site to benefit groundwater quality in the area (i.e., installation of public water service, replacement of various outdated sanitary systems with modern systems, and the removal of oil storage tanks), the proposed action would also include the installation of stormwater management infrastructure to collect and recharge stormwater on-site, where currently stormwater runoff is permitted to flow overland. The proposed action also includes the replacement of the existing tennis court that encroaches upon the residences to the north with a smaller basketball court and the establishment of a vegetated buffer along the site boundary. Additionally, the

proposed action would result in the closure and/or relocation of existing site driveways to improve safety on Majors Path. These various benefits are related to the applicant's ability to operate the camp as proposed. It should also be noted that the operation of the proposed day camp and tennis club use would preclude the development of the subject in accordance with prevailing zoning, which, as detailed within the Alternatives section of this DEIS (see Section 4.2), would result in various greater adverse environmental impacts than the proposed action (e.g., increased clearing, increased annual sanitary waste discharge to on-site systems, etc.).

Site Plan Approval

The proposed improvements at the subject property would require site plan approval pursuant to Section 330-184 of the Town Code. A more detailed discussion of the proposed land uses, land coverages, and site layout is included in Section 2.3 of this DEIS. A preliminary site plan package is included in Appendix B of this DEIS. Site plan approval would be necessary prior to issuance of a building permit and ultimate implementation of the proposed action.

A comparison of the dimensional criteria for the R-20 Residence District with the proposed improvements at the subject property is provided in Table 22, below.

Table 22 – Project Consistency with Dimensional Regulations of the R-20 Residence Zoning District

Regulation	R-20 Residence Permitted	Proposed	Consistent?
Minimum lot area*	20,000 square feet	752,677 square feet	Yes
Maximum lot coverage by main and accessory buildings	20 percent	1.60± percent	Yes
Minimum lot width	120 feet	1,028.33'	Yes
Maximum height**	2 stories / 32 feet	1.5 stories / <32 feet	Yes
Minimum front yard, principal building***	40 feet	40' to proposed new cottage	Yes
Minimum side yard, one side, principal building	20 feet	32.2' to cottage 10	Yes
Minimum total side yard on interior lot, principal building	45 feet	291.3'	Yes
Minimum side yard, abutting side street on corner lot, principal building	40 feet	N/A	N/A
Minimum rear yard, principal building	60 feet	177.2' to deck of cottage 6	Yes
Minimum Distance from street, accessory buildings and structures, except fences and retaining walls[40,41]	50 feet	88.6' to cottage 11	Yes
Minimum distance from side and rear lot lines, accessory buildings and structures, except fences and retaining walls	10 feet	180.7' to cottage 6	Yes

* Where public sewerage is not available, no lot shall be built upon which has insufficient space for a private sanitary waste disposal system, as determined by the town and the Suffolk County Department of Health Services.

** Maximum height in any AE or VE Zone as shown on the applicable Flood Insurance Rate Map prepared by the Federal Emergency Management Agency for the Town of Southampton shall not exceed +40 feet NAVD (88) plus required Residential Code of New York State freeboard or the maximum height in feet as shown on this table, whichever is less.

*** Minimum yards may be modified pursuant to the provisions of § 330-45A or 330-83K.

As shown in Table 22 – Project Consistency with Dimensional Regulations of the R-20 Residence Zoning District, the proposed improvements at the subject property would be consistent with the dimensional regulations of the R-20 Residence zoning district.

The existing tennis club and/or tennis camp facility includes dense vegetative buffers at the property boundaries, where the subject property primarily abuts single-family residential uses and open space areas. As identified on the *Site Plan* in Appendix B, the proposed action would maintain these buffers, and includes additional landscape plantings to enhance these buffers at selected locations (see *Planting Plan* in Appendix B). It is noted that the northernmost existing tennis court currently encroaches approximately two feet beyond the northern property line. This tennis court would be replaced by a smaller basketball court that would be setback a minimum of 20-feet-8±-

▼

[40] Minimum yards for a residential storage shed may be modified pursuant to the provisions of § 330-77E.
[41] Unroofed steps, decks, patios and terraces shall not be subject to distance from street regulations.

inches from the property boundary, thus creating increased separation between the proposed facility and the adjacent residential uses. The setback area would be re-vegetated with native species to provide a buffer.

Along Majors Path, the existing 22-foot-5-inch vegetated buffer in the area of Cottage 11 (and proposed Cottage 14) would be maintained, and enhanced by the revegetation of the circular gravel driveway to be removed. A minimum 40-foot buffer would be retained in the area of the gravel driveway and new parking spaces, and minimum buffers of 74-feet-5-inches and 67-feet-1-inch would be retained in the areas of the proposes swimming pools and the southern parking area, respectively.

To the south of the subject property, a minimum 40-foot-8-inch buffer would be retained, and enhanced with additional landscape plantings along the relocated driveway and southern parking area. To the east, no new clearing is proposed, such that all existing vegetative buffers (95-feet-7-inches, minimum) would be maintained.

The Town Code requires one use per building, structure, lot or parcel of land, pursuant to Section 330-6(A) of the code. It is noted that the proposed action is a change from one nonconforming use (a tennis club and/or tennis camp) to another nonconforming use (a day camp and tennis club). As detailed in Section 2.3 of this DEIS, the proposed improvements would allow the camp to provide a broader range of day camp activities (e.g., more swimming and sports other than tennis). However, the overall use of the subject property would be virtually indistinguishable from the existing condition with respect to the types of activities and facilities present and daily/seasonal operations.

Based on the foregoing, the proposed action would not result in significant adverse impacts with respect to zoning.

3.7.2.3 Relevant Comprehensive Land Use Plans

Town of Southampton Master Plan (1970)

As indicated in Section 3.7.1.3, the *1970 Master Plan* sets forth numerous community planning objectives in the categories of Natural Resources; Population; Highways, Roads and Other Transportation Facilities; Seasonal Residence, Tourism and Recreation; Utilities; Housing; Business; Industry; and Implementation. In the Seasonal Residence, Tourism and Recreation category, the *1970 Master Plan* states the following relevant objectives:

1. *Since seasonal residents and tourists are greater in number than year around residents, and since, despite some change in proportions, they will continue to be a substantial factor*

in the seasonal population peak, as well as in the economy, particular note shall be made of commercial housing for seasonal residents and of appropriate recreational capacity, both private and public.

5. *Recreation lands and open space have been a major part of the Southampton Community's environment and land area. It is proposed that this quality be projected in major recreation and open space areas in the future, particularly in the areas of high ground water recharge potential, along the streams and ponds and along the shore and barrier beach. Cluster or planned residential development zoning, park and open space requirements per capita, and strong governmental leadership will be necessary to initiate, coordinate and accomplish such a program.*

The proposed action is in keeping with these objectives in that it would maintain a private recreational use to serve the seasonal population peak within the Town. The location of the subject property is also appropriate, as the seasonal recreational use represents a less intense development than would be allowed as-of-right within the R-20 Residential District, as detailed in Section 4.2 of this DEIS. There would be no reduction in recreational or open space resources of the Town as a result of the proposed action.

Southampton Tomorrow – Comprehensive Plan Update Implementation Strategies (1999)

The *1999 Comprehensive Plan Update* includes several goals and recommendations that are intended to guide future development in the Town. These goals and recommendations are guided by the overall Vision expressed at the beginning of the *1999 Comprehensive Plan Update* (see Section 3.7.1.3 above). The sections of the *1999 Comprehensive Plan Update* that are relevant in the context of the proposed action include Natural Resources, Scenic Resources, Greenways and Open Space, and Economic Development. The consistency of the proposed action with the applicable goals and recommendations contained within each section is discussed below.

Natural Resources

The relevant Vision Goals of the Natural Resources section include:

- *Improve the quality of surface and bay waters by reducing nutrient loading, toxins and sedimentation;*

  The proposed tennis club and camp would continue to use modern on-site sanitary systems with septic tank pretreatment and a grease trap for kitchen waste. These systems, which were installed at the subject property after the Planning Board's 2012 adoption of a Positive Declaration, meet the current SCDHS standards. Additional sanitary

systems to be abandoned in connection with the existing cottages to be removed, would be abandoned in accordance with SCDHS protocols. The additional system to be installed in the vicinity of the new Cottage 14 would meet all design requirements of SCDHS and all necessary approvals would be obtained prior to construction of the system.

All existing oil storage tanks were removed (with the exception of a 235-gallon heating oil tank within the on-site residence) following the adoption of the Positive Declaration, eliminating associated potential for impacts to surface waters. Fertilizer use would be done under contract to the applicant, in accordance with all relevant restrictions.

Erosion and sedimentation control measures (e.g., silt fences and inlet protection) and on-site stormwater drainage infrastructure (e.g., drywells and catch basins) would prevent sedimentation during construction and operations.

The proposed action includes the installation of a comprehensive stormwater management system to collect and recharge, on-site, all stormwater runoff from improved portions of the site from a minimum two-inch rainfall event. This is a significant benefit from the existing conditions where no stormwater management infrastructure exists, and stormwater runoff is permitted to flow overland.

In addition, as discussed in detail within Section 3.2 of this DEIS, there is a net recharge from Little Fresh Pond to the groundwater system, and net yearly flow is away from the pond, such that discharges at the site do not adversely affect water quality of Little Fresh Pond. Overall stormwater runoff from the subject property would be minimized through the use of permeable paving, vegetation and stormwater leaching structures. As such, the proposed action would not adversely affect the quality or quantity of the surface waters of Little Fresh Pond.

Overall, there would be no adverse impacts to surface waters as a result of the proposed action, consistent with this goal.

- *Preserve the diversity of Southampton's biotic communities;*

  Under existing conditions, 6.37± acres of the 17.28±-acre subject property are cleared of natural vegetation. Upon implementation of the proposed action, an additional 0.79± acre would be cleared (i.e., approximately 4.6 percent of the subject property), and 0.21± acre would be revegetated with native trees, shrubs and herbaceous plants. Overall, the proposed improvements represent minimal alterations to a site already in use as a

tennis club and/or tennis camp, and the total impervious surface area would not change. As such, the proposed action would not have a significant adverse impact on Southampton's biotic communities.

- *Safeguard rare and/or endangered plant and animal species by protecting their habitat areas;*

  Based on a June 18, 2015, field inspection by VHB, there are no federally-listed or New York State endangered, threatened or special concern plants or wildlife present on the subject property. As such, the proposed action would have no impact on such species.

- *Protect and restore the Town's freshwater, tidal and brackish wetlands;*

  The Town of Southampton regulates activities within 200 feet of a wetlands boundary. The closest proposed disturbance would occur approximately 388 feet southeast of the wetland/upland boundary, as delineated by the Town of Southampton Environment Division on August 29-30, 2007, and confirmed by VHB on June 18, 2015. Consultations were undertaken with NYSDEC, and a Determination of Non-Jurisdiction was obtained for the proposed action (see Appendix E). Furthermore, as discussed in Sections 3.2 and 3.3 of this DEIS, there is a net recharge from Little Fresh Pond to the groundwater system, and net yearly flow is away from the pond. Therefore, groundwater discharges from the tennis club/camp facility do not adversely affect pond water quality. Overall stormwater runoff from the subject property would be minimized through the use of permeable paving (i.e., gravel), vegetation and stormwater leaching structures, representing a benefit with respect to potential discharges to surface waters. As such, the proposed action would not adversely affect the quality or quantity of the surface waters of Little Fresh Pond, and would not have a significant adverse impact on the Town's freshwater wetlands.

- *Create a regional open space system that comprehensively sustains and integrates all of Southampton's natural communities.*

  As previously discussed, the proposed action would leave 10.12± acres of the overall 17.28±-acre subject property in its natural, undisturbed state. The improved portion of the subject property would be used as a day camp and tennis club, providing outdoor recreational opportunities for area residents. The undisturbed natural area would effectively function as open space within a larger overall system that includes several parcels under public or Nature Conservancy ownership in the surrounding area (two of which are situated directly adjacent to the subject property along

Little Fresh Pond). As such, the proposed action would not have a significant adverse impact on the existing regional open space system.

Scenic Resources

The relevant Vision Goals of the Scenic Resources section include:

- *Protect those open spaces, vistas, farmlands and scenic areas that define the character of the individual hamlets and Southampton as a whole;*

  The *1999 Comprehensive Plan Update* included a preliminary analysis of "important scenic resource areas" within the Town of Southampton. This preliminary analysis identified portions of Majors Path in the vicinity of the subject property as Significant Scenic Areas (Map 11E of the *1999 Comprehensive Plan Update*). These areas have not received an official scenic designation from the Town. As such, no additional development and design regulations would apply to the subject property. Regardless, it is noted that the proposed action would maintain the existing scenic character of Majors Path, as the proposed alterations to site access would include revegetation of the existing curb cuts to be relocated.

Greenways and Open Space

As defined in the *1999 Comprehensive Plan Update* the term "greenways" refers to,

> *"… linear open space situated along a naturally formed corridor, such as an oceanfront, a stream valley, or ridgeline. It can extend overland along a railroad right-of-way, a canal, a scenic roadway corridor, or a similar type of route. A greenway can be any natural or landscaped course for pedestrian, equestrian, or bicycle movement. A Greenway, however, need not be linear, and includes both the parks, nature preserves, cultural features, or historic sites and the open space connectors which link them together"* (page 133).

The *1999 Comprehensive Plan Update* envisioned a three-part greenways system, consisting of:

1. *Public Access Greenways, for active and passive recreation and alternative modes of transportation;*

2. *Resource Protection Greenways, including wetlands, significant fish and wildlife habitat areas, and existing agricultural lands; and*

3. *Scenic Protection Greenways, including historic structures, historic landscapes and natural landscapes.*

Specifically, with respect to a guiding framework for acquisition of Resource Protection Greenways, the *1999 Comprehensive Plan Update* references the Town of Southampton's Community Preservation Project Plan, adopted in August 1998, which lists 21 environmentally significant open space and greenbelt target areas. The initial map of these areas, which was included within the *1999 Comprehensive Plan Update* (Map 14E), did not include the subject property within an Open Space/Greenbelt Target Area. However, an update to the Community Preservation Project Plan, dated April 2005, expands upon these areas, and identifies the subject property within the North Sea Atlantic White Cedar Swamp Open Space/Greenbelt Area.

