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DRAFT ENVIRONMENTAL IMPACT STATEMENT

FOR

Kiruv Estates

Subdivision Application

Volume 1 of 2

Main Text, Appendix A and Plans

PREPARED BY:

NELSON, POPE & VOORHIS, LLC
572 WALT WHITMAN ROAD
MELVILLE, NEW YORK 11747

PREPARED FOR:

KIRUV CAPITAL CORP.
ONE OLD COUNTRY ROAD
CARLE PLACE, NY 11514

JUNE 2006

DRAFT
ENVIRONMENTAL IMPACT STATEMENT

KIRUV ESTATES

Subdivision Application

Hamlet of Huntington, Town of Huntington
Suffolk County, New York

Volume 1 of 2
Main Text, Appendix A and Plans

NP&V Project No. 97110

June 2006

HUNTINGTON TOWN PLANNING BOARD

MEETING OF JUNE 28, 2006

The following resolution was offered by **Steven Schnittman**

and seconded by **Lynn Healy**

WHEREAS, Kiruv Capital Corp, One Old Country Road, Carle Place, New York, 11514, owner of fee title to land has submitted a subdivision application for the **KIRUV ESTATES** property, prepared by Nelson & Pope, Engineers & Surveyors, located on the southwest corner of Park Avenue and Woodhull Road in Huntington, designated as parcels 0400-073-01-038, 041.1 & 042 and 0400-097-02-107.000 on the Suffolk County Tax Map, and

WHEREAS, said preliminary application was received on May 21, 2004, for the modified subdivision of a 7.07-acre site within a Town Historic District [Old Huntington Green] in order to construct four groups of attached units (three of the groups would have two units and one group would have three units for a total of 9 units), a private roadway and two stormwater impoundment/drainage areas and three (3) existing structures, two (2) of which are designated historic would remain (Preliminary Map dated revised, 9/1/04), and

WHEREAS, the Planning Board has been established as the lead agency pursuant to SEQRA § 617.6 for the action, and

WHEREAS, the action was classified **TYPE I** pursuant to 6 NYCRR PART 617 of the State Environmental Quality Review, Section 617.4(b)(9) and based on the information provided with the application and in the Full Environmental Assessment Form Parts I, II, and III, was issued a **POSITIVE DECLARATION** by the Planning Board in a November 3, 2004 resolution, and

WHEREAS, the applicant has submitted a revised draft DEIS (dated June 2006), and upon review was determined to be satisfactory with regard to its scope, content and adequacy by the Staff of the Planning and Environment Department for the purpose of commencing the State Environmental Quality Review Act (SEQRA) hearing, now therefore be it

RESOLVED, that the Planning Board of the Town of Huntington determines that the Draft Environmental Impact Statement for Kiruv Estates (dated June 2006, and received on June 14, 2006) is **ACCEPTABLE FOR COMMENCING PUBLIC REVIEW**, and directs that a Notice of Completion of the DEIS and Notice of Hearing and copies of the Draft Environmental Impact Statement be filed with the appropriate agencies and posted in the on-line library on the Town of Huntington website by the Department of Planning and Environment in accordance with SEQRA 6 NYCRR 617.12, and be it further

RESOLVED, that the Planning Board hereby schedules the SEQRA hearing which is the same date as the public hearing on the preliminary application for July 26, 2006 at 7:30 p.m. at Huntington Town Hall, 100 Main Street, Huntington, New York and establishes a public comment period to expire August 7, 2006.

VOTE: 5 AYES: 5 NOES: 0 ABSENT: 1

P. Mandelik, Chairman	Not Voting
M. Sommer	Aye
L.A. Santoianni	Aye
A. Rosen	Aye
S. Schnittman	Aye
J. Devine	Absent
L. Healy	Aye

The resolution was thereupon declared to be duly adopted.

The ENB SEQRA Notice Publication Form - *Please check all that apply.*
Date: June 29, 2006
Deadline: Notices must be received by 6 p.m. Wednesday to appear in the following Wednesday's ENB.

____ Negative Declaration - Type I

____ Conditioned Negative Declaration

____ Draft Negative Declaration

____ Positive Declaration
____ with Public Scoping Session

__√__ Draft EIS
__√__ with Public Hearing
Generic
____ Supplemental

____ Final EIS
____ Generic
____ Supplemental

DEC Region # __1__ County: Suffolk Lead Agency: Town of Huntington Planning Board

Project Title: Kiruv Estates [Subdivision]

Brief Project Description: The proposed action involves the subdivision of a 7.07-acre site, within a Town Historic District [Old Huntington Green], zoned R-7 (minimum area 7,500 square feet residential) for the subsequent construction of new single-family homes. The site contains NYSDEC-designated freshwater wetlands and is at the confluence of two (2) watershed systems. The applicant's preference (DEIS dated June 2006) is for a cluster configuration consisting of four groups of attached units (three of the groups would have two units and one group would have three units for a total of 9 new units) and the retention of three (3) existing structures, two (2) of which are designated historic. Site access is proposed via a private cul-de-sac from Woodhull Road. The applicant is petitioning for inclusion in the Huntington Sewer District to allow all wastewater generated by the project to be conveyed off-site to the Huntington Sewage Treatment Plant. The project includes 2.98 acres of conservation area to encompass the site's freshwater wetlands, a 0.97-acre park dedication and an extension of the Town heritage trail. Public water is to be provided by the Suffolk County Water Authority.

Project Location (include street address/municipality): The project site is located on the southwest corner of Park Avenue (County Road 35A) and Woodhull Road in the Town of Huntington, Suffolk County, New York designated as parcels 0400-073-01-038, 041.1 & 042 and 0400-097-02-107.000 on the Suffolk County Tax Map.

Contact Person: Robert Riekert, Deputy Director, or Scott Robin, Senior Environmental Analyst, Department of Planning and Environment

Address: Huntington Town Hall, Town of Huntington Planning and Environment Department, 100 Main Street, Huntington, New York 11743

A Copy of the DEIS is posted on the Town of Huntington website in the On-line Library (Planning and Environment Department section under Kiruv Estates):

http://town.huntington.ny.us/permit_forms.cfm

Phone: (631) 351-3196 Fax: (631) 351-3257 E-Mail: PLANNING@town.huntington.ny.us

---

For ~~Draft Negative Declaration~~/Draft EIS: Public Comment Period ends: 08/07/06

For Public Hearing/~~Scoping Session~~: Date: 07/26/06 Time: 7:30 pm

Location: Huntington Town Hall,100 Main Street, Huntington, New York

For Conditioned Negative Declaration: In summary, conditions include:

E-mailed 6/29/06

SEQR

617.21
Appendix G
State Environmental Quality Review

Notice of Completion of Draft EIS and Notice of SEQR Hearing

Lead Agency: Town of Huntington Planning Board Project Number _____

Address: 100 Main Street, Huntington, NY 11743 Date: June 28, 2006

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

A Draft Environmental Impact Statement has been completed and accepted for the proposed action described below. Comments on the Draft EIS are requested and will be accepted by the contact person until **4:30pm, August 7, 2006.** A public hearing on the Draft EIS will be held on **July 26, 2006 at 7:30 PM at the Town of Huntington Town Board Room, 100 Main Street, Huntington, New York 11743.**

Name of Action: **Kiruv Estates (Subdivision Application)**

Description of Action: The action involves the subdivision of a 7.07-acre site, within a Town Historic District [Old Huntington Green], zoned R-7 (minimum area 7,500 square feet residential) for the subsequent construction of new single-family homes. The site contains NYSDEC-designated freshwater wetlands and is at the confluence of two (2) watershed systems. The applicant's preference (DEIS dated June 2006) is for a cluster configuration consisting of four groups of attached units (three of the groups would have two units and one group would have three units for a total of 9 new units) and the retention of three (3) existing structures, two (2) of which are designated historic. Site access is proposed via a private cul-de-sac from Woodhull Road. The applicant is petitioning for inclusion in the Huntington Sewer District to allow all wastewater generated by the project to be conveyed off-site to the Huntington Sewage Treatment Plant. The project includes 2.98 acres of conservation area to encompass the site's freshwater wetlands, a 0.97-acre park dedication and an extension of the Town heritage trail.

Location: (Include street address and the name of the municipality/county.)
The subject parcel is located on the southwest corner of Park Avenue (County Road 35A) and Woodhull Road in the Town of Huntington, Suffolk County, New York designated as parcels 0400-073-01-038, 041.1 & 042 and 0400-097-02-107.000 on the Suffolk County Tax Map.

Potential Environmental Impacts:
Please refer to the EAF Parts I, II & III and the associated November 3, 2004 Planning Board resolution.

For further information:

Contact Person: Robert Riekert, Deputy Director or Scott Robin, Senior Environmental Analyst, Department of Planning and Environment

Address: 100 Main Street, Huntington, NY 11743

Telephone Number: 631/351-3196 - FAX # 631/351-3257

A Copy of this Notice and the Draft EIS Sent to:

Commissioner, Department of Environmental Conservation, 50 Wolf Road, Albany, New York 12233-0001

Appropriate Regional Office of the Department of Environmental Conservation -- New York State Department of Environmental Conservation, Region I, SUNY, Building #40, Stony Brook, New York 11790-2356, Division of Environmental Permits

Office of the Chief Executive Officer of the political subdivision in which the action will be principally located -- *Supervisor Frank Petrone*

Applicant/Owner

√ Kiruv Capital Corp., One Old Country Road, Carle Place, New York 11514

All other involved / interested agencies (if any):

√ New York State Department of Environmental Conservation, Region I, SUNY, Building #40, Stony Brook, New York 11790-2356, Bureau of Habitat Attn: Robert F. Marsh

√ New York State Office of Parks, Recreation and Historic Preservation, Historic Preservation Field Services Bureau, Peebles Island, PO Box 189, Waterford, New York 12188-0189 Attn: Sloane Bullough, Historic Sites Restoration Coordinator

√ Town of Huntington Planning Board*

√ Town of Huntington, Office of the Town Clerk, Attn: Joanne Raia, Town Clerk

√ Suffolk County Planning Department, P.O. Box 6100, 100 Veterans Highway, Hauppauge, New York 11788, Attn: Thomas Isles, AICP, Director

√ Suffolk County Department of Health Services, Wastewater Management Division, County Center, Riverhead, New York 11901, Attn: Walter J. Hilbert, PE, Chief

√ Suffolk County Department of Health Services, Office of Ecology, County Center, Riverhead, NY 11901, Attn: Kim Shaw, Bureau Supervisor

√ Suffolk County Department of Public Works, 335 Yaphank Avenue, Yaphank, New York 11980 Attn: William Hillman, P.E., Chief Engineer

√ Town of Huntington, Department of Waste Management, Attn: Phillip C. Nolan, Director

√ Town of Huntington Highway Department, Attn: William Naughton, Superintendent,

√ Town of Huntington Department of Engineering Services, Attn: Patricia A. DelCol, Director
√ Town of Huntington, Town Assessor, Attention: Bryan Monaghan
√ Suffolk County Water Authority, Administrative Services, 4060 Sunrise Highway, Oakdale, New York 11769-0901 Attn: Steven T. Burns, P.E. Director of Distribution
√ Huntington Union Free School District, 50 Tower Street, Huntington Station, New York 11746 Attention: David Grackin, Assistant Superintendent of Finance and Management Services.
√ Long Island Power Authority, 175 East Old Country Road, Hicksville, NY 11801, Attn: Director of Government Relations
√ Town of Huntington Department of Maritime Services
√ Town of Huntington Conservation Board
√ Town of Huntington Historic Preservation Commission
√ Town of Huntington Fire Prevention Bureau
√ Huntington Library, 338 Main Street, Huntington, NY 11743 Attn: Reference Librarian

Any person who has requested a copy of the Draft EIS
√ Residents for the Preservation of Hilaire Woods, C/O Robert Ripp, 670 Park Avenue, Huntington, New York 11743

* = Copy of DEIS already provided

A copy of the Draft EIS is posted on the Town of Huntington website in the On-line library (Planning and Environment Department section under Kiruv Estates:

http://town.huntington.ny.us/

Draft Environmental Impact Statement

KIRUV ESTATES

Subdivision Application

Hamlet of Huntington, Town of Huntington
Suffolk County, New York

Prepared for: Kiruv Capital Corp.
One Old Country Road
Carle Place, NY 11514
Contact: Jay Viders
(516) 742-1666

Lead Agency: Huntington Town Planning Board
100 Main Street
Huntington, New York 11747
Contact: Anthony J. Aloisio, Director
Dept. of Planning and Environment
(631) 351-3196

Prepared by:

Planning & Environmental Analysis:
Nelson, Pope & Voorhis, LLC
572 Walt Whitman Road
Melville, NY 11747
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(631) 427-5665

Traffic:
Nelson and Pope, LLP
572 Walt Whitman Road
Melville, New York 11743
Contact: Kerri Collins, PE
(631) 427-5665

Engineering:
Nelson and Pope, LLP
572 Walt Whitman Road
Melville, New York 11743
Contact: Tom Dixon, PE
(631) 427-5665

Date of Acceptance by Lead Agency: _____

Comments to the Lead Agency are to be submitted by: _____

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SUMMARY

SUMMARY

Introduction

This document is a Draft Environmental Impact Statement (DEIS) for the proposed Kiruv Estates residential project, prepared in conformance with the New York State Environmental Quality Review Act (SEQRA), as administered by the Planning Board of the Town of Huntington (hereafter, the "Board"). The proposed project, known as "Kiruv Estates", is for the subdivision of a 7.07-acre site, to enable its development into a 10-unit residential cluster project, and involves an amended subdivision application for a prior version of the Kiruv Estates project. The site, formerly part of the overall Swezey Dairy Farm (aka, the "Park Avenue Dairy Site"), is presently developed with two unoccupied, historic residential structures presently in a state of disrepair (the Skidmore house to the north and Moses Rolph House to the south), an occupied rental residence (the former main farm house, at 471 Woodhull Road) and an occupied rental cottage (formerly the milk house), along with a cow barn and silo (in a state of collapse). The proposed project would demolish the rental cottage and historic barn and silo, leave the former main house as Unit #3 in the cluster map and add nine new residences. Simultaneously, the two existing unoccupied, historic structures would be deeded to the Town of Huntington along with the 0.97 acres on which they are located. The subject property is within the Town of Huntington's Old Town Green Historic District, and is listed on the National Register of Historic Places. In addition, there are NYSDEC-designated freshwater wetlands on the eastern portion of the site.

The public need for the project is related to the benefits to be derived if the project is implemented. The applicant has designed the proposed project to achieve the highest and best use of the site based on its current R-7 residential zoning, adjacent and nearby uses and densities, and the site's development considerations (e.g., wetlands, drainage, steep slopes, historic resources, etc.). The project site lies within a portion of the Town that has long been and remains an area with a distinctly rural and historic character. The proposed project will provide a permanent use of an underutilized property in conformance with its R-7 zoning, with conforming buffers from wetlands resources, provision of significant historic resources to the Town, and will address a significant local drainage problem.

The project includes two substantial land protection mechanisms noted, as follows:

- 2.98 acres of conservation area to be placed under a Conservation Easement for the freshwater wetlands and associated 100-foot (70 feet in areas previously disturbed) setback area, and
- 0.97 acres on which are located the two historic residences fronting Woodhull Road designated in the National Register of Historic Places and Town Historic District, which includes land for an extension of the Town heritage trail. Extended discussions during early to mid-2004 were conducted between the Town and applicant in which it was agreed that, upon approval of the Subdivision Map, these two houses and property would be deeded to the Town at a mutually-agreeable price. The 0.97 acres of land on which the two houses are situated and area surrounding the heritage trail would also be deeded to the Town.

The development of the property will increase the revenues generated to taxing jurisdictions, though it will result in incremental increases in demand for and cost of services to be utilized; this will be discussed in greater detail in this DEIS.

The local community will benefit from the proposed project in the following ways:

- The project will provide high-quality residential housing in a desirable area of the Town of Huntington where similar high-quality housing already exists.
- The project will utilize the remaining development potential of the site, thereby eliminating any possibility of substantive future changes to the site.
- More than half of the property (3.95 acres out of 7.07 acres) will be preserved; the existing wetlands and buffering areas will be preserved as conservation area under a Conservation Easement and the two historic structures and the heritage trail will be permanently preserved and protected by deed to the Town.
- The Town of Huntington will benefit from the deeding of the two significant historic structures, to be available for Town rehabilitation and use in association with surrounding land and the Town heritage trail.
- The project will generate a number of temporary construction jobs.

Description of the Proposed Project

Location and Site Conditions

The subject property is located at the southeast corner of Park Avenue (CR 35) and Woodhull Road in the hamlet of Huntington, Town of Huntington. The property lies along the south side of Park Avenue and the northeast side of Woodhull Road, giving the site frontage on two roadways. The property has approximately 861 feet of continuous frontage along Woodhull Road and approximately 770 feet of discontinuous frontage along Park Avenue. The project site is identified as Suffolk County Tax Map District 400, Section 73, Block 1, Lots 38, 41.1 & 42 and Section 97, Block 2, Lot 107. The subject property is the site of the former Swezey Dairy Farm.

The subject site is within or subject to restrictions of the following service and planning districts:

- Huntington Union Free School District (UFSD)
- Huntington Fire District
- Suffolk County Police Department (SCPD)
- Huntington Municipal Refuse District
- Suffolk County Water Authority (SCWA)
- Long Island Power Authority (LIPA/) KeySpan (electricity & natural gas)
- R-7 (Residential) Zone
- Town Steep Slope Ordinance
- Old Town Green Historic District
- National Register of Historic Places
- NYSDEC-Designated Freshwater Wetland

Overall Site Layout

The project site is irregularly shaped, with Woodhull Road running north-south along the western property boundary and Park Avenue running north-south along the eastern property boundary. Site access is proposed via a single cul-de-sac access from Woodhull Road and all required parking pursuant to the Town Code will be provided with off-street parking in the form of driveways and garages for the proposed residences. The site's single access roadway will be located at approximately the mid-point of the western property boundary. A small land dedication at the intersection of Park Avenue and Woodhull Road will be provided, to enable an increase in the radius of this intersection. All of the proposed structures and the single-family residence that is to remain will be accessible from the single access point. In order to reduce the site elevation and to provide suitable access road grades and building sites, a two-tiered retaining wall is proposed around the cul-de-sac to the building that houses Units #9 and #10, and a single-tiered retaining wall extends northwards from Unit # 4 for a distance of about 130 feet.

The proposed use does not require a zone change of the existing R-7 zoning; the proposed project involves a Subdivision application for the construction of nine (9) attached units. A Yield Map was prepared by the Applicant in the summer of 2004 and was revised in August of 2005; it was reviewed by the NYSDEC (due to the presence of NYS-designated wetlands), and found to be feasible. Subsequently, in response to Town comments on the lot encompassing the cottage, the Yield Map was revised (in December 2005) to result in a 10-lot plan which conforms to Town requirements for sites in the R-7 district where steep slopes are present. As this revision is not in proximity to the wetlands boundary and would not change the clearing envelope or site design, it is not anticipated that the prior NYSDEC review would be compromised by the current Yield Map. The Yield Map shows 10 lots, of which 9 are new and one that would accommodate the existing dwelling to be retained. New York State Town Law, Section 281 empowers the Town Planning Board to allow a residential project to be "clustered" on lots of less than 7,500 SF in the R-7 district, in order to provide, among other goals, the preservation and/or protection of significant features or characteristics of a site. This is achieved by permanently prohibiting development in the area intended to be protected; the landowner, however, is allowed to develop the same number of lots as would be possible absent this preservation, but on smaller lots clustered in such a way as to avoid impact to the protection areas of the site. In this way, both the Town (representing the public) and the landowner achieve their goals: the valuable asset is permanently preserved and protected, and the landowner retains his ability to develop the number of lots determined from a feasible yield plan which conforms to zoning. The Yield Map was prepared in conformance with the Town's Steep Slope Ordinance (Article X, Sections 198-60 through 64); the map depicts the three allowable lots within the portion of the site where slopes in excess of 25% are located. The portion of the site which is not subject to this ordinance would provide seven additional lots. The Yield Map also includes a public parkland dedication accessible via Town-standard internal roadway; this parkland is also contiguous to other public lands.

It should be noted that the proposed new units would be individually owned, with the remainder of the property including common areas and roadways to be owned and maintained by a condominium homeowners association (HOA). The project's internal roads will not be built to

Town standards (i.e., will have a paved width of 30 feet, where the Town would require a 34-foot paved width if this roadway were to be dedicated to the Town; see Section 1.3.3). The site has been designed to locate the units, roadways, and other improvements on the portion of the site which has previously been developed to the maximum extent practicable, as well as setback a minimum of 100 feet from the freshwater wetland in those areas which have not previously been disturbed. The proposed units would be distributed in a cluster design on the west-central portion of the site, with four 2-story structures; three will contain 2 units each, and one will contain 3 units. The 4 proposed residential structures will have a total footprint of 14,175 SF. Each unit will have three (3) bedrooms and will have approximately 2,700 SF of gross floor area in its two floors. Upon completion, buildings will occupy 0.41 acres of the site, with paved surfaces on approximately 0.59 acres, 0.02 acres of gravel surfaces, 0.89 acres of wetlands, 3.10 acres of forest, and 2.06 acres of non-fertilized and irrigated landscaping. Deeded areas (0.97 acres) and areas to remain natural with a conservation easement (2.98 acres) will occupy 3.95 acres of the property. There are significant slopes in the southern and southeastern portions of the property, most of which will be protected by a conservation easement within the proposed conservation area.

The existing barn, silo, cottage, and access driveway from Park Avenue would be removed; however the single-family dwelling and pond on the northeastern portion of the site would remain.

The project sponsor is petitioning the Huntington Sewer District for inclusion, to allow all wastewater generated by the project to be conveyed to the public sewer system for treatment and disposal in the Huntington Sewage Treatment Plant (STP). Public water supply is proposed for the development and stormwater runoff will be retained and disposed of in the proposed on-site drainage system.

The subject property is within the Town of Huntington's Old Town Green Historic District, and is listed on the National Register of Historic Places. In addition, there are NYSDEC-designated freshwater wetlands on the eastern portion of the site. As part of the proposed project, the two historic dwellings are proposed to be deeded to the Town of Huntington, and the surrounding 0.97 acres of land would also be deeded to the Town. Additionally, the proposed project includes land for the Town to extend its heritage trail from the southeast portion of the property across the site to Woodhull Road and the two historic structures. Approximately 129,608 SF (2.98 acres) of conservation area for the freshwater wetlands and associated 100-foot (70 feet in areas previously disturbed) setback area will be protected by a conservation easement.

It is pre-mature to prepare architectural renderings of each of the new residences (such plans will be prepared and reviewed by the Town as part of the individual building permit applications), however, the applicant will comply with applicable Town and Historic District design requirements for this district, which would ensure that building designs complement the overall architectural theme of the vicinity and reflect the era which gives the Old Town Green Historic District its distinctive appearance.

Grading and Drainage

Approximately 3.12 acres located on the western portion of the property will be subject to clearing/grading for the new internal access road, driveways, homesites, impoundment areas and yards. Approximately 2,000 cubic yards of soil will be disturbed, to be retained for reuse on-site as fill to the greatest degree practicable. Excess material, if any, will be removed from the site to be sold as fill or disposal in an approved C&D landfill or solid waste facility. The greatest depth of cut is anticipated to be approximately 20 feet and will be located in the area of the retaining wall near Units #9 and #10; the greatest depth of fill is approximately 5 feet in the vicinity of proposed Unit #4 and Kiruv Court. In conformance with Town standards, artificial slopes will not exceed 1:3. In order to reduce the amount of graded area, a two-tiered retaining wall is proposed along the cul-de-sac to around the building that houses Units #9 and #10, and a 130-foot single-tier retaining wall is located north of Unit #4. Slopes will be stabilized immediately after final grading with appropriate cover, such as hydroseeding or straw.

Erosion and sedimentation controls will be provided during construction activities associated with the project. In accordance with the NYSDEC Phase II SPDES Program, coverage under the General Permit for Stormwater Discharges from Construction Activities (NYSDEC Permit No. GP-02-01, General Permit) will be obtained prior to the initiation of construction activities. Prior to filing for coverage under the General Permit, the NYSDEC requires that a Stormwater Pollution Prevention Plan (SWPPP) be prepared for the parcel, including a detailed erosion and sediment control plan, to manage stormwater generated on-site during construction activities, and for post-construction stormwater management. A SWPPP will be prepared to ensure compliance with water quality and quantity requirements pursuant to Technical Guidance and GP-02-01 requirements. In addition, an erosion and sedimentation control plan incorporating the NYSDEC Technical Guidance manual, and use of measures such as silt fencing, storm drain inlet protection, hay bales, and good housekeeping procedures will be prepared and implemented as part of site construction. The drainage system and revegetation plan will further provide permanent stormwater controls once construction is completed. Development of the property is not anticipated to significantly increase erosion/sedimentation or stormwater impacts, as a result of proper site grading procedures, erosion controls, and drainage system design. The Notice of Intent (NOI) requesting coverage under the General Permit will be filed in accordance NYSDEC requirements, prior to the initiation of construction activities at the subject property.

The proposed project includes an on-site drainage system that will collect runoff from the project's developed surfaces, as well as from off-site tributary areas; the eastern side of Woodhull Road along the subject site will be provided with curbing and drainage facilities. As noted in the Engineering Report for this system, the contributing drainage area (including the project site) is approximately 4.07 acres. The stormwater management system will be designed to handle the runoff from this contributing area only. The undisturbed areas that naturally drain away from the site are not included in the design of the system.

As seen in the Grading and Drainage Plan, stormwater will be collected through a series of landscape area drains and roadside catch basins. The stormwater will be conveyed through buried piping to an underground filtration and detention system located in the central and

northern portions of the site. The stormwater will ultimately be released into the Town drainage system on Woodhull Road that connects to the Park Avenue drainage system. The discharge of stormwater to the Town drainage system will be released at a controlled rate in compliance with the design criteria set forth set forth in the NYS Stormwater Management Design Manual (SMDM). Detention will be provided based on a 3-inch rainfall event and water quality treatment will be provided.

The NYS SMDM sets forth design criteria for sizing stormwater management systems. The SMDM manual outlines sizing criteria to meet pollutant removal goals, reduce channel erosion, prevent overbank flooding, and help control extreme storm flooding. The following are the four sizing criteria outlined in the manual:

1) Water Quality Volume Requirement - Volume required to capture and treat 90% of the average annual stormwater runoff volume.
2) Channel Protection Volume Requirement - Provide 24 hour extended detention of the post-development 1 year, 24 hour storm event.
3) Overbank Flood Control Criteria - Control the post-development 10 year, 24 hour peak discharge rate to pre-development rate.
4) Extreme Storm Control Criteria - Control the post-development 10 year, 24 hour peak discharge rate to pre-development rate.

The Engineering Report shows that the drainage system will meet the above requirements for water quality volume, stream channel protection, overbank flood control, and extreme storm flood control, as follows:

1) Water Quality Volume - The required water quality volume is 4,397 CF and the volume of the stormwater filtration system is 4,766 CF.
2) Stream Channel Protection - The report shows that the proposed system will provide the required 24 hour extended detention of the post-development 1 year, 24 hour storm event.
3) Overbank Flood Control - The report shows that the proposed system will control the peak discharge from the post-development 10 year, 24 hour storm event to the pre-development rate. The pre-development peak discharge rate is 2.86 cubic feet per second (CFS) and the controlled post-development peak discharge rate is 2.69 CFS.
4) Extreme Storm Flood Control - The report shows that the proposed system will control the peak discharge from the post-development 100 year, 24 hour storm event to the pre-development rate. The pre-development peak discharge rate is 6.22 CFS and the controlled post-development peak discharge rate is 5.95 CFS.

This document contains the Water Resource/Watershed Analysis Study prepared for the proposed project. That document notes that a portion of runoff currently generated on-site during rain events is able to leave the property and adversely impacts adjacent roadways and properties, causing localized flooding. This condition will be improved as a result of the project. The proposed drainage system has been designed in consideration of the Town-required runoff coefficient for surfaces and the unique condition of the site. With respect to this condition, the Study concludes:

> The results of the watershed analysis study demonstrate that the existing drainage inlets at the corner of Woodhull Road and Park Avenue are capable of handling the additional flow from Woodhull Road caused by constructing new curbing along the east side of the road. Although the existing drainage was determined to be adequate, new drainage inlets and piping are proposed to decrease the gutter flow along the east side of the road.
>
> The study results also indicate that by providing an on-site stormwater collection system as a part of development the site would be removed from the watershed tributary to the corner of Park Avenue and Woodhull Road. The proposed system will collect and recharge stormwater on-site and eliminate the current overflow at the northwest corner of the site onto Park Avenue.
>
> In Summary, the development of the proposed subdivision will have no adverse impacts on the Town's drainage system at the corner of Park Avenue and Woodhull Road. The proposed development will in fact help to improve the existing stormwater collection system on Woodhull Road and at the intersection with Park Avenue.

As a result, the existing flooding problem will be eliminated by the proposed project.

Access, Road System and Parking

Site access is proposed via a private roadway from Woodhull Road ending in a cul-de-sac. The site's internal roadway will be 30 feet in paved width, and will be privately owned and maintained by the HOA. This access will be located at approximately the mid-point of the western property boundary. All of the proposed structures and the single-family residence that is to remain will be accessed from this internal roadway. Exiting traffic at the access point will be controlled by a Stop sign, as the number of trips generated is not sufficient to require a traffic signal. There is sufficient visibility along Woodhull Road in both directions for entering and exiting traffic to turn safely; no substantial amount of vegetation will have to be cleared.

The project includes a dedication of 306 SF at the southern corner of the Woodhull Road/Park Avenue intersection, to enable a Town-sponsored improvement in the radius of this turn, particularly for larger delivery trucks, school buses and fire trucks on Woodhull Road to make right turns onto Park Avenue

All 20 parking spaces required by the Town Code will be provided in head-in parking areas located along the internal roadway and on driveways.

Sanitary Disposal and Water Supply

Sanitary wastewater will be generated as a result of the proposed residential development. The project sponsor is petitioning for inclusion within the Huntington Sewer District so as to allow all sanitary wastewater generated by the project to be conveyed off-site to the public sewer system for treatment and disposal in the Huntington Sewage Treatment Plant (STP). However, the system is presently near its capacity, and the Town has engaged a consultant, H2M, to prepare a study analyzing existing and future treatment needs for the district. That study is not

due for completion until mid-2006. If it is not possible to connect to this system, the applicant would develop the project utilizing on-site septic systems until such time that the study is complete and access to public sewers becomes available. According to the Town Department of Environmental Waste Management, the cement sewer pipe to which the proposed project would connect is owned by the Town, and is 8-inches in diameter. It was installed for the Huntington Jewish Center in 1960, and is presently in good condition. The Sewer District is of the opinion that higher density development should be located in areas where sufficient sewer hydraulic capacity is available to support that development. The district notes that its collection system capacity is greatest at the center of the district, whereas the project site is located at its (current) periphery. However, if and when the sewer district is expanded, the hydraulic capacity of the sewer line beneath Park Avenue would be increased to a size capable of conveying the increased volume of wastewater generated by development served by this public facility, so that the district's concerns regarding capacity would be alleviated. It is also noted that the Kiruv Estates project is proposed at a yield conforming to its and the vicinity's existing medium-density zoning, and so does not represent a "higher density" project.

The current sewage design flow for a single-family residential unit applied by the Suffolk County Department of Health Services (SCDHS) is 300 gpd. Therefore, it is estimated that the nine proposed residences and the single-family structure that is to remain would generate approximately 3,000 gpd of sewage flow. This represents a net 2,400-gpd increase in sanitary wastewater flow on the site. The two historic structures to remain on the site do not presently have active plumbing systems, so that no wastewater is generated in either building. The water table beneath the subject property ranges from approximately 4 to 69 feet below ground surface (bgs; due to land topography), sufficient to ensure proper operation of these systems. Design and installation of the septic systems, if provided, would take place under the review authority of the SCDHS.

A significant amount of study has been devoted to understanding the geology underlying the subject site including a series of soil borings. If on-site systems are used, each system would include a septic tank and leaching pool with the capacity required by SCDHS regulations. Each sanitary system will require a separate permit to construct and a crane-dug test hole will be performed on each individual homesite for the system. The test holes will be observed by representatives of SCDHS and, should lower-permeability clay be observed, the excavation will be extended downward until good leaching material is encountered. The excavation will be backfilled with good leaching material and sanitary systems will be placed within these holes. Based upon the detailed understanding of the site geology resulting from the test holes, no significant clay units are expected to be encountered in the installation of individual sanitary systems. Subsurface soils consisting of lower permeability material are, however, present. The number of test holes installed far exceeds the number required by the SCDHS for preliminary subdivision design. In addition, the depth of these test holes also far exceeds the requirements of the SCDHS for preliminary subdivision design. The design of the proposed project is intended to ensure that groundwater or surface water resources will not be adversely affected as a result of the installation of sanitary systems. All effluent will leach through the underlying soils in an unsaturated zone of sufficient depth to allow for conversion of ammonia to nitrate. Effluent will leach to the water table and become part of the regional groundwater reservoir. Since the total

nitrogen load on the property is consistent with SCDHS requirements this will not adversely affect groundwater resources. In addition, a groundwater impact model has been used to simulate the concentration of nitrogen in recharge. The results conclude that the project will not adversely impact the groundwater as a result of nitrogen loading from the proposed subdivision. It is noted that on-site systems are only proposed if access to the existing Huntington STP is not obtained.

Water will be supplied by the SCWA, which will utilize an existing 6-inch supply main beneath Woodhull Road. Assuming that all water used by the project will be supplied by the SCWA, domestic water consumption will total 3,000 gpd and irrigation will average 843 gpd, resulting in a total water use of 3,843 gpd.

Site Landscaping and Amenities

Areas of the site outside of the deeded and conservation areas not to be covered by buildings, paved surfaces or retained forest will be professionally landscaped using a combination of native and/or native-compatible species. This coverage will total approximately 2.06 acres. A complete list of species used in landscaping is included on the Landscape Plan, to be submitted for Town review as part of the Site Plan application.

It is not proposed to fertilize these landscaped areas, except for an initial application to establish healthy growing conditions; other than lawns abutting the buildings, it is anticipated that the remaining landscaped areas will consist of low maintenance species and wood chip/mulch beds. Landscaped areas will be irrigated at a rate of 5.5 inches annually (an average of 843 gpd), by use of an in-ground sprinkler system. Landscape maintenance activities will be monitored and enforced by the HOA.

Open Space and Protected Lands

As part of the proposed project, the two historic dwellings are proposed to be deeded to the Town of Huntington, and the surrounding 0.97 acres of land will be deeded to the Town. The proposed project also includes the extension of the Town heritage trail from the southeast portion of the property through the portion of the site which is to be deeded to the Town, to Woodhull Road and the two historic structures. This trail was initiated in 2002 as part of the Hilaire Woods subdivision. It is not paved or otherwise maintained at the present time; according to the Town Historian, the Town is seeking to obtain ownership of the land on which their intended trail alignment is proposed, after which time the Town will determine, fund and install improvements. It is not expected that the trail would be paved or illuminated, though appropriate interpretive signage is expected. The ultimate destination of the trail is not determined at the present time; the trail may be extended to Heckscher Park, or it may terminate elsewhere.

Additionally, approximately 129,608 SF (2.98 acres) including the freshwater wetland and surrounding areas will be located in a conservation area, protected by a conservation easement.

Ultimately more than half of the property (3.95 acres, or 55.9%) will be permanently preserved and protected.

Construction Schedule and Operations

The construction schedule will be based on the Approved Schedule of Operations, as required by the Town of Huntington Subdivision Regulations and Site Plan Specifications, which includes a construction staging area.

The construction process will begin with establishment of flagged clearing limits, followed by installation of staked hay bales and silt fencing in critical areas for erosion control purposes, including the downslope limit of all cleared/graded area, to minimize the potential for eroded soils to impact the wetlands or dedicated areas. Then, demolition and site clearing operations can begin; the existing buildings will be inspected by a NYS-certified inspector to determine the presence of asbestos or other potentially hazardous materials in the structures. If such materials are found, they will first be removed according to applicable NYS standards and procedures, and the removed materials will be disposed of properly. Wells and tanks on-site, whether documented with the NYSDEC or not, will be properly removed, capped and, if necessary, remediated during this period.

It is anticipated that 2 of the existing 5 structures will be removed: the rental cottage and dilapidated barn/silo; the single-family residence located in the northeastern portion of the property will be retained, as well as the two historic structures. The conservative clearing assumptions referenced above results in an estimated 3.12 acres of clearing, or 44.0% of the site. This includes areas for the new roadways, buildings, the drainage impoundment areas and landscaping. However, as the proposed project is to be developed on areas already developed, only 0.93 of these 3.12 acres to be cleared represent natural vegetation. No clearing will occur on the remaining 3.95 acres, which will be deeded and/or protected within a conservation area.

Grading operations will take place next. In order to minimize the time span that denuded soil is exposed to erosive elements, excavations for the roads, building foundations, wastewater systems, stormwater collection and detention system and utilities will take place immediately after grading operations have been completed. Building construction can then begin concurrent with the utility connections and paving of the internal road and driveways. As building construction nears completion, finish grading will occur, followed by spreading of topsoil and installation of the landscaping, which will be performed while the structures are completed.

The site operator/contractor contracted by the site owners will be responsible for all construction activities, site grading, and installation of the erosion and sediment controls. Conceptually, a variety of temporary erosion and sediment controls will be provided to ensure soil stabilization and protection of exposed areas for the duration of construction period to the maximum extent practicable. The erosion control plan which will be prepared for the project will provide silt fencing to be installed where necessary along the limits of disturbance to minimize/prevent sediment from washing onto adjacent properties. A continuous row of staked hay bales will also

be installed around all grated drainage inlets to trap sediments in stormwater runoff as they are installed and a dust control and watering plan will also be instituted. The proposed locations, sizes, and lengths of each of the temporary erosion and sediment control practices planned during site construction activities, and the dimensions, material specifications, and installation details for all erosion and sediment control practices are also provided on the are provided on a erosion control plan which will be prepared specific to the proposed project.

The erosion control plan will be designed to contain sediment, debris, and pollutants from traveling off site by utilizing sediment barriers and sound construction practices. All sediment spilled, dropped, washed, or tracked onto public rights-of-way are to be removed daily. Debris removal and control, and sweeping of adjacent streets, walks, and pavement of site-generated debris is recommended to ensure site cleanliness and reduce possible sediment transport as a result of runoff. The site contractor will be responsible for ensuring storage and stockpiling of construction materials and supplies will be in designated areas and erosion control measures are implemented to prevent/reduce wind-blown dust and erosion from rainwater. The site operator will be responsible for securing an approved carter to empty the site dumpster and haul waste from the site to an approved location for disposal.

Woodhull Road will be used for construction vehicle access; construction equipment and material storage and parking will be kept within the site. Construction activities will not occur outside weekday daytime hours (expected to be 7 AM to 6 PM), or as governed by Town regulations. "Rumble strips" will be placed at the site entrance, to prevent soil on truck tires from being tracked onto Woodhull Road.

Based on the relatively small size of the site and project, it is anticipated that the construction period (clearing, grading, construction and finishing) will take approximately 6-9 months.

Significant Environmental Impacts

Topography

Planned grading of strategic locations of the site will be necessary to provide appropriate and stable surfaces and stabilized slope transition areas to allow development of the proposed project. It is noted that due to the topographic relief areas on the site, any site use would require topographic alterations. The project involves the minimum grading necessary to permit proposed residential use of the property, particularly in view of the proposed attached unit cluster plan.

Some areas of steep slopes on the property will be altered due to grading for the proposed road, homesite locations. The most extensive grading will occur along the proposed site access roadway, and within the footprints of each single-family residence. Grading for the proposed road surfaces will require a combination of cut and fill. It is estimated that cuts ranging from 1 to 15 feet below ground surface (bgs) will be required, resulting in the excavation of approximately 7,500 cubic yards (CY) of soil, to create suitable grades for the road and building

locations as well as to provide adequate stormwater retention capacities within the proposed stormwater collection and detention system. The 5,500 CY of soil required as fill for the site access roadway will be provided from excavated on-site soil and the net balance of 2,000 CY of cut will be removed from the site.

Road grading will control overall site grading to provide access to individual lots. Once complete, slopes of 1:3 or less will be established in newly graded areas. Subsequent development of individual lots will involve grading unique to each lot. In general, following development, the site will continue to slope from a topographic high located along the southern property lines towards the north. Fill ranging from approximately 2 to 6 feet above ground surface (ags) will be required which will allow the cul-de-sac to maintain grades of approximately 4.5%. As noted, all created soil slopes will be 1:3 or less and will be stabilized using ground cover material. In addition retaining walls will be installed along the southwestern end and southeastern side of the cul-de-sac as well as within the southern portions of the property to further stabilize soils within the topographical high areas of the site and to reduce required grading. As a result, it is expected that topographic impacts will be minimized to the maximum extent practicable. In addition, due to the proposed grade transitions, planting of ground cover materials, installation of retaining walls and stormwater detention facilities, the potential erosion of surface soils and proposed grades will be mitigated through project design.

Additional safeguard against erosion will be achieved through the NYSDEC SPDES review of stormwater control measures consistent with Phase II stormwater permitting for construction sites in excess of 1-acre (DEC GP-02-01). Under this program, a Notice of Intent (NOI) must be filed with the NYSDEC 60-days prior to commencement of construction, and a site specific SWPPP must be maintained on site. In addition, a copy of the final NOI, SWPPP and Erosion & Sedimentation Control Plan will be submitted to the Town of Huntington simultaneously with the NYSDEC submission.

Surface Soils

The surface soils present on the subject property include CpE, MlB and RhB soils. A majority of the site (6.87± acres) is comprised of RhB and CpE soils and will be subject to extensive grading for development. Only a small portion of the site (0.20± acres) located in the southern end of the property is comprised of MlB. This area of the property will be only subject to surface grading, installation of a portion of the site access roadway and installation of a section of a proposed residence. According to the soil survey, only the CpE soil type poses severe limitations on development due to slopes and sandy surface layers as they relate to dwellings, sewage disposal fields, roads and lawns/landscaping if proper engineering and site development techniques are not employed. A detailed engineering grading plan has been prepared to establish limits of clearing and grading, use of retaining walls, suitable grades and slopes and proper drainage conveyance and retention. Disturbed areas of the site will be stabilized during construction and will be graded to an appropriate slope (1:3 slopes) in order to provide suitable surface areas to accommodate development. In addition, it is also noted that the CpE soils also possess a limitation for sewage disposal fields due to severe slopes. The project sponsor is petitioning for

inclusion within the Huntington Sewer District so as to allow all sanitary wastewater generated by the project to be conveyed off-site to the public sewer system for treatment and disposal in the Huntington STP. Should this request not be approved, a plan has been prepared to illustrate how proper engineering of the site will allow conventional sanitary systems to be installed. The only severe limitation related to MlB soils is due to moderately slow permeability as it relates to sewage disposal fields. As indicated with respect to CpE soils, the preferred option is to connect to the Huntington STP; however, an on-site system option has also been designed. There were no severe limitations noted in the soil survey related to the RhB soils found on the property. As a result of these mitigation measures noted above it is not anticipated that the soil limitations noted will adversely impact development of the property.

Subsurface Geology

Grading operations or the excavations required for roads, retaining walls, homesites and stormwater collection and detention areas are not expected to result in subsurface soil disturbance to a depth which will adversely impact subsurface conditions.

The stormwater collection and detention system will be constructed through the removal of soil material. If needed and if this material displays acceptable bearing capacity and leaching characteristics, this soil material may be used as backfill in other areas of the site to produce acceptable slopes for construction particularly for fill along the alignment of the roadbed. Excess acceptable material will be removed by truck (between 7 AM and 6 PM) and sold as backfill. If such characteristics are not determined, this material will be removed by truck to an acceptable landfill. As a result it is not expected that there will be any significant adverse impacts with regard to subsurface geological conditions.

Water Resources

Groundwater Hydrology and Water Budget

Development of the site is anticipated to modify groundwater hydrology due to the increase in impermeable surface area and use of an on-site stormwater system which will overflow runoff to public storm sewers, resulting in a decrease in groundwater recharge compared to what presently exists. Results of the SONIR model run completed for the proposed project estimate that recharge will decrease from the site's existing 3.88 MGY to 1.95 MGY. However, it is not anticipated that this decrease will result in a significant alteration in groundwater flow in the area surrounding the subject property. In addition, it is not expected that there will be a depletion in water source to the on-site wetlands or pond as discussed in more detail herein.

The subject site lies in an area where there is a confluence of stormwater drainage from the watershed associated with a ravine generally coinciding with Park Avenue, and a ravine associated with Woodhull Road. The wetlands and pond system receive a large quantity of runoff from the surrounding watershed areas. The subject site comprises less than 23% of the total watershed area associated with just the Woodhull Road ravine. As a result, the

establishment of drainage systems on the site is not expected to adversely affect the hydrology of the wetlands or pond on the subject site.

The pond is an impoundment system that lies above the regional groundwater table. The impoundment is at the northwest limit of the pond, where a weir overflows to the drainage piping system in Park Avenue. The pond elevation establishes the basic elevation of water upstream, and supports the small adjacent wetland system. The wetlands are in a topographic low area and as a result receive drainage, and are further supported by accumulation of silt, organic material (leaf litter) and subsurface stratum.

Parts of the subject property are underlain by a low permeability clay substratum, which tends to retain water. Controls instituted on the subject property essentially intercept water atop the clay and convey it to a low point in the property with overflow to the drainage pipe system on Park Avenue. This act did not result in alteration of the wetlands or pond, as the pond still maintains flow to the drainage system

The proposed project and the detailed engineering design which has been prepared will permit the installation of a road and homesites in consideration of the unique hydrologic properties of the site. In order for drainage systems to work properly, adequate containment capabilities must be provided. The clayey sand beneath parts of the site is not impermeable, but retards the recharge of water through the 2-3.5 foot layer. Since the clay is discontinuous, and is not impermeable, it is evident that many parts of the site recharge as they would if the clay were not present. As a result, the clay is not a major source of water to the wetlands and pond.

Drainage design has considered the site hydrology. Most borings intercept the regional water table at an elevation of 42-48 feet. Several borings intercept water at 52-63 feet, and primarily include those borings which show evidence of either a 2-3.5 foot brown clayey sand or a silty sand hardpan layer. Despite the increase in impervious surfaces, the proposed project will decrease the volume of recharge generated on-site (as predicted by the SONIR model) from 3.88 to 1.95 MGY. This is due to the use of off-site sewage treatment and use of an on-site detention system with overflow to the off-site public drainage system, which removes a substantial volume of water from recharge on-site. As a result of the large watershed contributing area which supports the wetlands and pond, their location in low topographic areas which retain silt and organic material, the stormwater sources and immediate overland flow, and the discontinuous but lower leaching characteristics of the clay beneath the site, the subject property is not a significant factor in the hydrology of the wetlands and pond.

<u>Groundwater Quality</u>
Groundwater impacts which may occur during construction activities could potentially result from building materials and equipment stored on-site. Building materials are anticipated to be inert and therefore are not expected to have an adverse impact on groundwater quality at the site. Equipment stored on-site which will be utilized during clearing and construction activities would be required for any land use on the site. Reputable contractors will be used and the construction company (along with the applicant and site owner) will be responsible to properly maintain and operate equipment and address any potential water quality threats pursuant to State laws. In

addition, construction activities will only occur over an estimated 6 to 9 month period and as a result no significant or long-term construction impact to groundwater quality is anticipated.

The operation of the proposed project will not utilize any toxic/hazardous industrial chemicals or solvents. The only discharges anticipated to occur will be comprised of runoff from impervious surface areas and sanitary discharges from individual, on-site septic systems. Each of these on-site facilities will be designed and constructed in conformance with Suffolk County permitting requirements. As a result, use of the site is not anticipated to result in any discharges which would adversely impact groundwater quality underlying the site.

The project is proposed to be connected to the Huntington STP. It is anticipated that the concentration of nitrates (as nitrogen) generated on-site will be decreased by the proposed project, due primarily to the conveyance of wastewater to the STP, and since several residences currently exist on site and now discharge sanitary effluent to groundwater. The SONIR computer model was applied to the proposed project, to determine the expected concentration of nitrogen in recharge originating on the site. The results indicate that the nitrogen concentration will decrease to 0.01mg/l, which represents a substantial reduction as compared to the existing level of 2.33 mg/l. As no fertilizers will be used and wastewater will be sent off-site for treatment and disposal, the only sources of nitrogen will be in rainfall and lawn irrigation water. This anticipated concentration is less than the NYSDEC drinking water standard of 10 mg/l and the proposed project is not expected to result in significant adverse effects to groundwater quality with regard to nitrogen loading.

There are no potential impacts to water resources from stormwater generated on-site, based upon analysis of the project's conformance to design requirements of the Town, and to recommendations of the 208 and NURP studies. Specifically, the project will detain and discharge all runoff from developed surfaces to the public drainage system. The upland portion of the existing perforated piping system will be removed and replaced during the construction period to conform to the new development pattern of this portion of the site, so that this system can continue to intercept perched groundwater flow and protect proposed Unit #3. Based upon the NURP Study, the low-density residential nature of the site and vicinity does not represent a significant source which could impact groundwater quality. As a result, no significant impact to groundwater quality is anticipated from recharge of stormwater from the project site.

<u>Watershed and Drainage Conditions</u>
Stormwater runoff will be generated from impervious surfaces such as the proposed internal roadway, driveways, roofs, sidewalks, etc. On-site drainage will be altered due to the overall grading and redevelopment of the subject property; however, proper grading, erosion control techniques and drainage containment will minimize impacts.

To inhibit the free flow of stormwater runoff from the site, the removal of natural vegetation at the site will be limited to the greatest extent possible allowing vegetation, where it exists, to remain primarily along the boundaries of the subject property. Disturbed areas not covered with building or pavement will be revegetated with landscape vegetation consisting of lawns, shrubbery and trees. Areas of the site which will not be disturbed by construction or grading

activities will remain as natural vegetation. Additional protection against erosion and sedimentation will be provided through implementation of an overall grading plan which will not create surface contours in excess of 1:3 slopes across the entire project area as well as the provision of a sedimentation and erosion control measures designed to prevent the migration of overland runoff to adjacent properties. In addition, each individual residential structure will be designed with proper grading at the time of building permit review and when the architecture of residences is know and it should be noted that all gutters and leaders on individual dwellings will be directed to drywells within each individual lot for recharge to the underlying aquifer.

To minimize sediment and debris transported off-site by stormwater runoff and the impact to local water quality, erosion and sedimentation controls will be provided during construction activities associated with the project. In accordance with the NYSDEC Phase II SPDES Program, coverage under the General Permit for Stormwater Discharges from Construction Activities (NYSDEC Permit No. GP-02-01, General Permit) will be obtained prior to the initiation of construction activities. Prior to filing for coverage under the General Permit, the NYSDEC requires that a Stormwater Pollution Prevention Plan (SWPPP) be prepared for the parcel, including a detailed erosion and sediment control plan, to manage stormwater generated on-site during construction activities, and for post-construction stormwater management. A SWPPP will be prepared to ensure compliance with water quality and quantity requirements pursuant to Technical Guidance and GP-02-01 requirements. In addition, an erosion control plan incorporating the NYSDEC Technical Guidance manual, and use of measures such as silt fencing, storm drain inlet protection, hay bales, and good housekeeping procedures will be utilized. The drainage system and revegetation plan will further provide permanent stormwater controls once construction is completed. Development of the property is not anticipated to significantly increase erosion/sedimentation or stormwater impacts, as a result of proper site grading procedures, erosion controls, and drainage system design. The Notice of Intent (NOI) requesting coverage under the General Permit will be filed in accordance NYSDEC requirements, prior to the initiation of construction activities at the subject property.

Ecological Resources

The impacts to ecological resources are typically a direct result of clearing of natural vegetation, the resulting loss and fragmentation of wildlife habitat, and the increase in human activity. The proposed development will require a minimal amount of clearing of natural vegetation on the property. The proposed project will necessitate removal of a portion of the successional hardwood forest found on site, approximately 0.93 acres. However, the existing fragmentation and significance of this habitat as documented herein tends to reduce the magnitude of this impact as is discussed further below. The existing lawn areas and wooded edge habitat will be converted to impoundments, developed with residential units or replanted with landscape vegetation. However, large contiguous areas of existing wetlands and forested upland will remain natural and will become protected areas for wildlife. The entire wetlands complex along the eastern portion of the site will be preserved as conservation area (approximately 2.98 acres), including a 100-foot wetland buffer where natural woodland currently exists. Additionally, approximately 0.19 acres of currently cleared upland area within the proposed conservation area

will be supplementally planted with native species such as maples and oaks and allowed to return to wooded upland habitat. A portion of the cleared vegetation within 100 feet of the wetlands (approximately 0.20 acres) is proposed to contain impoundment areas which will also be revegetated with native species tolerant of wet conditions. The change in habitat acreage provides a quantitative account of the project's potential impact as well as benefits with respect to site vegetation.

The vegetation found on the project site provides habitat for a wide variety of wildlife species, including species found in suburban and woodland habitats. Based on the project plan, much of this natural vegetation will remain intact, although some of the upland wooded vegetation will be replaced by residential units and landscaping. With time, landscaping will become reestablished and provide habitat for those species which originally utilized it. The overall change in habitat on site will cause a minimal local impact on relatively common wildlife species, as will be discussed in more detail below. Overall, this impact is not expected to be significant given the common status of wildlife on site and the context of the site with surrounding lands and expected development patterns.

The majority of wildlife found in early successional habitats will utilize suburban areas, and most of those numbers would be expected on site following construction. Those species which are intolerant of development and are restricted to interior forest habitats will be most affected by the proposed project, but relatively few of these species are expected. The mown turf on the property constitutes a very small percentage of the grassland habitat in the vicinity of the site. The wooded edge habitat on the property is only a fraction of the available woodland in the vicinity of the site, and clearing of this habitat should only minimally impact most species. Use of native and non-invasive non-native species in landscaping which offer benefits to wildlife should be considered for planting as a mitigation measure.

In determining impacts upon the existing wildlife populations, it can be assumed that an equilibrium population size is established in an area for each species as determined by availability of resources in the habitat. Thus, the removal of habitat resulting from the proposed project will cause a direct impact on the abundance and diversity of wildlife using the site. Although the assumption that species are at equilibrium is an oversimplification, it does provide a worst case scenario in determining the impact of habitat loss. In addition to this direct impact, the increased intensity of human activity and potential increase of domestic pets on the site will cause an indirect impact on the wildlife which remains on the site and in the area, under post-development conditions. Domestic dogs are currently present on the subject property and limit the use of landscaped areas surrounding the dwellings by wildlife. Additionally, various studies have documented the impacts of domestic cats on local bird and small mammal populations and it is presumed that the proposed development would result in the increase of domestic cats on the project site and adjacent natural areas. However, it can not be stated that domestic cats would be newly introduced to the project site and adjacent areas as a result of the project. The residential nature of the surrounding properties suggests the existing presence of free roaming domestic cats which likely hunt birds and small mammals both on and adjacent to the subject property. Thus, the combined removal of habitat and potential increase in domestic pets as a result of the

proposed project may result in direct and indirect impacts on localized populations of commonly occurring species of wildlife that are tolerant of human activity.

In the short term, lands adjacent to the subject property will experience a slight increase in the abundance of certain wildlife populations due to displacement of individuals by the construction phase of the proposed project. Ultimately, competition with both conspecifics and other species already utilizing the resources of the surrounding lands should result in a net decrease in population size for most species. The effect on the density and diversity of regional populations of most species should be minimal, as minimal wooded habitat is to be affected. The impacts of habitat losses are cumulative, however, and impacts need to be considered in light of regional planning.

Literature suggests that many avian species are able to adapt to both urban and suburban environments. Birds such as the crows, doves, blue jay, American robin, northern mockingbird, brown thrasher, gray catbird, brown thrasher, cedar waxwing, grackle, northern oriole, red-winged blackbird, and cowbird may be temporarily affected by the development of the property; however, these birds usually adjust well to human activities. The proposed project will primarily disrupt the existing landscape vegetation on site and vacant structures which may be utilized by bird species, but most of these species will utilize the site once landscaping is reestablished. The avian, mammalian, and reptilian species which may utilize the wetland areas and surrounding wooded upland are expected to be minimally affected, as this habitat will remain intact and adjacent area buffers will be improved. In addition, illicit discharges and waste water discharge in proximity to the pond will be removed by the proposed sewering; this can be expected to result in improved water quality. Following construction, those birds and mammals that utilize landscaped habitats will return to the site in limited numbers. Ultimately, the proposed project will result in a minimally lower equilibrium population density for most species.

In a letter dated March 11, 2005, The New York Natural Heritage Program listed Wild Sorrel (*Rumex hastatuls)* and Little-leaf Tick-trefoil (*Desmodium ciliare*) as two threatened vascular plants that may be present on or near the subject property. Though globally secure, they are vulnerable in New York State. Wild sorrel was last spotted in 1996 less than one mile from the subject property. Both of these species prefer sandy, well-drained soils in meadows or oak openings. Neither of these species were encountered during any site visit and are not believed to occur on the subject property due to lack of suitable habitat.

Of the avian species listed as being likely on the site, none are listed as species of special concern by the State of New York. The eastern hognose snake is listed as a special concern species. Special concern species are native species which are not recognized as endangered or threatened, but for which there is documented concern about their welfare in New York State as a whole. Unlike threatened or endangered species, species of special concern receive no additional protection under New York State Environmental Conservation Law Section 11-0535. This category is intended to enhance public awareness of those species which deserve additional attention.

The eastern hognose snake is the only reptile species potentially found on site which is listed as a special concern species. The hognose snake may be expected to occur on the site in small numbers, and may suffer some direct loss. Although there is documented concern about its welfare in New York State, this special concern species receives no additional legal protection under Environmental Conservation Law Section 11-0535.

The tiger salamander, which is listed as endangered by the New York State DEC, is a mole salamander that breeds primarily in vernal ponds. Tiger salamanders prefer ponds with a long hydroperiod, with abundant herbaceous cover within the flooded portion and in ponds that have an open canopy. The project site does not provide suitable habitat for breeding tiger salamanders and no threatened or endangered species are expected on site.

Land Use, Zoning and Plans

Land Use

The subject property is presently classified as residential use and vacant land. The residential use of the subject property is consistent and in conformity with residential use on adjacent properties.

The proposed project includes retention of an existing non-historic home on the site for continued private occupancy, and deeding the two (2) historic homes along Woodhull Road to the Town of Huntington. In addition, open spaces on the site will be retained and protected by establishing a conservation area on the eastern 2.98 acres of the property (which contains the NYSDEC-mapped Freshwater Wetlands), and by deeding the above-noted 0.97 acres (including the area of the two historic homes and for an extension of the Town heritage trail) to the Town. These actions will combine to enhance the area's historic and aesthetic characteristics by preserving and protecting land use characteristics deemed valuable by the community (e.g., the wetlands and steep slopes).

The above resource preservations and protections have been made possible in part by the applicant's willingness to reduce the size of the new units and to develop them in attached, multi-unit structures that will nonetheless be architecturally designed to appear to be traditional detached homes. The 10-unit yield of the proposed project is the same as the density for the site if it were developed as a conventional 10-lot subdivision; no increase in yield is proposed.

The subject property is proposed as a ten (10) lot residential subdivision on 7.07 acres of land. The homes will be two-story, three-bedroom units, which will be attached in two (2) and three (3) unit clusters. The proposed residential density of the site will be consistent with that of the adjacent properties and somewhat more dense than the use in the area east of Park Avenue, which has greater minimum lot size requirements as a result of the existing zoning pattern. Therefore, through design and cooperation with the Town, the clustered subdivision of the property is not expected to impact the existing land use in the vicinity.

The Town anticipates that extension of its sewer line southward along Park Avenue would increase the potential for intensified (i.e., development in excess of that allowed as-of-right) development of sites served by this new utility line. However, the proposed project does not represent such an intensification; it is designed to reflect only its as-of-right yield. Therefore, the proposed project would not meet this Town concern, and no adverse impact in this respect is anticipated.

Zoning

The proposed project does not require a change of zone from its current R-7 zoning classification, nor does it require a Special Use Permit or Special Exception Approval. The use and configuration of development is enabled under NYS Town Law Section 278 through clustering as administered by the Town of Huntington. As a result, there will be no impacts to the zoning of the site or vicinity, or to the zoning pattern of the area. The proposed plan results in a layout of 10 condominiums with shared common area, and has been designed to conform to preliminary comments from the Town. In general, the subdivision plan is based on a conservation design that incorporates significant areas of open space and common areas in order to preserve environmentally-sensitive features including two existing historic houses which the Town will own, retention of one (1) home on-site, and preservation of wetlands and steep slopes.

Through the use of Town Law Section 278, the project is not required to meet the (strict application of) dimensional requirements for a subdivision in the R-7 zone. However, by use of the site design flexibility of "clustering" inherent in the Town Zoning Code and its above-described conservation design, the project will develop that portion of the site already impacted and preserve its more valuable natural and historic portions.

Areas of steep slopes will be preserved and any development occurring on areas having slopes of 10% or more will be in conformance with the Town of Huntington Subdivision Regulations, Erosion and Sediment Control Handbook. The project's design reflects the limitation of steep slopes to three units; however, as the project is a clustered design, no individual lots are proposed, and several of the new residences will be located in the steep slope area of the site.

With regard to historic architectural requirements, these requirements are applicable to those properties that have been designated as historic structures. The two historic buildings located on Woodhull Road will be deeded to the Town of Huntington and it is expected that any renovations performed by the Town will adhere to the requirements of this code.

The existing home on the Kiruv property to remain is not designated as an historic structure and therefore it is not required that any alterations or restorations adhere to the architectural standards of the Town Code. However, as the entire site is within a Town-designated Historic District, the Town clearly intends that alterations (as well as the new homes) should use architecture and building materials complementary to the prevailing architecture of the district. While no plans for such alterations have been prepared, the applicant will ensure that the design will include architectural treatment and building materials having colors and textures consistent with the period exemplified by the Old Town Green Historic District. Since the proposed project

conforms with the R-7 zoning and no variances are required, no impacts are expected with regard to zoning.

Land Use Plans

Town Comprehensive Plan Update (1992)

The proposed project will be in conformance with the 1992 Town Comprehensive Plan Update in regard to land use type and the zoning classification associated with that land use type. In particular, the recommendations of the Update will be followed by the project, as follows:

Environmental Conditions

- *Direct more intensive development to less environmentally-sensitive areas and assure that sufficient infrastructure support is provided.*

The site contains freshwater features including a man-made pond, stream, emergent marsh, forested wetlands, and several groundwater seeps or springs. The Update also recommends that, in order to protect sensitive environmental features within a parcel, clustering should be considered in order to preserve open space. The 7.07-acre project site will maintain a 2.98-acre area of land (41.1% of the site) along its eastern property line as conservation area, thereby minimizing the potential for impact. In addition, infrastructure support exists in the area, and will be utilized. The site is served by public water and is proposed to connect to the Huntington STP.

Housing

- *Minimize disruptions or alterations to established neighborhoods and development densities. This will help preserve property values in areas accommodating development.*

The project has been designed to minimize impact to the character of the neighborhood, by its conformance to the existing land use type in the area. The project is generally within an existing developed area and, through cluster design, is both consistent with surrounding development densities and will minimize disruption on the neighborhood on a long-term basis.

- *Design new developments which respect all environmental limitations.*

The project has been designed to avoid impact to that portion of the site that presents environmental limitations, specifically the conservation areas. Steep slopes areas will be retained through design, wetland areas will be avoided and two (2) historic homes on-site will be retained through deeding to the Town.

Historic Resources

- *Make proposed actions that are adjacent to or partially or wholly within locally designated historic properties or districts subject to the most stringent review standards promulgated in the SEQRA regulations.*

The project has been designed to emulate the historic appearance of the historic district where the site is located. Furthermore, the two existing historic houses on the subject property will be deeded to the Town of Huntington. Therefore the project will not impact the historic character of the area. This DEIS provides a framework for thorough environmental review with public input, consistent with the recommendation.

Draft Vision Statement for the Town of Huntington's Comprehensive Plan Update

The proposed project will conform to the applicable goals described in the Draft Vision Statement. The project will protect and restore historic resources on the site, provide an extension of the Town heritage trail, and preserve and enhance the site and area's aesthetic and

historic character. The project will also protect wetlands and open space as well as maintain the existing land use of the site and area. Hence, the project will be consistent with the spirit of the Statement and the new Comprehensive Plan.

Town Open Space Index
The subject property does not fall within, intersect with or immediately abut any parcel listed on the Index. Therefore, the project is not in conflict with the Town Open Space Index, as this plan does not apply.

Suffolk County Planning Commission Subdivision Guidebook

B. *SUBDIVISION ROADS*
The proposed internal roadway will be 30-feet in width, and so will not be dedicated to the Town; it will be owned and maintained by the HOA created by the individual owners. The project is not anticipated to generate a significant number of vehicle trips or conflict with traffic patterns. Due to the configuration of the site and the presence of the eastern Conservation Areas, a second vehicle access cannot be provided, as recommended in the Guidebook.

C. *STORMWATER*
The proposed project includes an on-site stormwater collection and detention system, which will overflow to the existing public storm sewer system for off-site recharge. In this way, the potential for adverse impacts to groundwater and surface water quality, especially for the wetlands on the property, will be minimized.

D. *OPEN SPACE*
The project will maintain 2.98-acres of conservation area in order to protect the wetlands on the property. The western 0.97-acre portion of site, where the two existing historic houses are located, will be deeded to the Town. Therefore, more than half of the project site will remain as it currently exists.

E. *GENERAL*
The layout of the proposed project is the result of careful consideration of the existing natural features of the site (including topography, developed area, natural vegetation patterns and presence of the wetlands).

Community Character

The existing residential character of the site will not be substantially changed by the proposed project, and there will be no impact to the prevailing residential land use pattern of the vicinity. As a result, no impacts to the residential character of the community are anticipated. The discussion below analyzes the potential for impacts to the visual character of the site and vicinity.

The cottage and two barns on the site will be removed; the non-historic single-family house will be converted to an ownership structure retained within the residential development, and the Town will obtain the two historic houses along Woodhull Road by deed. While a portion of the existing vegetation will be cleared for the project, this clearing will occur mainly within the

interior of the property, leaving naturally vegetated buffers, approximately 150 feet in width, to be retained along the eastern property line and on the southwestern corner of the site. Retention of the vegetation in these areas will minimize the potential for adverse impacts for outside observers by minimizing the increase in visibility of the project. During the majority of the year (i.e., spring, summer and autumn, when trees are in leaf), the depth of the buffers, combined with the thickness of the vegetation and the mix of taller trees and understory will result in a minimal opportunity to discern the buildings.

Due to the conservation design of the project, the vegetation on the northern tip of the property and adjacent to the proposed cul-de-sac will be cleared to accommodate the cluster development and drainage retention features. In areas where vegetation will be cleared, a minimum of approximately 25 feet of landscaped buffer will be provided to screen the site from traffic and prevent impact on the adjacent properties.

In general, the impact of the project on the visual resources of the site will be to slightly increase the visibility of the buildings proposed, primarily from the west. Viewers closer to the site to the north, east and south will experience lesser degrees of impact, as the thickness and density of vegetation retained within the sites in these directions is greater than for the western buffer areas, which are currently less natural.

The project will also enhance the historic character of the area by use of landscaping, architectural designs and building materials complementary to the prevailing architecture of the district. While no architectural plans have been prepared, the applicant will ensure that the design will include architectural treatment and building materials having colors and textures consistent with the period exemplified by the Old Town Green Historic District.

Community Services

Socio-Economics

Development of the proposed project will result in a significant increase in the amount of tax revenue generated from the subject parcel, to be distributed to the various taxing jurisdictions. The additional taxes generated will help offset the additional expenses incurred by the various jurisdictions caused by an increase in service requirements from the proposed project. In order to quantify the projected future tax revenue generated as a result of the proposed project, the land assessment for the existing home (which is now situated on a large lot) was reduced to reflect the future conditions (from $1,690 to $500), thereby reducing the total assessment to $4,900. The resulting tax revenue for this home is expected to be about $11,912 per year. Based on tax bills for a comparable development of townhomes in the R-7 zoning district (on Southdown Court), it is estimated that the tax revenue generated by the nine new homes will be approximately $13,325 each per year. It is expected that the project will result in an increase of approximately $115,063 per year.

The proposed project will also result in generation of numerous, temporary jobs during the construction phase of the project, with subsequent secondary job generation following

development due to increased demand for local services (i.e. landscaping, clearing, maintenance, etc.). Consumer spending will have a "ripple" effect, providing additional economic benefit to providers of goods and services within the local area during and following construction. The project will also provide a permanent land use for the site that is viable and has a high probability of success through full utilization.

Schools

The proposed project is expected to result in 5 school-aged children, based on a multiplier of 0.35 school-aged children in each of the nine new 3-bedroom attached units and 1.12 school-aged children in the existing 4-bedroom home to be retained. These multipliers are based on a study prepared for Western Suffolk BOCES by the Center for Urban Policy Research, Rutgers University. Based upon the estimate that 3 school-aged children live in the existing homes on the property, the proposed development would account for an increase of only 3 students to the district. It is important to note that the increased school taxes will more than pay for the these 5 students; expenditures necessitated by the project will total $73,875/year, but the project will generate $85,694/year in school district taxes.

The Huntington UFSD response letter indicates that the district is obligated to provide educational services to all students in the district. However, as the increase in enrollment is only 3 students, and the project will more than pay for the students resident on the site, it is not anticipated that there will be any adverse impacts on the Huntington UFSD.

Police Protection

The response letter from the SCPD states that the proposed project *"…should have a negligible impact upon this sector."* In addition, the project will increase SCPD allocations to approximately $16,377/year, which would defray at least a portion of the increased costs to the department to provide services to the site, if needed.

Fire Protection

In consideration of the residential nature of the project, it is not anticipated that additional or specialized training or staffing of the Huntington Fire District will be necessary.

Construction of the new homes will conform to applicable requirements of the NYS Fire and Building Codes. Fire/smoke detectors will be installed as required in new homes to render early warning of any fire incidents until professional assistance arrives. It is expected that the proposed project will generate approximately $3,614 in annual tax revenue to the fire district, defraying a portion of the increased costs to the department to provide emergency services to the site.

Ambulances and Hospitals

There is a hospital and ambulance service provider in the immediate area of the project site. The proposed project will result in a minimal (28 capita) increase in population in the immediate vicinity. The proposed project will generate additional monies to the Town general tax districts, which should help offset any additional demand for social services. As a result, no significant impacts to healthcare facilities or ambulance service providers are anticipated.

Recreation

The proposed project will result in a slightly increased (28 capita) number of residents within the vicinity of the public parks, though it is not anticipated that any increased visitation to these recreational areas will be significant. The project will deed 0.97 acres of land to the Town for it to extend its existing heritage trail, as well as utilize the two historic houses for public recreational purposes. This will add to the Town's recreational resource base, at no cost to the Town for land acquisition.

Solid Waste Handling/Recycling

The proposed residential use is predicted to generate approximately 171 lbs/day of solid waste, which would represent less than 0.009% of the total volume disposed at the Town facility. Solid waste will be removed by the Town of Huntington and disposed of at the Town of Huntington's Resource Recovery Facility.

It is not anticipated that any toxic or hazardous waste will be generated, stored or used on the site other than general household-type cleaners. In summary, the type and volume of solid wastes generated by the project are not expected to have a significant impact on the operation of the Town facility. Residents are expected to deposit bagged wastes in closed containers for curbside collection. As a result, impacts from solid waste generated by the proposed project or to solid waste handling facilities are not anticipated.

Utilities

Water Supply

The volume of potable water required by the proposed project is assumed to be the same as the generation of wastewater for the project plus landscape irrigation, which is 3,843 gpd. This document contains the Letter of Water Availability for the project. The SCWA is chartered by the State of New York to provide potable water to all sites within its authorized service area; therefore, it is anticipated that the SCWA will be able to service the site, particularly in consideration of its small water demand. The site residences are already served by public water; therefore, the marginal increase in site population represents a relatively minor increase in water consumption above existing conditions.

Wastewater Treatment

Assuming that the 3,000 gpd of water required for the project will be used for sanitary purposes, 3,000 gpd of wastewater will be generated. The proposed project includes a request to extend the Town Sewer District to encompass the site, to enable it to utilize the existing Town sewer system and STP to treat and dispose of its sanitary wastewater. The proposed project would connect to the sewer district via a new pipe laid beneath Woodhull Road, from the site access northward to the existing 8-inch sewer main beneath Park Avenue. The applicant submitted a Sewer District Extension Request letter to the Town Board in November of 2004; the response letter (dated January 6, 2005) indicates that the district's sanitary sewage flow is approaching the limits of the STP's design and permitted flow capacities. A sewer capacity study is currently being prepared for the Huntington Sewer District to determine a future course of action.

However, an involved agency may not undertake, fund or approve an action until all provisions of SEQRA have been completed; therefore, the district cannot consider the extension request until the SEQRA process for the Subdivision application has been completed. In the event that no connection is possible, the use of individual sanitary septic tanks will be necessary.

Energy

The proposed project will increase the electrical and, if used, natural gas consumption in the area, and will require service connections of the electrical and natural gas lines to the nine (9) additional dwelling units. KeySpan has indicated that they will supply electricity to the site within its filed schedules and tariffs of the utilities operating conditions. In consideration of the small size of the project, the resulting electrical and natural gas demands are not anticipated to result in significant impacts to KeySpan or its ability to serve other sites in the vicinity.

Transportation

The proposed single-family homes are not expected to generate a significant number of trips during the AM, PM, or the Saturday peak hours. The most trips expected to be generated are nine during the PM and Saturday peak hours or an average of one trip every seven minutes. It is assumed that the distribution of these residential single-family trips will follow the typical commuter distribution pattern. Therefore the projected trips will disperse more towards the south in the morning peak period where the major highways (LIE and Northern State Parkway) and LIRR train station are located, with the reverse pattern from the north occurring in the evening peak hour. It is not expected that these trips will generate any significant traffic impact on Park Avenue considering the relatively low projected site volumes compared to the current roadway volumes.

The site plan for the project proposes a single access onto Woodhull Road, with no direct access onto Park Avenue. An intersection sight distance measurement was performed at the proposed driveway location in accordance with the recommendation contained in *A Policy on Geometric Design of Highways and Streets*, published by the American Association of State Highway and Transportation Officials (AASHTO). AASHTO states that for the most critical movement, a vehicle making a left-turn from the driveway, an intersection sight distance of 335 feet is recommended for a design speed of 30 mph.

The site plan indicates a driveway on the south side of Woodhull Road approximately 300 feet west of CR 35 labeled Kiruv Court. Kiruv Court will be a 30-foot wide two-way private roadway providing access to the proposed homes. The available sight distance for drivers exiting Kiruv Court was recorded at approximately 170 feet to the east and 400 feet to the west. A utility pole and heavy brush limit the sight distance to the east. However, relocating the utility pole and cutting back the brush in this area is proposed as part of the project. These measures will provide the maximum available sight distance by creating a clear sight line to the intersection with Park Avenue. Given the low traffic volumes and adequate sight distances, no significant adverse traffic impacts are expected as a result of this project.

The project includes a small (306 SF) dedication of land at the intersection of Park Avenue and Woodhull Road, for the Town to increase the turning radius at this point, as the angle for vehicles turning right from Woodhull Road onto Park Avenue is greater than 90°. This will provide improved traffic flow and safety at this intersection, particularly for longer trucks, school buses and articulated fire trucks.

Cultural Resources

Regarding the former Tannery site, the stone and mortar vat will be removed to construct the proposed impoundment area. The Stage I Archaeological Evaluation and Survey recommended mitigation in the form of data recovery excavations, which would include emptying the vat and examining the contents for artifacts. It would also include the completion of a trench on the exterior of the vat to search for evidence of the date and methods of construction. Therefore, the vat will be fully documented in photographs and drawings before its removal, and samples of the vat's stone and mortar will be taken.

The Stage I Survey also recommended that excavation for a proposed drain line, associated with the formerly proposed Tannery Park project, from a proposed stormwater retention basin to the catch basin on Park Avenue be monitored by an archaeologist. The proposed drain line would have crossed the reported location of six huts used by Hessian soldiers during 1779-1783. Shovel tests did not locate any remains of the huts, but indicated fill to a depth of 1.3 feet. *"Since the stream that formerly ran along this side of Park Avenue was converted into a storm drain within the last 50 years, this location most likely has been disturbed, but there is a slight possibility that remains from the huts survive."* However, the currently proposed Kiruv Estates project will not require any disturbance in this area. The proposed grading to construct impoundment area #3 lies farther southwest of the reported location of Hessian huts and no disturbance of potential historic artifacts are anticipated.

The OPRHP has expressed a desire to retain the barn and silo on the property and, in the past, suggested adaptive re-use of this structure. However, and in addition to the structural engineer's reports, this action is not feasible desirable or in keeping with the goals and objectives of the project sponsor for the following reasons:

- The site is privately owned and zoned for residential use under the R-7 zone.
- The barn and silo are not designated historic structures.
- The applicant does not intend to incur the substantial expense of rebuilding or maintaining these deteriorated structures.
- The re-use option is not consistent with the site's zoning or applicant's desires.
- The structural integrity of the buildings is very poor; the feasibility of adaptive re-use is highly questionable.
- The structure is affected by springs of water seeping through the ground within the building.
- The silo is severely degraded and in danger of failure.
- The site is an attractive nuisance and a potential danger from vandalism, fire or physical harm due to the condition of the structures.

Overall, retention of the barn and silo is not considered a viable or desirable option for the site in connection with private development consistent with zoning. The applicant does not intend to retain these deteriorated, dangerous structures in connection with a new residential development.

Public Health

In its EAF Part III prepared for the proposed project, the Town Planning and Environmental Review Divisions expressed concerns regarding soil moisture impacts on home structural integrity and resident health and safety, as well as safety concerns associated with a prior on-site drainage system which utilized surface impoundments; the project's stormwater system has been redesigned and no longer includes such a system. Instead, an on-site collection and detention system is proposed, which will minimize on-site recharge of runoff from developed surfaces of the site by overflowing this detained runoff to the public storm sewer system. . The specific concerns noted in that document follow, with brief discussions of those project features that would minimize or eliminate each.

- *Basements, if present, may be flooded due to the close proximity of the impoundments.*

Impoundments are no longer proposed. It is not proposed to provide basements for those units located in the lower northern portion of the site, where the depth to groundwater is low. These units will be built on sealed concrete slabs, thereby eliminating basements or crawl spaces as a potential locus of impact. Use of the collection and detention system for overflow to the off-site public storm sewer system will significantly reduce the amount of runoff recharged on-site, and thereby obviate potential high groundwater and soil moisture problems.

- *Saturated soils may present a long-term drainage problem.*

It should be noted that the groundwater that is the cause of concern is perched water, and is not reflective of the true water table. The proposed stormwater system will reduce potential problems from high groundwater and soil moisture levels by overflowing to the public storm sewer system for recharge off-site. In this way, high soil moisture conditions will be reduced beneath the site, thereby reducing the potential for drainage system operating problems.

