

FINAL ENVIRONMENTAL IMPACT STATEMENT

LANDS END Subdivision Application

Incorporated Village of Sands Point
Nassau County, New York

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This document, together with the Draft Environmental Impact Statement concerning this proposal, represents a Final Environmental Impact Statement (FEIS). Copies are available for public review and comment at the office of the Lead Agency. Comments on the FEIS should be submitted to the Lead Agency listed above by June 19, 2009 to be included in the public record and considered in the Findings Statement.

Date FEIS Accepted: June 2, 2009

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C-3	Robert M. Eschbacher, PE, Principal, Eschbacher VHB, April 25, 2008
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D-6	Peter R. Mineo, Esq., Forchelli, Curto, et al (representing Leo and Katherine Ullman), April 8, 2008
D-7	Eric Swenson, Director, Hempstead Harbor Protection Committee, April 10, 2008
D-8	Corinne A. Rohr, B. Laing Associates, Environmental Scientist representing Karli and James Hagedorn, April 28, 2008
D-9	James A. Bradley, Ackerman, Levine, et al (representing Karlie and James Hagedorn), April 28, 2008
D-10	Peter R. Mineo, Esq., Forchelli, Curto, et al (representing Leo and Katherine Ullman), April 28, 2008
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D-14	Paul P. Stewart, Vice President of Environmental Health, Residents for a More Beautiful Port Washington, April 28, 2008

D-15 Michael H. Sahn, Sahn Ward & Baker, PLLC, Attorney representing
Sands Point Realty, LLC, April 28, 2008

Appendix E Application Correspondence

- E-1 Port Washington Fire District Correspondence
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Pocket 2 Schematic Water Main Plan, prepared by Nelson & Pope, last revised 1/27/09

SECTION 1.0
INTRODUCTION

1.0 INTRODUCTION

1.1 Purpose of this Document

This document is the Final Environmental Impact Statement (“FEIS”) for the **Lands End** residential subdivision application. This FEIS represents the penultimate step in the New York State environmental review process, which is intended to provide the public and governmental review agencies with information regarding the proposal under review, as well as analyses of its potential environmental effects. This FEIS incorporates the Draft Environmental Impact Statement (“DEIS”) by reference, so that the combination of these two documents constitutes the entire Lands End EIS. This document fulfills the State Environmental Quality Review Act (“SEQRA”) requirements for an FEIS, as administered by the Incorporated Village of Sands Point Planning Board in its capacity as the lead agency having jurisdiction of the subdivision application.

The 15.54-acre project site is comprised of two properties, of which one is located at 15 Hoffstot Lane (also referred to as Cedar Knoll Drive), and the other is at 7 Seacoast Lane (also referred to as Prospect Road). This latter property is situated north of Hoffstot Lane at the tip of Prospect Point and overlooks Long Island Sound. The larger of the two properties is comprised of 13.34 acres and located at 15 Hoffstot Lane (Block 122, Lots 25 & 26 and Block 100, Lot 3). This property has formerly been known since the early 1900’s as “Lands End,” “Kidd’s Rocks,” “Keewaydin,” and the “H.B. Swope Estate”. This estate contains a large three-story dwelling, a two-story garage with two apartments located on the second floor, and a two-story caretaker’s cottage, as well as an in-ground pool and cabana, two greenhouses, a shed, and a tennis court. Due to their existing poor structural condition and the impractically large size of the three-story dwelling (it has 17 bedrooms), this structure, as well as all of the accessory structures (except for the cabana and pool) will be removed.

The western-most portion of the property is 2.20 acres in size and is located at 7 Seacoast Lane (Block 122, Lot 8). This parcel is currently occupied and improved with a two-story dwelling, an in-ground swimming pool and tennis court (all of which will remain).

The proposed project involves a subdivision of the site consistent with that of the surrounding 2-acre zoning and residential land uses. The project represents a land use that is allowed in the site’s Residential A zoning district, so that no zoning change, special permits or variances will be necessary. An application for subdivision of the property (based on a Preliminary Subdivision Map) was submitted to the Incorporated Village of Sands Point Planning Board (“Planning Board”) on August 9, 2005. A revised Preliminary Subdivision Map was submitted to the Village in November 2006 and was subsequently revised and resubmitted to the Village concurrently with the DEIS.

The Lands End DEIS was submitted to the Village Planning Board in July 2006 and revised based on comments from the Village Planning Board and its consultants until the DEIS was deemed acceptable as complete by the Planning Board on March 4, 2008 (see **Appendix A**). A

joint public hearing was held on the DEIS and subdivision application on April 8, 2008, and the lead agency accepted written public and agency comments through April 18, 2008. As required by SEQRA, this document addresses all concerns and comments provided by the public and agencies during the hearing and comment period.

Section 2.0 of this document presents all of the comments on the DEIS that were provided verbally at the hearing and/or in written form received by the lead agency, along with a response to each.

After acceptance of the FEIS by the lead agency, the Village Planning Board, there will be a minimum 10-day period of consideration for preparation and adoption of a Findings Statement, prior to a decision on the subdivision application.

1.2 Organization of this Document

Appendix B contains a copy of the public hearing transcript, and **Appendices C and D** contain the written comments received by the lead agency from the government agencies and public, respectively. All responses are provided in **Section 2.0**. As required by SEQRA, only those comments that are “substantive” in nature merit a response; comments which are directed to a specific portion of the DEIS or other aspect of the project have a response (general statements of opposition or support are not considered to be substantive). Each comment has been delineated and numbered sequentially. The numbering system includes a letter code that indicates the source of the comment, followed by a number that is assigned to each consecutive comment from that source. As a result, the identity of the commenter can easily be determined. In addition, the subsection of **Section 2.0** where the response can be found (see explanation below) is provided adjacent to each comment. There were a total of 170 separate comments; **Appendix B** contains comments B-1 through B-40, **Appendix C** contains comments C-1 to C-41, and **Appendix D** contains comments D-1 through D-89.

Because a number of the comments are similar to, closely related to and/or duplicate other comments, these related comments have been together, so that only one response would be necessary for each grouping. Each subsection of **Section 2.0** addresses one of these groups of comments. The comment numbers to which the response refers are listed in each subsection so that the reader may refer back to the appendix to review the comments in their original form. **Appendix E** contains correspondence and information related to and in support of various responses.

Each response provides the information necessary for the Lead Agency (the Village of Sands Point Planning Board) and other involved agencies to make informed decisions on the specific impacts of the project. This document fulfills the obligation of the Lead Agency in completing an FEIS based upon Title 6, New York Code of Rules and Regulations Part 617.9 (b)(8).

1.3 Summary of Change in EIS Proposed Water Main Routing

The SEQRA process anticipates that changes to the project may occur in response to comments and community input as the review process proceeds. Since the acceptance of the DEIS, comments received during the public hearing/public comment period and comments from the Village of Sands Point Water Department and the New York State Department of Environmental Conservation (NYSDEC) have resulted in a change to the preferred water main routing identified in the DEIS. Specifically, the DEIS proposed action included the construction of a second feed water connection from Hoffstot Lane to Glen Road by directional drilling under East Creek (water main routing Alternative A, Pocket 4 of the DEIS) based on the preference of the Village of Sands Point Water Department (see Section 1.3.5 of the DEIS). However, given the comments received during the public comment period and the inability of the applicant to obtain the necessary easements for the proposed water main connection from Hoffstot Lane to Glen Road (Alternate Water Main Routing Plan A, or “Alternate A”), the applicant met with the Village of Sands Point Water Department (“Water Department”) in December 2008 to discuss pursuing of the Alternative B water main routing evaluated as Alternative 8 of the DEIS (see Alternate Water Main Routing Plan B, Pocket 4 of the DEIS). Alternate Water Main Routing Plan B (“Alternate B”) involves the construction of a new 8” water main parallel to the existing water mains between the intersection of Hoffstot Lane and Seacoast Lane and the interconnection of the existing water main from Vanderbilt Drive to Hoffstot Lane (see **Pocket 2** at the end of this document). Given the constraints of the Alternate A water main routing across East Creek, the Water Department has indicated that the Alternate B water main routing would be acceptable. **Appendix E-2** provides the correspondence from the Water Department regarding this matter. Therefore, the applicant proposes to pursue the construction of the Alternate B water main routing pursuant to the direction of the Water Department for the future water connection associated with the proposed six lot subdivision.

SECTION 2.0

COMMENTS AND RESPONSES

2.0 COMMENTS AND RESPONSES

2.1 SUBDIVISION MAP

2.1.1 Lot Area

Comments B-1, D-10, D-43 & D-62:

These comments question whether the necessary easements for the emergency access, drainage, etc. have been properly deducted from the overall yield. If not, the lot lines in the proposed subdivision plan may have to be redrawn to ensure adequate lot area after the easements have been subtracted from the calculation of the lot areas.

Responses:

The Village Code § 176-2 defines lot area as:

The area of a lot upon which the main building and its accessories are located, measured to the street line only. It shall not include:

1. Any area within a street, right of way, lane or alley.
2. Any area where the width of the lot is less than 75 feet.
3. Any area below mean high-water mark where the lot abuts tidal waters.

Using this definition, the only elements of this project that should be excluded from the overall yield are the area of the lots below the high-water mark and the area included in any street, right of way, lane or alley. The lot areas shown on the Preliminary Map included in the DEIS neither include the area below the mean high-water mark nor the area of the right of way that provides access to the property.

The buffers, utility easements and emergency access road required by the Village and other public authorities as part of this proposal are not listed among the exclusions set forth in the Code's definition of lot area. Therefore, they are properly included in the yield of the proposed subdivision.

The emergency access road should not be considered a street, right of way, lane or alley because it will not be paved and will be left in its natural state. Contrary to the opinion of Mr. Mineo, in his April 28, 2008 correspondence, the emergency access road does not meet the Code's definition of road or street. The proposed emergency access road ("EAR") is not a "Secondary or Feeder Street" because it is not "intended to serve as a link or connection from a **major road** to a minor residential street or streets." (Village Code §145-2). This is so because the EAR does not connect a major road to a minor residential street. The EAR actually connects two minor residential streets to one another and will only be used in a rare, emergency situation. The site plan clearly shows that the EAR will connect two cul-de-sacs to one another. A cul-de-sac does not meet the Code's definition of a "Major Road" because it is not "intended to serve as a main through traffic road" (Village Code §145-2). By virtue of the fact that a cul-de-sac is a dead end

it cannot accept through traffic. Thus, a cul-de-sac is a minor road (i.e., “one intended to serve primarily for the use of the occupants of the residences fronting thereon”). Furthermore, the EAR is not a Minor Residential Street because it is not “intended to serve primarily for the use of the occupants of the residences fronting thereon” (Village Code §145-2). The reason for this is simple; there are no houses fronting on the EAR. The EAR is simply not a road of any kind as defined in the code. The houses in the proposed subdivision do not need it for access to their properties and it will not be used for that purpose.

However, with that analysis in mind, even if this area were excluded from the yield the subdivision would still comply with the Code requirements. While not required under subdivision regulations, the Preliminary Map (see Pocket 1) has been revised to deduct the area of the emergency access road. The lots are adequately sized.

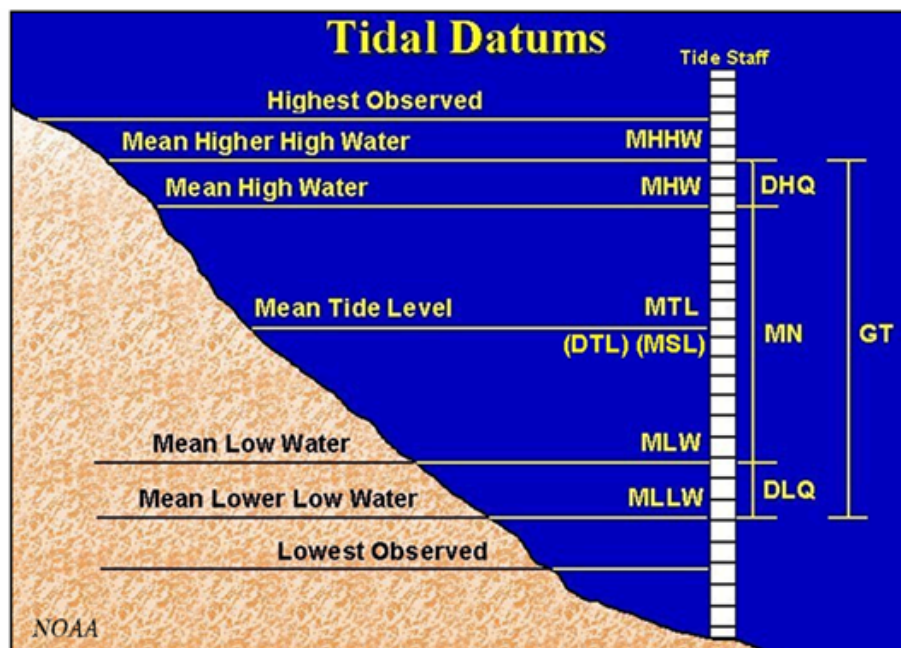
Comments B-25, B-29, D-21 & D-65:

These comments question the validity and methodology utilized to establish the Mean High Water Line, and request that the resulting lot lines be reviewed and revised as necessary.

Responses:

Pursuant to § 176-2 of Village Code, the “area below mean high-water mark where the lot abuts tidal waters” must be excluded from the lot area. The National Oceanic and Atmospheric Administration (NOAA) defines mean high water as “the average of all the high water heights observed over the National Tidal Datum Epoch.” The National Tidal Datum Epoch (NTDE) is defined as “the specific 19-year period adopted by the National Ocean Service as the official time segment over which tide observations are taken and reduced to obtain mean values (e.g., mean lower low water, etc.) for tidal datums. The present NTDE is 1983 through 2001 and is actively considered for revision every 20-25 years” (http://www.co-ops.nos.noaa.gov/datum_options.html).

Therefore, a mean high tide measurement is not accurately measured by locating the *observed* high tide mark on a particular day. Rather, it is measured by locating the elevation along the shoreline at which mean high water occurs (based on an average of observed high tides over the NTDE, see definition above). The diagram at the right is provided to help demonstrate the difference between an



Source: NOAA website (http://www.co-ops.nos.noaa.gov/datum_options.html)

observed high water on a particular day and mean high water.

The elevation of mean high water shown on the Preliminary Map (**Pocket 1**) is elevation 4.1. This elevation was derived based on the NOAA Tidal Benchmark located at the Glen Cove Yacht Club Station (Station ID: 8516614, Bench Mark: BM No. 1 1934). The elevation for this tidal benchmark was calculated using a global positioning system (GPS) (two hour static observation). Collected data was processed using NGS OPUS software (version 3.0) and Army Corp. of Engineers conversion program Corpscon (version 6.0.1) to translate the results to NAVD 29 datum. The elevations shown on the Preliminary Map are referenced to NAVD 29 as per Nassau County Benchmark No. 069E02 D114A and NGS Benchmark No. PIDAA9663. This datum was also verified by GPS (two hour static observation) on control points situated on the subject site. Once a common datum was verified between the tidal benchmark and the site control, the value of mean high water as established by the NOAA Tidal Benchmark at the Glen Cove Yacht Club Station was applied to the site.

Shorelines are dynamic systems, subject to accretion of sand/sediment as well as erosion of sand/sediment due tidal currents, wind events, storms, etc. The elevations along the shoreline of the subject property will change continuously over time due to these processes (see Section 2.4.1 of this document), and thus the location of mean high water along the shoreline of the property will also physically change continuously with these continuous accretion and erosion processes. Recent natural alteration of the creek occurred due to several storm events in 2007, resulting in erosion along the western bank of the creek in proximity to the subject property. These conditions were surveyed in January 2008 and are reflected on current pending plans for the Lands End subdivision. The area below mean high water has been properly deducted from the lot areas of the Preliminary Map (**Pocket 1**) as required by Village Code.

2.1.2 Easements

Comments B-2, B-3, D-29, D-67, D-85, D-86, D-87 & D-89:

These comments question the legal right of the applicant to access the site from Hoffstot Lane over the existing easement crossing over the lot south of the Lands End property (Nassau County Tax Map Section 4, Block 122, Lot 10) (hereafter "Lot 10") without overburdening the easement or limiting access over this easement to adjacent property owners. A comment contends that there is no "extrinsic proof" that the proposed subdivision access road and access across Lot 10 is allowable under the language of the easement. A comment also questions whether there is adequate land area within the easement to construct the proposed roadway to access the subdivision.