According to the Community Preservation Project Plan,

> *"Located within the watershed of Little Fresh Pond in North Sea, this area is one of the only remaining fragments of coastal Atlantic white cedar swamp on Long Island's East End. Ranked S1 and G3G4 by the New York Natural Heritage Program, this community type is extremely vulnerable to extirpation in the State. "Cedar bogs" such as this are key habitat for rare species such as the Hessel's hairstreak, a rare green butterfly whose larvae feed solely on Atlantic white cedar plants. These towering evergreen stands also offer unique outdoor research and educational opportunities, as well as providing a striking contrast to neighboring home and other vested land. The North Sea swamps are today mostly unprotected, with development and pollution being their greatest threat. The Town's Comprehensive Plan Update has recognized the importance of this area, and has targeted the site as one of the more significant natural areas to be preserved"* (pages 20-21).

The subject property is assigned priority OSG2, where "preservation can be accomplished using other combinations [besides acquisition] of land use alternatives" (page 27). More specifically, the suggested land use alternatives for OSG2 sites include

> *"Regulatory strategies involving the Town's zoning, subdivision and companion regulations designed to preserve open space. The application of Planned Residential Development and Old Filed Map requirements will be essential. The establishment of conservation easements, either privately or through the subdivision process will also be an important alternative. Enforcement of vegetation protection regulations and Aquifer Protection Overlay standards on both private and public lands must be ongoing. The potential for TDR should also be applied with these category two parcels in concert with future Planned Development Districts, site plan and subdivision applications. Private conservation approaches should also again be achieved through substantial landowner outreach"* (pages 48-49).

Based on the above excerpts from the Community Preservation Project Plan, the Town has indicated that some form of preservation of the subject property should be part of a broader overall strategy to protect valuable natural resources throughout the Town.

As discussed in Section 3.4 of this DEIS, neither Atlantic white cedar trees nor the Atlantic White Cedar Swamp ecological community were observed at the subject property during field inspection. The locations provided in NYNHP correspondence indicate that off-site records for this community are from the northern side of Little Fresh Pond. The Hessel's Hairstreak butterfly occurs exclusively within the Atlantic White Cedar Swamp ecological community, where larvae feed exclusively on Atlantic white cedar trees.[42] Accordingly, given that the aforementioned ecological community and tree species were not observed during the field inspection, it is not expected that Hessel's Hairstreak occurs at the subject property.

The proposed action would leave undisturbed 10.12± acres of the existing 10.91± acres of natural area at the subject property, and would revegetate an additional 0.21± acre with native species. The proposed clearing of vegetation would occur in areas adjacent to the portion of the subject property already in use as a tennis club and/or tennis camp, and would not affect the undeveloped tract running between Little Fresh Pond and the tennis club and/or tennis camp. Thus, the proposed action maintains open space at the subject property to the maximum extent practicable, and would not cause a significant adverse impact to the North Sea Atlantic White Cedar Swamp Open Space/Greenbelt Area.

Economic Development

As set forth in the *1999 Comprehensive Plan Update*, the Vision for economic development in the Town is:

> *"Southampton should emphasize those types of economic development that manage and complement the Town's outstanding resort qualities. Indeed, as long as the second-home resident and visitor sectors remain the driving force in the local economy, the Town and others should seek to enhance the amenities and other qualities that give Southampton its unique regional advantage. These include the Town's rural and historic scenery, beach and recreational amenities, and cultural and specialty retail amenities"* (page 201).

Recreational uses are an important component of the Town's resort economy, and the *1999 Comprehensive Plan Update* encourages the Town to promote various types of recreational uses (including tennis and public swimming pools) "in a manner that is compatible with the overall land use policy" (page 233).

▼

[42] New York Natural Heritage Program. 2015. Hessel's Hairstreak Guide. Available online at: http://www.acris.nynhp.org/guide.php?id=7857. Accessed July 28, 2015.

One of the strategies promoted within the Economic Development section is to "encourage private and public recreation facilities to locate in and close to hamlet and village centers, both to cut down on trips between these facilities and nearby services and stores, and to enhance the image of the centers" (page 233). It is noted that the existing tennis club and/or tennis camp is located approximately 0.5 mile southeast of the North Sea commercial area beginning at the intersection of North Sea Road and Parrish Road.

Implementation of the proposed action would enhance the recreational character of the subject property by improving site access and parking, diversifying the activities offered by the camp (i.e., replacing some tennis courts with pools and a basketball court and adding a play area), improving overnight accommodations for staff, and renovating the clubhouse deck associated with the tennis club. These improvements would be made without creating significant adverse impacts to the surrounding community, including noise and aesthetics (as discussed in Sections 3.5 and 3.9 of this DEIS).

The Economic Development section also presents a discussion of non-conforming uses in the context of the balance between the nuisances they may create and the role they play in the Town's economy. Specifically, the *1999 Comprehensive Plan Update* proposes "a problem-solving approach that will, over time, reduce the nuisance associated with non-conforming uses while still accommodating diverse (if not always benign) economic activities" (page 246). The recommended action items are geared toward zoning review procedure, public participation and creating incentives. With respect to the proposed action, relevant recommendations include the referral of variances for non-residential pre-existing non-conforming issues to the Planning Board for comment, reducing the extent to which a non-conforming use can expand, and providing opportunity for public comment with regard to Certificate of Occupancy Permits (COs) for pre-existing non-conforming uses (page 247).

It is noted that the proposed action is consistent with these recommendations in that it is a change, and not an expansion of a non-conforming use. Additionally, public scoping, including a scoping meeting and a written comment period, was conducted as part of the SEQRA environmental review process for the proposed action. In accordance with the implementing regulations of SEQRA, at a minimum, this DEIS would be subject to public review following the issuance of a Notice of Completion for the DEIS, and prior to implementation of the proposed action.

Southampton 400+ Sustainability Element

As described in Section 3.7.1.3, the overall vision of the *Sustainability Element* is to "sustain the beauty, culture and history that have made [the] Town among the most desirable places to live and vacation" (page 9). To that end, the *Sustainability Element* sets forth numerous Tactics within ten Focus Areas, several of which can be applied directly to the proposed action.

Focus Area: Water

Goal: Restore and protect the Town's ground and surface waters to ensure their ability to support public health and the maritime, recreational and resort activities that underpin Southampton's way of life and economy.

Tactics:

- *Consider creating a septic management plan to reduce nutrient loading in the Town's waters…*

With regard to septic systems, the subject property is served by on-site systems, which were installed in 2012. The proposed action requires the connection of the proposed new cottage to an existing sanitary system, as well as the abandonment of an existing sanitary system connected to Cottages 4 and 5, which are to be removed. As discussed in detail in 3.2 of this DEIS, the existing sanitary systems would provide sufficient capacity to handle the anticipated 6,800± GPD of sanitary waste to be generated at the subject property, and these systems are in compliance with Article 6 of the SCSC, such that sanitary waste generation would not result in significant adverse impacts to the Town's waters.

- Develop low-maintenance landscaping guidelines that include native and low-input vegetation.
- Create a comprehensive landscape management policy for reducing and/or preventing pesticides and fertilizers from entering ground and surface water bodies.

Proposed landscaping at the subject property would consist of native species in order to reduce potential irrigation demands and minimize the need for fertilizer and pesticide application (see *Planting Plan* in Appendix B). Furthermore, fertilizer use would be limited in accordance with all prevailing regulations to preclude significant adverse impacts to water resources.

- Reduce reliance on the municipal stormwater system by encouraging natural percolation through landscaping, pervious paving, open space protection, limits on vegetation clearing, and on-site retention.

As presently developed, the subject property contains no existing stormwater management infrastructure, and stormwater runoff is permitted to flow overland. Upon implementation of the proposed action, leaching pools would be installed throughout the developed portions of the subject property in order to contain and recharge 100 percent of stormwater runoff on-site from the improved portions of the subject property.

Focus Area: Land Use

Goal: Achieve land development and redevelopment that preserves Southampton's rural and maritime heritage, and which reinforces traditional development Patterson characterized by the interdependence of compact and walkable village and hamlet centers with surrounding open space and managed landscapes, agricultural uses, and accessible coastal areas.

Tactic:

- Continue to encourage native and non-invasive vegetation landscaping design guidelines…

As previously discussed, and as shown on the *Planting Plan* (see Appendix B), the proposed action includes 0.79± acre of additional clearing, and 0.21± acre would be revegetated with native trees, shrubs and herbaceous plants.

Focus Area: Energy & Carbon

Goal: Become carbon neutral through a combination of conservation, efficiency, and alternative energy sources.

Tactic:

- Support efforts to educate residents about the problems associated with light pollution and the Town regulations that help to curtail it…

A *Lighting Plan* (see Appendix B) would be implemented as part of the proposed action, as detailed in Section 3.5 of this DEIS. All of the proposed light sources on the subject property would be shielded and projected downward to prevent skyglow and light trespass, and conform to the Town's non-residential lighting requirements to the maximum extent practicable. All light fixtures would be extinguished no later than 11:30 pm during camp season and existing wall sconces would be replaced with full cut-off wall sconces. As indicated on the *Lighting Plan*, the proposed outdoor lighting

improvements would result in 0.0 (zero) foot-candles at all points along the perimeter of the subject property. Additionally, all exterior lighting would be installed in accordance with a lighting plan to be submitted or the Town's review and approval as part of site plan review, in accordance with Article XXIX of the Town Code.

Focus Area: Quality of Life

Goal: Provide access for all Town residents to a healthy lifestyle including opportunities for active recreation, locally produced/organic food, safe drinking water, educational and cultural activities, community engagement and personal fulfillment.

The proposed action would fulfill this goal by continuing to provide a seasonal recreational resource to area residents. It is noted that the subject property has been developed for recreational use for several decades, and that the proposed action would enable Southampton Racquet Club and Camp to continue operating a tennis club while providing a broader range of day camp activities than presently exist at the site.

Focus Area: Stewardship

Goal: Ensure sustainable stewardship of the Town's natural, cultural, historic, and scenic resources, in both public and private ownership.

Tactic:

- Propose a set of regulations to limit the amount of Nitrogen and Phosphorus (nutrients) that are permitted to enter the environment (especially surface waters) for man-made sources and/or actions…

As detailed in Sections 3.2 and 3.3 of this DEIS, P.W. Grosser conducted a study to determine the hydrological relationship between the subject property and Little Fresh Pond. The results of this study indicate that groundwater from beneath the subject property is not discharging to Little Fresh Pond, as evidenced by surface and groundwater elevations. As such, sanitary waste generated during the operational months at the subject property (i.e., May-October) (which would be accommodated by on-site sanitary systems before discharge to the subsurface) would not result in increased Nitrogen or Phosphorus loading to Little Fresh Pond. As indicated in Table 9 of this DEIS, the proposed action would discharge approximately 75 percent less Nitrogen on an annual basis than is would be permitted under the SCSC Article 6 population density equivalent restrictions, which are protective of groundwater resources. Furthermore, all stormwater would be contained and recharged on-site via proposed leaching pools and natural infiltration, such that nutrients from fertilizer application would not wash into Little Fresh Pond during storm events.

Based on the above, the proposed action is consistent with the *Sustainability Element*.

3.7.3 Mitigation Measures

The proposed action is not expected to result in significant adverse impacts to land use and zoning, such that no mitigation measures are proposed. Nonetheless, the tennis court that currently encroaches approximately two feet beyond the northern property line would be replaced by a smaller basketball court that would be setback a minimum of 20-feet-8±-inches, thus creating increased separation between this recreational use and the adjacent residential use. The setback area would be re-vegetated with native species to provide a buffer, as a benefit to the neighboring properties.

Furthermore, it is noted that the proposed action is designed to be consistent with the goals and objectives of the Town of Southampton's *1970 Master Plan* and *1999 Comprehensive Plan Update.*

3.8 Community Facilities and Services

3.8.1 Existing Conditions

3.8.1.1 Fire Protection

The subject property is within the service area of the North Sea Fire Department (NSFD). The NSFD maintains headquarters at 149 Noyack Road, North Sea, New York, approximately 1.3 miles northwest of the subject property.

3.8.1.2 Ambulance Services

The subject property is within the service area of the Southampton Volunteer Ambulance Corps (SVA). According to its website,[43] the SVA provides ambulance services in the North Sea and Southampton Fire Districts, excluding the Village of Southampton. The SVA operates with three advanced life support ambulances, and typically responds to approximately 800 emergency calls over the course of a year, including support for motor vehicle accidents, and sick and injured members of the community. The membership consists of over 40 members, including New York State Certified Paramedics, Critical Care Technicians, Emergency Medical Technicians, drivers and helpers. The SVA is based at 1232 North Sea Road, approximately 0.5 mile northwest of the subject property.

3.8.1.3 Police Protection

The subject property is within the jurisdiction of the Southampton Town Police Department (STPD), headquartered at 110 Old Riverhead Road in Hampton Bays, New York, approximately 7.3 miles west of the subject property. According its website,[44] the STPD operates within a service area of 122 square miles, in addition to the Villages of North Haven and Sagaponack, serving a year round population of over 60,000 residents, which often more than doubles on weekends and during the summer. The STPD provides year-round law enforcement services including a full-service patrol force, criminal investigations, and an E-911 dispatch system.