- *The building foundations may be rendered unstable due to the close proximity of the impoundments. Prolonged soil or surface water in contact with footers and foundations can weaken soil bearing capacity, and thereby increase wall settlement and form cracks in walls and foundations. Seepage under foundation footers can erode soil, thereby removing support and cause walls to drop or crack. Excessive moisture may eventually penetrate and buckle flooring or cause warping, making windows, doors and cabinets difficult to close or open.*

If unsuitable soils are found, piles can be driven to provide for proper foundations. Recharge basins and similar drainage system designs, including the proposed collection and detention system, are a feature commonly associated with residential development in the Town of Huntington as well as in Suffolk County. Accepted engineering practice (including use of foundation sealing, impermeable membranes and footing drains with separate drywells) has shown that properly-designed features such as these, upon review and approval of Town and County agencies, do not result in safety hazards such as foundation instability or cracking, soil erosion, floor buckling, etc.

- *The impoundments may be a safety (drowning) hazard for children.*

Impoundments are no longer proposed; the proposed stormwater collection and detention system is an underground system and would not be accessible to children.

- *Mosquitoes hatched in the impoundments may become an annoyance as well as health hazard.*

Impoundments are no longer proposed. The proposed collection and detention system is located underground and would not be accessible to mosquitoes.

- *Saturated soils may cause high humidity in basements and crawl spaces, resulting in surface condensation, mildew, fungi, musty odors and a general unhealthy home environment. High humidity in basements and crawl spaces may result in deterioration of floor joists, beams and sub-flooring, insulation and electrical-mechanical systems.*

Use of an on-site stormwater collection and detention system will reduce the amount of water recharged on-site, which would reduce the level of soil moisture available to impact basements, crawl spaces, etc. In addition, modern HVAC systems are well-suited to address potential basement/crawl space humidity problems and, in conjunction with the foundation waterproofing techniques noted above, minimize the potential for mildew and fungi, as well as impacts to the substructure of the houses

- *As crawl space or basement dampness always moves toward drier upstairs areas, higher humidity will result in costlier heating and air conditioning bill, as larger volumes of living space are affected. In the case of crawl spaces, if the upper-flooring insulation collects moisture or sags from excessive wetness, heating and air conditioning costs are driven higher. Wet basements and crawl spaces reduce the value of a house, at least by the amount that would be required to repair the damage and eliminate the cause of the problem.*

As noted above, several features of the proposed project will minimize the potential for excessive energy costs due to high humidity levels in basements, including: use of modern basement waterproofing techniques; use of a stormwater collection and detention system designed in conformance with Town and County requirements and approvals; and use of modern, energy-efficient HVAC systems.

In summary, based on the applicant's intended use of modern construction techniques commonly implemented elsewhere in the Town and region, these health- and safety-related concerns will be addressed by the proposed project and are not anticipated to result in any significant adverse impacts.

Mitigation Measures

Topography

- Once site grading is completed, slopes of 1:3 or less will be established in newly graded areas. Subsequent development of individual lots will involve grading unique to each lot. In general, following development, the site will continue to slope from a topographic high located along the southern property lines towards the north. Fill ranging from approximately 2 to 6 feet will be required which will allow the cul-de-sac to maintain grades of approximately 4.5%. All graded slopes will be stabilized using ground cover material.
- Retaining walls will be installed along the southwestern end and southeastern side of the cul-de-sac as well as within the southern portions of the property to stabilize soils and provide for grade transitions within the topographical high areas of the site. Retaining walls facilitate grade transition and create a

site design where the minimum amount of grading needed to utilize the site for its intended purpose under zoning will occur. As a result, it is expected that topographic impacts will be minimized to the maximum extent practicable due to the proposed grade transitions, planting of ground cover materials, and installation of retaining walls and stormwater retention facilities

- Additional safeguard against erosion will be achieved through the NYSDEC SPDES review of stormwater control measures consistent with Phase 2 stormwater permitting for construction sites in excess of 1-acre (DEC GP-02-01).
- Prior to the start of construction, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared, including a detailed erosion and sediment control plan, to manage stormwater generated on-site during construction, and for post-construction stormwater management. A SWPPP will be prepared to ensure compliance with water quality and quantity requirements pursuant to Technical Guidance and GP-02-01 requirements. In addition, an erosion control plan incorporating the NYSDEC Technical Guidance manual, and use of measures such as silt fencing, storm drain inlet protection, hay bales, and good housekeeping procedures will be utilized. Hay bales and silt fencing will be installed in critical areas for erosion control, including the downslope limit of all cleared/graded area, to minimize the potential for eroded soils to impact the wetlands or dedicated areas. The Notice of Intent (NOI) requesting coverage under the General Permit will be filed in accordance NYSDEC requirements, prior to the initiation of construction activities at the subject property.

Surface Soils

- A detailed engineering grading plan has been prepared to establish limits of clearing and grading, use of retaining walls, suitable grades and slopes and proper drainage conveyance and detention. Disturbed areas of the site will be stabilized during construction and will be graded to an appropriate slope (1:3 slopes) in order to provide suitable surface areas to accommodate development.
- The project sponsor is petitioning for inclusion within the Huntington Sewer District so as to allow all sanitary wastewater generated by the project to be conveyed off-site to the public sewer system for treatment and disposal in the Huntington STP. However, if the sewer connection is not approved, then on-site septic systems would be provided. If required, each of these systems will extend into the subsurface until suitable leaching materials are encountered and then backfilled with clean material in order to facilitate properly functioning sanitary systems.

Subsurface Geology

- The stormwater collection and detention system will be constructed through the removal of soil material. If needed and if this material displays acceptable bearing capacity and leaching characteristics, this soil material may be used as backfill in other areas of the site to produce acceptable slopes for construction particularly for fill along the alignment of the roadbed. If such characteristics are not determined, this material will be removed by truck to an acceptable landfill. As a result it is not expected that there will be any significant adverse impacts with regard to subsurface geological conditions.

Water Resources

- The site will be served by an on-site stormwater detention system, which will collect all runoff from developed surfaces, as well as off-site, upstream surfaces tributary to the subject site, for filtration, detention and controlled overflow to the public drainage system.
- To inhibit the free flow of stormwater runoff from the site, the removal of natural vegetation at the site will be limited to the greatest extent possible allowing vegetation, where it exists, to remain primarily along the boundaries of the subject property. Disturbed areas not covered with building or pavement will be revegetated with landscape vegetation consisting of lawns, shrubbery and trees. Areas of the site which will not be disturbed by construction or grading activities will remain as natural vegetation.
- Protection against erosion and sedimentation will be provided through implementation of an overall grading plan which will not create surface contours in excess of 1:3 slopes across the entire project area as well as the provision of sedimentation and erosion control measures designed to prevent the migration of overland runoff to adjacent properties.
- Each individual residential structure will be designed with proper grading at the time of building permit review and when the architecture of residences is know and it should be noted that all gutters and leaders on individual dwellings will be directed to drywells within each individual lot for recharge to the underlying aquifer.
- Coverage under the DEC General Permit Stormwater Discharges from Construction Activities will be obtained as required for the proposed construction site.

Ecological Resources

- Approximately 2.98 acres of forested wetland, emergent marsh, wooded upland buffer and cleared adjacent area will be protected in the conservation area under a conservation easement.
- Approximately 0.19 acres of upland area within the proposed conservation area will be supplementally planted with native species such as maples and oaks and allowed to return to wooded upland habitat.
- Approximately 0.20 acres of cleared vegetation within the 100-foot wetland adjacent area will be revegetated with native wetland tolerant species in the proposed impoundment areas.
- Approximately 0.97 acres of wooded upland will be deeded to the Town of Huntington and improved with the proposed extension of a heritage trail that will continue to the historic Moses Rolph House on the southwest portion of the property.
- Some native and near native plant species which provide food and shelter to wildlife can be utilized in the landscaped areas surrounding the proposed residential units, where possible. This may encourage ongoing use of the site by avian species which would otherwise abandon the site. Species which will be utilized include the following: black cherry, red maple, oak, highbush blueberry, dogwood and viburnum.
- The portion of the site disturbed for installation of the stormwater collection and detention system will be revegetated with species tolerant of moist conditions, and will eventually provide food and shelter for some wildlife.
- Approximately 0.07 acres of existing wooded buffer and shrubs will be retained along the western side of the property near Woodhull Road.
- Revegetating impacted areas not otherwise covered by developed surfaces with a selection including some native and/or native-compatible species would incrementally increase potential habitat areas.

Land Use, Zoning and Plans

- The above discussion indicates that no adverse impacts to the land use, prevailing zoning or the zoning pattern in the vicinity are expected; therefore, no mitigation measures are necessary or proposed other than mitigation inherent in project design as expressed herein.
- The analyses do not indicate potentially significant adverse impacts (defined as non-conformance with applicable recommendations) to the pertinent land use plans studied. Therefore, no additional mitigation measures are necessary or proposed.
- The project includes retention of wetlands and steep slopes on-site, as well as the extension of the existing Huntington heritage trail, which presently terminates on the property adjacent to the south. The extension will occupy the southern and southwestern portions of the site, and terminate opposite the two existing historic homes (which will be deeded to the Town).

Community Character

- In consideration of the site layout and building design features pertinent to the character of the site and community (i.e., the land use of the site and in the vicinity, the prevailing land use pattern, and the visual appearance of the site and properties in the area), mitigation is primarily related to the design of the project and future, more detailed landscape and architectural design and review.

Community Services

- The proposed project will result in only three (3) new students in the Huntington UFSD, which would not significantly impact the enrollment of the Huntington UFSD; therefore, no mitigation is warranted or proposed.
- Adherence to the NYS Fire and Building Codes will increase the level of safety from fires and minimize the potential for use of ambulance services. In addition, use of fire/smoke alarms will assist in minimizing the incremental increase in the potential need for fire protective services.
- The deeding of land and two historic houses to the Town will incrementally expand the Town's recreational facilities and resources, at no public cost for land acquisition.
- As no significant adverse impacts are anticipated as a result of the increased solid waste generation of the proposed project, no mitigation is necessary or proposed.

Utilities

- The analyses presented above do not indicate that there would be significant adverse impacts to the SCWA, the Town Sewer District (after its approval of a district extension), or KeySpan. As a result, no additional mitigation is necessary or proposed.
- It is anticipated that water-conserving plumbing fixtures will be utilized in construction, which will further minimize the volume of water required from the public water supply.
- It is anticipated that energy-conserving insulations, current building code requirements mechanical systems and the like will be utilized in construction, thereby mitigating the anticipated increase in energy consumption.

Transportation

- Based on the above analysis, the limited amount of traffic generated by the proposed project will not result in any significant impacts to the adjacent roadways and intersections during the peak traffic periods.
- The location of the access roadway will provide sufficient sight distance. Kiruv Court will intersect a section of Woodhull Road with a very low frequency of accidents (less than one per year), contributing to a minimization of potential safety and/or traffic impacts. Therefore, as no significant impacts are anticipated, no additional mitigation is necessary or proposed.
- The proposed dedication for increased turning radius at Woodhull Road/Park Avenue will increase traffic flow and safety at this intersection, particularly for longer vehicles and trucks.

Cultural Resources

- Approximately 0.97 acres of wooded upland will be deeded to the Town of Huntington and improved with the proposed extension of a heritage trail that will continue to the historic Moses Rolph House and Skidmore House on the southwest portion of the property.
- The existing farmhouse and two historic dwellings facing Woodhull Road will be preserved. Deeding the two historic dwellings to the Town will be considered simultaneously with approval of a Subdivision Map for Kiruv Estates.
- The stone and mortar vat will be emptied, examined for artifacts, and fully documented prior to removal. Additionally, its exterior will be searched for evidence of the date and methods of construction.
- The barn and silo will be documented through measurements and photography, and the history of the site will be compiled for education and research purposes.
- Demolition of the deteriorated barn and silo will remove an unsafe site condition.

Public Health

- Implementation of the measures recommended in the ESA II has eliminated the potential for health-related impacts from soil contamination and asbestos in the buildings to be demolished.

Alternatives Considered

SEQRA requires the investigation of alternatives to a proposed project in order to determine the merits of the project as compared to other possible uses, site locations and technologies. The discussion and analysis of each alternative should be conducted at a level of detail sufficient to allow for the comparison of various impact categories by the decision-making agencies. For this document, the alternatives include the following:

1. Alternative 1: site stays in its existing use and condition, occupied by a house and a cottage.
2. Alternative 2: site is occupied by 10 homes in a modified cluster design; the house would be retained, the cottage would be removed, and 9 new detached units would be built, with a 2.46-acre conservation area, heritage trail extension and 0.51 acres of historic area (including two historic houses) deeded to the Town; sanitary and drainage systems would be used.

3. Alternative 3: the site is occupied by10 homes; (the house would be retained, the cottage would be removed, and 9 new attached units would be built), with a 2.98-acre conservation area, heritage trail extension and 0.71 acres of historic area (including two historic houses) deeded to the Town; on-site septic and recharge systems would be used.
4. Alternative 4: the site is occupied by10 homes; it incorporates the house and the two historic houses (after renovations), relocates the cottage out of the proposed dedicated area to the developed area (for reuse as a community center), provides 2.62 acres of conservation area, heritage trail extension and utilizes the Town sewer system.
5. Alternative 5: the site is occupied by 10 homes as a conventional subdivision, of which 3 existing houses would be located on separate lots and 7 new houses would be built; individual septic systems would be used. There would be a public parkland dedication but no heritage trail extension.

Permits and Approvals Required

This Draft EIS is intended to provide the Town of Huntington Planning Board with the information necessary to render a decision on the Kiruv Estates application.

This document is intended to comply with SEQRA requirements as administered by the Town of Huntington. Once accepted, the document will be the subject of public review, followed by the preparation of a Final Environmental Impact Statement (FEIS) for any substantive comments on the DEIS. Upon completion of the FEIS, the Planning Board will be responsible for the preparation of a Statement of Findings, which will form the basis for the final decision on the Subdivision application. Following this process, the following additional approvals would have to be obtained prior to commencement of project construction:

- Town Planning Board - Subdivision review (cluster)
- Town Planning Board - Subdivision approval
- Town Department of Buildings, Engineering and Housing - Building Permits
- Town Department of Buildings, Engineering and Housing - Demolition Permits
- Town Highway Department - Roadwork Permit
- Huntington Sewer District - Sewer District Expansion
- SCWA - Water Supply permit
- SCDHS - Article 6 (Sanitary System design review)
- SCDHS - Article 4 (Water Supply System design review)
- SCDPW - NYS Highway Law 136 & General Municipal Law 239f
- NYSDEC - Freshwater Wetlands Permit
- NYSDEC - Sanitary Sewer Connection (from outside of District)
- NYSDEC - General Permit for Stormwater Discharges from Construction Activity (GP-02-01)

SECTION 1.0

DESCRIPTION OF THE PROPOSED PROJECT

1.0 DESCRIPTION OF THE PROPOSED PROJECT

1.1 Project Background, Need, Objectives and Benefits

1.1.1 Project Background and History

The proposed project, known as "Kiruv Estates", is for the subdivision of a 7.07-acre site, to enable its development into a 10-unit residential cluster project, and involves an amended subdivision application for a prior version of the Kiruv Estates project. The site, formerly part of the overall Swezey Dairy Farm (aka, the "Park Avenue Dairy Site"), is presently developed with two unoccupied, historic residential structures presently in a state of disrepair (the Skidmore house to the north and Moses Rolph House to the south), an occupied rental residence (the former main farm house, at 471 Woodhull Road) and an occupied rental cottage (formerly the milk house), along with a cow barn and silo (in a state of collapse). The proposed project would demolish the rental cottage and historic barn and silo, leave the former main house as Unit #3 in the cluster map and add nine new residences. Simultaneously, the two existing unoccupied, historic structures would be deeded to the Town of Huntington along with the 0.97 acres on which they are located. The subject property is within the Town of Huntington's Old Town Green Historic District, and is listed on the National Register of Historic Places. In addition, there are NYSDEC-designated freshwater wetlands on the eastern portion of the site.

A prior application was submitted for the property in 1998. The Hassett-Belfer application (also known as the Tannery Park Senior Housing project) was for a proposed rezoning to allow a congregate care facility on the then-7.42-acre site. Coordinated review under the NYS Environmental Quality Review Act (SEQRA) was conducted, the application was given Type I status, and Town Planning Board recommended that a Positive Declaration be issued; however, the application was not pursued, and neither the Town Board nor the Zoning Board of Appeals held public hearings. In a December 4, 1998 memorandum concerning the former Hassett-Belfer project (**Appendix A-1**), the Town Historic Preservation Commission deemed that the three existing dwellings and the milk house were presently in habitable condition, but that the other structures on the property were in ruinous condition and not considered viable for preservation.

In late 2001, the Kiruv Estates subdivision application was submitted; at that time the application involved 11 lots (retention of two existing residences on two lots and 9 new lots, of which one would be for a future religious building). The subdivision application underwent coordinated review, resulting in a Town-prepared Environmental Assessment Form (EAF) Parts II and III (**Appendix A-2**) and issuance of a Positive Declaration on February 13, 2002, thereby requiring preparation of a Draft Environmental Impact Statement (DEIS). However, that document was not prepared, as the applicant undertook to revise the Preliminary Site Plan in response to discussions with the Town regarding the existing structures, wetlands setbacks, drainage system design and other site considerations.

It should be noted that during this process the applicant requested and was granted a demolition permit from the Town Board on September 25, 2001 to remove a horse barn, cow barn, silo, two-

bay garage and storage building. This review had been conducted in accordance with SEQRA regulations. As regulated by Town Code, the Huntington Historic Preservation Commission (the Commission) reviewed the application and concurred. However, after a certificate of approval was issued by the Commission, correspondence was received from the NYS Office of Parks, Recreation and Historic Preservation (OPRHP), encouraging the previous applicant to explore alternatives to demolition of the cow barn. The Commission requested that the Town Board reconsider its issuance and revisit the issue (**Appendix A-3**). Demolition of the two-bay garage, the storage building and horse barn occurred, leaving the cow barn and silo. The Town withheld issuing the demolition permit for the cow barn until the possibility of adaptive reuse could be explored.

The Town's initial findings were similar to the conclusions documented in two structural engineer's reports completed in March 2001 and February 2002 by Joseph Schmitt Consulting Engineers for the property (**Appendix A-4**). The engineers determined that the milk house, gray house (Moses Rolph House), historic house (Skidmore House), and large house (main farm house) were all salvageable with varying degrees of reconstruction. However, they determined that the cow barn and silo were in very unstable condition and not suitable for reuse:

> The floor to ceiling height in the first floor is approximately 7 feet or less and would be reduced further when the floor is leveled and straightened with a topping slab. This would not meet minimum Building Code requirements.

Additionally, the building's side walls lack adequate footings and the east wall of the barn is facing imminent collapse. The attached silo is in comparably deteriorated condition, with the roof having long ago blown off, causing the silo walls to further deteriorate with exposure to weather.

In May of 2004, the prior Kiruv Estates application was withdrawn by the applicant and resubmitted as an amended modified Subdivision application, for nine new residences on a 7.07-acre site; the 0.35-acre reduction eliminated two parcels fronting Park Avenue on which freshwater wetlands are located. This amended proposal includes retention of three structures, of which two are historic structures (to be deeded to the Town), the approximately 0.97 acres of land on which the two houses are situated would be deeded to the Town (to also enable the Town to extend its heritage trail), and proposed connection to the Town Sewer District. **Appendix A-5** contains the EAF Part I prepared for this project. The Planning Board adopted the revised EAF Parts II and III and issued a Positive Declaration on November 3, 2004 (**Appendix A-6**). As established in 2002, it was determined that reconstruction and reuse of the cow barn remains highly unfeasible and would not be considered for inclusion in the proposed project; the barn and attached silo would be demolished to protect public safety. The former milk house, which has been used as a residential cottage, will also be demolished. The two structural engineering reports along with the most recently revised site plans were forwarded to the OPRHP for review and comment on April 1, 2005 (**Appendix A-7**) and their response is pending.

1.1.2 Public Need and Municipality Objectives

The public need for the project is related to the benefits to be derived if the project is implemented. The applicant has designed the proposed project to achieve the highest and best use of the site based on its current R-7 residential zoning, adjacent and nearby uses and densities, and the site's development considerations (e.g., wetlands, drainage, steep slopes, historic resources, etc.). The project site lies within a portion of the Town that has long been and remains an area with a distinctly rural and historic character. The proposed project will provide a permanent use of an underutilized property in conformance with its R-7 zoning, with conforming buffers from wetlands resources, provision of significant historic resources to the Town, and will address a significant local drainage problem.

The project includes two substantial land protection mechanisms noted, as follows:

- 2.98 acres of conservation area to be placed under a Conservation Easement for the freshwater wetlands and associated 100-foot (70 feet in areas previously disturbed) setback area, and
- 0.97 acres on which are located the two historic residences fronting Woodhull Road designated in the National Register of Historic Places and Town Historic District, which includes land for an extension of the Town heritage trail. Extended discussions during early to mid-2004 were conducted between the Town and applicant in which it was agreed that, upon approval of the Subdivision Map, these two houses and property would be deeded to the Town at a mutually-agreeable price. The 0.97 acres of land on which the two houses are situated and area surrounding the heritage trail would also be deeded to the Town.

The development of the property will increase the revenues generated to taxing jurisdictions, though it will result in incremental increases in demand for and cost of services to be utilized; this will be discussed in greater detail in this DEIS.

1.1.3 Objectives of the Project Sponsor

The applicant's objective is to realize an appropriate economic return on his investment, by providing a high-quality, well-designed residential development on a site zoned for such a use, at a yield appropriate for the amount of developable land, within site constraints, and by taking advantage of opportunities to utilize the positive project features noted above.

1.1.4 Benefits of the Project

The local community will benefit from the proposed project in the following ways:

- The project will provide high-quality residential housing in a desirable area of the Town of Huntington where similar high-quality housing already exists.
- The project will utilize the remaining development potential of the site, thereby eliminating any possibility of substantive future changes to the site.

- More than half of the property (3.95 acres out of 7.07 acres) will be preserved; the existing wetlands and buffering areas will be preserved as conservation area under a Conservation Easement and the two historic structures and the heritage trail will be permanently preserved and protected by deed to the Town.
- The Town of Huntington will benefit from the deeding of the two significant historic structures, to be available for Town rehabilitation and use in association with surrounding land and the Town heritage trail.
- The project will generate a number of temporary construction jobs.

1.2 Location

1.2.1 Geographic Boundaries

The subject property is approximately 7.07 is size and is located at the southeast corner of Park Avenue (CR 35) and Woodhull Road in the hamlet of Huntington, Town of Huntington. The property lies along the south side of Park Avenue and the northeast side of Woodhull Road, giving the site frontage on two roadways. The property has approximately 861 feet of continuous frontage along Woodhull Road and approximately 770 feet of discontinuous frontage along Park Avenue. **Figure 1** provides a general location of the subject property; note that figures are located following the text). The project site is identified as Suffolk County Tax Map District 400, Section 73, Block 1, Lots 38, 41.1 & 42 and Section 97, Block 2, Lot 107. The subject property is the site of the former Swezey Dairy Farm.

The subject site is within or subject to restrictions of the following service and planning districts:

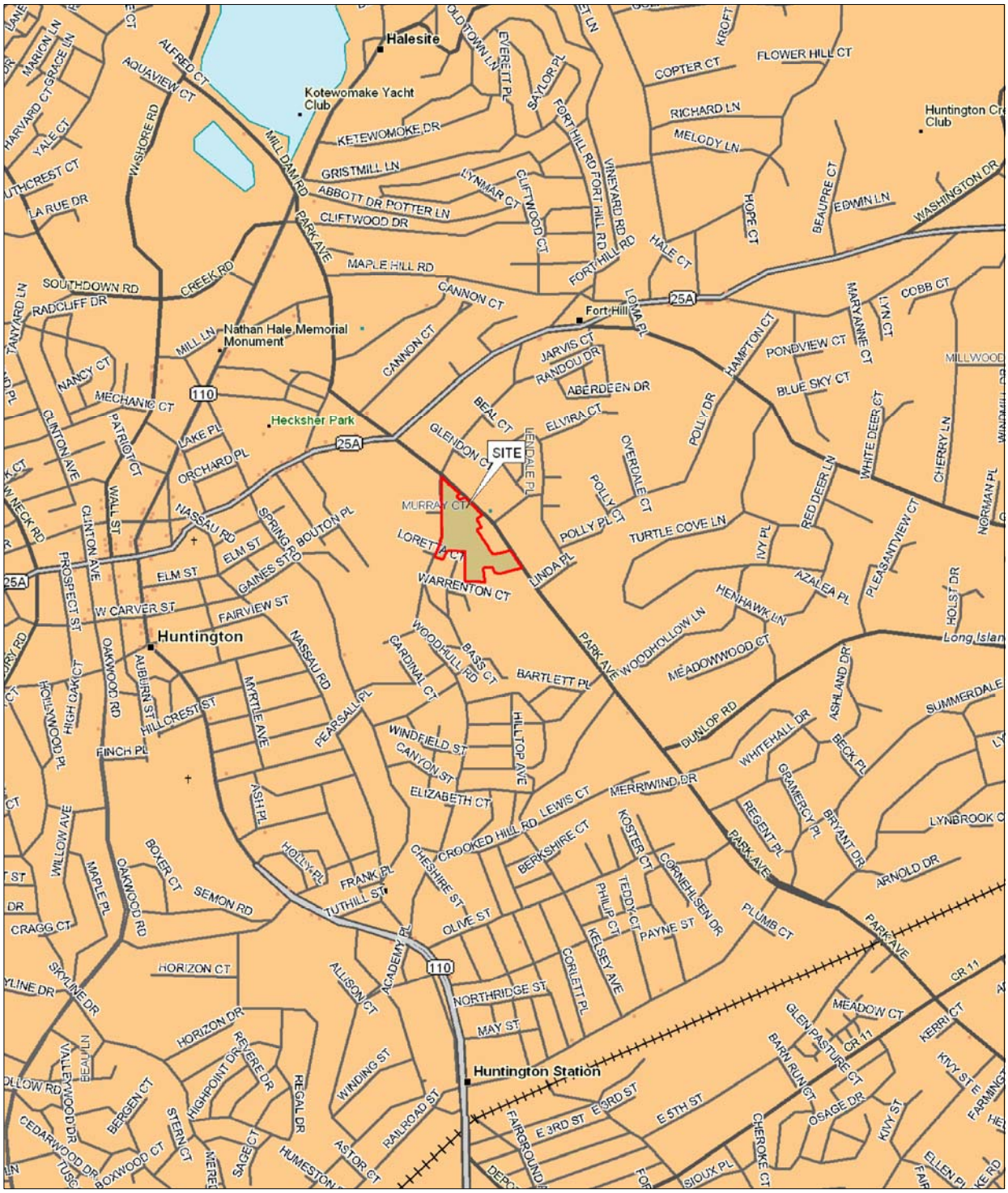
- Huntington Union Free School District (UFSD)
- Huntington Fire District
- Suffolk County Police Department (SCPD)
- Huntington Municipal Refuse District
- Suffolk County Water Authority (SCWA)
- Long Island Power Authority (LIPA/) KeySpan (electricity & natural gas)
- R-7 (Residential) Zone
- Town Steep Slope Ordinance
- Old Town Green Historic District
- National Register of Historic Places
- NYSDEC-Designated Freshwater Wetland

1.2.2 Site Access

Vehicle access to the site is presently available via Woodhull Road and Park Avenue (CR 35). An unpaved driveway currently extends from Woodhull Road into the central part of the property and accesses the four (4) existing dwellings, two of which are unoccupied. The two unoccupied dwelling are located along Woodhull Road while the two occupied residences are located in the interior of the property.

FIGURE 1

LOCATION MAP



Source: DeLorme Street Atlas
Scale: Not to Scale

NORTH

NELSON POPE & VOORHIS, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

1.2.3 Existing Site Conditions and Zoning

The subject site is presently improved with an occupied single-family dwelling, an occupied cottage, an access driveway and a man-made pond in the northeast portion of the site. A cow barn with attached silo is located in the central portion of the site. An emergent marsh and freshwater wetlands which flow into the man-made pond are also located along the eastern edge of the site. The southwest portion of the site contains two historic residential dwellings along the frontage of Woodhull Road, which the Town of Huntington has expressed interest in purchasing from the applicant, together with the 0.97 acres upon which they are situated. An unpaved driveway currently extends from Woodhull Road to access the four existing dwellings.

The project site is zoned R-7 (Residence) by the Town of Huntington, wherein a minimum lot size of 7,500 square feet (SF) is required. Property immediately surrounding the subject property, including areas contiguous to the south and across Woodhull Road and Park Avenue, are also zoned R-7. Other adjacent and nearby zones include: R-15 (15,000 SF lot size), R-80 (2 acres and R-20 (20,000 SF lot size) to the north, R-10 (10,000 SF lot size), R-20 (20,000 SF lot size) and R-40 (1 acre) to the east (across Park Avenue), R-10 (10,000 SF lot size) to the south, and R-20 (20,000 SF lot size) to the west, across Woodhull Road. **Figure 2** illustrates the zoning of the subject property and surrounding areas. In response to the dominant residential zoning in the area, the predominant land use in the area is residential. However, institutional uses are found nearby, including the Huntington Jewish Center and Nursery School (on the east side of Park Avenue), and the Woodhull Intermediate School (located west of the site) is accessible from Woodhull Road. Additional information on zoning and land use is provided in **Section 3.1**, and a description of community services is contained in **Section 3.3**.

Other uses permitted in the R-7 Residence District include farms, nurseries, truck gardens, country estates, churches, schools, libraries, museums, parks and recreation areas, municipal parking fields, fire stations, and municipal water supply reservoirs. Buildings in the District are limited to a maximum height of 35 feet or 2 stories. Dimensional restrictions for building setbacks are as follows: front yard setback, 25 feet; side yard setback, 7 feet (combined yard of 15 feet); and rear yard setback, 25 feet.

It should be noted that the site is subject to the Town of Huntington Steep Slope Ordinance, which will be further discussed in **Sections 2.1.1** and **3.1.1** of this document. The subject property is within the Town of Huntington's Old Town Green Historic District, and is listed on the National Register of Historic Places. In addition, there are NYSDEC-designated freshwater wetlands on the eastern portion of the site.

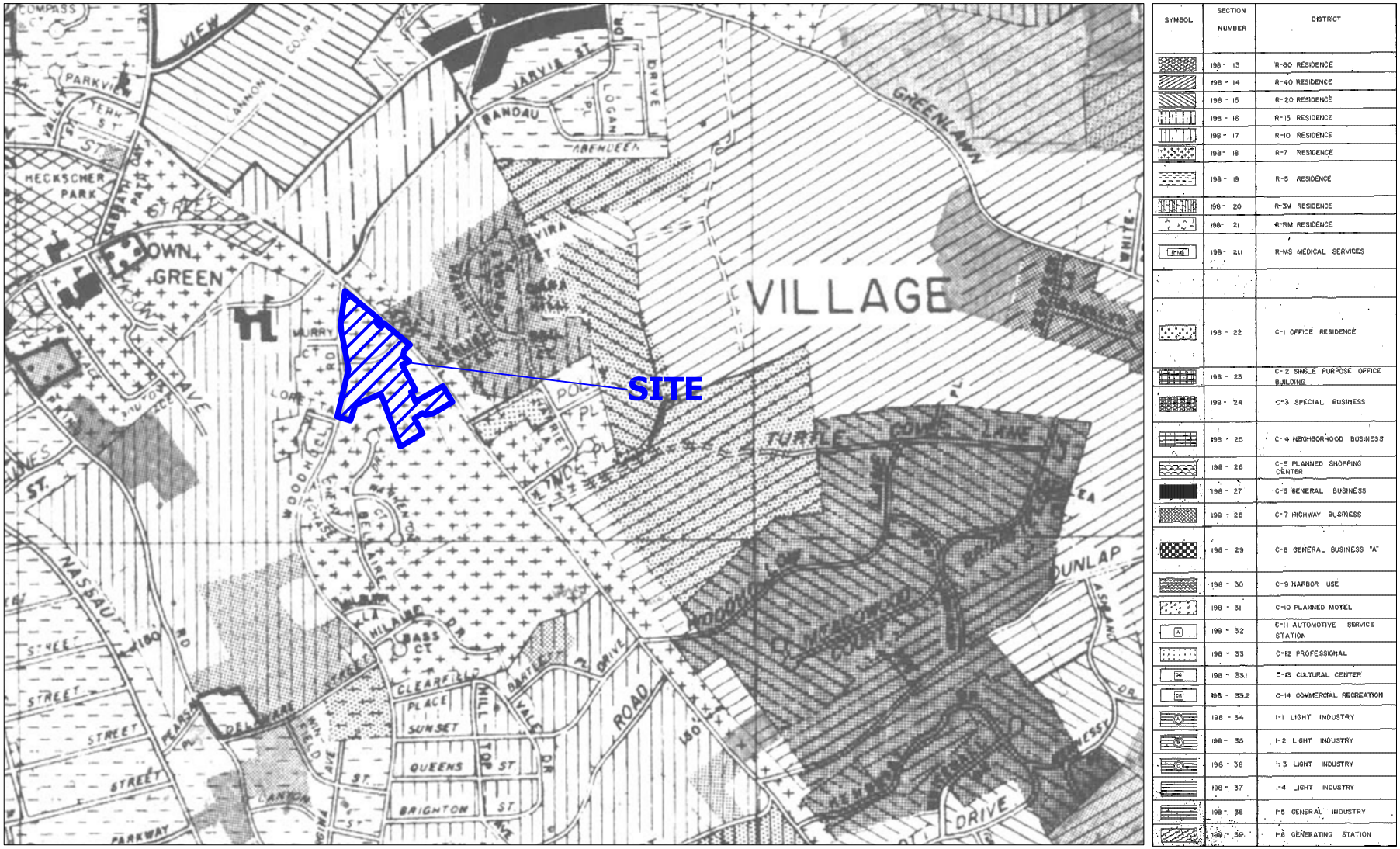
1.3 Project Design and Layout

1.3.1 Overall Site Layout

Table 1-1 provides a listing of the subject site's existing and proposed coverages and physical characteristics. The project site is irregularly shaped, with Woodhull Road running north-south

FIGURE 2

ZONING MAP



Source: Town of Huntington Zoning Map
Scale: 1" = 1,000'

NORTH

NELSON POPE & VOORHIS, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

along the western property boundary and Park Avenue running north-south along the eastern property boundary. Site access is proposed via a single cul-de-sac access from Woodhull Road and all required parking pursuant to the Town Code will be provided with off-street parking in the form of driveways and garages for the proposed residences. The site's single access roadway will be located at approximately the mid-point of the western property boundary. A small land dedication at the intersection of Park Avenue and Woodhull Road will be provided, to enable an increase in the radius of this intersection. All of the proposed structures and the single-family residence that is to remain will be accessible from the single access point. In order to reduce the site elevation and to provide suitable access road grades and building sites, a two-tiered retaining wall is proposed around the cul-de-sac to the building that houses Units #9 and #10, and a single-tiered retaining wall extends northwards from Unit # 4 for a distance of about 130 feet.

The proposed use does not require a zone change of the existing R-7 zoning; the proposed project involves a Subdivision application for the construction of nine (9) attached units. A Yield Map was prepared by the Applicant in the summer of 2004 and was revised in August of 2005; it was reviewed by the NYSDEC (due to the presence of NYS-designated wetlands), and found to be feasible. Subsequently, in response to Town comments on the lot encompassing the cottage, the **Yield Map** was revised (in December 2005; see folder at rear) to result in a 10-lot plan which conforms to Town requirements for sites in the R-7 district where steep slopes are present. As this revision is not in proximity to the wetlands boundary and would not change the clearing envelope or site design, it is not anticipated that the prior NYSDEC review would be compromised by the current Yield Map. The Yield Map shows 10 lots, of which 9 are new and one that would accommodate the existing dwelling to be retained. New York State Town Law, Section 281 empowers the Town Planning Board to allow a residential project to be "clustered" on lots of less than 7,500 SF in the R-7 district, in order to provide, among other goals, the preservation and/or protection of significant features or characteristics of a site. This is achieved by permanently prohibiting development in the area intended to be protected; the landowner, however, is allowed to develop the same number of lots as would be possible absent this preservation, but on smaller lots clustered in such a way as to avoid impact to the protection areas of the site. In this way, both the Town (representing the public) and the landowner achieve their goals: the valuable asset is permanently preserved and protected, and the landowner retains his ability to develop the number of lots determined from a feasible yield plan which conforms to zoning. The Yield Map was prepared in conformance with the Town's Steep Slope Ordinance (Article X, Sections 198-60 through 64); the map depicts the three allowable lots within the portion of the site where slopes in excess of 25% are located. The portion of the site which is not subject to this ordinance would provide seven additional lots (see **Section 3.1.1**) The Yield Map also includes a public parkland dedication accessible via Town-standard internal roadway; this parkland is also contiguous to other public lands.

Table 1-1
SITE AND PROJECT CHARACTERISTICS

Parameter	Existing Conditions	Proposed Conditions			
		Total	Conservation Area	Deeded	Project
Coverages (acres):	---	---	---	---	---
Buildings	0.24	0.41	0	0.05 (1)	0.36
Paved	0.02	0.59	0	0	0.59
Gravel/Pervious	0.12	0.02	0	0.02	0
Mapped Wetlands (2)	0.89	0.89	0.89	0	0
Lawn	1.77	2.06 (3)	0	0	2.06
Successional Forest	4.03	3.10	2.09	0.90	0.11
TOTAL	7.07	7.07	2.98	0.97	3.12
Trip Generation (vph, 4)**:**	---	---			
AM Peak Hour	1	8			
PM Peak Hour	1	10			
Water Resources:	---	---			
Water/Wastewater (5)	600 gpd	3,000 gpd			
Irrigation (annual avg.)	0	843 gpd			
Total Water Use	600 gpd	3,843 gpd			
Recharge Volume	3.88 (6)	1.95 (7)			
Nitrogen Concentration	2.33 (6)	0.01 (7)			
Miscellaneous:	---	---			
Residents (8)	7 capita	28 capita			
School-age children (9)	2 capita	5 capita			
Solid Waste (10)	42 lbs/day	171 lbs/day			

(1) Includes two structures to be deeded to the Town.
(2) Includes 0.51-acre Forested Swamp, 0.11 acres of Emergent Marsh, and 0.27-acre Freshwater Pond.
(3) To minimize nitrogen concentration in recharge, assumes irrigated @ 5.5 inches/year, but not fertilized.
(4) From the ITE Trip Generation Handbook, 7th Edition, 2003.
(5) Based on SCDHS design rate of 300 gpd/unit; assuming three bedroom units.
(6) See **Appendix B-2**.
(7) See **Appendix B-3**.
(8) Based on one 3-bedroom detached and one 4-bedroom detached units existing and nine 3-bedroom attached and one 4-bedroom detached units proposed; 3.14 capita/unit for three-bedroom detached units, 2.67 capita/unit for 3-bedroom attached units, and 3.83 capita/unit for 4-bedroom detached units (from BOCES/Burchell, modified Rutgers Study).
(9) Based on 0.64 school-aged children for 3-bedroom detached units, 0.35 capita/unit for 3-bedroom attached units and 1.12 capita/unit for 4-bedroom detached units (from BOCES/Burchell, modified Rutgers Study).
(10) Based on 5 lbs/day per capita (plus 1 lb/bedroom/day; from Salvato, 1982).

It should be noted that the proposed new units would be individually owned, with the remainder of the property including common areas and roadways to be owned and maintained by a condominium homeowners association (HOA). The project's internal roads will not be built to Town standards (i.e., will have a paved width of 30 feet, where the Town would require a 34-foot paved width if this roadway were to be dedicated to the Town; see **Section 1.3.3**). The site has been designed to locate the units, roadways, and other improvements on the portion of the site which has previously been developed to the maximum extent practicable, as well as setback a minimum of 100 feet from the freshwater wetland in those areas which have not previously been disturbed. The proposed units would be distributed in a cluster design on the west-central portion of the site, with four 2-story structures; three will contain 2 units each, and one will contain 3 units. The 4 proposed residential structures will have a total footprint of 14,175 SF.

Each unit will have three (3) bedrooms and will have approximately 2,700 SF of gross floor area in its two floors. Upon completion, buildings will occupy 0.41 acres of the site, with paved surfaces on approximately 0.59 acres, 0.02 acres of gravel surfaces, 0.89 acres of wetlands, 3.10 acres of forest, and 2.06 acres of non-fertilized and irrigated landscaping. Deeded areas (0.97 acres) and areas to remain natural with a conservation easement (2.98 acres) will occupy 3.95 acres of the property. There are significant slopes in the southern and southeastern portions of the property, most of which will be protected by a conservation easement within the proposed conservation area.

The existing barn, silo, cottage, and access driveway from Park Avenue would be removed; however the single-family dwelling and pond on the northeastern portion of the site would remain. **Figure 3** provides a reduced copy of the **Overall Layout Plan;** the full-scale plan is also included in a folder at the end of this document.

The project sponsor is petitioning the Huntington Sewer District for inclusion, to allow all wastewater generated by the project to be conveyed to the public sewer system for treatment and disposal in the Huntington Sewage Treatment Plant (STP; see **Section 1.3.4**). As described in **Section 1.3.2**, public water supply is proposed for the development and stormwater runoff will be retained and disposed of in the proposed on-site drainage system.

The subject property is within the Town of Huntington's Old Town Green Historic District, and is listed on the National Register of Historic Places. In addition, there are NYSDEC-designated freshwater wetlands on the eastern portion of the site. As part of the proposed project, the two historic dwellings are proposed to be deeded to the Town of Huntington, and the surrounding 0.97 acres of land would also be deeded to the Town. Additionally, the proposed project includes land for the Town to extend its heritage trail from the southeast portion of the property across the site to Woodhull Road and the two historic structures. Approximately 129,608 SF (2.98 acres) of conservation area for the freshwater wetlands and associated 100-foot (70 feet in areas previously disturbed) setback area will be protected by a conservation easement.

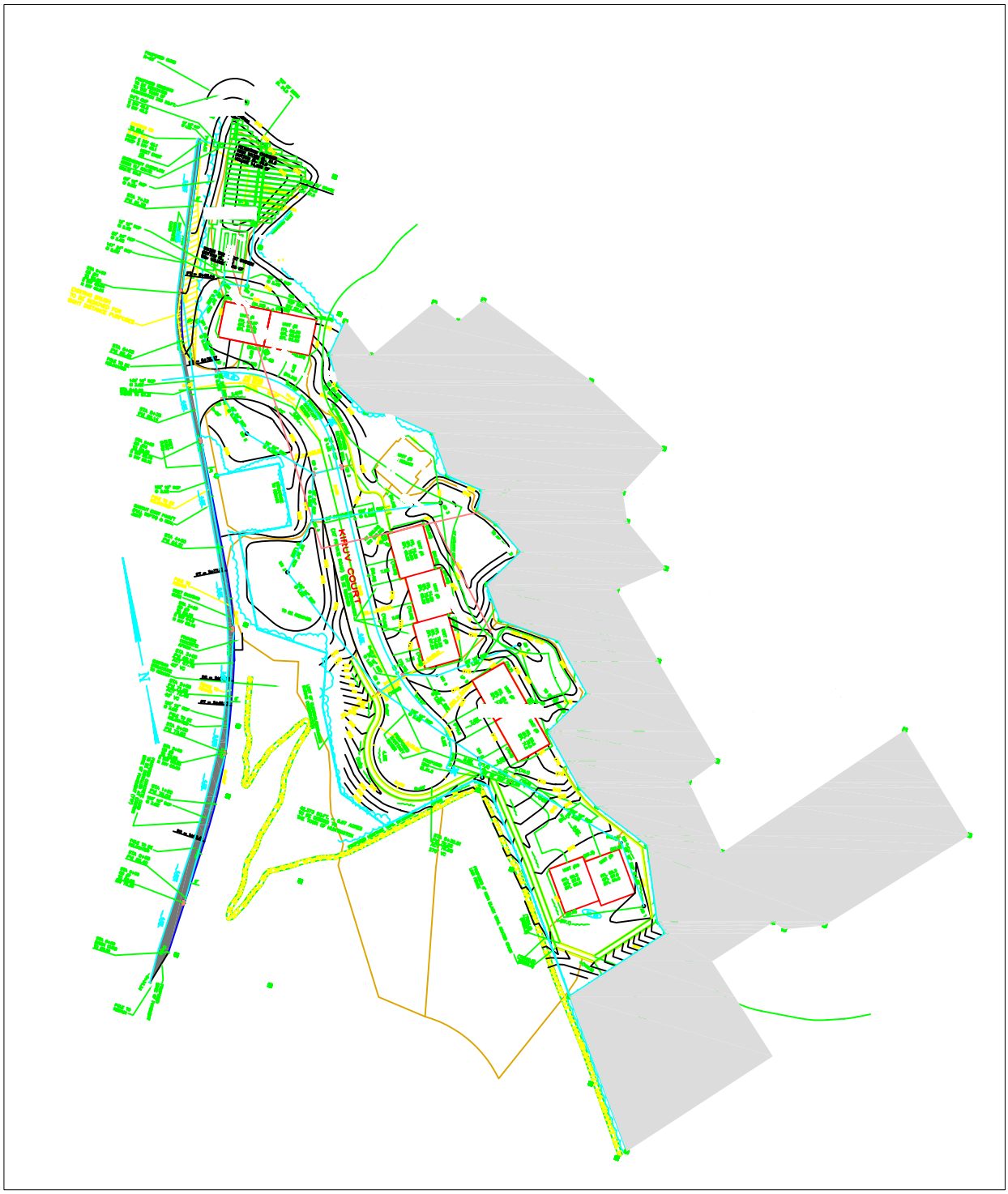
It is pre-mature to prepare architectural renderings of each of the new residences (such plans will be prepared and reviewed by the Town as part of the individual building permit applications), however, the applicant will comply with applicable Town and Historic District design requirements for this district, which would ensure that building designs complement the overall architectural theme of the vicinity and reflect the era which gives the Old Town Green Historic District its distinctive appearance.

1.3.2 Grading and Drainage

Approximately 3.12 acres located on the western portion of the property will be subject to clearing/grading for the new internal access road, driveways, homesites, impoundment areas and yards. Approximately 2,000 cubic yards of soil will be disturbed, to be retained for reuse on-site as fill to the greatest degree practicable. Excess material, if any, will be removed from the site to be sold as fill or disposal in an approved C&D landfill or solid waste facility. The greatest depth

FIGURE 3

OVERALL LAYOUT PLAN



Source: Nelson & Pope Preliminary Plan
Scale: 1" = 150'

of cut is anticipated to be approximately 20 feet and will be located in the area of the retaining wall near Units #9 and #10; the greatest depth of fill is approximately 5 feet in the vicinity of proposed Unit #4 and Kiruv Court. In conformance with Town standards, artificial slopes will not exceed 1:3. In order to reduce the amount of graded area, a two-tiered retaining wall is proposed along the cul-de-sac to around the building that houses Units #9 and #10, and a 130-foot single-tier retaining wall is located north of Unit #4. Slopes will be stabilized immediately after final grading with appropriate cover, such as hydroseeding or straw.

Erosion and sedimentation controls will be provided during construction activities associated with the project. In accordance with the NYSDEC Phase II SPDES Program, coverage under the General Permit for Stormwater Discharges from Construction Activities (NYSDEC Permit No. GP-02-01, General Permit) will be obtained prior to the initiation of construction activities. Prior to filing for coverage under the General Permit, the NYSDEC requires that a Stormwater Pollution Prevention Plan (SWPPP) be prepared for the parcel, including a detailed erosion and sediment control plan, to manage stormwater generated on-site during construction activities, and for post-construction stormwater management. A SWPPP will be prepared to ensure compliance with water quality and quantity requirements pursuant to Technical Guidance and GP-02-01 requirements. In addition, an erosion and sedimentation control plan incorporating the NYSDEC Technical Guidance manual, and use of measures such as silt fencing, storm drain inlet protection, hay bales, and good housekeeping procedures will be prepared and implemented as part of site construction. The drainage system and revegetation plan will further provide permanent stormwater controls once construction is completed. Development of the property is not anticipated to significantly increase erosion/sedimentation or stormwater impacts, as a result of proper site grading procedures, erosion controls, and drainage system design. The Notice of Intent (NOI) requesting coverage under the General Permit will be filed in accordance NYSDEC requirements, prior to the initiation of construction activities at the subject property.

The proposed project includes an on-site drainage system that will collect runoff from the project's developed surfaces, as well as from off-site tributary areas; the eastern side of Woodhull Road along the subject site will be provided with curbing and drainage facilities. As noted in the Engineering Report for this system (see **Appendix C**), the contributing drainage area (including the project site) is approximately 4.07 acres. The stormwater management system will be designed to handle the runoff from this contributing area only. The undisturbed areas that naturally drain away from the site are not included in the design of the system.

As seen in the **Grading and Drainage Plan**, stormwater will be collected through a series of landscape area drains and roadside catch basins. The stormwater will be conveyed through buried piping to an underground filtration and detention system located in the central and northern portions of the site. The stormwater will ultimately be released into the Town drainage system on Woodhull Road that connects to the Park Avenue drainage system. The discharge of stormwater to the Town drainage system will be released at a controlled rate in compliance with the design criteria set forth set forth in the NYS Stormwater Management Design Manual (SMDM). Detention will be provided based on a 3-inch rainfall event and water quality treatment will be provided.

The NYS SMDM sets forth design criteria for sizing stormwater management systems. The SMDM manual outlines sizing criteria to meet pollutant removal goals, reduce channel erosion, prevent overbank flooding, and help control extreme storm flooding. The following are the four sizing criteria outlined in the manual:

1) Water Quality Volume Requirement - Volume required to capture and treat 90% of the average annual stormwater runoff volume.
2) Channel Protection Volume Requirement - Provide 24 hour extended detention of the post-development 1 year, 24 hour storm event.
3) Overbank Flood Control Criteria - Control the post-development 10 year, 24 hour peak discharge rate to pre-development rate.
4) Extreme Storm Control Criteria - Control the post-development 10 year, 24 hour peak discharge rate to pre-development rate.

The Engineering Report shows that the drainage system will meet the above requirements for water quality volume, stream channel protection, overbank flood control, and extreme storm flood control, as follows:

1) Water Quality Volume - The required water quality volume is 4,397 CF and the volume of the stormwater filtration system is 4,766 CF.
2) Stream Channel Protection - The report shows that the proposed system will provide the required 24 hour extended detention of the post-development 1 year, 24 hour storm event.
3) Overbank Flood Control - The report shows that the proposed system will control the peak discharge from the post-development 10 year, 24 hour storm event to the pre-development rate. The pre-development peak discharge rate is 2.86 cubic feet per second (CFS) and the controlled post-development peak discharge rate is 2.69 CFS.
4) Extreme Storm Flood Control - The report shows that the proposed system will control the peak discharge from the post-development 100 year, 24 hour storm event to the pre-development rate. The pre-development peak discharge rate is 6.22 CFS and the controlled post-development peak discharge rate is 5.95 CFS.

Appendix D contains the Water Resource/Watershed Analysis Study prepared for the proposed project. That document notes that a portion of runoff currently generated on-site during rain events is able to leave the property and adversely impacts adjacent roadways and properties, causing localized flooding. This condition will be improved as a result of the project. The proposed drainage system has been designed in consideration of the Town-required runoff coefficient for surfaces and the unique condition of the site. With respect to this condition, the Study concludes:

> The results of the watershed analysis study demonstrate that the existing drainage inlets at the corner of Woodhull Road and Park Avenue are capable of handling the additional flow from Woodhull Road caused by constructing new curbing along the east side of the road. Although the existing drainage was determined to be adequate, new drainage inlets and piping are proposed to decrease the gutter flow along the east side of the road.
>
> The study results also indicate that by providing an on-site stormwater collection system as a part of development the site would be removed from the watershed tributary to the corner of Park

Avenue and Woodhull Road. The proposed system will collect and recharge stormwater on-site and eliminate the current overflow at the northwest corner of the site onto Park Avenue.

In Summary, the development of the proposed subdivision will have no adverse impacts on the Town's drainage system at the corner of Park Avenue and Woodhull Road. The proposed development will in fact help to improve the existing stormwater collection system on Woodhull Road and at the intersection with Park Avenue.

As a result, the existing flooding problem will be eliminated by the proposed project.

1.3.3 Access, Road System and Parking

Site access is proposed via a private roadway from Woodhull Road ending in a cul-de-sac. The site's internal roadway will be 30 feet in paved width, and will be privately owned and maintained by the HOA. This access will be located at approximately the mid-point of the western property boundary. All of the proposed structures and the single-family residence that is to remain will be accessed from this internal roadway. Exiting traffic at the access point will be controlled by a Stop sign, as the number of trips generated is not sufficient to require a traffic signal. There is sufficient visibility along Woodhull Road in both directions for entering and exiting traffic to turn safely; no substantial amount of vegetation will have to be cleared.

The project includes a dedication of 306 SF at the southern corner of the Woodhull Road/Park Avenue intersection, to enable a Town-sponsored improvement in the radius of this turn, particularly for larger delivery trucks, school buses and fire trucks on Woodhull Road to make right turns onto Park Avenue

All 20 parking spaces required by the Town Code will be provided in head-in parking areas located along the internal roadway and on driveways.

1.3.4 Sanitary Disposal and Water Supply

Sanitary wastewater will be generated as a result of the proposed residential development. The project sponsor is petitioning for inclusion within the Huntington Sewer District so as to allow all sanitary wastewater generated by the project to be conveyed off-site to the public sewer system for treatment and disposal in the Huntington Sewage Treatment Plant (STP). A copy of the petition is included in **Appendix E**. However, the system is presently near its capacity, and the Town has engaged a consultant, H2M, to prepare a study analyzing existing and future treatment needs for the district. That study is not due for completion until mid-2006. If it is not possible to connect to this system (see **Section 2.4.1**), the applicant would develop the project utilizing on-site septic systems until such time that the study is complete and access to public sewers becomes available. This alternative scenario is analyzed in this document in **Section 5.3**. According to the Town Department of Environmental Waste Management, the cement sewer pipe to which the proposed project would connect is owned by the Town, and is 8-inches in diameter. It was installed for the Huntington Jewish Center in 1960, and is presently in good

condition. The Sewer District is of the opinion that higher density development should be located in areas where sufficient sewer hydraulic capacity is available to support that development. The district notes that its collection system capacity is greatest at the center of the district, whereas the project site is located at its (current) periphery. However, if and when the sewer district is expanded, the hydraulic capacity of the sewer line beneath Park Avenue would be increased to a size capable of conveying the increased volume of wastewater generated by development served by this public facility, so that the district's concerns regarding capacity would be alleviated. It is also noted that the Kiruv Estates project is proposed at a yield conforming to its and the vicinity's existing medium-density zoning, and so does not represent a "higher density" project.

The current sewage design flow for a single-family residential unit applied by the Suffolk County Department of Health Services (SCDHS) is 300 gpd. Therefore, it is estimated that the nine proposed residences and the single-family structure that is to remain would generate approximately 3,000 gpd of sewage flow. This represents a net 2,400-gpd increase in sanitary wastewater flow on the site. The two historic structures to remain on the site do not presently have active plumbing systems, so that no wastewater is generated in either building. The water table beneath the subject property ranges from approximately 4 to 69 feet below ground surface (bgs) (due to land topography), sufficient to ensure proper operation of these systems. Design and installation of the septic systems, if provided, would take place under the review authority of the SCDHS.

A significant amount of study has been devoted to understanding the geology underlying the subject site including a series of soil borings (see **Section 2.3.1**). If on-site systems are used, each system would include a septic tank and leaching pool with the capacity required by SCDHS regulations. Each sanitary system will require a separate permit to construct and a crane-dug test hole will be performed on each individual homesite for the system. The test holes will be observed by representatives of SCDHS and, should lower-permeability clay be observed, the excavation will be extended downward until good leaching material is encountered. The excavation will be backfilled with good leaching material and sanitary systems will be placed within these holes. Based upon the detailed understanding of the site geology resulting from the test holes, no significant clay units are expected to be encountered in the installation of individual sanitary systems. Subsurface soils consisting of lower permeability material are, however, present. The number of test holes installed far exceeds the number required by the SCDHS for preliminary subdivision design. In addition, the depth of these test holes also far exceeds the requirements of the SCDHS for preliminary subdivision design. The design of the proposed project is intended to ensure that groundwater or surface water resources will not be adversely affected as a result of the installation of sanitary systems. All effluent will leach through the underlying soils in an unsaturated zone of sufficient depth to allow for conversion of ammonia to nitrate. Effluent will leach to the water table and become part of the regional groundwater reservoir. Since the total nitrogen load on the property is consistent with SCDHS requirements this will not adversely affect groundwater resources. In addition, a groundwater impact model has been used to simulate the concentration of nitrogen in recharge. The results conclude that the project will not adversely impact the groundwater as a result of nitrogen

loading from the proposed subdivision. It is noted that on-site systems are only proposed if access to the existing Huntington STP is not obtained.

Water will be supplied by the SCWA, which will utilize an existing 6-inch supply main beneath Woodhull Road. Assuming that all water used by the project will be supplied by the SCWA, domestic water consumption will total 3,000 gpd and irrigation will average 843 gpd, resulting in a total water use of 3,843 gpd.

1.3.5 Site Landscaping and Amenities

Areas of the site outside of the deeded and conservation areas not to be covered by buildings, paved surfaces or retained forest will be professionally landscaped using a combination of native and/or native-compatible species. This coverage will total approximately 2.06 acres. A complete list of species used in landscaping is included on the **Landscape Plan**, to be submitted for Town review as part of the Site Plan application.

It is not proposed to fertilize these landscaped areas, except for an initial application to establish healthy growing conditions; other than lawns abutting the buildings, it is anticipated that the remaining landscaped areas will consist of low maintenance species and wood chip/mulch beds. Landscaped areas will be irrigated at a rate of 5.5 inches annually (an average of 843 gpd), by use of an in-ground sprinkler system. Landscape maintenance activities will be monitored and enforced by the HOA.

1.3.6 Open Space and Protected Lands

As part of the proposed project, the two historic dwellings are proposed to be deeded to the Town of Huntington, and the surrounding 0.97 acres of land will be deeded to the Town. The proposed project also includes the extension of the Town heritage trail from the southeast portion of the property through the portion of the site which is to be deeded to the Town, to Woodhull Road and the two historic structures. This trail was initiated in 2002 as part of the Hilaire Woods subdivision. It is not paved or otherwise maintained at the present time; according to the Town Historian, the Town is seeking to obtain ownership of the land on which their intended trail alignment is proposed, after which time the Town will determine, fund and install improvements. It is not expected that the trail would be paved or illuminated, though appropriate interpretive signage is expected. The ultimate destination of the trail is not determined at the present time; the trail may be extended to Heckscher Park, or it may terminate elsewhere.

Additionally, approximately 129,608 SF (2.98 acres) including the freshwater wetland and surrounding areas will be located in a conservation area, protected by a conservation easement. Ultimately more than half of the property (3.95 acres, or 55.9%) will be permanently preserved and protected.

1.4 Construction Schedule and Operations

The construction schedule will be based on the Approved Schedule of Operations, as required by the Town of Huntington Subdivision Regulations and Site Plan Specifications, which includes a construction staging area.

The construction process will begin with establishment of flagged clearing limits, followed by installation of staked hay bales and silt fencing in critical areas for erosion control purposes, including the downslope limit of all cleared/graded area, to minimize the potential for eroded soils to impact the wetlands or dedicated areas. Then, demolition and site clearing operations can begin; the existing buildings will be inspected by a NYS-certified inspector to determine the presence of asbestos or other potentially hazardous materials in the structures. If such materials are found, they will first be removed according to applicable NYS standards and procedures, and the removed materials will be disposed of properly. Wells and tanks on-site, whether documented with the NYSDEC or not, will be properly removed, capped and, if necessary, remediated during this period.

It is anticipated that 2 of the existing 5 structures will be removed: the rental cottage and dilapidated barn/silo; the single-family residence located in the northeastern portion of the property will be retained, as well as the two historic structures. The conservative clearing assumptions referenced above results in an estimated 3.12 acres of clearing, or 44.0% of the site. This includes areas for the new roadways, buildings, the drainage impoundment areas and landscaping. However, as the proposed project is to be developed on areas already developed, only 0.93 of these 3.12 acres to be cleared represent natural vegetation. No clearing will occur on the remaining 3.95 acres, which will be deeded and/or protected within a conservation area.

Grading operations will take place next. In order to minimize the time span that denuded soil is exposed to erosive elements, excavations for the roads, building foundations, wastewater systems, stormwater collection and detention system and utilities will take place immediately after grading operations have been completed. Building construction can then begin concurrent with the utility connections and paving of the internal road and driveways. As building construction nears completion, finish grading will occur, followed by spreading of topsoil and installation of the landscaping, which will be performed while the structures are completed.

The site operator/contractor contracted by the site owners will be responsible for all construction activities, site grading, and installation of the erosion and sediment controls. Conceptually, a variety of temporary erosion and sediment controls will be provided to ensure soil stabilization and protection of exposed areas for the duration of construction period to the maximum extent practicable. The erosion control plan which will be prepared for the project will provide silt fencing to be installed where necessary along the limits of disturbance to minimize/prevent sediment from washing onto adjacent properties. A continuous row of staked hay bales will also be installed around all grated drainage inlets to trap sediments in stormwater runoff as they are installed and a dust control and watering plan will also be instituted. The proposed locations, sizes, and lengths of each of the temporary erosion and sediment control practices planned during site construction activities, and the dimensions, material specifications, and installation

details for all erosion and sediment control practices are also provided on the are provided on a erosion control plan which will be prepared specific to the proposed project.

The following elements constitute the conceptual major work which is anticipated for this project, including the recommended installation of erosion controls for the remainder of the construction period:

1. Installation of stabilized construction entrance from Woodhull Road. Control debris and dust resulting from construction activities daily, and water as necessary or as directed by inspector.
2. Installation of all perimeter erosion control measures (i.e. silting fencing) to ensure on site containment of all sediments and run-off. Maintain daily.
3. Clearing and rough grading of the building sites, and drainage structures in accordance with approved plans. Stockpile topsoil in designated areas and cover as necessary to prevent exposure to erosive elements.
4. Foundation excavation and pouring of building foundation.
5. Installation of exterior block, sanitary lines and construction of the building frame, installation of drainage structures.
6. Installation of inlet protection using hay bale rings in accordance with an erosion control plan which will be prepared specific for the proposed project.
7. Temporary stabilization by the use of erosion control measures (temporary vegetation, mulching, hydroseeding) immediately following back filling of the foundation as conditions warrant.
8. Installation of utility lines, doors, and windows; followed by enclosure and exterior finishing, then interior framing, utility installations/hookups and interior finishing.
9. Remove all temporary erosion control measures and install permanent vegetation and seeding with erosion control jute matting following site stabilization. Completion of landscaping and final lot grading.
10. Paving of road areas.
11. Cleaning of all drainage structures silted up due to erosion incurred during construction.
12. Removal of all remaining temporary erosion control devices.

Maintenance of all temporary erosion and sediment control measures will be performed on an as needed basis to ensure effectiveness. Recommendations for erosion control measures include the following:

1. Remove sediment from silt fencing, when sediment becomes 0.5 feet deep at the fence and repair fencing as necessary to maintain a sound barrier;
2. Clean (or replace) inlet protection when storage capacity is 50% filled;
3. Supplement stone at the construction entrance as necessary to ensure area is stabilized and to minimize dust and ponding.

In addition, inspections are to be conducted every seven (7) calendar days and after each rainfall event of 0.5 inches and shall be supervised by a qualified professional. As required by the General Permit, a record of inspection reports should be maintained on site.

Maintenance of all permanent stormwater management controls and drainage structures will be the responsibility of the site owner upon the completion of construction activities. Routine maintenance responsibilities for permanent stormwater structures and practices include:

1. Monitoring of the drainage inlets should be completed routinely, particularly following rainfall events with significant rainfall (2-year storm, defined as 3.5 inches of rainfall over a 24 hour period, or greater is recommended as a minimum).
2. Drainage grates should be kept free from obstruction of leaves, trash, and other debris.
3. Drainage structures are to be initially inspected annually to determine if sediment removal is necessary to ensure drainage structures are properly functioning and permitting adequate conveyance throughout the system and establish the frequency of future maintenance.
4. All seeded and landscaped areas are to be maintained, reseeded, and mulched as necessary to maintain a dense vegetative cover.

The erosion control plan will be designed to contain sediment, debris, and pollutants from traveling off site by utilizing sediment barriers and sound construction practices. All sediment spilled, dropped, washed, or tracked onto public rights-of-way are to be removed daily. Debris removal and control, and sweeping of adjacent streets, walks, and pavement of site-generated debris is recommended to ensure site cleanliness and reduce possible sediment transport as a result of runoff. The site contractor will be responsible for ensuring storage and stockpiling of construction materials and supplies will be in designated areas and erosion control measures are implemented to prevent/reduce wind-blown dust and erosion from rainwater. The site operator will be responsible for securing an approved carter to empty the site dumpster and haul waste from the site to an approved location for disposal.

Woodhull Road will be used for construction vehicle access; construction equipment and material storage and parking will be kept within the site. Construction activities will not occur outside weekday daytime hours (expected to be 7 AM to 6 PM), or as governed by Town regulations. “Rumble strips” will be placed at the site entrance, to prevent soil on truck tires from being tracked onto Woodhull Road.

Based on the relatively small size of the site and project, it is anticipated that the construction period (clearing, grading, construction and finishing) will take approximately 6-9 months.

1.5 Permits and Approvals Required

This Draft EIS is intended to provide the Town of Huntington Planning Board with the information necessary to render a decision on the Kiruv Estates application.

This document is intended to comply with SEQRA requirements as administered by the Town of Huntington. Once accepted, the document will be the subject of public review, followed by the preparation of a Final Environmental Impact Statement (FEIS) for any substantive comments on the DEIS. Upon completion of the FEIS, the Planning Board will be responsible for the preparation of a Statement of Findings, which will form the basis for the final decision on the

Subdivision application. Following this process, the following additional approvals would have to be obtained prior to commencement of project construction:

- Town Planning Board - Subdivision review (cluster)
- Town Planning Board - Subdivision approval
- Town Department of Buildings, Engineering and Housing - Building Permits
- Town Department of Buildings, Engineering and Housing - Demolition Permits
- Town Highway Department - Roadwork Permit
- Huntington Sewer District - Sewer District Expansion
- SCWA - Water Supply permit
- SCDHS - Article 6 (Sanitary System design review)
- SCDHS - Article 4 (Water Supply System design review)
- SCDPW - NYS Highway Law 136 & General Municipal Law 239f
- NYSDEC - Freshwater Wetlands Permit
- NYSDEC - Sanitary Sewer Connection (from outside of District)
- NYSDEC - General Permit for Stormwater Discharges from Construction Activity (GP-02-01)

SECTION 2.0

NATURAL ENVIRONMENTAL RESOURCES

2.0 NATURAL ENVIRONMENTAL RESOURCES

2.1 Topography

2.1.1 Existing Conditions

The majority of the subject property slopes downward in a south-to-northeast direction, with a small portion of the property in the southwest sloping downward to the northwest and north. The highest point on the subject property, at 114 feet above sea level (asl), is located along the eastern boundary of Hilaire Woods, in the southern portion of the site. The lowest point, at approximately 49 feet asl, is located near the intersection of Park Avenue and Woodhull Road. Approximately 55% of the site (3.89 acres) has slopes that range between 0 and 10%, with approximately 15% (1.06 acres) in the range 10-15% and approximately 30% of the site at 15% and greater (2.12 acres). Significant slopes exist in the southern and southwestern portions of the property. Approximately 0.93 acres of the steep slope area will be conveyed to the Town by sale. An emergent marsh and freshwater wetlands, which flows into the man-made pond, are located along the eastern edge of the site. These areas occupy approximately 1.10 acres of the site. The existing topography is illustrated on the **Overall Layout Plan**.

2.1.2 Anticipated Impacts

Planned grading of strategic locations of the site will be necessary to provide appropriate and stable surfaces and stabilized slope transition areas to allow development of the proposed project. It is noted that due to the topographic relief areas on the site, any site use would require topographic alterations. The project involves the minimum grading necessary to permit proposed residential use of the property, particularly in view of the proposed attached unit cluster plan.

Some areas of steep slopes on the property will be altered due to grading for the proposed road, homesite locations. The most extensive grading will occur along the proposed site access roadway, and within the footprints of each single-family residence. Grading for the proposed road surfaces will require a combination of cut and fill. It is estimated that cuts ranging from 1 to 15 feet below ground surface (bgs) will be required, resulting in the excavation of approximately 7,500 cubic yards (CY) of soil, to create suitable grades for the road and building locations as well as to provide adequate stormwater retention capacities within the proposed stormwater collection and detention system. The 5,500 CY of soil required as fill for the site access roadway will be provided from excavated on-site soil and the net balance of 2,000 CY of cut will be removed from the site.

Road grading will control overall site grading to provide access to individual lots. Once complete, slopes of 1:3 or less will be established in newly graded areas. Subsequent development of individual lots will involve grading unique to each lot. In general, following development, the site will continue to slope from a topographic high located along the southern property lines towards the north. Fill ranging from approximately 2 to 6 feet above ground

surface (ags) will be required which will allow the cul-de-sac to maintain grades of approximately 4.5%. As noted, all created soil slopes will be 1:3 or less and will be stabilized using ground cover material. In addition retaining walls will be installed along the southwestern end and southeastern side of the cul-de-sac as well as within the southern portions of the property to further stabilize soils within the topographical high areas of the site and to reduce required grading. As a result, it is expected that topographic impacts will be minimized to the maximum extent practicable. In addition, due to the proposed grade transitions, planting of ground cover materials, installation of retaining walls and stormwater detention facilities, the potential erosion of surface soils and proposed grades will be mitigated through project design.

Additional safeguard against erosion will be achieved through the NYSDEC SPDES review of stormwater control measures consistent with Phase II stormwater permitting for construction sites in excess of 1-acre (DEC GP-02-01). Under this program, a Notice of Intent (NOI) must be filed with the NYSDEC 60-days prior to commencement of construction, and a site specific SWPPP must be maintained on site. In addition, a copy of the final NOI, SWPPP and Erosion & Sedimentation Control Plan will be submitted to the Town of Huntington simultaneously with the NYSDEC submission.

2.1.3 Proposed Mitigation

- Once site grading is completed, slopes of 1:3 or less will be established in newly graded areas. Subsequent development of individual lots will involve grading unique to each lot. In general, following development, the site will continue to slope from a topographic high located along the southern property lines towards the north. Fill ranging from approximately 2 to 6 feet will be required which will allow the cul-de-sac to maintain grades of approximately 4.5%. All graded slopes will be stabilized using ground cover material.
- Retaining walls will be installed along the southwestern end and southeastern side of the cul-de-sac as well as within the southern portions of the property to stabilize soils and provide for grade transitions within the topographical high areas of the site. Retaining walls facilitate grade transition and create a site design where the minimum amount of grading needed to utilize the site for its intended purpose under zoning will occur. As a result, it is expected that topographic impacts will be minimized to the maximum extent practicable due to the proposed grade transitions, planting of ground cover materials, and installation of retaining walls and stormwater retention facilities
- Additional safeguard against erosion will be achieved through the NYSDEC SPDES review of stormwater control measures consistent with Phase 2 stormwater permitting for construction sites in excess of 1-acre (DEC GP-02-01).
- Prior to the start of construction, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared, including a detailed erosion and sediment control plan, to manage stormwater generated on-site during construction, and for post-construction stormwater management. A SWPPP will be prepared to ensure compliance with water quality and quantity requirements pursuant to Technical Guidance and GP-02-01 requirements. In addition, an erosion control plan incorporating the NYSDEC Technical Guidance manual, and use of measures such as silt fencing, storm drain inlet protection, hay bales, and good housekeeping procedures will be utilized. Hay bales and silt fencing will be installed in critical areas for erosion control, including the downslope limit of all cleared/graded area, to minimize the potential for eroded soils to impact the wetlands or dedicated areas. The Notice of Intent (NOI) requesting coverage under the General Permit will be filed in accordance NYSDEC requirements, prior to the initiation of construction activities at the subject property.

2.2 Surface Soils

2.2.1 Existing Conditions

The USDA Soil Survey of Suffolk County, New York **(Warner et al., 1975)** provides a complete categorization, mapping and description of soil types found in Suffolk County. Soils are classified by similar characteristics and depositional history into soil series, which are in turn grouped into associations. These classifications are based on profiles of the surface soils down to the parent material, which is changed little by leaching or the action of plant roots. An understanding of soil character is important in environmental planning as it aids in determining vegetation type, slope, engineering properties and land use limitations. These descriptions are general, however, and soils can vary greatly within an area, particularly soils of glacial origin. The slope identifiers noted in this subsection are generalized based upon regional soil types; the more detailed subsection on topography should be consulted for analysis of slope constraints.

The soil survey identifies the subject site as lying within an area characterized by Montauk-Haven-Riverhead Association soils (**Warner et al., 1975**). These are deep, nearly level to strongly sloping, well drained to moderately well drained, with moderately coarse textured and medium-textured soils on glacial moraines.

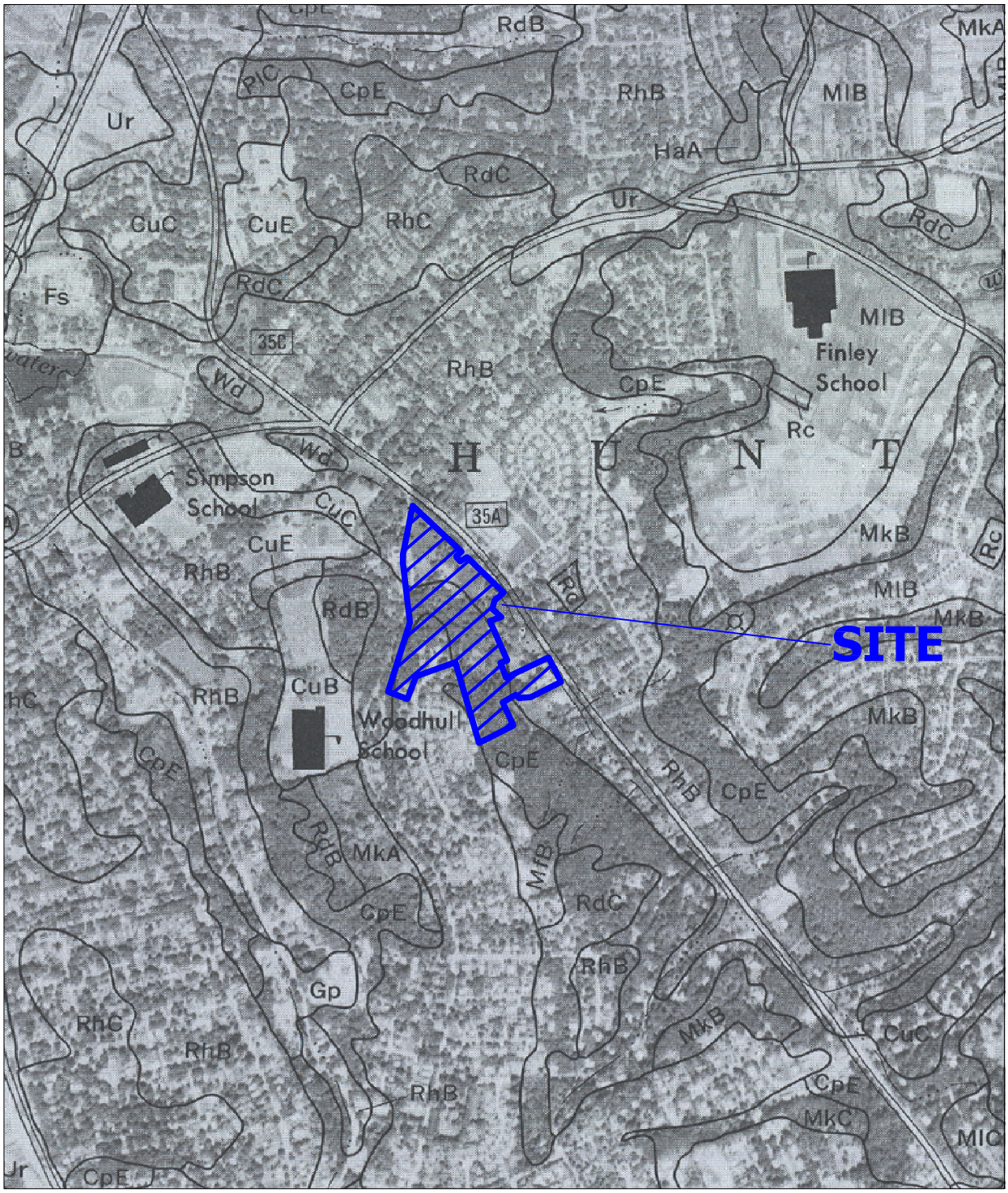
A total of three (3) soil types have been identified on-site; the locations of these soils are depicted in **Figure 4**. Specific descriptions of the soils found on-site are presented below (**Warner et al., 1975**).

> *Carver and Plymouth sands, 15-35% slopes (CpE)* - The Carver series consists of deep, excessively drained coarse-textured soils. This soil type is found almost exclusively on moraines except for a few steep areas on side slopes along some of the more deeply cut drainage channels on outwash plains. The hazard for erosion is moderate to severe. These soils are droughty with naturally low fertility. The primary limitation to use is due to moderately steep to steep slopes.
>
> *Montauk Soils, graded, 0-8% slopes (MlB)* - consists of areas of Montauk sandy loam, Montauk silt loam or both. The areas have been altered by grading and are used for housing developments, shopping centers, industrial parks or similar non-farm purposes.
>
> *Riverhead and Haven soils, graded, 0 to 8 % slopes (RhB*) - This map unit consists of Riverhead sandy loam, of Haven loam, or of both. The areas have been altered by grading for use as housing developments, shopping centers, industrial parks and similar non-farm uses.

The soil survey was also consulted for information on the potential limitations on development that the soils may present. These constraints on development posed by these soils are summarized in **Table 2-1**. As noted in the table, the three (3) soils that occupy the property present slight to severe limitations for development, due to their permeability, sandy surface layer and slopes.

FIGURE 4

SOILS MAP



Source: Suffolk County Soil Survey
Scale: 1' = 700'

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Table 2-1
SOIL LIMITATIONS

SOIL FEATURES AFFECTING:	Carver and Plymouth sands, 15-35% slopes (CpE)	Montauk Soils, graded, 0-8% slopes (MlB)	Riverhead and Haven soils, graded, 0 to 8 % slopes (RhB)
Highway location	Poor trafficability; extensive cuts and fills likely.	*	*
Embankment foundation	Strength generally adequate for high embankments; slight settlement; Moderately steep to steep slopes.	*	*
Foundations for low buildings	Low compressibility; large settlement possible under vibratory load; moderately step to steep slopes.	*	*
Irrigation	Very low available moisture capacity; rapid water intake; moderately step to steep slopes.	*	*
LIMITATIONS:	---	---	---
Sewage disposal fields	Severe: slopes	Severe: moderately slow permeability of fragipan.	Slight
Homesites	Severe: slopes	Slight	Slight
Streets and parking lots	Severe: slopes	Moderate: slopes	Moderate: slopes
Lawns and landscaping	Severe: slopes; sandy surface layer	Moderate: slopes	Slight
Paths and trails	Severe: slopes; sandy surface layer	Slight	Slight
Picnic/play areas	Severe: slopes; sandy surface layer	Slight	Slight
Athletic fields and intensive play areas	Severe: slopes; sandy surface layer	Moderate: moderately slow permeability.	Slight

* Per Soil Survey, not included because characteristics are too variable to estimate.