Responses:

The Subject Property has the benefit of an easement over Nassau County Tax Map Section 4 Block 122 Lot 10. This easement provides access to the Subject Property from Hoffstot Lane. The easement was granted on or about December 11, 1902 and has been continually transferred to each successive owner of the Subject Property. The easement specifically states that

TOGETHER with a right of way to said party of the second part his heirs and assigns and to the occupants or grantees under him or them of the above described lands and premises, and to any and all persons for his or their use and benefit in common with said parties of the first part or any other owner or owners, deriving title from or through said parties of the first part, of land included in that tract of land of which the above described premises are a part bounded on the North and Northwest by Long Island Sound and on the East and South by said East Creek and on the Southwest by the boundary line or limit of the ownership of said parties of the first part and with his or their heirs and assigns and with the occupants or grantees under him or them and with any and all persons for his or their use and benefit at any and all times to pass and repass to and fro on foot or with animals and vehicles over and by the said recently made road until it turns into and joins the old or lower road over the land of said parties of the first part and over and by such old or lower road as it passes by their garden by their right of way along the shore and to and from the public highway; including in such right of way the strip of land twenty-five feet in width included within the lines of said recently made road as extended to the westerly bank of said East Creek.

One of the comments regarding the easement is that there is no “extrinsic proof” that use of the easement by the owners of subdivided portions of the dominant estate is permissible. However, the law does not require any “extrinsic proof” on this issue. Rather it is just the opposite. An easement is not destroyed where the dominant estate is divided unless the language of the easement specifically states such. *Green v. Mann*, 237 A.D.2d 566 (2d Dept. 1997). In other words, unless the easement restricts future division of the dominant estate, owners of portions of the dominant estate may lay claim to the use of the easement.

Here, the use of the easement is not restricted in anyway. In fact, the language creating the easement seems to account for the possibility of division of the lot since it was granted to the “...party of the second part his heirs and assigns and to the occupants or grantees under him or them of the above described lands and premises...” The future owners of the lots in the proposed subdivision would clearly be occupants and grantees and grantees of the dominant estate.

Some of the comments seek additional information on the issue of whether the easement will be overburdened by the creation of the new subdivision. In addition to the comments above, it should be noted that the issue of overburdening does not exist in this case. The examples set forth in the correspondence of Michael Sahn, Esq. dated April 28, 2008 are not applicable to the instant matter. In each of the examples, the additional burden placed on the easement involved erecting or placing some type of structure in, around and under the easement area. Mr. Sahn has not pointed to one example in which a court found that an easement was overburdened when it was used for its intended purpose, such as ingress and egress only. In *Zubli v. Community Mainstream Associates Inc.*, 102 Misc. 2d 320 (Sup. Ct. Nass. Cnty. 1979) aff’d 74 A.D.2d 624; mot. den’d 49 N.Y. 2d 919, the Court held that where an easement granted for purposes of ingress and egress did “... not import any limitations in its use and so long as the driveway is

used for this purpose only the easement will not be affected by subsequent changes in the use and occupancy of the dominant premises...” [citations omitted]. With respect to the adequacy of land area to construct the proposed roadway connection, the Preliminary Map demonstrates that there is adequate area to align the proposed roadway extension across Lot 10 and into the property. It is noted that the existing paved driveway area within Lot 10 is approximately ±1,980 square feet and the physical improvements necessary to construct the proposed roadway extension involve only an approximately ±1,200 SF area of Lot 10, thereby slightly reducing the amount of paved area within Lot 10.

2.1.3 Buffers

Comments B-21, B-22, B-27, C-30, D-10 & D-81:

These comments request additional information regarding the proposed buffer areas, including: width, acreage, restoration and/or plantings, suitability of the proposed buffer size and protection. The need for deed restrictions to properly protect these areas is noted, rather than by the Homeowners Association. Finally, these areas should be excluded from the land counted toward aggregate lot sizes.

Responses:

No improvements are proposed seaward of the bulkheads located along the northern and eastern portions of the subject property due to the presence of tidal wetlands. This area seaward of the bulkheads totals approximately 2.87 acres and includes intertidal, beach, marsh and successional forest edge vegetation. Additionally, as described in Sections 1 and 2 of the DEIS, a 0.85 acre buffer zone is proposed along the western portion of Lot 2 and approximately 25 feet landward of the existing wooden bulkheads within a portion of Lot 3, and Lots 4 and 5. The buffer zone does not extend into the adjacent 25 foot right-of-way (Lot 10) south of the subject property, as Lot 10 is not owned by the applicant.

The majority of the shoreline buffer zone is proposed for the eastern portion of the site (Lots 3, 4 and 5), as it contains more sensitive habitat areas for nesting shorebirds. Additional buffer zone is proposed along the western boundary of Lot 2 so as to preserve areas of existing successional forest vegetation. However, the existing high concrete bulkhead/seawall on Lot 2 provides effective separation between the upland habitats above and the maritime beach below. In addition to the seawall which creates a physical separation between habitats (thus not allowing for contiguity of habitats), much of the area landward of this concrete bulkhead is presently landscaped. Therefore, additional buffer zones along the concrete bulkhead that defines the northern and northwest shorelines of the property (Lots 2 and 3) would not offer any significant protection of shoreline habitats.

Within the proposed buffer zones, no lawn grasses or fertilizer dependent vegetation shall be established, thereby limiting clearing, the use of fertilizer dependent vegetation, and the creation of maintained turf lawn areas along the eastern-southeastern and northwestern portions of the site. Furthermore, these buffer zones allow for the preservation of maritime beach habitat located landward of the existing wooden bulkhead on Lots 3 and 4, as well as the preservation of successional forest vegetation on Lots 4 and 5 which will serve to provide a buffer between the

residential uses and natural shoreline. In total, 3.72 acres are proposed to be preserved on the property, inclusive of the buffer zones and the areas located seaward of the existing bulkheads on the property. No restoration and/or planting of these buffer areas are currently proposed.

To ensure protection of these areas in perpetuity, the applicant is proposing to establish conservation easements for these buffer zones (where no lawn grasses or fertilizer dependent vegetation shall be established), which are 25 feet wide landward of the existing wooden bulkhead on a portion of Lot 3 and Lots 4 and 5, and 40 feet wide along the southern property boundary of Lot 5. The covenanted buffer zone on Lot 2 is proposed as a 50 feet wide area along the western property boundary of Lot 2, as shown on the project plans. The proposed buffer zone is intended to minimize disturbance of the shoreline and remaining wooded portions of the site by prohibiting the establishment of fertilizer dependent vegetation and lawn within its limits, as well as restricting the removal of trees (6-inch DBH and greater) without the approval of the Village (and the NYSDEC if such tree is located within the NYSDEC jurisdictional area). The buffer area may receive supplemental native, coastal tolerant, vegetation and a four-foot wide access path to the water. This conservation easement shall not preclude the maintenance of the existing bulkhead/seawall or future shoreline stabilization subject to permitting from the applicable regulatory agencies. The conservation easement shall also specify that a permit is required for all work within the NYSDEC jurisdictional area pursuant to Article 25, tidal wetlands land use regulations.

The shoreline buffer is also intended to reduce the potential for impacts to nesting and feeding shore bird populations by preserving and protecting their critical habitats, particularly maritime beach. Within the 0.85 acre buffer zone landward of the bulkheads, approximately 0.72 acres of this area are either currently forested edge habitat or otherwise successional field or lawn areas (presently totaling approximately 0.20 acres) that are most likely to develop into successional forest. The remaining 0.13 acres of this proposed buffer zone are presently classified as vegetated beach habitat (an approximately 25-foot wide area located landward of the existing wooden bulkhead and north of the existing beach access on Lot 4) and are expected to remain as beach habitat. During construction, the buffer areas will be preserved and field demarcated with construction fence. Furthermore, the proposed limits of clearing, grading and ground disturbance are approximately 5 to 15 feet farther landward from the proposed buffer zone in the eastern portion of the property, allowing for the retention of successional forest vegetation which currently effectively separates the landscaped areas of the property from vegetated beach and wetland habitats. Post-construction, the establishment of a conservation easement on these buffer areas will ensure long term legal protection. Any further clearing of vegetation beyond the proposed grading associated with the subdivision in proximity to these buffer zones will be subject to Article 25 review and permitting by the NYS Department of Environmental Conservation.

2.1.4 Emergency Access Road

Comments C-6, D-27, D-44, D-62:

These comments request additional information in regard to the proposed emergency vehicle access to the site, the need for this secondary access, the minimum requirements for the width

and right of way, and details on surface materials, fencing, drainage, grading, signage, etc. Future deed restrictions to prevent conversion of this roadway to a fully operating access in the future and its accessibility for emergency vehicles are questioned. A comment also questions whether the emergency access road is necessary for the lots to meet the minimum lot frontage requirement.

While not required by Village Code, it is sound planning practice to provide alternate means of ingress and egress for emergency vehicles to and from the site. Conversely, such an emergency access would also provide alternate means for emergency access for the houses presently located on Seacoast Lane. This emergency access would be 20 feet wide, constructed using “grasspave” (high density polyethylene grid on a stabilized base of crushed stone, which is filled with soil and seeded). Therefore, the physical emergency access lane will resemble turf lawn to passersby and will be distinguished by a sign and mountable curb at the access point from Seacoast Lane and the cul-de-sac on the subject property. No fencing is proposed and no drainage structures are proposed within the easement. Minimal stormwater will be generated as a result of the permeable pavers; however, stormwater that may result from the emergency access will be directed to the proposed drainage system within the new road extension as a result of the slopes and grading for this access. The grading necessary to construct the emergency access is shown on the Preliminary Map, Sheet 2 of 7 (see **Pocket 1**). The emergency access would only be utilized in the rare event of emergency, if the main site access from Hoffstot Lane were blocked or inaccessible by emergency vehicles. The access is not required for any of the lots to meet the minimum lot frontage requirements of the Village Code. The applicant is willing to place deed restrictions on the emergency access to prevent conversion of the access to a fully functioning roadway, as well as to prevent encroachments of structures, vegetation or other improvements by adjoining property owners that may obstruct access.

2.1.5 Engineering Comments on Preliminary Subdivision Plan

Comment C-1:

The common lot line for proposed Lots 3 and 4 is not radial. Section 145-10. B. of the Village code requires lot lines to be radial (as applicable) unless waived by the Planning Board.

Response:

An inspection of the key map on the Preliminary Map (see **Pocket 1**) reveals that most, if not all of the existing lots in the area have lot lines that are not radial (or perpendicular) to the road right of way. Thus the Preliminary Map is consistent with existing lots in the area and in substantial compliance with the referenced code section, as compared to the surrounding properties. As part of the application, the applicant will request a waiver of the requirement for radial lot lines in the cul-de-sac from the Village Planning Board.

Comment C-2:

The plan indicates proposed slopes that exceed 1 vertical to 3 horizontal in an extensive "cut" area on lot 6.

Response:

The average slope in the area in question is 1:3 or flatter and the perceived steepness is due to a drafting inconsistency in the spacing of the contour lines shown on the plans included in the DEIS. The Preliminary Map – Grading/Sanitary Plan (see Pocket 1) has been corrected to show uniform spacing of the contours reflecting a 1:3 slope.

Comment C-3:

The Board should consider allowing a 22-foot pavement width for the proposed road. This would be consistent with other roads in the Village and would reduce the amount of stormwater runoff from the subdivision.

Response:

The applicant agrees with the commenter that there are benefits to the reduction of the road width to 22 feet, including a reduction in the amount of stormwater runoff that would be generated by the project. However, a 22 foot pavement width does not allow for on street parking and adequate passage of emergency vehicles (when vehicles are parked in the street). It is noted that no parking is permitted on streets within the Village. The applicant is willing to reduce the pavement width of the street and make the subsequent necessary revisions to the plan (i.e., reduce drainage) at the Village Planning Board's direction.

Comment C-4:

It appears that the overflow from the drainage system on the southern portion of lot 5 would flow into the DRA in the rear of the proposed lot. Pipe sizes and invert elevations should be provided for the stormwater system to ensure that it could be constructed as intended by design.

Response:

The Preliminary Map – Grading/Sanitary Plan (see Pocket 1) includes a Drainage Structure Table with the invert elevations and pipe sizes of the stormwater system.

Comment C-7:

There is no note number 10 on the pavement section detail, although it is referenced.

Response:

Comment noted. The Preliminary Map Details have been revised accordingly.

Comments C-8 & C-39:

These comments reference that the minimum volume for a septic tank to service a lot greater than 1-acre is 1500 gallons according to Nassau County Department of Health standards. The detail would have to be revised accordingly.

Response:

The applicant concurs that according to Nassau County Department of Health standards, the minimum volume for a septic tank to service a lot greater than 1-acre is 1500 gallons. The Preliminary Map Details have been revised accordingly.

Comment C-9:

The minimum allowable trench drain is 12-inches in width, to ensure that runoff does not pass over the opening.

Response:

Comment noted. The Preliminary Map Details have been revised accordingly.

Comment C-10:

The applicant should provide the Nassau County Department of Public Works review status.

Response:

An application has not yet been submitted to Nassau County Department of Public Works (NCDPW). Such application will be made to NCDPW once the Village Planning Board issues its SEQRA Findings, and a final subdivision plan is prepared.

Comment C-18:

Provide comments from the Port Washington Fire Department regarding its review of the site plan and alternative layouts.

Response:

As discussed in Section 3.4 of the DEIS, the applicant and project engineer (Nelson and Pope) met with the Port Washington Fire Department Assistant Chief, John J. Walters, III on July 12, 2006 to review the proposed Preliminary Map and alternative layout (provided as Pocket 3 of the DEIS). At this meeting, Chief Walters indicated that they would review the project plans and determine the number and location of hydrants to be placed; however, to date a review has not been received. A letter from the applicant's engineer with copies of the Preliminary Map and alternative layout was submitted to the Port Washington Fire Department (Fire Department) on June 26, 2008, requesting review and/or a meeting to again discuss the proposed subdivision layout. A subsequent letter dated July 21, 2008 was submitted to the Fire Department providing an updated AutoTurn analysis (discussed in Section 2.7 of this document) and requesting their input on the submitted plans. To date, no response has been received from the Fire Department. The applicant will continue to reach out to the Fire Department in an effort to obtain their comments, which will be forwarded to the Village upon receipt.

Comments C-27, C-31, D-16 & D-19:

These comments note the presence of several deteriorating bulkheads along the property's perimeter and request information as to plans to replace/repair them. Additionally, it is

requested that the FEIS specify any proposed improvements to East Creek and recommendations for protection of any proposed improvements to East Creek.

Responses:

No improvements to East Creek or the existing bulkheads on the subject property are proposed as part of the proposed action. Work requested by the Water Department involving the proposed installation of a water main connection below East Creek would involve off site construction activities adjacent to the Creek and directional drilling a minimum of 8-10 feet below the Creek bed. The details of the water main installation and protection methods during construction are discussed in Section 2.3.3 of this document. Any future improvements to the existing wooden bulkhead or seawall would be the responsibility of the future homeowners and would be subject to review and permitting by the NYSDEC, Army Corps of Engineers (COE), New York State Department of State (DOS), Town of North Hempstead and the Village.

Comment D-66:

“The applicants’ state (Page S-3) that ‘ the proposed project will comply with all applicable land use regulations of Chapter 145 (Subdivision of Land) and Chapter 176 (Zoning) of the Village Code, which include restrictions on lot coverage, minimum street frontage, building height, lot depth and setbacks.’ It cannot possibly be known at this time that no variances will be required as ‘...the 5 parcels proposed for development will be sold individually and will be developed according to the specifications of the homeowner.’ (page S-28, Construction Related Activities). It would be the right of the homeowner to ask for variances.”

Response:

Comment acknowledged. The proposed Preliminary Map provides lots which are sized in accordance with the applicable requirements of Village Code to provide adequately sized building envelopes for the construction of single family dwellings and associated accessory structures. The commenter is correct that the future homeowners may choose to apply for zoning variances based on the design of the future dwellings and/or improvements.

2.1.6 Flood Insurance Rate Maps and Otherwise Protected Areas

Comment C-5 & C-40:

These comments state that the Federal Emergency Management Agency ("FEMA") maps are due to be updated in 2008, including those for Sands Point. The first floor elevation requirements of the updated maps should be discussed, as well as compliance of the proposed subdivision map to the first floor requirements as the New York State Building Code requires that residential first floor elevations be two feet above the base flood elevation.