▼

[43] http://townems.org/. Accessed August 2015.
[44] http://www.southamptontownny.gov/262/Town-Police. Accessed August 2015

3.8.1.4 Educational Facilities

The subject property is within the Southampton Union Free School District (SUFSD), with administrative offices at 70 Leland Lane, Southampton, New York. SUFSD consists of three public schools: one elementary school, one intermediate school and one high school. According to data provided by the New York State Education Department, the SUFSD had a total K-12 enrollment of 1,536 students for the 2013-14 school year.[45]

3.8.2 Potential Impacts

As indicated above, the subject property is within the service areas of the North Sea Fire Department (NSFD), the Southampton Volunteer Ambulance (SVA), and the Southampton Town Police Department (STPD). The proposed action involves a change from one non-conforming use (a tennis club/camp) to another non-conforming use (a day camp and tennis club), and would not substantially alter the existing site operations. It is noted that enrollment has been increasing at the camp since 2013 (i.e., from 104 to 280 campers for the summer of 2016), and would continue to increase incrementally above the existing enrollment, even absent the implementation of the proposed action. The incremental increase in camp enrollment would result in a negligible increase in demand for emergency services. Notwithstanding the existing, active use at the subject property, the proposed single day camp and tennis club facility would be situated within a well-established community already containing similar uses and with approximately 3,276 housing units,[46] such that the demand for community-provided services would not be substantial. Additionally, as the use of the subject property would continue to be non-residential, no school-aged children would be introduced to the population of the Southampton Union Free School District as a result of the proposed action. Overall, the proposed action would not result in significant adverse impacts to the fire protection, ambulance service, police protection or educational facilities that serve the subject property.

3.8.3 Mitigation Measures

As stated above, no significant adverse impacts to community facilities and services are anticipated as a result of the proposed action. Therefore, no mitigation measures would be necessary.

▼

[45] http://data.nysed.gov/enrollment.php?year=2014&instid=800000036824. Accessed August 2015.
[46] 2010-2014 US Census American Community Survey 5-Year Estimate for the North Sea Census Designated Place

3.9 Noise

A Noise Study was performed to provide information on existing sound levels at the subject property, and sound levels that would be expected upon implementation of the proposed action ("with-action" sound levels) under construction period and operational conditions.

The study includes background information on applicable noise regulations and criteria, results of sound level monitoring that was conducted to characterize the existing environment of the tennis club and/or tennis camp, predictions of future sound levels associated with the proposed use and construction-period activity, and an assessment of potential noise impact and mitigation recommendations. The appendices to the Noise Study include photographs of the measurement locations and figures of existing and future with-action sound levels.

3.9.1 Existing Conditions

3.9.1.1 Background on Sound Levels

Noise is defined as unwanted or excessive sound. Sound becomes unwanted when it interferes with normal activities such as sleep, work, or recreation. How people perceive sound depends on several measurable physical characteristics. These factors include:

- Level – Sound level is often equate to loudness.
- Frequency – Sounds are comprised of acoustic energy distributed over a variety of frequencies. Acoustic frequencies, commonly referred to as tone or pitch, are typically measured in Hertz. Pure tones have all their energy concentrated in a narrow frequency range.

Sound levels are most often measured on a logarithmic scale of decibels (dB). As shown in Table 23, the decibel scale compresses the audible acoustic pressure levels, which can vary from the threshold of hearing (0 dB) to the threshold of pain (120 dB).

Because sound levels are measured in dB, the addition of two sound levels is not linear. Adding two equal sound levels creates a 3 dB increase in the overall level. Research indicates the following general relationships between sound level and human perception:

- A 3-dB increase is a doubling of acoustic energy and is the threshold of perceptibility to the average person.
- A 10-dB increase is a tenfold increase in acoustic energy but is perceived as a doubling in loudness to the average person.

The human ear does not perceive sound levels from each frequency as equally loud. In order to compensate for this phenomenon in perception, a frequency filter known as A-weighted (dB(A)) is used to evaluate environmental sound levels. A variety of sound level indicators can be used for analyzing environmental sound. Leq is commonly used in assessing environmental noise as it has been shown to correlate well to human annoyance. Leq is the continuous equivalent A-weighted sound level that represents the same acoustic that exists over a period of time in a single value as the fluctuating levels. The Leq takes into account how loud events are during the period, how long they last, and how many times they occur. Leq is commonly used to describe environmental noise as it relates well to human annoyance.

Table 23 – Indoor and Outdoor Sound Levels

Outdoor Sound Levels	Sound Pressure (μPa)	Sound Level dB(A)	Indoor Sound Levels
	6,324,555	110	Rock Band at 5 m
Jet Over-Flight at 300 m		105	
	2,000,000	100	Inside New York Subway Train
Gas Lawn Mower at 1 m		95	
	632,456	90	Food Blender at 1 m
Diesel Truck at 15 m		85	
Noisy Urban Area—Daytime	200,000	80	Garbage Disposal at 1 m
		75	Shouting at 1 m
Gas Lawn Mower at 30 m	63,246	70	Vacuum Cleaner at 3 m
Suburban Commercial Area		65	Normal Speech at 1 m
	20,000	60	
Quiet Urban Area—Daytime		55	Quiet Conversation at 1 m
	6,325	50	Dishwasher Next Room
Quiet Urban Area—Nighttime		45	
	2,000	40	Empty Theater or Library
Quiet Suburb—Nighttime		35	
	632	30	Quiet Bedroom at Night
Quiet Rural Area—Nighttime		25	Empty Concert Hall
Rustling Leaves	200	20	
		15	Broadcast and Recording Studios
	63	10	
		5	
Reference Pressure Level	20	0	Threshold of Hearing

μPA MicroPascals describe pressure. The pressure level is what sound level monitors measure.
dBA A-weighted decibels describe pressure logarithmically with respect to 20 μPa (the reference pressure level).
Source: Highway Noise Fundamentals, Federal Highway Administration, September 1980.

3.9.1.2 Regulatory Context

The Noise Study for the proposed action was completed in fulfillment of the adopted DEIS scope dated March 26, 2015, pursuant to NYCRR SEQR Chapter VI Part 617.9. The NYSDEC has issued program policy on "Assessing and Mitigation Noise Impacts" which provides guidance on the methods for identifying when sound levels may cause a significant environmental impact and how to assess, avoid and reduce noise accordingly. It is noted that this project is not subject to the NYSDEC policy - - the policy provides relevant guidance only. The Noise Study also addresses sound level limits outlined in the Town of Southampton Noise Ordinance (Part I, Chapter 235 – Noise) which are associated with specific activities and have the potential to be a

nuisance. This section provides background information on the NYSDEC program policy for assessing noise and the Southampton Noise Ordinance.

NYSDEC Noise Program Policy

The NYSDEC policy recommends that existing and future (with the proposed action) sound levels be evaluated when residential, commercial, institutional or recreational uses are adjacent to a facility which generates sound. The NYSDEC policy indicates that receptor locations may be either at the property line of the parcel on which the facility is located or at the location of common use or inhabitance on adjacent property. With respect to this guidance, sound levels for existing and future with-action conditions have been reported at receptors located near the property line and also near the buildings (i.e., residences on properties contiguous to the subject property).

The goal for any permitted operation is to minimize increases in sound levels. Table 24 presents the thresholds for significant increase in sound level and the NYSDEC program policy on determining the need for mitigation. According to the policy, limiting maximum sound levels may be appropriate in some circumstances. For example, in non-industrial settings, a proposed action should generally not raise ambient sound levels above 65 dBA. Whether the proposed action would cause a pure tone condition should also be considered since they are readily discerned by the human ear and can cause annoyance. A pure tone is commonly considered to be the condition where the sound level in any 1/3-octave band exceeds the two adjacent bands by three dB or more.

Table 24 – NYSDEC Guidelines for Assessing Noise Impact and Mitigation

Sound Level Increase (dB)	Impact Determination	Need for Mitigation
0 to 3	No impact	None
3 to 6	Potential adverse impact for the most sensitive receptors	Mitigation may be needed for the most sensitive receptors.
6 to 10	Potential adverse impact depending on existing sound level and character of land use	Mitigation is generally needed for most residential receptors.
10 or more	Adverse impact	Mitigation is warranted where reasonable.

When a noise study indicates that the proposed action may result in significant impact, the NYSDEC requires the applicant to implement reasonable and necessary measures to mitigate or eliminate the adverse effects. If a significant adverse impact is identified, in addition to physical mitigation measures such as noise barriers, the applicant should also consider best management practices (BMP) to reduce noise by means of modifying noise-generating equipment or activities, limiting the period of

time or duration of noisy operations or relocating noise sources farther away from receptors.

3.9.1.3 Southampton Noise Ordinance

The Town of Southampton Noise Ordinance (Chapter 235 of the Town Code) prohibits persons from creating sound, when measured on the property line of a residential district, exceeding an overall level of 65 dBA between the hours of 7:00 a.m. and 7:00 p.m. The noise ordinance has an overall sound level limit of 50 dBA at residential receptors for the night time period between 7:00 p.m. and 7:00 a.m. It should be noted that no outdoor activities at the camp are anticipated during the night-time period.

Construction activities that occur between 7:00 a.m. and 7:00 p.m. are exempt from the sound level limits provided that the construction complies with other applicable provisions. Noise generated from vehicles on public ways are also exempt from sound level limits as long as the vehicles meet other applicable federal or state regulations.

The noise ordinance also prohibits yelling, shouting, hooting, whistling or singing at any time which is plainly audible at a distance of 50 feet from where the noise is generated and which annoys or disturbs the quiet, comfort or repose of persons in the vicinity.

3.9.1.4 Current Camp Activities

The existing facility had 215 campers in attendance during the 2015 summer camp season. Because this analysis compares the 2015 "existing" enrollment to the proposed with-action enrollment of 360, the assessment is conservative in showing greater potential increases in noise than if the actual 2016 enrollment was compared to the proposed action. The primary existing outdoor activities that have the potential to generate sound include tennis, swimming at the outdoor pool, basketball, and general playground games such as soccer. Indoor activities include arts and crafts, music, cooking and science. These indoor activities do not generate significant sound that would propagate into the neighboring community. Additionally, there is no machinery or equipment (i.e., woodworking tools) that creates significant sound that could propagate into the surrounding neighborhood. These same general indoor and outdoor activities are anticipated for the proposed action.

With the proposed action, there would still be tennis played at the seven courts located at the southern end of the facility, but the other two existing courts would be replaced by other uses. Specifically, two new outdoor swimming pools would be

constructed adjacent to the existing pool. These two new pools would be approximately 30-feet-by-53-feet and 25-feet-by-63-feet in size and would replace the existing tennis court that is adjacent to the existing pool. The existing pool mechanical equipment located on the north end of the pool area would remain in its current location. Additional mechanical equipment for the two new pools would be located adjacent to the existing equipment. With the proposed action, a new basketball court approximately 55-feet-by-90-feet would be replacing the existing tennis court located on the northern end of the facility. The overall footprint of the existing tennis court would be reduced with the installation of the proposed basketball court, and new vegetation would replace existing tennis court pavement between the new basketball court and the northern property line.

Tennis is currently played at the seven courts located at the southern end of the subject property, the single court located next to the pool, and the single court at the northern end of the subject property. The existing basketball court is approximately 34-feet-by-57 feet and located at the northern end of the subject property. There is currently one pool 23-feet-by-63 feet located in the area just north of the tennis courts.

Currently campers travel to the facility primarily by 16 small passenger buses, with a capacity of 24 persons each. On average, there are 13 campers in each bus. There are also three shuttle vans for staff members that travel to the facility in the morning around 8:15 a.m. and depart in the afternoon around 4:15 p.m. With the proposed action, there would up to an estimated 22 passenger buses to accommodate 360 campers.

3.9.1.5 Noise Sensitive Land Uses

Land uses within ½-mile of the subject property include single-family residences, open space conservation land, commercial properties and industrial facilities. Noise sensitive land uses adjacent to the subject property include single-family residences on Majors Path (and a private drive) to the north, Majors Path to the east, Horton Terrace to the south, North Sea Mecox Road to the south and west, Robinson Road to the west, and a nursery to the south on North Sea Mecox Road.

3.9.1.6 Existing Sound Levels

VHB conducted sound level measurements at the subject property on August 14, 2015, and August 18, 2015. Sound level measurements were conducted adjacent to the swimming pool, basketball court, and tennis courts to obtain reference level information. Table 25 presents the results of these reference sound level measurements.

Table 25 – Existing Sound Level Measurement Results

Activity	Measurement Distance Source (feet)	A-weighted Equivalent Sound Level (LAeq, dBA)
Soccer with 12 campers	30	59.6
Tennis with 25 campers	80	51.3
Basketball with 7 campers	20	62.3
Swimming Pool with 84 campers	75	60.0
Parachute Game with 14 campers	30	59.5
Ambient conditions	n/a	57.6

3.9.2 Potential Impacts

Based on the existing sound level measurements, the number of existing and future campers and staff, and the proposed location and size of the facilities, sound levels generated by the camp under the proposed action were predicted throughout the neighborhood. Noise exposure contours were computed using the Cadna-A™ prediction software. This program calculates sound level emissions of standard or user-defined sources and take into consideration influences due to the surrounding environment, including propagation effects, topography, ground cover, intervening buildings and terrain. Reference sound levels for the primary outdoor activities including tennis, swimming, and basketball were input to the model based on the existing measurements.

In order to account for proposed changes to the camp facilities, the sound levels have been scaled according to the number of potential future campers. Because these outdoor activities are dependent on the number of participants, as the number of participants increase, the future sound levels would increase. For the potential increase in the number of campers from 215 to 360 campers, a given activity would have approximately 67% more participants and sound generated from the activity would increase 2.6 dB. This approach is relatively conservative, since with greater enrollment there is greater potential for some of the additional campers to be observing activities rather than actively participating (e.g., there would not necessarily be a greater number of campers on the same court at the same time generating sound for a given activity).

Under the proposed action, outdoor activities are assumed to be the same as the existing activities with 67% more participants:

- Swimming at three pools with 152 campers (total)
- Tennis at the seven courts with 45 campers
- Basketball at the existing court with 13 campers
- Basketball at the proposed court with 32 campers
- Soccer with 22 campers

Table 26, below, presents the existing and future sound levels, and specifies the associated sound level increase at receptors near the property line, and at locations near each residence. Existing and future with-action sound level contours show the exposure in the entire neighborhood in Figure 15 and Figure 16, below.

Many receptors near the property line are adjacent to roadways or driveways and frequent human use would not be expected. Therefore, noise impacts would generally not occur at these property line locations. While information has been provided for receptors both near the property line and near each residence, potential noise impact should be assessed primarily at locations near the residences.