In addition, borings were installed at the site to characterize the surface soils and subsurface geology at the subject property. Review of the geologic borings indicates that the surface soils (surface material from approximately 0 to 2 feet bgs) overlying the site generally consist of a mix of sand and loam which overly a mix of sands and clayey sands. This characterization of the on-site surface soil is consistent with the on-site soil classifications derived from the Suffolk County Soil Survey. A further description of the geologic material underlying on-site surface soils is provided in **Section 2.3.1**.

Appendix F contains a letter sent to the NYSDEC, Oil Spill Unit regarding the remediation of two limited areas of contaminated soils related to an on-site spill reported to the NYSDEC as part of the Phase I Environmental Site Assessment (ESA) prepared on the site (see also **Section 3.7**). The letter (dated December 13, 2005) states:

> During August of 2005 a Phase II ESA was prepared for the subject property in response to recommendations issued in a previous Phase I ESA dated December 23, 2004 which recommended sampling of soils in the area of a former gasoline storage tank that was located adjacent to the northeast corner of the on-site barn as well as soils within the hole of the concrete basement floor of the house located in the southwest corner of the property. Results of the soil sampling detected several semi-volatile organic compounds above their respective recommended soil cleanup objectives identified in TAGM 4046 in samples collected from both areas.
>
> As a result it was recommended that both areas be excavated and soils be transported to an appropriate facility for disposal. Both areas were excavated by hand on September 22, 2005 and all excavated material was placed on and covered with plastic pending waste characterization analysis. An estimated 0.5 yards of soil was removed from the area of the former gasoline storage tank and approximately 0.25 yards of soil was removed from the basement of the residence in the southwestern corner of the property. On September 27, 2005, Brian Donovan of the NYSDEC arrived on-site and inspected the excavated areas, was satisfied with the extent of material removed and did not request any end point sampling.
>
> The soils were then transferred to 55-gallon drums and shipped to General Environmental Management of Cleveland Ohio for disposal. The drums were collected and transported to General Environmental Management by Rapid Waste Disposal, Inc. and Piper Trucking on November 26, 2005 and delivered to the facility on November 31, 2005.
>
> This information has been provided at your request and if satisfactory we ask that the incident be closed by your department.

As a result, no soil quality or contamination issues exist with respect to the subject site. Additional information and a summary of the Phase I and Phase II ESA's are provided in **Section 3.7**.

2.2.2 Anticipated Impacts

The surface soils present on the subject property include CpE, MlB and RhB soils; **Table 2-1** lists those characteristics which could be a constraint or a limitation to development. A majority of the site (6.87± acres) is comprised of RhB and CpE soils and will be subject to extensive grading for development. Only a small portion of the site (0.20± acres) located in the southern end of the property is comprised of MlB. This area of the property will be only subject to surface grading, installation of a portion of the site access roadway and installation of a section of a proposed residence. According to the soil survey, only the CpE soil type poses severe limitations on development due to slopes and sandy surface layers as they relate to dwellings, sewage disposal fields, roads and lawns/landscaping if proper engineering and site development techniques are not employed. A detailed engineering grading plan has been prepared to establish limits of clearing and grading, use of retaining walls, suitable grades and slopes and proper drainage conveyance and retention. Disturbed areas of the site will be stabilized during construction and will be graded to an appropriate slope (1:3 slopes) in order to provide suitable surface areas to accommodate development. In addition, it is also noted that the CpE soils also possess a limitation for sewage disposal fields due to severe slopes. The project sponsor is petitioning for inclusion within the Huntington Sewer District so as to allow all sanitary

wastewater generated by the project to be conveyed off-site to the public sewer system for treatment and disposal in the Huntington STP. Should this request not be approved, a plan has been prepared to illustrate how proper engineering of the site will allow conventional sanitary systems to be installed. The only severe limitation related to MlB soils is due to moderately slow permeability as it relates to sewage disposal fields. As indicated with respect to CpE soils, the preferred option is to connect to the Huntington STP; however, an on-site system option has also been designed. There were no severe limitations noted in the soil survey related to the RhB soils found on the property. As a result of these mitigation measures noted above it is not anticipated that the soil limitations noted will adversely impact development of the property.

2.2.3 Proposed Mitigation

- A detailed engineering grading plan has been prepared to establish limits of clearing and grading, use of retaining walls, suitable grades and slopes and proper drainage conveyance and detention. Disturbed areas of the site will be stabilized during construction and will be graded to an appropriate slope (1:3 slopes) in order to provide suitable surface areas to accommodate development.
- The project sponsor is petitioning for inclusion within the Huntington Sewer District so as to allow all sanitary wastewater generated by the project to be conveyed off-site to the public sewer system for treatment and disposal in the Huntington STP. However, if the sewer connection is not approved, then on-site septic systems would be provided. If required, each of these systems will extend into the subsurface until suitable leaching materials are encountered and then backfilled with clean material in order to facilitate properly functioning sanitary systems.

2.3 Subsurface Geology

2.3.1 Existing Conditions

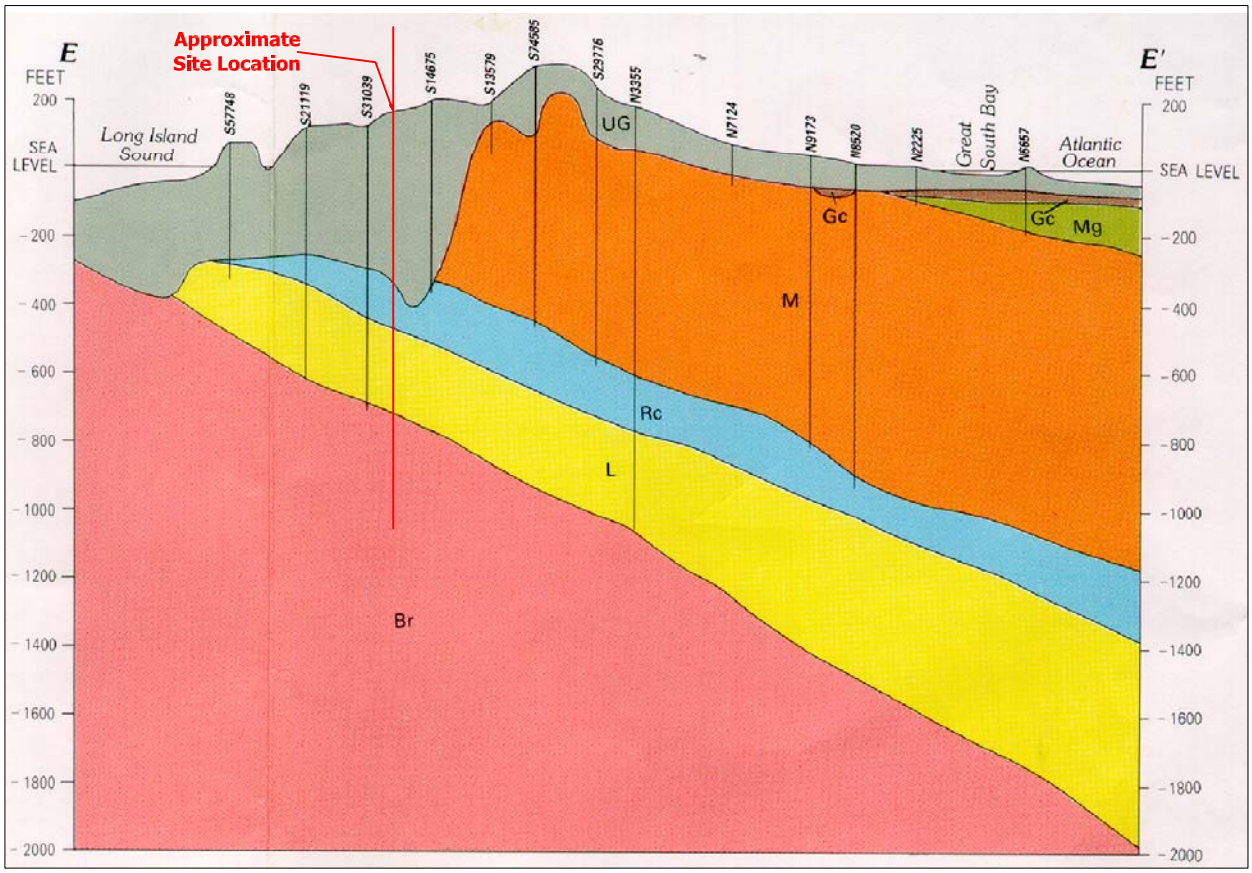
Long Island is located within the Atlantic Coastal Plain, a general physiographic province in which substantial sediment deposits overlie the base, or bedrock (**Fuller, 1914**). The surface topography of the Island is primarily a product of glacial history and subsequent human activity. Understanding the geologic history and stratigraphy of Long Island is important in relating potential impacts of the project to hydrogeologic resources and their importance in Long Island's future.

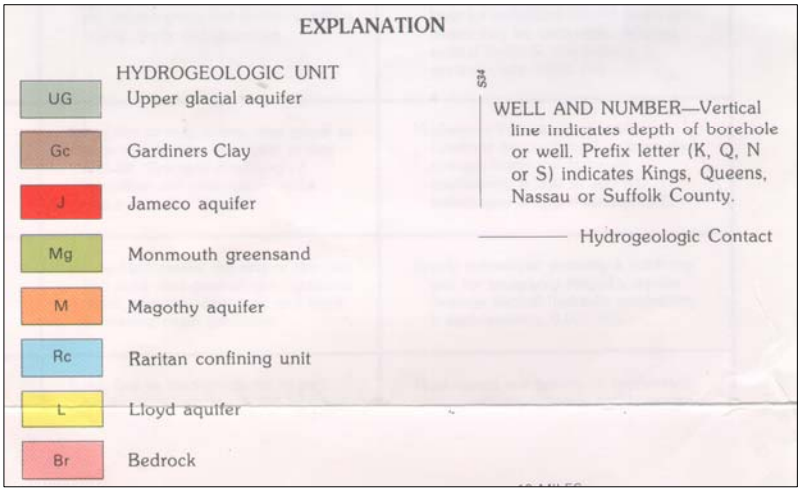
The bedrock beneath Long Island consists of a complex of igneous and metamorphic rock of Precambrian age that strikes to the east-northeast with a southeastward trending slope of Approximately 80 feet per mile. The elevation of the top of the bedrock is approximately 1,000 feet below sea level (bsl) in the area of the site. Bedrock is overlain by sediments of Cretaceous and Quaternary age containing three major aquifers consisting of the Lloyd, Magothy and Upper Glacial **(Lubke, 1964)**. **Figure 5** provides a cross section of Long Island for a profile running from Long Island Sound to the Atlantic Ocean in the vicinity of the project site **(Jensen and Soren, 1974)**.

The primary Cretaceous deposits on Long Island are the Raritan and Magothy Formations, which were deposited atop the bedrock during the mid to late Cretaceous period (138 to 65 million

FIGURE 5

GEOLOGIC CROSS-SECTION





Source: Smolensky, Bruxton & Shernoff
Scale: Not to Scale

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years ago) as a result of sediment transport from highlands to the north of the Island **(Koszalka, 1983)**. The deposits directly overlying the bedrock consist of the Raritan formation that is comprised of the Lloyd Sand Member and the overlying Raritan Clay **(Lubke, 1964)**. The Lloyd Aquifer is contained within the Lloyd Sand Member and rests unconformably on bedrock at an elevation of approximately 800 feet bsl in the area of the site indicating a thickness of 200 feet. Sediments within this formation consist of white to pale yellow fine to coarse-grained sands and gravel with some clay and layers of silt and clay. The clay member of the Raritan formation that overlies the Lloyd Sand Member is located at an elevation of 700 feet bsl and indicating a thickness of 100 feet. This deposit is composed chiefly of beds of gray, white and red variegated clay and silt, with interbedded layers of sand in some places. The material of this clay layer is of relatively low permeability and acts as an aquiclude which confines the water in the underlying Lloyd and retards interchange of water from overlying formations **(Lubke, 1964)**.

Resting above the Raritan Clay lies the Magothy Formation and Matawan Group, which form the Magothy Aquifer, and were deposited in the late Cretaceous approximately 75 million years ago following a period of erosion of the Raritan Clay. These deposits are found in the vicinity of the site at an elevation equivalent to sea level indicating a thickness of approximately 700 feet (**Lubke, 1964**). The lower portion of the Magothy rests directly on the clay member of the Raritan formation and consists largely of brown and gray coarse sand, gravel with some clay. The upper portion of the Magothy includes white, gray and brown interbedded clay, fine to medium sand and silt and some lignite.

During the Tertiary period (65 million to 2 million years ago) there was erosion of Cretaceous deposits over much of Long Island due to hydrologic processes such as stream formation. Sea level was low, and a large valley formed north of Long Island in what is now Long Island Sound. Most of the surface sediments evident on Long Island were deposited during the glacial advances of the Pleistocene epoch, Quaternary period (2 million years ago to 10,000 years ago). The Pleistocene was marked by cycles of glacial advance and subsequent retreat producing morainal and glaciofluvial (outwash) sediments on top of the Magothy Formation and Matawan Group. These Quaternary sediments, which consist of clay, silt, sand, gravel, and boulders, comprise the deposits of the Upper Glacial Aquifer. The glacial outwash deposits of the Upper Glacial Aquifer are found at an elevation of 150 feet asl corresponding to the land surface indicating a thickness of 150 feet **(Lubke, 1964)**. These sediments predominantly consist of brown, yellow and gray sands and gravels with localized clay lenses. The Ronkonkoma and Harbor Hills Terminal Moraines were deposited as part of this Upper Glacial deposit along the spine and the North Shore of Long Island as the glaciers retreated during the Wisconsin stage of the Late Pleistocene (approximately 25,000 to 10,000 years ago) **(Koszalka, 1983, p. 15)**. Low, flat outwash plains formed southward as erosional processes carried sediments away from the moraines, and coastal processes formed barrier beaches along the south shore as sea level rose.

The Water Resource/Watershed Analysis Study contains an extensive discussion of subsurface soil conditions, particularly in relation to infiltration of recharge. The following description of subsurface conditions is taken from the Summary and Conclusions section of that document:

> Subsurface geology, and particularly geology effecting groundwater, surface water interaction, is best determined by on-site test borings. Test borings were completed on the site on two

> occasions by two different geotechnical contractors on November 19, 1998 by Soil Mechanics Drilling Corp. and on December 14, 2004 by MacDonald Geoscience. Borings were installed in different locations, though in some cases the 2004 borings were installed near prior 1998 borings.
>
> Test borings were reviewed primarily for the purpose of determining the groundwater, surface water inter-relationship. The silt content as described in vertical intervals is important in determining the potential for water retention in the soils underlying the property. Each boring installed by independent contractors in 1998 and 2004 make note of groundwater at various depths within the boring.
>
> Several findings are evident in review of the soil borings. First, the results are highly variable with little correlation between borings that are at similar elevations and in similar locations. This would be expected to some extent given the fact that two different contractors installed the borings approximately 6 years apart; however, the degree of variability is suspicious. Second, [**Figure 6** indicates that] the elevation of groundwater beneath the site is in the range of 28 feet, and is not expected to exceed 30 feet. However, all borings noted water at elevations well above the expected regional water table elevation.
>
> Review of the soil profiles finds extreme variability and various layers of silt-bearing soils.

The locations of these borings as well as individual boring log profiles are provided on the **Grading and Drainage Plan** (in a pocket at the end of this document). Review of the on-site boring logs indicate that subsurface soils generally consist of semi-permeable silty to clayey sands from depths of approximately 2 to 14 feet below ground surface (bgs). Soils underlying this silty/clayey sand layer are found to generally consist of fine sands with traces of silt and gravel. An additional boring installed in April 2006 indicates the presence of 2 feet of acceptable-draining material

2.3.2 Anticipated Impacts

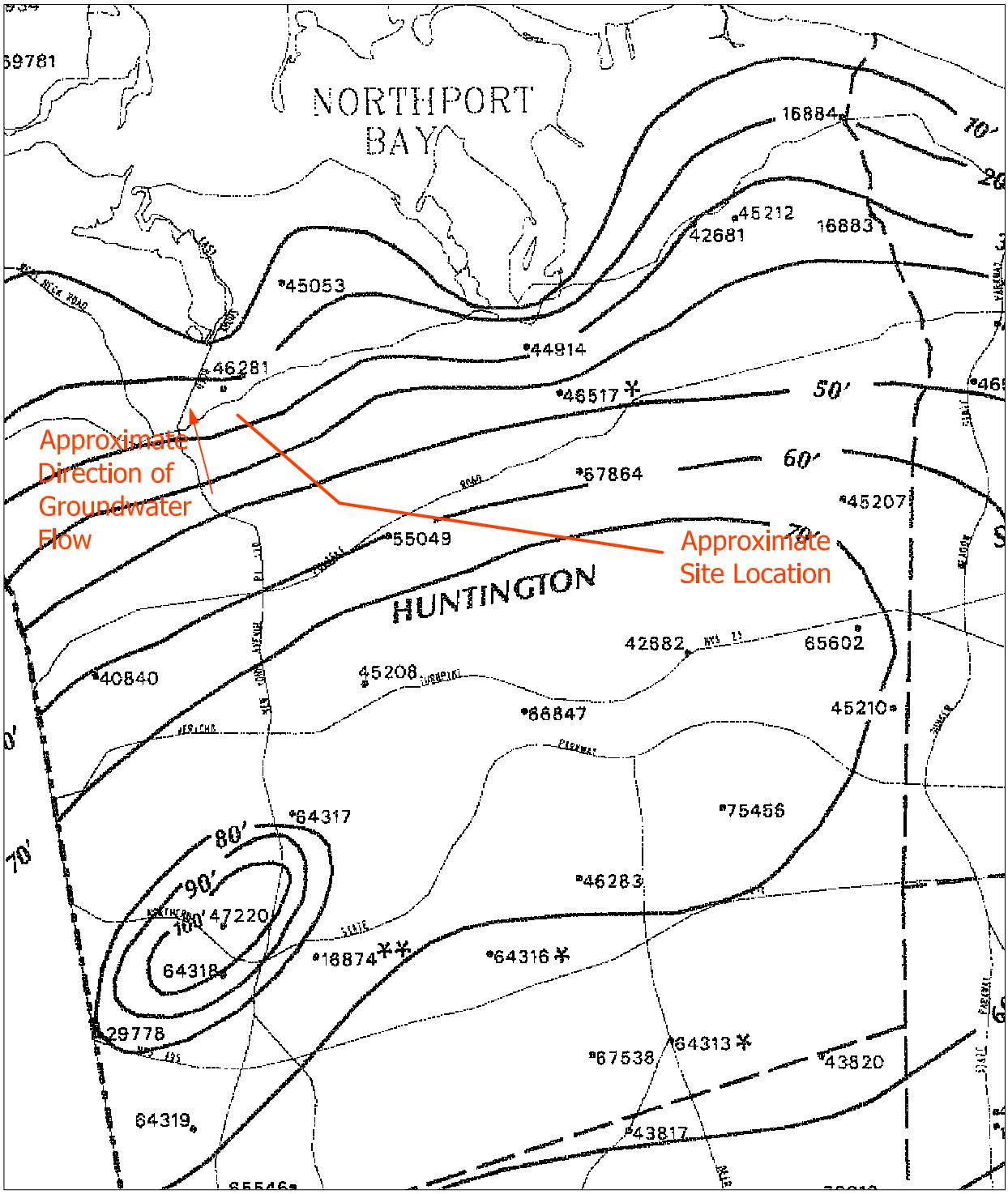
Site grading and topographic impacts are discussed in **Section 2.1.2**. This section will focus on subsoil characteristics relative to leaching capabilities and functioning of the stormwater collection and detention system.

Grading operations or the excavations required for roads, retaining walls, homesites and stormwater collection and detention areas are not expected to result in subsurface soil disturbance to a depth which will adversely impact subsurface conditions.

The stormwater collection and detention system will be constructed through the removal of soil material. If needed and if this material displays acceptable bearing capacity and leaching characteristics, this soil material may be used as backfill in other areas of the site to produce acceptable slopes for construction particularly for fill along the alignment of the roadbed. Excess acceptable material will be removed by truck (between 7 AM and 6 PM) and sold as backfill. If such characteristics are not determined, this material will be removed by truck to an acceptable landfill. As a result it is not expected that there will be any significant adverse impacts with regard to subsurface geological conditions.

FIGURE 6

WATER TABLE CONTOUR MAP



Source: SCDHS Water Table Contour Map, 1999
Scale: 1' = 8,000'

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2.3.3 Proposed Mitigation

- The stormwater collection and detention system will be constructed through the removal of soil material. If needed and if this material displays acceptable bearing capacity and leaching characteristics, this soil material may be used as backfill in other areas of the site to produce acceptable slopes for construction particularly for fill along the alignment of the roadbed. If such characteristics are not determined, this material will be removed by truck to an acceptable landfill. As a result it is not expected that there will be any significant adverse impacts with regard to subsurface geological conditions.

2.4 Water Resources

2.4.1 Existing Conditions

Groundwater Hydrology

The major water bearing units beneath the subject site are the Upper Glacial, Magothy and Lloyd Aquifers **(Jensen and Soren, 1974; Smolensky et al., 1989).**

Groundwater on Long Island is derived from precipitation. Precipitation entering the soils in the form of recharge passes through the unsaturated zone to a level below which all strata are saturated. This level is referred to as the groundwater table. The groundwater table coincides with sea level on the north and south shores of Long Island, and rises in elevation toward the center of the island. The high point of the parabola is referred to as the groundwater divide.

The changes in elevation of the groundwater table create a hydraulic gradient, which causes groundwater to flow in a direction perpendicular to the contour lines of equal elevation **(Freeze and Cherry, 1979).** Contour lines are lines of equal elevation of groundwater as inferred between observation well points mapped by the SCDHS. The lines of equal elevation assist in determining the generalized direction of groundwater flow in the water table aquifer. In an isotropic aquifer (an aquifer where the conductivity is the same in the horizontal and vertical directions), groundwater moves perpendicular to the contour lines **(Freeze and Cherry, 1979).** Although the hydrogeologic units are not isotropic on Long Island, this principle may be used to approximate the direction of groundwater flow. The configuration of the water table and the location of the groundwater divide will change as groundwater elevations fluctuate.

The subject parcel lies north of the regional groundwater divide, based upon the USGS water table map from 1999 shown in **Figure 6.** The flow of groundwater for areas north of the regional groundwater divide is generally to the north; for the project site, groundwater flow is toward the north-northwest. Review of the 2000 USGS water table map indicates that the upper surface of the groundwater table in the area of the site lies at approximately 40 feet above mean sea level (msl). This generally corresponds with water table elevations identified in on-site boring logs which identifies groundwater at an elevation of approximately 45 feet above msl in the northern end of the property. Based on the results from these borings as well as property elevations that range from 49 to 114 feet above msl it is estimated that the water table lies at depths ranging from between 4 to 69 feet bgs at the site.

However it should also be noted that a review of logs for borings installed in other portions of the site indicates the presence of subsurface water at significantly higher elevations within the range of 50 to 70 feet above msl. Further examination of the boring logs reveal the presence of semi-impermeable layers of clayey sands and hardpan material consisting of silty sands that retards the downward migration of recharge to the underlying water table and ultimately result in the creation of perched water zones at the site.

Groundwater Quality

The Long Island Regional Planning Board in conjunction with other agencies prepared a management plan for Long Island groundwater resources in 1978 in accordance with Section 208 of the 1972 Federal Water Pollution Control Act Amendments (the "208 Study"). The purpose of the 208 Study was to investigate waste disposal options and best practice for ground and surface water protection. The study delineated Hydrogeologic Zones for the formulation of management plans based on groundwater flow patterns and quality **(Koppelman, 1978).** The subject site is located in Groundwater Management Zone I as delineated by the Suffolk County Department of Health Services for the purpose of implementing the 208 Study recommendations **(SCDHS, 1985)**. Zone I is the portion of the groundwater system that is a deep aquifer recharge area. This zone is a primary source of public water supply. It is recommended in the 208 Study that development in this zone utilize public sewers if available, or provide for wastewater collection/treatment where the existing residential density is 9 or more persons per acre. For comparison, the proposed project will have a residential density of approximately 5 persons/acre. In the case of new residential development, wastewater collection/treatment should be provided for densities of 6 or more persons/acre. The project sponsor is petitioning for inclusion within the Huntington Sewer District so as to allow all sanitary wastewater generated by the project to be conveyed off-site to the public sewer system for treatment and disposal in the Huntington STP. However, if the sewer connection is not approved, then on-site septic systems would be provided and is allowable since the proposed density will be less than 6 persons/acre. In addition, the 208 Study recommends: 1) that stormwater runoff be controlled on-site by preventing sediments, nutrients, metals, organic chemicals and bacteria from reaching surface and, eventually, ground waters; 2) that on-site disposal systems should be maintained properly; and 3) fertilizer use should be minimized on lawn areas.

The Suffolk County Comprehensive Water Resources Management Plan (SCCWRMP) provides information on water quality from 0 to 400 feet below the water table, based on observations as well as public and private water supply and well monitoring data. The general area in proximity to the subject site is depicted as having good water quality with respect to nitrate-nitrogen (1-6 mg/l) at between 0 and 100 feet as well as between 100 and 400 feet. In regard to organic compounds, SCDHS water quality data presented in the SCCWRMP indicates that Volatile Organic Compound (VOC) levels at 0 to 100 feet below the water table are good (less than 60 % of standard) and found not to exceed drinking water standards the majority of the time. Between 100 and 400 feet, VOC levels are not detectable, further indicating good water quality and an absence of adverse impact.

Review of the site specific geologic logs generated from soil borings installed at the site indicate that subsurface water is retained in soils underlying the property at depths ranging from approximately one (1) to eleven (11) feet bgs. The presence of low-permeability subsoils at the

site has resulted in the creation of a perched water condition beneath the subject property, which is above the existing regional water table. This perched water has been noted to reach the ground surface in several portions of the site in the form of ponded areas and surface seeps/springs located along the eastern property line and in the northern corner of the site. This subsurface water is present as the result of surface flow percolating downward and being retained within the clay substratum, and from perched water flow from higher elevations that has moved downgradient. The ponded area above the perched water coincides with a surface depression; beneath this depression are low-permeability soils and at the bottom of the depression is an accumulation of organic debris such as decomposed leaves. These two factors have caused the ponds and wetlands to form; these areas have been noted to drain and dry out during prolonged dry periods.

Water Budget

The groundwater budget for an area is expressed in the hydrologic budget equation, which states that recharge equals precipitation minus evapotranspiration plus overland runoff **(SCDHS, 1987-2; p. 5-29).** This indicates that not all rain falling on the land is recharged. Loss in recharge is represented by the sum of evapotranspiration and overland runoff. The equation for this concept is expressed as follows:

$$\mathbf{R = P - (E + Q)}$$

where: **R** = recharge
P = precipitation
E = evapotranspiration
Q = overland runoff

Nelson, Pope & Voorhis, LLC has utilized a microcomputer model developed for exclusive use of NP&V for the purpose of predicting both the water budget of a site and the concentration of nitrogen in recharge. The model, referred to as SONIR (Simulation of Nitrogen in Recharge), utilizes a mass-balance concept to determine nitrogen in recharge. Critical in the determination of nitrogen concentration is a detailed analysis of the various components of the hydrologic water budget, including recharge, precipitation, evapotranspiration and overland runoff. The basis for this method of nitrogen budget analysis is well established, and similar techniques have been used to simulate nitrogen in recharge as published by the New York State Water Resources Institute, Center for Environmental Research at Cornell University, Ithaca, New York (BURBS - A Simulation of the Nitrogen Impact of Residential Development on Groundwater; **Hughes et al., 1985).** The SONIR model includes four (4) sheets of computations: 1) Data Input Field; 2) Site Recharge Computations; 3) Site Nitrogen Budget; and, 4) Final Computations. There are a number of variables, values and assumptions concerning hydrologic principles, which are discussed in detail in a user manual developed for the SONIR Model and provided in **Appendix B-1.**

The model has been run for water budget and nitrogen parameters for Existing Conditions. The results of this analysis are presented in **Appendix B-2**. The SONIR model was run for the project site based on current site conditions (see **Table 1-1**) in order to provide a basis for comparison. The 7.07-acre site currently has a total site recharge of 20.21 inches per year, or 3.88 million gallons per year (MGY) over the entire site.

A more detailed assessment of the environmental impact of the existing site and proposed development can be made by calculating the total nitrogen input to groundwater, diluted by the total volume of recharge water. These figures can then be used to determine the expected nitrogen concentration in recharge. The basis for this simulation was established in the 208 Study, and further developed by the Cornell University, Water Resources Program **(Koppelman, 1978; Hughes and Porter, 1983).** A microcomputer model was developed using the Microsoft Excel spreadsheet software in order to account for a wide variety of hydrologic and nitrogen related variables. This spreadsheet model named (SONIR), was utilized to determine the present recharge and nitrogen entering the site, and is included in **Appendix B-2**. In its present state, the property is estimated to recharge a nitrogen concentration of 2.33 mg/l.

Watershed and Drainage Conditions

Stormwater drainage generally follows the topographic profile of the subject property where stormwater that is not infiltrated eventually discharges to the pond and wetland areas located along the western property boundary as well as the ponded area in the northern corner of the site. Stormwater deposited in the wetlands area eventually drains into the pond located in the on-site pond. Water in the pond is transferred through a weir into the County roadside catch basin system located on the west side of Park Avenue. Water entering this system is conveyed by piping in Park Avenue towards the north where it discharges to a shallow stream located in an open Town park north of Woodhull Road. Water entering this estuary system is eventually deposited into Heckscher Pond, which lies approximately 2,000 feet northwest of the subject site.

In response to a prior drainage problem associated with the property, a perforated drainage culvert was installed approximately 2 years ago to alleviate flooding which periodically occurred at the property during periods of excessive rainfall. The system, which is located in the northern end of the site, collects runoff that percolates slowly through the overlying low permeability soils and transfers it to the northern corner of the property and into a subsurface leaching pool. Overflow from the leaching pool is eventually discharged to the County roadside catch basin system where it is eventually transferred to Heckscher Pond. This system has also reduced the degree of ponding that occurs in the northern corner of the site but this area still has been observed to collect run-off during periods of excessive precipitation. The drainage pattern of the site is illustrated in **Figure 7**.

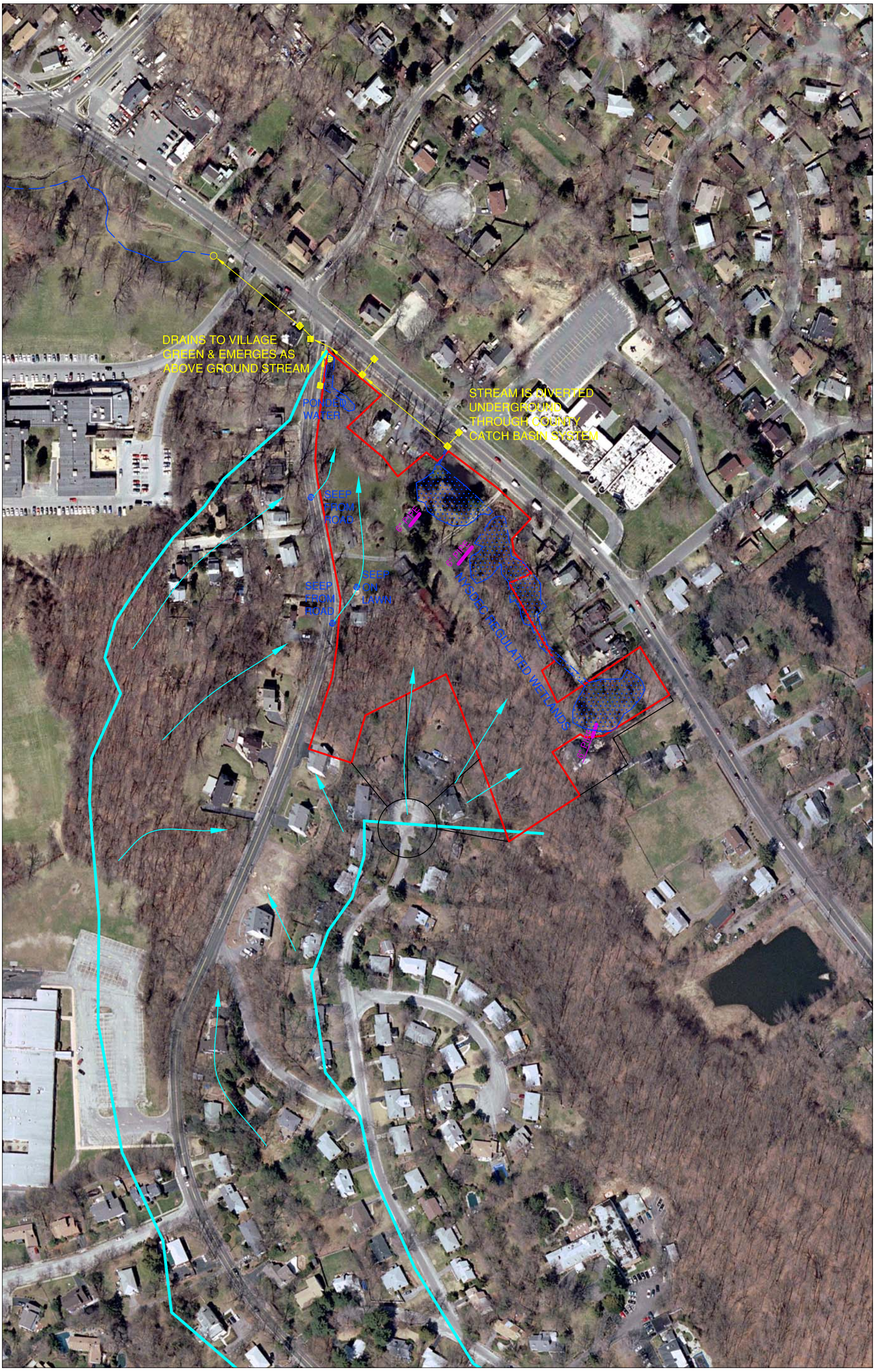
Stormwater, as runoff, is the vehicle by which pollutants move across land and through the soil to groundwater or surface waters. Contaminants accumulate or are disposed of on land and improved surfaces. Sources of contaminants include:

- animal wastes
- highway deicing materials
- decay products of vegetation and animal matter
- fertilizers
- pesticides

In 1982, the Long Island Regional Planning Board (LIRPB) prepared the L.I. Segment of the Nationwide Urban Runoff Program (NURP Study). This program attempted to address, among other things, the following:

FIGURE 7

AERIAL PHOTOGRAPH WITH HYDROLOGICAL FEATURES



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Source: GeoMaps
Scale: 1' = 200'

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

The purpose of the NURP Study, carried out by the USGS, was to determine:

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

In order to accomplish this, five recharge basins, located in areas with distinct land use types, were selected for intensive monitoring during and immediately following storm events. Five recharge basins, three in Nassau and two in Suffolk, were chosen for the study on the basis of type of land use from which they receive stormwater runoff. The following is a listing and description of each drainage area:

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

Based on the sampling program, the NURP Study reached the following relevant findings and conclusions:

Finding: Median values of total recoverable lead in runoff samples ranged from 275 μg/l at the Plainview recharge basin, which drains a major highway, to 19 μg/l at the Laurel Hollow recharge basin, which drains a low density residential area containing only minor roadways. Between these two, in order of decreasing lead concentrations, were Centereach (strip commercial with major roadway), Huntington (parking lot), and Syosset (medium density residential with minor roadways).

Conclusion: Lead concentrations in runoff entering a recharge basin appear to be directly related to the extent and characteristics of the road network and the type and volume of traffic in the drainage area served by the basin.

Finding: The number of coliform and fecal streptococcal indicator bacteria in stormwater range from 10^8 MPN to 10^{10} MPN per acre per inch of precipitation. Except in a few cases, these bacteria were not detected in the groundwater beneath the recharge basins studied. Where they were present, they were found in concentrations at or near the analytical detection limit.

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

In general, stormwater runoff will be generated from impervious surfaces such as roofs and driveways. Runoff may carry such pollutants as heavy metals, petroleum hydrocarbons, bacteria,

and nitrogen. Extensive monitoring associated with the NURP Study found that direct discharge of stormwater to surface water caused significant water quality impairment; however, on site stormwater discharge utilizing leaching facilities significantly reduces such impacts. Groundwater monitoring beneath recharge basins found a significant reduction in concentrations of heavy metals, hydrocarbons, and bacteria, indicating that such contaminants are attenuated in soil or volatilized in stormwater transport **(Koppelman, 1982).**

For the NURP Study, a 100-acre drainage area in Laurel Hollow was selected as the site for monitoring of recharge that is characteristic of a low-density residential neighborhood. These data are included in this report as an example of stormwater impacts from such an area. No direct comparisons of the project vicinity to this NURP Study area are intended; it is acknowledged that the recharge regime of the project site is characterized by both stormwater runoff from off-site roadways and perched groundwater, whereas elevated groundwater was not discussed for the Laurel Hollow site. However, it is speculated that the potential impacts from the stormwater component of the site's overall recharge volume would be similar to those reported in connection with the Laurel Hollow area. It should be noted that contaminants in surface runoff would be removed from recharge as it percolates downward through the filtering soil matrix; the NURP Study test results for recharged water would show a reduced concentration of contaminants than would result from testing of the stormwater prior to its recharging on-site.

Groundwater samples collected directly beneath the recharge basin at the Laurel Hollow site were tested for a number of parameters. The results of these analyses are presented in **Table 2-2.** The table provides information regarding the potential stormwater impact in a low-density residential area. As previously indicated, it is expected that heavy metals associated with automobile usage of roads may be present in stormwater, particularly lead and chromium. In addition, nitrogen and bacteria (coliform) would also be expected due to animal waste in paved areas. The NURP Study and the data presented in **Table 2-2** indicate that most of the constituents commonly present in stormwater are reduced in concentration in groundwater beneath stormwater leaching basins. Elevated heavy metals were detected in groundwater as expected; however, their concentrations were significantly reduced presumably through attenuation. It is noted that the concentration of lead complies with drinking water standards. In addition, the pH level is in excess of the acceptable range; however, pH in groundwater is often on the acidic side due to recharge of acidic precipitation **(SCDHS, 1987-2).**

The data presented herein are for developed areas with public roads. The proposed project will be a low-density residential housing site, which will be developed at an intensity similar to the Laurel Hollow area, therefore the impact from the stormwater runoff component of overall site-originating recharge volume is expected to be similar to the Laurel Hollow area studied in the NURP report. It is possible that stormwater emanating from the project site will contain slightly elevated levels of heavy metals; however, based upon the documented attenuation associated with recharge of stormwater by use of catch basins, these impacts are not expected to be significant. The section dealing with Land Use Plans should be reviewed as regards the recommendations of the NURPS for stormwater management and **Section 2.4.2** should be reviewed for a full discussion of potential impacts. The proposed project will conform to the recommendations of this report for best management in terms of stormwater disposal.

Table 2-2
GROUNDWATER IMPACTS OF STORMWATER
Low Density Residential Use

Parameter	Value	Standard
Spec. Cond. (umhos)	61	[n]
PH (standard units)	6.1	6.5-8.5[1]
Turbidity (NTU)	0.4	*
Hardness (mg/1)	15.0	[n]
Calcium (mg/1)	4.5	[n]
Magnesium (mg/1)	0.9	[n]
Sodium (mg/1)	3.7	[n]
Potassium (mg/1)	---	[n]
Sulfate (mg/1)	11.0	250.0
Flouride (mg/1)	0.1	1.5
Chloride (mg/1)	4.3	250.0
Nitrate-Tot (mg/1)	1.0	10.0
Phosphorus (mg/1)	0.01	[n]
Cadmium (mg/1)	0.001	0.01
Chromium (mg/)	0.013	0.05
Lead (mg/1)	0.006	0.025
Arsenic (mg/1)	0	0.025
Coliform (MPN)	3	**
Coliform, fecal	2	[n]

Source: Koppelman, 1982
Notes: Standards from NYS, 1984, Section 703.5 Classes and quality Standards for Groundwaters, except as noted.
1. Standards indicate limit except where exceeded due to natural conditions.
* Standard for Total Dissolved Solids for Class "AA" surface water (Drinking purposes), is 500 mg/1NYS, 1984; Section 701.19)
** Standard for coliform for Class "AA" surface water, indicates the monthly median coliform value for 100 ml of sample shall not exceed 50 from a minimum of five examinations and provided that not more than 20% of the samples shall exceed a coliform value of 240 for 100 ml of sample (NYS, 1984; Section 701.19).
[n] no standards for parameter.

2.4.2 Anticipated Impacts

Groundwater Hydrology and Water Budget

Development of the site is anticipated to modify groundwater hydrology due to the increase in impermeable surface area and use of an on-site stormwater system which will overflow runoff to public storm sewers, resulting in a decrease in groundwater recharge compared to what presently exists. Results of the SONIR model run completed for the proposed project estimate that recharge will decrease from the site's existing 3.88 MGY to 1.95 MGY. However, it is not anticipated that this decrease will result in a significant alteration in groundwater flow in the area surrounding the subject property. In addition, it is not expected that there will be a depletion in water source to the on-site wetlands or pond as discussed in more detail herein.

The subject site lies in an area where there is a confluence of stormwater drainage from the watershed associated with a ravine generally coinciding with Park Avenue, and a ravine associated with Woodhull Road. The wetlands and pond system receive a large quantity of runoff from the surrounding watershed areas. The subject site comprises less than 23% of the total watershed area associated with just the Woodhull Road ravine which is depicted in **Figure 8**. As a result, the establishment of drainage systems on the site is not expected to adversely affect the hydrology of the wetlands or pond on the subject site; however additional empirical evidence and analysis is provided in **Appendix D**.

The pond is an impoundment system that lies above the regional groundwater table. The impoundment is at the northwest limit of the pond, where a weir overflows to the drainage piping system in Park Avenue. The pond elevation establishes the basic elevation of water upstream, and supports the small adjacent wetland system. The wetlands are in a topographic low area and as a result receive drainage, and are further supported by accumulation of silt, organic material (leaf litter) and subsurface stratum.

Parts of the subject property are underlain by a low permeability clay substratum, which tends to retain water. Controls instituted on the subject property essentially intercept water atop the clay and convey it to a low point in the property with overflow to the drainage pipe system on Park Avenue. This act did not result in alteration of the wetlands or pond, as the pond still maintains flow to the drainage system

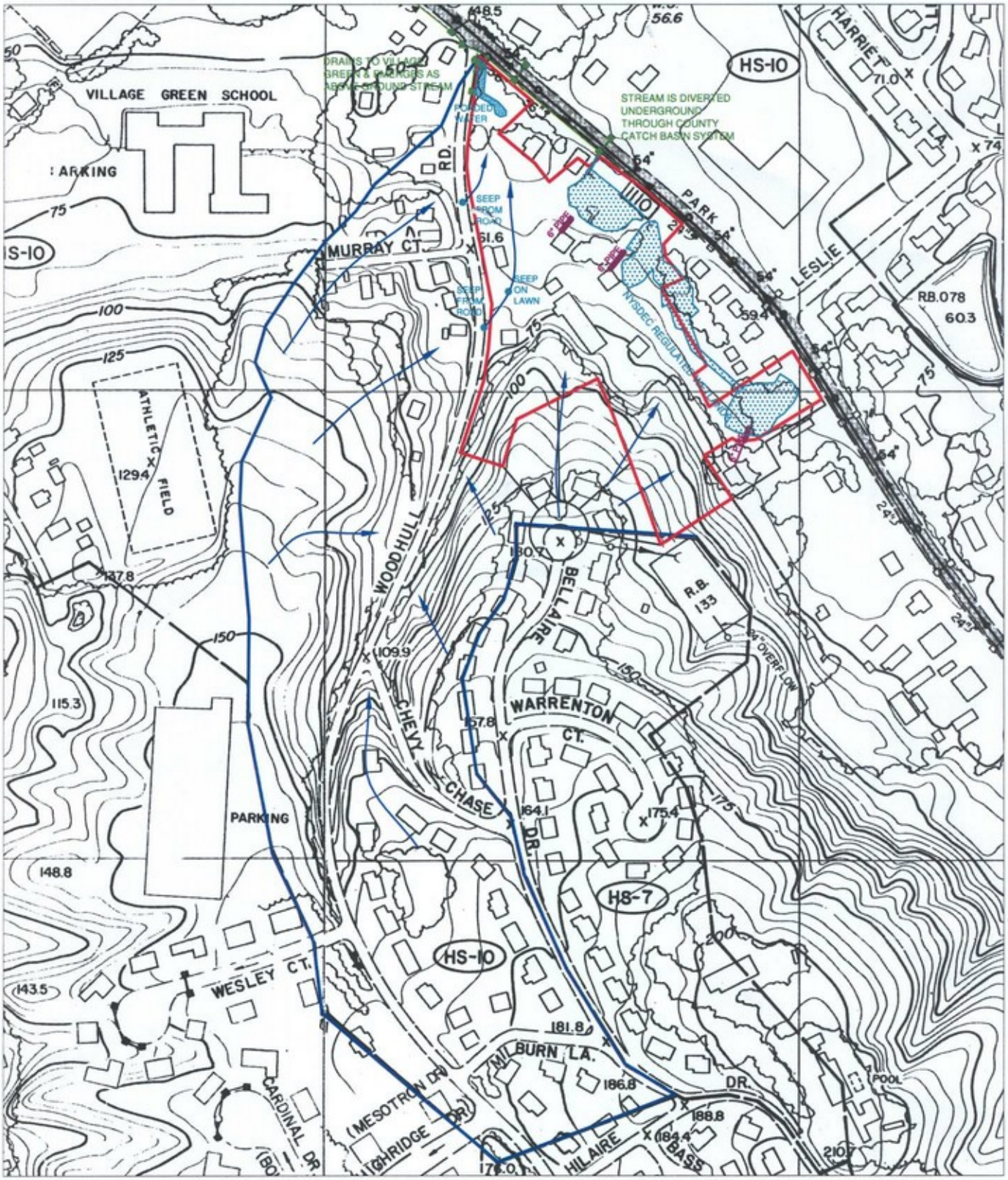
The proposed project and the detailed engineering design which has been prepared will permit the installation of a road and homesites in consideration of the unique hydrologic properties of the site. In order for drainage systems to work properly, adequate containment capabilities must be provided. The clayey sand beneath parts of the site is not impermeable, but retards the recharge of water through the 2-3.5 foot layer. Since the clay is discontinuous, and is not impermeable, it is evident that many parts of the site recharge as they would if the clay were not present. As a result, the clay is not a major source of water to the wetlands and pond.

Drainage design has considered the site hydrology. Most borings intercept the regional water table at an elevation of 42-48 feet. Several borings intercept water at 52-63 feet, and primarily include those borings which show evidence of either a 2-3.5 foot brown clayey sand or a silty sand hardpan layer. Despite the increase in impervious surfaces, the proposed project will decrease the volume of recharge generated on-site (as predicted by the SONIR model) from 3.88 to 1.95 MGY. This is due to the use of off-site sewage treatment and use of an on-site detention system with overflow to the off-site public drainage system, which removes a substantial volume of water from recharge on-site. As a result of the large watershed contributing area which supports the wetlands and pond, their location in low topographic areas which retain silt and organic material, the stormwater sources and immediate overland flow, and the discontinuous but lower leaching characteristics of the clay beneath the site, the subject property is not a significant factor in the hydrology of the wetlands and pond.

<u>Groundwater Quality</u>
Groundwater impacts which may occur during construction activities could potentially result from building materials and equipment stored on-site. Building materials are anticipated to be

FIGURE 8

WATERSHED & HYDROLOGICAL FEATURES



Source: Comprehensive Storm Drainage Study Plan for Town of Huntington, 1980
Scale: 1" = 300'

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inert and therefore are not expected to have an adverse impact on groundwater quality at the site. Equipment stored on-site which will be utilized during clearing and construction activities would be required for any land use on the site. Reputable contractors will be used and the construction company (along with the applicant and site owner) will be responsible to properly maintain and operate equipment and address any potential water quality threats pursuant to State laws. In addition, construction activities will only occur over an estimated 6 to 9 month period and as a result no significant or long-term construction impact to groundwater quality is anticipated.

The operation of the proposed project will not utilize any toxic/hazardous industrial chemicals or solvents. The only discharges anticipated to occur will be comprised of runoff from impervious surface areas and sanitary discharges from individual, on-site septic systems. Each of these on-site facilities will be designed and constructed in conformance with Suffolk County permitting requirements. As a result, use of the site is not anticipated to result in any discharges which would adversely impact groundwater quality underlying the site.

The project is proposed to be connected to the Huntington STP. It is anticipated that the concentration of nitrates (as nitrogen) generated on-site will be decreased by the proposed project, due primarily to the conveyance of wastewater to the STP, and since several residences currently exist on site and now discharge sanitary effluent to groundwater. The SONIR computer model (presented in **Section 2.4.1**) was applied to the proposed project, to determine the expected concentration of nitrogen in recharge originating on the site. The results (**Appendix B-3**) indicate that the nitrogen concentration will decrease to 0.01mg/l, which represents a substantial reduction as compared to the existing level of 2.33 mg/l. As no fertilizers will be used and wastewater will be sent off-site for treatment and disposal, the only sources of nitrogen will be in rainfall and lawn irrigation water. This anticipated concentration is less than the NYSDEC drinking water standard of 10 mg/l and the proposed project is not expected to result in significant adverse effects to groundwater quality with regard to nitrogen loading.

There are no potential impacts to water resources from stormwater generated on-site, based upon analysis of the project's conformance to design requirements of the Town, and to recommendations of the 208 and NURP studies (see **Section 2.4.1**). Specifically, the project will detain and discharge all runoff from developed surfaces to the public drainage system. The upland portion of the existing perforated piping system (see **Overall Layout Plan**) will be removed and replaced during the construction period to conform to the new development pattern of this portion of the site, so that this system can continue to intercept perched groundwater flow and protect proposed Unit #3. Based upon the NURP Study, the low-density residential nature of the site and vicinity does not represent a significant source which could impact groundwater quality. As a result, no significant impact to groundwater quality is anticipated from recharge of stormwater from the project site.

<u>Watershed and Drainage Conditions</u>
Stormwater runoff will be generated from impervious surfaces such as the proposed internal roadway, driveways, roofs, sidewalks, etc. On-site drainage will be altered due to the overall grading and redevelopment of the subject property; however, proper grading, erosion control techniques and drainage containment will minimize impacts.

To inhibit the free flow of stormwater runoff from the site, the removal of natural vegetation at the site will be limited to the greatest extent possible allowing vegetation, where it exists, to remain primarily along the boundaries of the subject property. Disturbed areas not covered with building or pavement will be revegetated with landscape vegetation consisting of lawns, shrubbery and trees. Areas of the site which will not be disturbed by construction or grading activities will remain as natural vegetation. Additional protection against erosion and sedimentation will be provided through implementation of an overall grading plan which will not create surface contours in excess of 1:3 slopes across the entire project area as well as the provision of a sedimentation and erosion control measures designed to prevent the migration of overland runoff to adjacent properties. In addition, each individual residential structure will be designed with proper grading at the time of building permit review and when the architecture of residences is know and it should be noted that all gutters and leaders on individual dwellings will be directed to drywells within each individual lot for recharge to the underlying aquifer.

To minimize sediment and debris transported off-site by stormwater runoff and the impact to local water quality, erosion and sedimentation controls will be provided during construction activities associated with the project. In accordance with the NYSDEC Phase II SPDES Program, coverage under the General Permit for Stormwater Discharges from Construction Activities (NYSDEC Permit No. GP-02-01, General Permit) will be obtained prior to the initiation of construction activities. Prior to filing for coverage under the General Permit, the NYSDEC requires that a Stormwater Pollution Prevention Plan (SWPPP) be prepared for the parcel, including a detailed erosion and sediment control plan, to manage stormwater generated on-site during construction activities, and for post-construction stormwater management. A SWPPP will be prepared to ensure compliance with water quality and quantity requirements pursuant to Technical Guidance and GP-02-01 requirements. In addition, an erosion control plan incorporating the NYSDEC Technical Guidance manual, and use of measures such as silt fencing, storm drain inlet protection, hay bales, and good housekeeping procedures will be utilized. The drainage system and revegetation plan will further provide permanent stormwater controls once construction is completed. Development of the property is not anticipated to significantly increase erosion/sedimentation or stormwater impacts, as a result of proper site grading procedures, erosion controls, and drainage system design. The Notice of Intent (NOI) requesting coverage under the General Permit will be filed in accordance NYSDEC requirements, prior to the initiation of construction activities at the subject property.

2.4.3 Proposed Mitigation

- The site will be served by an on-site stormwater detention system, which will collect all runoff from developed surfaces, as well as off-site, upstream surfaces tributary to the subject site, for filtration, detention and controlled overflow to the public drainage system.
- To inhibit the free flow of stormwater runoff from the site, the removal of natural vegetation at the site will be limited to the greatest extent possible allowing vegetation, where it exists, to remain primarily along the boundaries of the subject property. Disturbed areas not covered with building or pavement will be revegetated with landscape vegetation consisting of lawns, shrubbery and trees. Areas of the site which will not be disturbed by construction or grading activities will remain as natural vegetation.

- Protection against erosion and sedimentation will be provided through implementation of an overall grading plan which will not create surface contours in excess of 1:3 slopes across the entire project area as well as the provision of sedimentation and erosion control measures designed to prevent the migration of overland runoff to adjacent properties.
- Each individual residential structure will be designed with proper grading at the time of building permit review and when the architecture of residences is know and it should be noted that all gutters and leaders on individual dwellings will be directed to drywells within each individual lot for recharge to the underlying aquifer.
- Coverage under the DEC General Permit Stormwater Discharges from Construction Activities will be obtained as required for the proposed construction site.

2.5 Ecological Resources

2.5.1 Existing Conditions

Overview

The overall subject property is 7.07 acres in size and is partially developed with four (4) existing dwellings as indicated in **Section 1.1.1**. The remaining areas on-site are either landscaped or naturally vegetated and consist of a man-made pond, forested freshwater wetlands, small emergent marsh, successional hardwood forest, and cultural mowed lawn with trees. These habitat types have been defined by a classification system developed by the NYSDEC **(Reschke, 1990).** The following text outlines the existing conditions of the subject property with regard to ecological resources. The existing site habitat quantities listed in **Table 2-3** were determined by aerial photography and field observations by NP&V. **Figure 9** presents a map of the vegetation community types found at the site.

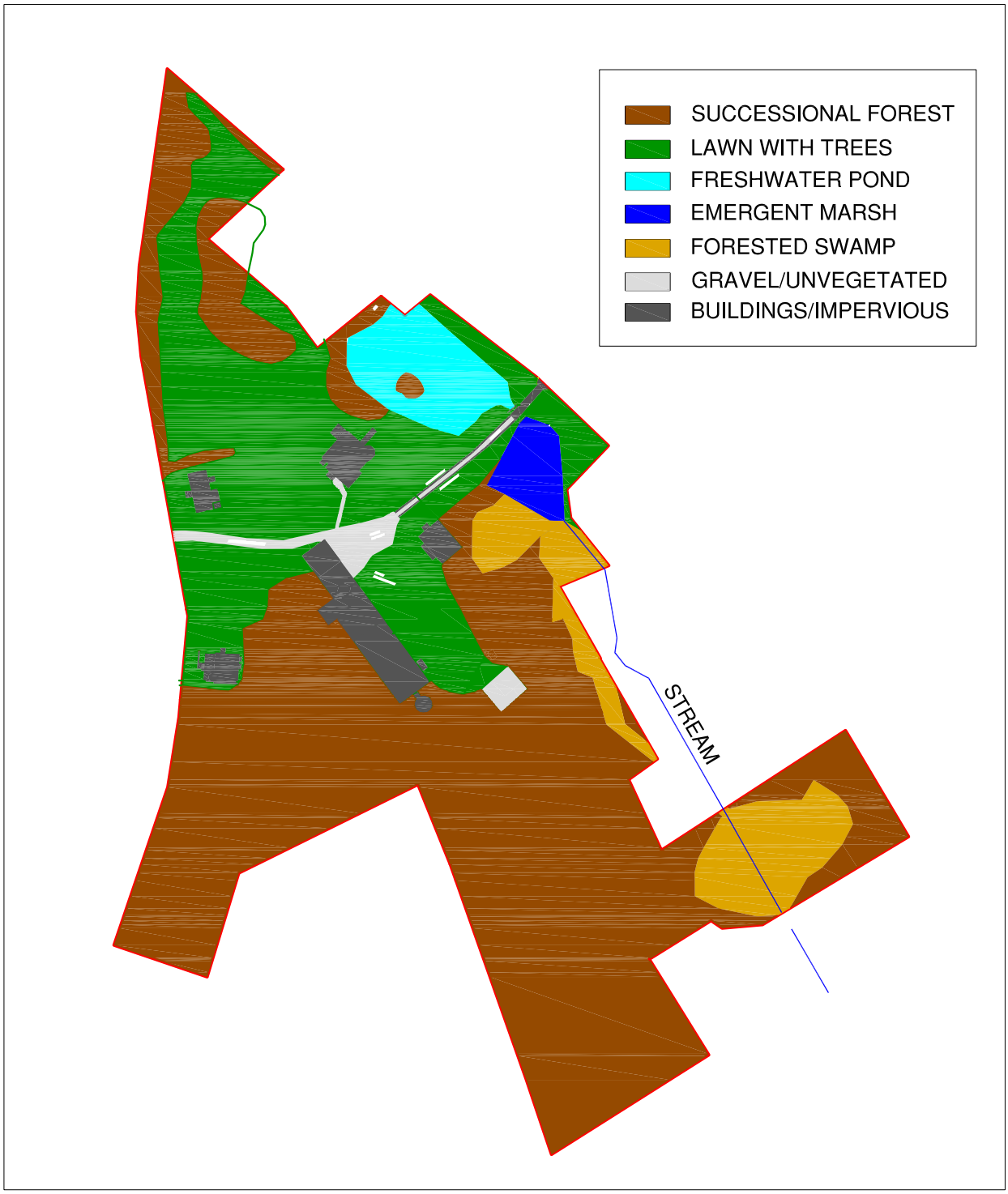
Table 2-3
HABITAT AREAS

Parameter	Existing Conditions	Percent of Site
Successional Hardwood Forest	4.03 acres	57.0%
Forested Freshwater Wetland	0.51 acres	7.2%
Reedgrass Emergent Marsh	0.11 acres	1.6%
Artificial Pond/Surface Water	0.27 acres	3.8%
Mowed Lawn with Trees	1.77 acres	25.0%
Pervious Gravel Driveway/Unvegetated	0.12 acres	1.7%
Buildings/Concrete	0.26 acres	3.7%
TOTALS	**7.07 acres**	**100%**

Optimal field investigation times for noting the vegetative communities on site would occur during the growing season, which typically occurs from May/June through September/October. Optimal field investigation times for noting the vegetative communities on site occur during the growing season, primarily from May/June through September/October. This time period also reflects the optimal time to observe both resident wildlife and most migratory birds. The site was visited on June 22, 2004, September 29, 2004, and March 21, 2005 to delineate wetland

FIGURE 9

HABITAT MAP



Source: NP&V Field Inspections
Scale: 1" = 150'

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boundaries and to inventory vegetation and wildlife species present on the property. Field visits were either conducted during the early morning hours beginning as early as 8:00 AM or during mid-afternoon. In addition to several systematic ecological assessments of the property, the entire site was also randomly traversed which also accounted for a large number of inventoried species listed in the following vegetation and wildlife sections. Detailed accounts of habitat type and quality, an extensive list of observed species, and a complete list of species expected given the habitat type on site is contained in the succeeding sections of this ecological assessment.

As previously stated, two unoccupied, historic residential structures (the Skidmore house to the north and Moses Rolph House to the south), an occupied rental residence (the former main farm house, at 471 Woodhull Road) and an occupied rental cottage (formerly the milk house), along with a cow barn and silo (in a state of collapse) presently occupy the central portion of the site. They are accessible via a gravel driveway from Woodhull Road and a concrete bridge from Park Avenue. Landscaped areas are evident around the peripheries of the dwellings and the northern portion of the site. There is also a small unvegetated area southeast of the cow barn which is the remains of an old horse barn. Successional southern hardwood forest occurs primarily in the steep-sloped southern half of the site and to a lesser extent as patches of woodland edge in the northern portion of the site. Freshwater wetlands dominate the eastern portion of the site. A deciduous forested swamp wetland with a small stream runs parallel to Park Avenue, northward into an emergent marsh wetland on the south side of the driveway. The Phragmites-dominated marsh then empties into a man-made pond (with a small forested island in its center) via a culvert below the driveway.

The majority of the surrounding areas are dominated by developed residential and institutional land uses. The only wildlife habitat in the surrounding area occurs primarily as thin strips of forested edge habitat that separate land parcels. The wooded area along the site's southern boundary contains steep slopes. Therefore, there is some contiguous upland wildlife habitat available south of the site. A more detailed description of the existing habitats, vegetation and wildlife on the subject site is provided in the following subsections.

<u>Flora</u>

Early Successional and Forested Habitats

The following communities are classified as terrestrial/cultural communities. Reschke **(1990)** further relates these broad community types to those that are created and maintained by human activities, or the biological composition of the resident community is substantially different from the character of the community as it existed prior to human influence. **Edinger (2002)** revised and expanded Reschke's classic 1990 publication and his revisions are incorporated into the community descriptions listed below. Mowed lawn with trees surrounds the dwellings in the central portion of the site and extends into the northern portion of the parcel. Ornamental shrubs and hedges surround the two northern-most dwellings as well as portions of the pond. Successional forest is most prevalent in the southern half of the property, but patches of successional woodland vegetation also occur along the site's northern boundaries. Further information on the process of succession is discussed below.

> <u>*Mowed Lawn with Trees*</u> - This community is also created and maintained by human activity, whose existence prior to human intervention was substantially different. As defined by **Reschke,**

1990, "*residential, recreational, or commercial land in which the groundcover is dominated by clipped grasses and forbs, and it is shaded by at least 30% cover of trees. Ornamental and/or native shrubs may be present, usually with less than 50% cover. The groundcover is maintained by mowing."* This habitat occupies 1.77 acres, or 25 % of the total parcel.

Successional Southern Hardwoods Forest - Successional Southern Hardwoods Forest is defined by Edinger **(2002)** as *"a hardwood or mixed forest that occurs on sites that have been cleared or otherwise disturbed."* Trees cover at least 60 percent of the canopy cover. Characteristic trees and shrubs may include any of the following: American elm, slippery elm, white ash, red maple, box elder, silver maple, sassafras, gray birch, hawthorns, eastern red cedar, and choke-cherry. Certain introduced species are commonly found in successional forests, including black locust, tree-of-heaven, and buckthorn. Any of these may be dominant or co-dominant in a successional southern hardwood forest. A successional hardwood forest is generally characterized by small trees and a dense understory, although large diameter trees may be present if the site was originally landscaped. As time progresses, the canopy begins to close, decreasing light penetration to the understory. The understory will open, allowing for colonization of more shade tolerant species. This habitat occupies approximately 4.03 acres, or 57% of the total project site.

Successional forest habitat typically dominates areas that have been cleared or otherwise disturbed. Following an initial disturbance, herbaceous weeds and other plants with wide seed dispersal occupy the site. Woody shrubs then replace these early successional species, as well as saplings produced by seed from nearby habitats. As saplings colonize the area and time progresses, first growth woods appear. In time, light penetration to the understory is reduced due to the increasing canopy cover, allowing more shade tolerant species to colonize the understory. The resulting forest generally resembles the original forest, although non-native species introduced into the area may be dominant. The successional habitat found on site contains both native and non-native species, and in general, the presence of non-natives typically reduces the value of these habitats.

The successional forest habitat on the site is consistent with the previous agricultural use of the property as a dairy farm with large areas having been cleared for pasture. Most of the large trees identified in the upland woodland areas are black locust. Although considered to be an invasive species, black locust is a leguminous tree species that is capable of nitrogen fixation, and therefore thrives in poor soils typical of old fields or formerly mined lands. The leaf litter produced by this tree is known to be rich in minerals such as potassium, calcium, and magnesium, which aid in plant growth and lessen soil acidity. Therefore, it is a very useful tree for converting previously disturbed and overworked soils into valuable ecological habitats. It is highly likely that the site's old pastures were initially colonized by black locust, which primed the soils for the colonization of other deciduous trees.

The successional woodland in the sloping hillsides of the southwestern portion of the property, near Woodhull Road, is dominated by oak species typically associated with mid- to late-successional forests. The steep slopes in this area likely prevented the use of this portion of the site for pasture land. Therefore, species such as scarlet oak, red oak, white oak, chestnut oak and black cherry began colonizing the steeper areas prior to the pasture areas. The well-drained soils found on these hillsides support understory vegetation such as sassafras, inkberry, yew and early lowbush blueberry. However, the understory is dominated by saplings of Norway maple, an

aggressive invasive tree. The high level of habitat fragmentation and residential landscape areas that surround the site make it vulnerable to invasions by non-native species, which degrade the ecological value of the natural communities. Field inspections of this area occurred throughout the growing season and sufficiently document plant communities representative of this habitat. **Tables 2-4 and 2-5** identify those species recognized by the Invasive Plant Council of New York State and the USDA Natural Resources Conservation Service as invasive weeds within the State.

Table 2-4 presents a list of plant species found on site or expected to be found within deciduous successional and deciduous habitats.

Table 2-4
EARLY SUCCESSIONAL PLANT SPECIES

Trees	
* Norway maple	*Acer platanoides [i]*
* red maple	*Acer rubrum*
* silver maple	*Acer saccharinum*
* tree-of-heaven	*Alianthus altissima [i]*
* gray birch	*Betula populifolia*
white birch	*Betula papyrifolia*
pignut hickory	*Carya ovalis*
mockernut hickory	*Carya tomentosa*
silky dogwood	*Cornus amomum*
* flowering dogwood	*Cornus florida [p]*
red-osier dogwood	*Cornus stolonifera*
hawthorne	*Craetagus sp.*
American beech	*Fagus gradifolia*
black walnut	*Juglans nigra*
* eastern red cedar	*Juniperus virginiana*
* magnolia	*Magnolia sp.*
crab apple	*Malus coronaria [p]*
common apple	*Malus pumila*
mulberry	*Morus alba*
* Norway spruce	*Picea abies*
* red spruce	*Picea rubens*
pitch pine	*Pinus rigida*
* white pine	*Pinus strobus*
eastern cottonwood	*Populus deltoides.*
bigtooth aspen	*Populus grandidenta.*
* black cherry	*Prunus serotina*
choke cherry	*Prunus virginiana*
* white oak	*Quercus alba*
* scarlet oak	*Quercus coccinea*
pin oak	*Quercus palustris*
* chestnut oak	*Quercus prinus*
* red oak	*Quercus rubra*
black oak	*Quercus velutina*
* black locust	*Robinia pseudoacacia [i]*

	common buckthorn	*Rhamnus cathartica [i]*
	smooth buckthorn	*Rhamnus frangula [i]*
*	sassafras	*Sassafras albidum*
*	hemlock	*Tsuga canadensis*
Shrubs and Vines		
	Japanese barberry	*Berberis thunbergii [i]*
	boxwood	*Bux sempervirens*
	American bittersweet	*Celastrus scandens [p]*
*	oriental bittersweet	*Celastrus orbiculatus [i]*
	silverberry	*Elaeagnus commutata*
	autumn olive	*Elaeagnus umbellata [i]*
	winged spindle tree	*Euonymus alatus [i]*
	forsythia	*Forsythia sp.*
*	English ivy	*Hedera helix*
	bush clover	*Lespedeza sp.*
	privet	*Ligustrum vulgare*
*	honeysuckle	*Lonicera spp.*
	hairy honeysuckle	*Lonicera hirsuta*
	Japanese honeysuckle	*Lonicera japonica [i]*
	fly honeysuckle	*Lonicera morrowii [i]*
	tartarian honeysuckle	*Lonicera tatarica [i]*
	stagger-bush	*Lyonia mariana*
	bayberry	*Myrica pensylvanica [p]*
*	Virginia creeper	*Parthenocissus quinquefolia*
*	andromeda	*Pierus sp.*
*	multiflora rose	*Rosa multiflora [i]*
	pasture rose	*Rosa sp.*
	pinkster bloom	*Rhododendron nudiflorum [p]*
*	azalea	*Rhododendron sp. [p, native only]*
	winged sumac	*Rhus copallina*
*	smooth sumac	*Rhus glabra*
*	poison ivy	*Rhus radicans*
	staghorn sumac	*Rhus typhina*
	currant	*Ribes lacustre*
*	wineberry	*Rubus phoenicolasius [i]*
	common dewberry	*Rubus flagellaris*
*	greenbriar	*Smilax rotundifolia*
	carrion flower	*Smilax herbacea*
	nightshade	*Solanum dulcamara*
	common nightshade	*Solanum nigrum*
*	yew	*Taxus floridana*
*	poison-ivy	*Rhus radicans*
*	early lowbush blueberry	*Vaccinium vacillans*
	maple-leaved viburnum	*Viburnum acerifolium*
*	grape	*Vitis spp.*
*	myrtle	*Vinca minor*
Herbs and Groundcovers		
	yarrow	*Achillia millefolium*
	redtop	*Agrostis gigantea*

*	garlic mustard	*Alliaria petiolata [i]*
	wild onion	*Allium stellatum*
	big bluestem grass	*Andropogon gerardii*
	little bluestem grass	*Andropogon scoparius.*
	pigweed	*Amaranthus sp.*
	ragweed	*Ambrosia artemisiifolia*
	dogbane	*Apocynum maculosa*
*	mugwort	*Artemisia vulgaris [i]*
	common milkweed	*Asclepias syrica*
	milkweed	*Asclepias sp.*
	asters	*Aster sps.*
	wood aster	*Aster divaricatus*
	yellow rocket	*Barbarea vulgaris*
	mustard	*Brassica sp.*
	sedge	*Carex sp.*
	spotted knapweed	*Centurea maculosa*
*	common lamb’s quarters	*Chenopodium album*
	chicory	*Cichorium intybus*
	enchanter’s nightshade	*Circacea quadrisulcata*
	thistle	*Cirsium sp.*
	crown vetch	*Coronilla varia*
	broom	*Cytisus scoparius*
*	poverty grass	*Danthonia spicata*
*	Queen Anne's lace	*Daucus carota*
	cypress spurge	*Euphorbia cyparissias*
	common strawberry	*Fragaria virginiana*
*	English ivy	*Hedera helix*
	woodland sunflower	*Helianthus divaricatus*
	common St. Johnswort	*Hypericum perforatum*
*	inkberry	*Ilex glabra [p]*
	butter-n-eggs	*Linaria vulgaris*
	rye grass	*Lolium sp.*
	white campion	*Lychnis alba*
	whorled loosestrife	*Lysimachia quadrifolia*
	evening primrose	*Oenethera biennis*
	sensitive fern	*Onoclea sensibilis*
	panic grass	*Panicum sp*
*	Virginia creeper	*Parthenocissus quinquefolia*
	timothy	*Phleum pratense*
*	poke weed	*Phytolacca americana*
	bluegrass	*Poa sp.*
	Soloman’s seal	*Polygonatum biflorum*
*	Japanese knotweed	*Polygonum cuspidatum [i]*
	plantain	*Plantago sp*
	gall-of-the-earth	*Prenathus sp.*
	cinquefoils	*Potentilla spp.*
	common buttercup	*Ranunculus acris*
	hooked buttercup	*Ranunculus recurvatus*
*	prickly dewberry	*Rubus flagellaris*
	black-eyed Susan	*Rudbeckia hirta*

	dock	*Rumex crispus*
	bouncing bet	*Saponaria officinalis*
*	goldenrod	*Solidago spp.*
	false Soloman's seal	*Smilacina racemosa*
	common dandelion	*Taraxacum officinale*
	clover	*Trifolium sp.*
	common mullien	*Verbascum thapsus*
*	common speedwell	*Veronica officinalis*
	cow vetch	*Vicia cracca*
	spring vetch	*Vicia satvia*
	sweet violet	*Viola blanda*
	cocklebur	*Xanthium chinense*

*	Species identified on site during field visits by NP&V Staff.
[t]	NYS threatened species (none identified)
[p]	NYS exploitably vulnerable protected plant
[i]	NYS invasive species (no legal status)

Freshwater Wetlands Habitats

Freshwater wetlands are important ecological communities. These habitats are generally more productive than upland habitats, and are typically high in both plant and animal diversity. Wetlands are also vital in controlling floodwaters and filtering pollutants, and are valuable as recreation areas and as refugia for rare species. As the intrinsic value of wetlands has become recognized, they have received increasing protection from Federal, State, and local regulations and are often prioritized for public acquisition and preservation. Wetland boundaries are generally defined by the presence of significant numbers of indicator plant species that are typical of flooded or waterlogged soils. This approach may be somewhat arbitrary and is open to individual interpretation, particularly in areas with shallow slopes and broad transition zones.

The following communities are classified as lacustrine/palustrine communities by the NYS Department of Environmental Conservation (**Reschke, 1990** and **Edinger 2002**. Four (4) freshwater wetlands communities were identified as occurring along the eastern portion of the site. They form a complex of groundwater and surface water fed wetlands that drain in a south to north direction parallel with Park Avenue. The small stream found on site is better characterized as a groundwater-fed spring in accordance with the NYSDEC community classification system. Further information is discussed below.

> <u>*Wooded Red Maple - Hardwood Swamp*</u> - As defined by **Eddinger, 2002,** red maple swamp is "*a hardwood swamp that occurs in poorly drained depressions, usually on inorganic soils. This is a broadly defined community with many regional and edaphic variants. In any one stand, red maple is either the only canopy dominant or is codominant with one or more hardwoods including ashes, elms, yellow birch, and swamp white oak. Other trees with low percent cover include butternut, bitternut hickory, black gum, ironwood, and white pine.*" There is typically a well developed shrub layer, with spicebush, winterberry, black chokeberry, red osier dogwood, arrowwood, wild raisin and highbush blueberry. Black gum, sweet pepperbush and swamp azalea are common in swamps in southeastern New York. The ground layer is generally dominated by ferns, with skunk cabbage, sedges, jewelweed, and skull cap.

Wade, et al. (1990) describe red maple swamps in Brookhaven as generally dominated by red maple and tupelo, with sweet pepperbush and highbush blueberry dominating the shrub layer. Swamp azalea, buttonbush, inkberry, maleberry and spicebush are also common. This description is applicable to red maple swamps throughout Long Island, although in disturbed areas early successional shrubs such as multiflora rose, grape and greenbriar may also be common. This habitat occupies 0.51 acres, or 7.2 % of the total parcel.

> Spring - A spring habitat is defined by **Eddinger (2002)** as "*the aquatic community of very small, cold stream sources where the flow is perennial. Springs are characterized by water with constant cold temperature and rich in dissolved oxygen. These streams are typically very shallow and have a short length and relatively constant and very low discharge. Stream gradient, substrate and the proportion of flow microhabitats can vary greatly between examples. These streams may adjoin to any other aquatic community, but are typically found in association with headwater streams. Species diversity may be high, and [macroinvertebrate] assemblages characteristic of riffles may dominate the community. Fishes are absent."* This habitat occurs within the wooded red maple – hardwood swamp habitat found in the central portion of the site along the eastern boundary.
>
> Reedgrass/Purple Loosestrife Marsh - **Reschke (1990)** describes Reedgrass/Purple Loosestrife Marsh as "*a marsh that has been disturbed by draining filling, road salts, etc., in which reedgrass or purple loosestrife has become dominant."* On Long Island, reedgrass, or common reed, is more likely to colonize such areas. The common reed (*Phragmites australis*) is an invasive weed which often colonizes sunny, disturbed wetland habitats in fresh or brackish water. It will also grow along lake shores, riverbanks, wet ditches and other moist areas. The species was originally native to North America, but a highly aggressive non-native strain is believed to have been imported and has since outcompeted the native strain. It typically forms dense, monospecific stands with few other species, although poison ivy and other plants common to disturbed habitats may be present in small numbers. This habitat occupies 0.11 acres, or 1.6 % of the total parcel and is dominated by Phragmites australis.
>
> Farm Pond./Artificial Pond – As defined by **Reschke (1990),** a farm pond or artificial pond is defined as *"the aquatic community of a small pond constructed on agricultural or residential property. These ponds are often eutrophic, and may be stocked with panfish such as bluegill and yellow perch. The biota are variable (within limits), reflecting the species that were naturally or artificially seeded, planted, or stocked in the pond."* This habitat occupies 0.27 acres, or 3.8 % of the total parcel.

The only originally-mapped and regulated wetland on site was the man-made pond, which is identified as wetland H-35 on the NYSDEC Freshwater Wetlands Map, Huntington Quadrangle. The remaining wetland areas south of the pond were flagged in 1997 by C. Bowman of the Land Use Co., updated on June 22, 2004 by S. da Silva of Nelson, Pope & Voorhis, and verified by NYSDEC on September 29, 2004. NYS-mapped freshwater wetlands are protected by regulations of ECL Article 24.

The southern-most wetland on site is a deciduous forest swamp in the southeast corner of the site that is roughly oval in shape. It is dominated by red maple and silver maple trees and contains other wetland-indicator plant species such as inkberry, Northern arrowwood, cinnamon fern, jewelweed, and skunk cabbage. Non-native species such as multiflora rose and wineberry are

also prevalent. The forested swamp is supported by perched water and surface water primarily from stormwater. The northern most portion of the swamp begins as a hillside seep near the old milk barn and supports watercress and mosses. An old leaching drain was found just southeast of the old milk barn and approximately 10 feet east of an existing concrete pad within this hillside seep. A small stream enters the southeastern wetland via a culvert underneath the driveway on the adjacent southern property and quickly loses its defined channel upon entering the swamp. This wetland is somewhat degraded, as it is surrounded by cleared residential areas and a road, making it susceptible to invasion by non-indigenous vegetation and deposition of household and yard refuse. It also receives illicit discharge from a pipe that originates at the home just south of the site. This pipe has been observed as flowing during each site visit and is likely a sump pump discharge from the home's basement. The stream becomes defined again on the northern edge of the oval-shaped swamp area and continues through the adjacent properties before entering onto the site again. The inundated portions of the stream contain obligate wetland species such as duckweed and watercress with jewelweed growing along the banks. The stream is surrounded by wetland-indicative tree and shrub species such as red maple, silver maple, sweet pepperbush, inkberry, and skunk cabbage.

The stream transforms into a small emergent marsh on the south side of the site's driveway, which then drains into the existing large pond via a culvert that runs beneath the site's driveway entrance from Park Avenue. The marsh appears to have formerly been a small man-made pond with a rock-lined bank along its western edge. The marsh area was historically depicted and referred to as the smaller of two ponds on the Park Avenue Dairy Farm throughout the early part of the 20th Century. This former pond is undergoing succession as it slowly fills in with sediment and vegetation, but it is currently largely degraded, as it has become dominated by the invasive Common reed (*Phragmites australis*). An illicit discharge pipe, likely from a sump pump, also enters the marsh from the existing cottage (former milk barn).