Response:

Draft FEMA maps for Nassau County were made available in May 2008, which included changes to the designations on the subject site. The draft FEMA map for the subject site is included as **Figure 1**, with the proposed subdivision lot lines overlaid on the map. The changes to the FEMA map for the subject property include modification of the locations of the Special Flood Hazard Areas on the site, as well as changes to the Base Flood Elevations (BFE) for Zones AE and VE on the site. The existing Zones AE (EL 15) and VE (EL 17, 19) were changed to proposed Zones AE (EL 12, 13) and VE (EL 15). This effectively reduces the height at which any subsequent structure would need to be constructed on the property. It is noted that the building envelopes for the proposed lots do not extend into VE zones, rather the building envelopes are located in Zone X (no BFE applies) or Zone AE (elevation 12 and 13). It should also be noted that the draft 2008 FEMA maps are based on North American Vertical Datum of 1988 (NAVD 88), whereas the present FEMA maps are referenced to National Geodetic Vertical Datum of 1929 (NGVD 29). Adjusting the new draft 2008 FEMA maps to the 1929 datum of the existing mapping results in an AE zone BFE of approximately 14 on the subject site, as opposed to elevation 15 on the existing mapping. It is noted that the 2008 FEMA maps are in draft form only, and are not expected to become final until mid-2009.

With respect to the requirements of the New York State Building Code (NYS Building Code) for residential structures, Section R323.1.3.3 requires that a freeboard of two feet must be added for construction when the design flood elevation is specified. The site has been designed to provide for a minimum first floor elevation for structures at elevation 16, therefore, the residences would comply with this requirement.

Comment C-41:

The FEMA Flood Insurance Rate Map ("FIRM") information indicates that there are Otherwise Protected Areas ("OPAs") on and adjacent to the site. The FEIS should discuss the potential impacts of this on the lot configuration, the grading plan, amount of fill required and FEMA's rules and regulations pertaining to OPAs, and whether or not flood insurance would be available to the future homeowners.

Response:

As stated in Section 2.2.1 of the DEIS, the area along the eastern side of the subject site is partly within an area of land identified as an "otherwise protected area," (OPA) for which flood insurance is "not available for structures – newly built or substantially improved on or after February 24, 1997 – not used in a manner consistent with the purpose of the otherwise protected areas." This area is designated on the draft 2008 FEMA map by backward slanting diagonal and dashed lines, shown within the area seaward of the seawall on Lot 3 and the eastern portions of Lots 4 and 5. Consequently, newly built structures within this OPA may not be eligible for federally backed flood insurance; however, this designation does not prevent private development, private financing, or private flood insurance. Additionally, buildings may be eligible for federally backed flood insurance even if they are located within the OPA, however certification from the governmental body overseeing the area must be provided to indicate that a building in the OPA "is used in a manner consistent with the purpose for which the area is

protected” (FEMA, 2007). It is noted that each of the lots have building envelopes allowing for construction of single family dwellings outside of the OPA designated area on the property.

2.1.7 Grading Associated with Site Development

Comments B-19, B-20, B-23 & B-40:

These comments seek confirmation as to the distribution of filling activities on the site, and the potential associated effects of altered runoff patterns on the wetlands. Concern is noted regarding potential impacts from the reduction of stormwater inputs to East Creek due to the proposed drainage system.

Responses:

Section 2.1.2 of the DEIS provide a detailed discussion of the grading operations proposed for the site and the Preliminary Map – Drainage/Sanitary (see Pocket 1) provides the existing and proposed grading contours to graphically depict the proposed grading on the site. Generally, soils from the higher elevation slopes on the western and central portions of the property will be excavated and redistributed to the lower lying areas on the southeastern portion of the site to ensure that the all proposed dwellings can be constructed above the FEMA base flood elevations. Overall there will be a decrease in elevation in the southwestern portion of the property (ranging from two to ten feet) and an increase in elevation of the central and southeastern portions of the site (ranging from approximately two to four feet). The slope within the central and southeastern portions of the property will be consistent with that which presently exists.

No grading or fill is proposed within the tidal wetland areas or within 100 feet of the NYSDEC regulated wetland boundary on the subject property. Additionally, no grading or fill activities are proposed within the proposed buffers provided in a 50 feet wide area along the western property boundary of Lot 2, a 40 feet wide area along the southern property boundary of Lot 5 and from high water landward to a point 25 feet landward of the existing wooden bulkhead on a portion of Lot 3 and Lots 4 and 5 (refer to Preliminary Plan – Drainage/Sanitary, Pocket 1).

The overall drainage pattern of the site under pre-development conditions (whereas higher elevations in the western and northern portion of the property trend downward towards the lower elevations in the eastern and southeastern portions of the property) will remain similar in the post-development condition. However, the installation of the proposed on-site drainage system will direct stormwater runoff to on-site drainage inlets and the dry pond for subsurface recharge, as opposed to current conditions which allow for direct overland flow into East Creek and the Long Island Sound. The stormwater management system for the proposed project is designed to accommodate an 8-inch storm event.

With respect to potential impacts to “starve” East Creek by reducing stormwater runoff or altering drainage patterns, East Creek is a tidally fed water body. Overland flow of stormwater runoff from the subject property represents an inconsequential portion of the overall water input to the East Creek tidal system. As discussed in Section 2.2.2 of this document and Section 2.3 of the DEIS, subsurface recharge of precipitation and sanitary waste water on the site will be slightly increased as a result of the on-site sanitary and

drainage systems. As under existing conditions, recharged precipitation and sanitary waste water will reach groundwater and be discharged under post development conditions from the subsurface system in the form of subsurface outflow to the adjacent coastal waters of East Creek and directly to Long Island Sound. Comments D-12, D-13 & D-55:

These comments express concerns about site grading operations in terms of potential grading within the Coastal Erosion Hazard Area, the quantity of fill necessary to meet the minimum first floor requirements and the associated impacts from truck traffic to import/export soil for construction activities (in terms of both area and depth of cut/fill).

Responses:

As discussed in detail in Section 2.1 and 2.2 of the DEIS, very minor grading is proposed within the Coastal Erosion Hazard Area on the property and this is restricted to an approximately 0.13 acre area on the eastern portion of Lot 4. The grading proposed in this area allows for stormwater to be directed to the on-site drainage system, rather than allowing for direct overflow of stormwater into East Creek. The proposed grading plan is expected to be refined further during the application review process, and the Village Planning Board may require modifications to the proposed grading plan to reduce the grading proposed within the Coastal Erosion Hazard Area if found necessary. It is further noted that pursuant to Chapter 66 of the Village Code, a coastal erosion management permit is required prior to the commencement of any regulated activities (e.g. construction, grading, and excavation) within the Coastal Erosion Hazard Area and a variance will be required from the Village for any encroachments into the Coastal Erosion Hazard Area.

With respect to the quantity of fill material required for the proposed action, Section 2.1.2 of the DEIS provides detailed information on the proposed cut and fill quantities associated with the proposed grading program. The grading program involves use of soil material from the higher elevations in the western and central portions of the property, which will be excavated and distributed to the lower lying areas on the southern portion of the site to ensure that the all proposed dwellings can be constructed to meet the BFE and NYS Building Code requirements. The present grading program (see Pocket 1, Preliminary Map – Drainage/Sanitary Plan) represents a balance between the need to preserve natural buffers on the property and maximize the reuse of cut materials on-site to minimize the quantity of fill material imported to the site. A previous plan submitted to the Planning Board (and evaluated in Section 5.2 of the DEIS) allowed for balance of cut and fill on the site, so as to reduce the number of truck trips necessary for site development. The previous plan would involve more extensive cut into the western portion of the property and require greater disturbance of the site (eliminating the potential to maintain the natural buffer on the western property boundary of Lot 2). However, the long term benefit of retaining more natural areas on the site was preferred. Therefore, the proposed action that was advanced and evaluated in the DEIS involves a grading plan that provides for protection of natural areas, but requires the import of approximately 11,125 cubic yards of fill material. As stated above, the final grading program is expected to be refined further during the application review process, and the Village Planning Board may require modifications to the proposed grading plan as necessary during its review. The final quantities of cut and fill material will be adjusted and quantified subject to final site plans, grading plans, stormwater structures and landscaping, and a refined estimate for the number of truck trips necessary for import/export of

materials will be provided. A fill permit from the Village Zoning Board (which includes local roadway evaluations and bonding requirements prior to issuance of such permit) will be required in order to import the estimated volume of fill material required. Construction mitigation measures related to import of fill and construction materials are discussed in detail in Section 3.6 of the DEIS and in Section 2.5 of this document.

2.2 SANITARY & DRAINAGE SYSTEM PERFORMANCE & IMPACTS

2.2.1 Drainage/Sanitary System Design & Performance

Comments D-30, D-53, D-54:

These comments express concerns about whether the proposed drainage system design for an 8-inch storm is adequate and concerns regarding how quickly the dry pond/stormwater collection area will drain following storm events so that this area does not attract breeding mosquitoes.

Responses:

The drainage system is designed to meet stringent Nassau County Department of Public Works (NCDPW) drainage requirements, which require storage for stormwater runoff resulting from in excess of a hundred year storm event. These requirements exceed the NYSDEC requirements for stormwater runoff control from construction projects, which were created to provide down stream flooding protection. In the case of the subject property, the 100 year storm peak discharge requirements contained in the NYSDEC Stormwater regulations (General Permit 0-08-001) would not apply to the subject site, due to its location on the a large water body. Therefore, the drainage system is designed to meet or exceed the storage requirements of all applicable drainage regulations.

With respect to concerns regarding standing water in the dry pond proposed for the site, the final engineering drawings will provide for removal of all existing fill from within the dry pond and replacement with well drained material. The results of the on-site soil boring within the cul-de-sac shows underlying material to be well drained (SM and SP materials) and that groundwater is approximately 7'8" below the ground surface at test boring #2 (groundwater elevation of 1.8'). The soil boring shows a percolation of 18.5 minutes for water to drop one inch (or approximately 6.45 feet over 24 hour period). Given the maximum storage depth of the pond is seven feet; the dry pond would drain in just over a day's time. However, it is noted that the soil boring was taken in the poorer draining fill material currently present in this location, which when replaced with well drained material, will increase the percolation rate. Using the percolation test from soil boring #1 (see Preliminary Map – Drainage/Sanitary Plan), which would be more reflective of material after replacement of the existing soil containing sandy silt lenses, results in the percolation rate of 7.9 feet in 24 hours. Therefore, when constructed, it is anticipated that the dry pond would drain in less than a 24 hour period.

Comments D-74:

The DEIS acknowledges that ground water beneath the property is tidally influenced due to its close proximity to the coast (DEIS, p. 2-13). However, it fails to describe the extent of that influence, especially when high tides occur during severe storm events. Nor does the DEIS describe the potential impact of fluctuations on the water table on proposed drainage structures intended to manage runoff during severe storm events. It's failure to discuss the influence of tidal cycles on the shallow water table beneath the property raises serious questions about whether the proposed storm water drainage system is capable of managing storm events during periods of high tide.

Response:

The subject site is located such that Long Island Sound lies north of the site and East Creek lies east of the site. Tidal cycles influence the elevation of groundwater; however, submarine groundwater outflow dampens the effect of tidal cycles on vertical groundwater fluctuations (Li, H. and J.J. Jiao, 2001, 2002). There is also a relationship between the influence of tidal cycles with distance inland from the shoreline, such that the influence is decreased inland (Li, H. and J.J. Jiao, 2001; Cheng, A. and Ouazar, D., 2004). Groundwater elevations experience a phase lag in response to tidal and storm fluctuations (Li, H. and J.J. Jiao, 2001; Paulsen, Ron et al, 2004). Research shows that the influence decreases exponentially, while the phase lag decreases linearly with distance inland (Li, H. and J.J. Jiao, 2001). Normal tidal conditions result in a localized increase in water table elevations near the shoreline. The elevation of groundwater would not exceed the elevation of mean high water, and in fact, during high water, the slope of the water table locally dips inland, indicating that the constant water table is at a lower elevation than mean high water (Li, H. and J.J. Jiao, 2003). As a result, normal tidal fluctuations would not significantly raise water table elevations beyond a localized area near the shoreline. The combination of hydrologic principles noted above indicates that during storm events, the water table may rise; however, groundwater outflow, distance from the shore and lag time are such that elevated water table conditions would be most prominent near the shore and would not be expected to coincide with the storm event. The delay would allow high tide or storm waters to recede. Stormwater structures are located within the property at distances more than 120 feet from surface waters (with the exception of two leaching pools in Drainage Area-6 which involve only a small surface drainage area), and 1 roof runoff leaching pool associated with Lot 3).

In order to further evaluate the impact that this issue may have on the proposed project, a hydrogeologic report has been prepared to assess the influence that tidal fluctuations along the adjacent coast line may have on groundwater elevations on the subject property. This study included the installation of a piezometer at the site, electronic collection of water level data, and review of collected data as well as tidal data obtained from the National Oceanic and Atmospheric Administration (NOAA) for there gauging station located in Kings Point, New York. A complete copy which summarizes the methods, procedures, results and conclusions has been provided as **Appendix F**.

Approximately 275 water level data points were collected from the piezometer during the period of record which consisted of approximately one (1) week during which a total of twelve (12) tidal cycles were recorded. The transducer water level data collected was compiled to illustrate the high and low water levels collected from the piezometer per day and the maximum groundwater elevation above the mid-tide groundwater elevation. For ease of analysis, the data which was collected as depth to water was converted into groundwater elevation using the approximate ground surface elevation of 13 feet above mean sea level where the piezometer was located.

Review of the NOAA tide tables indicated that tidal levels during the study period ranged from – 0.3 feet below to 7.7 feet above mean sea level with a calculated mean average of 3.7 feet above mean sea level. The maximum high tide and mean tide levels recorded during the study period were found to be slightly below respective Spring tide range of 8.46 feet above mean sea level and the mean tide level of 3.86 feet above mean sea level.

Based on review of the data in tabular form, as well as through graphical interpretation, results in an estimated mid-tide groundwater level elevation within the piezometer of approximately 0.830 feet above mean sea level. Review of the data from PZ-1 indicates that the maximum and minimum groundwater elevations collected during the study period were 1.578 and 0.281 feet above mean sea level, respectively. The calculated maximum elevation above the mid-tide groundwater elevation was determined to be 0.748 feet with a calculated maximum mean of 0.337 feet.

A graphical analysis correlating the impact that tidal influence has on groundwater elevations underlying the subject property revealed that there is an approximately three (3) hour lag time between high tide and the maximum water elevations observed during the study.

As a result of the information presented in Appendix F, the data support the following conclusions:

- The tide fluctuated as much as seven (7) feet during the study period, while the water table level in the piezometer rose less than one (1) foot; and
- At high tide, capacity of the proposed drywells and runoff storage area would not be compromised.

Based on these conclusions, the following findings are appropriate:

- The data suggest that the bottom of each drywell and stormwater storage facility proximate to tidal influence should be designed to account for a one (1) foot rise in the water table, while maintaining the required 2-foot minimum separation from the bottom of each structure to the water table.

Under the proposed project, all drainage pools will be designed with a minimum 2-foot separation from groundwater. This will be demonstrated by drainage calculations and a sample profile (which transverses the lowest lying areas of the property - Lot 5) showing the relation of the drainage structures/leaching pools to groundwater. It is noted that the bottom elevation of the drainage structures and sanitary pools were previously designed for the DEIS to be a minimum two feet above the groundwater elevation as established by the test holes previously conducted on the site (where the groundwater elevation was approximately 1.83 feet above sea level for borings #2 and #3 located in the south-central and central portion portions of the property, as shown on the Preliminary Map Profiles, Sheet 4 of 7 in **Pocket 1**). The sanitary and drainage system design can easily be modified to provide a 3-foot separation distance from groundwater, accounting for the tidal fluctuation. It is noted that there is a lessened tidal influence as a consequence of increased setbacks that will dampen the effect of tidal influence on groundwater elevations farther within the site. Further within the site, this separation will allow storage to be accommodated within the drainage structures which will occur during increases in groundwater elevation that will likely result during storm events. These temporary elevated water table conditions would be expected to recede after the occurrence of the tidal fluctuation or storm events, thus allowing normal drainage function.

Comments D-75:

The integrity of the individual residential sanitary waste disposal systems is also brought into question since they are reportedly being designed to maintain a minimum of only two feet distance between the base of each sanitary structure and the water table. If the tidal influence on the water table causes it to rise 2 or more feet, which is common for water tables in close proximity to the shore, septic wastes are likely to come in direct contact with the shallow water table and actually surface in the form of overland flow during a severe storm event. These wastes could migrate into the adjacent wetlands with potentially devastating consequences.