Table 26 – Noise Impact Assessment Results

	Receptor Near Residence			Receptor Near Property Line			
Receptor Location	Existing Sound Level (dBA)	Future Sound Level (dBA)	Sound Level Increase (dBA)	Existing Sound Level (dBA)	Future Sound Level (dBA)	Sound Level Increase (dBA)	Noise Impact?
717 Majors Path Rd	58	58	0	58	58	0	No
719 Majors Path Rd*	58	58	0	58	58	0	No
721 Majors Path Rd*	58	60	2	60	63	3	No
735 Majors Path Rd*	58	60	2	60	65	5	No
727 Majors Path Rd*	58	59	1	58	60	2	No
690 Majors Path Rd	58	59	1	58	59	1	No
676 Majors Path Rd	58	59	1	58	59	1	No
660 Majors Path Rd	58	59	1	58	59	1	No
640 Majors Path Rd	58	58	0	58	62	4	No
632 Majors Path Rd	58	58	0	59	61	2	No
620 Majors Path Rd	58	58	0	59	60	1	No
606 Majors Path Rd	58	59	1	58	60	2	No
605 Majors Path Rd	58	60	2	59	61	2	No
22 Horton Terr	59	61	2	59	62	3	No
15 Horton Terr	59	60	1	59	61	2	No
139 N. Sea Mecox Rd	58	60	2	58	60	2	No
105 N. Sea Mecox Rd	58	58	0	58	60	2	No
103 N. Sea Mecox Rd	58	58	0	58	59	1	No
99 N. Sea Mecox Rd	58	58	0	58	58	0	No
95 N. Sea Mecox Rd	58	58	0	58	58	0	No

* Receptor near property line is located on 717 Majors Path Rd property line adjacent to given address.

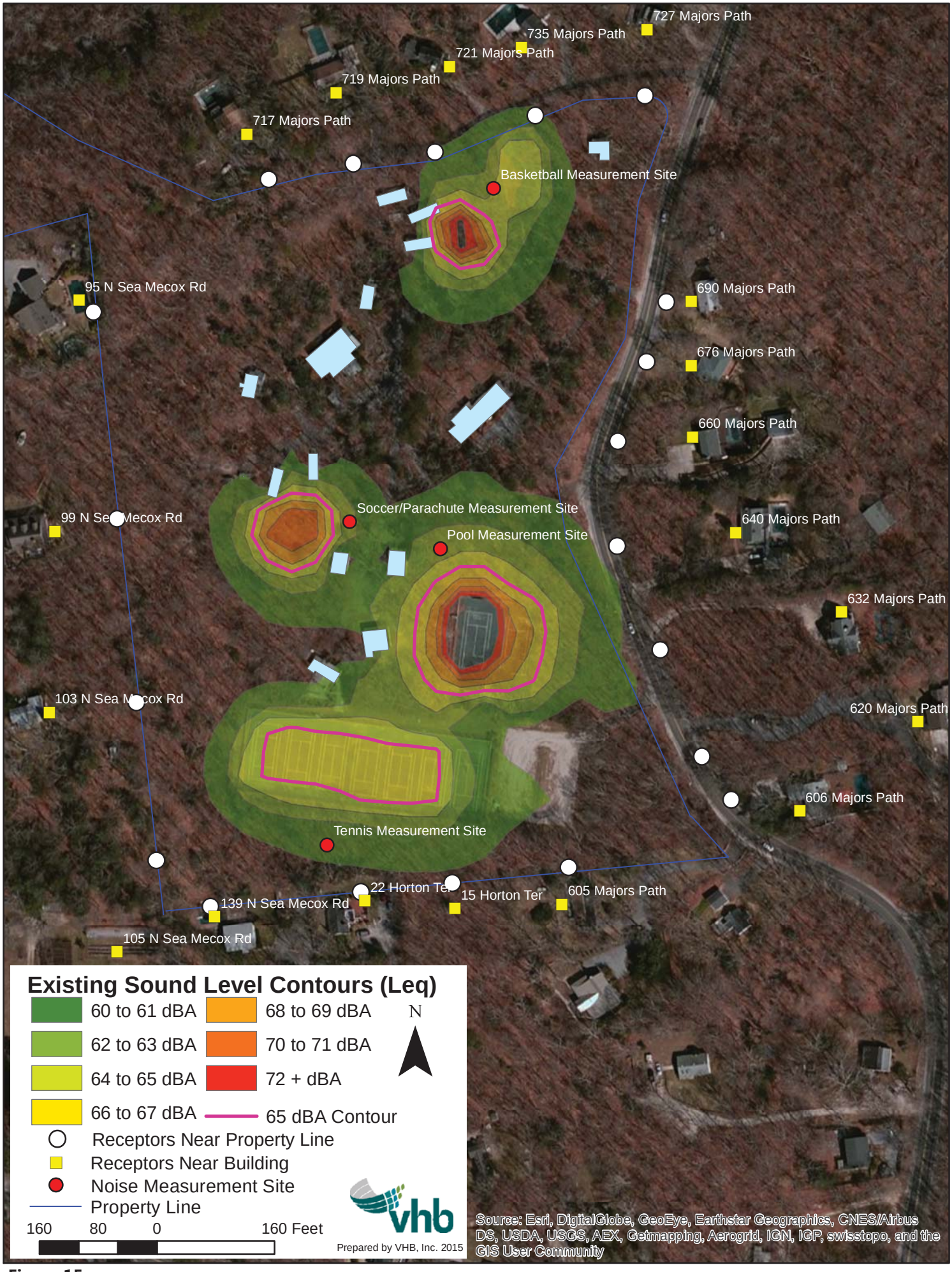

727 Majors Path
735 Majors Path
721 Majors Path
719 Majors Path
717 Majors Path
Basketball Measurement Site
95 N Sea Mecox Rd
690 Majors Path
676 Majors Path
660 Majors Path
Soccer/Parachute Measurement Site
99 N Sea Mecox Rd
Pool Measurement Site
640 Majors Path
632 Majors Path
103 N Sea Mecox Rd
620 Majors Path
606 Majors Path
Tennis Measurement Site
22 Horton Ter
15 Horton Ter
605 Majors Path
139 N Sea Mecox Rd
105 N Sea Mecox Rd
Existing Sound Level Contours (Leq)
60 to 61 dBA
62 to 63 dBA
64 to 65 dBA
66 to 67 dBA
68 to 69 dBA
70 to 71 dBA
72 + dBA
65 dBA Contour
Receptors Near Property Line
Receptors Near Building
Noise Measurement Site
Property Line
160 80 0 160 Feet
N
Prepared by VHB, Inc. 2015
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 15

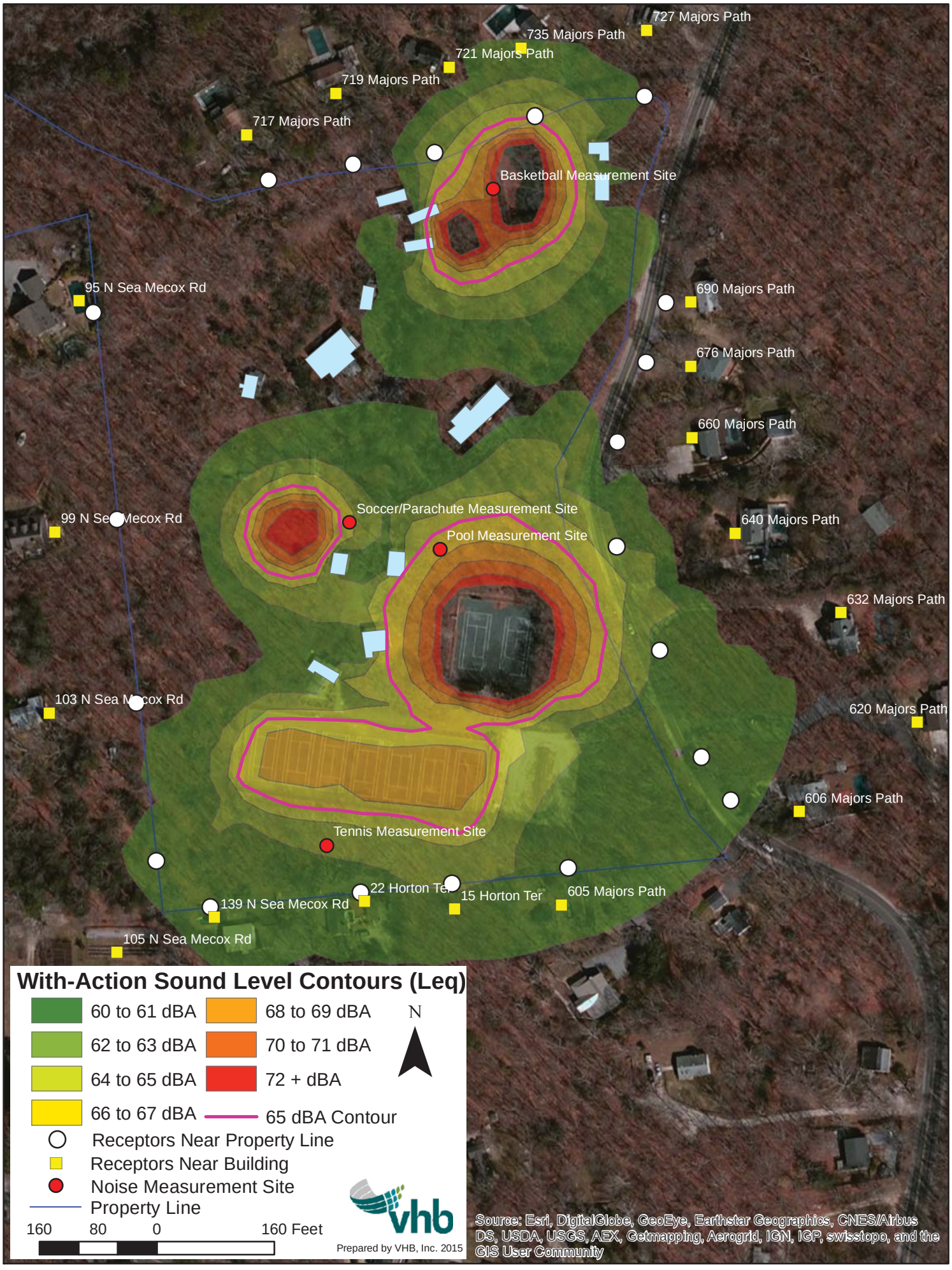

727 Majors Path
735 Majors Path
721 Majors Path
719 Majors Path
717 Majors Path
Basketball Measurement Site
95 N Sea Mecox Rd
690 Majors Path
676 Majors Path
660 Majors Path
Soccer/Parachute Measurement Site
99 N Sea Mecox Rd
Pool Measurement Site
640 Majors Path
632 Majors Path
103 N Sea Mecox Rd
620 Majors Path
606 Majors Path
Tennis Measurement Site
22 Horton Ter
15 Horton Ter
605 Majors Path
139 N Sea Mecox Rd
105 N Sea Mecox Rd
With-Action Sound Level Contours (Leq)
60 to 61 dBA
62 to 63 dBA
64 to 65 dBA
66 to 67 dBA
68 to 69 dBA
70 to 71 dBA
72 + dBA
65 dBA Contour
Receptors Near Property Line
Receptors Near Building
Noise Measurement Site
Property Line
160 80 0 160 Feet
N
Prepared by VHB, Inc. 2015
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 16

Table 26, above, shows that existing sound levels are up to 60 dBA at receptors near the adjacent residences and near the property line. With-action sound levels near the adjacent residences are predicted to be 61 dBA or lower and 65 dBA or lower near the property line. Sound levels are predicted to increase up to two decibels at most receptors. For receptors at to the north end of the property, sound levels immediately adjacent to the property boundary (e.g., within the private driveway surface) are predicted to increase up to five decibels due to the introduction of the new basketball court.

The impact assessment results show that future with-action sound levels do not exceed the Southampton Noise Ordinance daytime limit of 65 dBA for residential land use and, therefore, there would be no significant adverse impact. Additionally, the increase in sound would be less than six decibels at all receptors and, therefore, noise mitigation would not be needed for residential receptors, according to the NYSDEC program policy.

3.9.2.1 Construction Period Activities

Construction associated with the proposed action would generally include small equipment such as a backhoe for moving earth, a generator, a paver and hand tools for constructing buildings. Although the Southampton noise ordinance does not limit sound generated from construction activities between the hours of 7:00 a.m. and 7:00 p.m., projections of temporary construction sound are presented for informational purposes. Should night-time construction be considered by the applicant, a more detailed construction noise assessment and control plan would be recommended in support of a request for a variance from the Town.

The following are reference sound levels of typical equipment that may be used during construction. The reference data was obtained from the Federal Highway Administration Roadway Construction Noise Model. All sound levels are maximum values referenced to a distance of 50 feet.

- Backhoe, 80 dBA
- Generator, 82 dBA
- Paver, 85 dBA

The closest receptors to adjacent buildings, such as at the northern end of the subject property, are at least 100 feet from where construction would occur. Assuming that only a single piece of construction equipment, such as a backhoe, would be operating at any given time, temporary construction sound levels would be approximately 79 dBA or less. Construction activities would be limited in accordance with the Town of Southampton requirements, and would be of relatively short duration (i.e., construction noise would cease upon project completion).

3.9.3 Mitigation Measures

The results of the assessment show that there would be no noise impact associated with the proposed action according to NYSDEC program policy or the Southampton Noise Ordinance, such that no noise mitigation is required. Even though no impacts have been identified, BMPs may be considered to minimize noise generating activities at the camp or during construction.

BMPs for reducing noise from camp activities could include not reproducing amplified music, or using public announcement equipment on the camp. Yelling, hooting or screaming could be limited through general counseling of the campers and/or signage near the property lines.

BMPs for construction activities could include performing noisy operations only during periods of the day with less potential for annoyance to abutters, increasing the setback distance of construction equipment (such as portable generators) to sensitive receptors as feasible, using smaller and/or quieter equipment, altering construction methods (i.e. using a small bull dozer rather than a large bull dozer), and making sure equipment such as backhoes have functioning mufflers.

4.0

Alternatives and their Impacts

This section examines six alternatives to the proposed action, as follows:

- SEQRA-Mandated "No-Action" Alternative
- Residential Yield Plan
- Planned Residential Development with 25-Percent Open Space
- 100-Foot Setback
- Alternative Sanitary Technology
- 25-Percent Reduced Scale

The following sections evaluate the potential impacts of each of the aforementioned alternatives to the proposed action.