The existing shallow, man-made pond is not of high ecological value, as it is mostly unshaded and primarily surrounded by lawn vegetation and ornamental plantings to its edge. A few native wetland plants were identified along its banks, including cinnamon fern, sensitive fern, jewelweed and water pennywort. Illicit discharges from the main farmhouse and dwelling to the adjacent north have been known to empty into the pond in the past and were partially subject of a NYSDEC Article 24 violation. A consent order was issued mandating that the 6-inch pipes be set further back from the regulated wetland. These pipes are still visible and appear to still be connected to the basements of these homes for purposes of draining intruding water from the subsurface.

Table 2-5 presents a list of plant species found on site or expected to be found within freshwater wetland habitats.

Table 2-5
FRESHWATER WETLAND PLANT SPECIES

Trees		
* red maple	*Acer rubrum*	FAC
* silver maple	*Acer saccharinum*	FACW
alder	*Alnus serrulata*	OBL

	gray birch	*Betula populifolia*	FAC
	pignut hickory	*Carya glabra*	FACU-
	gray dogwood	*Cornus foemina racemosa*	FAC
	red osier dogwood	*Cornus stolonifera*	FACW
	butternut	*Juglans cinerea*	FACU+
	walnut	*Juglans nigra*	FACU
	mulberry	*Morus rubra*	FACU
	sour gum	*Nyssa sylvatica*	FAC+
	cottonwood	*Populus deltoides*	FAC
	black cherry	*Prunus serotina*	FACU
	choke cherry	*Prunus virginiana*	FACU
	white oak	*Quercus alba*	FACU-
	swamp white oak	*Quercus bicolor*	FACW
	pin oak	*Quercus palustris*	FACW
*	black locust	*Robinia pseudo-acacia [i]*	FACU-
	white willow	*Salix alba*	FACW
	peach-leaf willow	*Salix amygdaloides*	FACU
	pussy willow	*Salix discolor*	FACW
	gray willow	*Salix humilis*	FACU
	black willow	*Salix nigra*	FACW+
	sassafras	*Sassafras albidum*	FACU-
	linden	*Tilia sp.*	FACU
	American elm	*Ulnus americana*	FACW-
Shrubs and Vines			
	shadbush	*Amelanchier canadensis*	FAC-
	chokeberry	*Aronia arbutifolia.*	FACW
	buttonbush	*Cephalanthus occidentalis*	OBL
	leather-leaf	*Chamaedaphne calyculata*	OBL
*	sweet pepperbush	*Clethra alnifolia*	FAC+
*	inkberry	*Ilex glabra [p]*	FACW-
	winterberry	*Ilex verticillata [p]*	FACW
	fetterbush	*Leucothoe racemosa*	FACW
	spicebush	*Lindera benzoin*	FACW-
	maleberry	*Lyonia ligustrinan*	FACW
	bayberry	*Myrica pensylvanica [p]*	FAC
*	Virginia creeper	*Parthenocissus quinquefolia*	FACU
	swamp azalea	*Rhododendron viscosum [p]*	OBL
	currant	*Ribes lacustre*	FACW
*	multiflora rose	*Rosa multiflora [i]*	FACU
	swamp rose	*Rosa palustris*	OBL
*	wineberry	*Rubus phoenicolasius [i]*	FAC
	common elderberry	*Sambucus canadensis*	FACW-
*	common greenbriar	*Smilax glauca*	FACU
	catbriar	*Smilax rotundifolia*	FAC
	bittersweet nightshade	*Solanum dulcamara*	FAC-
	meadowsweet	*Spirea latifolia*	FAC+
	hardhack	*Spirea tomentosa*	FACW
*	poison-ivy	*Rhus radicans*	FAC
	highbush blueberry	*Vaccinum corymbosum*	FACW-

	wild raisin	*Viburnum cassinoides*	FACW
	* Northern arrowwood	*Viburnum recognitum*	FACW
	grape	*Vitis sp.*	Various
Herbaceous			
	sweet flag	*Acorus americanus*	OBL
	big bluestem	*Andropogon gerardii*	FAC
	Jack-in-the-pulpit	*Ariasaema triphyllum*	FACW-
	aster	*Aster spps.*	Various
	water shield	*Brasenia schreberi*	OBL
	bluejoint grass	*Calamagrotis canadensis*	FACW
	marsh bellflower	*Campanula aparinoides*	FACU
	bladder sedge	*Carex intumecens*	FACW+
	lurid sedge	*Carex lurida*	OBL
	umbrella sedge	*Carex strigosus*	FAC
	coontail	*Ceratophyllum demersum*	OBL
	pink tickseed	*Coreopsia rosea [r]*	FACW
	dodder	*Cuscuta gronovii*	n/a
	moccasin flower	*Cypripedium acaule [p]*	FACU
	sundew	*Drosera filiformes [p]*	OBL
	sundew	*Drosera intermedia [p]*	OBL
	sundew	*Drosera rotundifolia [p]*	OBL
	crested wood fern	*Dryopteris cristata [p]*	FACW+
	three way sedge	*Dulichium arundinaceum*	OBL
	spikerush	*Eleocharis spps.*	OBL
	waterweed	*Elodea spps.*	OBL
	pipewort	*Eriocaulon aquaticum*	OBL
	cleavers	*Galium aparine*	FACU
	mannagrass	*Glyceria canadensis*	OBL
	gratiola	*Gratiola aurea*	OBL
	* water pennywort	*Hydrocotyle Americana*	OBL
	Canadian St. John's-wort	*Hypericum canadense*	FACW
	* jewelweed	*Impatiens capensis*	FACW
	yellow flag	*Iris pseudoacorus*	OBL
	blue flag	*Iris versicolor*	OBL
	Canada rush	*Juncus canadensis*	OBL
	* soft rush	*Juncus effusus*	FACW+
	bayonet rush	*Juncus militaris*	OBL
	rushes	*Juncus sps.*	Various
	rice cutgrass	*Leersia oryzoides*	OBL
	* duckweed	*Lemna sp.*	OBL
	tiger lily	*Lilium canadense [p]*	FAC+
	club moss	*Lycopodium sps.*	OBL
	bugleweed	*Lycopus virginicus*	OBL
	seed box	*Ludwigia sphaerocarpa [r]*	OBL
	purple loosestrife	*Lythrum salicaria*	FACW+
	tufted loosestrife	*Lythrum thrysiflora*	OBL
	Canada mayflower	*Maianthemum canadense*	FAC-
	milfoil	*Myriophyllum sp.*	OBL
	naiad	*Najas flexilis*	OBL

* watercress	*Nastutrium officinale*	OBL
yellow pond lily	*Nuphar luteum*	OBL
white waterlily	*Nymphaea odorata*	OBL
* sensitive fern	*Onoclea sensibilis*	FACW
* cinnamon fern	*Osmunda cinnamomea [p]*	FACW
royal fern	*Osmunda regalis [p]*	OBL
arrowleaf	*Peltandra virginica*	OBL
canary grass	*Phalaris arundinacea*	FACW+
timothy	*Phleum pratense*	FACU
* common reed	*Phragmites australis [i]*	FACW
coolwort	*Pilea pumila*	FACW
Soloman's seal	*Polygonatum biflorum*	FACU
water smartweed	*Polygonum amphibium*	OBL
nodding smartweed	*Polygonum lapathifolium*	FACW+
pink smartweed	*Polygonum pensylvanicum*	FACW
pondweed	*Potamogeton perfoliatus*	OBL
bald rush	*Psilocarya scirpoides [r]*	OBL
bracken fern	*Pteridium aquilinum*	FACU
horned rush	*Rhynchospora macrostachya*	OBL
water dock	*Rumex orbiculatus*	OBL
duck potato	*Sagittaria latifolia*	OBL
pitcher plant	*Sarracenia purpurea*	OBL
wool grass	*Scirpus cyperinus.*	FACW+
common three-square	*Scirpus pungens*	FACW+
soft-stem bulrush	*Scirpus validus*	OBL
hard-stem bulrush	*Scirpus acutus*	OBL
nutrush	*Scleria reticularis [r]*	OBL
skullcap	*Scutellaria galericulata*	OBL
false Soloman's seal	*Smilacina racemosa*	FAC-
goldenrod	*Solidago spps.*	Various
* bur-reed	*Sparganium americanum*	OBL
* sphagum moss	*Sphagnum sp.*	NI
* skunk cabbage	*Symplocarpus foetidus [p]*	OBL
marsh fern	*Thelypteris thelypteroides [p]*	FACW+
cattails	*Typha latifolia*	OBL
bladderwort	*Utricularia sps.*	OBL
large yellow-eyed grass	*Xyris smalliana*	OBL
wild rice	*Zizania aquatica*	OBL
water starwort	*Zosterella dubia*	OBL

*	Species identified on site during field visits by NP&V Staff.
[t]	NYS threatened species (none identified)
[p]	NYS exploitably vulnerable protected plant
[r]	NYS rare species
[i]	NYS invasive species (no legal status)

Fauna

Overview

The successional woodland and forested wetland vegetation found on-site provides habitat for a number of wildlife species. The mown lawn with trees habitat found in the central and northern

portion of the site also provides habitat for some wildlife species. Most wildlife species found in woodland and cultural terrestrial habitats adjust well to human activity, but the development on and adjacent to the site makes it unlikely that an abundance of sensitive species is present. Thus, the species present on site are likely to be relatively common suburban species, with little potential for forest interior species. **Appendix G-1** presents a computer-generated list of species expected on site given the habitat available. This list is provided as a supplement to site specific discussions included herein, and also includes information on the biological needs of each species. Nelson, Pope & Voorhis, LLC developed the model, as a tool to supplement site specific inventory and discussions; this model is described more fully in the introductory statements contained in **Appendix G-1.**

In addition to Spring, Summer and Fall site wildlife surveys, the following text discusses the avian species that would be expected to breed on site, as well as those species that might be expected during migrations or as winter residents. In addition, data from the 2000-2004 Breeding Bird Survey for census block 6252B (which contains the site) was obtained from the New York State Department of Environmental Conservation (**Appendix H**). This study surveyed the entire State by 25 km^2 census blocks over a five-year period to determine the bird species that breed within the State. The site consists of two breeding bird census blocks and may have different levels of breeding status between each block. Most of the species listed by the NYSDEC breeding bird survey are likely to be found on site, with the exception of species restricted to habitats not found on site or those that are particularly vulnerable to habitat fragmentation. Birds that prefer a mix of woodland and urban habitats are expected to be abundant on the property.

Habitats on site include successional woodland, red maple swamp, reedgrass marsh, spring and a man-made pond, as well as landscaped areas. Extensive research of naturalist, birder, ecologists, and field guide authors' records for historic species sightings in Long Island habitats was compiled to create complete lists of species expected in each of these habitats as documented in **Appendix G-1**. These lists represent a four-season account of species expected, including frequency of finding the species in a given habitat, and the nature of a species use of that habitat. It is not possible to identify every species that may be found on a given site due to the secretive nature of many species, nocturnal characteristics, occasional passing in association with a habitat, and the limited time during which field inspections may identify a given species on a site. As a result, field inspections are generally opportunistic, with the biologist visiting the site during optimum hours and seasons for sighting, within the bounds of reasonable scientific investigation methods and dependent upon site sensitivity and expected species. Based upon-the site size, existing development, surrounding development with domestic pet occurrence noted, and the lack of any rare, threatened, endangered or species of special concern being noted through several field inspections, or as listed in the Breeding Bird Atlas for the census blocks which include the subject site, as well as contact with the NY Natural Heritage Program which indicated a potential for sensitive plant species formerly known to occur in the area (none were found on site), the wildlife inventory conducted for the subject site is complete and appropriate. The site-specific inventory and the habitat species inventory collectively provide a complete understanding of the species expected and during what seasons for all times of the year. This includes breeding birds through direct survey methods, Breeding Bird Atlas investigations and habitat species inventory.

Included on the succeeding pages of this section, are detailed discussions of expected species, their habitat needs, habits and abundance, as well as notations regarding breeding potential and direct site observations. Subsections include Birds, Mammals and Reptiles/Amphibians. Most direct sightings included avian species as these species are mobile, and include daytime activity and feeding periods. Mammals are more secretive and many burrow or are nocturnal, and as a result the list of observed mammals is logically smaller. The site has some herptile potential, and several reptiles and amphibians may be present within the freshwater wetlands and adjacent upland on site. Snakes may sun and feed during day, but are extremely cautious and secretive and use burrowing, camouflage and escape techniques for survival, as do many of Long Island's wildlife inhabitants. As a result, snake sightings are logically relatively rare. The eastern box turtle is a common woodland inhabitant and chance sightings are rewarding but few. Given the natural instincts and evolutionary protection features of all expected species, direct sightings are not always possible and are not the best single account of species potential on a given site. As a result, the combination of sources and references in the complete body of **Section 2.5.1** is appropriate and complete for the purpose of wildlife inventory as part of this DEIS.

Birds

Seed-eating birds, including grosbeaks, finches, towhees, juncos, and sparrows, are expected to be relatively common on site **(Bent, 1968).** The most common sparrow that breeds on Long Island is the song sparrow, and the introduced house sparrow is also abundant. Both species are found in forest openings, suburban areas and overgrown field habitats, and are expected on site. The house sparrow is an introduced old-world species, which often nests on buildings, and is considered a pest. The house sparrow and song sparrow are listed as confirmed breeders in the census block and are abundant on site and in the surrounding areas. House sparrows were also observed on site. The related fox sparrow and white-throated sparrow are common winter visitors on Long Island, and are expected during the colder months.

Many sparrows also prefer open areas and may utilize the lawn and forest edges on site. These species are generally not tolerant of human development with the exception of the chipping sparrow, which is found to be abundant around man made structures, and the white-crowned sparrow, which is often found in suburban areas and parks. The chipping sparrow is listed as a probable breeder within the census block.

The American goldfinch and house finch are the most likely finches to utilize the property. The house finch prefers suburban and edge habitats and is listed as a confirmed breeder within the census block. The American goldfinch prefers a diet of thistle and dandelions and is expected to utilize the lawn and forest edge portions of the site. The northern cardinal, as well as the related rufous-sided towhee and rose-breasted grosbeak prefer woodlands with a dense understory and/or hedgerows, and may be present on site. The indigo bunting prefers open landscapes with dense cover for nesting and tall trees for song perches **(Andrle and Carroll, 1988)** and may utilize the site. The house finch and northern cardinal were listed as confirmed breeders; the American goldfinch was listed as a probable breeder.

A variety of larger birds are commonly found in a suburban, successional habitats and woodlands, including the thrashers, the orioles and blackbirds **(Bent, 1964, 1965**). Corvids which are common on Long Island include the American crow and blue jay, both of which are

expected on site. Several blue jay were observed on site. The American crow was listed as a confirmed breeder in the census block and the blue jay was listed as a probable breeder. The northern mockingbird, brown thrasher, and gray catbird are thrasher species that might be found on site, and are also expected to utilize the site and surrounding areas, as this group generally prefers more open habitats **(Andrle and Carroll, 1988).** The gray catbird and mockingbird were both listed as confirmed breeders within the census block. Two additional confirmed breeders, the American robin and the European starling, both have similar habitat requirement as the thrashers. These species are common in fields and suburban areas feeding on insects and fruits, and are expected on site. Both the American robin and European starling were listed as confirmed breeders within the census block. Several American robins were observed on site and in the surrounding areas.

Birds from the oriole and blackbird family also feed on a mix of insects, seeds, fruit and aquatic fauna. The grackle and brown-headed cowbird are both expected on site **(Andrle and Carroll, 1988).** These birds generally prefer open woodlands and field habitats, and are probably common throughout the area, as they are relatively tolerant of development. The cowbird is a nest parasite that lays eggs in the nests of other birds, and is listed as a probable breeder on site. The grackle is listed as a confirmed breeder and several were observed in the swamp area on site. The northern Baltimore oriole is expected to be present, as it generally prefers to nest in taller trees in open areas. The orchard oriole prefers farmyard, suburban, or roadside shade trees, scattered trees in fields, and thin woods near water **(Andrle and Carroll, 1988)**. The Baltimore oriole is listed as a confirmed breeder within the census block of the breeding bird atlas, while the orchard oriole is listed as a probable breeder. The red-winged blackbird generally prefers open woodlands and field habitats. The red-winged blackbird feeds primarily on insects, and is typically associated with wetland habitats. It nests on or near the ground in a variety of habitats including marshes, swamps, wet meadows, fields and thickets **(Bent, 1965),** and is listed as a confirmed breeder within the census block. Several red-winged blackbirds were observed utilizing the swamp area in the southeast corner of the property. The killdeer also prefers open areas with short grass and is expected. The killdeer is listed as a confirmed breeder within the census block.

Two doves are found on Long Island, including the mourning dove and the introduced rock dove, also known as the domestic pigeon. Both are common in suburban areas, parks, cultivated fields and along roadsides. The mourning dove typically nests in overgrown areas and tangled vines, while the rock dove prefers to nest on buildings and other structures **(Andrle and Carroll, 1988).** Both the mourning dove and the rock dove are listed as confirmed breeders within the census block and are expected to breed on site and in the local area. Mourning doves were audible on the property.

A few smaller insect feeding birds are found in overgrown areas, including the wrens, titmice, and nuthatches. The house wren and Carolina wren are the only wrens expected on site. The house wren is commonly found in suburban areas and edge habitats as well as forest understory, where it feeds on insects. The house wren and Carolina wren are both listed as probable breeders within the census block. The Carolina wren breeds in woodlands, thickets, brushy hollows, swamps, and along steam beds **(Andrle and Carroll, 1988)** and may be expected on site. The tufted titmouse is a year-round resident on Long Island **(Bent, 1964),** and is listed as a confirmed

breeder within the census block. Titmouse typically breed in woodlands, and are also expected to forage on site. Similar birds which may also utilize the site outside of the breeding season are the golden-crowned and ruby-crowned kinglets, both of which are winter visitors on Long Island and are found in both forested and open habitats.

Birds from the flycatcher family feed on flying insects in woodlands, edge habitats and open areas. The eastern kingbird, eastern wood-pewee and great-crested flycatcher are the most common flycatchers on Long Island **(Bent, 1963; Andrle and Carroll, 1988)**. These species are generally found in deciduous woodlands or edge habitats, although the great-crested flycatcher prefers larger blocks of woodland and is less tolerant of human activity **(Andrle and Carroll, 1988**). The kingbird generally prefers more open areas, and is most likely to utilize the landscaped areas and edge habitat at the site. The eastern kingbird is listed as a confirmed breeder within the census block. The eastern wood-pewee is an "edge" species found mainly at forest margins and openings and is common to fragmented and open forest tracts **(Bent, 1963; Andrle and Carroll, 1988).** This species is expected to utilize the site. The willow flycatcher is a western flycatcher which appears to be expanding its range in the eastern U.S., including Long Island (**Andrle and Carroll, 1988**). The least flycatcher is a breeding bird of deciduous and mixed forests. It prefers semi-open areas: forest edges, open woodlands, stream and pond borders, and also orchards and parks **(Andrle and Carroll, 1988)**. The blue-gray gnatcatcher prefers thick vegetation along waterways and often nests in the tops of the tallest trees **(Andrle and Carroll, 1988)** and may be expected on site. The eastern phoebe may be found in any of the forest types, although it usually builds its nest near water where it forages over streams and ponds for insects and uses mud to construct the nest **(Andrle and Carroll, 1988)**.

Most thrushes and creepers also feed on insects in wooded areas. The wood thrush is expected to utilize the site, as it prefers open woods with a well developed understory of shrubs and small trees **(Andrle and Carroll, 1988**). The veery may also be present, although it generally prefers larger tracts of forest **(Bent, 1964)**. The brown creeper generally prefers moist woods near streams and is also expected on site. Nesting has been recorded in dry uplands in both coniferous and deciduous forests and the brown creeper is generally found in areas with 50 percent or greater forest cover **(Andrle and Carroll, 1988).** This species requires the presence of dead or dying trees with loose shingles of bark, as it builds its nest behind the bark. The woodland habitat on site contains a few suitable trees for use by this species for nesting.

The cedar waxwing also occasionally feeds on flying insects, but is more commonly associated with open woodlands, orchards, and suburban areas where its diet consists primarily of fruit. This species might be present on site during summer months **(Bull and Farrand, 1974)** and is listed as a probable breeder within the census block. The scarlet tanager is extremely vulnerable to habitat fragmentation and is usually found in mature wooded areas of over 50 acres, and therefore is not expected on site **(Andrle and Carroll, 1988).**

The vireos are also somewhat vulnerable to forest fragmentation, with only the warbling vireo expected on site. Warbling vireos favor open woods and isolated trees of open areas, typically nesting in shade trees (**Andrle and Carroll, 1988**), and are listed as a probable breeder within the census block.

Common Long Island swallows include the barn and tree swallows, both of which adjust well to human activity. The barn swallow nests on barns and other buildings, but may use natural nest sites as well. The tree swallow and purple martin prefer wetland areas where insects are abundant, and may be found on site. Both swallows nest in cavities of trees, but are also common residents in nesting boxes and bird houses. The northern rough-winged swallow also prefers to nest generally alone in open areas near water and is also believed not to excavate its own burrow for nesting (**Andrle and Carroll, 1988)**. The bank swallow digs its nest hole into the ground, preferring to nest near water along the banks of ponds, lake, streams or quarries (**Andrle and Carroll, 1988)**. The northern rough-winged swallow is a probable breeder, while the barn swallow is listed as a confirmed breeder within the census block.

The nocturnal whip-poor-will feeds on moths and other insects, and prefers dry woods with adjacent fields. This species may utilize the edge habitat on site, and may forage in the area. The chimney swift also feeds on flying insects, and is found in a variety of habitats. Although it originally nested in cliffs and tree cavities, the species now is most commonly found nesting on buildings and other structures **(Andrle and Carroll, 1988**). It may also forage in the vicinity of the site, as well as breed on the property. The chimney swift was listed as a confirmed breeder within the census block in the 2000 to 2004 Breeding Bird Atlas.

The yellow-billed cuckoo prefers to nest in open wooded areas or along edges, but tends to avoid developed areas. The black-billed cuckoo seems to prefer more wooded areas than the yellow-billed cuckoo and nests in habitats such as brushy pastures, shrubby hedgerows and dry open upland woods **(Andrle and Carroll, 1988)** and may utilize the parcel. Neither species is listed on the breeding bird survey.

Warblers also feed on a variety of insects, and most warbler species are found in woodlands. Warblers that prefer woodland habitats include the black-and-white warbler, black-throated blue warbler, blue-winged warbler, pine warbler, prairie warbler, yellow warbler, yellow-rumped warbler and the common yellowthroat. Most of these warblers are relatively intolerant of human development, and are not expected to utilize the site. However, the black-throated blue warbler can adapt to suburbs and the yellow-rumped warbler may be found in yards. The chestnut-sided warbler prefers first growth woods, with some open brush area and the site provides some available habitat. The yellow warbler was listed as a confirmed breeder within the census block and the black-and-white warbler was listed as a possible breeder.

The site and surrounding area is suitable for use by raptor and owl species, most of which nest or roost in the forested areas, preying primarily on small mammals in adjacent field and scrub habitats. The eastern screech owl and great horned owl are the most common owls on Long Island and both are listed as probable breeders within the census block. The screech owl may nest on site, as it is relatively tolerant of humans, **(Andrle and Carroll, 1988).** The barn owl is likely to be present as it is almost exclusively found in the presence of humans, and requires open areas in which to hunt as it almost never hunts in woods **(Andrle and Carroll, 1988)**.

Most raptors nest in high areas away from humans and may roost or breed on the property. Raptors prey primarily on small mammals, which are likely to be abundant in the area. Additional species that may occasionally be found on site include the American kestrel, Cooper's

hawk, and the broad-winged hawk. The most common raptors on Long Island are the red-tailed hawk and the American kestrel, as they are relatively tolerant of human activity **(Bent, 1961; Andrle and Carroll, 1988**). The American kestrel may be found where suitable nest cavities in trees, buildings, or nest boxes exist and sufficient non-forested foraging areas are present **(Andrle and Carroll, 1988).** The red-tailed hawk is a confirmed breeder within the census block of the breeding bird atlas.

Woodpecker species, including the common flicker, red-bellied woodpecker, hairy woodpecker and downy woodpecker, are common in the mature wooded portions of Long Island, and are likely to be found on site. The northern flicker and downy woodpecker were listed as confirmed breeders and the red-bellied woodpecker was listed as a probable breeder within the census block. The hairy woodpecker is more secretive and avoids human activity. It is also listed as a probable breeder. These species prefer mature woodlands where insects are abundant in both large mature trees and decaying trees. The red-headed woodpecker, a listed species of concern, generally prefers open woodlands, parks and suburban areas, and may occasionally be present as a migrant, although it rarely breeds on Long Island **(Andrle and Carroll, 1988).** The red-bellied woodpecker prefers northern hardwoods, lowland hardwoods, oak and pine **(Andrle and Carroll, 1988)** and is also expected to utilize the site and surrounding areas. The yellow-bellied sapsucker is more numerous at higher elevations, and breeds in either deciduous or mixed deciduous and evergreen forests, **(Andrle and Carroll, 1988)** but may be found on site. Many suitable trees are present on site for nesting and feeding by woodpecker species.

Several waterfowl were observed utilizing the shallow pond in the central portion of the site. These include several Canada goose and a pair of mallards. The mallard is listed as a probable breeder and the American black duck is listed as a possible breeder in the census block. The less desirable Canada goose is listed as a confirmed breeder.

Table 2-6 is a list of the bird species observed or expected on site given the habitats present and is also based upon field investigations conducted by NP&V. Additional information regarding these species and others can be found within **Appendix G-1.**

Table 2-6
BIRD SPECIES

gray catbird	*Dumetella carolinensis*
*red-winged blackbird	*Agelaius phoeniceus*
black-capped chickadee	*Parus atricapillus*
Northern cardinal	*Cardinalis cardinalis*
brown-headed cowbird	*Molothrus ater*
brown creeper	*Certhia familiaris*
American crow	*Corvus brachyrhynchos*
yellow-billed cuckoo	*Coccyzus americanus*
black-billed cuckoo	*Coccyzus americanus*
*mourning dove	*Zenaida macroura*
rock dove	*Columba livia*
American goldfinch	*Carduelis tristis*
house finch	*Carpodacus mexicanus*

Northern flicker	*Colaptus auratus*
least flycatcher	*Empidonax minimus*
great-crested flycatcher	*Myiarchus crinitus*
blue-grey gnatcatcher	*Polioptila caerulea*
*common grackle	*Quiscalus quiscula*
ruffed grouse	*Bonasa umbellus*
rose-breasted grosbeak	*Pheucticus ludovicianus*
red-tailed hawk	*Buteo jamaicensis*
American kestrel	*Falco sparverius*
*blue jay	*Cyanocitta cristatta*
Northern (dark-eyed) junco	*Junco hyemalis*
Eastern kingbird	*Tyrannus tyrannus*
golden-crowned kinglet	*Regulus satrapa*
ruby-crowned kinglet	*Regulus calendula*
Northern mockingbird	*Mimus polyglottos*
white-breasted nuthatch	*Sitta carolinensis*
northern oriole	*Icterus galbula*
barn owl	*Tyto alba [s]*
Eastern screech owl	*Otus asio*
great-horned owl	*Bubo virginianus*
long-eared owl	*Asio otus*
Eastern phoebe	*Sayornis phoebe*
*American robin	*Turdus migratorius*
American redstart	*Setophaga ruticilla*
chipping sparrow	*Spizella passerina*
fox sparrow	*Passerella iliaca*
*house sparrow	*Passer domesticus*
song sparrow	*Melospiza melodia*
white-throated sparrow	*Zonotrichia albicollis*
European starling	*Sturnus vulgaris*
barn swallow	*Hirundo rustica*
rough-winged swallow	*Stelgidopteryx ruficollis*
tree swallow	*Tachycineat bicolor*
chimney swift	*Chaetura pelagica*
scarlet tanager	*Piranga olivacea*
brown thrasher	*Toxostoma rufum*
rufous-sided towhee	*Pipilo erythrophathalmus*
hermit thrush	*Catharus guttatus*
wood thrush	*Hylocichla mustelina*
tufted titmouse	*Parus bicolor*
veery	*Catharus fuscescens*
red-eyed vireo	*Vireo olivaceus*
white-eyed vireo	*Vireo griseus*
black-throated blue warbler	*Dendroica caerulescens*
yellow warbler	*Dendrocica petchia*
Carolina wren	*Thryothorus ludovicianus*
killdeer	*Charadrius vociferus*
cedar waxwing	*Bombycilla cedrorum*
whip-poor-will	*Caprimulgus vociferous*[s]
American woodcock	*Philhela minor*

Eastern wood-peewee	*Contopus virens*
downy woodpecker	*Picoides pubescens*
hairy woodpecker	*Picoides villosus*
red-bellied woodpecker	*Melanerpes carolinus*
red-headed woodpecker	*Melanerpes erythrocephalus* [s]
yellow bellied sapsucker	*Sphyrapicus varius*
house wren	*Troglodytes aedon*
common yellowthroat	*Geothlypis trichas*

[s] special concern species
* Species identified on site during field visits by NP&V Staff.

Mammals
The habitats found on the project site are expected to support a number of mammal species. Small rodents and insectivores such as mice, shrews and voles are expected to be the most abundant mammals. The number of larger mammals is present on site is expected to be minimal given the habitat fragmentation and residential development of the area.

The masked shrew may be the most common mammal on Long Island. Although it is rarely seen, this small insectivore has been captured and identified in almost every type of habitat on Long Island **(Connor, 1971).** It will utilize any site with sufficient ground cover, including woods, fields, bogs, and both marine and freshwater marshes. The short-tailed shrew also uses a variety of habitats, but on Long Island appear to be most common in deciduous woodlands **(Connor, 1971; Godin, 1977)**. Both shrews feed on insects and other small invertebrates, and are expected to be abundant on site.

A larger insectivore, the eastern mole, is also found on Long Island, and is expected on site. The eastern mole is common in woodlands, fields and suburban lawns throughout the Island, where they dig tunnels which are also used by mice and shrews. The species is probably most common in the rich soils of deciduous woodlands along the north shore of Long Island, and may be present on the property. Its habitats also include landscaped areas, pine barrens, dunes and salt marsh borders, but the species seems to avoid fresh water swamps and marshes **(Connor, 1971).** The meadow vole may be expected to utilize the subject parcel. The meadow vole prefers open woodlands and utilizes underground tunnels **(Conner, 1971).**

Other rodents expected on site include mice and rats, and some of the larger rodents. Most mice and rats are omnivorous, feeding on grasses, herbs, roots, tubers and occasionally small invertebrates. The white-footed mouse is likely to be the most abundant mouse on site. It is found in a wide variety of habitats on Long Island, including wetlands, dry fields, woods and occasionally buildings **(Connor, 1971)**. This mouse is one of the most common mammals on the Island, but local populations appear to fluctuate greatly from year to year **(Connor, 1971)**. The house mouse and Norway rat are introduced European species that prefer to be near human structures and are considered pests. These two species are likely to be abundant due to the development on site and in the surrounding areas.

Of the larger rodents, the eastern gray squirrel was abundant. Gray squirrels are quite tolerant of humans and will use both woodland and open habitats as long as large, nut bearing trees are

present for foraging and nesting. On Long Island, they are most common in the oak woodlands of the north shore, but are also present in pine barrens, where they feed on pine seeds. The species may become a pest, and individuals are often found in the attics of older buildings. **Connor (1971**) indicates that the southern flying squirrel is also present in heavily wooded areas away from developed areas, although its distribution does not appear to extend east of Riverhead. The chipmunk prefers forest and edge habitats with thick understory vegetation, where it feeds on a variety of plant materials, and it will utilize suburban areas with sufficient cover **(Connor, 1971; Godin, 1977).**

Bats typically prefer areas near water where there are abundant insects for feeding, and thus should be found on or near the site. Due to the absence of caves on Long Island, these species generally roost in colonies in the attics of buildings, although some species will occasionally roost in trees **(Connor, 1971).** Although none were observed, bats may utilize the abundance of vacant structures on site. The big brown bat is present throughout the year, and is the most common bat in many areas of Long Island **(Connor, 1971)**. The most common summer bats are the little brown myotis and Keen's bat, and the red bat and eastern pipistrelle are also present in small numbers **(Connor, 1971)**. The silver-haired bat and hoary bat are found on the Island only during seasonal migrations. All of these species are tolerant of humans, and may be present on site.

The eastern cottontail is the most common rabbit on Long Island, although the similar New England cottontail is also present in some areas **(Connor, 1971)**. The cottontails occupy a variety of habitats, including dry and swampy woods, fields, bogs, dunes and shrublands **(Connor, 1971).** They are also tolerant of humans and utilize suburban lawns and gardens extensively if food is available. The opossum is the only marsupial on Long Island, and makes use of a variety of habitats ranging from brushy woods to towns and urban areas with cover. It appears to be quite abundant, and is often killed on roadways. This species is also likely to be present on site.

The woodchuck, or ground hog, is found in a variety of habitats, including fields, meadows, brushy areas and woods **(Connor, 1971)** but has a scattered distribution and is not generally expected on site.

The white-tailed deer, the largest mammal on Long Island, is throughout Long Island where there is sufficient woodland habitat. Deer populations declined after European settlement of the northeastern U.S., however, recent decline in the number of large predators, increase in edge habitat, and decline in hunting allowed increases in deer populations during the twentieth century. Deer are now abundant in much of eastern Long Island where suitable cover is present. They will use a variety of wooded habitats, including deciduous woods, pine barrens and swamp borders **(Connor, 1971),** but prefer thickets alternating with open glades and fields in which they "bed down" **(Godin, 1977).** Deer typically move in herds within a home range of 2 to 3 square miles **(Godin, 1983),** but there is somewhat limited undeveloped habitat on the site and in the immediate vicinity to support the species. No deer, or sign of deer, were observed on site.

Long Island carnivores include the red fox, raccoon, long tailed weasel, and striped skunk. The raccoon or fox might occasionally be found on site. The raccoon is common throughout Long

Island, prefers brushy wooded habitats near water, and may be present on site. The raccoon is tolerant of humans, and may become a pest, foraging in garbage cans, gardens and agricultural fields. They will occasionally cause damage by denning in attics and other structures.

The red fox is found throughout Long Island in a variety of habitats with limited human development, and often hunts in freshwater and marine wetlands. Fox typically prefer diverse habitats consisting of "intermixed cropland, rolling farmland, brush, pastures, mixed hardwood stands and edges of open areas that provide suitable hunting grounds" **(Chapman and Feldhamer, 1982).** Much of this habitat has been either urbanized or allowed to revert to dense forest throughout the northeast U.S. **Chapman and Feldhamer (1982)** report ranges from 140 to 400 acres depending on the habitat, though regardless of size, home ranges are generally twice as long as they are wide. Home range size is determined by "abundance of food, degree of intraspecific and interspecific competition, type and diversity of habitat and the presence of natural physical barriers such as rivers or lakes" **(Wade et al., 1990).** It appears that although fox will utilize suburban areas, their range increases with diminished amounts of open land. The site and adjacent areas are not expected to be utilized by the fox.

The skunk and weasel are rare, but are occasionally sighted on eastern Long Island. The long tailed weasel is found in a variety of undeveloped habitats, including fields, pine barrens, woods, brushy areas and wetland borders (**Connor, 1971**). It was once common throughout Long Island, but has declined in the twentieth century. The species is not likely to be present in the general area due to extensive development that surrounds the site. The striped skunk has also declined on Long Island, in part due to fragmentation of habitat by roadways, as the species is often killed by automobile traffic. The species is now restricted to non-agricultural areas of eastern Long Island (**Connor, 1971**) and is therefore not expected on site.

Table 2-7 is a list of the mammal species that are expected to occur on site because of the existing site and area conditions. Additional information regarding these species and others can be found within **Appendix G-1.**

Table 2-7
MAMMAL SPECIES

big-brown bat	*Eptesicus fuscus*
hoary bat	*Lasiurus borealis*
little-brown bat	*Myotis lucifugus*
Eastern pipistrelle	*Pipistrellus subflavus*
silver-haired bat	*Lasionycteris noctivagans*
Eastern chipmunk	*Tamis striatus*
Eastern cottontail	*Sylvilagus floridanus*
red fox	*Vulpes vulpes*
Eastern mole	*Scalopus aquaticus*
house mouse	*Mus musculus*
white-footed mouse	*Peromyscus leucopus*
Virginia opossum	*Didelphis virginiana*
raccoon	*Procyon lotor*
Norway rat	*Rattus norvegicus*

	masked shrew	*Sorex cinereus*
	short-tailed shrew	*Blarina breuicauda*
*	Eastern gray squirrel	*Sciurus carolinensis*
	meadow vole	*Microtus pennsylvanicus*

*species observed by NP&V staff

Reptiles and Amphibians
The site would be expected to support a small population of reptiles and amphibians. The forested swamp found on site is expected to provide breeding habitat for species which require standing water without the presence of fish. The man-made pond may also provide some breeding habitat, although it is unknown if any fish currently live in the pond.

Two toads are common on Long Island in upland habitats. The spadefoot toad occurs in woods, shrublands and fields with dry, sandy loam soils, although it breeds in temporary pools **(Behler and King, 1979).** The Fowler's toad prefers sandy areas near marshes, irrigation ditches and temporary pools. These two species are likely to be present on site.

Most frog species remain in or near permanent water throughout their life cycle, with the exception of the wood frog and spring peeper. These two species may move considerable distances from the breeding site after hatching, and are expected to utilize the woodland found on and in the vicinity of the site. Aquatic frog species that prefer wooded ponds, including the bullfrog, green frog and northern leopard frog, may also be associated with the site **(Wright, 1949; Mattison, 1987; Dickerson, 1943).**

Salamander species require both undisturbed moist woods for foraging and standing water for breeding. The red-backed salamander is the most common salamander on Long Island, and prefers a dry woodland habitat with plenty of leaf litter and fallen logs to forage beneath **(Bishop, 1943).** It is expected to be present in the forested habitat found on site. Review of the **Cryan (1984**) report did not identify the possible presence of the tiger salamander on site. This species is listed as endangered by the NYSDEC, but is not expected on site due to the lack of suitable habitat.

Several species of reptiles could potentially be found on the property. Five snake species might be expected, including the eastern garter snake, eastern hognose snake, northern brown snake, northern ringneck snake and eastern milk snake **(Wright, 1957).** All of these species are terrestrial species found in a variety of habitats. The garter snake, brown snake and ringneck snake prefer moist soils and would be most likely to be present near the low areas. The hognose snake prefers dryer soils and the milk snake is found in soils of varying moisture content. These snakes are all colubrid snakes, which feed on whole animals such as insects and small amphibians **(Behler and King, 1979)**. The larger milk snake and hognose snakes will also take small rodents and birds **(Behler and King, 1979)**.

Aquatic reptiles such as the Eastern painted turtle and spotted turtle may utilize the shallow pond site. The eastern box turtle may also be present, as it is a terrestrial species which requires very little water **(Obst, undated).** The species prefers moist woodlands, but is found in a variety of

habitats and is likely to be present. The box turtle feeds primarily on slugs, earthworms, wild strawberries and mushrooms **(Behler and King, 1979),** and may be present within the wooded areas.

Table 2-8 presents a list of amphibian and reptile species that might occur on site given the existing habitat(s). This list is not intended to be all-inclusive but provides a detailed representation of what is or is likely to be found on site. In addition, further information regarding these species can be found in **Appendix G-1**

Table 2-8
REPTILE AND AMPHIBIAN SPECIES

Amphibians	
Fowler's Toad	*Bufo woodhousei fowleri*
spring peeper	*Hyla crucifer*
common gray treefrog	*Hyla versicolor*
red-backed salamander	*Plethodon cinereus cinereus*
wood frog	*Rana sylvatica*
eastern spadefoot toad	*Scaphiopus holbrooki*
Reptiles	
painted turtle	*Chrysemys picta*
snapping turtle	*Chelydra serpentina*
spotted turtle	*Chlemys guttata*
common garter snake	*Thamnophis sirtalis*
eastern box turtle	*Terrapene carolina*
eastern hognose snake	*Heterodon platyrhinos [s]*
eastern milk snake	*Lampropeltis triangulum*
northern brown snake	*Storeria dekayi*
northern ringneck snake	*Diadophis punctatus*

[s] NYSDEC special concern species
* Species identified on site during field visits by NPV Staff.

2.5.2 Anticipated Impacts

The impacts to ecological resources are typically a direct result of clearing of natural vegetation, the resulting loss and fragmentation of wildlife habitat, and the increase in human activity. The proposed development will require a minimal amount of clearing of natural vegetation on the property. The proposed project will necessitate removal of a portion of the successional hardwood forest found on site, approximately 0.93 acres. However, the existing fragmentation and significance of this habitat as documented herein tends to reduce the magnitude of this impact as is discussed further below. The existing lawn areas and wooded edge habitat will be converted to impoundments, developed with residential units or replanted with landscape vegetation. However, large contiguous areas of existing wetlands and forested upland will remain natural and will become protected areas for wildlife. The entire wetlands complex along the eastern portion of the site will be preserved as conservation area (approximately 2.98 acres),

including a 100-foot wetland buffer where natural woodland currently exists. Additionally, approximately 0.19 acres of currently cleared upland area within the proposed conservation area will be supplementally planted with native species such as maples and oaks and allowed to return to wooded upland habitat. A portion of the cleared vegetation within 100 feet of the wetlands (approximately 0.20 acres) is proposed to contain impoundment areas which will also be revegetated with native species tolerant of wet conditions. The change in habitat acreage contained in **Table 1-1** provides a quantitative account of the project's potential impact as well as benefits with respect to site vegetation.

The vegetation found on the project site provides habitat for a wide variety of wildlife species, including species found in suburban and woodland habitats. Based on the project plan, much of this natural vegetation will remain intact, although some of the upland wooded vegetation will be replaced by residential units and landscaping. With time, landscaping will become reestablished and provide habitat for those species which originally utilized it. The overall change in habitat on site will cause a minimal local impact on relatively common wildlife species, as will be discussed in more detail below. Overall, this impact is not expected to be significant given the common status of wildlife on site and the context of the site with surrounding lands and expected development patterns.

The majority of wildlife found in early successional habitats will utilize suburban areas, and most of those numbers would be expected on site following construction. Those species which are intolerant of development and are restricted to interior forest habitats will be most affected by the proposed project, but relatively few of these species are expected. The mown turf on the property constitutes a very small percentage of the grassland habitat in the vicinity of the site. The wooded edge habitat on the property is only a fraction of the available woodland in the vicinity of the site, and clearing of this habitat should only minimally impact most species. Use of native and non-invasive non-native species in landscaping which offer benefits to wildlife should be considered for planting as a mitigation measure.

In determining impacts upon the existing wildlife populations, it can be assumed that an equilibrium population size is established in an area for each species as determined by availability of resources in the habitat. Thus, the removal of habitat resulting from the proposed project will cause a direct impact on the abundance and diversity of wildlife using the site. Although the assumption that species are at equilibrium is an oversimplification, it does provide a worst case scenario in determining the impact of habitat loss. In addition to this direct impact, the increased intensity of human activity and potential increase of domestic pets on the site will cause an indirect impact on the wildlife which remains on the site and in the area, under post-development conditions. Domestic dogs are currently present on the subject property and limit the use of landscaped areas surrounding the dwellings by wildlife. Additionally, various studies have documented the impacts of domestic cats on local bird and small mammal populations and it is presumed that the proposed development would result in the increase of domestic cats on the project site and adjacent natural areas. However, it can not be stated that domestic cats would be newly introduced to the project site and adjacent areas as a result of the project. The residential nature of the surrounding properties suggests the existing presence of free roaming domestic cats which likely hunt birds and small mammals both on and adjacent to the subject property. Thus, the combined removal of habitat and potential increase in domestic pets as a result of the

proposed project may result in direct and indirect impacts on localized populations of commonly occurring species of wildlife that are tolerant of human activity.

In the short term, lands adjacent to the subject property will experience a slight increase in the abundance of certain wildlife populations due to displacement of individuals by the construction phase of the proposed project. Ultimately, competition with both conspecifics and other species already utilizing the resources of the surrounding lands should result in a net decrease in population size for most species. The effect on the density and diversity of regional populations of most species should be minimal, as minimal wooded habitat is to be affected. The impacts of habitat losses are cumulative, however, and impacts need to be considered in light of regional planning.

Literature suggests that many avian species are able to adapt to both urban and suburban environments. Birds such as the crows, doves, blue jay, American robin, northern mockingbird, brown thrasher, gray catbird, brown thrasher, cedar waxwing, grackle, northern oriole, red-winged blackbird, and cowbird may be temporarily affected by the development of the property; however, these birds usually adjust well to human activities **(Andrle and Carroll, 1988; Bent, 1963, 1964, 1968)**. The proposed project will primarily disrupt the existing landscape vegetation on site and vacant structures which may be utilized by bird species, but most of these species will utilize the site once landscaping is reestablished. The avian, mammalian, and reptilian species which may utilize the wetland areas and surrounding wooded upland are expected to be minimally affected, as this habitat will remain intact and adjacent area buffers will be improved. In addition, illicit discharges and waste water discharge in proximity to the pond will be removed by the proposed sewering; this can be expected to result in improved water quality. Following construction, those birds and mammals that utilize landscaped habitats will return to the site in limited numbers. Ultimately, the proposed project will result in a minimally lower equilibrium population density for most species.

The Environmental Setting section provides a discussion of the wildlife populations associated with the subject site. In addition, **Appendix G-2** includes the results of a microcomputer model used to establish baseline information of species associated with various habitats.

<u>Rare Species/Habitat Potential</u>
In a letter dated March 11, 2005 (**Appendix G-3**), The New York Natural Heritage Program listed Wild Sorrel (*Rumex hastatuls)* and Little-leaf Tick-trefoil (*Desmodium ciliare*) as two threatened vascular plants that may be present on or near the subject property. Though globally secure, they are vulnerable in New York State. Wild sorrel was last spotted in 1996 less than one mile from the subject property. Both of these species prefer sandy, well-drained soils in meadows or oak openings. Neither of these species were encountered during any site visit and are not believed to occur on the subject property due to lack of suitable habitat.

Of the avian species listed as being likely on the site, none are listed as species of special concern by the State of New York. The eastern hognose snake is listed as a special concern species. Special concern species are native species which are not recognized as endangered or threatened, but for which there is documented concern about their welfare in New York State as a whole. Unlike threatened or endangered species, species of special concern receive no

additional protection under New York State Environmental Conservation Law Section 11-0535. This category is intended to enhance public awareness of those species which deserve additional attention.

The eastern hognose snake is the only reptile species potentially found on site which is listed as a special concern species. The hognose snake may be expected to occur on the site in small numbers, and may suffer some direct loss. Although there is documented concern about its welfare in New York State, this special concern species receives no additional legal protection under Environmental Conservation Law Section 11-0535.

The tiger salamander, which is listed as endangered by the New York State DEC, is a mole salamander that breeds primarily in vernal ponds. Tiger salamanders prefer ponds with a long hydroperiod, with abundant herbaceous cover within the flooded portion and in ponds that have an open canopy. The project site does not provide suitable habitat for breeding tiger salamanders and no threatened or endangered species are expected on site.

2.5.3 Proposed Mitigation

- Approximately 2.98 acres of forested wetland, emergent marsh, wooded upland buffer and cleared adjacent area will be protected in the conservation area under a conservation easement.
- Approximately 0.19 acres of upland area within the proposed conservation area will be supplementally planted with native species such as maples and oaks and allowed to return to wooded upland habitat (see **Landscape Plan**, pocket at the end of the document).
- Approximately 0.20 acres of cleared vegetation within the 100-foot wetland adjacent area will be revegetated with native wetland tolerant species in the proposed impoundment areas (see **Landscape Plan**, in a pocket at the end of this document).
- Approximately 0.97 acres of wooded upland will be deeded to the Town of Huntington and improved with the proposed extension of a heritage trail that will continue to the historic Moses Rolph House on the southwest portion of the property.
- Some native and near native plant species which provide food and shelter to wildlife can be utilized in the landscaped areas surrounding the proposed residential units, where possible. This may encourage ongoing use of the site by avian species which would otherwise abandon the site. Species which will be utilized include the following: black cherry, red maple, oak, highbush blueberry, dogwood and viburnum.
- The portion of the site disturbed for installation of the stormwater collection and detention system will be revegetated with species tolerant of moist conditions, and will eventually provide food and shelter for some wildlife.
- Approximately 0.07 acres of existing wooded buffer and shrubs will be retained along the western side of the property near Woodhull Road.
- Revegetating impacted areas not otherwise covered by developed surfaces with a selection including some native and/or native-compatible species would incrementally increase potential habitat areas.

SECTION 3.0

HUMAN ENVIRONMENTAL RESOURCES

3.0 HUMAN ENVIRONMENTAL RESOURCES

3.1 Land Use, Zoning and Plans

3.1.1 Existing Conditions

Land Use

The subject property is presently classified as residential use and vacant land. Existing structures on the site include an occupied rental cottage, an occupied rental single-family dwelling, a (collapsing) barn and silo in the central portion of the site, and two historic single-family dwellings in the western portion of the site fronting Woodhull Road. Residential land use is immediately adjacent to the east and south of the site.

The subject property is situated on the southeastern edge of the Town Center and the Old Huntington Green Town Historic District. Land use in the vicinity of the site is thus generally divided into two patterns. To the northwest of the site, where the Town Center is located, the land use is comprised of a mix of institutional, commercial and recreational land use (see **Figure 10**). The Town Hall is located less than 2,000 feet northwest of the site and is surrounded by offices to the east and west, and a church to the north. The Heckscher Museum of Art is located on Prime Avenue on the Heckscher Park property. Less than 1,000 feet to the northwest of the site is the YWCA complex, which consists of a day care center and the Huntington Cinema Arts Center. Approximately 700 feet north of the site, a deli and gas station exist on the corner of Park Avenue and Main Street.

The land use to the east and south of the subject property is dominated by residential use and spotted with a few institutional uses. Residential use is generally the prevailing land use to the east of Woodhull Road and throughout the area bounded by Main Street, New York Avenue and Centerport Road corridors, and Long Island Railroad. Several historic houses are located along Park Avenue; including the National Register listed Wiggins-Rolph House. The Huntington Jewish Center is across Park Avenue from the subject property and the Jehovah Witness Kingdom Hall is approximately 750 feet south of the site. The Woodhull Intermediate School is also within 1,000 feet of the subject property. Photographs of the surrounding area are provided in **Appendix I**.

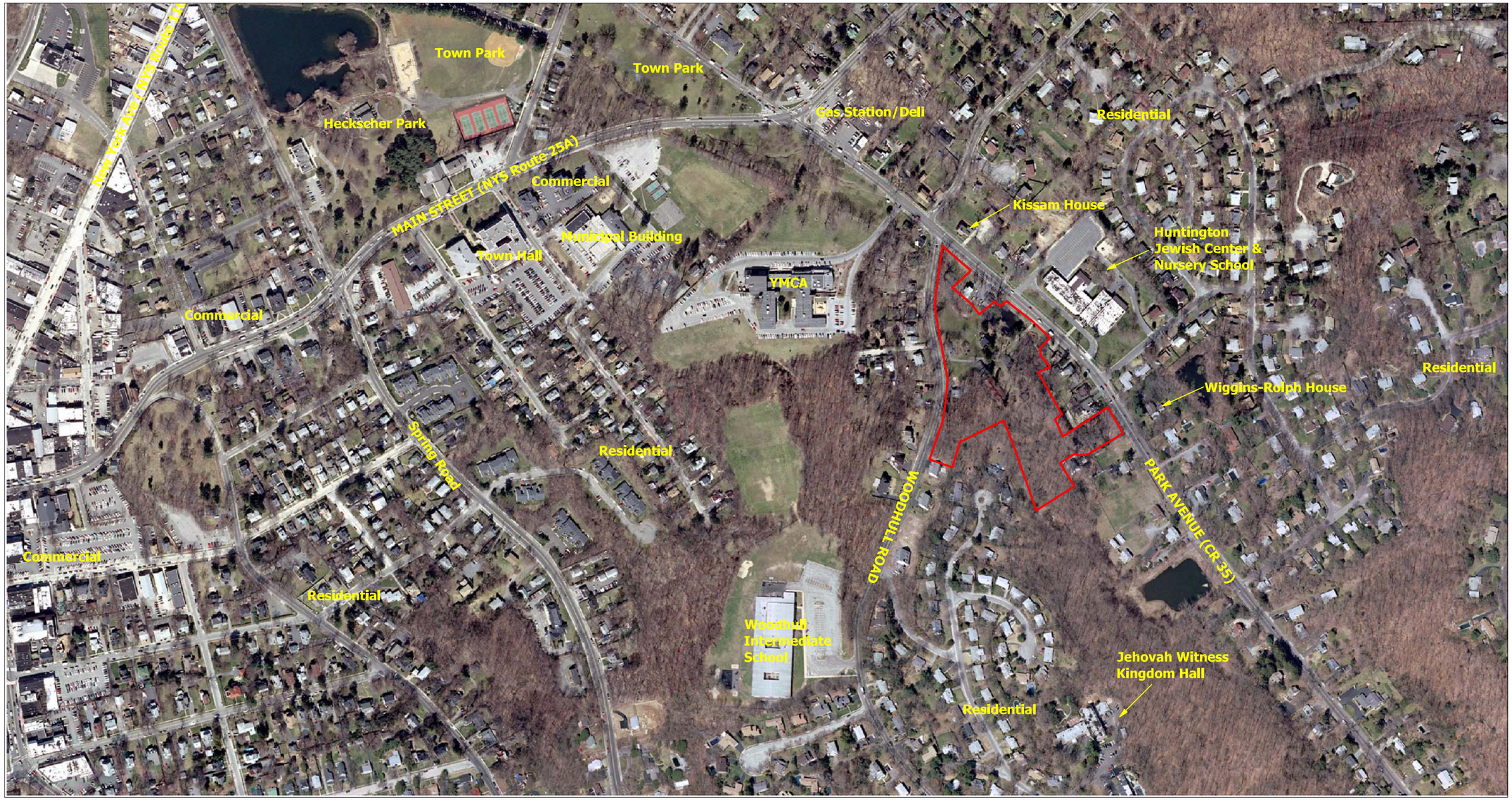
Zoning

The project site is presently zoned R-7 (Residence), as is land adjacent to the south between Woodhull Road and Park Avenue. Properties on the west side of Woodhull Road as well as the Town Hall property and its surrounding parcels are also zoned R-7. The R-7 zoning district further extends along west side of Park Avenue to Dunlop Road (see **Figure 2)**.

The R-7 Residence District is designated for single-family residences on 7,500 SF lots. Buildings in this district are limited to a maximum height of thirty-five (35) feet or 2.5 stories, with a minimum required front and rear yard width of twenty-five feet. As noted in the land use discussion above, the subject property is contained within the Old Huntington Green Town

FIGURE 10

LAND USE MAP



Source: GeoMaps
Scale: 1" = 400'

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NORTH

Historic District and therefore may be subject to special architectural controls contained in the Zoning Code. According to Section 198-42 of the Town Code, any erection, construction, reconstruction, repair, restoration, renovation, rehabilitation or alteration of designated historic structures or structures within a historic district is subject to review of the Town's Historic Preservation Commission. According to the Town Steep Slope Ordinance (Chapter 198, Article X), development on areas having slopes of 10% or more is to be performed in conformance with the Town of Huntington Subdivision Regulations, Erosion and Sediment Control Handbook. Town Code Sections 198-60 through 64 addresses steep slopes with respect to residential yield. As determined for the previous Hasset-Belfer application for this site (see **Section 1.1.1**), the 3.2 acres of the site which have slopes in excess of 25% would allow for three (3) lots conforming to the R-40 district. The Yield Map correctly depicts these three R-40 compliant lots in this steep slope area.]

Zoning of the properties more distant to the north includes a mix of residential zones of various densities. Land along the south side of Woodhull Road east of Park Avenue is zoned R-10; land between Woodhull Road and Main Street to the east of Park Avenue is zoned R-15 and R-20, R-80 and R-5 zoned lands are present to the north of Main Street. Land to the south and west of the site is generally zoned R-10. The extensive area between Park Avenue and Centerport Road is zoned R-40. Minimum lot sizes required for each zone discussed in this section are listed in **Table 3-1**.

Table 3-1
RESIDENTIAL ZONING DISTRICTS
(minimum lot area)

Zone	Min. Lot Area
R-80	2 acres
R-40	1 acre
R-20	20,000 SF
R-8	15,000 SF
R-10	10,000 SF
R-7	7,500 SF
R-5	5,000 SF

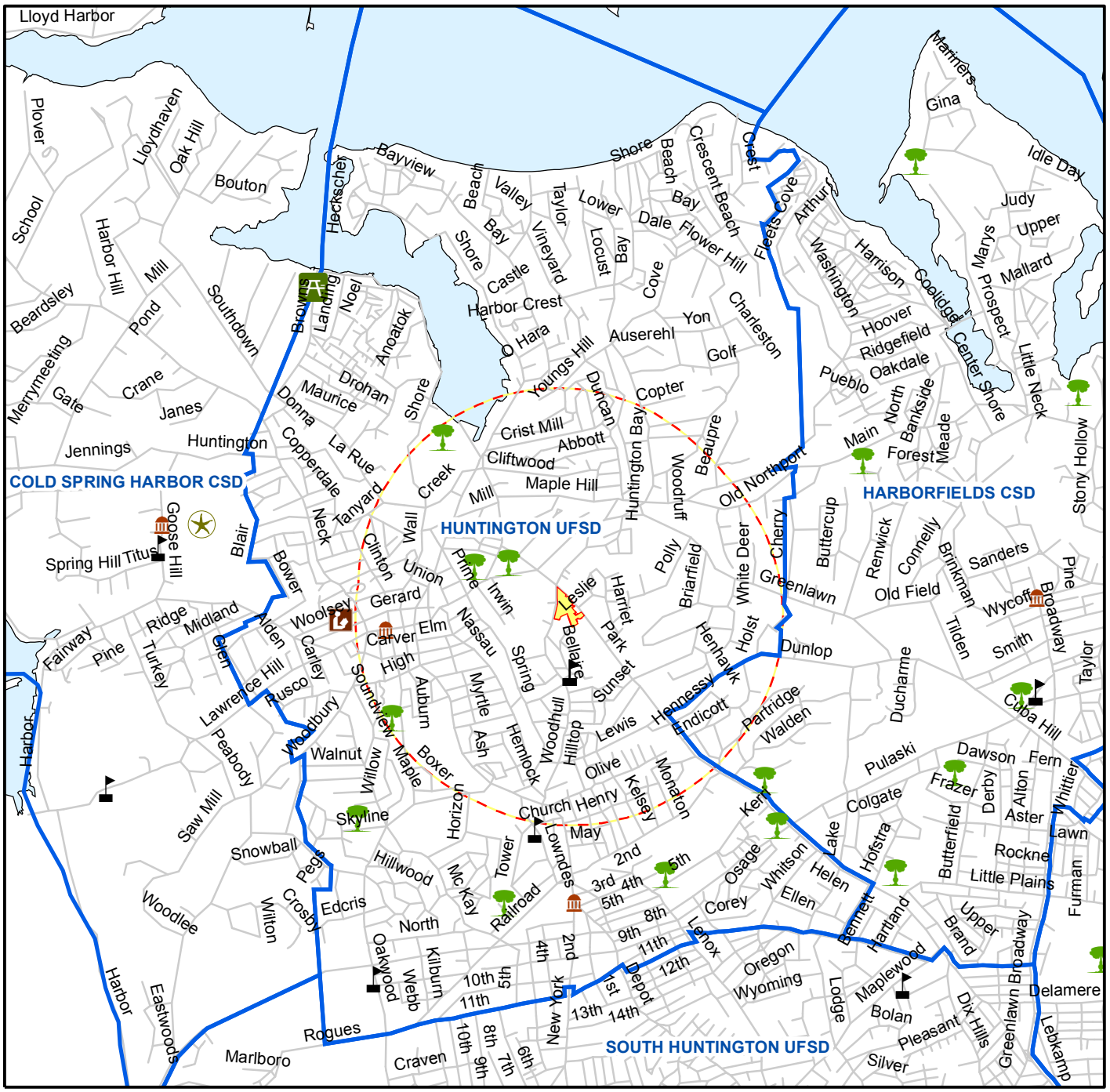
Land Use Plans

Town Comprehensive Plan Update

The Town of Huntington Comprehensive Plan (the "Plan") was updated in 1993 for the Town Board; it is intended "*…to reflect the issues the Town must confront associated with further growth and development based on its remaining resources.*" Similar to the Zoning pattern, the Plan recommends medium density residential use for the site and its immediately adjacent properties (see **Figure 11**). The Plan also recommends Low Density Residential use for the area to the east of the site, and High Density residential use for the general area between the site and New York Avenue. The existing parks are recommended to remain as parklands.

Recommendations of the Plan pertinent to the proposed project include:

FIGURE 12
EDUCATION & RECREATION FACILITIES



Site
1 mile Radius from Site
Roads
School Districts
College

Conservation Areas
County Park
Town/Neighborhood Park
Town Facilities

School
Library

Source: TIGER File 2000
NP&V GIS Library

Scale: 1" = 4,000'

5,000 Feet

N
W E
S

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Environmental Conditions

- Direct more intensive development to less environmentally-sensitive areas and assure that sufficient infrastructure support is provided.

Housing

- Minimize disruptions or alterations to established neighborhoods and development densities. This will help preserve property values in areas accommodating development.
- Design new developments which respect all environmental limitations.

Historic Resources

- Make proposed actions that are adjacent to or partially or wholly within locally designated historic properties or districts subject to the most stringent review standards promulgated in the SEQRA regulations.

Draft Vision Statement for the Town of Huntington's Comprehensive Plan Update

The Town of Huntington released a Draft Vision Statement (the "Statement") in 2004. The Statement was created *"…to be used to guide the preparation of a new Comprehensive Plan."* The visions of the Statement and the new Comprehensive Plan together will *"…be the means by which the citizens of Huntington will retain and enhance our community's character, define its identity, and ensure a sustainable future."* Portions of the Statement pertinent to the proposed project include:

Community Character

- We honor our rich heritage by protecting and restoring our historic buildings, districts, and landmarks; and by interpreting Huntington's history for present and future generations.

- We preserve and enhance the Town's unique aesthetic character and identity by setting high standards for quality, by protecting our neighborhoods and villages from incompatible influences, and by continually enhancing our scenic corridors, open space network, public access to the waterfront, and civic facilities and landmarks.

Sustainable Community Structure

- New development and redevelopment throughout Huntington is carefully managed to protect the character of neighborhoods, villages, and other established land use patterns; preserve open space; and set high standards for aesthetic quality.

Town Open Space Plan

The Town of Huntington Open Space Index, prepared in 1974 (the "Index") is intended to aid in the preservation and conservation of open lands in the Town that promote a sense of natural or rural spaciousness. The subject site is neither wholly nor partially contained within any of the parcels identified in the Index. Two Index Parcels, #NW-25 and #NW-26 are located within close proximity to the subject property. Index Parcel #NW-25 has an area of 68.8 acres and contains School District #3 property and adjoining properties to south between Woodhull Road, Delaware Street and Spring Road. Parcel #NW-26 has an area of 12.3 acres and sits on the wooded hillside on west side of Park Avenue, north of Bartlett Park. Although both Index Parcels are located less than 1,000 feet from the subject property, the site does not immediately abut these two Index Parcels.

Suffolk County Planning Commission Subdivision Guidebook
The Suffolk County Planning Commission has jurisdiction in the review of subdivisions, and procedures and guidelines have been established for this review. Following are the General Statements of Policy for those Commission Guidelines applicable to the project site:

B. SUBDIVISION ROADS

The objective of residential subdivision design is to provide for maximum residential amenity with a minimum of traffic. In the case of a commercial or an industrial subdivision the objective is to create a functional and viable economic asset for the community. These goals can not be achieved without safe and efficient access and circulation.

h. An alternate means of access must be provided for all subdivisions to insure access by emergency and service vehicles. Where a second street for an alternate means of access can not be provided a special right-of-way must be created for this purpose. While the chance of a sole means of access becoming blocked is extremely remote it is nevertheless possible, especially during hurricane season.

C. STORMWATER

Proper collection, retention, and disposal of stormwater runoff created by the development and improvement of all or a part of a tract of land that has been subdivided is essential for our environmental and economical well-being, as well as for our safety. The time for establishing control of stormwater runoff is when the tract is being designed for subdivision and not later when serious problems of erosion and flooding occur. Proper control must be exercised over the site when the site is being developed.

Allowing runoff from a subdivision to flow out into a county or state road may result in the overloading of the road's stormwater drainage system and as a consequence can contribute to flooding. This condition is not only hazardous but also limits the road's ability to carry traffic efficiently. Runoff may deposit soil and other material on the surface of the road resulting in a hazardous road condition, in addition to being a maintenance problem. Soil erosion not only wastes an important natural resource, but the sedimentation resulting from erosion can clog streams and ponds and kill fish and other aquatic life. Stormwater runoff carries deleterious materials, in addition to eroded soils, in solid form and in solution. These materials can alter wildlife environments and prevent use of recreational facilities.

It is the objective of the Commission to encourage the proper design and installation of stormwater disposal facilities at the time of development of the subdivision. Remedial measures taken to alleviate stormwater problems after the development of a subdivision has been completed and the residents have moved in are expensive in terms of disruption of residential amenities and economic cost. The Commission also encourages the use of innovative stormwater disposal techniques utilizing natural features of the site and free form design.

G. OPEN SPACE

Land that is set aside as open space as part of the subdivision design process under Section 278 of the Town Law and Section 7-738 of Village Law must remain as such. Measures must be taken to insure that this land is not used for purposes other than that intended and that the land does not end up in county ownership because of non-payment of taxes.

K. GENERAL

Once a parcel of land is subdivided the pattern of its layout will remain on the surface of the earth almost indefinitely. One only has to look to Manhattan to see the pattern of streets, and subsequent lotting, established in 1803. In many of the European cities that were established by the Roman Legions the pattern of the "castrum" is still evident. European cities leveled during World War II were often rebuilt with only minor changes in the street pattern due to the existing infrastructure and property ownership pattern. Therefore, serious consideration should be given to the impact that the subdivision will have, not only during the present time but in the future. The layout of a subdivision should take into consideration the preservation of the natural and historical features of the site and the creation of an environment that will enhance residential amenities of those who will reside in the subdivision. It is the desire of the Commission that in promulgating the following guidelines that these goals and objectives will be achieved and that in the future the pattern of the layout on the landscape will still be suitable for the use of future generations.

3.1.2 Anticipated Impacts

Land Use

The subject property is presently classified as residential use and vacant land. As discussed in **Section 3.1.1**, the residential use of the subject property is consistent and in conformity with residential use on adjacent properties.

The proposed project includes retention of an existing non-historic home on the site for continued private occupancy, and deeding the two (2) historic homes along Woodhull Road to the Town of Huntington. In addition, open spaces on the site will be retained and protected by establishing a conservation area on the eastern 2.98 acres of the property (which contains the NYSDEC-mapped Freshwater Wetlands), and by deeding the above-noted 0.97 acres (including the area of the two historic homes and for an extension of the Town heritage trail) to the Town. These actions will combine to enhance the area's historic and aesthetic characteristics by preserving and protecting land use characteristics deemed valuable by the community (e.g., the wetlands and steep slopes).

The above resource preservations and protections have been made possible in part by the applicant's willingness to reduce the size of the new units and to develop them in attached, multi-unit structures that will nonetheless be architecturally designed to appear to be traditional detached homes. The 10-unit yield of the proposed project is the same as the density for the site if it were developed as a conventional 10-lot subdivision; no increase in yield is proposed.

The subject property is proposed as a ten (10) lot residential subdivision on 7.07 acres of land. The homes will be two-story, three-bedroom units, which will be attached in two (2) and three (3) unit clusters. The proposed residential density of the site will be consistent with that of the adjacent properties and somewhat more dense than the use in the area east of Park Avenue, which has greater minimum lot size requirements as a result of the existing zoning pattern. Therefore, through design and cooperation with the Town, the clustered subdivision of the property is not expected to impact the existing land use in the vicinity.

The Town anticipates that extension of its sewer line southward along Park Avenue would increase the potential for intensified (i.e., development in excess of that allowed as-of-right) development of sites served by this new utility line. However, the proposed project does not represent such an intensification; it is designed to reflect only its as-of-right yield. Therefore, the proposed project would not meet this Town concern, and no adverse impact in this respect is anticipated.

Zoning

The proposed project does not require a change of zone from its current R-7 zoning classification, nor does it require a Special Use Permit or Special Exception Approval. The use and configuration of development is enabled under NYS Town Law Section 278 through clustering as administered by the Town of Huntington. As a result, there will be no impacts to the zoning of the site or vicinity, or to the zoning pattern of the area. The proposed plan results in a layout of 10 condominiums with shared common area, and has been designed to conform to preliminary comments from the Town. In general, the subdivision plan is based on a conservation design that incorporates significant areas of open space and common areas in order to preserve environmentally-sensitive features including two existing historic houses which the Town will own, retention of one (1) home on-site, and preservation of wetlands and steep slopes.

Through the use of Town Law Section 278, the project is not required to meet the (strict application of) dimensional requirements for a subdivision in the R-7 zone. However, by use of the site design flexibility of "clustering" inherent in the Town Zoning Code and its above-described conservation design, the project will develop that portion of the site already impacted and preserve its more valuable natural and historic portions.

Areas of steep slopes will be preserved and any development occurring on areas having slopes of 10% or more will be in conformance with the Town of Huntington Subdivision Regulations, Erosion and Sediment Control Handbook as discussed in **Section 1.3.2** of this document. The project's design reflects the limitation of steep slopes to three units; however, as the project is a clustered design, no individual lots are proposed, and several of the new residences will be located in the steep slope area of the site.

With regard to historic architectural requirements, these requirements are applicable to those properties that have been designated as historic structures. The two historic buildings located on Woodhull Road will be deeded to the Town of Huntington and it is expected that any renovations performed by the Town will adhere to the requirements of this code.

The existing home on the Kiruv property to remain is not designated as an historic structure and therefore it is not required that any alterations or restorations adhere to the architectural standards of the Town Code. However, as the entire site is within a Town-designated Historic District, the Town clearly intends that alterations (as well as the new homes) should use architecture and building materials complementary to the prevailing architecture of the district. While no plans for such alterations have been prepared, the applicant will ensure that the design will include architectural treatment and building materials having colors and textures consistent with the period exemplified by the Old Town Green Historic District. Since the proposed project conforms with the R-7 zoning and no variances are required, no impacts are expected with regard to zoning.

Land Use Plans

Town Comprehensive Plan Update (1992)

The proposed project will be in conformance with the 1992 Town Comprehensive Plan Update in regard to land use type and the zoning classification associated with that land use type. In particular, the recommendations of the Update will be followed by the project, as follows:

Environmental Conditions

- *Direct more intensive development to less environmentally-sensitive areas and assure that sufficient infrastructure support is provided.*

The site contains freshwater features including a man-made pond, stream, emergent marsh, forested wetlands, and several groundwater seeps or springs. The Update also recommends that, in order to protect sensitive environmental features within a parcel, clustering should be considered in order to preserve open space. The 7.07-acre project site will maintain a 2.98-acre area of land (41.1% of the site) along its eastern property line as conservation area, thereby minimizing the potential for impact. In addition, infrastructure support exists in the area, and will be utilized. The site is served by public water and is proposed to connect to the Huntington STP.

Housing

- *Minimize disruptions or alterations to established neighborhoods and development densities. This will help preserve property values in areas accommodating development.*

The project has been designed to minimize impact to the character of the neighborhood, by its conformance to the existing land use type in the area. The project is generally within an existing developed area and, through cluster design, is both consistent with surrounding development densities and will minimize disruption on the neighborhood on a long-term basis.

- *Design new developments which respect all environmental limitations.*

The project has been designed to avoid impact to that portion of the site that presents environmental limitations, specifically the conservation areas. Steep slopes areas will be retained through design, wetland areas will be avoided and two (2) historic homes on-site will be retained through deeding to the Town.

Historic Resources

- *Make proposed actions that are adjacent to or partially or wholly within locally designated historic properties or districts subject to the most stringent review standards promulgated in the SEQRA regulations.*

The project has been designed to emulate the historic appearance of the historic district where the site is located. Furthermore, the two existing historic houses on the subject property will be

deeded to the Town of Huntington. Therefore the project will not impact the historic character of the area. This DEIS provides a framework for thorough environmental review with public input, consistent with the recommendation.

Draft Vision Statement for the Town of Huntington's Comprehensive Plan Update
The proposed project will conform to the applicable goals described in the Draft Vision Statement. The project will protect and restore historic resources on the site, provide an extension of the Town heritage trail, and preserve and enhance the site and area's aesthetic and historic character. The project will also protect wetlands and open space as well as maintain the existing land use of the site and area. Hence, the project will be consistent with the spirit of the Statement and the new Comprehensive Plan.

Town Open Space Index
The subject property does not fall within, intersect with or immediately abut any parcel listed on the Index. Therefore, the project is not in conflict with the Town Open Space Index, as this plan does not apply.

Suffolk County Planning Commission Subdivision Guidebook

B. *SUBDIVISION ROADS*
The proposed internal roadway will be 30-feet in width, and so will not be dedicated to the Town; it will be owned and maintained by the HOA created by the individual owners. The project is not anticipated to generate a significant number of vehicle trips or conflict with traffic patterns. Due to the configuration of the site and the presence of the eastern Conservation Areas, a second vehicle access cannot be provided, as recommended in the Guidebook.

C. *STORMWATER*
The proposed project includes an on-site stormwater collection and detention system, which will overflow to the existing public storm sewer system for off-site recharge. In this way, the potential for adverse impacts to groundwater and surface water quality, especially for the wetlands on the property, will be minimized.

D. *OPEN SPACE*
The project will maintain 2.98-acres of conservation area in order to protect the wetlands on the property. The western 0.97-acre portion of site, where the two existing historic houses are located, will be deeded to the Town. Therefore, more than half of the project site will remain as it currently exists.

E. *GENERAL*
The layout of the proposed project is the result of careful consideration of the existing natural features of the site (including topography, developed area, natural vegetation patterns and presence of the wetlands).

3.1.3 Proposed Mitigation

- The above discussion indicates that no adverse impacts to the land use, prevailing zoning or the zoning pattern in the vicinity are expected; therefore, no mitigation measures are necessary or proposed other than mitigation inherent in project design as expressed herein.

- The analyses presented in **Section 3.1.2** above do not indicate potentially significant adverse impacts (defined as non-conformance with applicable recommendations) to the pertinent land use plans studied. Therefore, no additional mitigation measures are necessary or proposed.

- The project includes retention of wetlands and steep slopes on-site, as well as the extension of the existing Huntington heritage trail, which presently terminates on the property adjacent to the south. The extension will occupy the southern and southwestern portions of the site, and terminate opposite the two existing historic homes (which will be deeded to the Town).

3.2 Community Character

3.2.1 Existing Conditions

The subject property is currently comprised of single-family residences and vacant land, and the vicinity is dominated by residential properties, as described in **Section 3.1.1**. The following discussion presents the existing visual character of the site and vicinity; **Appendix I** contains photographs illustrating typical views found in the area in order to visually characterize community character.

The developed portion of the site is improved with a cottage, a single-family dwelling and a man-made pond on the northeast, a cow barn in the central portion, and two historic single-family dwellings in the western portion of the site fronting Woodhull Road. The remainder of the property is covered by forest, with thick wooded buffers present along the eastern and southern borders of the site. Except for those areas adjacent to the buildings and along the trails within the property, forest vegetation dominates the visual character of the parcel so that views into the site from outside are not generally available, as discussed below.

Views into the property from adjacent and nearby sites are restricted by the presence of thick vegetation contiguous to that on the project site (for viewers to the north, south and east), and elevation differences between the viewer and the site (for views to the south). The existing structures are generally not visible to outside viewers for most of the year (spring, summer and autumn), except at the access to the two existing historic houses on Woodhull Road.

This area is contained within the Old Town Green Historic District. The character of the vicinity may be described as an historic suburban town center. While the area has a mix of institutional, commercial and residential uses, these are found to the north and west of the vicinity, leaving the immediate area of the project site in quiet, attractive residential and low-intensity institutional uses. Commercial activity in the vicinity is not as intense as that taking place on New York Avenue to the west; strip malls and parking areas typical of some of the commercial corridors in the general vicinity are not found in the immediate area. To the north, both commercial and residential uses are woven together tightly on smaller lots. Most structures in this area also have historic appearances. The area of the site also retains open space and provides a more rural and historic character than other more suburban and urban areas of the Town.

3.2.2 Anticipated Impacts

As discussed and analyzed in **Section 3.1.2**, the existing residential character of the site will not be substantially changed by the proposed project, and there will be no impact to the prevailing residential land use pattern of the vicinity. As a result, no impacts to the residential character of the community are anticipated. The discussion below analyzes the potential for impacts to the visual character of the site and vicinity.

The cottage and two barns on the site will be removed; the non-historic single-family house will be converted to an ownership structure retained within the residential development, and the Town will obtain the two historic houses along Woodhull Road by deed. While a portion of the existing vegetation will be cleared for the project, this clearing will occur mainly within the interior of the property, leaving naturally vegetated buffers, approximately 150 feet in width, to be retained along the eastern property line and on the southwestern corner of the site. Retention of the vegetation in these areas will minimize the potential for adverse impacts for outside observers by minimizing the increase in visibility of the project. During the majority of the year (i.e., spring, summer and autumn, when trees are in leaf), the depth of the buffers, combined with the thickness of the vegetation and the mix of taller trees and understory will result in a minimal opportunity to discern the buildings.

Due to the conservation design of the project, the vegetation on the northern tip of the property and adjacent to the proposed cul-de-sac will be cleared to accommodate the cluster development and drainage retention features. In areas where vegetation will be cleared, a minimum of approximately 25 feet of landscaped buffer will be provided to screen the site from traffic and prevent impact on the adjacent properties.

In general, the impact of the project on the visual resources of the site will be to slightly increase the visibility of the buildings proposed, primarily from the west. Viewers closer to the site to the north, east and south will experience lesser degrees of impact, as the thickness and density of vegetation retained within the sites in these directions is greater than for the western buffer areas, which are currently less natural.

The project will also enhance the historic character of the area by use of landscaping, architectural designs and building materials complementary to the prevailing architecture of the district. While no architectural plans have been prepared, the applicant will ensure that the design will include architectural treatment and building materials having colors and textures consistent with the period exemplified by the Old Town Green Historic District.

3.2.3 Proposed Mitigation

- In consideration of the site layout and building design features pertinent to the character of the site and community (i.e., the land use of the site and in the vicinity, the prevailing land use pattern, and the visual appearance of the site and properties in the area), mitigation is primarily related to the design of the project and future, more detailed landscape and architectural design and review.

3.3 Community Services

3.3.1 Existing Conditions

Socio-Economics

Table 3-2 below provides a summary of the tax rates and taxes for the project site based on the most recent tax bills (2004-05) obtained from the Town of Huntington. All taxes are calculated based on assessed valuation and individual tax rates, with the exception of the refuse district, which is a factor of the number of units.