Response:

As noted in response to comment D-74, minor temporary increases in water table elevations may be experienced during high tide and storm events. However, based on the tidal influence study conducted and discussed above, a rise of more than two feet is not expected, as a result of the distance from the shoreline. NCDH and NYSDEC require at least 100 feet of separation between sanitary systems and surface water, and the two foot vertical separation above seasonal high groundwater is intended to provide adequate separation for properly functioning systems. Under the proposed project, all drainage pools will be designed with a minimum 2-foot separation from groundwater. The combination of horizontal separation from surface water and vertical separation from groundwater ensures that sanitary systems will function properly. No sanitary systems are located within 225 feet of the shoreline of Long Island Sound, or within 185 feet of the shoreline of East Creek. These separations provide significantly more than required, and as a result of the lesser influence of tidal cycles on water table elevations with distance into the site, systems will function as intended. The depth of the sanitary leaching pools and the fact that sanitary systems are covered with concrete structures and buried below grade ensures that no contact with the ground surface or overland flow is possible. Horizontal separations also ensure that bacteria are attenuated in soil as groundwater migrates toward surface water. The excess separation of the proposed systems provides additional safety with distance.

Comments D-77:

The DEIS fails to acknowledge that high-solids waste water from residential septic systems does not disperse horizontally over large areas, but mounds in the immediate vicinity of the drainage structure. Localized mounding is even more common in organic, silty soil found within the top ten feet of the ground surface beneath the subject property (DEIS, Sheet 2 of 7).

Response:

Residential sanitary systems remove solids through the use of septic tanks with baffles. Resultant effluent is low in solids and is conveyed by an overflow to leaching pools. Sanitary systems will be installed by excavating surrounding soils, installing leaching structures which permit both sidewall and bottom leaching, with backfill of good quality leaching material. As a result, sanitary leaching pools will effectively leach effluent to the subsoils surrounding these installed structures. The proposed conventional sanitary systems will be reviewed and approved by the appropriate regulatory agencies, and will use technology that is commonly and routinely used across Long Island for effective treatment and disposal of sanitary waste.

Comments D-78:

Anticipating the drainage problem, the DEIS states that “the proposed sanitary and drainage leaching pools will be excavated (3) feet below the proposed bottom of each leaching structure in order to remove low permeability soils and backfilled with granular material to enhance leachability.” (DEIS, p. 2-29, 2-30). That effort to eliminate mounding, however, will only enhance dispersal of sanitary and storm water effluent over the limited area excavated, not the entire property as suggested in the DEIS.

Response:

The discussion in the DEIS regarding removal of low permeability material is included to provide mitigation in cases where low permeability soils are encountered. This method is commonly used to create suitable leaching soils in the locations where sanitary and drainage structures are installed. It is not necessary to conduct such activities in areas where sanitary and drainage structures are not installed. The DEIS did not make any such representation that such measures would be conducted beyond the leaching structures, nor are they necessary for the entire property.

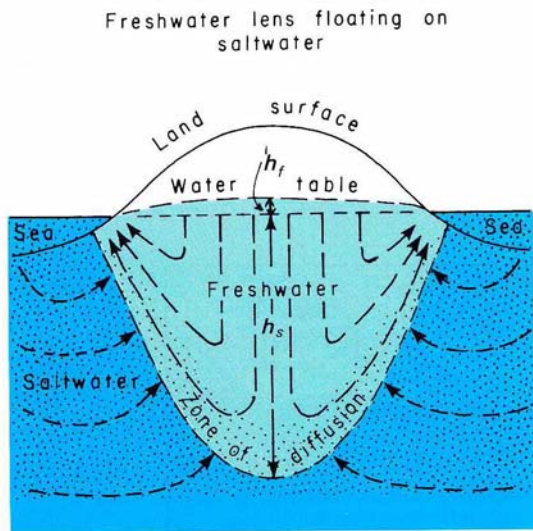
2.2.2 Hydrogeology & Water Budget

Comment D-73:

The DEIS only briefly discusses surface water and ground water resources in the vicinity of the proposed development. The occurrence of the North Shore aquifer, the ground water depression and salt water intrusion beneath the northern portion of the peninsula are completely omitted from its discussion. The DEIS simply states that “Ground water will ultimately be discharged from the subsurface system in the form of subsurface outflow to the adjacent coastal waters of East Creek and directly into Long Island Sound.” (DEIS, p. 2-12). A more detailed description of the site’s hydrogeology and its interaction with the adjacent East Creek drainage system is warranted given the increased ground water pumpage, sanitary waste water discharge and storm water recharge anticipated by the proposed development.

Responses:

The DEIS is accurate by indicating that groundwater will be discharged from the subsurface system in the form of subsurface outflow to the adjacent coastal waters of East Creek and directly to Long Island Sound. The subject site is the northernmost extent of the geographic landform referred to as Manhasset Neck. The site is underlain by unconsolidated glacial deposits beneath which are coastal-plain deposits of Late Cretaceous. Precipitation is the sole source of groundwater on Manhasset Neck, and subsurface soils contain water in the Upper Glacial aquifer (Stumm et al, 2002). Based on on-site soil borings, the minimum elevation of groundwater above sea level is approximately 1.8 feet. The Ghyben-Herzberg principle predicts that for every 1 foot of water above sea level, there is a depth of 40 feet of fresh groundwater above the salt-water interface (see figure below). As a result, freshwater depth is estimated to be about 72 feet (Urish and Ozbilgin, 1989; Heath, 1983). The fresh groundwater lens extends beyond the shoreline, beneath tidal waters, and groundwater flow results in constant submarine outflow of freshwater (Li, H. and J.J. Jiao, 2001, 2002). The hydrology in the coastal area is such that water recharged on the site, becomes part of the Upper Glacial aquifer, and flows in a shallow system



Source: USGS, Water Supply Paper 2220, Basic Ground-Water Hydrology, 1983.

toward surface water as a result of hydraulic gradient, ultimately discharging to East Creek and the near shore coastal waters. As discussed in detail in **Section 2.2.1** above, the tidal cycles of Long Island Sound and the East Creek tidal river influence the elevation of groundwater; however, submarine groundwater outflow groundwater fluctuations (Li, H. and J.J. Jiao, 2001, 2002). There is also a relationship between the influence of tidal cycles with distance inland from the shoreline, such that the influence is decreased inland (Li, H. and J.J. Jiao, 2001; Cheng, A. and Ouazar, D., 2004). Groundwater elevations experience a phase lag in response to tidal fluctuations (Li, H. and J.J. Jiao, 2001; Paulsen, Ron et al, 2004). Research shows that the influence decreases

exponentially, while the phase lag decreases linearly with distance inland (Li, H. and J.J. Jiao, 2001). Normal tidal conditions result in a localized increase in water table elevations near the shoreline. The elevation of groundwater would not exceed the elevation of mean high water, and in fact, during high water, the slope of the water table locally dips inland, indicating that the constant water table is at a lower elevation than mean high water (Li, H. and J.J. Jiao, 2003) (see figure above). The overall migration of groundwater is to discharge to surface waters as subsurface outflow. The local groundwater flow system associated with East Creek is such that during outflow of the tidal creek, the system functions to dewater the aquifer as a result of hydraulically induced flow toward East Creek. During flood tides, this migration pattern is curtailed as a result of hydraulic gradients, which may be temporarily reversed. Again, the overall flow is from south to north toward Long Island Sound and East Creek.

Farther south on Manhasset Neck, groundwater elevations increase inland and in areas of higher topography (see DEIS Figure 2-4). Localized areas on Manhasset Neck achieve groundwater elevations in excess of 100 feet. Deeper aquifers are used for water supply purposes. Pumpage of water supply production wells causes localized changes in the potentiometric surface of the Lloyd and North Shore aquifers on Manhasset Neck. These conditions do not alter the localized flow of groundwater beneath the subject site in the Upper Glacial aquifer (Stumm et al, 2002). As a result, the proposed project is not expected to significantly change the hydrology beneath the site as compared with current conditions, particularly in view of the increase in recharge on the site as discussed in greater detail below with respect to site water quantity and public water supply.

As discussed in Section 2.2.2 of the DEIS, development of the proposed project is not anticipated to have an adverse impact on groundwater resources related to a reduction in groundwater elevations or an increase in saltwater intrusion. As stated in Section 2.2.2 of the DEIS, SONIR model calculations estimate that following development of the proposed project there will be an increase in recharge of 5.74 inches per year which equates to 323,795 cubic feet per year over the entire site (0.48 feet x 676,922 square foot site). Recharge will occur periodically throughout

the year depending upon hydrogeologic and meteorological conditions. On an average daily basis, this recharge correlates to 887 cubic feet per day over the site, or a depth of water of 0.0013 feet per day, which equals a depth of 0.02 inches per day. The porosity (void space from soil interstices) of typical Long Island soils is in the range of 0.25 (McClymonds and Franke, 1972), resulting in the solids of soil particles accounting for a factor of 0.75. As a result, the water depth from recharge can be multiplied by a factor of 4 to consider the level that this quantity of water would rise to within subsoils, or 0.08 inches per day. If it is assumed that the greater amount of recharge occurs during the warmer half of the year, the average daily recharge on a semi-annual basis would be twice the values noted above as follows: 1,818 cubic feet per day; 0.0026 feet per day; correlating to 0.04 inches per day, or 0.16 inches per day (accounting for soil porosity). Therefore, although the quantity of recharge entering the site will increase, this increase is less than 2/10^{ths} of an inch without considering the horizontal and vertical soil permeability characteristics which exist in the unconfined aquifer underlying the site and provides continuous leaching. This insignificant increase in recharge volume further does not account for the storage of recharge in leaching systems and other factors that would further reduce any potential effect on mounding beneath the site. In summary the insignificant increase in water table from stormwater recharge and sanitary discharges generated on the site will be mitigated by the natural aquifer properties which include permeability, hydrologic conductivity and groundwater discharge. These will lead to a stabilization of groundwater levels across the property and as a result, the proposed project is not expected to have an appreciable impact on the elevation of water beneath the site.

Development of the proposed project is expected to result in an increase in water demand from Sands Point Water Department. The increased water demand associated with five new service connections to the District's existing 1,540 water service connections is not expected to result in a significant increase in pumpage by the utility which would impact the degree of saltwater intrusion which may be occurring in the region. Further, an on-site groundwater supply well has been utilized for irrigation purposes. Under the proposed project this well will be decommissioned and the removal of water from the underlying aquifer will be further reduced, limiting the potential for an increase in saltwater intrusion in the immediate region.

Comments D-76:

The DEIS also estimates that the proposed development will produce an additional 5.74 inches of sanitary waste water and storm water effluent to the water table each year. Assuming that this increase is evenly dispersed over the entire 15.43 acre property, the DEIS concludes that a net increase of only 0.0026 feet per day of recharge will occur with minimal impact on the water table beneath the site (DEIS, p. 2-30).

Response:

This comment is acknowledged. As discussed in Section 2.2.2 of the DEIS, any increase in groundwater elevation resulting from wastewater and stormwater discharge on-site is expected to be minimal as a result of dispersal of discharges across the site, and the rapid permeability of subsoils.

Comment D-79:

Mounded storm water and sanitary waste water effluent will eventually drain towards low lying areas of the property, including the wetlands to the east and southeast. The effects of even attenuated storm water and waste water discharges on wildlife in the wetlands has not been fully discussed in the DEIS.

Response:

Mounded stormwater and sanitary wastewater, if such were to occur, would be a condition on the top of the water table. Groundwater flows as a result of hydraulic gradient, in this case toward the shoreline. The purpose of vertical separation above the water table is to allow chemical and physical processes to remove and chemically change contaminants in wastewater prior to reaching the water table. The horizontal setbacks are to ensure that further attenuation and dispersion occur to further remove and/or dilute contaminants. Both the NYSDEC and the Nassau County Health Department require a minimum setback of 100 feet for sanitary systems from wetlands and surface water, as well as a minimum two foot vertical separation from groundwater. The proposed project conforms to or is more conservative than applicable design standards including vertical separation and horizontal setbacks from ground and surface water respectively. The proposed project provides a minimum sanitary setback in excess of 185 feet from the regulated tidal wetlands boundary and a setback of ± 107 feet for drainage leaching pools and roof drywells. The NYSDEC has established these setbacks to reduce potential impacts to wetland areas. Further, as described above in response to comment D-73 and in **Section 2.4.1**, changes to groundwater levels as a result of stormwater and wastewater discharges are expected to be insignificant, and drainage and sanitary systems are expected to function as intended; therefore no adverse impacts to wetlands or wildlife are anticipated.

2.3 WATER SUPPLY & WATER MAIN INSTALLATION

2.3.1 Water Needs for Area; Need for New Water Main

Comments B-9, B-35, C-12, C-33, C-34, C-35, C-37, D-9, D-37, D-38, D-42, D-46, D-57 & D-72:

These comments request that the reason for the proposed water main loop be detailed, including the project potable water vs. irrigation demand required for the project, and that the system-wide water pressure problems (the most problematic being the Hoffstot Lane area) be discussed in conjunction with the proposed water pressure solutions, as well as concerns regarding fire flow. Additionally, comments raise concerns that water pressure problems would be exacerbated for residents in the Sands Point Acres Beach Association if the proposed water main loop were constructed. A comment also questions whether a water availability letter has been received from the Water Department.

Responses:

Section 3.4.2 of the DEIS provides details of the projected water use of the proposed project. Based on the Water Department's Annual Drinking Water Quality Report for 2007 (issued May 2008 and included in **Appendix E-2**), the highest single day of water usage in 2007 was 3,090,000 gallons for the Department's 1,540 service connections (or an average of 2,006 gallons per connection). However, based on discussions and correspondence from the Water Department, it was indicated that irrigation demands are the cause of the significant increases/peak water use during summer months. The Water Department indicated that irrigation systems designed with the capacity of 30 gallons per minute are permitted for residential properties and that the typical daily irrigation period during summer months is three hours. This results in a total irrigation demand of 5,400 gallons per day per residential lot. For design purposes, the Water Department considers the peak water usage for the project to be when all six dwellings irrigate at the same time. The Water Department was contacted to determine whether the Department would be able to supply water to the project. The Water Department responded in a letter, dated August 25, 2005 (included as Appendix F of the DEIS), that "the distribution system in the area is not adequate to handle the addition of five (5) new homes with significant irrigation needs. There already exist 24 homes in this area which are fed off the 6 inch dead end water mains on Seacoast Lane and Hoffstot Lane. These homes have manifested large irrigation demands." The Village Water Department stated in this letter that an agreement and deposit for design of a water main connection (looping the water main) from Hoffstot Lane across East Creek to the existing main on Glen Road would be required by the applicant in order for the Village to issue a letter of water availability. A subsequent letter from the Water Department dated September 28, 2005 (see Appendix F of the DEIS) stated that the secondary connection from Glen Road to Hoffstot Lane "is required to eliminate the area being served by a single water main on Hoffstot Lane." Appendix F and Section 3.4.2 of the DEIS includes documentation of the discussions (correspondence and a meeting on December 1, 2006) held between the applicant and the Water Department regarding the requested water main connection.

The Village of Sands Point Water Department's engineer, Dvirka and Bartilucci (D&B), provided a letter (included as **Appendix E-2** of this document), which provides the following additional information regarding the need for the water main loop:

The area of the proposed subdivision experiences relatively low pressure during peak water use periods, approaching the allowable minimum limit. In addition, this area is a hydraulic dead end in the distribution system. Without any water main improvements, the addition of five homes to this area will exacerbate an already stressed condition, resulting in inadequate water pressure and endangering all the homes in the area in the event of a fire.

The applicant prepared two routing options for the requested second feed (see Pocket 4 of the DEIS) and submitted them to the Water Department in December 2006. At that time, the Water Department indicated preference for Alternate A routing plan (see Correspondence dated March 21, 2007 in Appendix F of the DEIS), which involves the connection of the water main from Hoffstot Lane to Glen Road by directional drilling under East Creek. The Water Department's Engineer indicated that the Alternate A routing plan provides better pressures of flow during a fire event than the Alternate B routing option (see correspondence dated April 28, 2008 provided in **Appendix E-2** of this document). The Alternate A routing plan was therefore evaluated under the proposed action in the DEIS (see Section 3.4.2 of the DEIS).