4.1 No-Action Alternative

The No-Action alternative involves leaving the subject property in its present state. Specifically, the subject property would remain in use as a seasonal tennis club and/or tennis camp. As the proposed action would maintain the essential character of the subject property, this alternative is similar to the proposed action, although the minimal impacts associated with the disturbance of the subject property would be avoided, and the various benefits associated with the proposed action would be foregone.

Under the No-Action alternative, enrollment at the Southampton Racquet Club and Camp is expected to continue to increase above the current level, based on the consistent growth observed over the recent years since the subject property has been in operation by Southampton Racquet Club and Camp (see enrollment, membership and staff trends data on Page 6 of this DEIS). The ultimate maximum camp enrollment under the No-Action alternative may differ from that under the proposed action (i.e., 360 anticipated campers), but cannot be specifically determined. However, camp enrollment is not "capped" by any maximum occupancy.

If the No-Action alternative is implemented, there would be no construction-related impacts. Because no physical improvements would occur in connection with implementation of this alternative, there would be no potential new impacts to soils and topography, visual and aesthetic resources, community character, land use and zoning, or ecology. However, due to the increase in enrollment that may continue to occur absent the proposed action, the No-Action alternative would still have potential effects on transportation, water resources (potable water usage and sanitary waste generation), noise and community facilities.

It should be noted that the No Action alternative does not achieve the objective of the project sponsor to improve facilities at the existing camp and operate a day camp and tennis club at the subject property.

4.1.1 Water Resources

As discussed throughout this DEIS, Southampton Racquet Club and Camp occupancy has continued to increase year after year (i.e., 215 campers and 65 staff [including 22 staying overnight] in 2015 to 280 campers and 66 staff [including 53 staying overnight] in 2016). It is anticipated that this trend would continue in the future, regardless of whether the proposed action is implemented. While the precise ultimate occupancy absent the proposed action cannot be determined, it is expected that there would be little or no significant difference, and water use/sanitary waste generation would thus be nearly the same as with the proposed action. As provided by the project engineer, the existing on-site sanitary systems are designed with ample capacity to accommodate sanitary waste generated by the proposed action, and would thus be able to accommodate future enrollment under the No-Action alternative. As such, there would be no significant adverse impacts related to water use/sanitary waste generation under the No-Action alternative.

The No-Action alternative would also leave all of the existing cottages in place and would not construct the proposed Cottage 14. As such, the existing on-site sanitary system connected to Cottages 4 and 5 would remain in place, and the proposed addition to the sanitary system connected to Cottages 11 and 14 would not be installed. In addition, the existing water service connections at Cottages 4 and 5 would remain, and the proposed water service connection to Cottage 14 would not be installed.

With respect to impacts related to stormwater, the No-Action alternative would forego the proposed drainage improvements at the subject property, which would contain and recharge all stormwater runoff at the subject property. Under this alternative, stormwater runoff would remain uncontrolled.

As no physical improvements would be implemented, the No-Action alternative, as with the proposed action, would not impact the wetlands associated with Little Fresh Pond near the northwest corner of the subject property.

4.1.2 Visual and Aesthetic Resources and Community Character

The No-Action alternative would leave the subject property in its current state, with no impact to views of the subject property from the surrounding area. However, this alternative would forego the proposed removal and revegetation of a portion of the northernmost existing tennis court, bordering the private, shared residential driveway to the north. Thus, the positive visual impact of the proposed action in this area would not be realized.

4.1.3 Transportation

As discussed above, camp enrollment is expected to continue to increase under the No-Action alternative, such that at least a portion of the traffic expected under the proposed action would occur under this No Action alternative. As discussed in the TIS (see Appendix H), the additional peak period traffic expected to occur under the proposed action can be easily accommodated by the existing roadway network, and the addition of the very small estimated increase in traffic should not result in any increase in accidents in the vicinity of the site. Accordingly, the additional traffic expected under the No-Action alternative would also not be expected to result in significant adverse impacts.

The No-Action alternative would forego the proposed improvements to site access and parking. Specifically, these improvements include improving available parking on the site, and relocating camp driveways in order to improve sight distance for vehicles traveling on Majors Path and using the driveways.

4.1.4 Land Use and Zoning

As this alternative involves leaving the site in its current state, there would be no change in the existing land use, and the subject property would remain developed with the existing improvements associated with the tennis club and/or tennis camp. Under the No-Action alternative, the existing non-conforming use would continue, and the change to another non-conforming use (a day camp and tennis club) would not occur. As with the proposed action, there would be no change to existing zoning.

4.1.5 Community Facilities and Services

As discussed above, camp enrollment is expected to increase under the No-Action alternative similarly to the proposed action. This increase in enrollment would result in a negligible increase in demand for emergency services, and would only affect the

site during the operational season (i.e., May through October for the tennis club and June through early September for the camp). Furthermore, as with the proposed action, the No-Action alternative would not introduce any school-aged children to the population of the Southampton Union Free School District. Overall, the No-Action alternative would not result in significant adverse impacts to the fire protection, ambulance service, police protection or educational facilities that serve the subject property.

4.1.6 Noise

Under the No-Action alternative, the noise environment at the subject property would be similar to the existing condition, with minor incremental increases in noise due to the anticipated increase in camp enrollment. It is not anticipated that these incremental increases would result in sound levels above 65 dBA at any adjoining property line, and thus, there would be no significant adverse noise impacts associated with the No-Action Alternative.

4.2 Residential Yield Plan

This section examines an alternative development, whereby the subject property would be developed in accordance with the prevailing R-20 Residence zoning district (including the use, bulk and dimensional regulations of that district). As detailed below, and depicted on the *Sketch Plan of R-20 Yield* included in Appendix I, the prevailing R-20 Residence zoning would allow for the development of a 22-lot single-family residential subdivision, resulting in the demolition of all existing improvements, and requiring clearing of the subject property to a greater extent than the proposed action.

To evaluate this alternative, a yield map has been developed that depicts the maximum potential development of the subject property in accordance with the use, bulk and dimensional requirements of the R-20 Residence zoning district, among other considerations (see *Sketch Plan of R-20 Yield* in Appendix I). All existing buildings, decks/patios and courts/pools would be removed, and the subject property would be redeveloped as 23 separate lots, including one lot to be preserved as open space (92,748± SF). The 22 lots that would be developed with residences would range in area from 20,014± SF to 69,397± SF, with an average lot size of 26,509± SF.
In order to characterize the theoretical maximum development of the subject property under this alternative, assumptions regarding lot coverage (building footprint), impervious surface area, and clearing were applied to each of the 22 residential lots. Based on the building envelopes created by required yard setbacks and a maximum permitted lot coverage (by main and accessory buildings) of 20 percent of the lot area,

this alternative would result in a maximum total building area of 115,930 SF (2.66± acres) at the overall 17.28± acre subject property (15.4± percent building coverage). Typical site improvements and accessory structures (e.g., driveways, tennis courts and swimming pools) were also considered in developing estimates of the total impervious surface area to be created. In order to provide an expected extent of clearing, the yield map estimates that 50 percent of each of the residential lots would be cleared of natural vegetation. This is a conservative estimate, as there is no maximum amount of clearing set forth in the Town Code. It is, in fact, a very conservative estimate, as even in the Town's Aquifer Protection Overlay District (APOD) which does not include the subject property, the protective clearing limits for residential lots between 30,001 and 60,000 square feet in size allow up to 60 percent of the lot area to be cleared (see Section 330-67.A[4]).

It is noted that the potential residential development of the subject property is limited by Article 6 of the SCSC, which limits sanitary waste discharge to 300 GPD per acre. Sanitary waste discharge would thus be capped at 5,184 GPD for the 17.28± acre subject property, and a maximum of 17 single-family residences (rather than 22) would be allowed. However, as discussed below, the subject property has a "grandfathered" maximum sanitary flow of 9,450 GPD, which would allow the future development of the subject property to discharge a greater quantity of sanitary waste than would otherwise be permitted under Article 6. Residential development at the subject property is further limited by the wetlands and adjacent area associated with Little Fresh Pond on the northwestern portion of the subject property. An alternative *Sketch Plan of One Acre Yield* (see Appendix I) has been developed which accounts for the sanitary waste discharge restriction that would apply absent the "grandfathered" flow, and wetland adjacent area restrictions, depicting a maximum total of 14 single-family residential lots complying with the dimensional regulations of the R-20 Residence zoning district and respecting the irregular shape of the subject property.

Due to the above-described density restrictions, in order to build the maximum 22 lots in accordance with the existing R-20 Residence zoning district, this alternative would require the application of the "grandfathered sanitary flow." Even without the grandfathered flow, the full zoning yield of the site could be achieved through a transfer of developments (e.g., sanitary credits, Pine Barrens Credits, etc.) or a variance granted by the SCDHS Board of Review. Accordingly, for the purposes of this analysis, the potential impacts associated with the residential yield plan would be discussed in terms of the *Sketch Plan of R-20 Yield* in Appendix I (i.e., 22 single-family residences), except as otherwise noted.

It should be noted that this alternative does not achieve the objective of the project sponsor to improve facilities at the existing camp and operate a day camp and tennis club at the subject property.

4.2.1 Soils and Topography

Development of the subject property in accordance with this alternative would require disturbance of land surfaces across much of the subject property. With the exception of a 92,748± SF open space area to be preserved on the northwestern portion of the subject property, adjacent to the wetlands associated with Little Fresh Pond, the *Sketch Plan of R-20 Yield* would result in the clearing of vegetation and grading of land surfaces across the site. The *Sketch Plan of R-20 Yield* presents a theoretical development of the site, wherein 10.05± acres of land would be disturbed for development. As with the proposed action, such land disturbances would increase the potential for adverse erosion and sedimentation impacts, and control measures would be required.

As compared to the proposed action, this alternative would result in the disturbance of a greater land surface area (i.e., 10.05± acres instead of 3.06± acres). Additionally, as discussed in Section 3.1.2 of this DEIS, the proposed action has been designed to retain the existing site topography to the maximum extent practicable, to minimize excavation, and to balance cut and fill such that only a minimal quantity of natural material would require removal (i.e., 625± cubic yards for new stormwater drainage structures). By comparison, for this alternative, the development of 115,930± SF of single-family residences with foundations, 105,408± SF of paved driveways, pools, tennis courts and roadways, and various supporting infrastructure (e.g., sanitary disposal systems, underground stormwater containment piping and structures, etc.), could result in significantly greater disturbances to on-site soils and topography than the proposed action, and may require material removal for off-site disposal (and potential adverse impacts associated therewith [e.g., truck traffic]). The period of disturbance from construction activity would be expected to be significantly longer than that expected under the proposed action, and thus, the potential for erosion and sedimentation impacts could be greater.

With respect to the 14-lot *Sketch Plan of One Acre Yield*, similar impacts would be expected to those described above for a 22-lot subdivision. The total amount of disturbance for a 14-lot subdivision would still be greater than under the proposed action (i.e., 9.77± acres versus 3.06± acres). Impacts to topography would also be greater than under the proposed action, as significant grading would be required where no substantial grading is currently proposed. Disturbance from construction activities would occur over a longer construction period, resulting in greater potential for erosion and sedimentation impacts.

Overall, both the 22-lot and 14-lot subdivisions examined in this alternative would have a greater potential to impact existing soils and topography in comparison to the proposed action.

4.2.2 Water Resources

With respect to water use and sanitary discharge, this alternative would be expected to create a demand of 300 GPD of potable water/sanitary discharge for each of the 22 single-family residences, for a total of 6,600 GPD. As discussed above, the total quantity of sanitary waste that may be permitted to be discharged to on-site sanitary systems is limited pursuant to Article 6 of the SCSC. For the 17.28±-acre subject property, the maximum permitted discharge to on-site systems (at a density of 300 GPD/acre in GMZ-V) would be 5,184± GPD. As indicated above, the subject property has a "grandfathered" maximum sanitary flow of 9,450 GPD, which would allow this yield alternative development of 22 single-family residences to exceed the restriction of 300 GPD per acre for GMZ-V. As discussed in Section 3.2 of this DEIS, the proposed action would result in a total potable water demand of 7,153± GPD and would generate 6,800± GPD of sanitary waste. Calculated on a daily basis, this alternative would discharge approximately 200 GPD less sanitary waste to on-site sanitary systems than the proposed action. Thus, on a daily basis, this alternative has a marginally lesser potential to affect groundwater quality and available water supplies than the proposed action, which would use 7,153± GPD of potable water and generate 6,800± GPD of sanitary waste for discharge to on-site systems.

In order to better compare actual water usage/sanitary discharge for the residential yield alternative to the proposed action, it is necessary to factor in the seasonal nature of residential development in the area as well as the seasonal nature of the proposed action. According to the United States Census Bureau, there are 3,276± housing units in the North Sea CDP, within which the subject property is situated. Of these housing units, 1,370± (42± percent) are classified as vacant for seasonal, recreational, or occasional use. Applying a three-month seasonal factor to 42 percent of the 22 potential residences (i.e., nine residences) yields a total water usage/sanitary discharge of 1.67± MGY.

The proposed action would involve day camp operations for a ten week period. Applying a ten week period to the estimated of 7,153± GPD of water usage and 6,800± GPD sanitary discharge from the proposed action yields a total water usage of 500,710 gallons per year (GPY) and a total sanitary discharge of 476,000 GPY. It is noted that this estimate is conservative, as it applies constant water demand and sanitary discharge to every day of the week, whereas campers would only occupy the site Monday through Friday, with overnight staff staying throughout the week.

Thus, when adjusting for the seasonal nature of both the proposed action and residential development in the North Sea CDP, it is clear that the proposed action would be significantly less impactful on water resources, using nearly 1.2 million fewer gallons of water per year, and generating nearly 1.2 million fewer gallons of sanitary waste than the residential yield alternative.

Applying the same seasonal factor to a 14-lot subdivision yields a total water usage/sanitary discharge of 1.05± MGY. Thus, the proposed action would use approximately 550,000 gallons of water per year less, and generate nearly 574,000 million gallons of sanitary waste per year less than a 14-lot subdivision.