Table 3-2
TAX GENERATION AND DISTRIBUTION
Existing Conditions

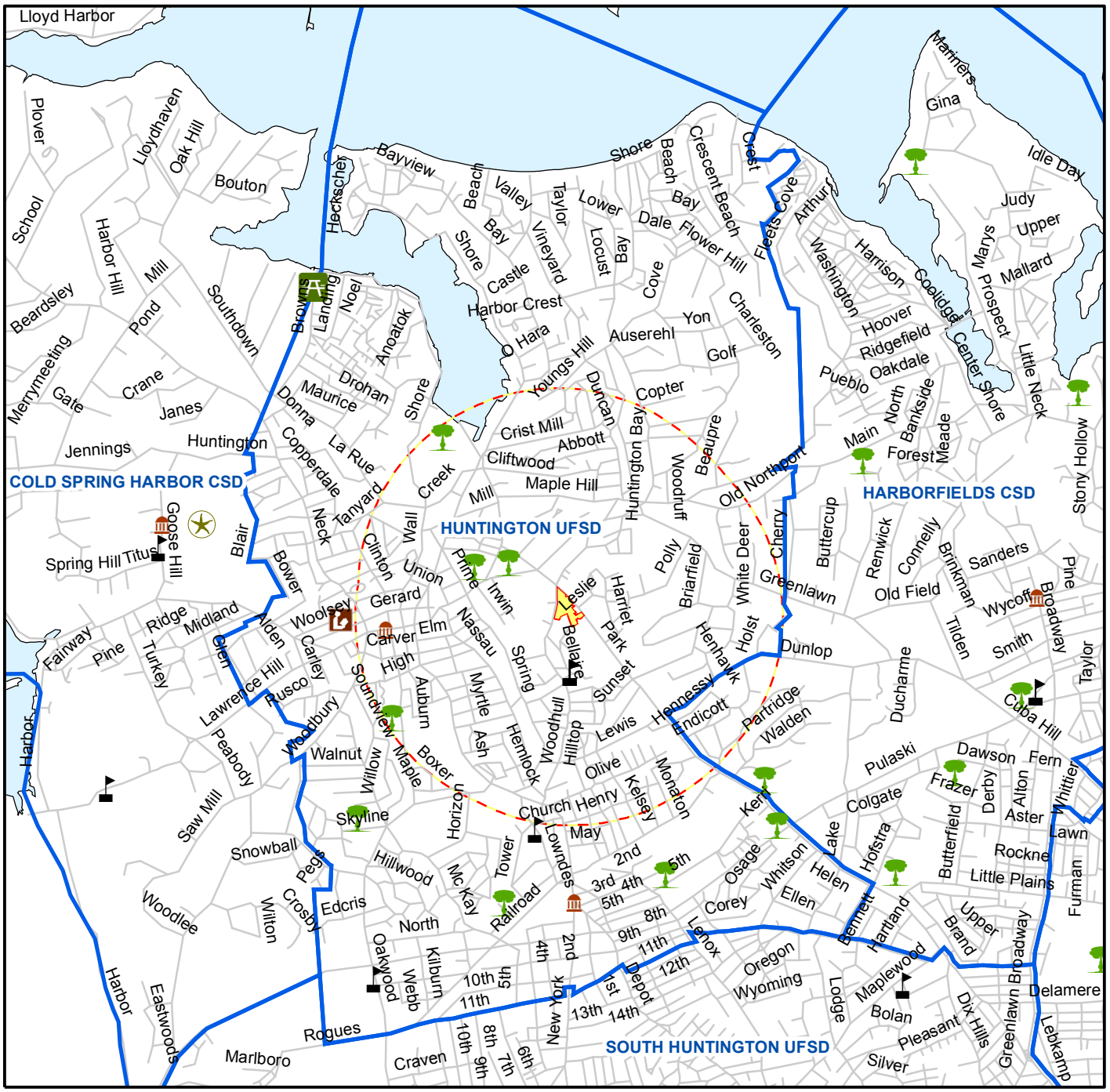
Tax Type	**Tax Rate** ($/$100 assessed)	**Total** ($/yr)
School District - Huntington	157.523	10,696
Library District - Huntington	13.356	907
County, General	1.021	69
County, NYS-Mandated	1.909	130
County, Real Property Tax Law	1.814	123
County Police	30.105	2,044
Town/Pt.	9.148	621
Highway	9.405	639
Lighting District - Town-wide	0.974	66
Open Space Bonds, I & II	1.331	90
Fire Department - Huntington	6.643	451
Refuse District	370.37	741
Ambulance District - Huntington	2.306	157
Total	**605.905**	**16,734**

Schools

The project site is located within the Huntington Union Free School District (UFSD; **Figure 12**). A letter was sent to the Superintendent's office (**Appendix J**) to request specific information regarding the availability of bus service to the site, the name of the elementary school that would be attended by students living at this location and current costs associated with educating pupils in the district. The response letter indicates that students on the site would attend the following:

Washington Primary School (grades K-3)
Whitson Road, Huntington (approximately 2.1 miles to the south-southeast)
Huntington Intermediate School (grades 4-6)
Lowndes Avenue, Huntington Station (approximately 1.4 miles to the south-southwest)
Finley Middle School (grades 7 & 8)

FIGURE 12
EDUCATION & RECREATION FACILITIES



Site
1 mile Radius from Site
Roads
School Districts
College

Conservation Areas
County Park
Town/Neighborhood Park
Town Facilities

School
Library

Source: TIGER File 2000
NP&V GIS Library

Scale: 1" = 4,000'

5,000 Feet

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Greenlawn Road, Huntington (approximately 0.6 miles to the east-northeast)
Huntington High School (grades (9-12)
Oakwood and McKay Roads, Huntington (approximately 1.5 miles to the southwest)

According to the response letter, the current cost for educational services (grades 7-12) is $14,775/year. Based on the NYS Education Department's Comprehensive Information Report for the Huntington UFSD, the enrollment for the 2003-2004 school year (the most recent available) was 4,131 students. The total number of teachers for that school year was 383, which is a student-teacher ratio of approximately 10.8:1.

Based on the two occupied residences on the property, the site is currently expected to generate 2 school-aged children. Based on the per pupil cost of $14,775 the two (2) students would represent a total of $29,550/year in expenditures. As the site presently generates only $10,696/year in school district taxes to the district, the site generates $18,854/year less in school district taxes than it requires of the district in expenditures.

Finally, the response letter indicates that school bus service is available for students living on the subject site for Washington Primary, Huntington Intermediate and Huntington High School, but not for Finley Middle School, as it is located in close proximity to the site.

Police Protection

The project site is served by the Suffolk County Police Department (SCPD). **Appendix J** contains correspondence received from Deputy Inspector Stuart K. Cameron, Executive Officer of the Second Precinct, responding to a letter regarding current and projected police protective services for the site. The response letter confirms that the site is within sector 217 of the Second Precinct, which is located at 1071 Park Avenue in Huntington, New York 11743 (see **Figure 13**).

Fire Protection

Fire protection for the project site is provided by the Huntington Fire Department. A letter requesting information about the Department and the potential impact of the proposed project was sent to the chief (**Appendix J**); however, a response was not received for inclusion in this document. Potential impacts, available tax revenue and construction methods are discussed in **Section 3.3.2**. The Huntington Fire Department Station is located at 1 Leverich Place, less than 1 mile from the project site (see **Figure 13**).

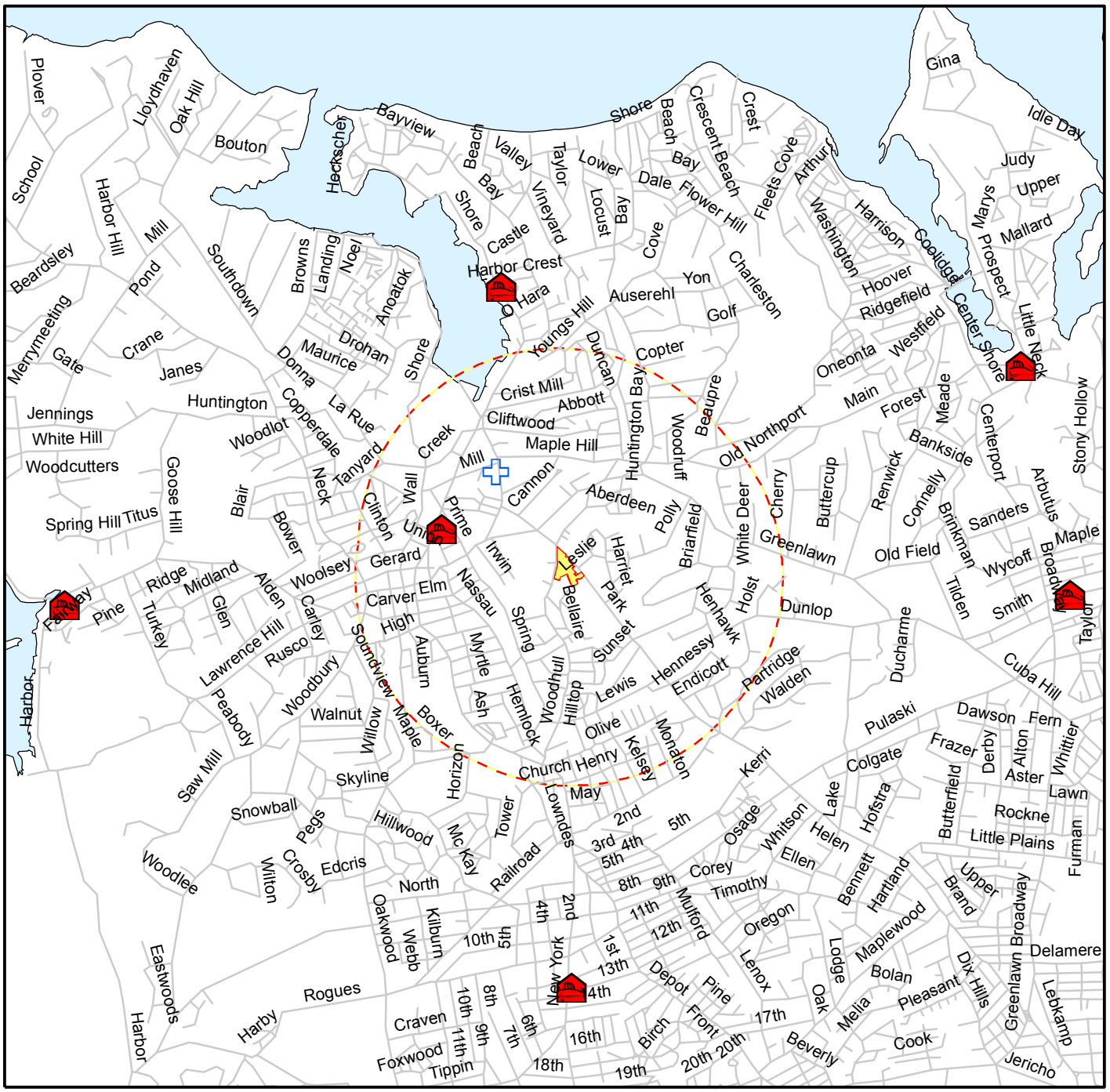
Ambulances and Hospitals

Huntington Hospital is located at 270 Park Avenue in Huntington, less than 1 mile from the project site. Ambulance services provided through the Huntington Fire Department are also dispatched from a station less than a mile from the site (see **Figure 13**).

Recreation

Existing recreational facilities, including several Town public parks, are located within 1-mile radius of the project site (see **Figure 12**). In addition, the Town heritage trail terminates on the property adjacent to the south. Opportunities for outdoor public recreation in the Town of Huntington are also available and include Town, State and County parklands.

FIGURE 13
EMERGENCY SERVICES


Plover
Lloydhaven
Oak Hill
Bouton
School
Harbor Hill
Mill
Pond
Beardsley
Merrymeeting
Gate
Crane
Janes
Jennings
White Hill
Woodcutters
Huntington
Woodlot
Copperdale
La Rue
Donna
Maurice
Drohan
Southdown
Browns
Landing
Noel
Anoatok
Shore
Bayview
Hockscher
Beach
Valley
Taylor
Lower
Shore
Beach
Crescent Beach
Crest
Bay
Dale
Flower Hill
Fleets Cove
Arthur
Bay
Vineyard
Locust
Bay
Castle
Harbor Crest
O Hara
Cove
Yon
Charleston
Auserehl
Golf
Youngs Hill
Duncan
Copter
Crist Mill
Abbott
Cliftwood
Maple Hill
Huntington Bay
Woodruff
Beaupre
Old Northport
Washington
Harrison
Coolidge
Hoover
Ridgefield
Westfield
Center Shore
Oneonta
Main
Forest
Meade
Gina
Idle Day
Judy
Upper
Marys
Prospect
Mallard
Little Neck
Stony Hollow
Centerport
Bankside
Renwick
Buttercup
Cherry
Connelly
Brinkman
Arbutus
Sanders
Wycoff
Maple
Broadway
Taylor
Smith
Tilden
Old Field
Greenlawn
White Deer
Holst
Dunlop
Henhawk
Partridge
Walden
Endicott
Hennessy
Lewis
Olive
Monaton
Kelsey
Henry
Church
May
Kerri
Colgate
Lake
Hofstra
Ducharme
Cuba Hill
Pulaski
Dawson
Fern
Frazer
Derby
Alton
Whittier
Aster
Lawn
Butterfield
Rockne
Little Plains
Furman
Upper
Brand
Hartland
Bennett
Maplewood
Bolan
Pleasant
Dix Hills
Greenlawn
Broadway
Delamere
Lebkamp
Jericho
Cook
Beverly
Melia
Oak
Lodge
Lenox
Oregon
Timothy
Corey
Mulford
Whitson
Helen
Ellen
Osage
Harbor
Pine
Turkey
Glen
Ridge
Midland
Alden
Woolsey
Carley
Rusco
Lawrence Hill
Woodbury
Peabody
Saw Mill
Snowball
Pegs
Crosby
Wilton
Woodlee
Edcris
Walnut
Willow
Maple
Boxer
Soundview
Auburn
High
Carver
Elm
Gerard
Clinton
Wall
Creek
Mill
Tanyard
Neck
Blair
Bower
Goose Hill
Titus
Spring Hill
Union
Prime
Cannon
Irwin
Nassau
Spring
Myrtle
Ash
Hemlock
Woodhull
Hilltop
Bellaire
Sunset
Park
Harriet
Leslie
Aberdeen
Polly
Briarfield
Skyline
Horizon
Hillwood
Mc Kay
Tower
Railroad
Lowndes
North
Oakwood
Webb
Kilburn
Eastwoods
Rogues
Harby
Craven
Foxwood
Tippin
New York
Depot
Pine
Front
Birch
Oak
Melia
Beverly
Cook
Jericho
Greenlawn
Lebkamp
Dix Hills
Pleasant
Bolan
Maplewood
Hartland
Bennett
Upper
Brand
Harbor
Harbor
Fishkill
Harbor
Harbor
Harbor

Solid Waste Handling/Recycling

Based on the existing uses, the site presently generates an estimated 42 pounds of solid waste daily (lbs/day). The site is located within the Town Municipal Refuse Pickup District (see **Figure 14**). All non-hazardous solid waste generated in this district is taken to the Town of Huntington's Resource Recovery Facility. This facility handled approximately 316,000 tons of solid waste in 2004, with a maximum allowable throughput of 350,400 tons per year (**NYSDEC, Division of Solid and Hazardous Materials website**). The waste is then separated and sent to several facilities. The landfill component (ash) is sent to the Brookhaven and Babylon facilities; the incinerator component is sent to the Northport facility. The recyclable component is sold and sent to multiple sources, currently being the OMNI facility in Westbury (**Appendix J**).

3.3.2 Anticipated Impacts

Socio-Economics

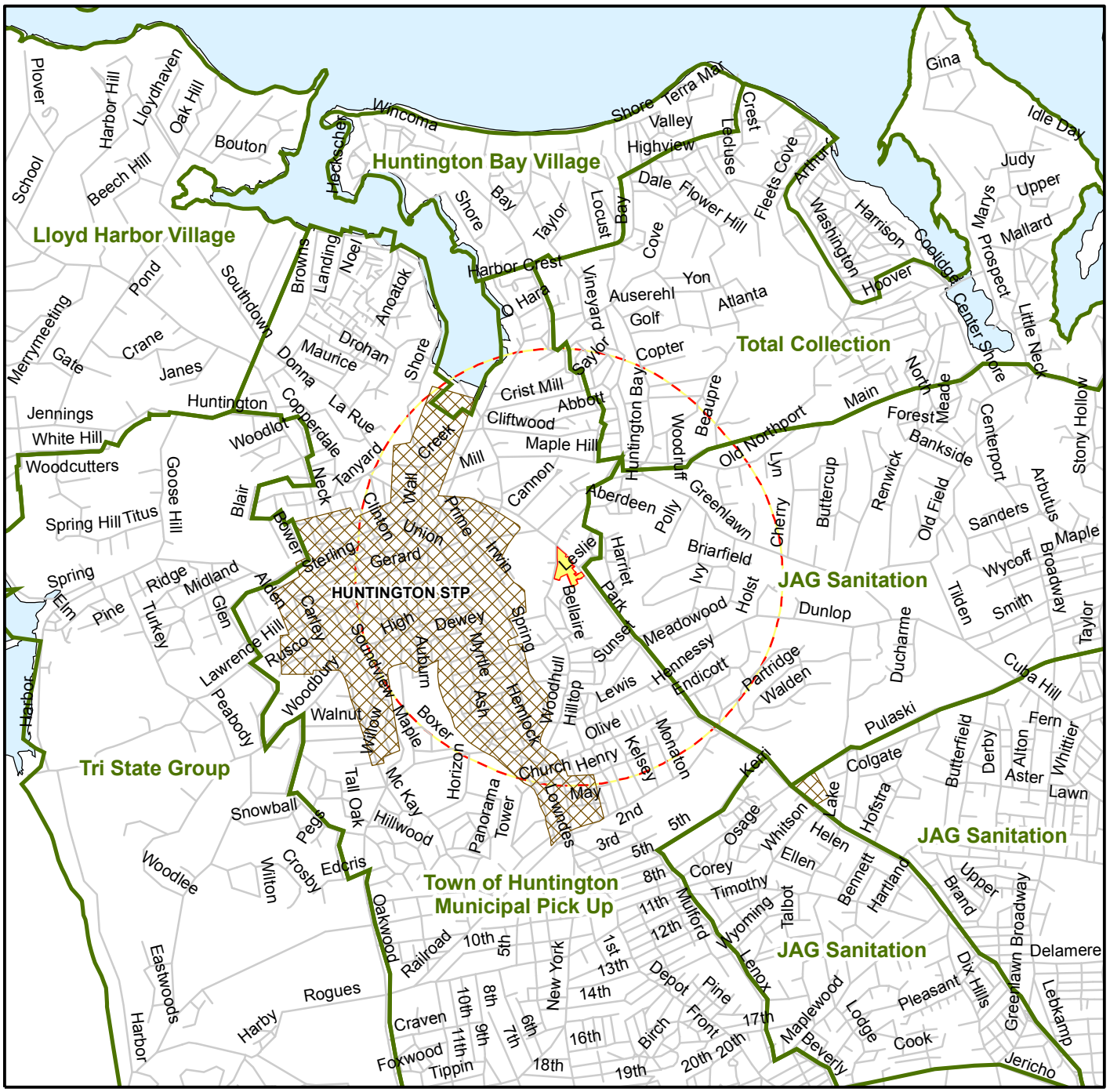
Development of the proposed project will result in a significant increase in the amount of tax revenue generated from the subject parcel, to be distributed to the various taxing jurisdictions. The additional taxes generated will help offset the additional expenses incurred by the various jurisdictions caused by an increase in service requirements from the proposed project. In order to quantify the projected future tax revenue generated as a result of the proposed project, the land assessment for the existing home (which is now situated on a large lot) was reduced to reflect the future conditions (from $1,690 to $500), thereby reducing the total assessment to $4,900. The resulting tax revenue for this home is expected to be about $11,912 per year. Based on tax bills for a comparable development of townhomes in the R-7 zoning district (on Southdown Court), it is estimated that the tax revenue generated by the nine new homes will be approximately $13,325 each per year. **Table 3-3** provides a breakdown of the estimated tax revenue to be generated by the project. Based on this analysis, it is expected that the project will result in an increase of approximately $115,063 per year.

The proposed project will also result in generation of numerous, temporary jobs during the construction phase of the project, with subsequent secondary job generation following development due to increased demand for local services (i.e. landscaping, clearing, maintenance, etc.). Consumer spending will have a "ripple" effect, providing additional economic benefit to providers of goods and services within the local area during and following construction. The project will also provide a permanent land use for the site that is viable and has a high probability of success through full utilization.

Schools

The proposed project is expected to result in 5 school-aged children, based on a multiplier of 0.35 school-aged children in each of the nine new 3-bedroom attached units and 1.12 school-aged children in the existing 4-bedroom home to be retained. These multipliers are based on a study prepared for Western Suffolk BOCES by the Center for Urban Policy Research, Rutgers University. Based upon the estimate that 3 school-aged children live in the existing homes on the property, the proposed development would account for an increase of only 3 students to the district. It is important to note that the increased school taxes will more than pay for the these 5

FIGURE 14
UTILITIES



Site
1 mile radius from site
Roads
Sewered Area
Refuse District Boundary

Source: TIGER File 2000
NP&V GIS Library
Town of Huntington

Scale: 1" = 4,000'

3,000 Feet

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students; expenditures necessitated by the project will total $73,875/year, but the project will generate $85,694/year in school district taxes.

Table 3-3
TAX GENERATION AND DISTRIBUTION
Existing and Proposed

Tax Type	**Tax Rate** ($/$100 assessed)	**Existing Taxes*** ($/yr)	**Anticipated Taxes** ($/yr)	**Change** (+/- $/yr)
School District - Huntington	157,523	10,696	85,694	+74,998
Library District - Huntington	13.356	907	7,226	+6,319
County, General	1.021	69	555	+486
County, NYS-Mandated	1.909	130	1,039	+909
County, Real Property Tax Law	1.814	123	987	+864
County Police	30.105	2,044	16,377	+14,333
Town/Pt.	9.148	621	4,977	+4,356
Highway	9.405	639	5,116	+4,477
Lighting District - Town-wide	0.974	66	530	+464
Open Space Bonds, I & II	1.331	90	724	+634
Fire Department - Huntington	6.643	451	3,614	+3,163
Refuse District	370.37	741	3,704	+2,963
Ambulance District - Huntington	2.306	157	1,254	+1,097
Total	**605.905**	**16,734**	**131,797**	**+115,063**

* Assuming $13,325/yr taxes for homes, based on comparable development.

The Huntington UFSD response letter indicates that the district is obligated to provide educational services to all students in the district. However, as the increase in enrollment is only 3 students, and the project will more than pay for the students resident on the site, it is not anticipated that there will be any adverse impacts on the Huntington UFSD.

Police Protection

The response letter from the SCPD states that the proposed project *"…should have a negligible impact upon this sector."* In addition, the project will increase SCPD allocations to approximately $16,377/year, which would defray at least a portion of the increased costs to the department to provide services to the site, if needed.

Fire Protection

In consideration of the residential nature of the project, it is not anticipated that additional or specialized training or staffing of the Huntington Fire District will be necessary.

Construction of the new homes will conform to applicable requirements of the NYS Fire and Building Codes. Fire/smoke detectors will be installed as required in new homes to render early warning of any fire incidents until professional assistance arrives. It is expected that the proposed project will generate approximately $3,614 in annual tax revenue to the fire district,

defraying a portion of the increased costs to the department to provide emergency services to the site.

Ambulances and Hospitals

There is a hospital and ambulance service provider in the immediate area of the project site (see **Figure 13**). The proposed project will result in a minimal (28 capita) increase in population in the immediate vicinity. The proposed project will generate additional monies to the Town general tax districts, which should help offset any additional demand for social services. As a result, no significant impacts to healthcare facilities or ambulance service providers are anticipated.

Recreation

The proposed project will result in a slightly increased (28 capita) number of residents within the vicinity of the public parks shown in **Figure 12**, though it is not anticipated that any increased visitation to these recreational areas will be significant. The project will deed 0.97 acres of land to the Town for it to extend its existing heritage trail, as well as utilize the two historic houses for public recreational purposes. This will add to the Town's recreational resource base, at no cost to the Town for land acquisition.

Solid Waste Handling/Recycling

The proposed residential use is predicted to generate approximately 171 lbs/day of solid waste, which would represent less than 0.009% of the total volume disposed at the Town facility. Solid waste will be removed by the Town of Huntington and disposed of at the Town of Huntington's Resource Recovery Facility.

It is not anticipated that any toxic or hazardous waste will be generated, stored or used on the site other than general household-type cleaners. In summary, the type and volume of solid wastes generated by the project are not expected to have a significant impact on the operation of the Town facility. Residents are expected to deposit bagged wastes in closed containers for curbside collection. As a result, impacts from solid waste generated by the proposed project or to solid waste handling facilities are not anticipated.

3.3.3 Proposed Mitigation

- The proposed project will result in only three (3) new students in the Huntington UFSD, which would not significantly impact the enrollment of the Huntington UFSD; therefore, no mitigation is warranted or proposed.
- Adherence to the NYS Fire and Building Codes will increase the level of safety from fires and minimize the potential for use of ambulance services. In addition, use of fire/smoke alarms will assist in minimizing the incremental increase in the potential need for fire protective services.
- The deeding of land and two historic houses to the Town will incrementally expand the Town's recreational facilities and resources, at no public cost for land acquisition.
- As no significant adverse impacts are anticipated as a result of the increased solid waste generation of the proposed project, no mitigation is necessary or proposed.

3.4 Utilities

3.4.1 Existing Conditions

Water Supply
Assuming the SCDHS design rate for sanitary wastewater generated by single-family detached unit (300 gpd), the site is expected to consume an estimated 600 gpd of water. The site is currently supplied by the Suffolk County Water Authority (SCWA), which supplies potable water within the district via a6-inch diameter pipe beneath Woodhull Road.

Wastewater Treatment
The subject project presently generates an estimated 600 gpd of wastewater and is served by conventional sanitary septic systems. The site is located outside of the Huntington Sewer District, the nearest boundary of which is approximately 1,125 feet to the northwest. The applicant has made petition to the sewer district to allow connection of the site. This petition and the proposed route of the sewer connection is provided in **Appendix E**. Correspondence received from the sewer district (**Appendix E**) indicates that the STP which serves the district is at or near its design and permitted capacity, and a sewer capacity study is currently being prepared for the Huntington Sewer District to determine a future course of action for additional connections. According to the Town Department of Waste Management, the sewer capacity report is planned for public release with the Town's Comprehensive Plan Update, which is tentatively scheduled for completion in mid-2006.

Energy
The subject property currently consumes electrical energy supplied by LIPA through its service arm, KeySpan Energy. Natural gas supplies in the area are available from KeySpan Energy Delivery, although the site does not presently use this energy form.

3.4.2 Anticipated Impacts

Water Supply
The volume of potable water required by the proposed project is assumed to be the same as the generation of wastewater for the project plus landscape irrigation, which is 3,843 gpd. **Appendix J** contains the Letter of Water Availability for the project. The SCWA is chartered by the State of New York to provide potable water to all sites within its authorized service area; therefore, it is anticipated that the SCWA will be able to service the site, particularly in consideration of its small water demand. The site residences are already served by public water; therefore, the marginal increase in site population represents a relatively minor increase in water consumption above existing conditions.

Wastewater Treatment

Assuming that the 3,000 gpd of water required for the project will be used for sanitary purposes, 3,000 gpd of wastewater will be generated. The proposed project includes a request to extend the Town Sewer District to encompass the site, to enable it to utilize the existing Town sewer system and STP to treat and dispose of its sanitary wastewater. The proposed project would connect to the sewer district via a new pipe laid beneath Woodhull Road, from the site access northward to the existing 8-inch sewer main beneath Park Avenue. The applicant submitted a Sewer District Extension Request letter to the Town Board in November of 2004; the response letter (dated January 6, 2005, see **Appendix E**) indicates that the district's sanitary sewage flow is approaching the limits of the STP's design and permitted flow capacities. A sewer capacity study is currently being prepared for the Huntington Sewer District to determine a future course of action. However, an involved agency may not undertake, fund or approve an action until all provisions of SEQRA have been completed; therefore, the district cannot consider the extension request until the SEQRA process for the Subdivision application has been completed. In the event that no connection is possible, the use of individual sanitary septic tanks will be necessary (see **Section 5.3**).

Energy

The proposed project will increase the electrical and, if used, natural gas consumption in the area, and will require service connections of the electrical and natural gas lines to the nine (9) additional dwelling units. KeySpan has indicated (**Appendix J**) that they will supply electricity to the site within its filed schedules and tariffs of the utilities operating conditions. In consideration of the small size of the project, the resulting electrical and natural gas demands are not anticipated to result in significant impacts to KeySpan or its ability to serve other sites in the vicinity.

3.4.3 Proposed Mitigation

- The analyses presented above do not indicate that there would be significant adverse impacts to the SCWA, the Town Sewer District (after its approval of a district extension), or KeySpan. As a result, no additional mitigation is necessary or proposed.
- It is anticipated that water-conserving plumbing fixtures will be utilized in construction, which will further minimize the volume of water required from the public water supply.
- It is anticipated that energy-conserving insulations, current building code requirements mechanical systems and the like will be utilized in construction, thereby mitigating the anticipated increase in energy consumption.

3.5 Transportation

3.5.1 Existing Conditions

Appendix K contains a description of the existing traffic characteristics of the site and vicinity, as well as an analysis of the potential for adverse impacts from the proposed project on these traffic characteristics. The following has been excerpted from that analysis.

The 7.07-acre site is located on the southwest corner of a signalized intersection at CR 35/Park Avenue and Woodhull Road in the Village Green area of Huntington Village. CR 35 is a north-south arterial roadway under the jurisdiction of the SCDPW. Within the vicinity of the site CR 35 has one travel lane in each direction with designated turn lanes at the intersection with NYS Route 25A/Main Street. A second northbound travel lane is introduced at the south intersection with Woodhull Road. This lane becomes a shared through/right turn lane on the approach to Main Street. The posted speed limit is 35 mph. CR 35 provides access to and from numerous properties and a variety of land uses. According to counts obtained from SCDPW, Park Avenue carries an average of 27,940 vehicles per day peaking at approximately 2,200 vehicles between 8:00-9:00 AM and 2,300 vehicles between 4:00-5:00 PM, along the section just south of Broadway. The section of Park Avenue, north of NYS Route 25A carries 4,456 vehicles per day with 425 vehicles per hour during the PM peak and 200 vehicles during the AM peak. Woodhull Road is an east-west collector roadway with one lane in each direction under the jurisdiction of the Town of Huntington. Woodhull Road extends from NYS Route 110 in the southwest direction to NY 25A in the northeast direction and has a posted speed limit of 30 mph within the vicinity of the site.

Accident data for the most recent three-year period available, June 1999 through May 2002, was obtained from the NYSDOT for the intersection of CR 35 at North and South Woodhull Road as well as the roadway segments just north and south of the intersections along CR 35 and combined with data from SCDPW for intersections along CR 35.

As summarized in **Table 3-4**, a total of 55 accidents, an average annual frequency of 18 accidents per year, occurred at the intersection over the 3-year period. One of the accidents involved a fatality and the majority, 75%, was property damage only. Only 2 accidents occurred in the section of Woodhull Road between CR 35 and Chevy Chase Road, where Kiruv Court is proposed. **Table 3-5** below contains the accident data by type of collision. The majority of the accidents involved right angle collisions, with the second-highest consisting of rear end accidents.

3.5.2 Anticipated Impacts

The trip generation estimates for the traffic to be created by the proposed nine single-family homes were calculated using the statistical data provided in the manual, *Trip Generation*, *7th Edition*, published by the Institute of Transportation Engineers (ITE) in 2003. It is expected that the proposed single-family homes will generate 7 trips during the AM peak hour (2 entering, 5 exiting), 9 trips during the PM peak hour (6 entering, 3 exiting), and 9 trips during the Saturday peak hour (5 entering, 4 exiting). The trip generation volumes are presented in **Table 3-6** below.

As shown in the table, the proposed single-family homes are not expected to generate a significant number of trips during the AM, PM, or the Saturday peak hours. The most trips expected to be generated are nine during the PM and Saturday peak hours or an average of one trip every seven minutes. It is assumed that the distribution of these residential single-family trips will follow the typical commuter distribution pattern. Therefore the projected trips will disperse more towards the south in the morning peak period where the major highways (LIE and Northern State Parkway) and LIRR train station are located, with the reverse pattern from the north occurring in the evening peak hour. It is not expected that these trips will generate any

significant traffic impact on Park Avenue considering the relatively low projected site volumes compared to the current roadway volumes.

Table 3-4
ACCIDENT SUMMARY
(by Severity of Injury)

Location	Accident Severity				
	Fatality	Injury	Property Damage	TOTAL	
CR 35: Leslie Lane to S. Woodhull Rd	1	2	1	4	7%
CR 35 at S. Woodhull Rd	0	2	10	12	22%
CR 35: S. Woodhull Rd to N. Woodhull Rd	0	1	6	7	13%
CR 35 at N. Woodhull Rd	0	4	12	16	29%
CR 35 between N. Woodhull Road and NY 25A	0	4	10	14	25%
S. Woodhull Rd: Chevy Chase Rd to Murray Ct	0	0	1	1	2%
S. Woodhull Road: Murray Ct to CR 35	0	0	1	1	2%
ACCIDENTS	1%	24%	75%	55	100%

Table 3-5
ACCIDENT SUMMARY
(by Type of Collision)

Location	Accident Type											
	Right Angle	Rear End	Head On	Left Turn	Right Turn	Fixed Object	Ped/ Bicycle	Over-Taking	Side-Swipe	Other/ Unknown	TOTAL	
CR 35: Leslie Lane to S. Woodhull Rd	1	2	0	0	0	1	0	0	0	0	4	7%
CR 35 at S. Woodhull Rd	5	4	0	0	1	0	0	1	0	1	12	22%
CR 3: S. Woodhull Rd to N. Woodhull Rd	4	1	0	1	0	1	0	0	0	0	7	13%
CR 35 at N. Woodhull Rd	6	3	0	0	1	0	0	3	0	3	16	29%
CR 3: N. Woodhull Rd to NY 25A	5	4	0	1	0	0	0	1	0	3	14	25%
S. Woodhull Rd: Chevy Chase Rd to Murray Ct	0	0	0	0	0	1	0	0	0	0	1	2%
S. Woodhull Rd: Murray Ct to CR 35	0	0	0	0	0	1	0	0	0	0	1	2%

Location	Accident Type										
	Right Angle	**Rear End**	**Head On**	**Left Turn**	**Right Turn**	**Fixed Object**	**Ped/ Bicycle**	**Over-Taking**	**Side-Swipe**	**Other/ Unknown**	**TOTAL**
TOTALS	21	14	0	2	2	4	0	5	0	7	55
	38%	25%	0%	4%	4%	7%	0%	9%	0%	13%	100%

Table 3-6
ESTIMATED TRIP GENERATION
(vehicle trips)

	AM Peak Hour	**PM Peak Hour**	**Saturday Peak Hour**
Enter	2	6	5
Exit	5	3	4
Total	7	9	9

The site plan for the project proposes a single access onto Woodhull Road, with no direct access onto Park Avenue. An intersection sight distance measurement was performed at the proposed driveway location in accordance with the recommendation contained in *A Policy on Geometric Design of Highways and Streets*, published by the American Association of State Highway and Transportation Officials (AASHTO). AASHTO states that for the most critical movement, a vehicle making a left-turn from the driveway, an intersection sight distance of 335 feet is recommended for a design speed of 30 mph.

The site plan indicates a driveway on the south side of Woodhull Road approximately 300 feet west of CR 35 labeled Kiruv Court. Kiruv Court will be a 30-foot wide two-way private roadway providing access to the proposed homes. The available sight distance for drivers exiting Kiruv Court was recorded at approximately 170 feet to the east and 400 feet to the west. A utility pole and heavy brush limit the sight distance to the east. However, relocating the utility pole and cutting back the brush in this area is proposed as part of the project. These measures will provide the maximum available sight distance by creating a clear sight line to the intersection with Park Avenue. Given the low traffic volumes and adequate sight distances, no significant adverse traffic impacts are expected as a result of this project.

The project includes a small (306 SF) dedication of land at the intersection of Park Avenue and Woodhull Road, for the Town to increase the turning radius at this point, as the angle for vehicles turning right from Woodhull Road onto Park Avenue is greater than 90°. This will provide improved traffic flow and safety at this intersection, particularly for longer trucks, school buses and articulated fire trucks.

3.5.3 Proposed Mitigation

- Based on the above analysis, the limited amount of traffic generated by the proposed project will not result in any significant impacts to the adjacent roadways and intersections during the peak traffic periods.
- The location of the access roadway will provide sufficient sight distance. Kiruv Court will intersect a section of Woodhull Road with a very low frequency of accidents (less than one per year), contributing to a minimization of potential safety and/or traffic impacts. Therefore, as no significant impacts are anticipated, no additional mitigation is necessary or proposed.

- The proposed dedication for increased turning radius at Woodhull Road/Park Avenue will increase traffic flow and safety at this intersection, particularly for longer vehicles and trucks.

3.6 Cultural Resources

3.6.1 Existing Conditions

The subject property is contained within the Old Huntington Green Town Historic District and is subject to architectural controls under Section 198-42, Article VI, Historic District, Buildings and Landmarks of the Huntington Zoning Code. The property has a lengthy history, beginning with its use as a watering place documented as early as the 17th Century, the first operating tannery in Huntington in the 18th Century, and a dairy farm throughout the early 20th Century. The former Park Avenue Dairy Farm property is listed on the State Register of Historic Places. Four (4) historic dwellings and a cow barn with attached silo currently exist on the property. Two (2) of the dwellings are vacant and currently face Woodhull Street: the Skidmore house to the north and the Moses Rolph House to the south. The other two (2) dwellings are occupied and face Park Avenue: the main farmhouse and former milk house (existing cottage). The Skidmore house is the only dwelling on the site listed on the National Register of Historic Places.

A Stage I Archaeological Sensitivity Evaluation and Survey was completed in March 1998 for a previously proposed project on the subject site, the Hassett-Belfer Senior Housing project (**Appendix L**). The Stage I Survey included the two northernmost houses (525 and 483 Park Avenue) within its assessment for the project. These houses are no longer included within the proposed project area and are considered out parcels, but they were both constructed during the 1800's and are seen as contributing structures within the historic district. The Stage I Survey concludes that *"no prehistoric archaeological sites exist within the planned impact area."* The evaluation also concludes that *"one significant historic site exists within the impact area. This is the Tannery site used during 1740 through 1850. One substantial feature, a stone and mortar vat, probably used for soaking hides was found. This vat is approximately seventeen feet in diameter and three feet deep"* and identified on the project plans as a circular wall located along the southeast edge of proposed impoundment area #3.

The site's ponds and stream functioned as a public watering place until 1858 when the property was sold to William (H.) Place. The subject property was historically known as the Hollow Ponds Watering Place, from which an open brook or stream ran from the Hollow Ponds (aka Swezey's Pond and former smaller pond-turned-marsh) along Park Avenue to the Village Green. In 1740, Nathanial Harrison established Huntington's first tannery. In the late 1700's, part of the

property was taken over by Hessian soldiers, who built six huts along the stream in the northern portion of the property (adjacent to Park Avenue) and lived there from 1779 through 1783. These huts were burned soon after their departure and the tannery was operated until 1850 by various owners. Circa 1800, the property was sold to Judge Moses Rolph II, at which time his house stood in the approximate location of the present main farmhouse. The 1873 Beers Atlas **(Figure 6 of Appendix L)** is the earliest map found showing property ownership. It depicts the eastern portion of the existing property along Park Avenue as being owned by H. Place and the western portion of the property along Woodhull Road as being owned by Mrs. Skidmore. Dwellings are illustrated on both parcels. According to the Historic Preservation Commission, the Skidmore dwelling was constructed some time between 1680 and 1725, and is in its original location.

Circa 1896, Daniel Swezey purchased the property and moved Judge Moses Rolph's home westward to its present location on Woodhull Road (formerly South Woodhull Street). Mr. Swezey established the Park Avenue Dairy with an original barn that held only ten cows and four horses. Soon after 1915, the original barn was moved and used to store hay and equipment while a new barn was constructed with a glazed tile silo at its south end. A milk house was also constructed north of the new barn. In 1921, the Swezey's farmhouse was moved to the southwest adjacent to Woodhull Road and replaced with a larger house that stood on the opposite side of South Woodhull Street. The larger house was moved by professional house movers utilizing a horse-powered winch, heavy ropes and greased skids. Both the original barn and the cow barn were expanded, with the original barn becoming known as a horse barn. In 1937, the former milk house was converted to a garage and a new milk house was constructed to the east where the original barn had stood. In 1939, the cow barn burned down and was rebuilt with a corrugated steel roof. The dairy farm ceased operating in 1942 and was sold in 1943. The project site currently contains five (5) standing structures:

- Main farm house (471 Park Avenue; Town Historic Structure Form HV52), moved to its present location in 1921 from its former location on opposite side of South Woodhull Street *(currently occupied);*
- Skidmore House (HV87), circa 1680-1725 *(vacant);*
- Moses Rolph House & "old" Swezey farmhouse (171 Woodhull Road; HV89), circa 1687, moved to its present location in 1921 *(vacant);*
- Milk barn *(now transformed into a cottage and currently occupied);* and
- Cow barn and silo, circa 1915 *(vacant).*

Of the various farm structures on the property, only the main farmhouse and the Moses Rolph house were nominated as part of the Town historic district. All four (4) dwellings, as well as the accessory farm structures, are listed on the Town's Historic Sites Inventory, but this listing carries no regulatory requirements.

During a recent site inspection in 2005, an old leaching drain was also found just southeast of the old milk barn and approximately 10 feet east of an existing concrete pad within the delineated forested wetland area. Both structures are likely remnants of the Swezey's dairy farm facility. The drain was approximately 2 feet in diameter, 3 feet in depth and constructed of stacked stone. A 4-inch pipe entered the western side of the drain, but its inlet is not known. Surface water

from the hillside seep in this area was observed entering the drain structure. This area is proposed to remain untouched.

The two structural engineer's reports on the site's existing structures (**Appendix A-4**) indicate that the barn and silo were in very unstable condition and not suitable for reuse:

> The floor to ceiling height in the first floor is approximately 7 feet or less and would be reduced further when the floor is leveled and straightened with a topping slab. This would not meet minimum Building Code requirements.

Additionally, the barn's side walls lack adequate footings and its east wall is facing imminent collapse. The attached silo is in comparably deteriorated condition, with the roof having long ago blown off, causing the silo walls to further deteriorate with exposure to weather.

3.6.2 Anticipated Impacts

Regarding the former Tannery site, the stone and mortar vat will be removed to construct the proposed impoundment area. The Stage I Archaeological Evaluation and Survey recommended mitigation in the form of data recovery excavations, which would include emptying the vat and examining the contents for artifacts. It would also include the completion of a trench on the exterior of the vat to search for evidence of the date and methods of construction. Therefore, the vat will be fully documented in photographs and drawings before its removal, and samples of the vat's stone and mortar will be taken.

The Stage I Survey also recommended that excavation for a proposed drain line, associated with the formerly proposed Tannery Park project, from a proposed stormwater retention basin to the catch basin on Park Avenue be monitored by an archaeologist. The proposed drain line would have crossed the reported location of six huts used by Hessian soldiers during 1779-1783. Shovel tests did not locate any remains of the huts, but indicated fill to a depth of 1.3 feet. *"Since the stream that formerly ran along this side of Park Avenue was converted into a storm drain within the last 50 years, this location most likely has been disturbed, but there is a slight possibility that remains from the huts survive."* However, the currently proposed Kiruv Estates project will not require any disturbance in this area. The proposed grading to construct impoundment area #3 lies farther southwest of the reported location of Hessian huts and no disturbance of potential historic artifacts are anticipated.

The OPRHP has expressed a desire to retain the barn and silo on the property and, in the past, suggested adaptive re-use of this structure (see correspondences included in **Appendix A-7**). However, and in addition to the structural engineer's reports (**Appendix A-4**), this action is not feasible desirable or in keeping with the goals and objectives of the project sponsor for the following reasons:

- The site is privately owned and zoned for residential use under the R-7 zone.
- The barn and silo are not designated historic structures.

- The applicant does not intend to incur the substantial expense of rebuilding or maintaining these deteriorated structures.
- The re-use option is not consistent with the site's zoning or applicant's desires.
- The structural integrity of the buildings is very poor; the feasibility of adaptive re-use is highly questionable.
- The structure is affected by springs of water seeping through the ground within the building.
- The silo is severely degraded and in danger of failure.
- The site is an attractive nuisance and a potential danger from vandalism, fire or physical harm due to the condition of the structures.

Overall, retention of the barn and silo is not considered a viable or desirable option for the site in connection with private development consistent with zoning. The applicant does not intend to retain these deteriorated, dangerous structures in connection with a new residential development.

3.6.3 Proposed Mitigation

- Approximately 0.97 acres of wooded upland will be deeded to the Town of Huntington and improved with the proposed extension of a heritage trail that will continue to the historic Moses Rolph House and Skidmore House on the southwest portion of the property.
- The existing farmhouse and two historic dwellings facing Woodhull Road will be preserved. Deeding the two historic dwellings to the Town will be considered simultaneously with approval of a Subdivision Map for Kiruv Estates.
- The stone and mortar vat will be emptied, examined for artifacts, and fully documented prior to removal. Additionally, its exterior will be searched for evidence of the date and methods of construction.
- The barn and silo will be documented through measurements and photography, and the history of the site will be compiled for education and research purposes.
- Demolition of the deteriorated barn and silo will remove an unsafe site condition.

3.7 Public Health

3.7.1 Existing Conditions

Appendix M contains the Phase Environmental Site Assessment (ESA I) prepared for the project site, to determine the presence of recognized environmental conditions (e.g., improperly closed or abandoned sanitary systems, leaking fuel tanks, vehicle repair spills, storage of regulated materials, etc.) and, if appropriate, recommendations for further study and/or clean-up activities. The following brief description/discussion of the results of that study is taken from the ESA I.

- There were no odors detected or identified from the site reconnaissance, interviews or records review within the interior or on the exterior of the building which would indicate uncontrolled release of hazardous substances.

- There were no pools of liquid on the ground that could contain hazardous substances or petroleum products visually or physically observed or identified from the site reconnaissance, interviews or records review.
- There were no areas of stains or corrosion observed on floors, walls or ceilings visually or physically observed or identified from the site reconnaissance, interviews or records review, except as previously noted.
- There were no pits, ponds or lagoons visually or physically observed or identified from the site reconnaissance, interviews or records review observed on the subject property.
- There were no areas of stressed vegetation visually or physically observed or identified from the site reconnaissance, interviews or records review.

Recommendations

1. The area of the former underground gasoline storage tank located off the northeast corner of the barn should be surveyed using Ground Penetrating Radar (GPR) in order to determine if the tank is present. If a tank is located, soil samples should be collected from around the tank to determine if a prior release has occurred. If no tank is identified, soil samples should be collected from the area of the suspected tank grave and analyzed for the presence of volatile organic compounds.
2. A flow study should be completed in order to identify the discharge point of the sump pumps located in the basement of the main house. Once identified, a soil sample should be collected from the discharge point and analyzed for the presence of semi-volatile organic compounds.
3. The asbestos wrap insulation located in the basement of the main house should be removed and properly disposed of at an approved facility. In accordance with the New York State Department of Labor Industrial Code 56, if any or all of the existing buildings are to be demolished, a complete asbestos survey should be completed for each structure situated on the subject property.
4. The discharge point of the sump pump and the soil situated within the hole of the concrete basement floor of the house located in the southwest corner of the property should be sampled and analyzed for the presence of volatile and semi-volatile organic compounds to determine if the surface soils in the vicinity of the discharge point have been impacted.
5. If one (1) or both of the above ground fuel oil storage tanks located on the east side of the house situated in the northwest corner of the property are not being used, these tank(s) should be removed and properly disposed of.
6. The former cesspools and drywells associated with the building that was razed from the southeastern portion of the property should be properly abandoned.

In response to the above recommendations, the site owner/applicant has prepared an ESA Phase II. The purpose of that document (contained in **Appendix N**) is to ascertain the presence, origin and extent of contamination presented in items 1, 2, 4 and 6. The ESA II utilized the following survey procedures:

GPR Survey

A ground penetrating radar (GPR) survey was conducted in the area immediately adjacent to the northwest corner of the barn present on the subject property. The purpose of this survey was to locate and/or orientate an underground storage tank reported to be present at the in this area of the site. Survey results did not detect the presence of a tank but did show evidence of disturbed subsurface soils which may have been the result of a former excavation. The location of this area was found immediately north of the barns northwestern corner. No other anomalies were identified which would indicate the presence of a tank.

Dye Testing Survey
Dye testing was conducted at the discharge point associated with the sump pumps located in the basement of the main house located on the property. Tracer dye tablets were placed in a containment sock that was tied off at the surface and subsequently inserted into the sump pump pits. Water was then continually flushed into the pits which dissolved the tablets, activated the tracer dye and activated the automatic pumps which transferred the dye colored water to its eventual discharge point. Inspection of potential discharge points revealed that the tracer dye was leaching to the ground surface northeast of the main residence and is presumed to discharge to a leaching field at this location. It should be noted that based on an inspection of this area and interviews with residents in the house, this area is frequently saturated which further indicates that a leaching field is present.

Headspace Analysis Survey
Headspace analysis was performed on the soil samples acquired from each of the soil probes installed adjacent to the underground tank to provide precursory data regarding hydrocarbon contamination. Results of the analysis were used to adjust the sampling program to yield the most accurate and representative results. The [results] indicate no significant hydrocarbon soil-vapor levels. However, the soil sample collected from the western side of the tank detected minor soil vapor readings of 2.7 part per million (ppm) from the soils retrieved at the 3 foot to 5 foot interval. As a result, this sample was submitted to the laboratory for analysis.

The test results led to the following conclusions for the ESA II:

1. The GPR survey conducted in the area of the reported gasoline tank located adjacent to the northeast corner of the barn did not detect the presence of a tank but did show evidence of disturbed subsurface soils which may have been the result of a former excavation. The location of this area was found immediately north of the barns northeastern corner. No other anomalies were identified which would indicate the presence of a tank.
2. Several semi-volatile organic compounds were detected in the sample collected adjacent to the former gasoline tank excavation with fluoranthene, at 232 ug/kg, and benzo-a-pyrene, at 144 ug/kg, being detected above their respective TAGM recommended soil cleanup objectives of 220 ug/kg and 61 ug/kg. As a result a spill should be reported to the NYSDEC and the impacted soils should be excavated and disposed of at an appropriate facility.
3. There were no semi-volatile organic compounds detected in the soils that received discharges from the sump pumps of the main house and southwestern residence which were found to exceed their respective TAGM soil cleanup objectives. As a result, no further work in these areas is recommended as it relates to discharges from these facilities.
4. Several semi-volatile organic compounds were detected in the sample collected from the bare soils in the basement of the southwest residence. Of the compounds detected benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, benzo(a)pyrene and dibenzo(a,h)anthracene were all found to exceed their respective TAGM recommended soil cleanup objectives. As a result, it is recommended that appropriate spill reporting procedures be followed and the soils in this area should be excavated and disposed of at an appropriate facility.

In summary, the two ESAs undertaken for the subject site indicate that, while some contamination has occurred on the subject site as a result of its previous occupants, the types,

extent and intensity of these impacts are limited. The applicant has fully remediated the impacted areas to the applicable requirements of the NYSDEC (see **Appendix F**).

In addition to the above-discussed site contamination issues, off-site public safety and health-related issues include:

- small-scale, localized flooding of Woodhull Road and Park Avenue during and after rainfalls, due to the installation of the drainage pipe and general site runoff; and
- during wintertime, icing of those portions of road discussed above.

It is noted that these safety problems occur on roadways under the jurisdiction of the Town and County, respectively. Therefore, it is the responsibility of these agencies to address these hazards.

3.7.2 Anticipated Impacts

In its EAF Part III prepared for the proposed project (see **Appendix A-6**), the Town Planning and Environmental Review Divisions expressed concerns regarding soil moisture impacts on home structural integrity and resident health and safety, as well as safety concerns associated with a prior on-site drainage system which utilized surface impoundments; the project's stormwater system has been redesigned and no longer includes such a system. Instead, an on-site collection and detention system is proposed, which will minimize on-site recharge of runoff from developed surfaces of the site by overflowing this detained runoff to the public storm sewer system. . The specific concerns noted in that document follow, with brief discussions of those project features that would minimize or eliminate each.

- *Basements, if present, may be flooded due to the close proximity of the impoundments.*

Impoundments are no longer proposed. It is not proposed to provide basements for those units located in the lower northern portion of the site, where the depth to groundwater is low. These units will be built on sealed concrete slabs, thereby eliminating basements or crawl spaces as a potential locus of impact. Use of the collection and detention system for overflow to the off-site public storm sewer system will significantly reduce the amount of runoff recharged on-site, and thereby obviate potential high groundwater and soil moisture problems.

- *Saturated soils may present a long-term drainage problem.*

It should be noted that the groundwater that is the cause of concern is perched water, and is not reflective of the true water table. The proposed stormwater system will reduce potential problems from high groundwater and soil moisture levels by overflowing to the public storm sewer system for recharge off-site. In this way, high soil moisture conditions will be reduced beneath the site, thereby reducing the potential for drainage system operating problems.

- *The building foundations may be rendered unstable due to the close proximity of the impoundments. Prolonged soil or surface water in contact with footers and foundations can weaken soil bearing capacity, and thereby increase wall settlement and form cracks in walls and foundations. Seepage under foundation footers can erode soil, thereby removing support*

and cause walls to drop or crack. Excessive moisture may eventually penetrate and buckle flooring or cause warping, making windows, doors and cabinets difficult to close or open.

If unsuitable soils are found, piles can be driven to provide for proper foundations. Recharge basins and similar drainage system designs, including the proposed collection and detention system, are a feature commonly associated with residential development in the Town of Huntington as well as in Suffolk County. Accepted engineering practice (including use of foundation sealing, impermeable membranes and footing drains with separate drywells) has shown that properly-designed features such as these, upon review and approval of Town and County agencies, do not result in safety hazards such as foundation instability or cracking, soil erosion, floor buckling, etc.

- *The impoundments may be a safety (drowning) hazard for children.*

Impoundments are no longer proposed; the proposed stormwater collection and detention system is an underground system and would not be accessible to children.

- *Mosquitoes hatched in the impoundments may become an annoyance as well as health hazard.*

Impoundments are no longer proposed. The proposed collection and detention system is located underground and would not be accessible to mosquitoes.

- *Saturated soils may cause high humidity in basements and crawl spaces, resulting in surface condensation, mildew, fungi, musty odors and a general unhealthy home environment. High humidity in basements and crawl spaces may result in deterioration of floor joists, beams and sub-flooring, insulation and electrical-mechanical systems.*

Use of an on-site stormwater collection and detention system will reduce the amount of water recharged on-site, which would reduce the level of soil moisture available to impact basements, crawl spaces, etc. In addition, modern HVAC systems are well-suited to address potential basement/crawl space humidity problems and, in conjunction with the foundation waterproofing techniques noted above, minimize the potential for mildew and fungi, as well as impacts to the substructure of the houses

- *As crawl space or basement dampness always moves toward drier upstairs areas, higher humidity will result in costlier heating and air conditioning bill, as larger volumes of living space are affected. In the case of crawl spaces, if the upper-flooring insulation collects moisture or sags from excessive wetness, heating and air conditioning costs are driven higher. Wet basements and crawl spaces reduce the value of a house, at least by the amount that would be required to repair the damage and eliminate the cause of the problem.*

As noted above, several features of the proposed project will minimize the potential for excessive energy costs due to high humidity levels in basements, including: use of modern basement waterproofing techniques; use of a stormwater collection and detention system designed in conformance with Town and County requirements and approvals; and use of modern, energy-efficient HVAC systems.

In summary, based on the applicant's intended use of modern construction techniques commonly implemented elsewhere in the Town and region, these health- and safety-related concerns will be addressed by the proposed project and are not anticipated to result in any significant adverse impacts.

3.7.3 Proposed Mitigation

- Implementation of the measures recommended in the ESA II has eliminated the potential for health-related impacts from soil contamination and asbestos in the buildings to be demolished.

SECTION 4.0

CUMULATIVE AND UNAVOIDABLE IMPACTS, IRREVERSIBLE COMMITMENT OF RESOURCES, GROWTH-INDUCING ASPECTS AND ENERGY CONSERVATION

4.0 CUMULATIVE AND UNAVOIDABLE IMPACTS, IRREVERSIBLE COMMITMENT OF RESOURCES, GROWTH-INDUCING ASPECTS AND ENERGY CONSERVATION

4.1 Cumulative Impacts

This subsection addresses the anticipated cumulative impacts of the proposed project, if any. Cumulative impacts are the potential impacts of a proposed action taken in conjunction with those of other active or anticipated nearby development projects. An analysis of cumulative impacts is generally required within a DEIS when it is expected that multiple projects within the same area may result in a greater cumulative impact than is suggested by an impact analysis of the individual actions. The following subsections describe the pending development projects in the immediate vicinity of the Kiruv Estates site, and discuss the potential for cumulative impacts on individual environmental resources in the area.

4.1.1 Other Pending Projects in the Area

According the Town Division of Planning, an application for the following project in the vicinity of the Kiruv Estates site has been submitted, and whose potential effects are considered herein, along with those of the proposed project:

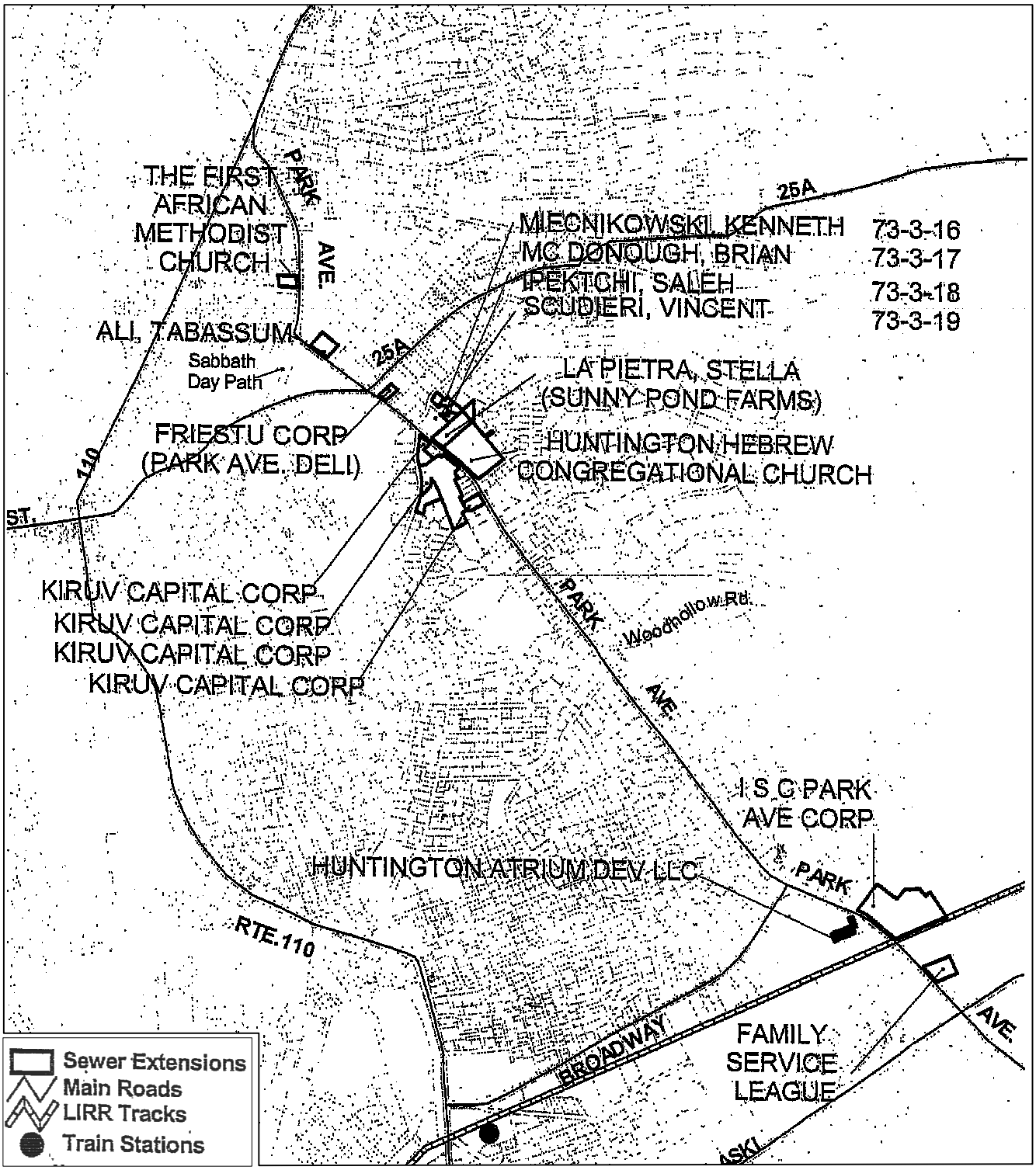
- Sunny Pond Estates, a 5-unit residential project on a site located opposite the subject, across Park Avenue and on the north side of the Huntington Jewish Center and Nursery School, at 478 Park Avenue. This proposal involves the resubdivision of a 1.5±-acre portion of an overall 6.9±-acre property. Sanitary wastewater would be handled by connection to the Town Sewer District. A small (0.05 to 0.10 acres) depression in the northeastern corner of this site has been recommended to the Town for designation as a freshwater wetland. This area holds surface water and supports duckweed (which mallard ducks consume) for significant periods of time.

In addition, the Town Board has received a petition representing a number households in the vicinity seeking permission to access an extension of the Town Sewer District along Park Avenue to serve either or both the proposed project and Sunny Pond Estates; septic systems on these area lots currently experience operational problems due to high groundwater. It should be noted that, as the existing Huntington Jewish Center and Nursery School is connected to the Town Sewer District (which treats its sanitary wastewater under contract with the district), extension of the district would not require installation of any new piping beneath Park Avenue, other than lateral connections from individual lots or street connections.

The Town Department of Environmental Waste Management states that inquiries from sponsors of numerous other commercial and residential projects had approached the Town regarding extension of the sewer district southward along Park Avenue prior to submittal of the Kiruv Estates application (see **Figure 15**). This revelation documents that a need for such an extension had been established before the Kiruv Estates application was submitted. As discussed in

FIGURE 15

PARK AVENUE CORRIDOR SEWER EXTENSION REQUESTS



Source: Town of Huntington Department of Planning & Environment
Scale: Not to Scale

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Section 1.3.4, the district is currently preparing (with H2M) a sewer capacity study which, presumably, includes consideration of pending, proposed and likely future development in those areas to be served by expanded district facilities. This inclusion ensures that the potential impacts of the above-noted commercial and residential projects are examined comprehensively and not on a case-by-case basis. As the study was initiated after the Kiruv Estates application was submitted to the Town, it is expected that the flow needs of Kiruv Estates are included in the study.

4.1.2 Geological Resources

The projects will require grading, but this would be expected in conjunction with any residential development. On a regional basis, all development projects are subject to Town zoning and policy standards to minimize disturbance of steep slope areas, seek to balance cut and fill quantities, and minimize potential for erosion. Potential cumulative impacts to soils typically include loss of prime agricultural soils or removal of other sensitive native soils, which will not occur under the proposed project. The potential for erosion of soils during construction will be controlled by adherence to applicable Town requirements, which are contained in its Erosion Control Handbook, as well as by the NYSDEC, through its SWPPP.

Extension of the Huntington Sewer District (and associated subsurface connections to it) would not significantly impact geological resources in the vicinity of these two projects, as the roadways and roadbeds are already disturbed, and the new connections would not be buried to a significant depth.

In summary, the geological impacts of these projects will be limited to each site, and no significant cumulative impacts to soil or topographic resources of other properties are expected.

4.1.3 Surface and Groundwater Resources

Impacts to groundwater quality are regulated through the SCDHS, which limits discharge of nitrogen and other wastes into groundwater. The groundwater quality in the vicinity of the site is good under existing conditions, and the additional contribution of nitrogen by these cumulative proposals will not be significant, particularly as they would seek to utilize the public sanitary system. In fact, existing homes which now have sanitary systems or are not functioning properly will result in reduced groundwater impacts if permitted to connect to the sewer district.

Potential impacts to surface waters were also considered in this document, as the site contains freshwater wetlands and Sunny Pond Estates contains a small area that has been nominated for Town wetland listing. Although these surface waters are localized features, cumulative impacts to natural drainage patterns are of concern since uneven topography (and uneven surface water flow patterns associated with it) is prevalent in the area. However, as a result of prior site disturbances and development, the surface and groundwater regimes of the systems on these two

sites are already highly altered; the developed surfaces within the drainage/stormwater contributing area to these surface water bodies may already contain pollutants.

The projects will conform to Town requirements to retain and recharge runoff on-site, thereby minimizing potential impacts to groundwater quality and, more particularly, to the water budgets of the existing wetlands on each site. In addition, the projects will conform to NYSDEC requirements to avoid impact to wetlands or their respective hydrologic conditions, by obtaining permits and providing wetland setbacks and retention of buffering vegetation. Finally, use of public sanitary and stormwater sewers for removal and off-site treatment will eliminate a major source of potential impact to the wetlands on and groundwater beneath these sites. As a result, cumulative impacts to surface and groundwater resources are not expected.

4.1.4 Wildlife and Ecological Resources

The majority of the Sunny Pond Estates site is already impacted, as it had been cleared and is now open lawn area, except for the area of the nominated wetland; the portion of the Kiruv Estates site to be developed is primarily disturbed with some areas vegetated with trees and groundcovers. As a result, only the Kiruv property will require removal of some existing vegetation. However, as discussed elsewhere in this document, ecological value of the Kiruv Estates site will be maintained since more than half of the site will be permanently preserved and protected in NYSDEC-regulated wetland setbacks, conservation areas and future Town-owned lands. As a result, cumulative impacts will be minimized since there will be significant areas of forested upland, emergent marsh and wetland forest preserved for the continued use of wildlife.

Extension of the Town Sewer District along Park Avenue would not impact ecological resources in the vicinity, as excavations would take place in developed portions of lots and in established streets, and would not impact undeveloped or naturally-vegetated areas.

Therefore, the loss of some upland habitat on these sites should not be significant on a regional scale, and no cumulative ecological impacts are expected.

4.1.5 Land Use, Zoning and Plans

Implementation of either or both of the Sunny Pond Estates and Kiruv Estates applications, as well as an extension of the Town Sewer District, would incrementally increase the potential to develop other sites in the vicinity, though the magnitude of the increase would not be significant, as each application is for a relatively small yield (5 and 9 new units, respectively), and the sewer district extension would not go beyond the existing sewer main at the Huntington Jewish Center and Nursery School. Neither of the two applications addressed in this analysis request a land use inappropriate for their site or in consideration of land uses adjacent or nearby, and no impact on the pattern of land use in the area would be expected.

The proposed project includes deeding of land to the Town. Within this area, the Town would be able to extend its heritage trail to the two historic structures on the site, which will also be deeded to the Town. This trail is presently packed earth, and is not improved. According to Town Historian Robert Hughes (personal communication, September, 2005), the Town intends to acquire ownership of all the land needed to complete this trail (which may terminate in Heckscher Park) prior to improving the trail. Such improvements may include interpretive signage, but would not include paving or lighting. The alignment shown in the **Overall Layout Plan** would require that the trail approach to within approximately 30 feet of two of the residences; according to the Town Historian, such a setback is experienced elsewhere along the trail, and is not perceived to be an adverse impact by the affected residents. In general, the Town would be responsible for conforming to appropriate design and construction standards for any trail improvements.

As neither application requires a change in zoning, there would be no adverse impacts on zoning character of either site or in the vicinity. Most of the area surrounding the subject sites is developed, and there is relatively little vacant land available for new development in the area; most new development would be by infilling of smaller residentially-zoned properties which dominate the area. Any other type of development would require alteration of existing uses, which may require rezonings, variances or Special Use permits. Thus, it is unlikely that there will be any significant cumulative zoning impacts.

The Town Comprehensive Plan Update (1993) indicates medium-density residential use for the Kiruv Estates property and high-density residential use for the Sunny Pond Estates site**.** The Sunny Pond Estates site use is consistent with this plan and Kiruv Estates represents a medium density development, at 1.4 units/acre, and more than one-half of the Kiruv site will remain as open space or be accessible for recreational/cultural use.

If the Town Sewer District were extended to serve the area of the subject site as well as areas to the south along Park Avenue, connection to this utility by other sites (particularly those of the homeowners' petition) might impact the land use, zoning and/or Town planning conformances of the area. That is, the availability of public sewers may lead to developments having yields in excess of that allowed under SCSC Article 6 if on-site septic systems were the only available treatment option. The potential for development in conformance with lesser Article 6-conforming yields would also be increased simply due to the availability of public sewers. However, as the demand for sewer extension was established prior to the Kiruv Estates project (see **Section 4.1.1**), the proposed project has not initiated this growth, but is a response to an already-established need for sewer district expansion.

4.1.6 Community Character

The visual environment along Park Avenue is characteristic of a curving roadway through a medium-density suburban residential area with intermittent wooded slopes. The existing residences are readily visible from this roadway. The appearance of these homes varies considerably, in terms of lot areas, colors, building materials, sizes, heights, ages and presence,

amount and density of retained natural vegetation. Each of the two proposed projects would be designed and landscaped to provide an architecturally cohesive result that would complement the general visual environment of the area. Where practicable, natural vegetation on each site would be retained and preserved, to be incorporated into each project. Extension of the Town Sewer District would not significantly affect the visual appearance of the sites or the vicinity, as connection would be buried. Thus, cumulative impacts to the visual quality of the area are not expected.

As the area is already developed, and therefore has a characteristic noise generation pattern, cumulative noise impacts are expected to be negligible since either project is residential in nature and would not generate noise dissimilar to the existing noise environment. Sewer District extension would also not result in cumulative impacts, as (outside of construction) would not generate noise at all.

4.1.7 Community Services

These projects are expected to have a positive impact on public services such as fire and police protection, as there will be an increase in tax revenues with a minimal increase in demand for their services. In addition, deeding of two homes on the site will provide increased Town recreational facilities, and availability of land for an extension of a Town historic trail. This will increase and extend this public recreational resource, while preserving and protecting the wetlands, which will also enhance natural resource protection and character in the immediate community.

However, the Huntington UFSD may be subject to a small number of new students without an increase in school district tax allocations sufficient to fully offset the cost to educate these new students. The increased demand for utility services (i.e., water supply, energy, wastewater treatment and waste removal) may have significant cumulative impacts, but the affected service providers would have sufficient capacity and capability to serve the sites and tax revenue would be available to help offset the demand for services. As a result, significant adverse cumulative impacts are not expected.

4.1.8 Transportation Resources

The proposed projects will generate only minimal traffic and, as the number of new residences which may be built as a result of the availability of public sewers would not be extensive, significant cumulative traffic impacts are not expected.

4.1.9 Cultural Resources

Cultural resources have been established for both the Sunny Pond Estates and Kiruv Estates sites, and both sites are within the Town Old Town Green Historic District and are listed on the

National Register of Historic Places. However, the specific resources on each site are not associated with the areas to be developed (the historic structures on Kiruv Estates to be removed are in a state of disrepair and have been approved for demolition). If the Town Sewer District were extended to serve these sites and area, no adverse impacts to cultural resources are anticipated, as impacts for this action would take place in disturbed (roadbed) areas, and would not be visible. Therefore, neither local nor cumulative impacts to cultural resources will occur.

4.1.10 Public Health

The results of the ESA II undertaken for the subject site (see **Section 3.7.1**), indicates the following:

1. A GPR survey to verify the presence of a gasoline tank adjacent to the barn did not detect the presence of such a tank, but did show evidence of disturbed subsurface soils, which may be the result of a prior excavation. No other anomalies were identified which would indicate the presence of a tank.
2. Several semi-volatile organic compounds were detected in the soil sample collected in the area adjacent to this reported gasoline tank location. As a result, the presence of this spill should be reported to the NYSDEC and the impacted soils should be excavated and disposed of at an appropriate facility.
3. No semi-volatile organic compounds were found to exceed their respective TAGM soil cleanup objectives in the soils that received discharges from the sump pumps of the main house and southwestern residence. As a result, no further work in these areas is recommended.
4. Several semi-volatile organic compounds were detected in the sample collected from the bare soil in the basement of the southwest residence, of which six were found to exceed their respective TAGM recommended soil cleanup objectives. As a result, it is recommended that appropriate spill reporting procedures be followed and the soils in this area should be excavated and disposed of at an appropriate facility.

In consideration of the above site-specific investigations and remediation measures, it may be concluded that there are no significant contamination issues related to the subject site, indicating that no cumulative adverse impacts to public health would occur.]

Off-site public safety and health-related issues are associated with a portion of the drainage originating on the subject site flooding (and freezing in the wintertime) portions of Woodhull Road and Park Avenue. However, these safety concerns are associated with roadways under the jurisdiction of the Town and County, respectively, so that the responsibility to address these impacts rests with these entities. In addition, the proposed project includes a drainage system designed to eliminate this escape of runoff, so that this impact will be eliminated. Thus, the combination of eliminating the impact and public agency responsibility to address this impact results in the elimination of cumulative impacts.

Finally, concerns related to high groundwater and surface water conditions were noted. It should be noted that these problems are associated with inadequate prior building construction techniques and designs, and would be addressed by modern construction solutions including, but

not limited to, elimination of basements or crawl spaces, waterproofing of foundations, installation of properly-designed and reviewed site-wide drainage systems, and use of foundation supports and HVAC systems. Based on the applicant's intended use of modern construction techniques commonly implemented elsewhere in the Town and region, these health- and safety-related concerns will be addressed by the proposed project and are not anticipated to result in significant cumulative impacts.

4.2 Adverse Impacts of the Project that Cannot be Avoided

The site has been characterized, and the potential impacts to the existing site have been assessed. Some impacts may still exist for which no mitigation is available. The impacts themselves have been quantitatively and qualitatively discussed in previous sections of this document. The impacts of the proposed project will be minimized where possible, but this subsection acknowledges those impacts that may still occur:

- Temporary increases in the potential for fugitive dust and construction traffic and noise during the construction period.
- Grading and filling operations will occur on the elevated central portion of the site, which will permanently alter the natural topography in this area.
- Reduction on the volume of recharge generated on the site; however, this reduction is not anticipated to result in any significant impact on the existing wetlands on the site's eastern boundary.
- Removal of approximately 30% of the 3.10 acres of natural vegetation now found on the site.
- Displacement and/or loss of forest interior species and those species unable to adapt to human influences.
- Incremental increase in vehicle trips generated on the site and on area roadways.
- Incremental increase in the number of school-aged children who may attend the Huntington UFSD.
- Removal of the deteriorated barn and silo.

4.3 Irreversible and Irretrievable Commitment of Resources

This subsection is intended to identify those natural and human resources discussed in **Sections 2.0 and 3.0** that will be consumed, converted or made unavailable for future use as a result of this project. The development of the proposed project will result in irreversible and irretrievable commitment of resources. The impact of this commitment of resources is not anticipated to be significant, as the magnitude of these losses is not substantial.

- Removal of approximately 0.93 acres of natural vegetation on the site.
- Reduction of that portion of the existing surface and groundwater flow reaching the wetlands on the site's eastern and northern areas, due to grading and development of the elevated central portion of the site.
- Material used for construction on the site, including but not limited to: wood, asphalt, concrete, fiberglass, steel, aluminum, etc.

- Energy and resources used in the operation and maintenance of this project, including fossil fuels, electricity and water.

4.4 Growth-Inducing Aspects

Growth-inducing aspects of a project are those characteristics that may promote further development in an area. A project can be assessed in terms of primary impacts and secondary impacts. For residential projects, primary impacts would arise from a significant influx of new residents (or, new consumers) to an area. In this sense, Kiruv Estates will not cause growth in the area, as it is a small (nine units) project in comparison to the overall level of development in the area as well as of the amount of pending or potential additional growth (see **Section 4.1.1**).

The primary impacts that may occur include the creation of temporary construction jobs. In the short-term, a limited number of construction jobs will be directly created, and a few indirect jobs may be created based on increased patronage of material suppliers. These job opportunities will not require relocation of specialized labor forces or an influx of large businesses from outside the area to provide construction support. The proposed project would have no long-term job implications, as it does not include new jobs. As a result, construction-related growth-inducing aspects of the proposed project are expected to be insignificant.

Development of the site will result in an incrementally increased usage of utilities. Electrical service is generally available throughout Long Island, and water mains are adjacent to the site; therefore, significant expansions of these utilities are not expected. Expansion of the existing Town Sewer District to include the subject site, or access to the existing sewer main serving the Jewish Center across Park Avenue, or an extension of a sewer main to serve the site (to then utilize the district through a contract) would represent a potential growth-inducing aspect, as other properties in the vicinity that could not otherwise be developed due to an inaccessibility to sanitary treatment would become more apt to be developed or subdivided. This effect may include the twelve properties southward along Park Avenue to the LIRR tracks (where inquiries for sewer extensions have previously been made). It should be remembered that any such sewer district expansions, as well as of connections to the district, would remain under the complete control of the Town Board. The proposed project may lead to the improvement of community services in the area as stimulated by the increased taxes generated by the project. This will add to the fabric of the community and support existing programs and special districts without adding significantly to growth potential. Subdivisions of other sites is speculative and would remain under the jurisdiction of the Town Board, which would retain discretionary authority to approve or deny each subdivision application on a case-by-case basis.

In summary, the proposed project does not include significant primary growth-inducing aspects, though it may present a secondary growth-inducing aspect associated with sewage treatment. It must be noted that access to an extended Sewer District or public sewer main would remain under the authority of the Town Sewer District, whose discretionary power would not be affected by the proposed project. Therefore, the proposed project is not in itself anticipated to cause significant growth in the community.

4.5 Effects on the Use and Conservation of Energy Resources

An increase in the consumption of energy resources would typically be expected from the intensification of land use on a site, particularly for a site which had been undeveloped or unused. Use of new, energy-efficient building materials (e.g., insulations, windows, weather stripping, door seals, etc.) and mechanical systems, (e.g., air conditioners, heating systems, HVAC systems, water heaters, heat pumps, etc.) is anticipated, which would minimize the amount of energy resources required. Incorporation of such energy-conserving measures is not only required by New York State, but is a sensible homebuilding practice, particularly in light of the increasing cost of energy resources. It is expected that existing public utilities at the site will be more than adequate to meet the expected demand.

There will be an increase in energy use during the construction phase of the proposed project. These impacts are expected to be of short duration, and the long-term energy demand is expected to remain stable or decline. The proposed project will utilize energy efficient design standards to minimize energy consumption at the site. The buildings will be constructed in conformance with New York State and Town building codes, which require adequate insulation as well as other design standards that would minimize energy use. Water-saving plumbing fixtures can be specified for the proposed buildings in accordance with current building requirements and practice of the trade. Installation of low-flow toilets, showers, sinks and equipment would reduce unnecessary water loss, which would translate into conservation of the energy resources required to heat this water.

In summary, it is not anticipated that the project will result in any significant adverse impacts on the use and conservation of energy resources.