However as discussed in Section 1.3, since the acceptance of the DEIS, comments received during the public hearing/public comment period have resulted in a change of the preferred water main routing identified in the DEIS to the Alternate B water main routing evaluated as Alternate 8 of the DEIS (see Alternate Water Main Routing Plan B, Pocket 4 of the DEIS). The applicant met with the Village of Sands Point Water Department in December 2008 to discuss the feasibility of pursuing the Alternate Water Main Routing Plan B given the comments received during the public comment period and the inability of the applicant to obtain the necessary easements for the proposed water main connection from Hoffstot Lane to Glen Road (Alternate A routing). The Alternate B water main routing involves the construction of a new 8" water main parallel to the existing water mains located within the existing road right of way between the intersection of Hoffstot Lane and Seacoast Lane and the interconnection of the existing water main from Vanderbilt Drive to Hoffstot Lane (see **Pocket 2** at the end of this document). Given the constraints of the Alternate A water main routing across East Creek, the Water Department has indicated that the Alternate B water main routing would be acceptable and that water would be available for the proposed project conditioned upon the applicant constructing the second water main feed in accordance with construction drawings prepared for the Alternate B water main routing plan and approved by the Water Department's engineer (see correspondence provided in **Appendix E-2** of this document). Therefore, the applicant proposes to pursue the construction of the Alternate B water main routing pursuant to the direction of the Water Department for the future water connection associated with the proposed six lot subdivision.

With respect to concerns that looping the water main from Hoffstot Lane to the existing water main in Glen Road may create water pressure problems for those presently serviced by the Glen Road main, the elimination of two hydraulic dead end water mains and the looping of water mains is considered best engineering practice. The looping of water mains provides greater

reliability of the system due to redundancy provided by a second feed, improved pressure for hydrants during fire fighting events, reduced maintenance needs and improvements to water quality due to increased circulation of water in the distribution system. It is noted that the Alternate A water main routing plan connecting the existing water main from Hoffstot Lane to Glen Road is no longer proposed; therefore concerns regarding the potential impacts to the existing water main in Glen Road and the ownership of the same are no longer pertinent.

Comments D-31, D-58 & D-59:

These comments express concerns that the Village pumpage caps (as set by the NYSDEC) have been exceeded, and that the proposed project would exacerbate this situation. A comment recommends that covenants on penalties for excessive water use be placed on the new residences. The potential for saltwater intrusion should be examined, due to the increased withdrawals of groundwater to serve the project.

Responses:

Pumpage caps may need to be increased as a result of the Village having exceeded the caps for a number of years. The Village-wide trend in water use should be to reduce usage to the maximum extent practicable for existing service connections. The project site is zoned for residential use and is designed to conform to zoning; the property owner should be entitled to seek water use to allow use of the site in conformance with zoning. New subdivision does provide an opportunity to seek maximum use of water saving fixtures/devices, increased natural areas and xeric-oriented flora for landscaping, and general reductions in water demand. In view of the potential for penalties for excessive water use to be placed on new residences, it would be prudent of the applicant and future homeowners to seek to minimize water use where possible. Future residents will be subject to the water use restrictions and penalties imposed by the Village at that time. The applicant has been in contact with the Village Water Department and is seeking to provide assistance to improve water service through a very costly and logistically difficult water main extension to complete a loop to the existing water mains on Hoffstot Lane. It is expected that this will assist the Village in managing water supply and in meeting existing and future water demand through an improved distribution system. Ability to distribute water within an improved distribution system will allow the Village to intermittently pump wells in the grid to reduce potential for saltwater intrusion. The project represents an addition of four new residences as one large house (as well as an accessory caretaker's cottage and carriage house) and a single family dwelling on a separate tax lot already exist on the subject site. Given the existing number of homes in the Village, the addition of four homes is not expected to cause a threshold condition which would exacerbate saltwater intrusion, particularly in view of the proposed water main loop options being pursued by the applicant, which would assist the Village in meeting water supply needs of the area.

2.3.2 On-Site Well in Lieu of Public Water

Comment D-38 & D-47:

These comments question whether an on-site supply well has been considered as a viable alternative to the proposed water main routing across East Creek and note that the Village Water Department has previously granted permits for on site irrigation wells. The comments note that there was an alternate possibility of running a new water line parallel to the existing line of Hoffstot Lane included in the DEIS that would preclude possible damage to the wetlands.

Response:

A well used for irrigation presently exists on the property. The applicant remains willing to explore continued use of this well for irrigation purposes of the proposed new dwellings if use of this well were permitted by the Village Water Department. A pump test would need to be completed to ensure the well could adequately provide irrigation water for the properties. However, based on preliminary discussions with the Water Department, the use of an on-site well for residential irrigation purposes would not be permitted. Rather, the Water Department has indicated that it would permit the connection of the proposed subdivision to the public water supply system subject to the improvements described above in Section 1.3 and 2.3.1 (pursuing the Alternate Water Main Routing Plan B). Connection to the public water supply system and completion of the necessary improvements to loop the water main parallel to the existing water line on Hoffstot Lane pursuant to Alternate B Water Main Routing Plan (see **Pocket 2**) is now proposed by the applicant and has been found acceptable to the Water Department (see **Appendix E-2**).

2.3.3 Details of Water Main Alternate Plan A Proposal, Installation & Potential Impacts

Comments B-12, B-37, B-38 C-20, C-21, C-22, C-38, D-7, D-11, D-33, D-36, D-38, D-39, D-48 & D-61:

These comments request details on the method of construction and potential impacts of the water main installation proposed water main connection across East Creek (Alternate Water Main Routing Plan A). Detailed information is requested regarding the installation/construction methods for the this water main connection (including equipment access and erosion control methods, long-term maintenance responsibilities and additional impact analyses are requested regarding the potential impacts should the water main below East Creek leak, as well as dust and noise impacts during construction of the main are requested. Finally, information regarding NYSDEC jurisdiction and involvement are requested, and the feasibility of obtaining a permit under Article 25 are questioned.

Responses:

As noted above in Section 1.3 and 2.3.1, the proposed project no longer includes the construction of a looped water main connection below East Creek (Alternate Water Main Routing Plan A). Given the constraints of the Alternate A water main routing across East Creek, the Water Department has indicated that the Alternate B water main routing (the construction of a new 8” water main parallel to the existing water mains located within the existing road right of way between the intersection of Hoffstot Lane and Seacoast Lane and the interconnection of the

existing water main from Vanderbilt Drive to Hoffstot Lane, see **Pocket 2** at the end of this document) would be acceptable. Therefore, the applicant proposes to pursue the construction of the Alternate B water main routing pursuant to the direction of the Water Department for the future water connection associated with the proposed six lot subdivision. The construction of the Alternate B water main routing would be completed within the existing road right of ways and would not involve disturbance to tidal wetland areas. The construction would involve a trench installation and road restoration, typical to utility installations commonly conducted within road right of ways. The timeframe for construction of the Alternate B water main routing (including necessary road restoration) is anticipated to be three to four weeks and, according to the Village Water Department, would involve periodic closures of one lane of the roadway. Flagman and proper traffic controls would be required to ensure safe passage of traffic during the construction process. The design and installation of the water main would be paid for by the applicant and, once constructed, would be owned and maintained by the Village Water Department.

While the Alternate A water main routing across East Creek is no longer being considered, the following information is offered in response to the comments noted above. To avoid physical disturbance to East Creek and the surrounding tidal wetlands, the water main for the Alternate A Routing Plan was proposed to be installed using a trenchless technology known as directional drilling. Directional drilling involves horizontal drilling below the ground surface to reduce disturbance and is commonly used for installing utilities under highways or within environmentally sensitive areas. The installation of this water main loop connecting the existing water mains in Hoffstot Lane to Glen/Beach Road would involve surface excavation of two entry and exit pits for the drilling activities. The pits would be eight foot by eight foot, and located within the existing road rights of way on Hoffstot Lane and Glen Road, landward of the tidal wetlands boundary. A Water Main Routing Conceptual Plan showing the Alternate A water main routing and locations of the entry and exit pits, construction equipment staging areas and erosion controls was submitted to the NYSDEC on September 30, 2008 (see **Appendix E-3**). The two excavated pits would be protected by erosion controls (100 feet of silt fence and a continuous row of staked hay bales) throughout the duration of the construction activities, which is estimated to take approximately three weeks. The drilling would be conducted a minimum of 8-10 feet below the bed of the tidal creek and wetlands to avoid any adverse impacts to these lands. Easements would be necessary for the proposed construction activities and installation of the water main under this routing option. The water main would be constructed by the applicant, based on the Water Department's approved design, and then dedicated to the Village of Sands Point Water Department, who will be responsible for future maintenance of the water main.

The applicant's engineer (N&P) consulted with the Village Water Department and met with Bancker Construction (a contractor specializing in directional drilling of utilities and often contracted by the Village of Sands Point Water Department for water main work) regarding the required staging area and methods of construction for the Alternative A water main routing. Bancker Construction indicated that a 40 foot by 20 foot staging area would be needed for the drill rig and required mud mixing truck and holding tank truck on the entry side of the installation (see Water Main Routing Conceptual Plan provided in **Appendix E-3**). The entry point would be on the south side of Hoffstot Lane (Cedar Knoll Drive), within the existing road right of way, in excess of 230 feet from the wetland boundary. The Village Water District indicated that adequate road right of way would be available on Hoffstot Lane for the necessary

equipment staging; however periodic closure of the roadway would be required during the construction period. The proposed 8" water main would be drilled along the property boundary of either tax Lot 14 or Lot 15 (on the south side of Hoffstot Lane), then below East Creek to connect to the existing water main running along Glen Road/Beach Road (subject to obtaining easements from these property owners). The hole for the water main would first be drilled and stabilized using bentonite, starting from the Hoffstot Lane entry pit. The water main would be laid out along the edge of Glen Road/Beach Road in two (± 475 foot) sections or three (± 320 foot) sections of pipe and would be pulled back through the hole, and the water main connections completed. Silt fence and haybales would also be utilized along the edge of Glen Road/Beach Road to provide additional erosion control protection.

The water main would be constructed within a 12" sleeve of high density polyethylene pipe (material commonly used for water, sanitary and other utility main installations in sensitive areas). The sleeve would allow for future access for maintenance and repair of the water main, if necessary, without disturbance to the wetland areas, as well as containment of water and protection of the overlying areas in the rare event that a water main break occurs. The use of the sleeve allows for significant reduction, if not completely elimination, of future potential disturbance to the wetland area related to upkeep and maintenance of the water main.

Potential impacts of the Alternative A water main installation are relatively minor, as disturbance would be limited to upland areas associated with the excavation of the eight foot by eight foot drilling entry/exit pits and the staging of construction vehicles within the road rights of way. No construction would occur within wetlands, and wetlands would further be protected through the use of erosion control measures (silt fence and hay bales). The directional drilling of the pipe below the creek bed is not expected to have an impact on the hydrology, water quality, vegetation or wildlife associated with the creek. During the installation, the drilled hole will be stabilized with inert bentonite to prevent caving of the above sediment. Resultant sludge from drilling activities is pumped directly into a holding tank on the truck as the hole is drilled. All physical disturbances will be limited to the entry and exit points of the pipe within the upland area.

The installation of the Alternate A water main is expected to require approximately three weeks, and during that time, some noise can be anticipated to occur from the drill rig and mud mixing truck. This noise would be limited to Village-approved construction hours of 8:00 AM to 5:00 PM on weekdays and 9:00 AM to 4:00 PM on weekends. Minimal dust would be expected to occur during excavation of the two drill pits. No stray material is expected to occur from drilling of the water main, as all material will be contained within the drilling equipment, mud mixing truck and holding tanks. There would be temporary inconvenience to the surrounding residents during the three week construction period (construction related noise, periodic street closures at the terminus of Hoffstot Lane and the terminus of Glen Road, temporary/limited shut off of water service, etc.). (Additional discussion regarding construction mitigation is provided in **Section 2.5**). Additionally, there is potential for noise and human activity during construction at the entry/exit points to temporarily impact wildlife (particularly birds and small mammals) utilizing the Sands Point Wild Life Preserve (bird sanctuary) and East Creek. It is expected that these wildlife would temporarily relocate to a nearby area while the noise persists, but would ultimately return to their normal roosting and foraging areas when construction ceases.

Temporarily displaced wildlife are expected to relocate to areas on the bird sanctuary further from the construction zone, or to the nearby Sands Point Park and Preserve.

The NYSDEC was contacted regarding the feasibility of obtaining a NYSDEC Article 25 Tidal Wetlands Permit for the Alternate A water main connection crossing tidal wetlands. A copy of the correspondence between the applicant and the NYSDEC is provided in **Appendix E-3**. The NYSDEC indicated that “historically, the Department has had no conceptual objection to directional drilling projects.” The NYSDEC’s letter further indicated that issues usually arise with respect to securing adequate upland area for staging the equipment and drilling fluid lagoons, and requested more detailed information regarding staging areas, construction methods and property ownership be provided. A detailed plan showing the areas of disturbance, staging areas and construction mitigation for the utility installation was prepared and submitted to NYSDEC with an Article 25 application for the water main construction and supplemental information on property ownership and construction equipment to be utilized (see **Appendix E-3**). As indicated above, adequate area for staging of materials is available within the existing road right of ways and fluid will be contained in mixing trucks (therefore not requiring a “fluid lagoon”). The NYSDEC provided a response letter dated October 30, 2008 stating that a permit may be issued subject to two changes to the submitted plan: 1) relocation of the proposed 8’ by 8’ exit pit on Glen Drive to the landward side of the road and 2) use of a double wall containment system rather than a single row of haybales for erosion control/protection (see **Appendix E-3**). It is noted that permission and necessary easements from the various property owners (Village of Sands Point for East Creek and the lands to the east; Sands Point Acres Beach Association for Glen Road/Beach Road; and landowners for either NCTM Section 4, Block 122 Lots 14 or Lot 15 for parcels on the south side of Hoffstot Lane), as well as permits from the Village of Sands Point, Army Corps of Engineers and NYS Department of State would be required prior to initiation of this water main routing option.

However as discussed in Section 1.3, since the acceptance of the DEIS, comments received during the public hearing/public comment period and the inability for the applicant to obtain the necessary easements to construct the Alternate A water main routing have resulted in a change to the preferred water main routing identified in the DEIS. Given the constraints of the Alternate A water main routing across East Creek, the Water Department has indicated that the Alternate B water main routing would be acceptable. Therefore, the applicant proposes to pursue the construction of the Alternate B water main routing (see **Pocket 2**) pursuant to the direction of the Water Department for the future water connection associated with the proposed six lot subdivision.

Comment C-36, D-38, D-60:

These comments note that the water main connection under East Creek is dependent upon the availability of an easement across private land. A commenter notes that the plans should not be approved until required easements have been obtained. The comments request information on the other options for water connections if the required easements are not available.

Response:

Section 5.5 of the Draft EIS includes an alternative (Alternative 8), which evaluates a potential routing option for a second feed water connection by installing a water main parallel to the existing water mains between the intersection of Hoffstot Lane and Seacoast Lane and the interconnection to Hoffstot Lane from Vanderbilt Drive (Alternate Water Main Routing Plan B, Pocket 4 of the DEIS). This option was included in the DEIS as a feasible alternative for water supply should obtaining either the necessary easements or permits for the water main connection from Hoffstot Lane to Glen Road under the proposed action (Alternate Water Main Routing Plan A) become infeasible. The Sands Point Water Department had previously indicated their preference for the water main connection below East Creek (see Water Department correspondence, dated March 21, 2007, included in Appendix F of the DEIS and correspondence from the Water Department's engineer, **Appendix E-2**). However, given the comments received during the public comment period and the inability of the applicant to obtain the necessary easements for the proposed water main connection from Hoffstot Lane to Glen Road (Alternate Water Main Routing Plan A), the applicant met with the Village of Sands Point Water Department in December 2008 to discuss the Alternate B water main routing evaluated as Alternative 8 of the DEIS (see Alternate Water Main Routing Plan B, Pocket 4 of the DEIS). Alternate Water Main Routing Plan B involves the construction of a new 8" water main parallel to the existing water mains between the intersection of Hoffstot Lane and Seacoast Lane and the interconnection of the existing water main from Vanderbilt Drive to Hoffstot Lane (see **Pocket 2** at the end of this document). Given the constraints of the Alternate A water main routing across East Creek, the Water Department has indicated that the Alternate B water main routing would be acceptable. **Appendix E-2** provides the correspondence from the Water Department regarding this matter. The applicant proposes to pursue the construction of the Alternate B water main routing pursuant to the direction of the Water Department for the future water connection associated with the proposed six lot subdivision.