As with the proposed action, a single-family residential subdivision at the subject property would be required to install drainage infrastructure to accommodate stormwater on-site.

4.2.3 Ecology

Development of the subject property in accordance with this alternative would result in the demolition and removal of the existing site improvements, as well as the clearing of approximately 10.05 acres (58.2± percent of the site) of land for the construction of 22 single-family residences and associated site improvements, including a paved road and driveways, swimming pools, tennis courts and lawns. The clearing and development associated with this alternative would take place within, and beyond, the existing developed portion of the site. A total of 2.13± acres (12.3± percent of the site) of contiguous, naturally vegetated open space would be maintained at the northwestern portion of the site, proximate to the wetlands associated with Little Fresh Pond.

Under existing conditions, 6.37± acres of the subject property (36.9± percent) is cleared of natural vegetation. The total post-development clearing that would take place under this alternative would occur over a larger area than under the proposed action after revegetation (i.e., 10.05± acres versus 6.96± acres, or an increase of 3.09± acres). Thus, a greater quantity of existing natural vegetation would be removed, resulting in marginally greater impacts to the existing ecological communities than under the proposed action (see detailed discussion in Section 3.4 of this DEIS). As previously indicated, the assumed extent of clearing for the 22-lot alternative is a conservative estimate, since there is no maximum clearing limit established within the Town Code. The proposed action has incorporated measures to minimize, preclude, and mitigate potential ecological impacts (i.e., revegetation of 0.21± acre with native trees, shrubs and herbaceous plants). It is expected that this alternative may incorporate similar measures in landscaped areas at each of the single-family residential lots. However, the impervious surface that would be created under this alternative (i.e., 5.08± acres), is greater than the combined impervious, deck and gravel surfaces that would occur under implementation of the proposed action (i.e., 3.19± acres). Thus, there would be 1.89± acres less available pervious surfaces for mitigation (i.e., for the planting of native vegetation) under this residential development alternative.

Similar to the 22-lot subdivision described above, a 14-lot subdivision would require the clearing of approximately 9.77 acres (56.6± percent of the site), with marginally greater impacts to the existing ecological communities than under the proposed action.

4.2.4 Visual and Aesthetic Resources

The alternative development of the subject property with 22 single-family residences would alter views of the site from the surrounding area to a greater extent than under the proposed action. As shown on the *Site Plan* in Appendix B, the proposed action involves the relocation of the central and southernmost access driveways to improve sight distances for drivers. The existing driveways to be relocated, as well as a gravel area along the right-of-way on the northernmost portion of the subject property, would be revegetated to mitigate visual impacts. Additionally, the northern portion of the tennis court to be converted to a basketball court on the northern portion of the subject property would be revegetated to enhance the vegetated buffer between the subject property and the adjacent residences to the north. Resulting views from the surrounding area would be nearly the same upon implementation of the proposed action as under existing conditions. By comparison, the residential yield alternative would alter views both from within and surrounding the subject property by removing all existing structures and site improvements, clearing an additional 3.09± acres of natural vegetation (above post-development conditions with the proposed action, after revegetation), and constructing 22 single-family residences and associated improvements, including a 1.76±-acre circular right-of-way with two access points along Majors Path. This alternative would locate six residential lots along the Majors Path right-of-way, which would be expected to alter views and change the visual character of the site.

This alternative would be required to adhere to the Town's dimensional regulations for the R-20 Residence zoning district, including minimum front yards of 40 feet, minimum side yards of 20 feet (45 feet for combined side yards and corner lots) and 60 feet for rear yards. Notably, adhering to these minimum required setbacks would result in different setbacks between the existing or proposed structures/site improvements and the adjoining property lines. Table 27 below presents a comparison of the buffers that would be created or maintained under the proposed action and those created under the residential yield alternative.

Table 27 – Comparison of Minimum Setbacks under Proposed Action and Residential Yield Alternative

Buffer	Proposed Action	Residential Yield	One-Acre Yield
Northern Property Line	20.75 – 75 feet	60 feet	60 feet
Eastern Property Line	40 feet	40 feet	40 feet – 60 feet
Southern Property Line	64.17 feet	60 feet	25 feet – 60 feet
Western Property Line	110.75 feet	60 feet	20 feet – 60 feet

The reduced setbacks shown above, combined with increased clearing of natural vegetation and the two-story/32-foot maximum allowable height, would result in potentially adverse visual impacts to surrounding properties, whereas the proposed action would essentially maintain the existing visual character of the site, where views from the surrounding area are limited by the existing wooded areas surrounding the subject property (to remain).

The 14-lot residential subdivision depicted on the *Sketch Plan of One Acre Yield*, would result in visual impacts similar to those described above for a 22-lot residential subdivision. A total of 9.77± acres of clearing would occur for 14 two-story/32-foot maximum homes, and six residential lots would be located along the Majors Path right-of-way, which would be expected to alter views and change the visual character of the site. Additionally, minimum buffers to adjacent properties would be altered as shown in Table 27. As such, a 14-lot subdivision would alter the visual character of the subject property and would result in greater visual impacts than the proposed action.

4.2.5 Transportation

Development of the subject property in accordance with the *Sketch Plan of R-20 Yield* in Appendix I with 22 single-family residences would be expected to generate several vehicular trips to-and-from the subject property. Pursuant to the Institute of Transportation Engineers (ITE) *Trip Generation Manual – 9th Edition*, development in accordance with this alternative would generate vehicular trips on surrounding roadways as follows:

Table 28 – Trip Generation Comparison: Residential Yield Plan Alternative and Proposed Action

Proposed Use / ITE Land Use Code	Weekday A.M. Peak Hour Trips		Weekday P.M. Peak Hour Trips		Saturday Peak Hour Trips		Sunday Peak Hour Trips	
	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit
Single-Family Detached Housing / 210 (22 units)	4	12	14	8	11	9	10	9
Single-Family Detached Housing / 210 (14 units)	3	8	9	5	7	6	6	6
Proposed Action – Camp Entrance/Exit	91	40	11	60	(Not studied)			
Proposed Action – Tennis Club/Staff Parking Area	54	0	3	29				

As shown in Table 28, development of the subject property under this alternative would result in the generation of fewer vehicular trips to-and-from the subject property than would the proposed action. It is noted that the proposed action involves seasonal use of the subject property, with the camp operating for a 10-week period on weekdays between mid-June and early September, and tennis club activities taking place daily over a 22-week period from early May to early October. For the remainder of the year, the subject property would not be active and would not generate any significant number of vehicular trips. The residential yield alternative, however, would be expected to generate at least a portion of the trips shown in Table 28, year-round. As discussed earlier in this section, approximately 42 percent of homes in the North Sea CDP are vacant for seasonal, recreational or occasional use. Thus, it is anticipated that approximately 58 percent, or 13 of the 22 homes would be occupied year-round, with the remaining nine homes being occupied seasonally. As such, although the proposed action would generate a greater number of trips to-and-from the subject property during peak usage than would occur under the residential yield alternative, these trips would only occur over a limited time period each year when the camp and tennis club are operational.

Access to the subdivision would be provided via a circular road with two access points on Majors Path, roughly equating to the locations existing northernmost and southernmost driveways.

With respect to the 14-lot subdivision depicted on the *Sketch Plan of One Acre Yield* (see Appendix I), trip generation is expected to be slightly less than it would be with a 22-lot subdivision, as shown in Table 28, above. Again, approximately 58 percent of trip generation is expected to occur year-round with residential development at the subject property, while under the proposed action, trip generation would coincide

with the seasonal use of the subject property. Site access for the 14-lot subdivision would be altered so that there would be one access point on Majors Path, near the existing camp entrance driveway.

Overall, trip generation associated with the residential yield alternative would be lower than the proposed action during the active period for the day camp and tennis club, but would occur (at least partially) year-round. It is acknowledged that no significant adverse traffic impacts are expected to result from this alternative or the proposed action.

4.2.6 Land Use and Zoning

By definition, this alternative is intended to consider the development of the subject property in accordance with the prevailing zoning and land use controls, including, but not limited to, the use, bulk and dimensional regulations of the R-20 Residence zoning district.

The development of the subject property under this alternative would result in the establishment of 22 single-family residences, resulting in clearing of undeveloped portions of the subject property (to a greater extent than the proposed action). It is noted that the surrounding area predominantly contains single-family residential uses and undeveloped land, such that development according to this alternative would not be out of character with the surrounding neighborhood. As this alternative has been designed to be "as-of-right," it conforms to the use, bulk and dimensional regulations of the R-20 Residence zoning district. Accordingly, the alternative would not require any zoning variances, and would remove the existing and proposed non-conforming uses. Site data would be as follows:

Table 29 – Site Data: Existing Conditions and Residential Yield Plan Alternative

Site Coverage	Existing (Acres)	Proposed (Acres)	R-20 Residential Yield (Acres)	One-Acre Residential Yield (Acres)
Roads, buildings, and other paved or impervious surfaces	1.65±	1.68±	5.08±	6.38±
Decks	0.08±	0.08±	0	0
Gravel	1.18±	1.43±	0	0
Lawn/Landscaping/Mulch Areas and Paths	3.46±	3.97±	4.98±	3.40±
Wooded	10.38±	9.59±	6.69±	6.97±
Wetlands	0.53±	0.53±	0.53±	0.53±
TOTAL	17.28±	17.28±	17.28±	17.28±

As shown above, the residential yield alternative would result in an increase in the total impervious surface and lawn/landscaping areas at the subject property, with a reduction in wooded area of 3.69± acres. By comparison, the proposed action would

reduce the total wooded area at the subject property by 0.79± acres (which would be partially mitigated through 0.21± acre of revegetation with native plantings).

It should be noted that the development of the subject property with an as-of-right land use (i.e., 22 single-family residences) would be expected to generally result in greater environmental impacts with respect to soils and topography, water use, sanitary waste discharge, ecology, aesthetics, transportation (during the off-season), and potentially noise from a longer construction period, as discussed throughout this section of the DEIS. Additionally, although developing the subject property with 22 single-family residences would not be out of character with the surrounding neighborhood, and would remove a non-conforming use, doing so would remove an established seasonal recreational use which has occupied the subject property for over four decades and is a part of the established land use character of the area.

With respect to the 14-lot subdivision depicted in the *Sketch Plan of One Acre Yield*, the impact on land use and zoning would generally be similar to the *Sketch Plan of R-20 Yield*, but with slightly increased areas of impervious surface, as shown in Table 29, above.

4.2.7 Community Facilities and Services

It is anticipated that community facilities and services, including the Town of Southampton Police Department, North Sea Fire Department, Southampton Volunteer Ambulance and Southampton Union Free School District would be able to provide service to the 22 single-family residence that would be built on the subject property as part of this alternative. It is noted that a minor increase in the number of school-aged children could be expected from a single-family residential development. Based on factors published by the Rutgers University Center for Urban Policy Research,[47] and accounting for the seasonal nature of the local housing stock (42±-percent seasonal), an estimated 18 school-age children could be generated by this alternative. This would represent a cost to the local school district of approximately $422,208 per year, based on a per-pupil expenditure of approximately $23,456 (2013-14 school year).[48] Similarly, a 14-lot subdivision would generate an estimated 11 school-age children, representing a cost to the local school district of approximately $258,016 per year. The proposed action would continue to generate tax revenues for the local school district, but would not generate any school-aged children.

▼

[47] *Residential Demographic Multipliers – Estimates of the Occupants of New Housing* (June 2006). Calculation assumes 13 year-round homes (seven, four-bedroom homes with a factor of 1.16 school-age children per home, and six, five-bedroom homes with a factor of 1.58 school-age children per home).

[48] New York State Education Department. *Fiscal Accountability Summary (2013-14)*. http://data.nysed.gov/fiscal.php?year=2015&instid=800000036824.

4.2.8 Noise

With respect to noise, the subject property would continue to be governed by the relevant provisions of the Town of Southampton Noise Ordinance (Chapter 235 of the Town Code) under this alternative, similar to the proposed action. The noise environment at the subject property would be altered as a result of the development of 22 single-family residences. Temporary construction-related noise would be expected to occur for the duration of the demolition of the existing site improvements and the construction of the homes, which could occur over a greater construction period than for the proposed action (i.e., the construction period would depend on a variety of factors, such as whether the homes are built out altogether, sold for individual custom home construction, etc.). The noise environment that would be created by this alternative would be generally consistent with the surrounding area, which is largely developed with single-family residences. During the operational season of the proposed action (i.e., early May to early October for the tennis club and mid-June to early September for the day camp), it is expected that this alternative would have a reduced potential for noise impact as compared with the proposed action. However, it is noted that the noise study conducted as part of this DEIS (see Section 3.9) concludes that noise levels would not exceed the regulatory daytime limit of 65 dBA at any property line with the proposed action.

4.3 Planned Residential Development with 25-Percent Open Space

In addition to the *Sketch Plan of R-20 Yield* alternative described above, an additional residential yield alternative has been created which increases the amount of open space to be preserved at the subject property from 92,748± SF to 188,170± SF, or 25 percent of the overall subject property (see *Sketch Plan of 25% Open Space, Clustered* in Appendix I). It should be noted that this alternative does not achieve the objective of the project sponsor to improve facilities at the existing camp and operate a day camp and tennis club at the subject property.