SECTION 5.0

ALTERNATIVES

5.0 ALTERNATIVES

SEQRA requires the investigation of alternatives to a proposed project in order to determine the merits of the project as compared to other possible uses, site locations and technologies. The discussion and analysis of each alternative should be conducted at a level of detail sufficient to allow for the comparison of various impact categories by the decision-making agencies. For this document, the alternatives include the following:

1. Alternative 1: site stays in its existing use and condition, occupied by a house and a cottage.
2. Alternative 2: site is occupied by 10 homes in a modified cluster design; the house would be retained, the cottage would be removed, and 9 new detached units would be built, with a 2.46-acre conservation area, heritage trail extension and 0.51 acres of historic area (including two historic houses) deeded to the Town; sanitary and drainage systems would be used.
3. Alternative 3: the site is occupied by10 homes; (the house would be retained, the cottage would be removed, and 9 new attached units would be built), with a 2.98-acre conservation area, heritage trail extension and 0.71 acres of historic area (including two historic houses) deeded to the Town; on-site septic and recharge systems would be used.
4. Alternative 4: the site is occupied by10 homes; it incorporates the house and the two historic houses (after renovations), relocates the cottage out of the proposed dedicated area to the developed area (for reuse as a community center), provides 2.62 acres of conservation area, heritage trail extension and utilizes the Town sewer system.
5. Alternative 5: the site is occupied by 10 homes as a conventional subdivision, of which 3 existing houses would be located on separate lots and 7 new houses would be built; individual septic systems would be used. There would be a public parkland dedication but no heritage trail extension.

Plans for Alternatives 2-5 are attached; each of these alternatives provides for 10 homes, while Alternative 1 retains the two existing occupied residences. **Table 5-1** presents a quantitative listing of relevant site and development characteristics for each of the above alternatives, along with those of the proposed project, to enable comparisons.

5.1 Alternative 1: No Action

The subject site is in private ownership and is zoned for residential use. Currently the site is developed with two unoccupied, historic residential structures (the Skidmore House to the north and Moses Rolph House to the south), an occupied rental residence (the former main farm house, at 471 Woodhull Road) and an occupied rental cottage (formerly the milk house), along with a cow barn and silo (in a state of severe disrepair). If the site is not developed and remains in its existing condition and use, no new residences would be built, the two existing residential units will continue to be rented or remain vacant, and the barn and silo will remain in a hazardous state of disrepair. The proposed conservation area to preserve and protect the wetlands will not be implemented, and the deeding of land for extension of the heritage trail and historic house preservation would not occur. The site would remain privately-owned and underutilized; however, the site could possibly be redeveloped in the future in accordance with zoning. As the

Table 5-1
COMPARISON OF ALTERNATIVES

Parameter	Proposed Project	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Use/Yield	10 homes, as 1 retained house & 9 new attached units; public sewers	2 homes, as 1 house & 1 cottage; on-site septic systems	10 homes, as 1 retained house & 9 new houses; on-site septic systems	10 homes, as 1 retained house & 9 new attached units; on-site septic systems	10 homes, as 3 retained houses & 7 new attached units; public sewers	10 homes, as 3 retained houses & 7 new houses; on-site septic systems
Coverages (acres):	---	---	---	---	---	---
Buildings	0.41	0.24	0.36	0.41	0.35	0.36
Paved	0.59	0.02	0.47	0.59	0.36	0.58
Gravel/Pervious	0.02	0.12	0.02	0.02	0.02	0.02
Mapped Wetlands	0.89	0.89	0.89	0.89	0.89	0.89
Lawn (1)	2.06	1.77	1.91	3.06	1.03	3.60
Successional Forest	3.10	4.03	3.42	3.33	4.42	1.62
Trip Generation (vph)**:**	---	---	---	---	---	---
AM Peak Hour	8	1	8	8	8	8
PM Peak Hour	10	1	10	10	10	10
Water Resources:	---	---	---	---	---	---
Domestic Water (gpd, 2)	3,000	600	3,000	3,000	3,000	3,000
Recharge (MGY)	1.95 (3)	3.88 (4)	5.07 (5)	5.81 (6)	3.89 (7)	5.15 (8)
Nitrogen Conc. (mg/l)	0.0 (3)	2.33 (4)	8.87 l (5)	7.75 (6)	0.01 (7)	8.73 (8)
Miscellaneous:	---	---	---	---	---	---
Residents (9)	28	7	38	28	29	37
School-age children (10)	5	2	12	5	5	11
Solid Waste (lbs/day 11)	171	42	230	171	176	223

(1) To minimize nitrogen concentration in recharge, assumed irrigated @ 5.5 inches/year, but not fertilized.
(2) Based on SCDHS design rate of 300 gpd/unit.
(3) See **Appendix B-3**.
(4) See **Appendix B-2**.
(5) See **Appendix B-4**.
(6) See **Appendix B-5**.
(7) See **Appendix B-6**.
(8) See **Appendix B-7**.
(9) Based on 3.14 capita/unit for 3-bedroom detached units, 2.67 capita/unit for 3-bedroom attached units, and 3.83 capita/unit for 4-bedroom detached units.
(10) Based on 0.64 school-aged children for 3-bedroom detached units, 0.35 capita/unit for 3-bedroom attached units, and 1.12 capita/unit for 4-bedroom detached units.
(11) Based on 5 lbs/day per capita plus 1 lb/bedroom/day.

Town has zoned the site for residential development, it is assumed that the Town anticipates that it could and would be developed in this manner at some time, particularly in consideration of the attractiveness of this site for such a use. If left undisturbed, the site will generate little traffic, solid waste or wastewater; it would use a minimal amount of potable water, and would not generate employees or new residents. There would continue to be little enrollment impact to the Huntington UFSD, as no new school children would be generated. A total of 3.88 MG of recharge would be generated on the site annually at a nitrogen concentration of 2.33 mg/l. Use of the four septic systems would continue.

If the project site were to remain undisturbed and in its present condition and use, the goals of the applicant and owner would not be realized. In comparison to the proposed project, this alternative would not satisfy the goals of the Town, in that permanent preservation of natural open space would not result, as the property would still be available for some future development unless acquired by the Town.

This alternative would result in the retention of existing historic and non-historic structures as well as the barn and silo. The structures would, however, be subject to further deterioration, continued attractive nuisance, danger, fire hazard and eventual collapse. These structures are not part of the proposed development, as the applicant does not wish to retain any structures other than the non-historic house. The project will result in deeding to the Town of two (2) historic homes on Woodhull Road; however, the only viable means of retaining the barn, silo and milk house is through Town acquisition at substantial expense with additional substantial expense to stabilize and re-build these structures. The applicant has negotiated with the Town for partial acquisition as is proposed and discussed in **Section 1.1.2**. The applicant is not aware of any other efforts to acquire other parts of the property. As a result, the No Action and Modified No Action (acquisition) alternatives are not found to be viable and are not in keeping with the objectives of the project sponsor.

5.2 Alternative 2: Modified Cluster Subdivision, On-Site Septic Systems

This alternative assumes a total of 10 lots with substantial common areas and land preservation; 9 new lots would be created and a tenth lot would accommodate the existing dwelling. As in the proposed project, the milk house and barn/silo would be removed, and the two existing historic houses, along with the 0.51 acres surrounding them, would be deeded to the Town. This open space would provide publicly-accessible parkland for the Town, by enabling the Town to extend its heritage trail to the two historic homes, and provide a valuable public recreational amenity. It should be noted that significant Town recreation and open space properties are also located in the immediate vicinity.

Similar to the proposed project, re-use of the barn and silo would not be feasible in this alternative in consideration of the following:

- The site is privately owned and zoned for residential use under the R-7 zone.
- The barn and silo are not designated historic structures.

- The applicant does not intend to incur the substantial expense of rebuilding or maintaining these deteriorated structures.
- The re-use option is not consistent with the site's zoning or applicant's desires.
- The structural integrity of the buildings is very poor; the feasibility of adaptive re-use is highly questionable.
- The barn structure is affected by springs of water seeping through the ground within the building.
- The silo is severely degraded and in danger of failure.
- The site is an attractive nuisance and a potential danger from vandalism, fire or physical harm due to the condition of the structures.

Overall, retention of the barn and silo is not considered a viable or desirable option for the site in connection with private development consistent with zoning.

This alternative represents a modified clustered-lot design which, as described in **Section 1.3.1,** would be allowed under NYS Town Law. In this way, 2.46 acres of the valuable wetlands area on the eastern portion of the property would be preserved (in a conservation area by conservation easement), though the southernmost portion would be located within Lot 5. This latter area would remain undisturbed, however, by inclusion in the conservation area. However, the analysis also indicates that this alternative would result in a lesser amount of preserved area than the proposed project: 2.97 acres vs. 3.95 acres. In addition, because a number of the units have to be sited along Woodhull Road, their visibility from that roadway would contribute to an overall reduction in the aesthetic quality of the property and surroundings.

Similar to the proposed project, this alternative would not require fill to be imported to the site; a larger volume of soil would be graded than would be needed for fill. The applicant would retain and reuse as much of the excavated soil on-site as possible. In this way, the need to bring soil in to the site will be eliminated, while minimizing potential truck trips needed to remove any excess soil. It is expected that a sufficient volume of soil will be excavated to enable proper vertical separations between groundwater and the leaching pools associated with the drainage and septic systems of this alternative. The SCDHS and Town would review site plans for this alternative, and would require their approvals of the sanitary and drainage system designs. Groundwater beneath the site is "perched", and does not represent the true groundwater table; the impervious material which created this perched water would be penetrated by excavations for the drainage and septic systems (as is the case for the drainage systems of the proposed project), so that properly functioning leaching systems would be installed.

It should be noted that this alternative assumes that connection to the Huntington Sewer District would not occur. As a result, the need to provide for effective septic system operation necessitates locating the new units in the higher elevations found along the southwestern and southern portions of the property. The water table beneath the subject property ranges from approximately 4-69 feet bgs due to surface elevation changes; however, this depth is sufficient to ensure proper operation of the septic systems provided proper design and installation methods are employed. Design and installation of the septic systems would take place under the review authority of the SCDHS.

The same 3,000 gpd of sanitary wastewater as in the proposed project would be generated. To indicate the extent of measures necessary to minimize nitrogen concentration in recharge, it is assumed that the 1.91 acres of lawn would not be fertilized but would be irrigated; this assumption is the same as that assumed for the site's existing condition and for the proposed project. As a result, sanitary wastewater would be the primary source of nitrogen in recharge, resulting in an overall site-generated recharge volume of 5.07 MGY, having a nitrogen concentration of 8.87 mg/l. It should be noted that this would represent a significant increase in nitrogen concentration compared to existing conditions, and would be close to the NYS Drinking Water standard of 10 mg/l.

The single vehicle access point would also be moved southward along Woodhull Road, to be located between the two historic residence to be deeded to the Town; however, locating the access point in close proximity to these houses would incrementally reduce the quality of these structures as historic resources for the Town. Sight lines at this access are anticipated to be adequate, with little clearing of vegetation necessary. Provision of a 30-foot wide internal roadway conforms to Town requirements for a privately-owned roadway; the site will be owned and maintained by an HOA.

Because the units assumed for this alternative are larger and somewhat different than those of the proposed project (4-bedroom, detached units versus 3-bedroom attached units), the total population, school-age children, solid waste generation, and community services characteristics and impacts are increased in comparison to those of the proposed project, though the same values for trip generation are anticipated.

In consideration of the above factors (and particularly sanitary wastewater impacts on groundwater quality), it may be concluded that neither the applicant nor the Town would consider this alternative as preferable to the proposed project**.**

5.3 Alternative 3: Proposed Project with On-Site Septic and Recharge Systems

This alternative also assumes a total of 10 units with substantial common areas and land preservation; 9 new units would be created and the existing house would be retained as the tenth unit. As in the proposed project, the milk house and barn/silo would be removed, and the two existing historic houses, along with the 0.71 acres surrounding them, would be deeded to the Town. This open space would provide publicly-accessible parkland for the Town, by enabling the Town to extend its heritage trail to the two historic homes, and provide a valuable public recreational amenity. It should be noted that significant Town recreation and open space properties are also located in the immediate vicinity. This alternative would be a condominium project like the proposed project; an HOA would own the common areas and roadway, and would provide maintenance of the site.

Similar to the proposed project, re-use of the barn and silo would not be preferable in this alternative in consideration of the reasons noted in **Section 5.2**.

Overall, retention of the barn and silo is not considered a viable or desirable option for the site in connection with private development consistent with zoning.

A total of 2.46 acres of the valuable wetlands area on the eastern portion of the property would be preserved (in a conservation area by conservation easement), and another 0.71 acres (including the two historic homes) would be deeded to the Town. This alternative would result in a lesser amount of preserved area than the proposed project: 3.17 acres vs. 3.95 acres. In addition, because a number of the units have to be sited along Woodhull Road, their visibility from that roadway would contribute to an overall reduction in the aesthetic quality of the property and surroundings. Retaining walls would be required to minimize the amount of grading required.

This alternative would also not require importation of fill; more soil would be graded than would be needed for filling purposes. The applicant would reuse as much of the excavated soil as possible, which would eliminate the need to bring fill to the site, and thereby minimize truck trips needed to remove any excess material. It is expected that enough soil would be available to ensure that there would be sufficient depth beneath the drainage and septic systems to meet the applicable Town and SCDHS requirements. The SCDHS and Town would review site plans for this alternative, and would require their approvals of the sanitary and drainage system designs. Since groundwater beneath the site is perched, it does not represent the true groundwater table; the impervious material which created this perched body would be penetrated by excavations for the drainage and septic systems of this alternative to ensure properly functioning systems.

It should be noted that this alternative assumes that connection to the Huntington Sewer District does not occur. As a result, the need to provide for effective septic system operation necessitates locating the new units in the higher elevations found in the southwestern portion of the property. The water table beneath the subject property ranges from approximately 4-69 feet bgs due to surface elevation changes; however, this depth is sufficient to ensure proper operation of the septic systems. Design and installation of the septic systems would take place under the review authority of the SCDHS.

The same 3,000 gpd of sanitary wastewater as in the proposed project would be generated. As was assumed for Alternative 2, the 3.06 acres of lawn would not be fertilized, though irrigated (at a rate of 5.5 inches annually). As a result, sanitary wastewater would be the primary source of nitrogen in recharge, resulting in an overall site-generated recharge volume of 5.81 MGY, having a nitrogen concentration of 7.75 mg/l. It should be noted that this would represent a significant increase in nitrogen concentration compared to existing conditions, and would be close to the NYS Drinking Water standard of 10 mg/l.

The single vehicle access point would also be moved southward along Woodhull Road, to be located between the two historic residence to be deeded to the Town; however, locating the access point in close proximity to these houses would incrementally reduce the quality of these structures as historic resources for the Town. Sight lines at this access are anticipated to be adequate, with little clearing of vegetation necessary. Provision of a 30-foot wide internal

roadway conforms to Town requirements for a privately-owned roadway; the site will be owned and maintained by an HOA.

Because the number and type of units assumed for this alternative are the same as those of the proposed project (3-bedroom, attached units), the total population, school-age children, solid waste generation, community services and trip generation characteristics and impacts are the same as those of the proposed project.

In consideration of the above factors (particularly sanitary wastewater impacts on groundwater quality), the applicant does not prefer this alternative to the proposed project and anticipates, based on the Town's goal to provide for appropriate development, that the Town would likewise not consider this alternative to be preferable to the proposed project**.**

5.4 Alternative 4: 10-unit Sewered Development, Retaining 3 Houses

This alternative also assumes a total of 10 units with substantial common areas and land preservation; 7 new units would be built, the 2 existing historic houses, and the existing dwelling would be retained as the tenth unit. Unlike the proposed project, the milk house would be retained in this alternative, to be moved westerly toward Woodhull Road (to serve as a community center); only the barn/silo would be removed. The two existing historic houses would be renovated for residential use in this alternative. Open space would include 2.62 acres of publicly-accessible parkland for the Town, and would enable the Town to extend its heritage trail to Park Avenue, thereby providing valuable public recreational amenities. It should be noted that significant Town recreation and open space properties are also located in the immediate vicinity. This alternative would be a condominium project like the proposed project; an HOA would own the non-dedicated common areas and roadway, and would provide maintenance of the site. This alternative assumes connection to the Town sewer system for wastewater treatment. The on-site drainage system would provide for 2 inches of storage from roofs and 6 inches of storage for the remainder of the developed portion of the property.

In comparison to the proposed project, this alternative would result in:

- less building coverage;
- less paved surfaces;
- less landscaped area;
- more natural area retained;
- a greater volume of recharge;
- a similar nitrogen concentration in recharge; and
- similar amounts of gravel/pervious surfaces, wetlands retained, trip generation, water use, solid wastes and residents.

Similar to the proposed project, re-use of the barn and silo would not be feasible in this alternative in consideration of the factors listed in **Section 5.2**.

Overall, retention of the barn and silo is not considered a viable or desirable option for the site in connection with private development consistent with zoning.

A total of 2.62 acres of the eastern portion of the property, including the wetlands and adjacent area, would be preserved (in a conservation area by conservation easement). This alternative would result in a lesser amount of preserved area than the proposed project: 2.62 acres vs. 3.95 acres. However, the preserved open space in this alternative is located in one contiguous bloc rather than distributed into two disjointed parcels as in the proposed project. In addition, all of the preserved open space in this alternative is wetlands and/or naturally-vegetated land, while the preserved open space in the proposed project includes 0.97 cares of previously-developed land, occupied by the two historic structures; the Town has indicated that the configuration in this alternative is preferred. Because the number and distribution of the units that would be sited along Woodhull Road is similar to that of the proposed project, their visibility from that roadway would be comparable to that of the proposed project. A total of 400 feet of retaining walls would be required in this alternative, to minimize the amount of grading required; this is approximately half of the amount of retaining walls for the proposed project.

Similar to the proposed project, this alternative would not require fill to be imported to the site; a larger volume of soil would be graded than would be needed for fill. The applicant would retain and reuse as much of the excavated soil on-site as possible. In this way, the need to import soil to the site would be eliminated, while minimizing potential truck trips needed to remove any excess soil. The SCDHS and Town would review site plans for this alternative, and would require their approvals of the sanitary connection and drainage system designs. The Town Engineering Department has requested that a soil boring be placed in the location of the drainage system, to establish that acceptable soil conditions are present beneath the site. This boring will be installed prior to the preparation of the FEIS, so that the results will be described and discussed in that document. It should be remembered that approval of the drainage system will be conducted as part of the site plan review process conducted by the Town of Huntington.

It should be noted that this alternative assumes that connection to the Huntington Sewer District occurs. As a result, the need to provide for effective drainage system operation necessitates locating the new units in the higher elevations found in the southwestern portion of the property, and placing the drainage recharge field in the lower northern portion of the property. The groundwater table beneath the subject property ranges from approximately 4-69 feet bgs due to surface elevation changes, though there is perched water in many areas of the site that would be addressed through design. The removal of low permeability material with backfill of good leaching soil during system installation along with the depth to groundwater will ensure proper operation of the drainage system. Design and installation of the drainage system would take place under the review authority of the Town.

The same 3,000 gpd of sanitary wastewater as in the proposed project would be generated. Similar to the proposed project and other alternatives, is assumed that the estimated 1.03 acres of lawn would not be fertilized, though irrigated (at a rate of 5.5 inches annually). As a result, stormwater recharged on-site would be the primary source of nitrogen in recharge, resulting in an overall site-generated recharge volume of 3.89 MGY, having a nitrogen concentration of 0.01

mg/l. It should be noted that this would represent a significant decrease in nitrogen concentration compared to existing conditions, and would be well below the NYS Drinking Water standard of 10 mg/l.

The single vehicle access point would be moved slightly southward along Woodhull Road compared to the proposed project, to be located between the two renovated historic residences. Sight lines at this access are anticipated to be adequate, with little clearing of vegetation necessary. In order to reduce the amount of stormwater runoff, the Town recommended use of an internal, privately-owned roadway for this alternative that is narrower than the Town-standard minimum paved width of 34 feet. This width reduction would reduce the amount of impervious surface, which would in turn reduce the volume of runoff tributary to the project's drainage system. The applicant acknowledges that the proposed 24-foot wide roadway would require a Modification from Town Subdivision Regulation and Site Plan Specifications, Article XVI, A-100.3. Where modifications are proposed for a private road, a minimum pavement width of 28 feet with no on-street parking is typically recommended by the Town. The applicant believes that the unique conditions of this site (i.e., historic structures, wetlands, constrained soils) warrants the reduced road width for aesthetic and stormwater reduction reasons. The road would be designed to provide safe access to the site. If such an relief is not granted, the applicant could propose a 28-foot wide roadway, which the Town typically recommends in applications similar to this alternative. The site will be owned and maintained by an HOA.

Because the number and type of units assumed for this alternative are similar to those of the proposed project, the total population, school-age children, solid waste generation, community services and trip generation characteristics and impacts are also similar to those of the proposed project.

In consideration of the above factors (particularly public sanitary wastewater treatment and provision of public amenities while retaining a 10-unit yield), the applicant may consider implementing this alternative in preference to the proposed project, if so requested by the Town.

5.5 Alternative 5: 10-Lot Conventional Subdivision, On-Site Septic Systems

This alternative also assumes a total of 10 units, but configured in a conventional subdivision layout. As a result, only a 0.78-acre public parkland dedication would be provided; the Town heritage trail would not be extended. Three of the existing structures on the property would be retained: the two historic structures would be renovated and reoccupied, and the former farmhouse (which is currently rented), though the barn/silo would be demolished. It should be noted that significant Town recreation and open space properties are also located in the immediate vicinity. This alternative assumes that the house will be individually owned, and the internal roadway would be built to Town standards and dedicated to the Town, which would provide maintenance. Sanitary wastewater would be handled in individual septic systems.

In comparison to the proposed project, this alternative would result in:

- less building coverage;
- a similar amount of paved surfaces;
- more landscaped area;
- less natural area retained;
- a greater volume of recharge;
- a greater nitrogen concentration in recharge;
- more residents; more solid wastes generated; and
- similar amounts of gravel/pervious surfaces, wetlands retained, trip generation and water use.

Similar to the proposed project, re-use of the barn and silo would not be feasible in this alternative in consideration of the reasons listed in **Section 5.2**.

Overall, retention of the barn and silo is not considered a viable or desirable option for the site in connection with private development consistent with zoning.

A total of 0.89 acres of the valuable wetlands area on the eastern portion of the property would be preserved within the rear yards of Lots 6, 7 and 8. Because 6 of the units would be sited along Woodhull Road, their visibility from that roadway would increase the perceived overall level of land use intensity of the site, and incrementally reduce the aesthetic quality of the property and surroundings. Retaining walls would be required to minimize the amount of grading required.

Similar to the proposed project, this alternative would not require fill to be imported to the site; a larger volume of soil would be graded than would be needed for fill. The applicant would retain and reuse as much of the excavated soil on-site as possible. In this way, the need to bring soil in to the site will be eliminated, while minimizing potential truck trips needed to remove any excess soil. The SCDHS and Town would review site plans for this alternative, and would require their approvals of the sanitary system and drainage system designs.

It should be noted that this alternative assumes that connection to the Huntington Sewer District does not occur. As a result, the need to provide for effective septic system operation necessitates locating the new units in the higher elevations found in the southwestern portion of the property. The water table beneath the subject property ranges from approximately 4-69 feet bgs due to surface elevation changes; however, this depth is sufficient to ensure proper operation of the septic systems. Design and installation of the septic systems would take place under the review authority of the Town.

The same 3,000 gpd of sanitary wastewater as in the proposed project would be generated. Similar to the proposed project and other alternatives, is assumed that the 3.60 acres of lawn would not be fertilized, though irrigated (at a rate of 5.5 inches annually). As a result, sanitary wastewater would be the primary source of nitrogen in recharge, resulting in an overall site-generated recharge volume of 5.15 MGY, having a nitrogen concentration of 8.73 mg/l. It should be noted that this would represent a significant increase in nitrogen concentration compared to existing conditions, and would be close to the NYS Drinking Water standard of 10 mg/l.

The single vehicle access point would be moved southward along Woodhull Road, to be located between the two renovated historic residence. Sight lines at this access are anticipated to be adequate, with little clearing of vegetation necessary.

Because the number and type of units assumed for this alternative are larger than those of the proposed project (5-bedroom, detached units), the total population, school-age children, solid waste generation, community services and trip generation characteristics and impacts are proportionately greater those of the proposed project.

In consideration of the above factors (particularly sanitary wastewater impacts on groundwater quality), the applicant does not prefer this alternative to the proposed project and anticipates, based on the Town's goal to provide for appropriate development, that the Town would likewise not consider this alternative to be preferable to the proposed project**.**

SECTION 6.0

REFERENCES

6.0 REFERENCES

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APPENDICES

APPENDIX A

TOWN- AND SEQRA-RELATED DOCUMENTS

Appendix A-1
Town Historic Preservation Commission letter

December 4, 1998

Town of Huntington
Historic Preservation Commission
Inter-Office Memorandum

DATE: December 4, 1998

TO: Richard Machtay, Director, Department of Planning and Environment

FROM: Reginald Metcalf, Historic Preservation Commission, on behalf of the Commission RM

RE: Hassett Belfer Senior Housing, LLC Application for Zone Change SEQRA Review, Cultural Resources Assessment Swezey Farmstead, Southwest Corner of Park Avenue and South Woodhull Road, Huntington, NY 11743 (SCTM# 0400-073-01-038, 039, 040, 041.1, and 042) (SCTM# 0400-097-02-107)

This acknowledges receipt of your memorandum, dated July 20, 1998 and subsequent data received through October, 1998.

At a regular meeting of the Commission, held on November 23, 1998, it was voted to recommend that the subject Application for a Change of Zone from R-10 Residence to Senior Housing Residence be DISAPPROVED, after due consideration within the provisions of Article Six of the Town Code.

The landmark designation status of the subject premises includes building - structure inventory listing, Old Huntington Green local historic district listing, six contributing structures, three non-contributing structures, archaeological site designation and geographical coverage extending beyond the boundaries of the subject parcel. There is no national, state or local individual landmark listing and no national historic district listing.

A Cursory Inspection of the subject premises was made on January 22, 1998 by four Commission members between 2:00PM and 3:00PM. Contract Vendee William Hassett and one Tenant were present and provided access to the exterior site and to the interiors of the horse barn, the cow barn and the ancient dwelling facing South Woodhull Road and Murray Court.

Based upon the information in hand and extensive research during the past few months, the subject property contains, for the most part, two ancient home lots, the first laid out to Noah Rogers in 1655 and the second laid out to Steven Jarvis Jr. in 1676. Both lots are still recognizable in the Slater Map of 1860, shown as figure 5 in the archaeological report included in the subject Application.

The first lot fronted on Park Avenue and extended along South Woodhull Road, containing three acres. On the present tax map, it includes lots 38, 39, 40, the westerly pan handle portion of 41.1 and lot 42.

The second lot fronted on Park Avenue for a distance of about 700 feet, containing three acres. On the present tax map, it includes most of lot 41.1 and lots 43, 44, 45, 46, 105, 106, 107 and 108.

Attachment #6

Noteworthy features of the subject property include the Hollow Ponds Watering Place, laid out as part of the highway in 1653 as an annex to the Village Green, for the watering of draught animals and other livestock and deeded by the Town Trustees to Henry Place in 1859 (now part of lot 41.1). The nearby Village Green was separated from the highway as park land at this same time, since both parcels were deemed as no longer relevant to the function of the highway. An open brook or stream ran from the Hollow Ponds (aka Swezey's Pond) along Park Avenue to the Village Green. It existed long before the First Purchase, provided running water for the Tannery and was not piped underground until 1952.
Another brook flowed from the high ground to the ponds until piped underground between 1915 and 1937.

The oldest house on the subject property stands at the center of the Noah Rogers Lot, facing South Woodhull Road opposite Murray Court. The public record clearly shows that no dwelling was standing here before 1680 and all of the known owners before 1740 are known to have lived elsewhere. However, the fabric of the structure indicates a building date anywhere between 1680 and 1725. The earliest identified occupant is James P. Chichester, who lived here in the 1790's. The house is shown at this location on the 1858 Chase Map and other subsequent maps. It is a Post Medieval vernacular structure remodeled with Greek Revival details in 1830. The foundation and partial cellar appear to be very early, probably original to the house, challenging the belief that it had been moved. This issue will be clarified below.

The second house stands at the southern end of the Noah Rogers Lot, on what is now lot 42, fronting on South Woodhull Road. It is now clear that this is the only remaining portion of the Rolph House which originally stood on present lot 41.1. Documentary evidence and exterior examination indicate that it is a Federal Style "half house", now missing its service wing and entrance doors. It was probably built as an addition between 1838 and 1850. The usually accurate 1860 Slater Map shows it on its original site. The house proportions, southern orientation and left hand service wing off the front hall all indicate that the wing was probably the original house built by Steven Jarvis Jr. in 1676, then owned by Samuel Griffin from 1679 until 1740, then by Moses Rolph until 1791, then by David Rolph until his death here on December 10, 1837. The old wing was removed and replaced by a much smaller kitchen wing off the rear hall about 1880. Daniel Swezey moved the house to its present location in 1921, removing the kitchen wing and altering the main block to its present form.

The confusion regarding the identity of the Rolph House stems from a research paper presented by Mrs. Norman Talbot in 1924 and referenced in the above mentioned archaeological report. The Talbot account mistakenly transposed the Rolph and Chichester histories between the two respective houses, but has otherwise been found to be reliable. The Eugene Swezey history of the subject property, published in 1983 and also referenced in the said report, rebuts the Talbot version. Our search of the public records verifies the Swezey version and adds to it as well.

The archaeological site of the Old Tannery lies at the northern end of the Noah Rogers Lot, fronting along Park Avenue and including present lots 38, 39 and 40. This parcel was subdivided to Nathaniel Harrison, who built a dwelling and shop and perhaps two tanning vats about 1740. The supposed remains of a tanning vat can still be seen on lot 38 where it borders lot 39. The original house stood on present lot 39 and was replaced by the present third house, which was subdivided to J. Fields in 1859. The Tannery went out of business about 1840.

The archaeological site of a Revolutionary War Encampment, in present lot 38, lies about fifty feet from the brook which ran along the Park Avenue frontage. It covered an area about fifty feet square and included six log huts facing each other in two rows onto a central company street. Each had a door in the front gable end and a stone fireplace with catted chimney at the other end, with bunk beds along the side walls. They were built in 1779 by order of Gen. Leland for Capt. Thorn's Company of the 43rd Regiment of Foot and were later occupied by soldiers of the Anspach Regiment of German mercenaries. David Rusco, who owned the Tannery, was forced to build the huts and provide one cord of firewood each. The huts were burned in 1783 by the departing British garrison.

A house was built at the northernmost corner of the property by J. Amherst Woodhull in 1859 and was demolished before 1896.

Present lot 40 and the present fourth house which stands on it were subdivided to William Fields about 1870.

The fifth house, which faces the pond on present lot 41.1, was originally built on the west side of South Woodhull Road about 1870 by a J. L. Mulling on present lot 34. It was bought by Daniel Swezey in 1921, moved to its present site and doubled in size. It stands just a few feet westward of the original Rolph House site.

Another house was built on a parcel of about one acre, subdivided to Reuben Rolph about 1770. It stood on present lot 107 until it burned to the ground in 1848.

The Horse Barn, Cow Barn and Milk House stand to the Southeast of the fifth house and were all built by Daniel Swezey in the early 20th century.

The subject property is an important element in the historical context of the surrounding neighborhood, which is designated as the Old Huntington Green Historic District. Each of the Town's several such districts have a unique theme or personality. This one focuses on the fact that it is the ancient "Town Spot", the core of its human habitation. The northern end of the District includes the archaeological site of a large Indian Village of prehistoric origin. The southern end includes the Village Green, surrounded by the original home lots of the first White settlers. This is where the bulk of the Town's rich history took place. Park Avenue, Main Street and South Woodhull Road originated as Indian trails and the multitude of spring fed streams and ponds were a critically important resource to the early inhabitants.

HASSETT.PLD

Most people were primarily farmers with crop land outside the village, some plying specific trades from their homes along the street. Houses were spaced an average of 200 feet apart until the late 19th century. Livestock far outnumbered people here, until the rampant suburban infilling of the late 1950's. This has always been a district of single family residences in a relatively rural setting. The Village Green area still retains a high concentration of good architecture dating from every period of the Town's settlement. It has survived so well mainly because the modern commercial center, or "downtown" district, sprang up a half mile to the West in the mid 19th century, thus sparing the old "Town Spot".

The long term survival of the Old Huntington Green Historic District will depend on the single family residential use of its historic streetscape. Since the 1950's, this fragile balance has been negatively impacted by the increased presence of institutional facilities and severe traffic conditions. The District is now struggling to coexist with the impact of the Huntington Hospital, Heckscher Park, the Town Hall, the Y.M.C.A., the Flanagan Center, the Huntington Jewish Center and the commercial encroachment along Main Street. The situation that exists today is probably irreversible. However, it is possible to establish a moratorium on any further institutional encroachment.

Regarding the subject Application, the Commission feels that the proposed change of zoning to permit another large, institutional facility within the Historic District would be inappropriate and, of course, unnecessary. What we have now is a farmstead with open space and a scattering of five historically significant houses, exemplifying the theme of the District. The addition of a huge institutional building occupied by about 150 residents and staff, together with the attendant activity, literally in their back yard, would dramatically increase the density of this already overcrowded neighborhood.

The proposed Development Plan shows a sincere effort to minimize the impact on the existing historic resources. It shows that three dwellings and the Milk House would remain, but it does not indicate how they would be used, to ensure their long term preservation. Also, the proposed regrading of the Revolutionary War Encampment Site is of concern to the Commission. The five existing dwellings and the Milk House are presently in habitable condition. The other structures on the property are in ruinous condition and are not considered viable for preservation.

cc: Frank Petrone, Supervisor, and Members of the Town Board (5)
Laura Mansi, Chairman, Zoning Board of Appeals
Tracey Edwards, Chairman, Planning Board
Charla Bolton, Planning and Environment
Thomas Mazzola, Director of Engineering, Building and Housing
Patricia Gladkowski, Principal Clerk, EBH
Jo-Ann Raia, Town Clerk/RMO
James Matthews, Town Attorney
Commission Members (8)
File (+21)

Appendix A-2
Environmental Assessment Form (EAF) Parts II and III

Town Divisions of Planning and Environmental Review

February 7, 2002

ENVIRONMENTAL ASSESSMENT FORM
PARTS II & III

Kiruv Estates Subdivision

SEQRA CLASSIFICATION: Type I. Pursuant to SEQRA [6 NYCRR 617.4(b)(9)], the action meets two of the Type I thresholds: it contains a site listed on the National Register of Historic Places, and it occurs substantially contiguous to a district listed thereon (Old Town Green Historic District). As a Type I action, a conditioned negative declaration may not be issued by the lead agency per SEQRA 617.7(d)(1).

PROJECT LOCATION
The project site is located at the southwest corner of Park Avenue (CR 35A) and Woodhull Road in the Village Green area of Huntington Village within an R-7 Residence District Zone, designated as # 0400-73-01-038, 039, 040, 041.1 & 042 and 0400-97-02-107 on the Suffolk County Tax Map.

PROJECT DESCRIPTION: The proposed action is a request for the modified subdivision of a 7.42-acre parcel (maps dated 11/12/01, received12/03/01). The application provides conflicting information with regard to the eventual number of lots and their uses. The applicant's official subdivision request (form revised 8/90), indicates nine (9) lots while the Environmental Assessment Form Part I proposes eleven (11) lots. The Preliminary Map that accompanied the application shows nine (9) lots one of which is for a "Future Drainage Area". Two (2) of the lots depicted are noted for "Potential Development". Lot # 7 is shown on Sheet SP-2 as the "Future Site of Religious Building". Sanitary wastewater collection and treatment is proposed via disposal to the Huntington Sewer District.

Little or no information was provided regarding the type and mass of structures proposed, amounts of vegetation and soils to be removed or how vehicular access will be achieved. In addition, an interconnecting french drain system is shown for Lots 1-5 & 8 with final discharge to a Suffolk County Department of Public Works storm drain on Woodhull Road (Sheet SP-2). Although the map suggests the system is conceptual, a site visit confirmed its installation and that it might be more extensive than shown.

In order to construct the religious building the project proposes the demolition of several historic structures, including a cow barn, the remains of an old horse barn, a garage, storage building and a silo. Since the subject property is contained within the Old Huntington Green Historic, such demolition requires Town Board approval. Initially, the Historic Preservation Commission recommended the demolition of the buildings. However, after the New York State Office of Parks, Recreation and Historic Preservation recommended preserving the cow barn, the Historic Preservation Commission has since asked the Town Board to reconsider the permit and revisit the issue [**attachment 1, memorandum dated 12/31/01**]. Based upon site visits by Department Staff, it appears that three (3) structures have already been removed. These include the two bay garage, storage building and the horse barn.

SURROUNDING LAND USE AND ZONING: The subject property is located in the Old Huntington Green Historic District, as are all of the properties to the northwest and southeast along Park Avenue. It is also contiguous to the Old Town Green Historic District (National Register), which has its southern end across Park Avenue. There are a number of individually listed sites by both the Town and National Register, and many more that could be eligible but have not been nominated. This area is important because it is the location of the original settlement of Huntington Village, and was also home to a community of Native Americans near the Village Green.

The surrounding area is primarily residential, although there are a number of public and non-profit uses along this section of Park Avenue. These include the Huntington YMCA, the Town of Huntington Senior Citizens Nutrition Center, the New Community Cinema, the Town Arsenal museum, the Huntington Historical Society's Kissam house museum, and the Huntington Jewish Center. Most of these are located between Woodhull Road and Main Street on the southwest side of the road.

Low to medium density residential development spanning the R-7 and R-10 residential zoning districts exists surrounding the Park Avenue corridor. Many of the dwellings on Woodhull Road and Park Avenue were built prior to the enactment of the Town zoning ordinance in 1934. Thus lot sizes vary. Those along Park Avenue opposite the subject property, in particular, are much larger than the zoning specifies. Barns are visible behind many of the older homes. There is a rise in elevation to the southwest of Park Avenue that provides a natural separation between historic and modern homes that has helped to preserve the historic view corridor.

PROJECT/SEQRA HISTORY: This is the fourth application under review for the site pursuant to SEQRA. Prior reviews were initiated for the site by the Zoning Board of Appeals and Town Board for a proposed congregate care facility (Hassett-Belfer). The project would have involved major disturbances on the site. The actions were classified as Type I by both boards, and were coordinated pursuant to SEQRA. A determination of significance was not made by either Board, nor were public hearings held. The Planning Board recommended that if the proposal was entertained, a positive declaration should be issued.

The last SEQRA review was less than 4 months ago for the demolition of the site's cow barn, the remains of the old horse barn, a garage, storage building and a silo. Although no information was available at the time regarding subdivision, there was concern that demolition would be a precursor to redevelopment. Pursuant to 6NYCRR Part 617.3(g), all known phases of a project should be considered in the determination of significance. Except in special circumstances, considering only a part, or segment of an overall action, is contrary to the intent of SEQRA. According to the SEQRA Handbook[1]:

> "There are two types of situations where segmentation can occur. One is where a project sponsor attempts to avoid an EIS by splitting a project into two or more smaller projects. The second is where activities that may be occurring at different times or places are exclude from the scope of an EIS. By excluding subsequent

phases or associated project components from the EIS the project may be more acceptable to the reviewing agencies and the public."

It should be noted that within the same time period application was submitted for demolition work, historic structures were removed (garage, storage building & horse barn), subsurface groundwater was redirected and wetlands were disturbed, without the benefit of any permits.

NATURAL RESOURCES DESCRIPTION: The site's long history of human use means that most of its natural resources have been impacted or modified by its users. Its most significant feature is a pond/wetlands system labeled on the NYS Final Freshwater Wetlands Maps as H-35, a Class I wetland. Previous SEQRA reviews have indicated that the wetlands may cover greater area than shown on the NYS wetlands map, including another pond immediately to the south. In its review of the project, Town of Huntington, Department of Maritime Services notes the wetland system is much larger than that designated in NYS Freshwater Wetland Maps which were flagged in 1997. [**attachment 2, memorandum dated 12/19/01**]. Although the preliminary map depicts freshwater wetlands south of H-35, flagged in 1998, Maritime Services is requiring that the applicant supply the Town with a plan based upon a more recent wetland survey, stamped and signed by NYSDEC. This may include areas where surfacing of groundwater from underlying springs have saturated most of the site. Past SEQRA reviews and observations by Planning and Environment staff indicate a spring located on the west side of the property.

The site also contains open lawn area around the existing buildings and deciduous woodland on the sloped portions of the property. The natural resource inventory classifies the site into three habitat sub-categories: open water, emergent and freshwater wetlands; open lawn area; and upland deciduous woodland. However, a significant component of the "open lawn area" is characterized by spongy, waterlogged soils and supports concentrations of native plants within the lawn area that may be considered to be freshwater wetland indicator species.

The applicant's Environmental Assessment Form, Part I indicates the site's predominate soil types as Riverhead/Haven & Carver/Plymouth, of which 85% are well drained. This is supported in the April 1975 Soil Survey of Suffolk County. However, with the recent manipulation of the site (described in the project history section above) and filling of the northwest corner, which has occurred in the past decade, this information may no longer apply.

The proposed project poses the potential for severe on and off-site drainage impacts. This requires in-depth consideration and further study including spring or summer seasonal surveys, important to identify the floral/faunal values and seasonal fluctuation in water levels/saturation of the site.

SEQR RECOMMENDATION: It is suggested that the proposed Kiruv Estates subdivision be issued a ***positive declaration*** pursuant to SEQRA or be reclassified as Type II and denied without prejudice. The proposed action meets several criteria in the SEQRA regulations (6 NYCRR 617.7) considered to be indicators of significant adverse impacts on the environment, specifically:

- *a substantial adverse change in existing air quality, ground or surface water quality, traffic or noise levels; a substantial increase in potential for erosion, flooding, or drainage problems...;*
- *the creation of a material conflict with a community's current plans or goals as officially approved or adopted [Town Comprehensive Plan];*

- *the impairment of the character or quality of important historical, archaeological, architectural, or aesthetic resources or of existing community or neighborhood character; and*
- *a substantial change in the use, or intensity of use, of land...or in its capacity to support existing [permitted] uses.*

IMPACT ON LAND:

1. Will the proposed action result in a physical change to the project site?

The proposed action will involve construction where the general slopes in the project area exceed 15%. Also, it involves construction on land where the depth to the water table is less than 5 feet. The applicant's EAF Part I does not provide any information in regard to potential impacts from the conversion of natural resources to roads and buildings. Parts A2 and B2 of the EAF were inexplicable left. Based upon the plans displayed to Town staff on 1/11/02, the proposed residential and facility development will cause significant change to the site.

The Composite Map of Environmental Constraints (Figure 3-8) contained in the Huntington Comprehensive Plan identifies the subject site as having moderate limitations. There are four physical limiting environmental factors which must be considered pertinent to this review-steep slopes, state-regulated freshwater wetlands, extension of the Huntington Sewer District, and retention of historic structures. All of these limiting environmental factors are summarized below.

Steep Slopes and Yield

As land zoned R-7, the site is subject to the Town Steep Slope Ordinance, Article X of the Zoning Code, §198-60 through §198-64. A steep slope analysis performed by the Department of Planning and Environment staff with Hasser-Belfer zone change application indicates that 2.61 acres of the site contain an average natural slope in excess of 25% (25.73%). In accordance with the Zoning Code this requires three (3) R-40 one-acre lots be provided. It also showed eleven (11) potential building lot based upon 70' NYSDEC setbacks rather than the 100' setbacks required under Article 24 of NYS Environmental Conservation Law without any set-aside in accordance with Article 10 of Town Subdivision Regulations and Site Plan Specifications or "Future Drainage Area" (proposed Lot 9 on the applicant's Preliminary Map). Since the Planning Board has not yet established yield, determining the number of lots at this time is speculative at best. Recognizing the steep slope area requires a yield of 3 R-40 lots, high groundwater table, historic structures and the regulated freshwater wetlands and buffer may yield no lots. Any further proposal to develop the property should be amended to consider these serious site limitations. There is sufficient information, however, to indicate, that significant impacts are possible within the scope and intent of the project.

State-Regulated Freshwater Wetlands and Buffer

The areas demarcated on the Preliminary Map by the applicant's consultants and the NYSDEC Environmental Protection staff indicate that 2.59 acres of the subject property comprise State-regulated freshwater wetland and adjoining buffer area. The state regulations require that any grading, clearing, filling or construction on the area within 100-feet of a mapped wetland boundary requires permits. Clearing will likely increase further into mapped wetland boundary, even though the applicant has not secured the approval of the NYSDEC.

Huntington Sewer District Extension

The applicant has not yet secured an extension of the Huntington Sewer District, which could enable a private sewer line to hook into the municipal sewer system. Without such approval, 11 or even 9 lots is questionable. Development of the site with subsurface sanitary systems would be difficult given the technical requirements for separating the systems from groundwater.

Retention of Historic Structure(s)
It is noted that no consideration was given to retaining the existing historic barns. If the retention of specific structures in situ for significant resource preservation is the intent of the lead agency, potential yield could be diminished further to provide lots which conform to Town height, area, and bulk regulations and which provide the long-term stability of appropriate residential zoning. New York State Department of Parks, Recreation and Historic Preservation have recommended to preserve these structures. Consistent with 6 NYCRR 617.3(a), no action should be taken by the applicant until yield has been established and the proper permits are issued.

2. Will there be an effect to any unique or unusual land form(s) found on the subject site? (i.e., cliffs, dunes, etc.) *No.

IMPACT ON WATER:

3. Will the proposed action affect any body of water designated as protected under Articles 15, 24, 25 of the NYS Environmental Conservation Law or Town of Huntington Marine Conservation Law?

The subject property contains state-regulated freshwater wetlands. While only a single pond feature is identified on the Huntington quad of the State's Final Freshwater Wetlands Map as H-35, a Class I wetland; the applicant's consultants have identified and depicted on the proposed plan additional area that should be demarcated as regulated. The project is within the jurisdiction of the NYSDEC Freshwater Wetlands Land Use Regulations (6 NYCRR, Part 663), and will require permits from NYSDEC. At this time, it appears that no permit application has been filed with the State, although work within the regulated has occurred. It should also be noted that records show existing discharges into the wetland corridor (i.e. pipes carrying wash water, basement overflow and other unknown discharges). This should be investigated with any DEIS review.

It appears to be the applicant's intention to continue to manipulate the state-regulated wetlands. Much of the "discharge" of water on the property appears to be originating from the upwelling of groundwater springs. Also, the site is a component of an active stream that originates south of the site and feeds into Town park properties to the north. No watershed study has been submitted which evaluates the volume of flow that is being accommodated on this property; how much of it might be interrupted through new catchment systems (necessitated by the introduction of new impervious surfaces) to the detriment of the dynamic system. These remain issues relating to the wetlands which should be considered in a Draft Environmental Impact Statement to enable the NYSDEC to provide substantive comment as an involved agency.

4. Will proposed action affect any non-protected existing or new body of water?

See discussion of potential drainage impacts in #6 below. There may be potential for the proposed action to affect other non-regulated freshwater resources in the immediate site vicinity, including the stream corridor in the Village Green Park to the north and the pond across Park Avenue at Sunny Pond Farm.

5. Will the proposed action affect surface or groundwater quality or quantity?

Surface Water: See Section 3 above.

Groundwater: Should development occur groundwater will be adversely affected. The proposed action lies within the deep recharge zone (Hydrogeologic Zone I). The subject property is not located within a Special Groundwater Protection Area. Any development of the site may pose a minor impact on groundwater quality from contaminants (oil, chloride) carried in on-site stormwater recharge.

The residences on site are presently supported by conventional sanitary systems which meet the Suffolk County Department of Health Services' (SCDHS) density requirements. The applicant anticipates sewer connection of the entire site to the Huntington Sewer District (HSD), thereby mitigating potential to impact groundwater from liquid sanitary waste disposal. Past comments received from the Town Department of Environmental Waste Management, K. Feustel, dated July 7 & November 9, 1998 indicate that the line to which the applicant anticipates connection is privately-owned and maintained by the Huntington Hebrew Congregational Church (across Park Avenue). HSD stated that any connection will require use of the sewer main on Woodhull Road, rather than the private sewer line. It was also noted:

- The HSD will require installation of a grease trap if the proposed project includes kitchen/food preparation area;
- The current HSD Rules and Regulations require the District to conduct a capacity analysis of its collection system and treatment plant prior to approval of any new sanitary sewer lying outside the service area of the district. If insufficient capacity exists, sewer impact fees may be levied to pay for the applicant's proportional share of the cost of improving the treatment collection system and/or treatment plan.
- Previous analysis has determined that the 24" sewer line upstream of the Huntington STP will flow full. with wastewater surcharging up into the manholes. before peak design flow conditions. Additional flows will further increase surcharging. This situation is currently under investigation by our District Engineers.

Connection to the Huntington Sewer District is not a ministerial action. The subdivision may exert a demand which exceeds the present infrastructure. The action pending before the Planning Board should more properly be identified as a phased project that includes potential subdivision as well as extension of the Huntington Sewer District. Connection to an existing sewage treatment plant or district is normally viewed as a mitigating measure to preclude on-site impacts; however, in this case, the connection may be necessary to advance the subdivision. Due to site limitations (high groundwater) it would be difficult for the applicant to construct septic systems in saturated soils.

No subdivision of the site that requires connection to the sewer district should be approved without the necessary analysis to determine whether the HSD can accommodate the flow and what, if any, treatment system improvements might befall the applicant. Such analysis should be incorporated into any DEIS prepared for the subdivision. While the SCDHS will review any future site-specific proposal(s) and require a sewage disposal system or alternative that best mitigates concern for sanitary wastewater management, the municipal infrastructure decision whether to allow the additional flow to the Huntington STP is the jurisdiction of the Town Board. Whether the project is of sufficient public benefit to accommodate the burden of increased capacity to the district, perhaps at capacity cost to other undeveloped sites, should be a scoped DEIS issue.

Public Water Supply

The subject area lies within a supply area of the Suffolk County Water Authority which must review and approve public water availability for connection thereto should any development plan be proposed. Consistent with direction provided to the Huntington Department of Planning and Environment by the South Huntington Water District pertaining to major policy changes, the owners/applicants should contact the water supplier early in the planning stages of any future project to request information regarding the time frame and cost of water availability.

6. Will proposed action alter drainage flow or patterns of surface water run-off?

Property development as proposed has/will be incompatible with existing drainage patterns (see discussion under #3 above). On recent site visit the ground in the area of proposed lots 1-3 was saturated and pooled water was evident about the site. The discharging of runoff into flagged (state-regulated) freshwater wetlands is also of concern. Additional test borings and watershed study appears necessary to properly evaluate potential impacts to wetlands and prevent flooding of existing and proposed homes.

While information regarding the complete contributing watershed area has not been supplied by the applicant's consultants, the subject site is recognized as being part of a significantly larger contributing watershed area. Drainage from the subject site moves by culvert under Woodhull Road to release through the Village Green (Town parkland) and further northward into Heckscher Park, through the pond, overflowing into a catchment system of culverts with final endpoint release into Huntington Harbor. Despite improvements undertaken by Suffolk County as comprehensive measures to enhance stormwater management in the immediate site area and the Village Green in 1987, the stream in the Village Green overflows its banks and Park Avenue and Route 25A continue to flood sporadically during peak charge events, sometimes forcing lane closures and hazardous roadway conditions.

Potential impact to area drainage can not be fully evaluated at this time, but is considered to be among the severest limiting factors to future intensified use of the subject property. Past review of the site with zone change application indicated that additional technical studies of the watershed and drainage conditions should be submitted in a DEIS and reviewed by all involved and interested agencies. As the site is part of an integrated drainage system with diverse flow sources and significant historic resources (e.g., Town arsenal, Kissam House) and park properties (Village

Green, Heckscher Park) in the downstream pathway, extreme caution must be exercised not to disrupt the hydrological balance of the area.

IMPACT ON AIR:

7. Will proposed action affect air quality?

Property development, particularly excavation and earth moving activity, may pose minor, temporary impact to air resources through dust loading and emissions from construction vehicles. Proper use of control agents with cover (vegetative or structural e.g., tarps) can mitigate dispersion off-site to surrounding uses. The proposed community building is likely to add to standing traffic at the intersection of Woodhull Road and Park Avenue, resulting in a moderate increase and cumulative effect to area air quality resources.

IMPACTS ON PLANTS AND ANIMALS:

8. Will the proposed action affect any threatened and/or endangered species? (as per Federal or State Law)

There is a potential that the project will impact state-protected native vegetation. The natural resource inventory for the zone change lists the existence of state-protected native plants, including such species as flowering dogwood, New York fern, cinnamon fern, and inkberry. Since most of the wooded and wetland components of the site will be directly disturbed, it is expected that protected species will be removed.

9. Will proposed action substantially affect non-protected, non-threatened or non-endangered species?

Site development will involve removal of some locally-important vegetation which presently supports small mammals and diverse birdlife. The most important native vegetation on the subject site is found within the woodland and wetlands areas. Any development of the site should result in the planned retention of buffer area for protecting wildlife habitat, wetland functions, and historical setting and the view corridors along Woodhull Road and Park Avenue.

IMPACT ON AGRICULTURAL LAND RESOURCES:

10. Will the proposed action affect agricultural land resources?

Development of the site will excavate or compact the soil profile of former agricultural land and convert these former, now quasi-agricultural lands. The site is not within a designated agricultural district, but contains prime agricultural soils classified as RhB (Riverhead and Haven soils, graded, 0-8% slopes) (Suffolk County Soil Survey, USDA, 1974.) along the lower plateau of the property.

IMPACT ON AESTHETIC RESOURCES:

11. Will proposed action affect aesthetic resources?

The proposed project will be obviously different from or in sharp contrast to current surrounding land use patterns. It will be visible to users of aesthetic resources, which will eliminate, or significantly reduce, their enjoyment of the aesthetic qualities of that resource. Project

components may result in the elimination, or significant screening, of scenic views known to be important to the area.
The removal of the site's remaining barn and silo and their replacement by a community facility building will affect the visual character of the community and the setting of the historic structures to be reserved. Because the view into the property is so highly regarded in the historic district, any landscape plan developed for future site use should be sensitive to the on-site and surrounding resources and be designed so as to be visually compatible therewith.

IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES:

12. Will the proposed action impact any site or structure of historic, prehistoric or paleontological importance?

The proposed action will affect a facility or site listed on the State or National Register of Historic Places and occurs substantially contiguous to a district listed thereon (Old Town Green Historic District). The proposed action will occur in an area designated as sensitive for archaeological sites on the New York State Archaeological Site Locator Map. As a site lying in proximity to identified resources, further study would normally be deemed requisite. The Expanded EAF submitted for the Hassett-Belfer Zone Change, included a State I Cultural Resource Assessment prepared by Greenhouse Consultants, Inc.

Historical/Architectural Resources
Pursuant to the review of this application, the input of the Huntington Historic Preservation Commission, an interested agency under SEQRA was sought. The Historic Preservation Commission copied a letter to the Town expressing their misgivings in response to work being preformed on the site **[attachment 3, dated December 29, 2001]**.

The subject property is contained within the Old Huntington Green [Town] Historic District and is subject to architectural controls under § 198-42, Article VI Historic District, Buildings and Landmarks of the Huntington Zoning Code. The subject property is also substantially contiguous to the Old Town Green National Register Historic District. The site itself contains a dwelling facing Woodhull Road which is listed on the National Register of Historic as the Skidmore House. This dwelling, according to research conducted by the Historic Preservation Commission, was constructed some time between 1680 and 1725, and is in its original location. National Register listing requires that the application be classified Type I under SEQRA and any State or Federal action in connection with the development of the site is subject to the review regulations of Section 106 of the National Historic Preservation Act of 1966.

The National Register listing identifies the whole of tax map parcel 0400-073-01-41.1, comprising 4.8 acres. Although the majority of the structures identified as part of the dairy farm are encompassed within tax map 0400-073-01-041.1, no others are listed on the nomination form as contributing. These structures include a farmhouse at 471 Park Avenue, constructed about 1870 and moved to its present site on the subject property in 1921; and a smaller farmhouse, at 171 Woodhull Road, constructed originally in 1676, owned later by the Rolph family, and moved to its present location in 1921.
The lack of acknowledgement in the National Register nomination form of the contributing qualities of the overall historic dairy complex is no doubt due to the fact that the nomination form

was prepared in the early 1980's before much credence was accorded to 20th century vernacular architectural and historical resources. The National Register imposition of a fifty (50) year age requirement may also explain the exclusion of this complex as a significant historical element either of the adjacent National Register historic district or as a part of the listing of the Skidmore House. With the exception of a former milk house, all farm accessory buildings are to be demolished. Two additional dwellings at 483 Park Avenue, constructed before 1873, and 525 Park Avenue constructed before 1860, both in separate ownership until recently, and not part of the original Swezey Dairy Farm, are included on the subject site and are to be retained. All five (5) dwellings, as well as the accessory farm structures, are listed on the Town's Historic Sites Inventory (1979). [Forms HV52, HV53, HV54, HV87 and HV89], a comprehensive survey of the Town's historic resources. This listing in and of itself carries no regulatory requirements but has the purpose of alerting planning and development officials of the significance of such buildings. The Commission characterizes the subject site thusly:

- The subject property is an important element in the historical context of the surrounding neighborhood, which is designated as the Old Huntington Green Historic District. each of the Town's several such districts have a unique theme or personality. This one focuses on the fact that it is the ancient " Town Spot", the core of its human habitation. the northern end of the District includes the archaeological site of a large Indian Village of prehistoric origin. The southern end includes the Village Green, surrounded by the original home lots of the first white settlers. This is where the bulk of the Town's rich history took place. Park Avenue, Main Street and South Woodhull Road originated as Indian trails and the multitude of spring fed streams and ponds were a critically important resource to the early inhabitants.

The very beginning of the Commission's report identifies the subject property as containing the Hollow Ponds Watering Place, laid out as part of the Highway in 1653 as an annex to the Village Green, a site which served as a watering place for animals until it was deeded to Henry Place in 1859, a predecessor in title to the present owner. This fact underscores the important historical linkage between the subject property and the balance of the Village Green settlement area, embodied in the Old Huntington Green Historic District.

The planned destruction of site resources, which are part of a site evolution beginning with the founding decades of the Town, and their location at the historical center of the community created by the founders is inconsistent with the Town's goals in establishing a historic district comprising all of the site's resources. The New York State Department of Parks, Recreation and Historic Preservation (NYS OPRHP) has recommended the preservation of the barn **[attachment 4, letter dated September 17, 2001]**. Consequently, as part of any Draft Environmental Impact Statement the applicant should provide a complete historic structures report prepared by a qualified architectural historian expert for the barn as well as all other structures on the site. The NYS OPRHP should review the historic structures report and make recommendations for mitigation, as appropriate, prior to any decision being made on the subdivision application.

Archaeological Resources

The subject property is also located within an area identified on the New York State Office of Parks Recreation and Historic Preservation (OPRHP) Archaeological Site locator map as being within an area comprising multiple archaeological sites. Three historic period archaeological sites, known to

exist prior to the initiation of the cultural resources testing phase, were identified: a group of Revolutionary War-era Hessian huts dated 1779-1783, occupied by Hessian soldiers, which were constructed at the northwestern tip of the property; these huts were occupied by Captain Thorn's Company of the 43rd regiment of Foot and were later occupied by soldiers of the Anspach regiment of German mercenaries according to the Historic Sites Inventory Form HV56A and the report of the Historic Preservation Commission; called huts, the structures were of logs with fieldstone fireplaces. To the immediate southeast a Tannery was located which operated from 1740-1840. Known to exist through contemporary times are two tan vats associated with the tannery. A third site, a 17th century house site is conjectured to be in the location where the smaller of the two ponds on the property presently exist, at the far northeasterly side of the property.

During review of the Hassett-Belfer zone change application, the applicant's archaeological consultant met with the Town's Historic Preservation Commission and prepared and submitted a cultural resources inventory of the property including a Stage IA archival study documenting the history of the property and a Stage IB subsurface testing program intended to reveal any buried archaeological remains from the prehistoric and historic period. The cultural resources study (revised March 1998 and submitted to the Planning Department on November 9, 1998) is contained in the rezoning file in the Department of Planning and the Environment.

Although the areas of the Hessian huts and the Tannery were subjected to subsurface testing the early house site, now underwater, was not. A fourth house site, dating from the mid-19th century, located in the vicinity of the Hessian Hut site was identified by Planning Review Staff in consultation with a member of the Historic Preservation Commission. This site is the area where testing was done to locate any subsurface remains of the Hessian huts and the Tannery. The cultural resources assessment concludes:

> The archaeological testing of the Tannery Park Senior Housing project area did not produce any evidence of prehistoric use of this land. No prehistoric artifacts or features were discovered in any of the shovel tests.
>
> The archaeological testing produced some evidence of historic archaeological resources. Testing in the northern parcel located remains of the Tannery. A stone and mortar vat, likely from the tannery was found. The tannery is clearly a significant historic archaeological resource since it represents the first establishment of what became a significant industry in eighteenth and 19th century Huntington.[emphasis supplied] Testing of the other planned impact locations also did not produce any evidence of significant historic period features or deposits. Most of the artifacts recovered and all of the standing or ruined structures seen in the central portion of the project area related to the 1896-1942 Park Avenue Dairy Farm. The history of this farm is available in the detailed recent publication by one of its occupants [Swezey 1983].
>
> Fill deposits were found over the location of the Revolutionary War huts. Although no eighteenth century artifacts or features were found here, they could still exist since the shovel tests could not reach natural subsoil in this location.[emphasis supplied]

The study recommended Stage III data recovery and documentation for the tan vat associated with the tannery. For the Hessian occupation site, the study recommended on-site monitoring by an archaeologist at the time of construction. Since the review does not take into consideration the most recent subdivision plan, the New York State Office of Parks Recreation and Historic Preservation [OPRHP] should be further consulted with respect to the newest proposed plan. It is recommended that with any approval, Stage III documentation and data recovery prior to site construction activities, rather than as part of a field monitoring program during construction be conducted. These archaeological sites present a rare opportunity to fully document sites which are extremely important to national and local history, evidence which is likely to be destroyed unless systematic archaeological study is conducted prior to any site alteration.

IMPACT ON OPEN SPACE AND RECREATION:

13. Will the proposed action affect the quantity or quality of existing or future open spaces or recreational opportunities?

Development as proposed will result in a major reduction of an open space important to the community. While the site is not listed on the 1974 Huntington Open Space Index, it lies substantially contiguous to two such mapped tracts, NW-25 to the west and NW-26 to the south. The subject property is not an open space in the conventional sense—simply, a large undeveloped tract. It is a more urban cultural asset where features both natural and man-made span a period of 350 years. The open space value of the subject site, similar to its aesthetic and community character value, is provided largely by its expanse of linear road frontage, open water view, slope interest, and diverse grouping of historic dwellings and ancillary structures. Its value is as village-oriented open space, tending toward an association with the historic green to the north. The scale and separation of uses on the site, far less dense than could be provided under the R-7 zoning, establishes a charming pattern of uses filtering from the aged residences about the perimeter to the more open inner zone. Replacing the look of the built environment on site with harder forms at much larger scale will forever alter the simple connection to the historic district easily formed by the untrained eye. It is difficult to mitigate the rural "feel" of a property in any way other than to preserve its components intact.

The proposed development is not anticipated to generate any real demand for active recreational facilities; however, *well planned passive buffer area is important to maintain the historic community environment.* Therefore, the site's remaining buffer area takes on greater significance to shield adjoining properties both to and from any proposed facility to create the least effect to existing community character. Supplemental landscaping along the property edges and about the site and proper site management will enable the peripheral boundaries to serve as passive vegetated buffer area, maintaining a private open space element. However, the visual, textural component of the open space will be dramatically altered.

A primary impact is the conversion of the open former agricultural landscape and wooded/wetland buffer thereto into a residential / private religious community facility use. The designated open space within the study area represents a significant opportunity to plan for retained open space, to insure that a component is preserved. Consistent with the Subdivision Regulations and Site Improvement Specifications, the Planning Board can require set-aside of 10% of the site area as parkland. The community organization, Residents for the Preservation of Hilaire Woods, has asked

that the Planning Board consider preserving the environmental historic resources of the subject property [**attachment 5, letter dated December 28, 2001**].

IMPACT ON CRITICAL ENVIRONMENTAL AREAS:

14. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6 NYCRR 617.14(g)? No.

IMPACT ON TRANSPORTATION:

15. Will there be an effect to existing transportation systems?

The proposed rezoning and subsequent facility development as proposed will cause an increase in traffic generation and change in flow patterns to and from the subject property. Although no traffic information was provided in the applicant's EAF, Part I, the addition of single-family homes and a religious community center indicates that the proposed action may result in the generation of traffic significantly above present levels.

Traffic generated by the proposed site may have significant impact on the existing levels of service at nearby intersections. Of the five intersections studied in the traffic study for the Hassett-Belfer zone change application, all operate at an LOS of D or below during the p.m. peak hour, with three exhibiting "oversaturated" conditions. The Comprehensive Plan supports this finding by indicating that the existing (1993) and proposed year 2000 roadway efficiencies for Park Avenue north of Pulaski Road are poor.

The action poses cummulative impact to preexisting stacking problems along Park Avenue from East Main Street (NYS 25A) to Woodhull Road and points further south. Park Avenue is three lanes in front of the subject property: a southbound lane, a northbound lane and a right turn lane onto N. Woodhull Road. Traffic in this area is very heavy, particularly during peak traffic hours. Vehicles attempting a northbound left turn into the site from Park Avenue block north and southbound traffic. With the addition of a community religious building on the site this impact has the potential for significant negative effect.

The project may also pose a significant localized increase in traffic generation. There are existing uses on Park Avenue in the immediate vicinity of the site which are known to cause congestion (mainly during weekend and evening hours). These include, but are not limited to: extremely high attendance/permitted events at Village Green and Heckscher Park (Celebrate Huntington, arts festivals, antique shows, etc.); film festivals and special events at the Cinema Arts Center; Huntington YMCA's Fairs and summer camp drop-off and pick-up; Huntington Historical Society's Sheep to Shawl (spring) and Apple (fall) festivals; observances and special events at the two synagogues.

Other major institutional uses in the immediate area, the Town Flanagan Center (including YMCA, New Community Cinema, and Senior Citizens Center at 423 Park Avenue), Huntington Jewish Center (510 Park Avenue), and Temple Beth El (660 Park Avenue) all have direct access to Park Avenue. While wetlands and drainage conditions appear to exclude development of an access road which would conform to Town standards, there are existing driveways that provide direct access to the existing residences fronting on Park Avenue. While the application was coordinated with the

Suffolk County Department of Public Works (SCDPW), no comments have been received indicating whether they might allow new curb cut to Park Avenue. SCDPW, however, did state that "mitigation on Woodhull Road may be required to alleviate runoff on Park Avenue (C.R. 35) **[attachment 6, letter dated December 17, 2001]**. As the project has potential to affect conditions on Park Avenue, specific roadway mitigation may be required by the SCDPW. Any future proposal for site development may include requirements to provide area for future widening and/or other roadway/drainage improvements deemed necessary to reduce traffic safety impacts and facilitate movement in the Woodhull Road/Park Avenue corridors. Additional traffic data should be presented in any DEIS prepared for the subject action.

IMPACT ON ENERGY:

16. Will the proposed action have an adverse effect on the community's sources of fuel or energy supply?

The subsequent development of the property may require the creation or extension of an energy transmission or supply system to serve residences. Availability of supply must be confirmed by KEYSPAN (formerly LILCO).

NOISE AND ODOR IMPACTS:

17. Will there be objectionable odors, noise or vibration as a result of proposed action?

Implementation of the proposed action will result in a temporary condition posing minor impact to the surrounding community during construction, and but negligible operating noise, odor or vibration relating to future use. However, future residents may experience noise impacts from the adjoining heavily-traveled roadway. The usual attenuation measures, such as berming, solid fencing, and specialized evergreen and deciduous buffer plantings along the property edge to reduce such impacts from off site to shield the religious building could result in significant aesthetic change to the property and surrounding vistas.

IMPACT ON PUBLIC HEALTH:

18. Will proposed action adversely affect public health and safety?

There may be a lingering effect of stored and used agricultural chemicals (i.e. herbicides, pesticides) from when the site was used as a dairy. It would appear that vehicles were fueled at the site and possibly serviced there as well which raises additional questions. Whether the site contains contaminants in the soil due to chemical use, fuel storage, or introduction of any fill in the northeast corner of the site may require analysis. The site is not included on the SCDHS' CLEARS inventory; however, on submission of any future application to the Planning Board for subdivision or site plan review, the applicant should be requested to submit a site history of past use practices to ascertain whether soil analyses will be required to determine the presence of residual chemicals and or fuels. Whether a portion of the site was previously used as a manure dump or disposal area for far waste should be identified. Removal of some of the older structures (dairy barn, garage, residences) or regrading on the site could result in distribution of small rodents (e.g. rats, mice, chipmunks, etc.) that may be burrowing in and about them into the adjoining residential areas. A control plan may be deemed necessary.

Any DEIS prepared for the subject application should include a professional Phase I Environmental Site Assessment to ascertain the likelihood of any contamination being present from the past activities at the site (e.g., sanitary systems, fuel tanks, vehicle repair, storage of regulated materials) and the composition of fill on-site. If such an assessment identifies any contamination that requires mitigation, or that additional analyses should be conducted, the study shall be distributed to the Suffolk County Department of Health Services and to the New York State Department of Environmental Conservation for review. It shall be the responsibility of the owner to conduct any analyses specified by the expert agencies or to remediate the site, under their supervision, to environmentally-acceptable standards.

IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD:

19. Will the proposed action affect the character of the existing community?

The proposed action will conflict with officially adopted plans or goals which identify the site for historic preservation. The proposed action will replace or eliminate existing facilities, structures or areas of historic importance to the community. New development will create a demand for additional community services (e.g. emergency services, police and fire, etc.).

The demolition of the accessory farm structures will change the perception of the historic district corridor. The immediate area used to have a tannery, blacksmith shop, and dairy farm, but no traces of these uses remain. When the area was first settled it was a rural community and everyone had home occupations. Dairy farms were common. With only the houses remaining it has the same look as other residential commuter neighborhoods, except that the houses are different architecturally. As these and other old barns and accessory structures get demolished, it becomes more likely that the lots will be subdivided and newer houses and structures will be built. Even with architectural control it will be impossible to hide their recent construction, and it will detract from the historical neighborhood.

20. Is there, or is there likely to be, public controversy related to potential adverse environmental impacts that may result if the proposed action is implemented?

It is anticipated that the project will generate controversy, based upon input received from *The Residents for the Preservation of Hilaire Woods* (attachment 5) and on past applications for the site.

February 7, 2002
Planning and Environmental Review Divisions
Huntington Town Department of Planning and Environment

Note: Information for this report was taken from the Hassett-Belfer rezoning (#98-ZM-304) EAF Parts 2 & 3, completed by Department of Planning and Environment staff on May 3, 1999 and the Demolition of Buildings, Permit # 03-26-01-2, EAF Parts 2 & 3 completed by Department of Planning and Environment staff on September 25, 2001.

HUNTINGTON HISTORIC PRESERVATION COMMISSION

MEMORANDUM

To: Supervisor Frank Petrone and Members of the Town Board
CC: Kiruv Capital Corp.
Greg Donofrio, NYS Office of Parks, Recreation & Historic Preservation
Tracey Edwards, Chairman, Huntington Planning Board
Richard Machtay, Director, Huntington Planning Department
From: The Huntington Historic Preservation Commission
Date: December 31, 2001
Re: 471 Park Avenue (SCTM # 400-73-1-41.1)
Demolition of Cow Barn

The Commission recommends that the Town Board reconsider its approval of a demolition for the cow barn at the above-referenced site within the Old Huntington Green Historic District. After the Commission recommended approval of the demolition permit, we were advised that the New York State Historic Preservation Field Services Bureau recommends preservation of the cow barn. A copy of a letter dated September 17, 2001 from Greg Donofrio, Historic Sites Restoration Coordinator for OPRHP, is attached. In the letter, Mr. Donofrio points out that the cow barn is " a relatively rare and architecturally significant, intact example of an early twentieth-century concrete block dairy barn." Mr. Donofrio encourages the applicant "to explore alternatives to demolition, possibly through the adaptive reuse of the cow barn."

The Commission would be happy to discuss adaptive reuse of the cow barn and by copy of this memo invites the owner to do so. We understand that although a certificate of approval was given at the September 25th Town Board meeting, the demolition permit has not yet been issued. Therefore, we believe it is not too late to revisit this issue.

DIRECTOR	M
DEPUTY DIR.	
ASST. DIRECTOR	
AGENDA	

#2

TOWN OF HUNTINGTON
DEPT. OF MARITIME SERVICES

Inter-Office Memorandum

December 19,2001

To: Bari Sue Koehler, Planning Aide

From: Janet Dieterich, Sr. Environmental Analyst Janet Dieterich

Re: Kiruv Estates

H-35

I have reviewed the preliminary proposal. Please be informed that the larger pond is a NYS DEC designated freshwater wetlands #H-36. The applicant must supply the Town with a plan that has been stamped and signed, in this case by Mr. Roy Jacobson, Jr. on behalf of the NYS DEC. It should also be stipulated that the area should be newly flagged while the construction is being done so the builders do not go into the designated freshwater wetland area. Since the area was supposed to be flagged in 1997, it is recommended that new flags be located.

As long as you have a copy of that approval, I do not have any problem with the proposal.

cc: Joseph J. Anastasia II, Director

01 DEC 21 AM 8:59

DEPUTY DIR.
DEPUTY DIR.
ASST. DIRECTOR
SOIL
ADMIN.

DEC 24 2001

#3

TOWN OF HUNTINGTON

FRANK P. PETRONE, *Supervisor*

Via Certified Mail # Z-294-751-983
Return Receipt Requested

Mr. Hed Schoenfeld
President
Kiruv Capital Corp.
1 Old Country Road
Carle Place, NY 11514

December 29, 2001

Re: Park Avenue Dairy Site, Huntington, NY
SCTM: #400-73-1-38,39,40,41.1,42 & 400-97-2-107

Dear Mr. Schoenfeld:

As you know, all six (6) of the above referenced parcels fall within the Old Huntington Green Historic District and therefore, according to Article VI of the Huntington Zoning Code, any work on the site that requires a building permit or a change of use is subject to review by the Huntington Historic Preservation Commission and subsequent recommendation to the Huntington Town Board for approval.

At our April 23, 2001 meeting, we reminded your architect and engineer of the historic sensitivity of this site. It is one of the most important historic sites in the Town.

The Commission has observed work taking place on the Park Avenue Dairy Site that has not been brought before the Commission for review. Of particular concern is work being performed on the Milk House. Located on SCTM# 400-73-1-41.1, the Milk House is situated on a lot where three (3) residential structures already exist. From an historic perspective, the Milk House is a rare surviving example of agricultural architecture of its kind in the Town of Huntington.

Work observed on the Milk House that requires the Commission's review for a change of use request includes but may not be limited to the following: Stripping of the original interior tile and replacement with new sheet rock ceiling, the removal of the original walk-in refrigerator, the addition of new interior finishes including doors, and the installation of new a electrical and heating system.

Work observed on the Milk House that requires the Commission's review for a building permit request includes but may not be limited to the following: Removal of the historic exterior refrigerator door, change of window size openings with the installation of new windows, patching exterior openings with new shingles, construction of a new exterior door, porch with steps, deck and handrail.

JAN 04 2002

Please note that prior to this construction, the Milk House was intact, with all its original historic fabric in place. In addition to the above work, it is important to note that the Commission has also observed the clear cutting of wetland vegetation and the deposit of a large amount of fill placed on the Park Avenue side of the structure. All work performed on the Milk House has occurred within the 100' setback of what we understand to be a designated wetland, which may be subject to review by other agencies.

In addition, the Commission was recently informed by the Huntington Planning Department that a subdivision application was submitted to further divide the site into a total of eleven (11) buildable lots. Please be advised that this application will come before the Historic Preservation Commission for review.

The Commission's next meeting is scheduled for January 25th at 8:00 pm, Room 114, Town Hall. We welcome the opportunity to meet with you and/or your representatives from Kiruv Capital Corp. to discuss a) work performed without the Commission's review and b) your overall master plan for the site.

If you have any questions or would like to be included on the January agenda, please contact Lawrence Leek at 631-549-4790.

Very Truly Yours

HUNTINGTON HISTORIC PRESERVATION COMMISSION

Lawrence Leek
Chairman

N. Scott Johnson
Vice Chairman

Robert Hughes

Reginald Metcalf

Joel Snodgrass

Alfred Walker

Cc: Supervisor and Members of the Huntington Town Board
Tracey Edwards, Chairman of the Planning Board
Richard Machtay, Director of the Planning Department
Craig Turner, Planning Department
Thelma Neira, Town Attorney
Bruce Richard, Director of Public Safety
Tom Mazzola, Director of the Department of Engineering Services
Chris Robinson, RMS Engineering
Neil Hoffman, Hoffman and Grayson Architects

#4

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau.
Peebles Island, PO Box 189, Waterford, New York 12188-0189

NEW YORK STATE
Bernadette Castro
Commissioner

518-237-8643

September 17, 2001

Craig Turner
Planner
Town of Huntington
Department of Planning and Environment
Town Hall
100 Main Street
Huntington, NY 11743-6991

RE: SEQRA
Application ID#: 03/26/01-02 (Demo)
471 Park Avenue and Woodhull Rd, Huntington
01PR3806

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP) for the proposed demolition of agricultural buildings in the Town of Huntington. We are pleased to offer comments on this proposal under the provisions of the State Environmental Quality Review Act.

James Warren of our National Register division has informed me that the Park Avenue Dairy Farm is listed on the State Register of Historic Places. The OPRHP has reviewed other proposals at this location and therefore has historic and visual information about the property ("Photographic Documentation of Standing Structures, Tannery Park Senior Housing, Town of Huntington, Suffolk County, New York," Feb. 1999). After reviewing the photographs in our files, it is the opinion of the OPRHP that the Swezey Horse Barn is in an advanced state of deterioration and therefor its demolition will pose No Adverse Impact to historic resources. The Swezey Cow Barn is, however, a relatively rare and architecturally significant, intact example of an early twentieth-century concrete block dairy barn. Some preservationist have a tendency to overlook the historic significance of these early twentieth-century out buildings despite the recent movement to preserve their more aesthetic nineteenth-century predecessors. We would encourage the applicant to explore alternatives to demolition, possibly through the adaptive reuse of the cow barn. The adjoining glazed-tile silo, while architecturally significant, appears fairly deteriorate in our 1999 photographs; given its condition, demolition of this structure may be appropriate.

Mike Schifferli, an OPRHP staff archeologist, has also reviewed the demolition plans and he has recommended that a Phase 1 survey be completed. I have enclosed a copy of his Archeology Comments for your review and files.

I hope these comments are useful for the town as it considers this approval. If you have any questions, feel free to call me at (518) 237-8643, ext. 3282. Please refer to the SHPO Project Review (PR) number in any future correspondences regarding this project.