2.3.4 Access to Water Main for Proposed Loop Improvements

Comment D-35 & D-46:

These comments contend that the proposed Alternate Water Main Routing Plan A connection appears to encroach on private property and involve a water main privately owned by the Sands Point Acres Beach Association and permission would necessary in order to complete such work. A comment contends that the existing water main in Glen Road is private and connecting to it without the permission of the Sands Point Acres Beach Association would be seizing private property.

Responses:

The applicant has no authority to condemn, take or seize any property. The water main connection across East Creek (Alternate Water Main Routing Plan A) was evaluated at the direction of the Village of Sands Point Water Department for reasons discussed in Section 2.3.1 above. If this water main routing were to be pursued, any takings necessary to make the recommended connections would be the obligation of the Water Department by use of its power to condemn property. However, as discussed in Section 1.3, given the comments received during the public comment period and the inability of the applicant to obtain the necessary easements

for the proposed water main connection from Hoffstot Lane to Glen Road (Alternate A routing), the applicant met with the Village of Sands Point Water Department in December 2008 to discuss the Alternate B water main routing evaluated as Alternative 8 of the DEIS (see Alternate Water Main Routing Plan B, Pocket 4 of the DEIS). Alternate Water Main Routing Plan B involves the construction of a new 8” water main parallel to the existing water mains between the intersection of Hoffstot Lane and Seacoast Lane and the interconnection of the existing water main from Vanderbilt Drive to Hoffstot Lane (see **Pocket 2** at the end of this document). Given the constraints of the Alternate A water main routing across East Creek, the Water Department has indicated that the Alternate B water main routing would be acceptable. The alignment of the Alternate B water main routing is completely within the existing Village road right of way, therefore no easements from private property owners are anticipated to be necessary.

Comments B-5, B-6, D-6, D-36 & D-40:

These comments indicate concerns on the part of a neighboring property owner that construction of the new water main (through which this feature would traverse) would significantly impair vehicle access and the aesthetics of his property.

Responses:

As discussed in Section 2.3.3 above, the Alternate A water main installation would require approximately three weeks and would involve minimal disturbance within the existing road right of ways. Access to properties on Glen/Beach Road may be temporarily limited during periods of the three week construction schedule. Flagmen would be used to control traffic and notification would be provided to homeowners prior to any necessary road closings. Construction would be limited to Village-approved construction hours of 8:00 AM to 5:00 PM on weekdays and 9:00 AM to 4:00 PM on weekends.

2.3.5 Decision-Making Process for Water Main Location

Comments B-8, B-18, B-26, D-8 & D-41:

These comments seek information on the timeline and process for the decision to be made on the route of the water main extension and what board would have the authority to make such decision and proper evaluation of the proposed water main connection pursuant to SEQRA requirements.

Responses:

The Village Planning Board, as lead agency under SEQRA, will be required to weigh the environmental impacts of the water supply and routing options and issue its findings under SEQRA. The Village Planning Board has requested the input from the NYSDEC with respect to the feasibility and potential impacts of the water main installation, which is discussed in Section 2.3.3 and **Appendix E-3** of this document. Based on the Board’s review of this information and the findings ultimately issued on the water main installation, the applicant will work with the Water Department either to obtain the permission and necessary easements from the various property owners for the selected water main routing. A detailed engineering design of the water main connection will be prepared and reviewed by the Water Department’s engineers and will

need to be submitted for review and approval by the Nassau County Department of Health (NCDH). If Alternate Routing Plan A (connecting the water main in Hoffstot Lane to Glen/Beach Road via directional drilling below East Creek) is selected, necessary wetland permits from the Village of Sands Point, Army Corps of Engineers and NYS Department of State would be required prior to initiation of the project. As discussed in Section 1.3, the applicant is no longer pursuing the Alternate A water main routing across East Creek.

2.4 NATURAL RESOURCE IMPACTS

2.4.1 Potential Impacts to East Creek and Surrounding Preserved Areas

Comments B-4, B-7, B-36, C-23 & D-83:

These comments express concerns that the proposed development would adversely impact East Creek, the associated wetlands and the two existing nature preserves in the area. Evaluation of potential impacts to these areas both during and post construction is requested.

Responses:

Prospect Point, inclusive of East Creek, is a diverse and significant coastal fish and wildlife habitat area that remains important to a variety of wildlife species in western Long Island. Construction of the overall subdivision is expected to last approximately 24 months and could have some temporary impact on wildlife within the immediate vicinity. Impacts associated with the overall subdivision were discussed in detail in Section 2.3.2 and 3.6.2 of the DEIS. No construction would occur within wetlands, and wetlands would further be protected through the use of erosion control measures (silt fence and hay bales). The sensitive shoreline and beach areas of the site will be preserved and further protected with a buffer zone along the northwestern and eastern/southeastern portions of the property so as to preserve existing successional forest vegetation and to reduce the potential for impacts to shore bird nesting habitats and populations.

The majority of the shoreline buffer zone is proposed for the eastern portion of the site (Lots 3, 4 and 5), as it contains more sensitive habitat areas for nesting shorebirds. Additional buffer zone is proposed along the western boundary of Lot 2 so as to preserve areas of existing successional forest vegetation. However, the existing high concrete bulkhead/seawall on Lot 2 provides drastic separation between the upland habitats above and the maritime beach below. In addition to the seawall not allowing for contiguity of habitats, much of the area landward of this concrete bulkhead is presently landscaped. Therefore, additional buffer zones along the concrete bulkhead that defines the northern and northwest shorelines of the property (Lots 2 and 3) would not offer any significant protection of shoreline habitats.

Within the proposed buffer zones, no lawn grasses or fertilizer dependent vegetation shall be established, thereby limiting clearing, the use of fertilizer dependent vegetation, and the creation of maintained turf lawn areas along the eastern-southeastern and northwestern portions of the site. Furthermore, these buffer zones allow for the preservation of maritime beach habitat located landward of the existing wooden bulkhead on Lots 3 and 4, as well as the preservation of successional forest vegetation on Lots 4 and 5 which will serve to provide a buffer between the residential uses and natural shoreline. In total, 3.72 acres are proposed to be preserved on the property, inclusive of the buffer zones and the areas located seaward of the existing bulkheads on the property. No restoration and/or planting of these buffer areas is currently proposed.

To ensure protection of these areas in perpetuity, the applicant is proposing to establish conservation easements for these buffer zones (where no lawn grasses or fertilizer dependent vegetation shall be established), which are 25 feet wide landward of the existing wooden bulkhead on a portion of Lot 3 and Lots 4 and 5, and 40 feet wide along the southern property boundary of Lot 5. The covenanted buffer zone on Lot 2 is proposed as a 50 feet wide area

along the western property boundary of Lot 2, as shown on the project plans. The proposed buffer zone is intended to minimize disturbance of the shoreline and remaining wooded portions of the site by prohibiting the establishment of fertilizer dependent vegetation and lawn within its limits, as well as restricting the removal of trees (6-inch DBH and greater) without the approval of the Village (and the NYSDEC if such tree is located within the NYSDEC jurisdictional area). The buffer area may receive supplemental native, coastal tolerant, vegetation and a four-foot wide access path to the water. This conservation easement shall not preclude the maintenance of the existing bulkhead/seawall or future shoreline stabilization subject to permitting from the applicable regulatory agencies. The conservation easement shall also specify that a permit is required for all work within the NYSDEC jurisdictional area pursuant to Article 25, tidal wetlands land use regulations.

The shoreline buffer is also intended to reduce the potential for impacts to nesting and feeding shore bird populations by preserving and protecting their critical habitats, particularly maritime beach. Within the 0.85 acre buffer zone landward of the bulkheads, approximately 0.72 acres of this area are either currently forested edge habitat or otherwise successional field or lawn areas (presently totaling approximately 0.20 acres) that are most likely to develop into successional forest. The remaining 0.13 acres of this proposed buffer zone are presently classified as vegetated beach habitat (an approximately 25-foot wide area located landward of the existing wooden bulkhead and north of the existing beach access on Lot 4) and are expected to remain as beach habitat. During construction, the buffer areas will be preserved and field demarcated with construction fence. Furthermore, the proposed limits of clearing, grading and ground disturbance are approximately 5 to 15 feet farther landward from the proposed buffer zone in the eastern portion of the property, allowing for the retention of successional forest vegetation which currently effectively separates the landscaped areas of the property from vegetated beach and wetland habitats. Post-construction, the establishment of a conservation easement on these buffer areas will ensure long term legal protection. Any further clearing of vegetation beyond the proposed grading associated with the subdivision in proximity to these buffer zones will be subject to Article 25 review and permitting by the NYS Department of Environmental Conservation.

As indicated in the Draft EIS, it is not expected that the noise and activity during construction or the increased human activities after construction will significantly affect wildlife populations within the adjacent bird sanctuary or local area, particularly avian species, as the upland portions of the property are already developed and occupied by relatively tolerant species. However, there will be temporary impacts to on-site wildlife due to clearing and grading activities, as well as some possible minor impacts to wildlife immediately adjacent to the site within East Creek and the bird sanctuary due to temporary relocation of on-site species and noise during the construction phase of the project. This noise would be limited to Village-approved construction hours of 8:00 AM to 5:00 PM on weekdays and 9:00 AM to 4:00 PM on weekends. It is expected that on-site and immediately adjacent wildlife would temporarily relocate to areas on the bird sanctuary further from the construction zone, or to the nearby Sands Point Park and Preserve. Many of the tolerant on-site species are expected to return following construction and establishment of landscaping. Wildlife adjacent to the site is expected to ultimately return to their normal roosting and foraging areas when construction ceases.

Comments D-14, D-17, D-18, D-52, D-80 & D-82:

These are a series of comments related to sightings and presence of wildlife species on the subject site, the presence of endangered, threatened and reptile/amphibian species, prohibition of ATV use, and impacts of clearing/grading/filling operations on habitats.

Responses:

Due to the secretive nature as well as seasonal and diurnal habits of many wildlife species, it is not possible to observe all species present on a property by observations within a limited number of field visits and survey hours. Therefore, in addition to field visits and utilizing such available information as the NYS Breeding Bird Atlas, Natural Heritage Program Database and Significant Coastal Fish & Wildlife Habitat forms, NP&V has also developed a wildlife model to assess the types of species which may occur on a property given the habitats present. This wildlife model was utilized in preparation of the DEIS and indicated the potential presence of species such as rabbits, squirrels, chipmunks, snakes, woodpeckers and owls which the public has indicated have been observed on the property. Additionally, it is acknowledged that fox, as well as a wide variety of shore birds have been observed by the public on the property. It has further been discussed within Section 2.3 of the DEIS that the beach areas along the perimeter of the property are known to be utilized by threatened and endangered shore birds, particularly terns and piping plover.

Due to the size and habitats present on the property, the site is expected to support a limited number of reptile and amphibian species. This does not detract from the fact that, given the site's location on Long Island Sound and proximity to the adjacent bird sanctuary, the beach along the eastern side of the site has been documented as a nesting area for the diamondback terrapin - a relatively uncommon marine turtle on the north shore of Long Island.

The extent of clearing, grading and ground disturbance is clearly depicted on the site plans for the project (see **Pocket 1**) and impacts associated with the clearing of vegetated habitat areas on the property are discussed in **Section 2.3.2** of the DEIS. The DEIS discloses that approximately 2.19 acres of successional field and 1.56 acres of successional wooded edge vegetation are anticipated to be cleared for grading operations and subsequent construction of the access road, residential dwellings, and stormwater features. The DEIS further clarifies that all proposed disturbances (including clearing and grading operations) associated with the lots within the NYSDEC jurisdiction are located greater than 100 feet from the tidal wetlands boundary and are limited to a portion of an asphalt roadway (± 260 feet from the tidal wetlands line), construction of drainage leaching pools and roof drywells (± 107 feet from the tidal wetlands boundary) and construction of a portion of a single family residence (± 122 feet from the tidal wetlands boundary). The DEIS states that the proposed development will have localized impacts on upland vegetation and wildlife and the overall quality and quantity of the existing habitat will be reduced. In summary, the loss of woodland edge habitat on the property will be partially mitigated by the preservation of mature trees within the steeper slope area along the western side of the property and along the eastern side of the property near East Creek.

The proposed project will continue to favor those wildlife species that prefer edge and suburban habitats and those that are tolerant of human activity. Most of the species expected on the

property are at least somewhat tolerant of human activity, but others will be at least temporarily impacted by the proposed clearing of wooded edge and field vegetation as well as the increase in human activity. The project will reduce the amount of available successional field and woodland edge habitat and it is therefore expected that particular species of wildlife will migrate to undisturbed areas adjacent or near the site (e.g. Sands Point Wildlife Preserve, Sands Point Park and Preserve) as a result of development. However, it is not expected that the increased human activities will significantly affect wildlife populations within the adjacent bird sanctuary or local area, particularly avian species, as the upland portions of the property are already developed and occupied by relatively tolerant species. Additionally, the sensitive shoreline and beach areas of the site will be preserved and further protected by a buffer zone along the northwestern portion and eastern/southeastern portion of the property so as to reduce the potential for impacts to nesting and feeding shore bird populations. Ultimately, the increased intensity of human activity on the site will cause an indirect impact on the abundance of wildlife that will remain on the site and in the area under post-development conditions, however, the effect on the density and diversity of both local and regional populations should be minimal, as the area represents only a small portion of the woodland edge habitat available in the vicinity. The ability to mitigate the impacts to vegetation and wildlife is principally in the preservation and protection of the existing vegetation and beach habitat found on site, as well as through use of supplemental landscaping to attract tolerant species back to the site post-construction.

Comments B-24, D-49, D-51 & D-63:

These comments note that the alignment of East Creek has meandering over time, and asks whether the potential impacts to lots lines from this effect in the future have been considered.

Responses:

East Creek is a tidal creek which receives daily tidal inundation, and subsequently is also subject to changes in configuration due to natural processes and anthropogenic activities related to historic fill as is described below. The location of East Creek was reviewed in consultation with the NYSDEC Solid Waste Division in 2006 (**Appendix B-5 of the DEIS**) in order to determine if past soil importation has adversely impacted the site. Specifically, an area formerly occupied by the adjacent creek was reported to have been backfilled with soil imported to the property. Aerial photographs were reviewed from 1954, 1966, 1976, 1980 and 1994 to provide information regarding the time frame when the northeast portion of the property was filled. Specifically, review of the 1954 aerial revealed that East Creek extended into the area of the property that was filled. In the 1966 aerial, further alteration showed that the former area of the stream had been filled and the stream was diverted to the east. Based on this information, it appears that the property was filled sometime between 1954 and 1966, prior to the NYSDEC Part 360 regulations that were implemented in September 1973.

No further human alterations of East Creek have occurred with respect to the subject property since the 1960's, but it is acknowledged that East creek is a dynamic system. Some changes in the orientation of the creek have occurred since the 1960's due to natural processes in the coastal environment. The NYSDEC tidal wetlands map of the property from 1974 illustrates the mouth of the creek being slightly curved farther to the west than present day conditions. The 1974 configuration of the creek is consistent with the wooden bulkhead which is still visible along the

eastern property line. It appears as though the bulkhead was more exposed in the 1970's, and since that time there has been a significant accumulation of sand along the eastern property boundary and the creek has shifted slightly farther to the east. The accreted sand has remained stable for a long enough period of time to become established with dune vegetation such as American beach grass, prickly pear cactus and sumac as well as locust saplings. This section of bulkhead currently emerges less than one foot from the vegetated beach surrounding it. It is possible that future storms may cause erosion of some of this accumulated sand and again lead to the shifting of the creek closer to the buried bulkhead on the subject property. At other times, additional sand may accrete on the property and push the creek farther to the east. It is not possible to predict when or to what extent these changes may occur.

Recent natural alteration of the creek occurred due to several storm events in 2007, resulting in erosion along the western bank of the creek in proximity to the subject property. These conditions were surveyed in January 2008 and are reflected on current pending plans for the Lands End subdivision. The current site conditions are a result of natural changes which may reverse over time as the stream experiences further changes as described above. The bulkhead remains as a limiting structure in the northeast part of the site and historic fill activity has established higher elevations in the south part of the site. The plans which have been prepared to date utilize this historic information to configure the most appropriate development based on past and current conditions. It is noted that the design of the site, the existing limiting bulkhead and historic fill, as well as required building envelopes, setbacks from wetlands, covenanted and conservation easement protected buffer areas and conformance to tidal wetlands land use regulations of the NYSDEC will provide safeguards to ensure that expected minor changes in the configuration of East Creek will not cause significant adverse impacts. In the unlikely event that more severe changes occur at some time in the future, individual homeowners may seek erosion protection to avoid loss or damage to property. Any such activity would be subject to the permit requirements and regulations of the NYSDEC and local permitting agencies in effect at that time.