As compared to the *Sketch Plan of R-20 Yield* alternative, this alternative would reduce the number of potential single-family residences from 22 to 21, to comply with the R-20 Residence zoning district regulations while maintaining 25-percent open space. As with the R-20 Yield alternative, each lot would be cleared a maximum of 50-percent, and developed with a two-story home to cover a maximum 20-percent of the lot area. The 50 percent clearing assumption is a very conservative estimate, as even in the Town's APOD which does not include the subject property, the protective clearing limits for residential lots between 30,001 and 60,000 square feet in size allow up to 60 percent of the lot area to be cleared (see Section 330-67.A[4]). Based on these various assumptions, the resulting site coverages would be as follows:

Table 30 – Site Data: Existing Conditions and Planned Residential Development with 25-Percent Open Space Alternative

Site Coverage	Existing (Acres)	Proposed (Acres)	R-20 Residential Yield (Acres)	Planned Residential Development with 25-Percent Open Space (Acres)
Roads, buildings, and other paved or impervious surfaces	1.65±	1.68±	5.08±	4.29±
Decks	0.08±	0.08±	0	0
Gravel	1.18±	1.43±	0	0
Lawn/Landscaping/Mulch Areas and Paths	3.46±	3.97±	4.98±	6.86±
Wooded	10.38±	9.59±	6.69±	5.60±
Wetlands	0.53±	0.53±	0.53±	0.53±
TOTAL	17.28±	17.28±	17.28±	17.28

As shown in Table 30 above, this alternative would result in an increase in impervious surfaces and lawns/landscaping as compared to the proposed action while reducing the amount of natural (wooded) area at the site. However, by maintaining a 25-percent contiguous open space area, this alternative would be marginally less impactful to soils and topography, water use, sanitary waste discharge, ecology, aesthetics, transportation, land use, community facilities and services and noise, than the full residential build-out discussed in Section 4.2 of this DEIS.

Compared to the proposed action, this 25-percent open space residential yield alternative would result in greater disturbances to soils and topography, year-round water use and sanitary waste generation and clearing of natural areas. Additionally, this alternative would alter the existing visual character of the site and would remove the established seasonal recreational use. With regard to trip generation, this alternative would result in year-round trips for a portion of the homes, whereas trip generation related to the proposed action would be seasonal. This alternative would not place an increased burden on police, fire and ambulance services, but would be expected to generate school-age children, whereas the proposed action would generate none. Similar to the full yield alternative discussed above, construction-related noise impacts would be expected to occur over a longer time-period with this alternative than with the proposed action. As such, this alternative is not favorable to the proposed action in terms of potential adverse environmental impacts, and would not achieve the goal of the project sponsor to improve facilities at the existing camp and operate a day camp and tennis club at the subject property.

4.4 100-Foot Setback Alternative

The existing camp and tennis club at the subject property is an established non-conforming use that has occupied the site for decades. The proposed action does not contemplate the need for a Special Exception permit from the Town of Southampton. Accordingly, the provisions of the Town Code that apply to "campgrounds, summer camps, day camps or health camps" are not applicable to the proposed action. As required by the Final Scope, this alternative involves rearranging the improvements at the subject property in attempt to reflect two selected special exception standards for campgrounds, summer camps, day camps or health camps (as set forth in §330-162.12 of the Town Code. Subsections B and C of §330-162.12), to wit:

B. All buildings shall be set back at least 100 feet from any property line, and in no case shall the setback be less than that required in the applicable district.

C. A minimum one-hundred-foot landscape buffer shall be provided adjacent to any property line.

In order to adhere to these requirements, a substantial amount of overall site disturbance would be necessary, as several of the existing and proposed site improvements fall within the 100-foot setback (see *100' Setback Plan* in Appendix I). Specifically, the following would require relocation or removal:

- Cottages 9, 10, 11 and the proposed Cottage 14;
- The existing tennis court (proposed basketball court) on the north side of the subject property;
- The existing basketball court on the north side of the subject property;
- Three of the seven existing tennis courts on the south side of the subject property;
- 16 parking spaces in the existing southern gravel parking lot;
- 23 proposed gravel parking spaces (including existing parking) in front of the residence; and
- A portion of one of the two pools proposed to replace the existing tennis court north of the tennis club gravel parking lot.

The various amenities that would require relocation out of the 100-foot buffer would likely be moved to areas that are currently vegetated, including wooded areas that currently buffer the site from adjacent residential development and Little Fresh Pond.

The above-listed improvements, including removing and relocating the existing facilities would, likely at a considerable financial cost. Further, subsequent planting would be required along the northern, eastern and southern property boundaries, and a small area near the southwest corner of the existing improvements, adding to the costs. From a vegetation standpoint, the planting that would be necessary to provide a

100-foot landscape buffer around the subject property would be offset by the additional clearing on the interior of the site, which would be needed to maintain the current level of amenities.

As the nature and level of activity of the use of the subject property would be the same under this alternative as under the proposed action, this alternative would have similar impacts associated with traffic generation, water use, sanitary waste discharge, etc., as identified within this DEIS.

Due to the extensive site disturbance (and cost) that would be involved in establishing a 100-foot landscaped buffer around the perimeter of the subject property, while maintaining a high standard of day camp and tennis club amenities, it is not feasible for the project sponsor to implement this alternative.

4.5 Alternative Sanitary Technology

The Final Scope requires the analysis of the potential for impacts to the surface waters of Little Fresh Pond (see Final Scope [Page 6] in Appendix A). This Alternative Sanitary Technology assessment evaluates the impacts and benefits of an alternative to the proposed action that incorporates an active denitrification system or an alternative sanitary technology (acceptable to the SCDHS) to address potential impacts to groundwater impacts and/or Little Fresh Pond. Other relevant impacts of such an alternative are also identified herein.

The SCDHS regulates the discharge of sanitary waste via the implementation of Article 6 of the SCSC, and via review of proposed systems for the accommodation or treatment of sanitary waste in accordance with its standards for construction of sewage disposal systems. Aside from the typical on-site sanitary systems (i.e., septic tanks and leaching pools), the SCDHS also currently approves sanitary treatment technologies (i.e., modified subsurface sewage disposal systems and small community sewage systems) capable of achieving a nitrogen discharge concentration of 10 mg/L for systems discharging between 1,000 and 15,000 GPD.[49,50] Pursuant to Article 6 of the SCSC (see §760-607), community sewerage systems are required under certain conditions, such as where a project is located within GMZ-V and the population density equivalent is greater than 300 GPD per acre. Modified subsurface sewage disposal systems, as a method of sewage disposal, may be approved by SCDHS for such projects, subject to the several conditions enumerated at §760-607.C of the SCSC.

▼

[49] http://www.suffolkcountyny.gov/departments/healthservices/environmentalquality.aspx. Accessed March 1, 2016.
[50] SCDHS. Standards for Approval of Plans and Construction for Sewage Disposal Systems for Other than Single-Family Residences. December 1, 2009.

As detailed in Section 3.2 of this DEIS, the subject property is currently improved with multiple individual subsurface sanitary systems, which were reviewed and approved by the SCDHS (see Appendix C). Moreover, the subject property is allowed a "grandfathered" flow of 9,450 GPD, which far exceeds the anticipated future sanitary flow of 6,800 GPD. Therefore, the requirement for a community method of sewage disposal, based on population density equivalent, would not apply to the proposed action.

Notwithstanding the above, the SCDHS *Standards for Approval of Plans and Construction for Sewage Disposal Systems for Other than Single-Family Residences* (2009) (hereinafter the "SCDHS Construction Standards") sets forth various standards that would apply to the design of a modified subsurface sewage disposal system, such as an active denitrification system. These standards include a wide range of design considerations, several of which relate to the minimum setbacks of system components from development and environmental features. Minimum horizontal separation distances from system components are set forth in Table 2 of the SCDHS Construction Standards, and, depending on the design of an alternative system (e.g., active denitrification system), the various separation distances in Tables A1 and A2 within Appendix A of the SCDHS Construction Standards may also apply. Such distances can require system components to be located as much as 100 feet from habitable buildings, 100 feet (or more) from surface waters, and 100 feet from areas of substantial human use. Compliance with these separation distances would limit the available locations on the subject property where an alternative system could be located. It should also be noted that there is the potential for practical difficulties associated with the seasonal nature that may preclude the reasonable use of the alternative systems that are acceptable to SCDHS (e.g., there is little-to-no sanitary waste flow occurring at the subject property in the spring, fall and winter). The systems take approximately two-to-three months to achieve a steady state, and the proposed facility is only open for approximately 90 days, such that the system would likely only treat sewage for a period of 30 days or less.

Depending on the particular features of the active denitrification system that would be installed under this alternative, property range of environmental impacts could result. In order to construct and install a system that meets the relevant separation distances required by the SCDHS, the clearing of naturally-vegetated areas may be required. Any such clearing would reduce the available ecological habitat at the site, also potentially reducing the vegetated buffers that currently screen the facility from view from surrounding residential development. Additionally, grading activities and excavation associated with the system installation and the establishment of necessary service access would result in impacts to soils and topography. While not necessarily significant (particularly assuming that all required separation distances are met), the operation of an active denitrification system at the site may have the potential to generate noise and odors.

With respect to innovative or alternative on-site sanitary systems, the *Suffolk County Comprehensive Water Resources Management Plan* (SCDHS, 2015) (SCCWRMP) explains that SCDHS is currently undertaking a study of alternative technologies that could reliably reduce nitrogen levels to 10 mg/L for individual residences or other sanitary waste generators. The first demonstration project began in 2014 and remains ongoing. Additionally, the SCCWRMP explains that the SCDHS is currently working on an update to the relevant standards for residential construction to allow alternative systems, and plans to update the SCSC and commercial construction standards in the future. However, at this time, the SCDHS' study is ongoing and no changes to the standards are available, such that it is unclear when (if at all) alternative systems may be found acceptable to the SCDHS for facilities such as that proposed. Also, the design and performance characteristics of any such system cannot be accurately predicted.

Section 3.2 of this DEIS details that, based on groundwater flow direction, the results of groundwater and surface water quality investigations on-site and in Little Fresh Pond, and a water budget analysis of the pond, groundwater discharges at the subject property do not adversely impact water quality at Little Fresh Pond. Moreover, the results of the analyses performed indicate that groundwater quality beneath the site is of excellent quality. Accordingly, the use of a permeable reactive barrier as a means of reducing nitrogen in groundwater would not provide any measurable benefit, and therefore, the benefits would not justify the cost associated with installing such a system.

The results of the groundwater impact analyses contained in Section 3.2 of this DEIS conclude that the anticipated quantity of sanitary waste to be generated upon implementation of the proposed action (i.e., at future occupancy) would be significantly below that which would be permitted under Article 6 of the SCSC on an annual basis, given that the proposed facility (and the existing facility) would operate on a limited, seasonal basis. Approximately 218 pounds of nitrogen would be discharged per year from the proposed facility. This represents only 25 percent of what would be allowed pursuant to Article 6, and only 17 percent of what would be allowed under the maximum grandfathered sanitary flow. Overall, no significant adverse impacts to groundwater quality are expected to result from implementation of the proposed action (e.g., including the continued use of traditional on-site sanitary systems). Therefore, there is no significant adverse impact for which mitigation – in the form of an active denitrification system, alternative sanitary waste treatment system, or permeable reactive barrier – would be necessary.

4.6 Reduced Scale Alternative (25 Percent)

This section examines a reduced scale alternative, whereby the population potential of the subject property is reduced by 25 percent. As discussed throughout this DEIS, there is currently no maximum number of campers or occupants of the subject property that applies to the existing facility, with the exception of the SCDHS grandfathered sanitary flow. The occupancy of the site is technically limited by the allowable discharge to on-site sanitary systems, for which a grandfathered flow rate of 9,450 GPD was calculated during the approval process for the existing sanitary systems (based on the pre-existing development of the subject property). The existing systems were installed in 2013 in accordance with the relevant approvals by SCDHS (see discussion in Section 3.2 of this DEIS and the SCDHS stamped approved plan in Appendix C). A 25 percent reduction in the allowable sanitary flow would be 7,085.5 GPD.

It is noted that the anticipated occupancy of the subject property in accordance with the proposed action (i.e., by 360 campers and 90 staff [including 65 overnight staff]) would result in a sanitary flow of 6,800± GPD. Therefore, a 25-percent reduction of the maximum allowable sanitary flow of 9,450 GPD (i.e., 7,087.5 GPD) would, in fact, allow a greater occupancy than that proposed. In addition to increases in water demand and the volume of sanitary waste to be discharged to groundwater, the greater occupancy that this alternative would allow would also have the potential to result in greater noise and transportation impacts, as compared to the proposed action. According to the project engineer, the existing on-site sanitary systems are oversized for the anticipated maximum occupancy with the proposed action, and would be capable of accommodating the sanitary flow under this 25 percent reduction alternative (i.e., 7,087.5 GPD). Thus, this alternative would not require additional improvements to sanitary systems at the subject property. Other site improvements would be the same as those anticipated under the proposed action (only minor additional improvements may be needed to accommodate the additional campers under this alternative). Therefore, the impacts to soils and topography, ecology, visual and aesthetic resources, land use, zoning or community character, would not be notably different from the proposed action.

4.6.1 Water Resources

With respect to water use and sanitary waste discharge, this alternative would be permitted to discharge up to 7,087.5 GPD. This represents a 25-percent reduction from the currently allowed 9,450 GPD, as discussed above. However, the projected occupancy of the subject property under the proposed action (i.e., 360 daily campers,

9 staff members including 65 overnight, and 90 tennis club members) would result in a total sanitary waste discharge of 6,800± GPD, which is less than would be allowed under this alternative. This alternative would be expected to continue to use the existing on-site sanitary systems which have been approved by SCDHS.

4.6.2 Transportation

As discussed above, this alternative would reduce the existing allowable sanitary discharge at the subject property by 25-percent, but would result in a greater allowable site occupancy than that of the proposed action. Accordingly, it is anticipated that this reduced scale alternative would result in a corresponding increase in trips generated to and from the site.

4.6.3 Community Facilities

The greater site occupancy that would be permitted under this alternative would result in an incrementally greater demand for community facilities than would the proposed action. However, the incremental increase as compared with existing conditions would not be expected to be significant, given the location of the subject property within an established community.

4.6.4 Noise

As with the transportation impacts described above, the increase in allowable site capacity compared to the proposed action that would result from this alternative, would also potentially result in increased noise impacts.

Overall, the implementation of this alternative would not reduce or eliminate any of the expected impacts of the proposed action. In fact, this alternative would have slightly greater impacts related to occupancy, as the proposed action anticipates a future occupancy that is more than 25 percent less than the maximum occupancy that would be permitted on the site.

5.0

Unavoidable Adverse Impacts

The environmental impacts associated with the proposed project and the proposed mitigation measures to minimize such impacts have been described in Section 3.0. Those impacts that cannot be either entirely avoided or fully mitigated are described below.