Sincerely,

Greg Donofrio
Historic Sites Restoration Coordinator
(greg.donofrio@oprhp.state.ny.us)

RECEIVED
SEP 24 2001
TOWN OF HUNTINGTON

DIRECTOR	✓
DEPUTY DIR.	
ASST. DIRECTOR	
AGENDA	
ADDED STARTER	

ENC: Arch. C

#5

Residents for the Preservation of Hilaire Woods
Co-Founders Rob Ripp and Lynn Geisler
C/O Rob Ripp 670 Park Avenue
Huntington, New York 11743

December 28, 2001

DIRECTOR	
DEPUTY DIR.	
ASST. DIRECTOR	
AGENDA	✓
ADDED STAMPER	
TECH	DOCR.

Rich Machtay
Director of Planning
Town of Huntington
Department of Planning and Environment
Town Hall
100 Main Street
Huntington, New York 11743

RE: Subdivision Application Kiruv Estates

We are founding members of Residents for the Preservation of Hilaire Woods, a local community organization that is dedicated to preserving what is commonly known as the Hilaire Woods. Located in Huntington Village, the woodlands is adjacent to the Village Green and is comprised of contiguous parcels that run from Sunset Drive to Woodhull Road along the west side of Park Avenue. Some parcels are privately owned, certain parcels are in the public domain (under town or county ownership), and some are in the process of being acquired for public use. Portions of the woodlands are considered historic forest and contain New York State designated wetlands. In addition, the northern portion of the woods lies within the Old Huntington Green Historic District.

In the past several years, Hilaire Woods has been subject to development pressure. This included the proposed development of a congregate care residential facility of over 100,000 square feet on 7.4 acres at the former Sweezey Dairy at Park Avenue and Woodhull Road. This was known as the Hasset-Belfer development. Furthermore the southern portion of the property was subject to the development of 13 residential housing units on 8 acres at the terminus of Hilaire Drive.

Last year the Town of Huntington and Suffolk County agreed to acquire the 8-acre parcel at the southern most portion of the woods from a local developer, Walter Morris, for use as passive parkland. The town and the county expect to close on this property early in 2002.

The Hasset-Belfer proposal was never executed and Kiruv Capital Corp has since acquired the property. It has come to our attention that Kiruv has filed a subdivision application with the Town of Huntington for the 7.4-acre property. Given the location of the property within an historic district and within 100 feet of New York State designated wetlands, we understand any subdivision application will be subject to the full SEQRA process. Residents for the Preservation of Hilaire Woods wish to be considered an "interested agency" in the SEQRA review process.

JAN 04 2002

We have a vital interest in continuing to protect the woodlands and wetlands of this

must take into consideration the preservation of the environmental and historic resources extant on the property.

While we are aware of the subdivision application before the planning board, residents have already reported the following activity at the property: demolition of existing buildings including two horse barns and a dairy shed; drainage work that we were told was being done to reroute the water from the property into the Park Avenue recharge and drainage system; and renovation of the dairy barn's milk house into a private residence.

We understand the owner has received a certificate of approval for certain activities from the Town Board. Despite this, we are concerned that certain activities are being conducted without the necessary environmental or historic resource reviews required and that this will continue.

We expect the subdivision application will follow the necessary town and state protocol including a Phase I and Phase II environmental and historic resource assessment. However, if work continues at this site, destruction of historic and environmental resources could continue - usurping the requirements of SEQRA.

We ask that Residents for the Preservation of Hilaire Woods be considered and "interested agency" for purposes of the SEQRA review. Our group has considerable knowledge of the community and has worked to preserve natural resources that might be impacted by any potential subdivision.

Thank you for your consideration. We look forward to hearing from you.

Rob Ripp
Gary Cicerello
Lynn Geisler
Barbara LoMoriello
Susan Shilling
Randy Statham
Guy Leopold
Brian Mulligan
Jeff Loader
John Albertson

Cc:
Frank Petrone, Huntington Town Supervisor
Mark Cuthbertson, Town Board Member
Marlene Budd, Town Board Member
Mark Cappadanno, Town Board Member
Susan Berland, Town Board Member
Tracey Edwards, Chairperson Planning Department
Craig Turner, Planning Department

Appendix A-3
NYS OPRHP letter

September 17, 2001

#4

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

NEW YORK STATE
Bernadette Castro
Commissioner

518-237-8643

September 17, 2001

Craig Turner
Planner
Town of Huntington
Department of Planning and Environment
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100 Main Street
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Sincerely,

Greg Donofrio
Historic Sites Restoration Coordinator
(greg.donofrio@oprhp.state.ny.us)

RECEIVED
SEP 24 2001
TOWN OF HUNTINGTON
DEPARTMENT OF P...

DIRECTOR	
DEPUTY DIR.	
ASST. DIRECTOR	
AGENDA	
ADDED STARTER	

ENC: Archeo Comments

HUNTINGTON HISTORIC PRESERVATION COMMISSION

MEMORANDUM

To: Supervisor Frank Petrone and Members of the Town Board
CC: Kiruv Capital Corp.
Greg Donofrio, NYS Office of Parks, Recreation & Historic Preservation
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DIRECTOR	bw
DEPUTY DIR.	
ASST. DIRECTOR	
AGENDA	

Appendix A-4
Structural Engineering Reports for Existing Structures

Joseph Schmitt Consulting Engineers

471 PARK AVE.
HUNTINGTON, NY

March 5, 2001

Prepared for
Jay Viders
Kiruv Capital Corp.
1 Old Country Rd.
Carle Place, NY 11541

by
Joseph Schmitt Consulting Engineers
12 Wylie Way
Stony Brook, NY 11790-1100
phone (631)689-7270, fax (631) 751-7047

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Gray House: 2
Historic House: 3
Red House: 4
Large House: 4

General:

Description:

The property is a former farm on which there was a large abandoned barn, a milkhouse, an historic house, a fairly large white house, a gray house with vinyl siding, a red house and another smaller white house.

Purpose of the Inspection:

The client requested that the milkhouse, the gray house and the historic house be inspected for structural integrity; that is, to determine if the buildings are structurally sound and if not, what is needed to restore the structural integrity. In addition to these three buildings, we also looked at the framing in the basement of the red house and the large white house.

Findings:

Milkhouse:

There was evidence of significant settling of the west wall at the center portion, that is, there were two doors in the west wall and the section between the two doors had settled most significantly creating a dip in the roof at this area as well. It was also found that on the east side there was erosion of the foundation, that is, the concrete block was actually eroded away and that the footing was shallow being maybe a foot or less below grade. It was also found that a stream of water was exiting the foundation where it was eroded on the east side and flowing into a pipe which ran under ground and lead to a pond further west on the property. It was also observed that the northeast corner of the foundation was settling which appears to be due to the shallowness of the footing and the stream running at this area. Further observation of the interior indicated that there was significant settling of the floor slab and this is most noticeable and most obvious at the southeast area, but it was also visible at the interior bearing wall that runs north and south down the middle of the building. It appears that there is an underground stream which is undermining the slab and the foundations of the milkhouse. The building is salvageable, however, it will be necessary to divert the stream so that it no longer flows through the structure. This can be done by either piping it around the house or actually piping it through

containing the stream within a conduit so that it does not cause any erosion as it passes through.

It will also be necessary to underpin the foundation at the northeast corner and to extend that concrete up the outside face to stabilize the deteriorating portion of the foundation. The interior slab would have to be removed as part of the effort to locate and diver the underground stream and also to correct the sagging. This would also then determine what needs to be done to correct the settling at the interior bearing wall. More substantial footing may be required and/or underpinning.

It appears that the settling in the west wall may also be a result of foundation settling because of the undermining by the stream. There was clearly evidence of rot in the framing of the wall as well, therefore, it will be necessary to remove the interior and exterior finishes on the wall to restore the structure, that is, the wood studs and sill plates will have to be sistered and/or replaced as necessary to restore the integrity of the walls. These would then be anchored to the foundation and any appropriate new foundation work in this area. The remainder of the structure, that is, the north, south and a good portion of the east foundation walls were sound and the superstructure except the west wall also appeared to be sound.

Gray House:

This house sits on the west side of the property and is approximately 150 years old and has had some reinforcing done to the first floor. The walls of this house, however, were quite badly out of plumb. The side walls especially were splayed out at the bottom and at the top creating a significant curvature from top to bottom. There was evidence of severe rot, insect damage, etc. to the first floor framing which had been repaired with new sistered joists, main beams, columns, etc. At the side walls, the floor framing was supported on new beams installed against the foundation with new column supports under the beams. It appears that the new floor framing was not tied to the exterior walls and that the original connection between the exterior walls and the floor framing had been lost due to the deterioration of the original framing. As a result, there is nothing to prevent the bottom of the walls from walking out which is what appears to be happening. This can be at least stabilized, if not restored to plumb, by installing straps to tie the new floor joists to the wall framing. This would require removing one or two panels of siding from the bottom, drilling holes through the walls and wrapping 16 gauge steel straps around the studs and running the two ends back and nailing them to a floor joist. This should be done at a maximum spacing of four feet depending on how the stud joists spacing lays out. This would then stabilize the exterior walls. At the front and rear the walls can be tied in using similar straps tied back to the subflooring.

The problem at the top of the walls is excessive side thrusts due to roof loads. This was a common fault in houses of this period where the wall extends only up half the height of the second floor and the ceilings then act as the collar ties to tie the roof rafters together. This does result in significant sidewards load on the walls resulting in sagging of the roof ridge and splaying of the outside walls as occurred in this case. In order to correct this would require installing cross ties at the top of the walls which would then render the second floor uninhabitable. The condition is such that there is no significant danger of the roof collapsing. Only that possibly some small additional amounts of settling may occur and, therefore, no corrective action is recommended at this area.

Historic House:

This house appeared to be approximately 200 years old or more and was built on a stone foundation with very little ground clearance. There was a small portion of the area that had a partially excavated basement with a dirt floor at the north end of the house. There was quite visible and obvious distortions in the house. Specifically, both ends of the house seemed to have settled relative to the center so that the roof ridge actually had a crown and the roof sides had a crown when viewed in the north and south direction. There was also evidence of considerable sagging and misalignment around the front entry door which is in the middle of the west wall. The second floor over the living room also had a very deep severe sag indicating undersized framing. The house is of substandard construction to begin with but then there was also evidence of quite severe deterioration of the sill beams and possibly the floor joists. The deterioration of the sill beams comes from possibly both water and insects. There was definitely evidence of rot due to water and moisture. The sill beams were observable from the small basement area where it could be seen that most of the sill beams were totally rotted. A gap of more than an inch was observed between the top of the tendon of the floor joists and the top of the mortice in the sill beam. It appeared that the entire bottom portion of the sill beam had rotted away and the joist was actually falling out of the mortice hole. At the inaccessible areas one would surmise that similar problems are occurring and that there may be additional damage into the floor joists as well.

Stabilizing the house would involve, at a minimum, removing the interior flooring for access to the framing and then removing the siding as necessary to replace all the sill beams around the perimeter and as necessary sister or replace floor joists and interior beams. The interior flooring can then be reinstalled. It would also be necessary to install foundation vents and to lay a vapor barrier on the ground in the crawl spaces and basement so that the new material does not rot. Restoration of the second floor would also require reframing the second floor with joists that are capable of spanning the full width of the house and then reinstalling the flooring or ceiling below.

The proper way to restore the house, however, would be to jack it up and excavate a basement under it then reframe the floor as necessary and set it down on a new foundation. The existing field stone foundation does not appear to be very solid, certainly not water proof nor of sufficient depth below grade.

Proper restoration of the structure alone would likely run approximately $50,000 to $75,000. Minimum stabilization would likely to run approximately $20,000 to $30,000.

Red House:

This house was on the east side of the property on Park Ave. This house was down in the lower portions of the property and was not originally on the schedule of inspection. The basement was checked and it was found that the floor joists, the beams supporting them and the posts supporting the beams in the area under the dining room were severely rotted. Some of the joists were so badly rotted as to be useless. The beam along the east side, right along the foundation wall, was supported on wooden posts the base of which had rotted, as a result the beam is essentially not supported. There is another main beam running north and south approximately two feet from the west foundation wall. This beam was supported on one column near the center with no supports at either end. It is advised that a new beam and columns be installed along the east foundation wall and new columns added under the west main beam. It would be advisable rather than columns to use masonry piers as they would be less likely to deteriorate with the water in the basement. It will also be necessary to sister up the existing floor joists with new joists. It would be advisable to use pressure treated lumber for the new material.

The basement in this house was quite wet at the time of the inspection and water was flowing through the west foundation wall. There was also a small area at the northwest corner of this basement area where the wall had deteriorated and crumbled. This area should be patched or grouted solid. The water problem appears to be ground water as well as surface water. A major drainage system would be required to eliminate the water problems in these basements.

Large House:

This was the last house to be inspected. This house generally appeared to be in good condition at the time of the inspection. There was, however, a problem at the main beam in the basement. The main beam sits on the foundation wall at the west side of the house. A hole had been made in the foundation wall at this point to run a waste line and the block was broken out from underneath the beam. The beam is now only partially supported on a small piece of concrete block. It is advised that a brick or block pad be laid up with mortar to fill the gap underneath the main beam.

It was also observed that there was water in this basement as well and substantial rust at the base of the steel columns. It will be necessary at some point in the future to replace these columns using masonry piers that would reduce the effects of future damage due to the water in the basement.

****

This report of findings is attested to and submitted this fifteenth day of March Two Thousand One.

Joseph Schmitt, P.E.

This engineering report is furnished at your request in strictest confidence and does not represent an offer to purchase or to guarantee the premises, its contents or surrounding property.

All statements and judgements are the result of a visual inspection on readily accessible areas of the premises.

All price figures are based on engineering estimates of quantities and unit prices. Actual costs may be greater or less than these estimates.

Please read the entire report and phone anytime for clarification.

STATE OF NEW
JOSEPH
LICENSED PROFESSIONAL ENGINEER
No. 045682

471 PARK AVE.
HUNTINGTON, NY

February 15, 2002

Prepared for
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Purpose of the Inspection: 1

COW BARN 2

Findings: 3

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General:

Description:

The property is a former farm on which there was a large abandoned barn, a milkhouse, an historic house, a fairly large white house, a gray house with vinyl siding, a red house and another smaller white house.

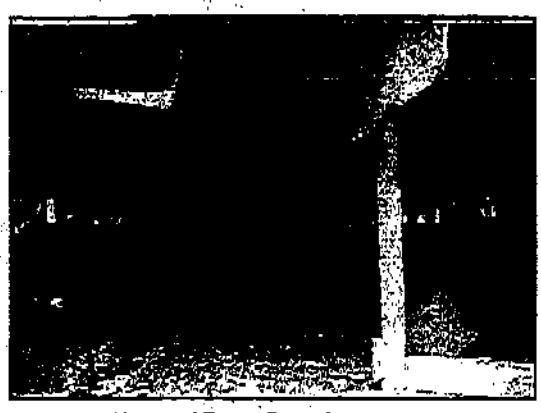
Purpose of the Inspection:

The premises were inspected last year on March 5, 2001. The purpose of this inspection was to check the condition of the original cow barn and silo for restoration and to check the condition of the small bridge over the stream at the driveway from the Park Avenue entrance.

COW BARN

Findings:

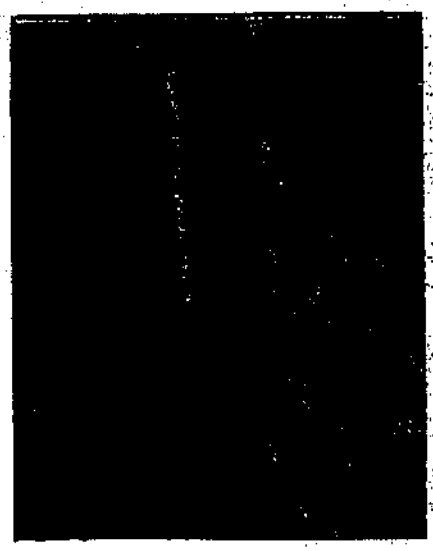
The barn is a masonry structure with poured concrete walls and a wood framed second floor and roof with corrugated steel roof coverings. The second floor is supported by interior wood beams and steel columns.



View of Barn Interior

The barn was in very poor condition and unstable condition at the time of the inspection. It is highly unsuitable for use for redevelopment for another use. The floor to ceiling height in the first floor is approximately 7' or less and would be reduced further when the floor is leveled and straightened with a topping slab. This does would not meet minimum Building Code requirements.

A more serious problem, however, is the condition of the east wall of the building. The east wall was tilted or leaning toward the east side at a dramatic rate. The amount of lean was measured using a level and is 1 ½" out of plumb in a distance of two feet. This means that the wall is out of plumb over its full height of 8' a total of 6". The center of gravity of the wall is approaching the point of instability which means that collapse could be eminent.



Wall of Barn Out of Plumb
1 ½" in 2'

View of Side Wall of Barn
Pilaster leaning at an even much greater angle than the wall.

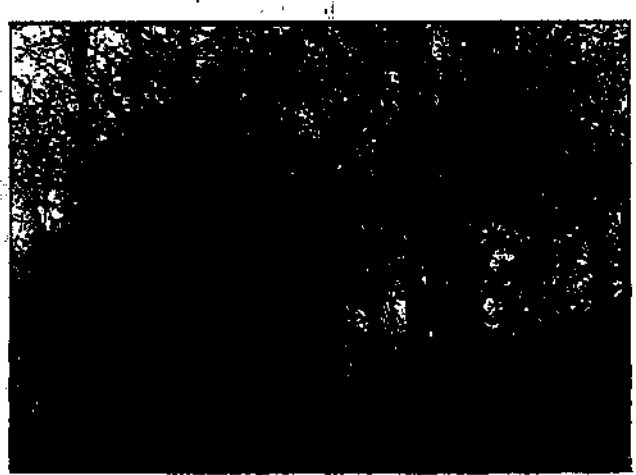
Concrete pilasters had been added at one point on the exterior of this wall apparently to stabilize the wall. These pilasters were not tied into the wall, therefore, were not very effective. As can be seen in the photo above, the pilaster has shifted substantially beyond the amount the wall has shifted.

The problem with the side walls appears to be a lack of an inadequate footing. A hole was dug to determine what if any type of footing was under the wall and it was found that there was no footing under the wall and that the bottom of the wall was only a few inches below the ground surface. The bottom of the wall is well above the frost line and is subject to frost heave and is footed on organic material which is subject to decomposition and root growth which can destabilize the wall.

In order to restore the barn to a stable condition, it would be necessary to completely remove and rebuild the east wall of the barn. Simply underpinning the wall with a new footing would not be adequate as the wall has leaned too far at this point as to become nearly unstable.

SILO

Located at the south end of the cow barn is a clay tile silo which was apparently used to store feed. The silo is in a severely deteriorated condition. The roof of the silo had long ago blown off and was laying on the side of the building leaving the top of the clay tile walls exposed to the weather. In addition, a tree had fallen and knocked off a substantial portion of the north side of the silo walls.



View of Silo including section destroyed at top

A partial view of the silo through the trees it can be seen that the top of the wall is missing to the right side of the slotted opening to the north side of the silo.

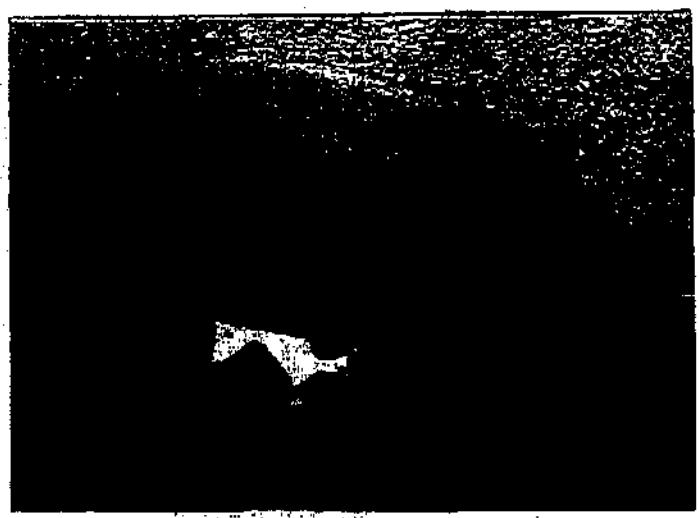
The silo construction consists of double wythe clay tile walls with the tile courses staggered. The inner wythe of tiles are banded with steel straps around the perimeter at approximately the middle of each course. The water entering the cavities of the tile walls as a result of the loss of the roof appears to be causing serious corrosion of the steel bands. The corrosion is causing the steel to expand and is knocking the outer wythe of the clay tiles off of the building.

View of Silo with corroded steel banding and spalling tiles.

There has been at the time of the inspection a severe loss of material at the outer wythe of the tile walls. The structure has been seriously compromised by the deterioration of the steel bands mainly and also by the loss of wall material.

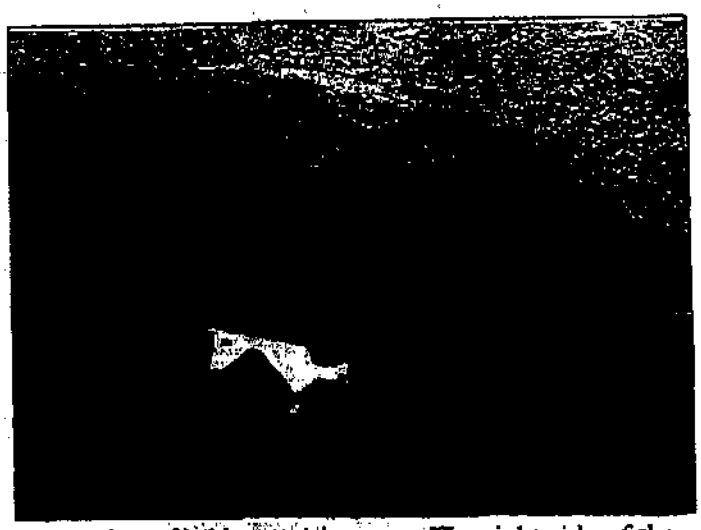
BRIDGE

The driveway bridge over the stream at the Park Avenue side of the property appears to be a poured concrete slab structure on masonry or concrete side walls. The east side wall appears to have deteriorated and basically disintegrated and the concrete slab that spans the stream has settled dramatically at the center. Essentially the bridge is collapsing and will have to be replaced. Design of a replacement structure is underway.



Under side of bridge at driveway - The right side of the bridge slab is unsupported and the slab is collapsing.

The driveway bridge over the stream at the Park Avenue side of the property appears to be a poured concrete slab structure on masonry or concrete side walls. The east side wall appears to have deteriorated and basically disintegrated and the concrete slab that spans the stream has settled dramatically at the center. Essentially the bridge is collapsing and will have to be replaced. Design of a replacement structure is underway.



Under side of bridge at driveway - The right side of the bridge slab is unsupported and the slab is collapsing.

****

This report of findings is attested to and submitted this twenty second day of February Two Thousand Two.

Joseph Schmitt, P.E.

This engineering report is furnished at your request in strictest confidence and does not represent an offer to purchase or to guarantee the premises, its contents or surrounding property.

All statements and judgements are the result of a visual inspection on readily accessible areas of the premises.

To the fullest extent permitted by law, the professional inspector's total liability to owner for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to the project or this agreement from any cause or causes including, but not limited to, the professional inspector's negligence, errors, omissions, strict liability, breach of contract or breach of warranty shall not exceed the total amount of the fee charged.

Please read the entire report and phone anytime for clarification.

Appendix A-5
Environmental Assessment Form (EAF) Part I

NP&V

5/6/04

FULL ENVIRONMENTAL ASSESSMENT FORM
COVER SHEET AND STATEMENT OF DETERMINATION OF SIGNIFICANCE

Purpose: The Environmental Assessment form (EAF) is designed to help applicants and reviewing agencies determine, in an orderly manner, whether a project or action may result in significant impacts. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or immeasurable making the determination difficult. It should also be understood that individuals that review projects may have different levels of expertise, differing analytical skills and/or be proficient in varying disciplines. The Full EAF is intended to provide an analytical tool by which applicants and agencies can be sure that the process has been orderly and comprehensive in nature, while remaining flexible enough to allow the introduction of data to the process resulting in a project that best fits the circumstances.

The full EAF is designed to in some way quantify the decision making process. It provides an agency with a record of the review that supports a final decision. If more information is needed before a decision can be made then it can be provided in an impact statement, however, processing the Full EAF can result in a determination that a project impacts can be mitigated and no further review is necessary.

Components of the Full EAF:

Part 1: Filled out by the applicant/sponsor - It provides data and information about a given project and its site. By identifying basic project data, it assists the reviewer in the analysis that takes place in the EAF Part II and III.

Part 2: Focuses on identifying the range of possible impacts, if any, that may occur from a project or action. It provides guidance as to whether an impact is likely to be small, moderate or potentially large. The form also assists the reviewer in identifying whether an impact can be mitigated or reduced. Filled out by reviewing agency.

Part 3: If any impact is identified in part two (2) as one which is potentially large then part three (3) is used to analyze the impact and determine whether or not it can be mitigated or more information is needed before a decision can be made by the agency about the proposed project. Part III need not be prepared if upon preparing Part II can be determined that the significant impacts will result from the proposed project or action. Prepare by reviewing agency.

TO BE COMPLETED BY THE LEAD AGENCY
DETERMINATION OF SIGNIFICANCE
For Type I and Unlisted Actions

Identify the portions of the EAF prepared for the proposed project described herein: ___X___ Part 1 ____Part 2 ____Part 3
Upon review of the information recorded on this EAF (Parts I and II and III if necessary), and any other supporting data, and considering both the magnitude and importance of each impact that may occur if the project is implemented, it is reasonably determined by the lead agency that:

___A. The project will not result in any large and important impact(s) and, therefore, is one which will not have a significant effect on the environment, therefore a Negative Declaration will be prepared.

___B. Although the project could have a significant effect on the environment, this unlisted action will not have such an effect because the mitigating measures described in Part III of the EAF have been required, therefore **a Conditioned Negative Declaration** will be prepared.

___C. The project may result in one or more large and/or important impacts that may have a significant impact on the environment, therefore **a Positive Declaration** will be issued and an **Environmental Impact Statement** will be prepared.

Name of Action
Kiruv Estates

Name of Lead Agency

Print or type name of officer in Lead Agency — Title of Officer

Signature of Officer in Lead Agency — Signature of Preparer (if different than Officer)

Date

PART 1 - PROJECT INFORMATION

Responsibility of project sponsor to complete

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Complete the entire form, Parts A through E. Answers to these questions herein will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts II and III of the Full EAF. It is expected that completion of the Full EAF will be dependent on information not currently available and requiring additional work is needed and should be supplied, then he/she does so at his/her own discretion. **Please answer N.A. to any question below that does not apply.**

Name of Action: *Kiruv Estates*

Suffolk County Tax Map Number: *0400-73-01-38, 41.1 & 42 and 0400-97-02-107*
Location: *Park Avenue & Woodhull Road, Town of Huntington, Suffolk County*
Street Hamlet

Applicant/Sponsor Information:

Name: *Kiruv Capital Corporation* Phone: *(516) 742-1666*

Street Address: *1 Old Country Road*

City/State/Zip: *Carle Place, NY 11514*

Owner Information (if different than Applicant/Sponsor):
Name: Phone: ( )
Street Address:
City/State/Zip:

Use the last page or the back of this form to answer questions for which there is insufficient space on the form to include all pertinent information.

DESCRIPTION OF ACTION
See attached.

A. SITE DESCRIPTION

Physical setting of overall project, both developed and undeveloped areas.

1. Present land use: **CHECK ALL THAT APPLY**

Urban	Industrial	Commercial	Residential *X*
Rural (non-farming)	Forest	Other (explain) *X* *Managed Landscape*	Agriculture

2. Total Acreage of Project Area: *7.07* acres.

APPROXIMATE ACRES	PRESENT	COMPLETED PROJECT
Meadow or Brushland	0.8 acres	0.5 Acres
Forest	3.0 acres	2.0 Acres
Agriculture	acres	Acres
Wetland	0.8 acres	0.8 Acres
Water Surface Area	0.3 acres	0.3 Acres
Unvegetated	acres	Acres
Roads, Buildings etc.	0.4 acres	1.9 Acres
other (indicate)Landscaped	1.7 acres	1.5 Acres

Project Description

The proposed project is located at the on the east side of Woodhull Road and south side of Park Avenue in the Town of Huntington, Suffolk County, New York. The site is 7.07 acres in size and can be more clearly defined as Suffolk County Tax Map Numbers 0400-073-01-38, 41.1, and 42 and 0400-097-02-107. The property is currently zoned R-7.

The proposed project involves the construction of eleven (11) new attached single family dwelling units and a cul-de-sac extension from Woodhull Road to provide access to the units. The site is currently improved with a cottage, single family dwelling and a man-made pond on the northeastern portion of the site, two barns in the central portion of the site, and two historic single family dwellings in the western portion of the site fronting Woodhull Road. The applicant proposes to preserve the two historic dwellings and dedicate the dwellings and surrounding 1.04 acres of land to the Town of Huntington. Additionally, the application proposes to extend the heritage trail from the southeast portion of the property to Woodhull Road and the two historic structures. The existing barns, cottage, and access driveway from Park Avenue would be removed; however the single family dwelling and pond on the northeastern portion of the site would remain. The eleven (11) proposed dwellings are two story units, each with an approximately 1,575 s.f. building footprint. The project will be serviced with public water and sewer connections.

3. What is predominant soil type(s) on project site? *Riverhead/Haven & Carver/Plymouth*
Soil Drainage:

Well Drained *85* %	Moderately Drained %	Poorly Drained *15* %

4. Approximate percentage of proposed project site with slopes:

0 to 10% *55* +/- %	10 to 15% 10 +/- %	15% or greater- *30* +/- %

5. Is project site contiguous to or substantially contiguous to (i.e., across the street etc.), or contain a building, site or district on the State or National Registers of Historic Places or on the Register of Natural Landmarks? X Yes _____No *(National Historic Register- Rolph House; Town Historic District & Structures- including Rolph House)*

6. Is project site contiguous or substantially contiguous to or is it occupied by an historic building or landmark as designated pursuant to Article VI of the Town Code? X Yes ____ No

7. Is the project site within a one mile radius of an archaeologically significant site or multiple site zone, as has been identified by the New York State Office of Parks, Recreation and Historic Preservation using the "circles and squares" method of evaluation? X Yes ____ No

8. What is the depth of the water table? ***3-10 ±*** **(in feet)**

*** outside a special groundwater area**

9. Is project site located over a primary, principal, or sole source aquifer? ***X*** Yes* ___ No

10. Do hunting, fishing or shell fishing opportunities presently exist in the project area? __ Yes ***X*** No
If yes, will they continue after completion of the project? ____Yes _____No

11. Does project site contain any species of plant or animal life that is identified as threatened or endangered? ___ Yes ***X*** No

If yes, then indicate authority_____
and Identify each species _____

12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, etc.)
____ Yes ***X*** No Indicate which: _____

13. Is the project site presently used by the community or neighborhood as an open space or recreation area? ___ Yes ***X*** No ***If yes, explain on the back of this form.***
If yes, will the use continue at the completion of the project? ____ Yes _____ No

14. Does the site presently include views known to be important to the community? _____ Yes ***X*** No
If yes, will the views be retained with the completion of the proposed project? ____Yes___ No

15. Name(s) of Stream and or rivers within or contiguous to project area? _____
Yes- unnamed tributary stream

A. Name of water body to which the stream/river is tributary: ***Huntington Harbor***

16. Names and sizes (acres) Lakes, ponds and other wetland areas within or contiguous to project area:
1.2 ± (man-made pond & wetland areas, stream)

17. Is the project site served by existing public utilities or are such utilities readily available to the site?
 __X__ Yes ___ No
 a) If yes, is there sufficient capacity to allow the proposed project to connect? __X__ Yes___ No
 b) If yes, will improvements be necessary to allow connection? __X__ Yes___ No

18. Is project site located in or substantially contiguous to (e.g., across the street, etc.) a Critical Environmental Area (CEA) designated pursuant to Article 8 of the ECL, and 6 NYCRR 617 (SEQRA)?_____Yes __X__No

19. Has the project site ever been used for the disposal of solid or hazardous wastes? ___ Yes __X__ No

B. PROJECT DESCRIPTION

1. Physical dimensions and scale of project (fill in dimensions as appropriate)

 a. Total contiguous and/or substantially contiguous (e.g., across the street) acreage owned or controlled by the project sponsor is __7.42__ acres.
 b. Project acreage to be developed initially is __7.07__ acres and ultimately is __7.07__ acres.
 c. Acreage to remain undeveloped upon completion of project is __3.30 ±__ acres.
 d. Length of project, in miles is _____ miles. (If appropriate) *N/A*
 e. If project will result in enlargement of a facility indicate the percent expansion here: __N/A__%
 f. For commercial/industrial indicate, if any, the number of off-street parking spaces existing: __; proposed: _____, and required by Code: _____.
 g. Estimate the maximum vehicular trips that will be generated per hour upon completion of project: __13*__ trips/hour. * (Saturday peak hour total; see attached trip generation)
 h. If the proposed project is residential indicate below the number and type of housing unites below:

	One Family	Two Family	Multi-Family	Conglomerated
Initially	*4**			
Ultimately	*14*			

* Four (4) single-family homes existing; 1 to be demolished, 1 to remain, 2 are historic and to be dedicated to Town.

 i. Dimensions, in feet, the largest proposed structure N/A
 __30'__ height; __35'__ width; __45'__ length.
 j. If non-residential indicate the gross floor area of proposed building: __N/A__ sq. ft.
 k. If commercial/industrial indicate the "Floor Area Ratio": __N/A__ FAR.
 (Proposed building area in square feet divided by lot area in square feet)
 l. Linear feet of frontage on any road in the Town is __1,354 ±__ feet.

2. How much natural material (e.g., rock, earth, sand, etc.) will be removed from the project site?
 _____tons __Not known at this time__ cubic yards.

3. Will disturbed areas be reclaimed? __X__ Yes ___No

 a. If yes, indicate here the intended purpose for reclamation: ***Landscaping***
 b. Will top soil and/or upper subsoil be stock piled for reclamation? __X__ Yes____No

4. Indicate here how many acres of vegetation (trees, shrubs, ground covers) will be removed from the project site during construction? __3.77 ±__ acres.

5. Will mature forest (over 100 years old) or other locally-important vegetation and/or NYS protected native plants be removed by the proposed project? _____ Yes __X__ No

6. If the proposed project is multi phased then: **N/A**
   a. Total number of phases are _____ .
   b. Anticipated starting date phase one is: Month _____ Year _____.
   c. Approximate completion date of final phase _____ Month _____ Year.
   d. Is the first phase functionally dependent on the following Phase(s) ___ Yes ___ No

7. Estimate the number of jobs generated: during construction *30* : if industrial/office or retail indicate number of jobs generated when complete _____.

8. Indicated the number of jobs that will be eliminated by the proposed project if it is implemented: *0*.

9. Will the proposed project require relocation of any other projects or facilities? _____ Yes __X__ No
   If yes, explain here: _____

10. Does the proposed project involve a liquid waste discharge to a body of water? ____ Yes __X__ No
    a. If yes, indicate volume per day (_____ gallons), & type (sewage, industrial) _____.
    b. If yes, indicate into what body of water the discharge will take place:
    _____

11. Is subsurface liquid waste disposal involved? __X__ Yes _____ No
    If yes, indicate volume per day 1,200*; 3,600 ** (gallons), type (storm water, sewage, industrial):
    Public Sewer Connection **** existing 4 units; ** 12 units upon completion***

12. Will the surface area of an existing body of water increase, decrease or will the bottom become deeper as a result of the proposed project? ___ Yes __X__ No ***If yes, explain on back of this form.***

13. Is any portion of the proposed project within either a 50-year or 100 year flood plain? __ Yes __X__ No
    If yes, which: _____Year flood plain.

14. If implemented will the project generate solid waste? __X__ Yes ___ No

    a. If yes, estimated amount per month will be 1,220*; 3,660** pounds.
    **** existing 4 units; ** 12 units upon completion (based on 10 lb/dwelling unit/day)***
    b. If yes, will an existing solid waste facility be used? __X__ Yes _____No If yes, provide name and location here: *Smithtown Landfill at Kings Park*

15. Will any wastes **not** go into a sewage disposal system, a sanitary landfill, resource recovery facility or be recycled? _____ Yes __X__ No
    a. If yes, explain_____

16. Indicate the volume of solid waste that will be recycled by the completed project each month:
    _____*N/A*_____tons.

To be answered only if project is one that will operate a facility that disposes of solid waste

17. Will the project involve the handling and disposal of solid waste? ___ Yes ___ No
    a. if yes, what is the anticipated rate of disposal? _____tons/month.
    b. If yes, and landfilling is proposed, what is the site life? _____years.

18. Is the project expected to use herbicides or insecticides on a regular basis for other then normal landscape maintenance? _____ Yes __*X*__ No

19. If implemented will project routinely produce odors? ___ Yes __*X*__ No

20. Is project expected to produce operating noise which exceeds local ambient noise levels?___Yes __*X*__No

21. Will project result in increased in energy usage for other than ordinary lighting and heating requirements? ___ Yes __*X*__ No
    If yes, indicate type(s) _____

22. If water supply is from wells indicate pumping capacity _____*N/A*_____ gallons/minute.

23. Total anticipated water usage will be __1,200*; 3,600 **__ gallons per day.
    **** existing 4 units; ** 12 units upon completion***

24. Does project involve Local, State or Federal funding? ___ Yes __*X*__ No
    If yes, explain _____

25. Approvals Required:

Agency			Type of Approval	Submittal Date
Town Board	Yes	No		
Planning Board	*X* Yes	No	*Subdivision*	***May 2004***
Town ZBA	Yes	No		
Health Department	Yes	No		
Other Local Agencies	*X* Yes	No	*Water & Sewer*	***Pending***
State Agencies	*X* Yes	No	*NYSDEC- Wetlands*	***May 2004***
Federal Agencies	Yes	No		
Other: Regional	Yes	No		

C. ZONING AND PLANNING INFORMATION

1. Does proposed action involve a planning or zoning decision? __*X*__ Yes ___ No
   Indicate which of the following: **Check All that Apply**

Zoning Amendment	Zoning Variance	Special Use Permit	Subdivision *X*
Site Plan	New or Updated Master Plan	Resource Management Plan	Other

If other, explain: _____

2. What is the zoning classification(s) of the site? _____R-7 Residence_____

3. In your opinion, what is the estimated maximum potential development of the subject site at the existing zoning? _____*13* ± SF Building Lots_____

4. If a zone change is proposed what zoning classification is requested and, in your opinion, what is the estimated maximum development potential of the subject site? Explain: ***N/A***

5. Is the proposed action consistent with the recommended uses in adopted local land use plan (s)?
   X Yes _____ No

6. What are the predominant land uses and zoning classifications within a 1/4-mile radius of the proposed action?List: ***Residential, Institutional, Municipal/ R-7 Res, R-10 Res, R-15 Res***

7. In your opinion, is the proposed project compatible with adjoining/surrounding land uses within 1/4 mile of the subject site? ***X*** Yes _____No

8. If the proposed action compatible is a subdivision of land how many lots are proposed, and what is the minimum lot size proposed? Explain: **N/A**

9. Will the proposed action require the extension of an existing sewer district or authorization for formation of a new sewer or water district? _____Yes **X** No

10. Will the proposed action create a demand on any community provided services (recreation, education, police, fire protection etc.)? ***X*** Yes _____ No

    If yes, is the existing capacity of the utility or service sufficient to handle the project demand?
    X Yes _____No

11. Will the proposed action result in generation of vehicular traffic significantly above present levels?
    ___ Yes ***X**** No ** (See attached traffic generation)*

    a. If yes, is existing infrastructure (roads, signals, signage, etc.) adequate to handle the additional traffic? ___ Yes ___ No On what authority is this opinion offered?

    b. Will Improvements be necessary?___ Yes ***X*** No If yes to either a) or b) provide the basis for such opinion and agency name and documentation that supports the conclusion:

D. Additional Informational Details

Attach any addendum with any additional information needed to clarify your project. If there may be adverse impacts associated with the proposal, discuss those impacts and the measures which you will undertake to mitigate or avoid them.

E. VERIFICATION

I hereby certify that I have filled out the above form for the action known as: ***Kiruv Estates***

and to the best of my knowledge, all of the answers are true.

Name: ***Nelson, Pope & Voorhis, LLC*** Date: ***05-06-04***
(Print or type name)

Signature ***(Sara N. da Silva)*** Title ***Environmental Scientist***
(Preparer)

If the Applicant/Sponsor did not fill out this form then the following verification must be signed.

I am the applicant/sponsor of the proposed project described above and I hereby certify that I have given the above signed individual/company permission to fill out this form on my behalf. I further certify that the above signed consultant has made me aware of the questions on this form and explained the answers that have been provided, and I understand the proposed project and the answers provided on this form.

Name: _____ Date: _____
(Print or type name)

Signed: _____ Title: _____
(Applicant/Sponsor)

Project Description

The proposed project is located at the on the east side of Woodhull Road and south side of Park Avenue in the Town of Huntington, Suffolk County, New York. The site is 7.07 acres in size and can be more clearly defined as Suffolk County Tax Map Numbers 0400-073-01-38, 41.1, and 42 and 0400-097-02-107. The property is currently zoned R-7.

The proposed project involves the construction of eleven (11) new attached single family dwelling units and a cul-de-sac extension from Woodhull Road to provide access to the units. The site is currently improved with a cottage, single family dwelling and a man-made pond on the northeastern portion of the site, two barns in the central portion of the site, and two historic single family dwellings in the western portion of the site fronting Woodhull Road. The applicant proposes to preserve the two historic dwellings and dedicate the dwellings and surrounding 1.04 acres of land to the Town of Huntington. Additionally, the application proposes to extend the heritage trail from the southeast portion of the property to Woodhull Road and the two historic structures. The existing barns, cottage, and access driveway from Park Avenue would be removed; however the single family dwelling and pond on the northeastern portion of the site would remain. The eleven (11) proposed dwellings are two story units, each with an approximately 1,575 s.f. building footprint. The project will be serviced with public water and sewer connections.

Appendix A-6
Positive Declaration and EAF Parts II and III

Town Planning Board

November 3, 2004

14-12-9 (2/87)-9c

SEQR

617.21
Appendix E
State Environmental Quality Review

Positive Declaration
Notice of Intent to Prepare a Draft EIS
Determination of Significance

Lead Agency: Town of Huntington Planning Board

Project Number

Address: 100 Main Street, Huntington, NY 11743

Date: November 3, 2004

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

The Huntington Town Planning Board, as lead agency has determined that the proposed action described below may have a significant effect on the environment and that a Draft Environmental Impact Statement will be prepared.

Name of Action: **Kiruv Estates (Subdivision)**

SEQRA Status: **Type I Action**

Description of Action: The proposed action is a request for the modified subdivision of a 7.07-acre site within a Town Historic District [Old Huntington Green] in order to construct four groups of attached units (three of the groups would have two units and one group would have three units for a total of 9 units), a private roadway and two stormwater impoundment/drainage areas (Preliminary Map dated revised, 9/1/04). Three (3) existing structures, two (2) of which are designated historic would remain. The historic structures and surrounding 1.72 acres of land are proposed for dedication to the Town. Two (2) existing barns, cottage and access driveway from Park Avenue are proposed for removal. The application also proposes the continuation of a historic trail through the area to be dedicated to the Town of Huntington. Although the proposed project is not within the Huntington Sewer District boundaries the applicant proposes to petition the Town Board for sanitary wastewater collection and treatment and disposal to the Huntington Sewer District. Public water is to be provided by the Suffolk County Water Authority.

Location (Include street address and the name of the municipality/county.): The project site is located at the southwest corner of Park Avenue (CR 35A) and Woodhull Road in the Village Green area of Huntington Village within an R-7 Residence District Zone (minimum 7,500 square feet of gross lot area), designated as # 0400-73-01-038, 041.1 & 042 and 0400-97-02-107 on the Suffolk County Tax Map.

Reasons Supporting This Determination:
Please refer to the EAF Parts II & III and the associated November 3, 2004 Planning Board resolution (attached).

For further information:

Contact Person: Richard Machtay, Director of Planning and Environment or
Scott Robin, Senior Environmental Analyst
Town of Huntington Planning Board

Address: 100 Main Street, Huntington, NY 11743

Telephone Number: 631/351-3196 - FAX # 631/351-3257

A Copy of this Notice Sent to:

- Commissioner, Department of Environmental Conservation, 50 Wolf Road, Albany, New York 12233-0001
- Appropriate Regional Office of the Department of Environmental Conservation -- *Region I*
- Office of the Chief Executive Officer of the political subdivision in which the action will be principally located -- *Supervisor Frank Petrone*
- Town of Huntington Planning Board
- Applicant & Owner– Kiruv Capital Corp.
- All other involved agencies (if any):
  - ✓ Town of Huntington Town Board
  - ✓ Town of Huntington Department of Environmental Waste Management
  - ✓ Town of Huntington Department of Engineering Services
  - ✓ Town of Huntington Highway Department
  - ✓ Suffolk County Department of Health Services, Wastewater Management Section
  - ✓ Suffolk County Department of Public Works
  - ✓ Suffolk County Water Authority
- Interested agencies (if any):
  - ✓ Suffolk County Department of Health Services, Office of Ecology
  - ✓ Suffolk County Planning Commission
  - ✓ Town of Huntington Department of Maritime Services
  - ✓ Town of Huntington Historic Preservation Commission
  - ✓ Town of Huntington Conservation Board
  - ✓ Huntington School District
  - ✓ Town of Huntington Bureau of Fire Prevention

HUNTINGTON TOWN PLANNING BOARD

MEETING OF NOVEMBER 3, 2004

The following resolution was offered by A. Rosen

and seconded by T. Edwards

WHEREAS, Kiruv Capital Corp, One Old Country Road, Carle Place, New York, 11514, owner of fee title to land has submitted a subdivision application for the **Kiruv Estates** property, prepared by Nelson & Pope, Engineers & Surveyors, located on the southwest corner of Park Avenue and Woodhull Road in Huntington, designated as parcels 0400-073-01-038, 041.1 & 042 and 0400-097-02-107.000 on the Suffolk County Tax Map, and

WHEREAS, said preliminary application was received on May 21, 2004, for the modified subdivision of an 7.07 acre property into twelve (12) lots later revised to ten (10) lots, zoned R-7 Residential, and was classified a **Type I Action** pursuant to 6 NYCRR PART 617 of the State Environmental Quality Review, Section 617.4(b)(9), and

WHEREAS, the Huntington Town Planning Board caused a review of the subdivision plan to be made, pursuant to the New York State Environmental Conservation Law, Article 8, SEQRA, and Part 617 of the implementation regulations (6 NYCRR Part 617), and

WHEREAS, the staff of the Huntington Town Department of Planning and Environment, Environmental Review Division at the direction of the Planning Board, has reviewed the information provided with Part I of the Full Environmental Assessment Form and the Preliminary Map, revised September 1, 2004 and has prepared a Parts II and III on behalf of the Planning Board, and,

WHEREAS, the Huntington Town Planning Board has conducted a complete review of all aspects of the Environmental Assessment Form Parts I, II and III and the facts presented thereby and the most recent plans; now therefore be it

RESOLVED, that the Huntington Town Planning Board hereby adopts the Full EAF (Parts I, II and III) prepared for the action and finds from the facts therein that there may be significant environmental impacts resulting from the implementation of the proposed plan and hereby issues a **Positive Declaration**, pursuant to the SEQRA regulations, and be it further

RESOLVED, that the Huntington Town Planning Board hereby directs the Director of the Department of Planning and Environment to file a Notice of Determination of Significance, and be it further

RESOLVED, that the Huntington Town Planning Board hereby directs the applicant to prepare a Draft Environmental Impact Statement (DEIS), and be it further

RESOLVED, that Parts I, II and III of the Full Environmental Assessment Form are attached hereto and made a part hereof.

Votes: 5 Ayes: 5 Noes: 0

M. Sommer, Chairman	Not Voting
A. Thompson	Aye
T. Edwards	Aye
A. Rosen	Aye
L.A. Santoianni	Absent
S. Schnittman	Aye
P. Mandelik	Aye

The resolution was thereupon declared to be duly adopted.

ENVIRONMENTAL ASSESSMENT FORM
PARTS II & III

Kiruv Estates Subdivision

SEQRA CLASSIFICATION: Type I. Pursuant to SEQRA [6 NYCRR 617.4(b)(9)], the action meets two of the Type I thresholds: it contains a site listed on the National Register of Historic Places, and it occurs substantially contiguous to a district listed thereon (Old Town Green Historic District). As a Type I action, a conditioned negative declaration may not be issued by the lead agency per SEQRA 617.7(d)(1).

PROJECT LOCATION
The project site is located at the southwest corner of Park Avenue (CR 35A) and Woodhull Road in the Village Green area of Huntington Village within an R-7 Residence District Zone, designated as # 0400-73-01-038, 041.1 & 042 and 0400-97-02-107 on the Suffolk County Tax Map.

PROJECT DESCRIPTION: The proposed action is a request for the modified subdivision of a 7.07-acre site within a Town Historic District [Old Huntington Green] in order to construct four groups of attached units (three of the groups would have two units and one group would have three units for a total of 9 units), a private roadway and two stormwater impoundment/drainage areas (Preliminary Map dated revised, 9/1/04). Three (3) existing structures, two (2) of which are designated historic would remain. The historic structures and surrounding 1.72 acres of land are proposed for dedication to the Town. Two (2) existing barns, cottage and access driveway from Park Avenue are proposed for removal. The application also proposes the continuation of a historic trail through the area to be dedicated to the Town of Huntington. Although the proposed project is not within the Huntington Sewer District boundaries the applicant proposes to petition the Town Board such that sanitary wastewater collection and treatment and disposal to the Huntington Sewer District.

PROJECT/SEQRA HISTORY: This is the fifth application under review for the site pursuant to SEQRA. Prior reviews were initiated for the site by the Zoning Board of Appeals and Town Board for a proposed congregate care facility (Hassett-Belfer). The project would have involved major disturbances on the site. The actions were classified as Type I by both boards, and were coordinated pursuant to SEQRA. A determination of significance was not made by either Board, nor were public hearings held. The Planning Board recommended that if the proposal was entertained, a positive declaration should be issued. The last SEQRA review for the site occurred in February 2002. The action proposed seven (7) additional residential lots, a house of worship and associated parking (letter from Kiruv Capital Corp., dated 5/7/04). The Planning Board issued a Positive Declaration for the action on February 13, 2002. On May 21, 2004, the application was withdrawn and resubmitted. The resubmission or current application before the Planning Board eliminates tax lots #0400-073-01-39 & 40. Although these two tax parcels contain wetlands, according to the applicant's Environmental Assessment Forms (EAF), the total wetland area decreased from 1.0 acre to 0.8 acres with resubmission.

The proposed layout is a slightly revised design of the Preliminary Map submitted on May 21, 2004, which proposed eleven (11) new residential units. The May submittal invoked staff recommendation

for a repeat Positive Declaration by the Planning Board (letter from the Department of Planning and Environment to Kiruv Capital Corp., dated June 14, 2004). Following this letter, the applicant requested a meeting with the planning staff, which was held on June 29, 2004. This was followed by another meeting held on August 3, 2004, attended by representatives from New York State Department of Environmental Conservation, Suffolk County Planning Department and Town agencies.

Many of the issues that led to the issuance of the previous February 13, 2002 Positive Declaration continue to apply. The Environmental Assessment Form, Parts II & III, dated February 7, 2002, that was used to support the Positive Declaration had identified specific studies that would be required with any subdivision of the property (sanitary sewage capacity analysis, watershed study and contamination study). The current application neither includes nor addresses these studies.

SURROUNDING LAND USE AND ZONING: The subject property is located in the Old Huntington Green Historic District, as are all of the properties to the northwest and southeast along Park Avenue. It is also contiguous to the Old Town Green Historic District (National Register), which has its southern end across Park Avenue. There are a number of individually listed sites by both the Town and National Register, and many more that could be eligible but have not been nominated. This area is important because it is the location of the original settlement of Huntington Village, and was also home to a community of Native Americans near the Village Green.

The surrounding area is primarily residential, although there are a number of public and non-profit uses along this section of Park Avenue. These include the Huntington YMCA, the Town of Huntington Senior Citizens Nutrition Center, the New Community Cinema, the Town Arsenal museum, the Huntington Historical Society's Kissam house museum, and the Huntington Jewish Center. Most of these are located between Woodhull Road and Main Street on the southwest side of the road.

Low to medium density residential development spanning the R-7 and R-10 residential zoning districts exists surrounding the Park Avenue corridor. Many of the dwellings on Woodhull Road and Park Avenue were built prior to the enactment of the Town zoning ordinance in 1934. Thus lot sizes vary. Those along Park Avenue opposite the subject property, in particular, are much larger than the zoning specifies. Barns are visible behind many of the older homes. There is a rise in elevation to the southwest of Park Avenue that provides a natural separation between historic and modern homes that has helped to preserve the historic view corridor.

NATURAL RESOURCES DESCRIPTION: The site's long history of human habitation means that most of its natural resources have been impacted or modified by its users. Its most significant feature is a pond/wetlands system labeled on the NYS Final Freshwater Wetlands Maps as H-35, a Class I wetland. Previous SEQRA reviews have indicated that the wetlands may cover greater area than shown on the NYS wetlands map, including another pond immediately to the south. In its review of the February 2002 project, Town of Huntington, Department of Maritime Services noted the wetland system may be much larger than that designated in NYS Freshwater Wetland Maps which were flagged in 1997. Maritime Services is requiring that the applicant supply the Town with a plan based upon a more recent wetland survey, stamped and signed by NYSDEC (memorandum dated May 27, 2004). This may include areas where surfacing of groundwater from underlying springs have saturated most of the site. Past SEQRA reviews and observations by Planning and Environment staff indicate a spring located on the west side of the property south of in the area of Impoundment Area #2.

The site also contains open lawn area around the existing buildings and deciduous woodland on the sloped portions of the property. The natural resource inventory classifies the site into three habitat sub-categories: open water, emergent and freshwater wetlands; open lawn area; and upland deciduous woodland. However, a significant component of the "open lawn area" is characterized by spongy, waterlogged soils and supports concentrations of native plants within the lawn area that may be considered to be freshwater wetland indicator species.

The applicant's Environmental Assessment Form, Part I indicates the site's predominate soil types as Riverhead/Haven & Carver/Plymouth, of which 85% are well drained. This is supported in the April 1975 Soil Survey of Suffolk County. However, the site has since been manipulated with the installation of an extensive French drain system and filling of the northwest corner, this information may no longer apply (see Department of Planning and Environment files, EAF Parts II & III, dated 2/7/02).

YIELD

The Yield Map, dated revised September 9, 2004, shows ten (10) potential building lots. This is based upon:

- 70' NYSDEC setbacks rather than the 100' setbacks required under Article 24 of NYS Environmental Conservation Law.
- A park dedication with no apparent access.
- Without an approved means of sanitary wastewater disposal. The property outside the boundaries of the Huntington Sewer District and public sewers are not available at this time.
- A map that places lot lines through an existing dwelling proposed for retention.
- A centerline separation distance between the proposed cul-de-sac (Kiruv Court) and Murray Court of less than the recommended minimum distance of 125'.

Since the Planning Board has not yet established yield, determining the number of lots at this time is speculative at best. Recognizing the environmental constraints yield may be less than ten (10) lots. Any further proposal to develop the property should consider these serious site limitations. There is sufficient information, however, to indicate, that significant impacts are possible within the scope and intent of the project.

SEQR RECOMMENDATION: It is suggested that the proposed Kiruv Estates subdivision be issued a ***positive declaration*** pursuant to SEQRA or the action to deny be reclassified as Type II and the application be denied without prejudice. The proposed action meets several criteria in the SEQRA regulations (6 NYCRR 617.7) considered to be indicators of significant adverse impacts on the environment, specifically:

- *a substantial adverse change in existing air quality, ground or surface water quality , traffic or noise levels; a substantial increase in potential for erosion, flooding, or drainage problems...;*
- *the creation of a material conflict with a community's current plans or goals as officially approved or adopted [Town Comprehensive Plan];*
- *the impairment of the character or quality of important historical, archaeological, architectural, or aesthetic resources or of existing community or neighborhood character; and*
- *a substantial change in the use, or intensity of use, of land...or in its capacity to support existing [permitted] uses.*

Due to the sensitivity of the site, almost any proposal that attempts to maximize yield could result in significant adverse environmental impacts. It is the responsibility of the Town of Huntington to promote compatible land use for the site. This could include an analysis and a recommendation in a Draft Environmental Impact Statement of zoning laws that restrict the use of land to activities and purposes that are compatible with its character.

IMPACT ON LAND:

1. Will the proposed action result in a physical change to the project site?

The action will result in a significant physical change to the project site as a consequence of clearing of woodland, grading and construction on steep slopes. According to the applicant's EAF, Part I, the proposed action will involve construction on slopes of 15% and greater resulting in the removal of 3.77 acres of vegetation. Clearing and grading will likely be greater upon formal review of the map by Department Planners. Modifications are proposed that include nominal roadway, driveways and backyards. Although required in the R-7 Residence Zoning District, no sidewalks are shown. The addition of required improvements could severely increase potential impacts of the project.

Impact on land includes clearing, grubbing, subsequent excavating or filling and stockpiling from home and road construction. The action proposes clearing as close as 10 feet from wetlands and cutting and filling on slopes of up to 80% and greater. This combination poses significant potential for erosion and sedimentation impacts. An increasing percentage of the surface will become impervious to infiltration by the construction of roads, roofs and driveways. The impervious surfaces decrease infiltration and increases overland flow, which increases the frequency and height of flood peaks during heavy storms. This means that more topsoil is washed away easier, erosion potential increases and there is less recharge to groundwater bodies. Water will be taken directly to impoundments, catch basins or stream channels for discharge, with a shortened travel time and increased proportion of runoff. These two changes together reduce the lag time between precipitation and runoff. The chance of flooding is thus increased together with the erosion potential.

The Composite Map of Environmental Constraints (Figure 3-8) contained in the Huntington Comprehensive Plan identifies the subject site as having moderate limitations. There are four physical limiting environmental factors, which must be considered pertinent to this review-steep slopes, state-regulated freshwater wetlands, extension of the Huntington Sewer District, and retention of historic structures. All of these limiting environmental factors are summarized below.

Steep Slopes

As land zoned R-7, the site is subject to the Town Steep Slope Ordinance, Article X of the Zoning Code, §198-60 through §198-64. A steep slope analysis performed by the Department of Planning and Environment staff indicates an average natural slope in excess of 25% (25.1%). In accordance with the Zoning Code this requires three (3) R-40 one-acre lots be provided.

State-Regulated Freshwater Wetlands and Buffer

The applicant's EAF, Part I states there are 0.8 acres of wetland and 0.3 acres of water surface area. Yield and preliminary maps indicate surface and wetland areas may be much larger. Yield and preliminary maps depict clearing based upon 70' NYSDEC setbacks rather than the 100' setbacks required under Article 24 of NYS Environmental Conservation Law. Although based upon NYSDC

correspondence (letter dated 7/1/04), ten (10) lots may be acceptable, construction could impact non-designated wetland areas. To date the applicant has not secured the approval of the NYSDEC.

Huntington Sewer District Extension
The applicant has not yet secured an extension of the Huntington Sewer District, which could enable a private sewer line to hook into the municipal sewer system. Without such approval, ten (10) lots is questionable. Development of the site with subsurface sanitary systems would be difficult given the technical requirements for separating the systems from groundwater.

Retention of Historic Structure(s)
It is noted that no consideration was given to retaining the existing historic barns. If the retention of specific structures in situ for significant resource preservation is the intent of the lead agency, potential yield could be diminished further to provide lots which conform to Town height, area, and bulk regulations and which provide the long-term stability of appropriate residential zoning. The New York State Department of Parks, Recreation and Historic Preservation has recommended preservation of these structures. Consistent with 6 NYCRR 617.3(a), no action should be taken by the applicant until yield has been established and the proper permits are issued.

2. Will there be an effect to any unique or unusual land form(s) found on the subject site? (i.e., cliffs, dunes, etc.) *No.

IMPACT ON WATER:

3. Will the proposed action affect any body of water designated as protected under Articles 15, 24, 25 of the NYS Environmental Conservation Law or Town of Huntington Marine Conservation Law?

The subject property contains state-regulated freshwater wetlands. While only a single pond feature is identified on the Huntington quad of the State's Final Freshwater Wetlands Map as H-35, a Class I wetland; the applicant's consultants have identified and depicted on the proposed plan additional area that should be demarcated as regulated. The project is within the jurisdiction of the NYSDEC Freshwater Wetlands Land Use Regulations (6 NYCRR, Part 663), and will require permits from NYSDEC. At this time, it appears that no permit has been issued by the State, although work within the regulated area has occurred.

The following are NYSDEC's comments to date (letter dated July 1, 2004):

- The agency is highly unlikely to grant approval for any new structures of clearing within 100' of the freshwater wetland boundary in naturally vegetated areas.
- Permits would likely be granted for structures within 75' of the freshwater wetland boundary on existing lawn/cleared areas. The limits of clearing, grading and ground disturbance for these structures would have a minimum of 50' from the wetland boundary.
- A substantial amount of the existing cleared area near the wetlands would have to be replanted with native vegetation in order to mitigate for the proposed project.
- Any new sanitary systems would have to be a min. of 100' from the wetland boundary. Existing sanitary systems would have to be relocated outside of the 100' adjacent area as mitigation for the project. Connecting all proposed and existing structures to the town sewer system would be the preferred solution.

The proposed project poses the potential for severe wetland impacts, not all of which can be addressed by existing State and local regulations. Generally, New York State and Town of Huntington wetland regulations only apply to the outer limit of wetland vegetation and its adjacent area. The design of an adequate mitigation plan must also account for site limitations and development constraints including such factors as slope, soil erodibility, depth to seasonal high water, soil percolation, water quality, etc.

Much of the "discharge" of water on the property appears to be originating from the upwelling of groundwater springs. Also, the site is a component of an active stream that originates south of the site and feeds into Town park properties to the north. No watershed study has been submitted which evaluates the volume of flow that is being accommodated on this property; how much of it might be interrupted through new catchment systems (necessitated by the introduction of new impervious surfaces) to the detriment of the dynamic system. In order to properly evaluate potential impacts sampling for establishing baseline water quality, spring or summer seasonal surveys, important to identify the floral/faunal values and seasonal fluctuation in water levels/saturation of the site must be analyzed. It should also be noted that records show existing discharges into the wetland corridor (i.e. pipes carrying wash water, basement overflow and other unknown discharges). All these remain issues relating to wetlands which should be considered in a Draft Environmental Impact Statement to enable the NYSDEC to provide substantive comment as an involved agency.

4. Will proposed action affect any non-protected existing or new body of water?

See discussion of potential drainage impacts in #6 below. There may be potential for the proposed action to affect other non-regulated freshwater resources in the immediate site vicinity, including the stream corridor in the Village Green Park to the north and the pond across Park Avenue at Sunny Pond Farm.

5. Will the proposed action affect surface or groundwater quality or quantity?

Surface Water: See Section 3 above.

Groundwater: Should development occur groundwater will be adversely affected. The proposed action lies within the deep recharge zone (Hydrogeologic Zone I). The subject property is not located within a Special Groundwater Protection Area. Any development of the site may pose a minor impact on groundwater quality from contaminants (oil, chloride) carried in on-site stormwater recharge.

The residences on site are presently supported by conventional sanitary systems, which meet the Suffolk County Department of Health Services' (SCDHS) density requirements. The applicant anticipates sewer connection of the entire site to the Huntington Sewer District (HSD), thereby mitigating potential to impact groundwater from liquid sanitary waste disposal. Past comments received from the Town Department of Environmental Waste Management, indicate:

- The current HSD Rules and Regulations require the District to conduct a capacity analysis of its collection system and treatment plant prior to approval of any new sanitary sewer lying outside the service area of the district. If insufficient capacity exists, sewer impact fees

may be levied to pay for the applicant's proportional share of the cost of improving the treatment collection system and/or treatment plan.

- Previous analysis has determined that the 24" sewer line upstream of the Huntington STP will flow full with wastewater surcharging up into the manholes before peak design flow conditions. Additional flows will further increase surcharging. This situation is currently under investigation by District Engineers.

Connection to the Huntington Sewer District is not a ministerial action. The subdivision may exert a demand which exceeds the present infrastructure. The action pending before the Planning Board should more properly be identified as a phased project that includes potential subdivision as well as extension of the Huntington Sewer District. Connection to an existing sewage treatment plant or district is normally viewed as a mitigating measure to preclude on-site impacts; however, in this case, the connection may be necessary to advance the subdivision. Due to site limitations (high groundwater) it would be difficult for the applicant to construct septic systems in saturated soils.

Connection of properties from outside the district may preclude expansion of properties within the district. There are a number of projects proposed or approved that are already in the Huntington Sewer District that have access before outside users can connect. Further, in the era of high land costs, landowners are trying to optimize the use of their properties in any way they can and that means expansions that were not anticipated which can mean extra sanitary discharge from properties already within the district.

No subdivision of the site that requires connection to the sewer district should be approved without the necessary analysis to determine whether the HSD can accommodate the flow and what, if any, treatment system improvements might befall the applicant. Such analysis should be incorporated into any DEIS prepared for the subdivision. While the SCDHS will review any future site-specific proposal(s) and require a sewage disposal system or alternative that best mitigates concern for sanitary wastewater management, the municipal infrastructure decision whether to allow the additional flow to the Huntington STP is the jurisdiction of the Town Board. Whether the project is of sufficient public benefit and/or need to warrant the accommodation of the burden of increased capacity to the district, perhaps at capacity cost to other undeveloped sites, should be a DEIS issue. The Town may want to reserve any sewer capacity for projects that provide public benefit and or expansion or change of use from within the district. Other requests for extensions in the area include Sunny Pond Estates (subdivision application received June 22, 2004) and homes on Glendon Court. Taken together there may be sufficient justification to support a Generic Environmental Impact Statement. GEIS's are useful when there is a need to account for the cumulative impacts of an overall group of actions from unrelated project sponsors.

Public Water Supply

The subject area lies within a supply area of the Suffolk County Water Authority which must review and approve public water availability for connection thereto should any development plan be proposed. Consistent with direction provided to the Huntington Department of Planning and Environment by the South Huntington Water District pertaining to major policy changes, the owners/applicants should contact the water supplier early in the planning stages of any future project to request information regarding the time frame and cost of water availability.

6. Will proposed action alter drainage flow or patterns of surface water run-off?

Property development as proposed has/will be incompatible with existing drainage patterns (see discussion under #3 above). On visits to the site the ground in the west corner was saturated and pooled water was evident about the site. The discharging of runoff into flagged (state-regulated) freshwater wetlands is also of concern. Additional test borings and watershed study appears necessary to properly evaluate potential impacts to wetlands and prevent flooding of existing and proposed homes. As indicated by the Town Engineer, Engineering Review will not proceed until all data agreed upon at the August 3, 2004 meeting is received (memorandum dated 10/4/04). This includes: a drainage study, mapping of all existing under drains and a study to determine if the groundwater is perched. In addition, Suffolk County Department of Public Works has cited the following concerns (letter dated 6/18/04):

- Insufficient grate capacity to handle the stormwater flow
- Impoundment area at the corner of Woodhull Road and C.R. 35, Park Avenue: Proposed high water elevation is too high, which may cause road flooding.

While information regarding the complete contributing watershed area has not been supplied by the applicant's consultants, the subject site is recognized as being part of a significantly larger contributing watershed area. Drainage from the subject site moves by culvert under Woodhull Road to release through the Village Green (Town parkland) and further northward into Heckscher Park, through the pond, overflowing into a catchment system of culverts with final endpoint release into Huntington Harbor. Despite improvements undertaken by Suffolk County as comprehensive measures to enhance stormwater management in the immediate site area and the Village Green in 1987, the stream in the Village Green overflows its banks and Park Avenue and Route 25A continue to flood sporadically during peak charge events, sometimes forcing lane closures and hazardous roadway conditions.

Potential impact to area drainage cannot be fully evaluated at this time, but is considered to be among the severest limiting factors to future intensified use of the subject property. Land use and management practices, such as the removal of buffers, clearing of vegetation and expansion of impervious surfaces can change the natural timing, magnitude and duration of rainfall runoff and ultimately increase the volume of stormwater is generated within a drainage shed area. Basements or slab foundations may disrupt drainage pathways. Past review of the site with zone change application indicated that additional technical studies of the watershed and drainage conditions should be submitted in a DEIS and reviewed by all involved and interested agencies. As the site is part of an integrated drainage system with diverse flow sources and significant historic resources (e.g., Town arsenal, Kissam House) and park properties (Village Green, Heckscher Park) in the downstream pathway, extreme caution must be exercised not to disrupt the hydrological balance of the area.

IMPACT ON AIR:

7. Will proposed action affect air quality?

Property development, particularly excavation and earth moving activity, may pose minor, temporary impact to air resources through dust loading and emissions from construction vehicles. Proper use of control agents with cover (vegetative or structural e.g., tarps) can mitigate dispersion off-site to surrounding uses.

IMPACTS ON PLANTS AND ANIMALS:

8. Will the proposed action affect any threatened and/or endangered species? (as per Federal or State Law)

There is a potential that the project will impact state-protected native vegetation. The natural resource inventory for the zone change lists the existence of state-protected native plants, including such species as flowering dogwood, New York fern, cinnamon fern, and inkberry. Since most of the wooded and wetland components of the site will be directly disturbed, it is expected that protected species will be removed.

Given the wet, even saturated nature of the subject property it is likely that small mammals, birds and amphibians will also be adversely affected. A through biological inventory should be conducted and an analysis of the various development alternatives included in a DEIS, in order to determine the true consequences of the proposal on wildlife.

9. Will proposed action substantially affect non-protected, non-threatened or non-endangered species?

Site development will involve removal of some locally-important vegetation which presently supports small mammals and diverse birdlife. The most important native vegetation on the subject site is found within the woodland and wetlands areas. Any development of the site should result in the planned retention of buffer area for protecting wildlife habitat, wetland functions, and historical setting and the view corridors along Woodhull Road and Park Avenue.

IMPACT ON AGRICULTURAL LAND RESOURCES:

10. Will the proposed action affect agricultural land resources?

Development of the site will excavate or compact the soil profile of former agricultural land and convert these <u>former</u>, now quasi-agricultural lands. The site is not within a designated agricultural district, but contains prime agricultural soils classified as RhB (Riverhead and Haven soils, graded, 0-8% slopes) (Suffolk County Soil Survey, USDA, 1974.) along the lower plateau of the property.

IMPACT ON AESTHETIC RESOURCES:

11. Will proposed action affect aesthetic resources?

The proposed project will be obviously different from or in sharp contrast to current surrounding land use patterns. It will be visible to users of aesthetic resources, which will eliminate, or significantly reduce, their enjoyment of the aesthetic qualities of that resource. Project components may result in the elimination, or significant screening, of scenic views known to be important to the area.

The removal of the site's remaining barn and silo and their replacement by attached housing will affect the visual character of the community and the setting of the historic structures to be reserved. Because the view into the property is so highly regarded in the historic district, any landscape plan developed for future site use should be sensitive to the on-site and surrounding resources and be designed so as to be visually compatible therewith.

IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES:

12. Will the proposed action impact any site or structure of historic, prehistoric or paleontological importance?

The proposed action may adversely effect a facility or site listed on the State or National Register of Historic Places and occurs substantially contiguous to a district listed thereon (Old Town Green Historic District). The proposed action will occur in an area designated as sensitive for archaeological sites on the New York State Archaeological Site Locator Map. As a site lying in proximity to identified resources, further study would normally be deemed requisite. The Expanded EAF submitted for the Hassett-Belfer Zone Change, included a State I Cultural Resource Assessment prepared by Greenhouse Consultants, Inc.

Historical/Architectural Resources

The subject property is contained within the Old Huntington Green [Town] Historic District and is subject to architectural controls under § 198-42, Article VI Historic District, Buildings and Landmarks of the Huntington Zoning Code. The subject property is also substantially contiguous to the Old Town Green National Register Historic District. The site itself contains a dwelling facing Woodhull Road which is listed on the National Register of Historic as the Skidmore House. This dwelling, according to research conducted by the Historic Preservation Commission, was constructed some time between 1680 and 1725, and is in its original location. National Register listing requires that the application be classified Type I under SEQRA and any State or Federal action in connection with the development of the site is subject to the review regulations of Section 106 of the National Historic Preservation Act of 1966.

The National Register listing identifies the whole of tax map parcel 0400-073-01-41.1, comprising 4.8 acres. Although the majority of the structures identified as part of the dairy farm are encompassed within tax map 0400-073-01-041.1, no others are listed on the nomination form as contributing. These structures include a farmhouse at 471 Park Avenue, constructed about 1870 and moved to its present site on the subject property in 1921; and a smaller farmhouse, at 171 Woodhull Road, constructed originally in 1676, owned later by the Rolph family, and moved to its present location in 1921.

The lack of acknowledgement in the National Register nomination form of the contributing qualities of the overall historic dairy complex is no doubt due to the fact that the nomination form was prepared in the early 1980's before much credence was accorded to 20th century vernacular architectural and historical resources. The National Register imposition of a fifty (50) year age requirement may also explain the exclusion of this complex as a significant historical element either of the adjacent National Register historic district or as a part of the listing of the Skidmore House. All farm accessory buildings are to be demolished. All dwellings, as well as the accessory farm structures, are listed on the Town's Historic Sites Inventory (1979). [Forms HV52, HV53, HV54, HV87 and HV89], a comprehensive survey of the Town's historic resources. This listing in and of itself carries no regulatory requirements but has the purpose of alerting planning and development officials of the significance of such buildings. The Commission characterizes the subject site thusly:

> The subject property is an important element in the historical context of the surrounding neighborhood, which is designated as the Old Huntington Green Historic District. each of the Town's several such districts have a unique theme or personality. This one focuses on the fact

that it is the ancient " Town Spot", the core of its human habitation. the northern end of the District includes the archaeological site of a large Indian Village of prehistoric origin. The southern end includes the Village Green, surrounded by the original home lots of the first white settlers. This is where the bulk of the Town's rich history took place. Park Avenue, Main Street and South Woodhull Road originated as Indian trails and the multitude of spring fed streams and ponds were a critically important resource to the early inhabitants.

The very beginning of the Commission's report identifies the subject property as containing the Hollow Ponds Watering Place, laid out as part of the Highway in 1653 as an annex to the Village Green, a site which served as a watering place for animals until it was deeded to Henry Place in 1859, a predecessor in title to the present owner. This fact underscores the important historical linkage between the subject property and the balance of the Village Green settlement area, embodied in the Old Huntington Green Historic District.

The planned destruction of site resources, which are part of a site evolution beginning with the founding decades of the Town, and their location at the historical center of the community created by the founders is inconsistent with the Town's goals in establishing a historic district comprising all of the site's resources. In a December 29, 2001 letter to the Town, the Historic Preservation Commission expressed their misgivings in response to work being preformed on the site.

The New York State Department of Parks, Recreation and Historic Preservation (NYS OPRHP) has recommended the preservation of the barn in a letter dated September 17, 2001. Consequently, as part of any Draft Environmental Impact Statement, the applicant should provide a complete historic structures report prepared by a qualified architectural historian expert for the barn as well as all other structures on the site. The NYS OPRHP should review the historic structures report and make recommendations for mitigation, as appropriate, prior to any decision being made on the subdivision application.

Archaeological Resources

The subject property is also located within an area identified on the New York State Office of Parks Recreation and Historic Preservation (OPRHP) Archaeological Site locator map as being within an area comprising multiple archaeological sites. Three historic period archaeological sites, known to exist prior to the initiation of the cultural resources testing phase, were identified: a group of Revolutionary War-era Hessian huts dated 1779-1783, occupied by Hessian soldiers, which were constructed at the northwestern tip of the property; these huts were occupied by Captain Thorn's Company of the 43rd regiment of Foot and were later occupied by soldiers of the Anspach regiment of German mercenaries according to the Historic Sites Inventory Form HV56A and the report of the Historic Preservation Commission; called huts, the structures were of logs with fieldstone fireplaces. To the immediate southeast a Tannery was located which operated from 1740-1840. Known to exist through contemporary times are two tan vats associated with the tannery. A third site, a 17th century house site is conjectured to be in the location where the smaller of the two ponds on the property presently exist, at the far northeasterly side of the property.

During review of the Hassett-Belfer zone change application, the applicant's archaeological consultant met with the Town's Historic Preservation Commission and prepared and submitted a cultural resources inventory of the property including a Stage IA archival study documenting the history of the

property and a Stage IB subsurface testing program intended to reveal any buried archaeological remains from the prehistoric and historic period. The cultural resources study (revised March 1998 and submitted to the Planning Department on November 9, 1998) is contained in the rezoning file in the Department of Planning and the Environment.

Although the areas of the Hessian huts and the Tannery were subjected to subsurface testing the early house site, now underwater, was not. A fourth house site, dating from the mid-19th century, located in the vicinity of the Hessian Hut site was identified by Planning Review Staff in consultation with a member of the Historic Preservation Commission. This site is the area where testing was done to locate any subsurface remains of the Hessian huts and the Tannery. The cultural resources assessment concludes:

> The archaeological testing of the Tannery Park Senior Housing project area did not produce any evidence of prehistoric use of this land. No prehistoric artifacts or features were discovered in any of the shovel tests.
>
> The archaeological testing produced some evidence of historic archaeological resources. Testing in the northern parcel located remains of the Tannery. A stone and mortar vat, likely from the tannery was found. The tannery is clearly a significant historic archaeological resource since it represents the first establishment of what became a significant industry in eighteenth and 19th century Huntington.[emphasis supplied] Testing of the other planned impact locations also did not produce any evidence of significant historic period features or deposits. Most of the artifacts recovered and all of the standing or ruined structures seen in the central portion of the project area related to the 1896-1942 Park Avenue Dairy Farm. The history of this farm is available in the detailed recent publication by one of its occupants [Swezey 1983].
>
> Fill deposits were found over the location of the Revolutionary War huts. Although no eighteenth century artifacts or features were found here, they could still exist since the shovel tests could not reach natural subsoil in this location.[emphasis supplied]

The study recommended Stage III data recovery and documentation for the tan vat associated with the tannery. For the Hessian occupation site, the study recommended on-site monitoring by an archaeologist at the time of construction. Since the review does not take into consideration the most recent subdivision plan, the New York State Office of Parks Recreation and Historic Preservation [OPRHP] should be further consulted with respect to the newest proposed plan. It is recommended that with any approval, Stage III documentation and data recovery prior to site construction activities, rather than as part of a field monitoring program during construction be conducted. These archaeological sites present a rare opportunity to fully document sites which are extremely important to national and local history, evidence which is likely to be destroyed unless systematic archaeological study is conducted prior to any site alteration.

IMPACT ON OPEN SPACE AND RECREATION:

13. Will the proposed action affect the quantity or quality of existing or future open spaces or recreational opportunities?