Comments D-20 & D-84:

These comments recommend that a number of mitigating measures be provided under deed restrictions to provide protection to East Creek, rather than as voluntary efforts under the purview of the Homeowners Association.

Responses:

To ensure protection of the shoreline and buffer zones in perpetuity, the applicant is proposing to establish conservation easements over the buffer zones (see Preliminary Map, **Pocket 1**) specifically prohibiting lawn grasses and fertilizer dependent vegetation within the proposed buffer zones. Additionally, the applicant is willing to provide the following additional measures to mitigate potential impacts of human activity.

1. Establish a rider on the contract of sale of the individual lots advising future land owners of the environmental sensitivity of the shoreline areas and the requirements to obtain an Article 25 Tidal Wetlands permit prior to any disturbance or improvements within the NYSDEC regulated adjacent area,
2. Require deed restrictions that prohibit vehicular use (e.g. ATVs) on the beach areas, and

3. Establish a deed restriction requiring the use of an organic landscaping protocol for all lawn and landscaped areas.

2.4.2 NYSDEC and US Army Corps of Engineers Permits

Comments B-11, B-14, C-24, D-1 & D-39:

These comments question the jurisdiction of the NYSDEC and the US Army Corps of Engineers for installation of the proposed water main loop below East Creek.

Responses:

While no longer considered under the proposed project, the installation of the water main below East Creek would require permits from the NYSDEC and Village of Sands Point, a letter of concurrence from the NYS Department of State and pre-construction notification of the U.S. Army Corps of Engineers (COE). Directional drilling beneath the creek bed for the water main would be covered under the COE Nationwide Permit #12 – Utility Line Activities. This Nationwide Permit authorizes activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than ½ acre of waters of the United States and that there is no change in pre-construction contours. No loss of wetlands and no change in pre-construction contours are proposed for the project. Additionally, in accordance with the conditions of the Nationwide Permit, any exposed slopes and disturbed soil associated with the entry/exit pits and staging area will be stabilized immediately upon completion of the water main crossing. The applicant would be required to submit a pre-construction notification to the Department engineer prior to commencing the installation of the water main for authorization to proceed under the nationwide permit. As the proposed water main would be installed below navigable waters of the United States (a minimum of 8-10 feet below the creek bed under the Alternate A routing plan), the COE would then submit copies of the pre-construction notification and Nationwide Permit verification to the National Oceanic and Atmospheric Administration, National Ocean Service, for charting the utility line to protect navigation. As discussed in Section 1.3, the applicant is no longer pursuing the Alternate A water main routing across East Creek.

2.5 CONSTRUCTION IMPACTS & REGULATORY REQUIREMENTS

Comments B-10, B-15, B-16, B-17, C-22, D-4, D-5, D-10, D-22 through D-24, D-68:

These comments express public concerns associated with impacts (and associated mitigation measures) to the community from noise, odors, dust, access disruptions and truck traffic safety during the grading and construction process. In addition, concerns are expressed regarding Village monitoring of the construction process, including hours of activity, number of truck trips and traffic, etc., as well as the time frames for construction and the need for a third party engineering consultant to monitor the site during construction. An evaluation of construction impacts, including a construction mitigation plan is requested.

Responses:

The anticipated construction sequence, construction schedule, impacts associated with noise, dust and odors from construction and number of anticipated truck trips necessary during construction are all described in detail in Sections 1.4 and 3.6 of the DEIS. Section 3.6 of the DEIS indicates a construction period of 24 months, where all five proposed dwellings are constructed at the same time, in order to evaluate the worse case scenario with respect to maximum truck trips and associated noise, air and other construction related impacts. However, it is acknowledged that the applicant may complete the general site work (site preparation, rough grading, drainage, roadway and utility installation, water main loop, road paving and associated landscaping) and then sell the lots individually for custom development. The overall site work (outlined above) is anticipated to require not more than 12 months. The construction of the five dwellings, if sold individually, may span several years and will ultimately be dependent on the sale of the individual lots and the preferences/schedules of the individual homeowner and their contractors.

Potential impacts associated with the proposed construction activities may include the following:

- Temporary noise from demolition and construction activity.
- Temporary dust from demolition and construction activity.
- Temporary truck and vehicle traffic on Village streets during demolition and construction activity.
- Potential impact to Village roads.
- Potential impact to neighboring properties during demolition and construction.

The following construction mitigation plan is proposed, in the form of identifying each potential impact and providing appropriate mitigation.

- Potential impacts related to construction noise, including pile driving (if necessary) will be mitigated by observing hours of operation for allowed construction in the Village, which will include normal day time, weekday and Saturday hours. Additionally, measures including the following will be implemented throughout construction as feasible: 1) Utilize the best available noise control techniques, i.e. exhaust mufflers on compressed air exhaust, engine enclosures and noise attenuating shields or shrouds on all equipment and trucks, external jackets on tools, etc.; 2) Place stationary construction equipment as far from sensitive receptors as possible; 3) Use of

noise barriers (i.e., plywood barriers) around building site construction if pile driving is necessary.

- Potential impacts related to dust will be mitigated by ensuring that a water truck is on-site to wet dry soils which will control fugitive dust. All exposed soils will be stabilized as soon as possible after initial grading using topsoil, groundcover or temporary wetting as needed.
- Trucks using Village streets are limited in size pursuant to Village requirements. The Village streets may experience temporary increases in truck and vehicle traffic; however, this will generally occur before morning and before afternoon peak hours, or will be of low, intermittent volume. Road access disruptions would occur during the installation of the proposed water main looping in the Hoffstot Lane right of way and potentially on a very limited basis for delivery of equipment/materials to the site, however, flagman and proper traffic controls would be required to ensure safe passage of traffic during the construction process. Temporary minor inconvenience may be experienced during day time hours, and motorists are advised to use caution and observe Village speed limits.
- In terms of potential impact to Village roads, trucks will be washed as necessary before leaving the site to access Village roads. The applicant will be responsible to sweep or repair Village streets if necessary, and in accordance with Village fill permit requirements, a bond will be posted to ensure any necessary road repairs or maintenance are completed as required by the Village.
- Potential impact to neighboring properties will be mitigated through observance of Village required hours of operation during normal day time, weekday and Saturday hours, wetting of soils to avoid fugitive dust and most importantly, ensuring that all construction staging, parking, and activity associated with the construction of the five proposed single family dwellings will occur within the boundaries of the subject site. During construction, the buffer areas to be preserved will be field demarcated with construction fence. These buffer areas will provide further screening of the property both during and post construction. Construction activities associated with the water main looping in Hoffstot Lane will be limited to within the road right of way and will be limited to mainly a trench installation to minimize disturbance to the roadway and surrounding areas.
- Additionally, applicable erosion and sedimentation control guidelines will be observed during construction of the proposed project in order to minimize impacts. In accordance with the NYSDEC Phase II SPDES Program and Chapter 139 of the Village Code, coverage under the NYS General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001 or General Stormwater Permit) will be obtained prior to the initiation of construction activities. Prior to filing for coverage under the General Permit, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the development of the property, including a detailed erosion and sediment control plan, to manage construction activities on-site. The SWPPP will be reviewed and approved by the Village prior to filing in accordance NYSDEC requirements and prior to the initiation of construction activities at the subject property.
- The site is large enough to accommodate all loading, unloading, storage, and parking related to demolition and construction activity. As a result, this practice will be observed in order to ensure that impacts to neighboring properties will be limited to the maximum extent practicable.

Construction will be coordinated with the Village of Sands Point in conformance with all requirements of the Village. The Building Inspector will be notified prior to commencement of construction, and will have the opportunity to visit the site during the course of construction activity. The applicant, contractors, site construction supervisors and/or applicable responsible parties will cooperate with the Building Inspector to work to mitigate potential impacts to the maximum extent practicable. Additionally, pursuant to the NYSDEC General Stormwater Permit requirements, weekly inspections of the construction site and associated erosion and sediment controls will be required to be conducted and overseen by a licensed professional engineer and a record of all inspection reports maintained on site. Chapter 139-11 of the Village Code further requires inspections to be scheduled with the Village Stormwater Management Officer (SMO) at the following phases of construction and/or as otherwise required by the SMO:

- (a) Start of construction.
- (b) Installation of sediment and erosion control measures.
- (c) Completion of site clearing.
- (d) Completion of rough grading.
- (e) Completion of final grading.
- (f) Close of the construction season.
- (g) Completion of final landscaping.
- (h) Successful establishment of landscaping in public areas.

Construction impacts are short-term and temporary. Once the site development is complete, the impacts cease. Any use of the site for other than open space purposes would require some level of construction activity. The construction mitigation plan identified above will minimize potential adverse impacts to the maximum extent practicable.

Comments B-33, B-34, B-39, C-29, D-28 & D-34:

These comments request additional information in regard to the anticipated demolition process for the existing structures and septic systems, as well as the potential presence of noxious or hazardous materials (e.g., mold, asbestos, etc.) and any resulting special handling/removal processes, permits, etc. The comments inquire what agency will be responsible for oversight of any such hazardous material removal, if such materials are found.

Responses:

As discussed in Section 3.6.2, all existing structures are proposed to be demolished except for the existing structures/accessory structures on Lot 1, cabana and in-ground pool on Lot 3, and bulkhead along the site's northern and eastern periphery. Regulations of various agencies must be adhered to as part of the demolition process. These requirements are summarized as follows and are discussed in more detail below:

**TABLE 2-1
REGULATORY REQUIREMENTS
APPLICABLE TO SITE DEMOLITION**

Activity	Responsible Agency	Authority/Requirements
Oil Tank Removal	Nassau County Department of Health	Article X of the NC PHO; report/register tanks; contact NCDH at time of removal; remove product/sludge for proper disposal; remove tank; report to NYSDEC if spill is found; properly dispose of tank and contaminated soil under guidance of NCDH and/or NYSDEC.
Gas Tank Removal	Nassau County Fire Marshal	Fire Code; report/register tanks; contact NCFM at time of removal; remove product/sludge for proper disposal; remove tank; report to NYSDEC if spill is found; properly dispose of tank and contaminated soil under guidance of NCFM and/or NYSDEC.
Asbestos Removal	New York State Department of Labor	Industrial Code 56; perform asbestos demolition survey; contract with licensed asbestos handler; provide 10-day notification to NYSDEC; properly licensed handler to remove and dispose of asbestos prior to demolition.
Sanitary Systems	Nassau County Department of Health	Contact NCDH if systems have received any inappropriate discharges; sample sanitary systems at discretion of NCDH; backfill systems with clean material under property closure protocols of NCDH.
Private Wells	NYSDEC	Determine if private wells exist; obtain NYSDEC protocols for well abandonment; remove pump equipment of any wells that will not remain in service; grout well casing and perform abandonment in conformance with NYSDEC protocols.
Demolition	Village of Sands Point	Apply to Village for Demolition Permit; conform to applicable requirements of the Village including removal of Asbestos; obtain permit and perform demolition in conformance with permit.

The applicant is aware of the applicable requirements noted above and will comply with the proper protocols and procedures. Prior to demolition, tank product removal, cleaning and tank removal, spill reporting and cleanup (as necessary), drainage structure testing, remediation and closure will be completed as necessary, and all such activities will be conducted under the auspices of the appropriate regulatory agency for each aspect of the site decommissioning. The existing gasoline storage tank located on the site will be registered with the Nassau County Fire Marshal and properly decommissioned prior to the start of construction activities. Any other tanks identified will be removed under the auspices of the Nassau County Fire Marshal or NCDH. Additional requirements with respect to realty subdivision applications and individual on-site sewerage disposal systems prior to the start of construction have been specified by the NCDH letter dated January 2, 2006. A response to this letter has been provided to the NCDH and is included in Appendix F of the DEIS. Additionally, prior to demolition of the buildings, a full asbestos survey will be completed and any suspected asbestos containing materials within all of the buildings will be removed in accordance with the NYS Department of Labor Industrial Code, Part 56. Any wells will be properly decommissioned and abandoned in conformance with the requirements of the NYSDEC which include grouting of conduits to the aquifer. The demolition contractor will be licensed for handling of materials containing lead-based paint.

Mold is not expected, but if encountered, a management plan for proper handling of such materials will be devised by the demolition contractor in conformance with any applicable OSHA requirements. A demolition permit will be required from the Village of Sands Point, and the Building Inspector is well versed in the various agency requirements, and is responsible to ensure that a demolition permit is not issued unless and until applicable agency requirements are addressed.

Overall, demolition activities will take place over a limited period of time (2-3 weeks expected) in order to prepare the site for construction. A stabilized construction entrance (designed in accordance with NYSDEC best management practices) will be placed at the site entrance, to prevent soil on truck tires from being tracked onto local roadways. The construction process will begin with the installation of staked hay bales and silt fencing to establish clearing limits and minimize transport of eroded soils during the construction period. The existing structures will be demolished and the debris generated will be trucked off-site to an approved construction and demolition (C&D) landfill for disposal.

Comments B-28, C-28 & D-13:

These comments request information on the need for use of pilings for the proposed future residences and design details and potential impacts of same. Additionally, comments raise concern regarding whether such pilings would be driven into the drinking water aquifer and potential impacts from the same.

Responses:

The individual homes have not yet been designed. However, given the underlying soil conditions at the site, it is possible that some of the homes may have to be either partially or fully constructed with piles. Driving of piles is a temporary activity (approximately 1-2 weeks per dwelling for the type/size of residential dwelling anticipated) associated with construction. The locations of homes are well within the boundaries of the project site such that no pile installation will occur within 60 feet of a property line, or within 100 feet of an existing dwelling (only the one on the applicants property, Lot 1). Activity associated with driving piles into naturally consolidated sediments would not impact surrounding structures given the setbacks. This technology is commonly employed for residential construction in proximity to other structures, with no adverse effect. With respect to the depth of the piles and potential impact to the underlying drinking water aquifer, piles may be steel, concrete or treated wood of a type approved for use in the marine environment. Fresh groundwater beneath the site is relatively shallow, below which is saline water. The Ghyben-Herzberg principle predicts that for every one foot of freshwater elevation above sea level, there is 40 feet below, beyond which are saline waters. The aquifer discharges to surface water and is not used for drinking water purposes in this area. As a result of groundwater discharge flow toward surface water, and the use of inert materials for pile installation, no significant adverse impact is expected with respect to installation of piles at the site. Ultimately, a geotechnical analysis will be necessary to determine the bearing capacity of soils prior to design of the individual homes to gather information on whether piles will be necessary, as well as the depth to which such piles may need to be driven. Use of piles in this fashion is common practice for such construction, and there is no evidence that such activity would cause an adverse impact to the aquifer.

2.6 PRIOR FILLING ON-SITE

Comments B-13, D-2, D-15 & D-64:

These comments note that an estimated 172,300 CY of fill had occurred on the site's wetland between 1954 and 1966, and that an unknown amount of filling had occurred about 35 years ago as well. These impacts should be evaluated and remediated. A comment also states that the fill historically placed on the property should not be included in the lot area measurements for the subdivision.

Responses:

Section 2.1 of the DEIS provides detailed information on the past filling activities on the site, sampling of this material and guidance from the NYSDEC Solid Waste Division regarding necessary mitigation. The fill activities occurred prior to the NYSDEC Part 360 regulations that were implemented in September 1973 and prior to the establishment of NYSDEC Part 661 regulating tidal wetlands and adjacent areas, which became effective in 1977. The activities occurred prior the establishment of the applicable regulations for filling in wetlands; therefore the activities are "grandfathered." As discussed above in Section 2.1.1, the only elements of the project that should be excluded from the overall yield are the area of the lots below the high-water mark and the area included in any street, right of way, lane or alley. The yield demonstrated on the Preliminary Map included in the DEIS properly excludes both the area below the mean high-water mark and the area of the right of way that provides access to the property.

Comments C-25, D-26, D-32 & D-71:

These comments note the recent removal of unauthorized fill that had been placed on the site by the applicant, Village monitoring of this removal process, the propriety of civil or criminal penalties, and the implications of this unauthorized activity with respect to the current application.