5.1 Short-Term Impacts

Based upon the analysis provided in this DEIS, there would be several temporary construction-related impacts that cannot be completely mitigated. These impacts are associated with the site preparation and development (including clearing, excavation of pools, installation of utilities and construction of building and parking facilities). It is anticipated that these impacts would cease upon completion of the construction phase of the project. Specific impacts are identified below:

- Soils would be disturbed by excavation, and mounding activities during site redevelopment;
- Despite the use of extensive and strategically placed erosion and sediment control measures, minor occurrences of erosion may occur;
- There is the potential for minor releases of air contaminants that would occur from construction equipment and emissions of fugitive dust during dry periods, although dust would, for the most part, be controlled by covering of soil piles and watering down of the site;
- Operation of construction equipment, trucks and worker vehicles may temporarily impact traffic in the area of the project site;

- Some wildlife species would emigrate from the subject property during the construction period. However, due to the preservation of representative areas of existing habitat types and revegetation of selected areas with native species, most of the species currently utilizing the site are expected to return upon completion of the construction phase;

- The visual quality of the area may be temporarily degraded by the presence and operation of construction equipment on the project site (to the minimal extent that they may be visible from surrounding areas); and

- Increases in noise levels at the site may result from construction activities. However, construction would occur only during hours permitted by the Town of Southampton, and construction activities would comply with all prevailing regulations.

It is anticipated that these impacts would be of short duration, that is, they would cease upon project completion.

5.2 Long Term Impacts

Long-term impacts associated with project implementation have been identified. Mitigation measures have been proposed to reduce or eliminate most of these long-term adverse impacts. Those adverse long-term impacts that cannot be fully mitigated are set forth below namely:

1. The use of the subject property would be modified from a tennis club and/or tennis camp to a day camp and tennis club. As demonstrated within this DEIS, the environmental impacts of the existing and proposed uses are barely discernible.

2. The introduction of a limited quantity of impervious surface area at the subject property (i.e., handicapped parking area, dumpster slab, loading area) would increase stormwater runoff. However, runoff would be contained and recharged on-site via the proposed comprehensive stormwater management system, which is a net benefit as compared with the existing condition (i.e., no stormwater management infrastructure is present).

3. The visual character of the site would be minimally modified due to the relocation of driveways, minor reductions in wooded buffer, and other proposed improvements.

4. Limited portions of the overall site (totaling 0.79± acre or 4.6± percent of the site area) would be modified such that naturally-vegetated areas would be removed and replaced with gravel parking areas, driveways and walkways and landscaping. An extensive landscaping plan would be implemented within project areas as part of the proposed action to provide screening and visual enhancement of the site, as well as to re-vegetate portions of the site with native species. A large portion of the site (i.e., 10.12± acres or 58.6± percent of the site) would remain as natural wooded and wetland areas.

6.0

Irretrievable and Irreversible Commitment of Resources

The proposed project would require a commitment of natural and manmade resources, as well as time. Specifically, approximately 0.79 acre of natural vegetation is proposed to be removed from the site. Approximately 0.03 acre of new impervious surfaces, 0.25± acre of new gravel surfaces and 0.51± acres of new lawns/landscaping would be created, and 0.21± acre would be revegetated with native plantings.

Certain additional resources related to the construction aspects of the development would be committed. These resources include, but are not limited to, concrete, asphalt, lumber, paint and topsoil. Mechanical equipment resources would be committed to assist personnel in demolition and construction activities at the subject property. The operation of construction equipment would require electricity, water resources and fossil fuels. Furthermore, the construction phase of the proposed project would require the commitment of manpower resources as well as time.

In addition, during the operation of the proposed project, electricity, water resources and fossil fuels would be used for cooling, cooking and other purposes.

7.0

Growth-Inducing Aspects

Growth-inducing aspects are generally described as the long-term secondary effects of the proposed action. Specifically, with respect to growth inducement, *The SEQR Handbook – 3rd Edition* (NYSDEC, 2010)[51] indicates:

> *"Some activities will encourage or lead to further increases in population or business activity. This type of secondary impact is called growth inducement… it is important to recognize activities which may induce growth because a consideration of the whole action must examine likely impacts of such growth, such as the need for additional sewer, water and other services; increased traffic congestion; or accelerated loss of open space."* (p. 88)

Since the subject property is a developed parcel with a long-established seasonal recreational use, it is not expected that the proposed improvements would induce additional growth in the area. The proposed action is designed to provide a seasonal recreational resource that would serve the existing and future population in the area, including seasonal population.

The proposed action includes seasonal overnight accommodations for up to 65 overnight staff. It is noted that seasonal overnight accommodations are part of the established use, and the amount of overnight staff has increased over the last several years as camp enrollment has increased. As of 2016, there are 53 staff members staying at the subject property overnight during the camp season. Thus, the proposed action would not result in a significant increase in the demands upon community facilities or services (see Section 3.8 of this DEIS). Furthermore, the proposed action is not expected to result in any significant adverse impacts upon utility providers (i.e., water, electric), such that no new significant infrastructure would be required; nor are any utility expansions/extensions proposed that would support other development. The TIS prepared to evaluate the potential transportation-related impacts of the

▼

[51] Accessible at http://www.dec.ny.gov/permits/6188.html.

proposed action does not identify the need for significant road widenings or the extensions of roadways (see Section 3.6 and Appendix H).

As demonstrated herein, implementation of the proposed action is not expected to induce additional growth within the community, or result in any significant adverse environmental impacts associated therewith.

8.0

Use and Conservation of Energy

Currently, electricity is provided to the subject property by PSEG Long Island. Liquid propane is used for hot water heating for the swimming pool. A small (235-gallon) heating oil tank is contained within the on-site residence, which would remain. There are no natural gas connections nor are any other fuel sources used.

The subject property contains an established tennis club and/or tennis camp facility which utilizes electricity. Minor changes in energy demand may result from the use of proposed swimming pool facilities (e.g., heating, pump operation), additional site lighting, construction of a new cottage and modifications to selected existing buildings. The proposed action also includes the demolition of selected existing structures, such that there would be no net increase in building area. It is noted that the proposed new cottage would be subject to the relevant provisions of the 2014 Energy Conservation Construction Code of New York State.

It is expected that the demand for energy by the proposed action would be satisfied by existing utility services (i.e., electric grid connection, liquid propane storage), such that no significant indirect energy-related impacts would result from implementation of the proposed action (e.g., construction of a new electric generating facility [power plant], etc.). Overall, the proposed project would not have an adverse effect on the distribution, generation and maintenance of existing energy facilities nor would it create a significant additional demand for energy.

Based on the foregoing, it is not expected that the project would result in adverse impacts to the use and conservation of energy.

9.0

References

Andrle, R.F. and J.R. Carrol, eds. 1988. *The Atlas of Breeding Birds in New York State.* Cornell University Press.

Bull, J. & J. Ferrand Jr. 1994. *National Audobon Society Field Guide to Eastern Birds, Eastern Region*. Alfred A. Knopf.

Citizens Statewide Lake Assessment Program. (2011). CSLAP 2011 Lake Water Quality Summary: Little Fresh Pond.

Cohen, P., Franke, O., & Foxworthy, B. (1968). An Atlas of Long Island's Water Resources. U.S. Geological Survey in cooperation with the New York State Water Resources Commission.

Connor, P.F. 1971. *The Mammals of Long Island, New York*. New York State Mus. & Sci. Service Bull. No. 416.

Edinger, G.J., D.J. Evans, S. Gebauer, T.G. Howard, D.M. Hunt, and A.M. Olivero (eds.). 2014. *Ecological Communities of New York State. Second Edition. A revised and expanded edition of Carol Reschke's Ecological Communities of New York State.* New York Natural Heritage Program, New York State Department of Environmental Conservation.

Federal Register Vol. 80, No. 63. Thursday, April 2, 2015.

Federal Register Vol. 81, No. 9. Thursday, January 14, 2016.

Freeze, Allan R. and Cherry, John A., 1979. Groundwater, Engelwood Cliffs, New Jersey: Prentice-Hall, Inc.

Gibbs, J.P., A.R. Breisch, P.K. Ducey, G. Johnson, J.L. Behler and R.C. Bothner. 2007. *The Amphibians and Reptiles of New York State*. Oxford University Press.

Harlow, W.M. 1946. *Fruit Key and Twig Key to Trees and Shrubs.* Dover Publications.

Institute of Transportation Engineers. *Trip Generation Manual – 9th Edition* (2012)

Jensen, H.M. and Soren, Julian, 1974. Hydrogeology of Suffolk County, Long Island, New York, Hydrologic Investigations Atlas. Department of the Interior, U.S. Geological Survey, Washington, DC.

Koppelman, Lee E., 1978. Long Island Comprehensive Waste Treatment Plan (208 Study). L.I. Regional Planning Board

Lanyon, W.E., R.G. Van Gelder and R.G. Zweifel. 1970. *The Vertebrate Fauna of the Kalbfleisch Field Research Station (*Dix Hills, New York*) of the American Museum of Natural History*. Kalbfleisch Field Research Station.

Long Island Botanical Society Flora Committee. 1994. *Preliminary Atlas of the Ferns & Fern Allies of Long Island NY*. Long Island Botanical Society Newsletter 4:15-25.

Long Island Regional Plannign Board. *The Long Island Segment of the Nationwide Urban Runoff Program*. Hauppauge, New York (1982).

McGowan, K.J. and K. Corwin. 2008. *The Second Atlas of Breeding Birds in New York State*. Cornell University Press.

McKenney, M. and R.T. Peterson. 1998. *A Field Guide to Wildflowers: Northeastern and North-central North America (Peterson Field Guides).* Houghton Mifflin Company.

National Environmental Services Center. (2013). Pipeline - Small Community Wastewater Issues Explained to the Public. Morgantown, WV: West Virginia University Research Corporation.

Nemickas, B., & Koszalka, E. J. (1982). Geohydrologic Appraisal of Water Resources of the South Fork, Long Island, New York. Washington, D.C.: U.S. Geological Survey.

Newcomb, L. 1989. *Newcomb's Wildflower Guide*. Little, Brown and Company.

New York Natural Heritage Program. 2015. Hessel's Hairstreak Guide. Available online at: http://www.acris.nynhp.org/guide.php?id=7857. Accessed July 28, 2015.

New York State Department of Environmental Conservation. Environmental Resource Mapper. Available from http://www.dec.ny.gov/imsmaps/ERM/viewer.htm.

New York State Department of Environmental Conservation. *New York Standards and Specifications for Erosion and Sediment Controls* (2005).

New York State Department of Environmental Conservation. New York State Freshwater Wetland Map No. 20 of 39, Suffolk County (1975).

New York State Department of Environmental Conservation. *New York State Stormwater Management Design Manual* (August 2010).

New York State Department of Environmental Conservation. Program Policy Memorandum, *Assessing and Mitigating Noise Impacts* (rev. February 2, 2001).

New York State Department of Environmental Conservation. *The SEQR Handbook – 3rd Edition* (2010). Available at http://www.dec.ny.gov/permits/6188.html.

New York State Department of Environmental Conservation. *SPDES General Permit for Stormwater Discharges from Construction Activity* (GP-0-15-002). Available from http://www.dec.ny.gov/chemical/43133.html.

New York State Department of Environmental Conservation and New York State Department of Agriculture and Markets. 2014. *New York State Prohibited and Regulated Invasive Plants*.

New York State Education Department. *Fiscal Accountability Summary (2013-14)*. http://data.nysed.gov/fiscal.php?year=2015&instid=800000036824.

Peterson, R.T. 1998. *Eastern Birds*. Mariner Books.

Petrides, G.A. 1986. *Field Guide to Trees and Shrubs: Northeastern and North-Central United States and Southeastern and South-Central Canada (Peterson Field Guides).* Houghton Mifflin Company.

Pluhowski, E., & Kantrowitz, I. (1964). Hydrology of the Babylon-Islip Area, Suffolk County, Long Island, New York. Washington DC: U.S. Geological Survey.

Rutgers University Center for Urban Policy Research. *Residential Demographic Multipliers – Estimates of the Occupants of New Housing* (June 2006).

Sabin, A. 1995. *Reptiles and Amphibians of the South Fork, Long Island New York*. South Fork Natural History Society.

Smolensky, D.A., Buxton, H.T., and Shernoff, P.K., 1989. Hydrologic Framework of Long Island, New York. Hydrologic Investigation Atlas, Department of the Interior, U.S. Geological Survey, Washington, DC.

Suffolk County Department of Health Services, 1987. Suffolk County Sanitary Code – Article 6 Realty Subdivisions, Development and Other Construction Projects, Amended March 4, 1987, Code of Administrative Regulations, Hauppauge, New York.

Suffolk County Real Property Tax Service Agency. Town of Southampton Tax Map Parcels. 2013.

Suffolk County Real Property Tax Service Agency. 2013 Tax Map Album, District 0900, Town of Southampton.

Town of Southampton. *Southampton Tomorrow Comprehensive Plan Update Implementation Strategies* (1999)

Town of Southampton. *Community Preservation Project Plan* (2005)

Town of Southampton. *Master Plan* (1970)

Town of Southampton. *Southampton 400+ Sustainability Element* (2013)

Town of Southampton Town Code. Avaiable at http://ecode360.com/SO0286.

United States Army Corps of Engineers. 2002. *Final Small Mammal and Herpetile Field Sampling and Summary Report for the South Shore of Long Island, New York.*

United States Census Bureau. American Community Survey 5-Year Estimates (2010-2014)

United States Department of Agriculture. *Soil Survey of Suffolk County, New York* (1975).

United States Fish and Wildlife Service. April 2015. Northern Long-Eared Bat (*Myotis septenrionalis*) Fact Sheet. Available online at: https://www.fws.gov/Midwest/Endangered/mammals/nleb/nlebFactSheet.html. Accessed January 15, 2016.

United States Fish and Wildlife Service. National Wetlands Inventory Online Wetlands Mapper. Available from http://www.fws.gov/wetlands/Data/Mapper.html.

United States Geological Survey Topographic Map, Southampton, NY 15-minute Quadrangle (1956).

Ven Te Chow, P. (1964). Handbook of Applied Hydology. In P. Ven Te Chow, Handbook of Applied Hydology (pp. 14-8). McGraw-Hill, Inc.