Responses:

Section 2.1.1 of the DEIS (beginning on page 2-4 of the DEIS) provides details of the fill placed on the property in 2007 and resultant violation issued by the NYSDEC. The violation was resolved under an Order on Consent (Order) issued by the NYSDEC on October 24, 2007, requiring payment of a fine and the preparation of a mitigation plan for the proper removal of this material. The NYSDEC approved Mitigation Plan and associated correspondence with NYSDEC was provided in Appendix K of the DEIS. As per the Order, removal of the fill material was conducted between November 16 and December 3, 2007 under the supervision of the NYSDEC Division of Solid Waste, and the area was graded to the original grade, as per the NYSDEC approved Mitigation Plan. The Village of Sands Point requested NYSDEC to investigate the fill placed on the property and were kept apprised of the violation and fill removal activities required by the NYSDEC. The NYSDEC staff visited the property in February 2008 and provided an inspection form which indicates the fill removal has been completed, and authorizes the seeding of the area (included in **Appendix E-4**). The violation for the fill has

been resolved and the NYSDEC reactivated its review of the pending subdivision application (deemed complete in July 2008, see **Appendix E-4**).

Construction associated with the proposed single family dwellings will be coordinated with the Village of Sands Point in conformance with all requirements of the Village. The Building Inspector/Stormwater Management Officer will be notified prior to commencement of construction, and will monitor the site during the course of construction activity as discussed above in **Section 2.5**. Additionally, the applicant will be required to obtain permit coverage under the NYSDEC General Permit for Stormwater Discharges from Construction Activity (GP-0-08-001), which requires weekly inspections of site construction activities, overseen by a licensed professional engineer and a record of all inspection reports must be maintained on-site.

2.7 TRAFFIC RELATED COMMENTS

Comment C-13:

Discuss how additional traffic generated by the proposed residential development may result in the average daily traffic exceeding the 400 vehicles per day threshold for “very low-volume local roads” and how other aspects of the traffic analysis may be affected.

Response:

The additional traffic that would be generated by the five homes proposed for the site would not be significant in volume. The proposed five homes will generate an average daily traffic volume of 66 trips and the two apartments and caretaker residence currently occupying the site generates an average daily traffic of 28 trips (based on TE trip generation rates, see Appendix G of the DEIS). Therefore the construction of the five homes on the site will result in a net increase of 38 trips per day on Hoffstot Lane. According to the data collected by Nelson & Pope on Hoffstot Lane in May 2006, the average weekday daily traffic is approximately 367 vehicles per day. With the construction of the five homes, the average daily traffic will increase from 367 trips to 405 trips per day. The projected average daily traffic is slightly higher than the 400 vehicle per day threshold cited in the AASHTO reference for a very-low-volume roadway. It should be noted that the volume count was taken at the southern end of Hoffstot Lane, nearest to Middle Neck Road. Volumes at this point would be the highest levels experienced along Hoffstot Lane, since it represents the location where the highest concentration of traffic occurs. Counts taken nearer to the project site would be substantially lower. More importantly, the results of the Two-Lane Highway analyses conducted for Hoffstot Lane as shown in the December 2006 Traffic Impact Study indicated that, the proposed project will not change the current levels of service on the roadway. It is therefore the professional opinion of Nelson & Pope that this slight increase in daily traffic (additional 5 trips per day) is insignificant and will not affect the very-low-volume status of the local roads.

Comment C-14:

Present and explain the observations and data of the actual operating speeds along Hoffstot Lane and explain how they relate to the 30 mph design speed.

Response: The Traffic Engineers, Nelson & Pope, were unable to locate the data presented in the Traffic Impact Study, therefore new data was collected. The new speed data was recorded for each direction of travel on a weekday during the afternoon using a radar device. Speeds were recorded on two sections of Hoffstot Lane: 1) between Middle Neck Road and Sloanes Beach Road, and 2) approximately 450' south of Seacoast Lane. The average observed speed on the southern section of Hoffstot Lane was 27-28 mph NB and 24-25 mph SB. The average observed speed on the northern section of Hoffstot Lane (near Seacoast Lane) was 19-20 mph NB and 21-22 mph SB. The field speed observation sheets are contained in **Appendix E-6**. Upon review of the observed speed data, it can be seen that the average roadway speeds are below the posted 30 mph design speed. Furthermore, on the winding sections of Hoffstot Lane, which are located closer to the site and further from Middle Neck Road, the average travel speed decreases.

Comment C-15:

Verify that the fire truck dimensions used in the AutoTurn analysis are representative of the largest vehicle which may be used by the Port Washington Fire Department.

Response:

The applicant's engineer (N&P) contacted the Port Washington Fire Department on June 26, 2008, requesting the vehicle dimensions for the largest vehicle that would access the subject project site. A subsequent letter dated July 21, 2008 provides a truck turning analysis for the subject property using the truck dimensions provided by the Port Washington Fire Department. The AutoTurn plan, included in **Appendix E-1**, demonstrates that the turning radii are adequate for the Port Washington Fire Department's largest responding vehicle to access the site. The Port Washington Fire Department provided a response letter dated October 2, 2008, which indicates that the Fire Department found the access for emergency and fire vehicles to be sufficient (see **Appendix E-1**).

Comment C-16:

Provide an explanation of why the traffic accident rates will not increase.

Response:

The statement referred to above was removed from the Traffic Impact Study included in the DEIS. The revised TIS (included as Appendix G of the DEIS) indicated the following:

Accident rates were computed for the two roadway segments that experienced accidents during the 3-years of accident data. These rates were calculated and compared to State-wide average rates for similar roadways and intersections, and are included in Appendix A. Both segments showed rates higher than the statewide rate. However, accident rates calculated based on a single accident over a three year period are not an indication of a high accident location.

Comment C-17:

Prepare a diagram, indicating graphically to scale, where vehicles will park for non-regular conditions, such as parties.

Response:

Like the other residential lots of two acres surrounding the subject site and throughout the Village, it could be expected that in such situations, hosts typically contact neighbors and/or the Village to provide for either on street parking, shuttling from nearby parking lots, or similar alternative parking means for these types of special events or situations.

Comment C-19:

Discuss the need for pedestrian amenities, such as sidewalks or warning/regulatory signs.

Response:

The proposed development is not expected to generate the levels of pedestrian activity that would establish a need for pedestrian amenities. Use of roadways for pedestrian access is not unusual in areas with very low volumes and has been the established practice throughout the surrounding neighborhood streets. The accident data does not indicate that a safety problem exists.

Comment D-25:

With respect to the discussion on transportation and community factors, the estimate at morning rush hour of only three additional automobile units coming into the area as a result of the development, when completed, under the circumstances is hardly believable.

Response:

The Estimates of the traffic generated by the proposed development were calculated based on the statistical data provided for Land Use Code (LUC) 210, Single Family Detached Housing, in the reference, *Trip Generation, 7th Edition*, prepared by the Institute of Transportation Engineers (ITE) in 2003. The proposed project consists of construction of (5) single family homes contained in a six (6) lot subdivision, with one existing single family home to remain. The proposed project will generate traffic for five (5) additional single family homes resulting in 13 trips during the morning peak hour (3 entering; 10 exiting), 8 trips during the evening peak hour (5 entering; 3 exiting), and 15 trips during the Saturday peak hour (8 entering, 7 exiting).

2.8 HISTORIC & VISUAL

2.8.1 Historic Nature of Existing Residence & Preservation of the Structures

Comments B-30, B-31, B-32, C-11, D-3a, D-3b, D-69 & D-70:

These comments refer to the existing large residence on the site, its importance architecturally and historically and question if the house can be retained or designated as a landmark by the Village of Sands Point Landmarks Commission; the OPRHP resolution of impacts and identified mitigation, and one comment suggests that the applicant purchased the site with the intention of maintaining the structure and questions the economic hardship associated with keeping the main structure.

Responses:

Pursuant to Chapter 100 of the Village Code, the Village of Sands Point Historic Landmarks Preservation Commission is responsible for reviewing applications for designation of an historic site or district and advising the Village Boards on land use applications and matters related to historic landmarks and designated areas. The Historic Landmarks Preservation Commission prepared a building structure inventory form for submission to the NYS Office of Parks and Historic Preservation (OPRHP) in 1990 and the property was found by OPRHP to be eligible for listing on the State and National Registers of Historic Places in the early 1990s; however there were a number of inaccuracies regarding the historic record pertaining to the property. A Historic Documentation was prepared for the property (which confirmed that the property was owned by Herbert Swope but is not the “Great Gatsby” house) and is included in Appendix H of the DEIS. Section 3.5 of the DEIS also provides detailed information documenting the conditions of the structures on the site, including documentation on the feasibility and estimated costs associated with maintaining the structure. The Historic Landmarks Preservation Commission and OPRHP found that the architectural details and features of the house embodied distinctive characteristics of type, period or method of construction, which warranted the eligibility for listing on the State and National Registers of Historic Places. The decision to restore/maintain a structure that is eligible for listing is voluntary by an owner.

The applicant explored the feasibility of reuse of the structures, and found that overall, renovation and retention of the existing house is not considered a viable or desirable option for the site in connection with private development consistent with zoning. To mitigate the adverse impacts associated with demolition of the existing structures, the applicant offered to prepare Historic American Buildings Survey (HABS) level photographic documentation of the three structures on the property. The HABS photos, along with the historic documentation report previously provided to OPRHP would be submitted to the Port Washington Library, Society for the Preservation of Long Island Antiquities and OPRHP in the appropriate archival format. OPRHP has reviewed the historic documentation and information regarding the potential for reuse of the property and made the following findings in a letter dated April 7, 2008 (included as **Appendix C-2**):

An evaluation of the property in the 1990’s found that “Land’s End” appeared to meet the criteria for inclusion in the State and National Registers of Historic Places. The proposed

demolition of this property will constitute an adverse impact on historic resources under Sec. 14.09, however, based on the condition report, cost estimates to return the buildings on the property to serviceable condition and on prior efforts to market this property intact, the OPRHP agrees that rehabilitation of the former estate is neither feasible or prudent. It is appropriate at this time for DEC and OPRHP and the applicant to enter into a Letter of Resolution setting forth the nature of the project and its impacts, the reasons leading to our agreement to proceed and the means by which the adverse impact is to be mitigated.

This letter goes on to state that the proposed HABS archival documentation of the estate would be adequate mitigation for the proposed project. The applicant, NYSDEC and OPRHP have signed a Letter of Resolution documenting the archival documentation as agreed upon mitigation, which is included in **Appendix E-5**.

2.8.2 Visual Impacts

Comment C-26:

“With respect to the visual analysis, there are inconsistencies with public vantage point ‘C’ (i.e., Figure 3-3C of the DEIS). The description on pages S-19 and 3-8 of the DEIS state the view as looking northwest, and the caption for Figure 3-3C specifies the view as looking north. This analysis should be clarified.”

Response:

Figure 3-3C in the DEIS should be labeled looking northwest. The text (pages S-19 and 3-8) of the DEIS and Figure 3-3 correctly describes and shows the location and direction of the photograph shown in public vantage point “C”.

2.9 ALTERNATIVES

Comments C-32:

The DEIS does not provide sufficient information to properly compare the impacts associated with the various alternatives. For example, the discussion of Alternative 3 in the DEIS states that balancing cut/fill results in more grading, which would eliminate buffer area. If dwelling and roads are farther from the wetlands/beach area, it is difficult to understand why grading and/or clearing would occur in the buffer area. It seems that the buffer area could be designed to be increased in width as part of this alternative.

Response:

For each of Alternatives 3-7, two grading scenarios were considered: 1) a grading program that “balances” cut and fill to reduce the temporary impact of construction activities related to soil removal (i.e., truck trips) and 2) a grading program that reduces cut on the western portion of the property, allowing for greater buffers, but requires the import of fill from off site sources. In order to balance cut and fill on the site, the fill material necessary to raise the site to meet FEMA first floor requirements and create adequate road grades must come from on-site sources. The source for this material is from the areas of higher elevation on the western portion of the site. This is a necessary aspect of the project if a balanced grading program is pursued, given the topography which slopes from west to east, the fixed road location and grade in the central and lower elevations of the site needed for access. If a grading program that seeks to maximize buffers and reduce disturbance of natural vegetation is desired, fill must be imported from off-site sources. The basic design and layout of the project is somewhat fixed between the two choices of road access location, the need for a road turnaround, the need for lot sizes and adequate building envelopes for home sites, the required minimum FEMA first floor elevations and the need for a drainage feature adequate for an 8-inch storm event. As a result, the buffers may be expanded under reduced density alternatives, but the extent is still limited due to the basic site development parameters listed above.

Table 5-1 of the DEIS reports a range of disturbance and buffers that could result, depending on the parameters applied to the future development of the site. For example, the requirements of Village Code and NYSDEC regulations of tidal wetlands require that the beach areas and disturbance within 100 feet of the regulated tidal wetlands boundary (up to the 10 foot contour, see Section 2.2.1 of the DEIS) are protected from clearing. Reducing the number of lots translates to fewer, larger lots; but does not prohibit a lot owner from clearing their property (whether two acres or five acres) for improvements, as long as the tidal wetland adjacent areas are retained as required. Therefore, the amount of disturbance permitted, regardless of the number of lots, does not change, and this is reported in Table 5-1 as the maximum permitted clearing (considering the worst case disturbance scenario). Similarly, the Village Code permits up to 20% allowable lot coverage, so a reduced density alternative does not significantly change the amount of impervious surfaces permitted as the lot sizes are increased (i.e., a 2 acre lot permits ±17,424 SF of impervious coverage and a 3 acre lot would allow 26,136 SF of impervious lot coverage). The amount of fill necessary for reduced density alternatives would also vary depending on the sizes of the houses or additional accessory improvements on the lots. If a land owner were to maximize this allowable building coverage under Village Code, the amount of disturbance (and cut or fill depending on the existing lot grades) would increase.

Alternatively, Table 5-1 also evaluates maximizing buffer areas on the lots should a grading program allowing the import of fill be considered, and lot building coverages and disturbance minimized (buffers ranging from 1.31 acres for a six lot subdivision to 3.51 acres for a four lot subdivision are reported in Table 5-1). Again, fill is necessary under all the alternatives to meet FEMA base flood elevations and create adequate road elevations; however the amount of disturbance on the site can be reduced by importing this material from off-site locations rather than extending excavations into the western higher elevations of the property.

Comments D-50 and D-56:

These comments indicate support for a reduced density alternative in order to reduce potential impacts from the proposed subdivision.

Response:

The project site is 15.54 acres in size and currently contains an existing home, one large dwelling in the extreme north part of the site nearest both Long Island Sound and East Creek, a caretaker's house and a carriage house with 2 apartments. The majority of the site is used as the grounds for this dwelling, and as a result, the site has been subject to development and human activity. The proposed project seeks to conform with zoning by keeping one developed lot and creating five (5) homesites (noting that the mansion, caretaker's house and two apartments exist and are proposed to be removed and lots reconfigured), resulting in a marginal net increase in density as compared to current conditions. It is noted that the property currently consists of four tax lots. The site is zoned Residential A, which allows homes on lots of two acres in size. The applicant has stated a belief that retaining one existing and creating five homes (with a small marginal net increase above existing conditions), on a 15.54 acre site is a reasonable density in consideration of zoning, land values, and the comprehensively designed development program that provides setbacks and buffers that are more conservative than required by regulations. An example involves required sanitary and house setbacks of 100 feet and 75 feet respectively, as required by NYSDEC under 6NYCRR Part 661. The proposed project provides a minimum sanitary setback in excess of 185 feet, and an impervious setback of 100 feet from the regulated wetlands boundary. This combined with fixed buffer areas provides environmental safeguards in connection with the proposed project. With respect to water use under a reduced density alternative, the Sands Point Water Department has not provided comment on whether or not the water main extension/looping required under the proposed action would also be required if a reduction in density was required. The Water Department has only indicated that they have concerns regarding water pressure in the area given it is the hydraulic dead end of the distribution system and that single family lots have significant irrigation needs. The Water Department would need to evaluate the adequacy of the existing water main for the projected water demand of the reduced density project to determine if upgrades would be necessary.

Comments D-45, D-88:

These comments request that additional alternatives be considered/studied, including: development per the subdivision map but without the emergency access roadway, a four-lot yield, alternative access not requiring use of the easement over Lot 10 and an alternative having a larger buffer zone and fewer lots.

Responses:

Section 5 of the DEIS evaluates a number of different reduced density alternatives (including a four lot yield), as well as a plan that utilizes Seacoast Lane rather than the existing site access (using the easement over Lot 10). With respect to an alternative removing the emergency access, the lot configuration would not change if the emergency access were removed. The amount of grading in the western portion of the property could be reduced if the emergency access were removed; however, grading of this hillside will be required, to a lesser extent, for development of Lot 6. Should the Village Planning Board determine that the emergency access is not necessary; the applicant would modify the subdivision plan accordingly during the final subdivision review process.

SECTION 3.0

REFERENCES

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