Development as proposed will result in a major reduction of an open space important to the community. While the site is not listed on the 1974 Huntington Open Space Index, it lies substantially contiguous to two such mapped tracts, NW-25 to the west and NW-26 to the south. The subject property is not an open space in the conventional sense—simply, a large undeveloped tract. It is a more an urban cultural asset where features both natural and man-made span a period of 350 years. The open space value of the subject site, similar to its aesthetic and community character value, is provided largely by its expanse of linear road frontage, open water view, slope interest, and diverse grouping of historic dwellings and ancillary structures. Its value is as village-oriented open space, tending toward an association with the historic green to the north. The scale and separation of uses on the site, far less dense than could be provided under the R-7 zoning, establishes a pattern of uses categorized by the aged residences about the perimeter to the more open inner zone. Replacing the look of the built environment on site with harder forms at much larger scale will forever alter the simple connection to the historic district easily formed by the untrained eye. It may be difficult to mitigate the rural "feel" of a property in any way other than to preserve its components intact.

The proposed development is not anticipated to generate any real demand for active recreational facilities; however, *well planned passive buffer area is important to maintain the historic community environment.* Therefore, the site's remaining buffer area takes on greater significance to shield adjoining properties both to and from the proposed housing to create the least effect to existing community character. Supplemental landscaping along the property edges and about the site and proper site management will enable the peripheral boundaries to serve as passive vegetated buffer area, maintaining a private open space element. However, the visual, textural component of the open space will be dramatically altered.

A primary impact is the conversion of the open former agricultural landscape and wooded/wetland buffer thereto into a residential use. The designated open space within the study area represents a significant opportunity to plan for retained open space, to insure that a component is preserved. Although, two historic structures and a surrounding 1.72 acre area is proposed for dedication to the Town of Huntington, pursuant to §278 of New York State Town Law, such parkland may not be interchangeable with open space nor meet the requirements of Town Code. The proposed reserve areas may have been chosen for their strategic location for development, not necessarily to preserve open space. Characteristics of the site lend themselves to numerous uses, its central location in the downtown area increases its accessibility for town residents, and its connection to the existing trail should be fully analyzed. It may be desirable to retain open space where Kiruv Court is being proposed. As indicated by the Suffolk County Planning Department in their July 7, 2004 comments:

"The proposed cul-de-sac road traverses some of the steepest slopes. Construction on site will require the use of retaining walls. Some of the walls will have exposed faces approaching 15 feet in height. Disturbances of construction on steep slopes can result in excessive surface water runoff, severe soil erosion and movement of sediment".

IMPACT ON CRITICAL ENVIRONMENTAL AREAS:

14. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6 NYCRR 617.14(g)?

No.

IMPACT ON TRANSPORTATION:

15. Will there be an effect to existing transportation systems?

The action will cause an increase in traffic generation and change in flow patterns to and from the subject property. Traffic information provided in the applicant's EAF, Part I, indicates 13 trips/hour (Saturday peak hour total).

Traffic generated by the proposed action may have an impact on the existing levels of service at nearby intersections. Of the five intersections studied in the traffic study for the Hassett-Belfer zone change application, all operate at an LOS of D or below during the p.m. peak hour, with three exhibiting "oversaturated" conditions. The Comprehensive Plan supports this finding by indicating that the existing (1993) and proposed year 2000 roadway efficiencies for Park Avenue north of Pulaski Road are poor.

Traffic in this area is very heavy, particularly during peak traffic hours. The action poses cumulative impact to preexisting stacking problems along Park Avenue from East Main Street (NYS 25A) to Woodhull Road and points further south. Additional traffic data should be presented in any DEIS prepared for the subject action.

IMPACT ON ENERGY:

16. Will the proposed action have an adverse effect on the community's sources of fuel or energy supply?

The subsequent development of the property may require the creation or extension of an energy transmission or supply system to serve residences. Availability of supply must be confirmed by KEYSPAN (formerly LILCO).

NOISE AND ODOR IMPACTS:

17. Will there be objectionable odors, noise or vibration as a result of proposed action?

Implementation of the proposed action will result in a temporary condition posing minor impact to the surrounding community during construction, but negligible operating noise, odor or vibration relating to future use. However, future residents may experience noise impacts from the adjoining heavily-traveled roadway. The usual attenuation measures, such as berming, solid fencing, and specialized evergreen and deciduous buffer plantings along the property edge to reduce such impacts from off site to shield the proposed building[s] could result in significant aesthetic change to the property and surrounding vistas.

IMPACT ON PUBLIC HEALTH:

18. Will proposed action adversely affect public health and safety?

There may be a lingering effect of stored and used agricultural chemicals (i.e. herbicides, pesticides) from when the site was used as a dairy. It would appear that vehicles were fueled at the site and possibly serviced there as well which raises additional questions. Whether the site contains contaminants in the soil due to chemical use, fuel storage, or introduction of any fill in the northeast

corner of the site may require analysis. The site is not included on the SCDHS' CLEARS inventory; however, on submission of any future application to the Planning Board for subdivision or site plan review, the applicant should be requested to submit a site history of past use practices to ascertain whether soil analyses will be required to determine the presence of residual chemicals and or fuels. Whether a portion of the site was previously used as a manure dump or disposal area for other waste should be identified. Removal of some of the older structures (dairy barn, garage, residences) or regrading on the site could result in distribution of small rodents (e.g. rats, mice, chipmunks, etc.) that may be burrowing in and about them into the adjoining residential areas. A control plan may be deemed necessary.

There are also public health concerns from:

- Flooded and icy roadways. Suffolk County Department of Public Works has indicated a potential flooding problem onto CR 35, Park Avenue with the project (see Section 6 above). Roadways that flood and then ice during freezing conditions would compound existing traffic safety problems on Park Avenue.
- Long-term drainage problems with the new homes from saturated soils. Wet basements and crawl spaces are sources of high humidity, which can produce surface condensation, mildew and fungi, musty odors, and an unhealthful environment. Such moisture can cause deterioration of floor joists, beams, sub-flooring, insulation, and electrical-mechanical systems. Prolonged water around the footer and foundation wall can soften the soil and weaken its bearing capacity, increasing the possibility of wall settlement and cracking. Serious seepage under the foundation footer may erode soil away and cause the wall to drop or crack. Excessive moisture can eventually penetrate the sub-flooring and buckle the flooring or cause warping, making doors and cabinets difficult to close or open. Since crawl space or basement dampness always moves toward the drier upstairs areas, higher humidity will result in costlier heating and air conditioning bills. In the case of crawl spaces, if the under-flooring insulation collects moisture, or sags from excessive wetness, the heating and air conditioning costs are driven even higher. Finally, wet basements and crawl spaces reduce the value of the house, at least by the amount that would be required to repair the damage and to eliminate the cause of the problem.[1]

Any DEIS prepared for the subject application should include a professional Phase I Environmental Site Assessment to ascertain the likelihood of any contamination being present from the past activities at the site (e.g., sanitary systems, fuel tanks, vehicle repair, storage of regulated materials) and the composition of fill on-site. If such an assessment identifies any contamination that requires mitigation, or that additional analyses should be conducted, the study shall be distributed to the Suffolk County Department of Health Services and to the New York State Department of Environmental Conservation for review. It shall be the responsibility of the owner to conduct any analyses specified by the expert agencies or to remediate the site, under their supervision, to environmentally-acceptable standards.

IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD:

19. Will the proposed action affect the character of the existing community?

The proposed action will conflict with officially adopted plans or goals which identify the site for historic preservation. The proposed action will replace or eliminate existing facilities, structures or

areas of historic importance to the community. New development will create a demand for additional community services (e.g. emergency services, police and fire, etc.).

The demolition of the accessory farm structures will change the perception of the historic district corridor. The immediate area used to have a tannery, blacksmith shop, and dairy farm, but no traces of these uses remain. When the area was first settled it was a rural community and everyone had home occupations. Dairy farms were common. With only the houses remaining it has the same look as other residential commuter neighborhoods, except that the houses are different architecturally. As these and other old barns and accessory structures get demolished, it becomes more likely that the lots will be subdivided and newer houses and structures will be built. Even with architectural control it will be impossible to hide their recent construction, and it will detract from the historical neighborhood.

20. Is there, or is there likely to be, public controversy related to potential adverse environmental impacts that may result if the proposed action is implemented?

Based upon input on past applications for the site, it is anticipated that the project will generate controversy.

October 28, 2004
Planning and Environmental Review Divisions
Huntington Town Department of Planning and Environment

Note: Information for this report was taken from the Hassett-Belfer rezoning (#98-ZM-304) EAF Parts 2 & 3, completed by Department of Planning and Environment staff on May 3, 1999 and the Demolition of Buildings, Permit # 03-26-01-2, EAF Parts 2 & 3 completed by Department of Planning and Environment staff on September 25, 2001.

KIRUV ESTATES
THE PRINCIPLES OF SMART GROWTH & LIVABILITY
CONSISTENCY CHECKLIST

Town Board resolution 1999-610 of October 5, 1999 accepted *The Principles of Smart Growth & Livability*, as adopted by the Huntington Smart Growth Steering Committee, and advised Departments and Boards in the Town to consider these principles in their review of applications, land use decisions and amendments to the Town Code and regulations.

Check if proposed action/project meets Smart Growth & Livability Principle(s). Otherwise, indicate if principle is not applicable (NA) to or inconsistent (IC) with the proposed action/project or if there is not sufficient information (NSI) to make a determination.

The proposed action/project encourages comprehensive land use planning that is ongoing, community-based and consistent with the needs and objectives of the local community, adjacent communities, and the region as a whole. **NSI**

The proposed action/project encourages development that contains a mix of uses essential to the daily life of its residents, which includes housing, shops, work places, schools, parks, and civic facilities ideally situated within easy walking distances of each other or otherwise within short travel distances. **NA**

The proposed action/project encourages land uses that link economic development decisions with environment and quality of life, and protect the property values of its residents. **NSI**

The proposed action/project encourages efficient development that is pedestrian-friendly, is attractive, reduces automobile dependency, provides transportation alternatives, and is focused around existing or newly designed transportation centers **although not proposed, will provide sidewalks**

The proposed action/project encourages development that enhances existing communities, and which particularly targets downtown and neighborhood centers for expanded or new development. The proposed action/project is directed toward areas of existing infrastructure or where infrastructure can be upgraded or introduced to foster redevelopment, rather than toward areas of open spaces, and, when consistent with the community goals, include the recycling of existing structures. **IC**

The proposed action/project encourages a sufficiency of housing to meet the needs of the residents of the Town, and which includes a natural diversity of housing types and facilities to enable citizens from a wide range of age groups, ethnic backgrounds, and economic levels to live within the neighborhood boundaries and interact. **IC**

The proposed action/project encourages planning, decision-making, and development practices that emphasize extensive and broad-based community participation, dialogue, the use of visual models, consensus-building and envisioning. **IC**

Consistent with the principles of Smart Growth & Livability, the proposed action/project results in:

- ☐ Protection of open space and the environment **IC**
- ☐ Strengthening of the local economy **will provide additional housing**
- ☐ An improved sense of community **NSI**
- ☐ A decrease or stabilizing of traffic congestion **IC**
- ☐ A reduction in auto dependency **IC**
- ☐ Preservation of historic structures **preserves two historic structures**
- ☐ Enhancement of the community character and aesthetics **NSI**
- ☐ Efficient use of public money **NA**
- ☐ Safe and secure communities **NSI**
- ☐ An improvement in the overall quality of life. **NSI**

Appendix A-7
NYS OPRHP letter

NP&V, LLC

April 1, 2005

NELSON, POPE & VOORHIS, LLC
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April 1, 2005

Ruth Pierpont, Director
New York State Office of Parks,
Recreation and Historic Preservation (OPRHP)
Historic Preservation Field Service Bureau, Peebles Island
PO Box 189
Waterford, NY 12188-0189

Re: Archaeological Sensitivity Review
Kiruv Estates
OPRHP # O1PR3806
SW c/o Woodhull Road and Park Avenue
Town of Huntington, Suffolk County
NP&V #97110

Dear Ms. Pierpont:

Nelson, Pope & Voorhis (NP&V) has been retained by the owner of the above referenced parcel to investigate the environmental resources associated with this site. We are aware of archaeological sensitivity associated with the site and your previous coordination with the Town of Huntington in 2001 regarding the subject property. We would like to inform you of revisions to the proposed project as well as feasibility analysis concerning the potential adaptive reuse of the cow barn found on the subject property.

To summarize the past archaeological review of the site, a Stage I Archaeological Sensitivity Evaluation and Survey was completed in March 1998 for the once proposed Tannery Park Senior Housing project on the subject property. The Stage I included the two northernmost houses on Park Avenue within its assessment for the Tannery Park project. These houses are no longer included within the proposed project area and are considered out parcels. Four (4) dwellings and a cow barn with attached silo currently exist on the property. Two (2) of the dwellings are vacant and currently face Woodhull Street: the Skidmore house to the north and the Moses Rolph House to the south. The other two (2) dwellings are occupied and face Park Avenue: the main farm house and former milk house (existing cottage). The Skidmore house is the only dwelling on the subject property to be listed on the National Register of Historic Places. Below is a summary of the existing structures on site:

- Main farm house (471 Park Avenue; Town Historic Structure Form HV52), moved to its present location in 1921 from its former location on opposite side of South Woodhull Street *(currently occupied);*
- Skidmore House (HV87), circa 1680-1725 *(vacant);*
- Moses Rolph House & "old" Swezey farmhouse (171 Woodhull Road; HV89), circa 1687, moved to its present location in 1921 *(vacant);*
- Milk barn *(now transformed into a cottage and currently occupied);* and
- Cow barn and silo, circa 1915 *(vacant).*

The applicant proposes to subdivide the 7.07-acre site and create a 10-unit clustered residential project. The proposed project would preserve the main farm house and add nine new residential structures. The existing cottage (former milk house) and cow barn with silo would be demolished. The two (2) existing historic dwellings facing Woodhull Road would be sold to the Town upon approval of the subdivision map, and the surrounding acre of land on which they are located would be improved with the extension of a heritage trail and dedicated to the Town.

The Stage I evaluation and survey concludes that *"no prehistoric archaeological sites exist within the planned impact area."* The evaluation also concludes that *"one significant historic site exists within the impact area. This is the Tannery site used during 1740 through 1850. One substantial feature, a stone and mortar vat, probably used for soaking hides was found. This vat is approximately seventeen feet in diameter and three feet deep"* and identified on the project plans as a circular wall located along the southeast edge of proposed impoundment area #3. *"Since this feature will be removed to construct the [proposed impoundment area], we recommend mitigation in the form of data recovery excavations. These excavations will include emptying the vat and examining the contents for artifacts, as well as the completion of a trench on the exterior of the vat to search for evidence of the date and methods of construction. The vat will be fully documented in photographs and drawings. Samples of the stone and mortar used will be taken."*

In a December 4, 1998 memorandum concerning the former Hassett Belfer Senior Housing project, the Town Historic Preservation Commission deemed that the three (3) existing dwellings and the Milk House were presently in habitable condition, but that the other structures on the property were in ruinous condition and not considered viable for preservation. Subsequently, a demolition permit was approved by the Commission on September 25, 2001 for removal of the cow barn. After a certificate of approval was issued, the Commission was advised that the New York State Historic Preservation Field Services Bureau recommended preservation of the cow barn. The NYS OPRHP response letter, September 17, 2001, from Greg Donofrio states the following:

> *The Swezey Cow Barn is, however, a relatively rare and architecturally significant, intact example of an early twentieth-century concrete block dairy barn. We would encourage the applicant to explore alternatives to demolition, possible through the adaptive reuse of the cow barn. The adjoining glazed-tile silo, while architecturally significant, appears fairly deteriorate in our 1999 photographs; given its condition, demolition of this structure may be appropriate.*

Therefore, the Town withheld issuing a demolition permit for the cow barn until the possibility of adaptive reuse could be examined. The applicant has since retained a structural engineer to survey the existing structures on the subject property, including the cow barn.

The Towns initial findings were similar to the conclusions documented in the structural engineer's two (2) reports completed in March 2001 and February 2002 by Joseph Schmitt Consulting Engineers for the property (enclosed for your review). The engineer determined that the milk house, gray house (Moses Rolph House), historic house (Skidmore House), and large house (main farm house) were all salvageable with varying degrees of reconstruction. However, they determined that the cow barn and silo were in very unstable condition and, *"highly unsuitable for redevelopment for another use."*

> *"The floor to ceiling height in the first floor is approximately 7' or less and would be reduced further when the floor is leveled and straightened with a topping slab. This would not meet minimum Building Code requirements."*

Additionally, the side walls lack adequate footing and the east wall of the barn is approaching imminent collapse. The attached silo is in comparable deteriorated condition, with the roof having long ago blown off, thus causing the silo walls to further deteriorate with exposure to weather. Therefore, it was determined that reconstruction and reuse of the cow barn is highly infeasible and will not be considered as an alternative to the proposed project. The barn with attached silo is proposed to be demolished to remove a safety and nuisance threat. As mitigation for the proposed project, the applicant proposes the following:

- Approximately 1 acre of wooded upland will be dedicated to the Town of Huntington and improved with the proposed extension of a heritage trail that will continue to the historic Moses Rolph House and Skidmore House on the southwest portion of the property.

- The existing farm house and two historic dwellings facing Woodhull Road will be preserved. The sale of the two historic dwellings to the Town will be considered simultaneously with approval of a Subdivision map.

- The stone and mortar vat will be emptied, examined for artifacts, and fully documented prior to removal. Additionally, its exterior will be searched for evidence of the date and methods of construction.

At this point in time, the client has conformed to the request of OPRHP and the Town of Huntington to explore the feasibility of adaptive reuse of the cow barn. Upon detailed review by a structural engineer, it was determined that reuse of the barn is not feasible due to several limitations, including: severe deterioration of the walls, unstable footing, and a floor to ceiling height that would be below the minimum Building Code requirements. The full structural engineer's report is enclosed for your review as well as photographs of the impacted structures and an aerial photograph indicating the location and direction of submitted photographs.

Please review this report at your earliest convenience, and forward a letter indicating your concurrence with the conclusions and recommendations of the professional engineer as well as the applicant's proposed mitigation. I appreciate your taking the time to review this matter and please do not hesitate to call should you have any questions or require additional information.

Sincerely,

NELSON, POPE & VOORHIS, LLC

Sara N. da Silva

cc: Roger Evans, NYSDEC
Richard Machtay, Town of Huntington Dep't of Planning
Jay Viders, Kiruv Capital Corp.
Tom Dixon, N&P

FIGURE 1

AERIAL PHOTOGRAPH AND PICTURE INDEX

Source: NYSGIS Orthoimagery Program, 2001
Scale: 1" = 200'

NORTH

NELSON POPE & VOORHIS LLC
ENVIRONMENTAL • PLANNING • CONSULTING

1. View of emergent marsh from driveway, looking northeast.

2. View of freshwater wetland upslope from marsh, looking southwest.

3. View of narrow portion of freshwater wetland facing Park Avenue, looking northeast.

4. View of forested swamp on south portion of property, looking northwest.

95-20-7 (5/93)

New York State Department of Environmental Conservation
Supplement to Joint Application for Permit

STRUCTURAL ARCHEOLOGICAL ASSESSMENT FORM (SAAF)

PART 1 - - APPLICANT COMPLETES	
APPLICANT INFORMATION	
1. Applicant Name	Kiruv Capital Corp.
2. Applicant Address	1 Old Country Road Carle Place, NY 11514
PROJECT INFORMATION	
3. Project/Facility Name	Kiruv Estates, Huntington
4. Project/Facility Location	SW c/o Park Avenue and Woodhull Road
5. Is the proposed project adjacent to, or does it contain a building or structure listed in the State or National Register of Historic Places?	☑ Yes ☐ No
6. Are any buildings or structures adjacent to or within the proposed project area 50 yrs of age or older ?	☑ Yes ☐ No
If the answer to question 5 and/or 6 is yes, provide the following information for each building and structure (use attachments if necessary):	
a. Name of structure	see attached
b. Location see attached	
c. Type of structure (ex. house, outbuilding, barn, bridge, dam, ruins)	see attached
d. Approximate age or date of construction	see attached
7. Might the proposed project have any impact (physical/visual) upon any buildings or structures listed in the State or National Register of Historic Places **or** built prior to 1940?	☑ Yes ☐ No
If yes, describe briefly (use attachments if necessary)	
All structures were built prior to 1940; one structure is listed on the National Register of Historic Places and will be	
preserved. The existing barn, silo and cottage would be demolished (see attached).	

APPLICANT SECTION CONTINUES ON REVERSE SIDE

Reset

PART 1 - - APPLICANT COMPLETES

8. Provide photographs of every building and structure that may be impacted by the project as described in number 7, on the opposite side of this page. The following standards are recommended:
   - Minimum of 2 photographs
   - Minimum size 4" X 4" prints from negatives preferred; polaroid photos are acceptable
   - Photos must be **clear** and **focused**
   - Clearly label photos so it is obvious what is being illustrated; key photos to map or plan, if possible
   - Photo 1: show both the entire front and side of the structure in a single shot from as close to the building as possible. Be sure the structure is not partially or fully blocked by trees or other obstructions
   - Photo 2: show relationship of building structure to roadway or surroundings

9.	Has the land within the proposed project area been previously disturbed or altered (excavated, landscaped, filled, utilities installed)?	☑ Yes ☐ No

If yes, describe briefly, including depth of disturbance (use attachments if necessary):

The proposed project area was originally a tannery and dairy farm. A full Stage I Archeology Sensitivity Evaluation and Survey was conducted in 1998 for the proposed Tannery Park Senior Housing Project, which includes the two northernmost homes in the current out parcel. The Stage I document is enclosed for your review.

10.	Approximate percentage of proposed project area with slopes:	0-10%	55 %
		10-15%	10 %
		15% or greater	30 %
11.	Approximate percentage of proposed project site with the following drainage characteristics:	Well drained	85 %
		Moderately well drained	0 %
		Poorly drained	15 %

Prepared By (Print or type name): Sara N. da Silva

Signature: Date:

Reset

PART 2 - - DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) COMPLETES

APPLICANT/PROJECT INFORMATION		
1.	Applicant Name	
2.	Project/Facility Name	
3.	DEC Number	
BUILDINGS AND STRUCTURES		
4.	Might the proposed project have any impact (physical/visual) upon any buildings or structures listed in the State or National Register of Historic Places **or** built prior to 1940?	☐ Yes ☐ No

If yes, DEC must consult with the Office of Parks, Recreation and Historic Preservation (OPRHP). DEC must request a determination of eligibility for the State Register of Historic Places and/or comments regarding project impact. Include information supplied by the applicant in response to questions 5, 6, 7 and 8 of Part 1 of this form.

ARCHEOLOGICAL SITES		
5.	Does the proposed project area coincide with a circle, square or stippled area on OPRHP's Statewide Archeological Inventory Map?	☐ Yes ☐ No
6.	Is the proposed project area outside of a circle or square, but one for which information has been provided (ex: documented reports of known sites) that suggests the area is archeologically sensitive?	☐ Yes ☐ No
	If yes, what is the nature and source of information?	
7.	Is the proposed project area apparently undisturbed?	☐ Yes ☐ No
8.	Will the proposed action include a physical disturbance of the project area?	☐ Yes ☐ No
9.	Is the slope in the area characteristically less than 15% (unless on limestone/flint escarpments)?	☐ Yes ☐ No
10.	Is the proposed project area characteristically moderately well or well drained?	☐ Yes ☐ No

If the answers to 5, 7-10 are yes, an archeological survey should be performed by the applicant. Provide the applicant with a copy of *Report Format for Cultural Resource Investigations* and a list of archeological consultants.

If the answer to 5 is no, but answers to 6-10 are yes, DEC must consult with OPRHP before requiring that the applicant perform an archeological survey.

DEC SECTION CONTINUES ON REVERSE SIDE

PART 2 - - DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) COMPLETES

RESULTS OF EVALUATION		
☐ **SHPA-1**	No buildings, structures or archeological sites identified at the project location.	
☐ **SHPA-2**	Buildings, structures or archeological sites identified, but no impacts will occur, no survey required. No further cultural resources review required.	
☐	Consultation by DEC with OPRHP required.	☐ Structures ☐ Archeology
☐	Archeological survey required.	
Prepared by:		Date:

1. Looking west towards cottage.

2. Looking west towards dairy barn.

3. Looking east along barn remains towards wetland.

4. Looking south at barn remains.

5. Looking northwest towards old dairy barn

6. Looking northeast from silo towards cottage.

Structural Archeological Assessment Form

Additional Information

(Question #6) Buildings or structures within or adjacent to the proposed project area 50 years of age or older include the following:

Out parcel in northern end of the property:

1. 525 Park Avenue (NYSOPRHP 1979: Structure Form HV54)
   Two-story dwelling with shed roof and imitation brick siding (circa pre-1860).

2. 483 Park Avenue (NHSOPRHP 1979: Structure Form HV53)
   Two-story dwelling with gable roof and clapboard siding (c. pre-1873).

   These structures will not be affected by the proposed project.

Central portion of property (originally the Swezey Dairy Farm):

3. 471 Park Avenue (NHSOPRHP 1979: Structure Form HV52)
   Main Farm House: 2 ½-story dwelling with gable roof and clapboard siding and 1-story porch on two sides. Moved to its present location in 1921 from its former location on opposite side of South Woodhull Street *(currently occupied);* (circa late 19th)

4. Moses Rolph House & "old" Swezey farmhouse (171 Woodhull Road; HV89) – (NHSOPRHP 1979: Structure Form HV89) Two-story dwelling with front porch (c. 1687), moved to its present location in 1921 *(vacant).*

5. Skidmore House (HV87); Listed on the National Register of Historic Places; 1 ½ -story dwelling with gable roof and central chimney, circa 1680-1725 *(vacant);*

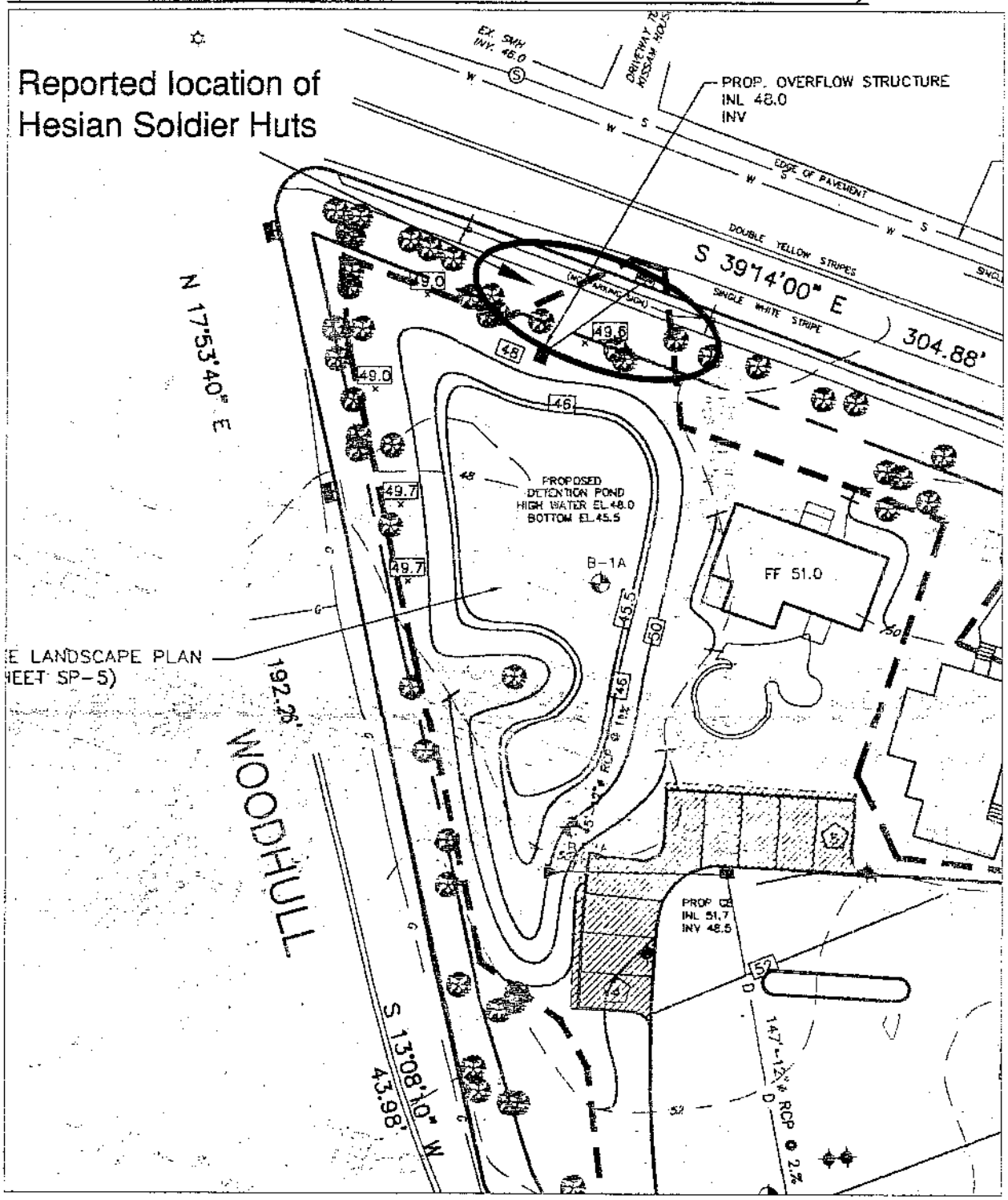
6. Milk barn *(now transformed into a cottage and currently occupied)* circa 1937; and

6. Additional structures include cow barn and silo, circa 1915 - 1939.

   The milk house was converted into a small cottage. The applicant proposes to preserve 471 Park Avenue and the two historic dwellings fronting Woodhull Road. The homes fronting Woodhull Road are proposed to be sold to the Town and the surrounding 0.97 acres of land are proposed to be dedicated to the Town of Huntington. The main farmhouse (471 Park Avenue) will be maintained (proposed unit #3) as part of this project. The existing barn, silo and cottage would be demolished.

FIGURE 1

FORMERLY PROPOSED TANNERY PARK SENIOR HOUSING PROJECT (NORTHWEST CORNER OF PROJECT PLANS)



Source: Preliminary Grading, Drainage & Utility Plan: Sear-Brown Group, 1998
Scale: 1' = 50'

NORTH

NELSON POPE & VOORHIS, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

95-19-3 (8/00) pfp

JOINT APPLICATION FOR PERMIT

New York State
United States Army Corps of Engineers

Applicable to agencies and permit categories listed in Item 1. Please read all instructions on back. Attach additional information as needed. Please print legibly or type.

1. Check permits applied for:

NYS Dept. of Environmental Conservation

- [ ] Stream Disturbance (Bed and Banks)
- [ ] Navigable Waters (Excavation and Fill)
- [ ] Docks, Moorings or Platforms (Construct or Place)
- [ ] Dams and Impoundment Structures (Construct, Reconstruct or Repair)
- [x] Freshwater Wetlands
- [ ] Tidal Wetlands
- [ ] Coastal Erosion Control
- [ ] Wild, Scenic and Recreational Rivers
- [ ] 401 Water Quality Certification
- [ ] Potable Water Supply
- [ ] Long Island Wells
- [ ] Aquatic Vegetation Control
- [ ] Aquatic Insect Control
- [ ] Fish Control

NYS Office of General Services
(State Owned Lands Under Water)

- [ ] Lease, License, Easement or other Real Property Interest
  Utility Easement (pipelines, conduits, cables, etc.)
- [ ] Docks, Moorings or Platforms (Construct or Place)

Adirondack Park Agency

- [ ] Freshwater Wetlands Permit
- [ ] Wild, Scenic and Recreational Rivers

Lake George Park Commission

- [ ] Docks (Construct or Place)
- [ ] Moorings (Establish)

US Army Corps of Engineers

- [ ] Section 404 (Waters of the United States)
- [ ] Section 10 (Rivers and Harbors Act)
- [ ] Nationwide Permit (s)
  Identify Number(s)

For Agency Use Only:
DEC APPLICATION NUMBER

US ARMY CORPS OF ENGINEERS

2. Name of Applicant (Use full name): Kiruv Capital Corp.
Telephone Number (daytime): (516) 742-1666
Mailing Address: 1 Old Country Road
Post Office: Carle Place **State**: NY **Zip Code**: 11514

3. Taxpayer ID (If applicant is not an individual): N/A

4. Applicant is a/an: (check as many as apply)
[x] Owner [ ] Operator [ ] Lessee [ ] Municipality / Governmental Agency

5. If applicant is not the owner, identify owner here - otherwise, you may provide Agent/Contact Person information.
Owner or Agent/Contact Person [ ] Owner [x] Agent /Contact Person: Nelson, Pope & Voorhis, LLC: contact: Sara daSilva
Telephone Number (daytime): 631-427-5665
Mailing Address: 572 Walt Whitman Road
Post Office: Melville **State**: NY **Zip Code**: 11747

6. Project / Facility Location (mark location on map, see instruction 1a.)
County: Suffolk
Town/City/Village: Huntington
Tax Map Section/ Block /Lot Number: SCTM # 0400-73-01-38, 41.1 & 42
0400-97-02-107
Location (including Street or Road): SW c/o Park Avenue and Woodhull Road
Telephone Number (daytime): (516) 742-1666
Post Office: Huntington **State**: NY **Zip Code**: 11743
7. Name of Stream or Waterbody (on or near project site): unnamed

8. Name of USGS Quad Map: Huntington
Location Coordinates: NYTM-E NYTM-N

9. Project Description and Purpose: (Category of Activity e.g. new construction/installation, maintenance or replacement; Type of Structure or Activity e.g. bulkhead, dredging, filling, dam, dock, taking of water; Type of Materials and Quantities; Structure and Work Area Dimensions; Need or Purpose Served)

The proposed project involves the construction of 11 attached single-family, two-story dwelling units and a cul-de-sac extension from Woodhull Road. The NE portion of the site is currently improved with a cottage, single-family dwelling and man-made pond. Emergent marsh and freshwater wetlands also occur along the eastern boundary of the site. Portion of project would occur w/i 100' of these wetlands. On SW portion of the site, the applicant proposes to dedicate the 2 historic dwellings along Woodhull Road and 1.04 ac of surrounding land to the Town of Huntington. Public water and sewer would service the proposed project, which is located on tax parcels 0400-073-01-38,41.1 & 42 and 0400-97-02-107, owned by Kiruv Capital Corp.

10. Proposed Use: [x] Private [ ] Public [ ] Commercial
11. Will Project Occupy State Land? [ ] Yes [x] No
12. Proposed Start Date: Pending
13. Estimated Completion Date: Pending

14. Has Work Begun on Project? (If yes, attach explanation of why work was started without permit.) [ ] Yes [x] No

15. List Previous Permit / Application Numbers and Dates: (If Any)

16. Will this Project Require Additional Federal, State, or Local Permits? [ ] Yes [x] No If Yes, Please List:

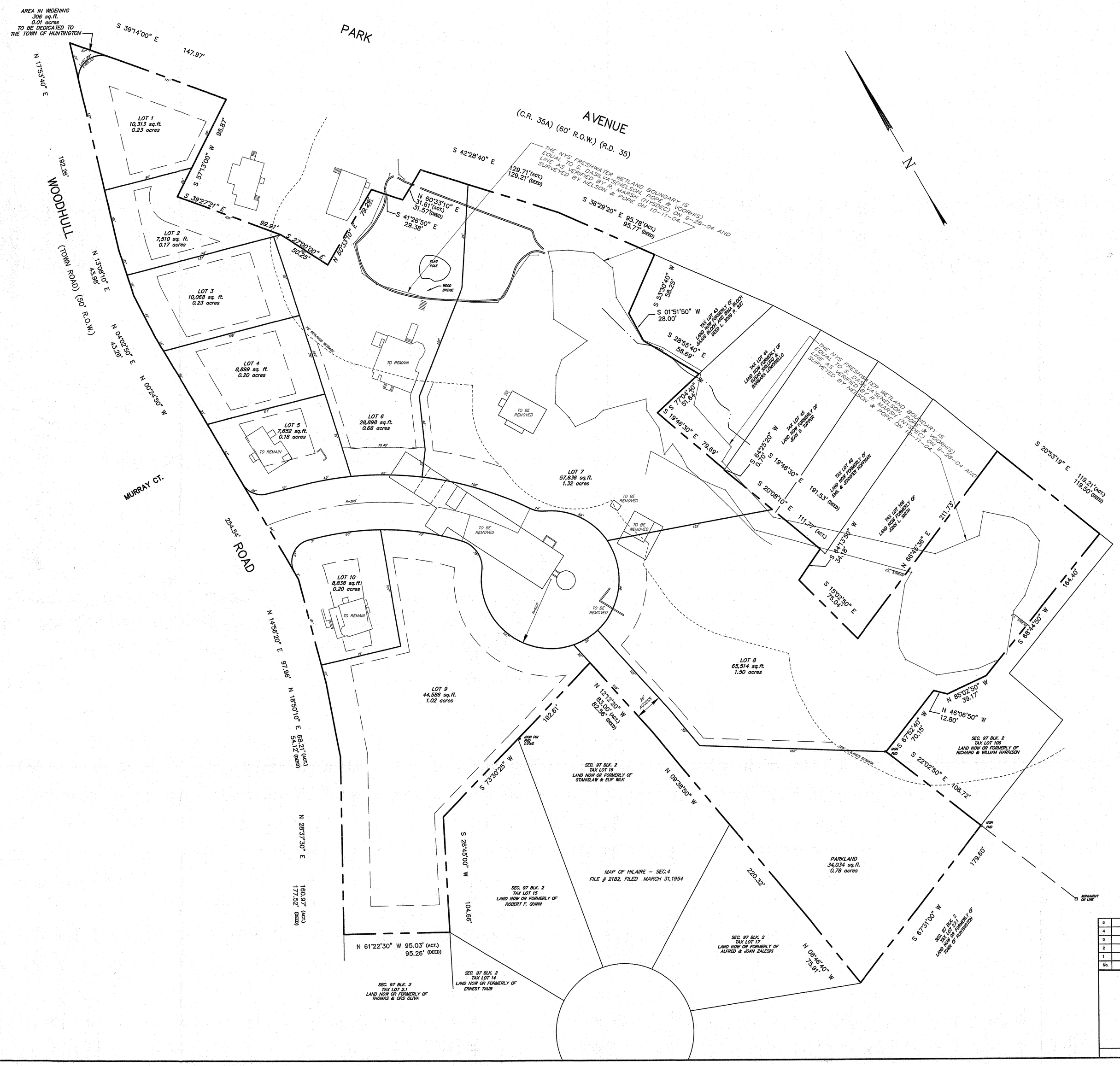
17. If applicant is not the owner, both must sign the application
I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than $10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, ficticious or fraudulent statement.

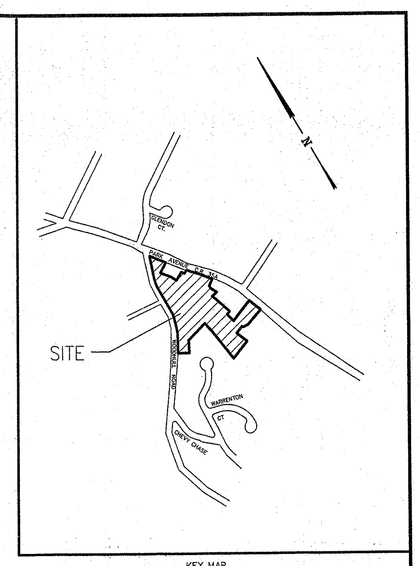
Date 7/2/04 Signature of Applicant _____ Title Environmental Scientist

Date _____ Signature of Owner _____ Title _____

PLANS

Yield Map, N&P (revised 12/05/05)
Overall Layout (Sheet 1 of 4), N&P (revised 4/20/06)
Grading and Drainage (Sheet 2 of 4), N&P (revised 4/20/06)
Profiles (Sheet 3 of 4), N&P (revised 4/20/06)
Road Improvement Plan (Sheet 4 of 4), N&P (revised 4/20/06)
Landscape Plan, R.B. Ignatow (revised 12/20/05)
Alternative 2: Grading and Drainage, N&P (revised 4/20/06)
Alternative 3: Grading and Drainage, N&P (revised 4/20/06)
Alternative 4: Grading and Drainage, N&P (revised 4/20/06)
Alternative 5: Yield Map, N&P (revised 12/05/05)





KEY MAP
SCALE: 1"=400'

SITE DATA
S.C.T.M. 0400-073-01-39, 41.1, AND 42
S.C.T.M. 0400-097-02-107
ZONE: B-7
TOTAL SITE AREA: 7.07 ACRES
AREA IN LOTS: 5.73 ACRES
AREA IN WIDENING: 0.01 ACRES
AREA IN ROADWAY: 0.55 ACRES
AREA IN PARKLAND: 0.78 ACRES
No. OF LOTS: 10
WATER DISTRICT: S.C.W.A.
FIRE DISTRICT: HUNTINGTON
POST OFFICE: HUNTINGTON
SCHOOL DISTRICT: HUNTINGTON

No.	DATE	REVISION	BY
5	12/05/05	REVISED PER TOWN COMMENTS 10/27/05	CCV
4	10/21/15	REVISED LOTS 6 AND 7 PER TOWN COMMENTS	GEO
3	08/02/05	REVISED PER TOWN COMMENTS DATED 06/02/05	LAB
2	08/09/04	REVISED LAYOUT	GEO
1	07/09/04	REVISED PER TOWN COMMENTS DATED 06/14/04	TCD

YIELD MAP
KIRUV ESTATES

S.C.T.M. DIST. 0400, SECT. 097.00, BLK. 02.00, LOT 107.0000
S.C.T.M. DIST. 0400, SECT. 073.00, BLK. 01.00, LOTS 39, 41.1, AND 42

LOCATED AT
HUNTINGTON
TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK

NELSON & POPE, LLP
ENGINEERS • DESIGNERS • SURVEYORS
572 WALT WHITMAN ROAD, MELVILLE, N.Y. 11747-2188
(631) 427-5665 FAX (631) 427-5620

DWN. BY:	pke
DATE:	2/11/04
CHK'D BY:	TCD
DATE:	2/12/04
JOB No.:	97110
FILE No.:	
CADD:	97110YM4
SCALE:	1"=30'
SHEET:	1 of 1

I HEREBY CERTIFY THAT THE WATER SUPPLY'S) AND/OR SEWAGE DISPOSAL SYSTEM'S) FOR THIS PROJECT WERE DESIGNED BY ME OR UNDER MY DIRECTION. BASED UPON A CAREFUL AND THOROUGH STUDY OF THE SOIL, SITE AND GROUNDWATER CONDITIONS, ALL LOTS AS PROPOSED, CONFORM TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES CONSTRUCTION IN EFFECT AS OF THIS DATE.

VICTOR BERT, P.E. No.49006

WE HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM AN ACTUAL SURVEY COMPLETED BY US ON _____ AND CONCRETE MONUMENTS WILL BE SET AS SHOWN.

PAUL M. RACZ, P.L.S. No. 50164

THIS IS TO CERTIFY THAT THIS SUBDIVISION HAS BEEN APPROVED BY THE TOWN OF HUNTINGTON PLANNING BOARD AND IF NO CONCRETE MONUMENTS HAVE BEEN SET, THE SIGNING OF THIS MAP BY A DULY AUTHORIZED PERSON AS DESIGNATED BY THE TOWN OF HUNTINGTON PLANNING BOARD HEREBY CERTIFIES THAT A PERFORMANCE BOND HAS BEEN POSTED TO SECURE INSTALLATION OF SAID MONUMENTS.

DATE OF CONDITIONAL FINAL APPROVAL | DATE OF FINAL APPROVAL | DIRECTOR OF PLANNING

NO PLOT MAY BE SUBDIVIDED OR CHANGED IN ANY MANNER AT ANY FUTURE DATE UNLESS BY SPECIAL ACTION OF THE HUNTINGTON TOWN PLANNING BOARD.

LANDS SHOWN ON THIS MAP AS ROADS, STREETS, OR HIGHWAYS OR FOR THE WIDENING THEREOF AND ALSO EASEMENTS FOR THE INSTALLATION OF SEWERS, DRAINS OR WATER MAINS, CONDUITS AND ALSO LANDS INDICATED AS TO BE DEDICATED FOR OTHER PUBLIC USE ARE HEREBY IRREVOCABLY OFFERED FOR DEDICATION TO THE MUNICIPALITY HAVING JURISDICTION THEREOF.

OWNER _____ DATE _____

OWNER _____ DATE _____

GRADING OF LOTS, INCLUDING SLOPES, ON THIS MAP SHALL BE LIMITED TO THE EXTENT OF CLEARING AND GRADING AS SHOWN ON THE APPROVED SITE PLANS AS DELINEATED BY THE LIMIT OF CLEARING/REGRADING LINE DURING CONSTRUCTION. TREES, WHICH ARE OUTSIDE THE CLEARING LIMIT LINE, MUST BE LEFT STANDING AND PROTECTED FROM GRADE CHANGES. EACH INDIVIDUAL LOT MUST BE TEMPORARILY AND/OR PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING THE BACKFILLING OF THE FOUNDATION AND SHALL BE COMPLIANCE WITH THE TOWN OF HUNTINGTON EROSION AND SEDIMENT CONTROL HANDBOOK AND SECTIONS H-100 THRU H-100.6 OF THE TOWN OF HUNTINGTON SUBDIVISION REGULATIONS AND SITE IMPROVEMENT SPECIFICATIONS.

A HIGHWAY WORK PERMIT SHALL BE OBTAINED FROM THE TOWN OF HUNTINGTON HIGHWAY DEPARTMENT PRIOR TO ANY WORK PERFORMED IN AN EXISTING TOWN RIGHT-OF-WAY.

PRIOR TO THE START OF CONSTRUCTION A BRIGHTLY COLORED CONSTRUCTION FENCE SHALL BE ERECTED ALONG THE LIMIT OF CLEARING/REGRADING LINE DURING CONSTRUCTION AND LEFT IN PLACE DURING CONSTRUCTION OF EACH DWELLING.

ALL IMPROVEMENTS SHALL BE IN CONFORMANCE WITH THE TOWN OF HUNTINGTON PLANNING BOARD SUBDIVISION REGULATIONS AND SITE IMPROVEMENT SPECIFICATIONS.

ANY UTILITY REQUIRED TO BE RELOCATED DUE TO THE INSTALLATION OF THE REQUIRED IMPROVEMENTS SHALL BE RELOCATED AT THE EXPENSE OF THE OWNER/ APPLICANT.

DRYWELLS SHALL BE PROVIDED FOR ALL ROOF DRAINS.

THE CONTRACTOR SHALL PROVIDE A STABILIZED CONSTRUCTION ENTRANCE AT ANY POINT WHERE CONSTRUCTION TRAFFIC WILL BE ENTERING OR LEAVING THE SITE.

RELEASE OF BUILDING PERMITS FOR ALL LOTS ON THIS MAP SHALL BE SUBJECT TO A SCHEDULE OF OPERATIONS APPROVED BY THE DIRECTOR OF ENGINEERING, BUILDING AND HOUSING, AND IN CONFORMANCE WITH THE TOWN OF HUNTINGTON SUBDIVISION REGULATIONS AND SITE IMPROVEMENT SPECIFICATIONS.

THERE ARE NO WELLS WITHIN 150' OF THE SITE.

ALL EXISTING STRUCTURES ARE TO BE REMOVED UNLESS OTHERWISE NOTED.

FOLLOWING SUBDIVISION AND IMPLEMENTATION OF APPROVED PLANS, THE REMOVAL, DESTRUCTION OR ALTERATION OF TREES AND WOODLAND SHALL BE SUBJECT TO TOWN CODE CHAPTER 186- TREE PRESERVATION LAW.

THE HOMEOWNERS ASSOCIATION SHALL OWN AND MAINTAIN THE PROPOSED ROADWAY, RETAINING WALLS, DRAINAGE STRUCTURES, SANITARY SYSTEMS, AND ALL COMMON AREAS.

HERITAGE TRAIL EXTENSION SHALL BE IMPROVED AND MAINTAINED BY THE TOWN OF HUNTINGTON.

THIS PLAT IS SUBJECT TO COVENANTS AND RESTRICTIONS DATED _____ AND FILED IN THE COUNTY CLERK'S OFFICE ON _____ AS LIBER _____ PAGE _____

1) THERE SHALL BE N CLEARING , GRADING, FILING OR DEPOSITING, EITHER DIRECTLY OR INDIRECTLY OF ANY MATERIAL INCLUDING LANDSCAPE DEBRIS, WITHIN THE "CONSERVATION AREA TO REMAIN NATURAL" LAND, MORE FILLY DESCRIBED ON THE PRELIMINARY AND FINAL MAP OF KIRUV ESTATES, AND AS MORE FULLY DESCRIBED HEREIN ON THE ANNEXED SCHEDULES "B" AND "C". SAID AREA SHALL BE DELINEATED BY MONUMENTS ON SITE. THIS RESTRICTION SHALL NOT INCLUDE NORMAL GROUND MAINTENANCE SUCH AS PERIMETER FENCE INSTALLATION AND REPAIR, TRIMMING AND REMOVAL OF DEAD OR DESEASED VEGETATION THAT MAY BE NECESSARY TO PRESERVE, PROTECT AND CONSERVE THE NATURAL BENEFITS THEREIN.

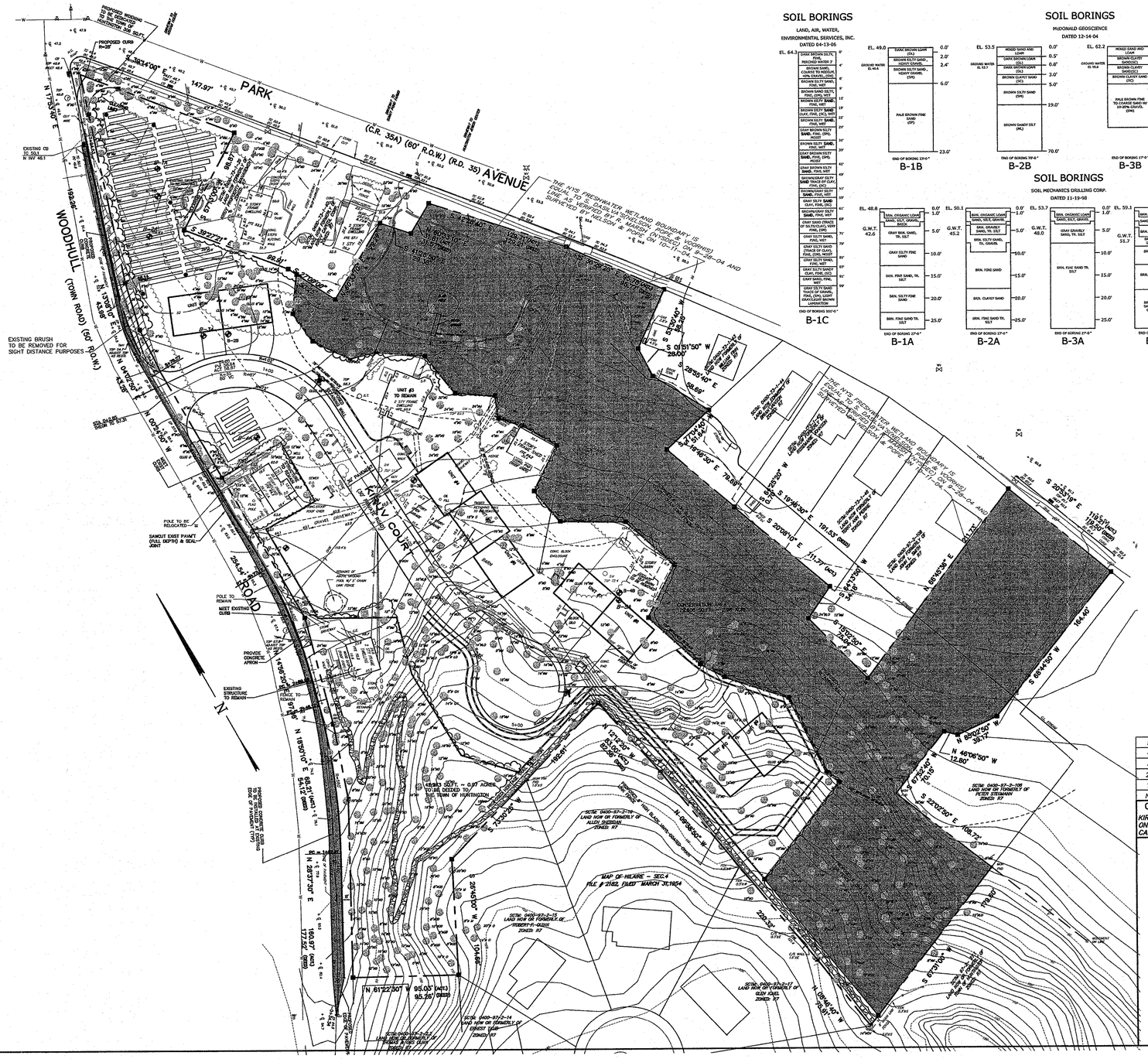
2) THE RESTRICTIVE COVENANT CREATED HEREBY SHALL INSURE TO THE BENEFIT OF THE RESIDENTS OF THE TOWN OF HUNTINGTON AND MAY ONLY BE CHANGED, AMENDED OR EXTINGUISHED BY ACTION OF THE PLANNING BOARD OF THE TOWN OF HUNTINGTON.

THIS PLAT IS SUBJECT TO COVENANTS AND RESTRICTIONS DATED_____AND FILED IN THE COUNTY CLERK'S OFFICE ON_____AS LIBER_____PAGE_____

STATING THE FOLLOWING:

1 MANAGEMENT OF THE COMMON AREAS OF KIRUV ESTATES, SHALL BE BY A HOMEOWNERS ASSOCIATION WHICH SHALL BE DULY CREATED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK AND APPROVED BY THE NEW YORK STATE ATTORNEY GENERAL. THE COMMON AREAS, SHALL BE OWNED AND MAINTAINED, IN PERPETUITY BY SAID HOME OWNERS ASSOCIATION. THE COMMON AREAS INCLUDE, AMONG OTHER PORTIONS OF THE PROPERTY AS DELINEATED ON THE SUBDIVISION MAP OF KIRUV ESTATES, ROADS, STREET LIGHTS, DRAINAGE STRUCTURES AND DRAINAGE EASEMENTS, RECREATION AREAS, RECHARGE BASINS, LANDSCAPED BUFFERS AND CONSERVATION AREAS.
2 THE COMMON AREAS SHALL NOT BE SUBDIVIDED IN THE FUTURE NOR USED FOR COMMERCIAL PURPOSES.
3 THE HOMEOWNERS' ASSOCIATION SHALL NOT USE THE COMMON AREAS AS COLLATERAL FOR IMPROVEMENTS WITHIN THE SUBDIVISION OR ANY OTHER PURPOSE.
4 THE HOMEOWNERS' ASSOCIATION SHALL MEET ALL REQUIREMENTS AND REGULATIONS OF THE STATE ATTORNEY GENERAL'S OFFICE PER 13 NYSRR PARTS 20, 21 AND 22.
5 DISSOLUTION OF THE HOMEOWNERS' ASSOCIATION SHALL BE PROHIBITED WITHOUT TOWN BOARD APPROVAL.
6 THERE SHALL BE NO FURTHER SUBDIVISION OR RESUBDIVISION OF ANY LOT OR LOTS ON THE MAP OF KIRUV ESTATES.

SITE DATA
S.C.T.M. 0400-073-01-38, 41.1, AND 42
S.C.T.M. 0400-097-02-107
ZONE: R-7
TOTAL SITE AREA: 7.07 ACRES
AREA IN LOTS: 0.36 ACRES
AREA IN ROADWAY: 0.41 ACRES
AREA IN DEDICATION TO TOWN: 0.97 ACRES
AREA IN WIDENING: 306 SQ.FT.
AREA IN COMMON AREAS: 5.33 ACRES
AREA IN CONSERVATION AREAS: 2.98 ACRES
No. OF LOTS: 10
WATER DISTRICT: S.C.W.A.
FIRE DISTRICT: HUNTINGTON
POST OFFICE: HUNTINGTON
SCHOOL DISTRICT: HUNTINGTON
⊡ DENOTES EXISTING MONUMENT
■ DENOTES PROPOSED MONUMENT
NOTE: BASE TOPOGRAPHIC SURVEY PREPARED BY SEAR-BROWN DATED 1-22-98.



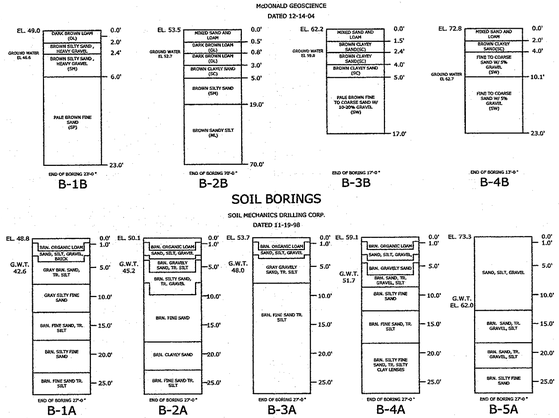
SOIL BORINGS

LAND, AIR, WATER, ENVIRONMENTAL SERVICES, INC.
DATED 04-13-06

B-1C

SOIL BORINGS

McDONALD GEOSCIENCE
DATED 12-14-04

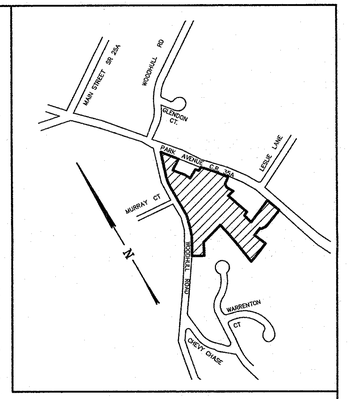


B-1B | B-2B | B-3B | B-4B

SOIL BORINGS

SOIL MECHANICS DRILLING CORP.
DATED 11-19-98

B-1A | B-2A | B-3A | B-4A | B-5A



KEY MAP
SCALE: 1" = 1,000'

LEGEND

	EXIST CURB		PROP SANITARY MANHOLE
	EXIST CURB TO BE REMOVED		PROP DRAIN MANHOLE
	EXIST EDGE OF PAVEMENT		PROP TELEPHONE MANHOLE
S	EXIST SANITARY SEWER	(122)	PROP CONTOUR
W	EXIST WATER MAIN	(123.45)	PROP SPOT ELEVATION
G	EXIST GAS MAIN		PROP HYDRANT
D	EXIST DRAIN LINE		PROP FENCE
T	EXIST TELEPHONE LINE		PROP CATCH BASIN
192	EXIST CONTOUR		PROP LEACHING CATCH BASIN
123.10	EXIST SPOT ELEVATION		PROP LEACHING POOL W/OPEN GRATE
	EXIST HYDRANT		PROP LEACHING POOL W/SOLID COVER
	EXIST FENCE	DM	PROP ROOF DRYWELL
	EXIST CATCH BASIN	TC	TOP OF CURB
	EXIST UTILITY POLE	P	PAVEMENT
(S)	PROP SANITARY SEWER		DRAIN FLOW ARROW
(W)	PROP WATER MAIN		PROP STREET LIGHT
(G)	PROP GAS MAIN		PROP LIMIT OF CLEARING/REGRADING DURING CONSTRUCTION
(D)	PROP DRAIN LINE		
(HC)	PROP HOUSE CONNECTION		
(WS)	PROP WATER SERVICE		
	PROP TRANSFORMER		
SDG	PROP SURFACE DRAINAGE GRATE		

PRELIMINARY MAP OF
KIRUV ESTATES
OVERALL LAYOUT
LOCATED AT
HUNTINGTON
TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK
S.C.T.M. DIST. 0400, SECT. 073.00, BLK. 01.00
LOTS 038.000, 041.0001, AND 042.0000
S.C.T.M. DIST. 0400, SECT. 097.00, BLK. 02.00, LOT 107.0000
SCALE: 1"= 50'

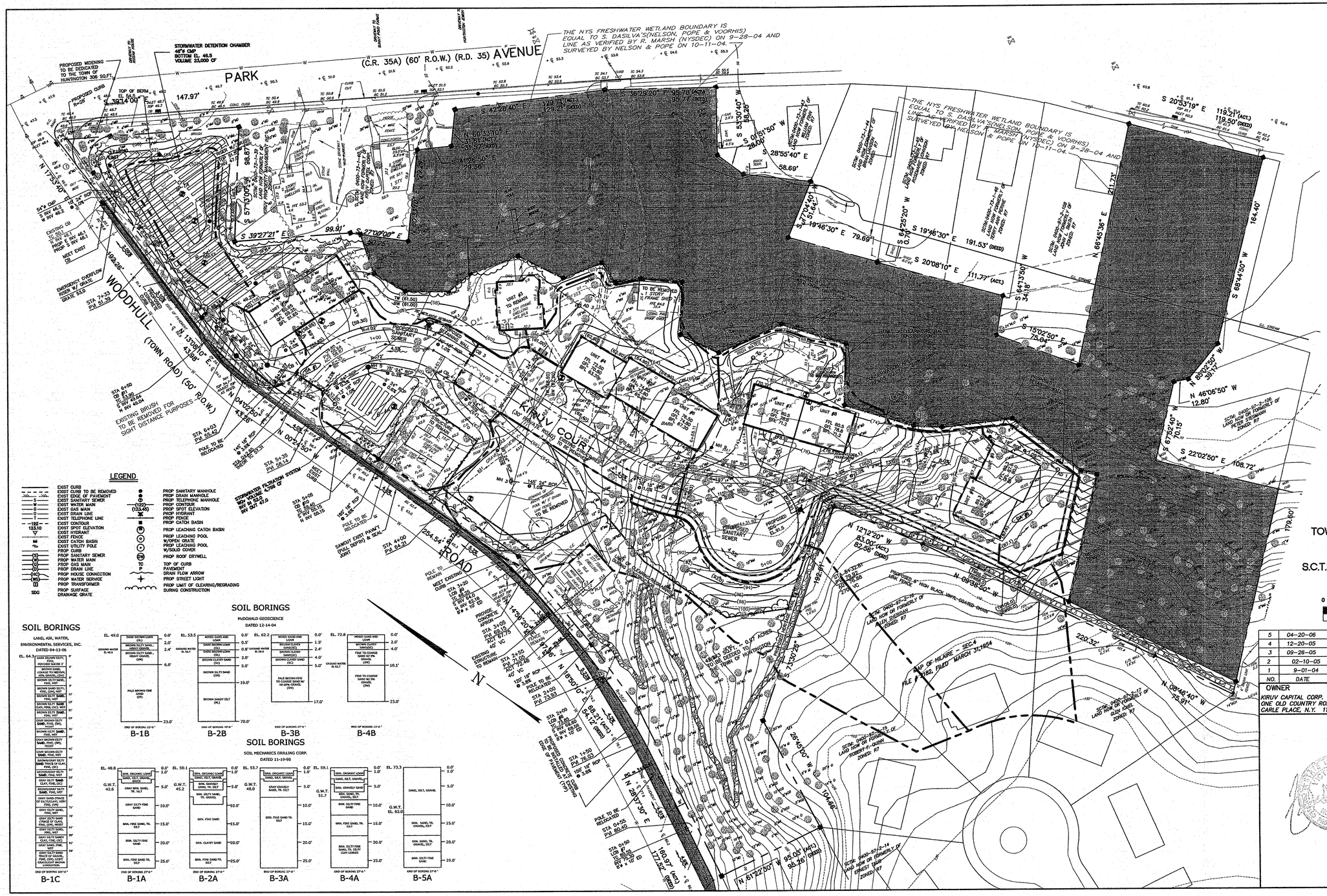
50 0 25 50 100 200
(IN FEET)

NO.	DATE	DESCRIPTION	BY
5	04-20-06	ADD TEST HOLE LOG	SWM
4	12-20-05	REVISED PER TOWN COMMENTS OF OCTOBER 27, 2005	GEO
3	09-26-05	REVISED PER TOWN COMMENTS OF JUNE 2, 2005	GEO
2	02-10-05	REVISED LAYOUT, GRADING AND DRAINAGE	GEO
1	9-01-04	REVISED LAYOUT- CHANGED TO 10 UNITS & TOWN COMMENTS, LETTER OF 6/9/04	GEO

OWNER	APPLICANT	DEVELOPER
KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514

NELSON & POPE
ENGINEERS • DESIGNERS • SURVEYORS
572 WALT WHITMAN ROAD
MELVILLE, N.Y. 11747-2188
(631) 427-5665 FAX (631) 427-5620

FILE NO.	JOB NO. 97110
DATE: APRIL 2004	SHEET 1 OF 4



COEFFICIENT OF RUNOFF

PERVIOUS: 2.78 x 0.3 = 0.83
IMPERVIOUS: 0.91 x 1.0 = 0.91
ROOF: 0.36 x 1.0 = 0.36
2.10
2.10/ 4.05 = 0.5185 SAY 0.52

DRAINAGE STRUCTURE TABLE						
No.	STATION	TC/TOP	INVERT	TYPE	AREA	REMARKS
CB 1	0+31.39	TC57.75	N 53.75 S 53.25	3	0.10 AC.	
CB 2	0+31.39	TC57.75	53.16	3	0.05 AC.	
CB 3	1+80	TC64.0	59.70	3	0.20 AC.	
CB 4	1+80	TC64.0	E 59.40 S 53.50 N 53.50	3	0.10 AC.	
CB 5	3+95	TC73.65	59.85	3	0.35 AC.	
CB 6	3+95	TC73.65	S 67.70 E 59.55 N 59.0	3	0.10 AC.	
LCB 7	0+50	TC80.55	78.30	1		
LCB 8	2+00	TC73.85	S 69.60 N 68.55	3		
LCB 9	3+20	TC68.25	S 64.0 N 62.18	3		
CB 10	5+05	TC59.40	55.15	3		
CB 11	5+50	TC53.90	S 49.64 N 49.04	3		
SDG 1		TOP91.5	71.20			
AD 1		TOP85.50	81.00		0.20 AC.	OPEN GRATE
AD 2		TOP55.50	61.00		0.30 AC.	OPEN GRATE
AD 3		TOP58.10	54.02		0.39 AC.	OPEN GRATE
AD 4		TOP57.0	53.3		0.26 AC.	OPEN GRATE
MH 1		TOP86.40	S 80.35 N 78.08			SOLID COVER
MH 2		TOP77.00	E 72.00 S 71.00 W 70.00			SOLID COVER
MH 3		TOP63.0	S 57.55		0.80 AC.	OPEN GRATE
MH 4		TOP74.20	E 53.64 S 56.72 W 53.64			SOLID COVER
MH 5		TOP57.50	N 53.04 W 52.04 S 53.28		0.25 AC.	OPEN GRATE
MH 6		TOP57.00	46.8			SOLID COVER
MH 7		TOP57.50	52.25			SOLID COVER
MH 8		TOP54.7	46.6			SOLID COVER

PRELIMINARY MAP OF KIRUV ESTATES
GRADING AND DRAINAGE
LOCATED AT
HUNTINGTON
TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK
S.C.T.M. DIST. 0400, SECT. 073.00, BLK. 01.00
LOTS 038.000, 041.0001, AND 042.0000
S.C.T.M. DIST. 0400, SECT. 097.00, BLK. 02.00, LOT 107.0000
SCALE: 1"= 40'

0 50 100 200

LEGEND

EXIST CURB
EXIST CURB TO BE REMOVED
EXIST EDGE OF PAVEMENT
EXIST SANITARY SEWER
EXIST WATER MAIN
EXIST GAS MAIN
EXIST DRAIN LINE
EXIST TELEPHONE LINE
EXIST CONTOUR
EXIST SPOT ELEVATION
EXIST HYDRANT
EXIST FENCE
EXIST CATCH BASIN
EXIST UTILITY POLE
PROP CURB
PROP SANITARY SEWER
PROP WATER MAIN
PROP GAS MAIN
PROP DRAIN LINE
PROP HOUSE CONNECTION
PROP WATER SERVICE
PROP TRANSFORMER
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PROP SANITARY MANHOLE
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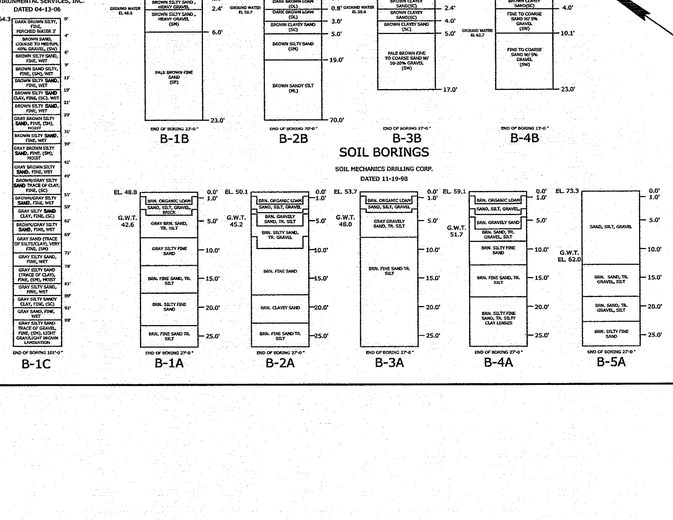
PROP CATCH BASIN
PROP LEACHING CATCH BASIN
PROP LEACHING POOL W/OPEN GRATE
PROP LEACHING POOL W/SOLID COVER
PROP ROOF DRYWELL
TOP OF CURB
PAVEMENT
DRAIN FLOW ARROW
PROP STREET LIGHT
PROP LIMIT OF CLEARING/REGRADING DURING CONSTRUCTION

SOIL BORINGS

LAND, AIR, WATER, ENVIRONMENTAL SERVICES, INC.
DATED 04-13-06



SOIL BORINGS

McDONALD GEOSCIENCE
DATED 12-14-04

SOIL BORINGS

SOIL MECHANICS DRILLING CORP.
DATED 11-19-98

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OWNER	APPLICANT	DEVELOPER
KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514

NELSON & POPE
ENGINEERS • DESIGNERS • SURVEYORS
572 WALT WHITMAN ROAD
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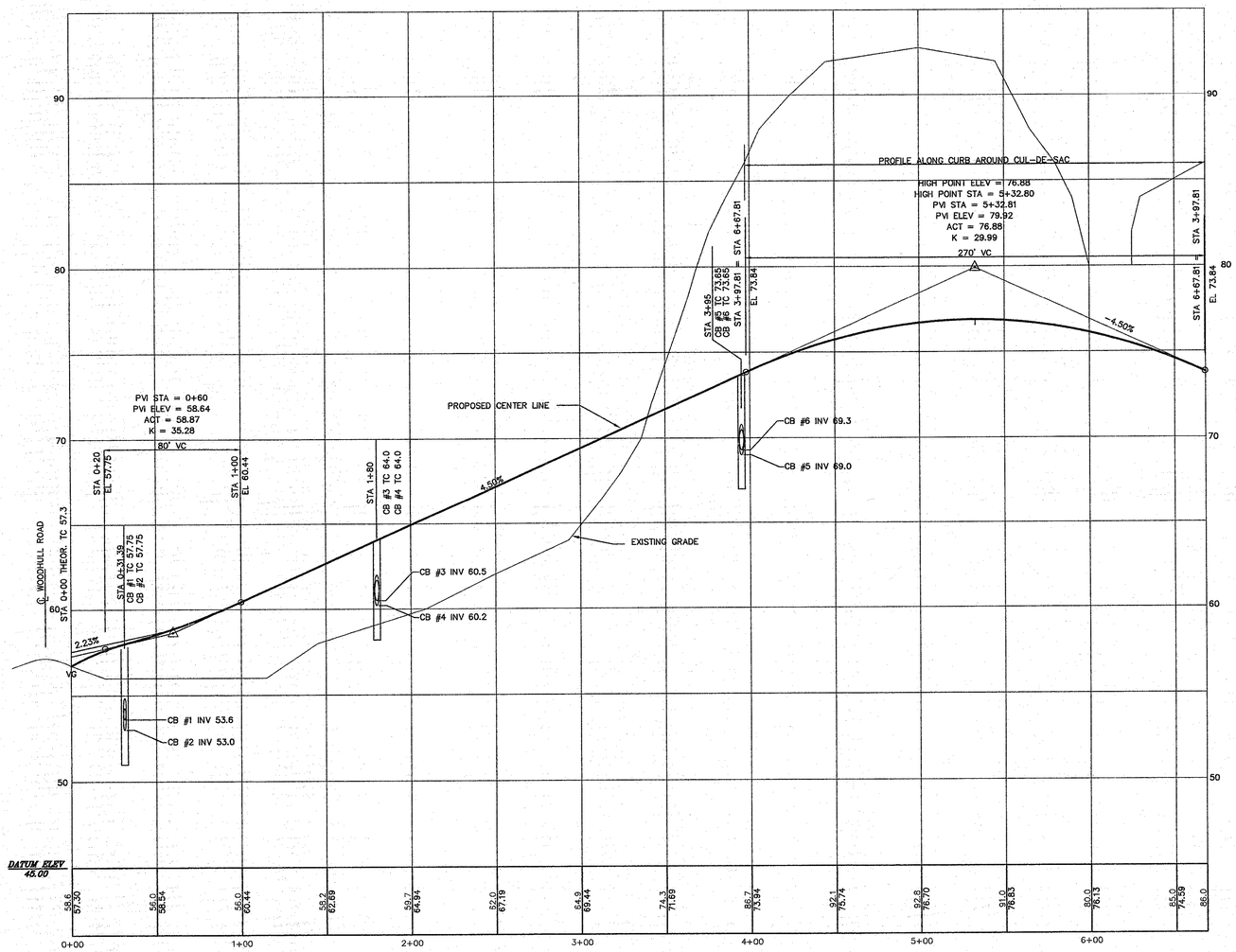
(631) 427-5665 FAX (631) 427-5620

FILE NO.	JOB NO. 97110
DATE: APRIL 2004	SHEET 2 OF 4



PRELIMINARY MAP OF
KIRUV ESTATES
PROFILES
LOCATED AT
HUNTINGTON
TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK
S.C.T.M. DIST. 0400, SECT. 073.00, BLK. 01.00
LOTS 038.000, 041.0001, AND 042.0000
S.C.T.M. DIST. 0400, SECT. 097.00, BLK. 02.00, LOT 107.0000
SCALE: HOR: 1"= 40'
VERT: 1"= 4'

NO.	DATE	DESCRIPTION	BY
5	04-20-06	NO REVISION THIS SHEET	SWM
4	12-20-05	REVISED PER TOWN COMMENTS OF OCTOBER 27, 2005	GEO
3	09-26-05	REVISED PER TOWN COMMENTS OF JUNE 2, 2005	GEO
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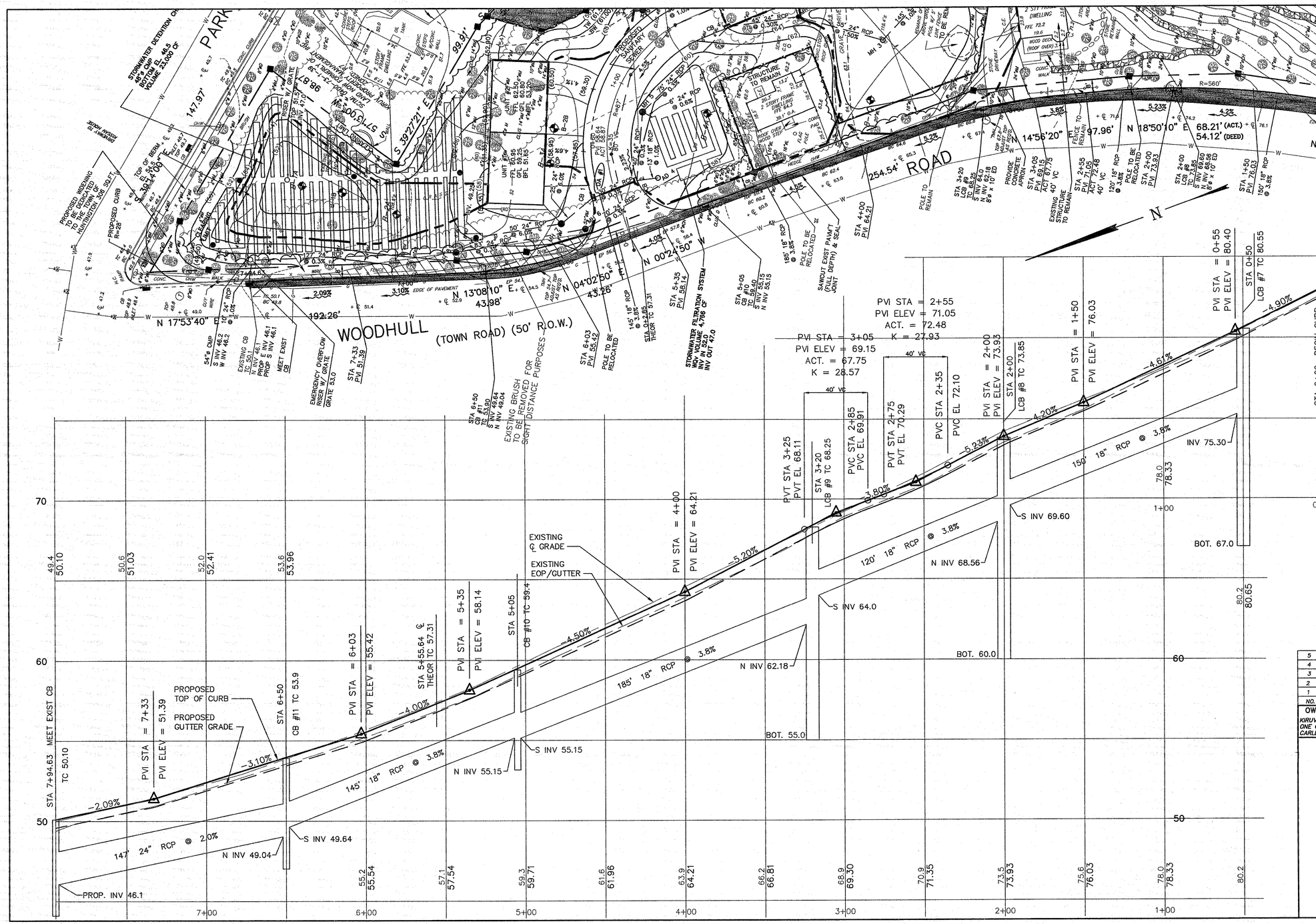
OWNER	APPLICANT	DEVELOPER
KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514

STATE OF NEW YORK
VICTOR BOSCO
No. 49906
LICENSED PROFESSIONAL ENGINEER

NELSON & POPE
ENGINEERS • DESIGNERS • SURVEYORS
572 WALT WHITMAN ROAD
MELVILLE, N.Y. 11747-2188
(631) 427-5665 FAX (631) 427-5620

FILE NO.	JOB NO. 97110
DATE: APRIL 2004	SHEET 3 OF 4



PRELIMINARY MAP OF KIRUV ESTATES

ROAD IMPROVEMENT PLAN

LOCATED AT

HUNTINGTON

TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK
S.C.T.M. DIST. 0400, SECT. 073.00, BLK. 01.00
LOTS 038.000, 041.0001, AND 042.0000
S.C.T.M. DIST. 0400, SECT. 097.00, BLK. 02.00, LOT 107.0000
SCALE: 1" VERT= 3'
SCALE: 1" HOR = 30'

0 50 100 200

NO.	DATE	DESCRIPTION	BY
5	04-20-06	NO REVISION THIS SHEET	SWM
4	12-20-05	REVISED PER TOWN COMMENTS OF OCTOBER 27, 2005	GEO
3	09-26-05	REVISED PER TOWN COMMENTS OF JUNE 2, 2005	GEO
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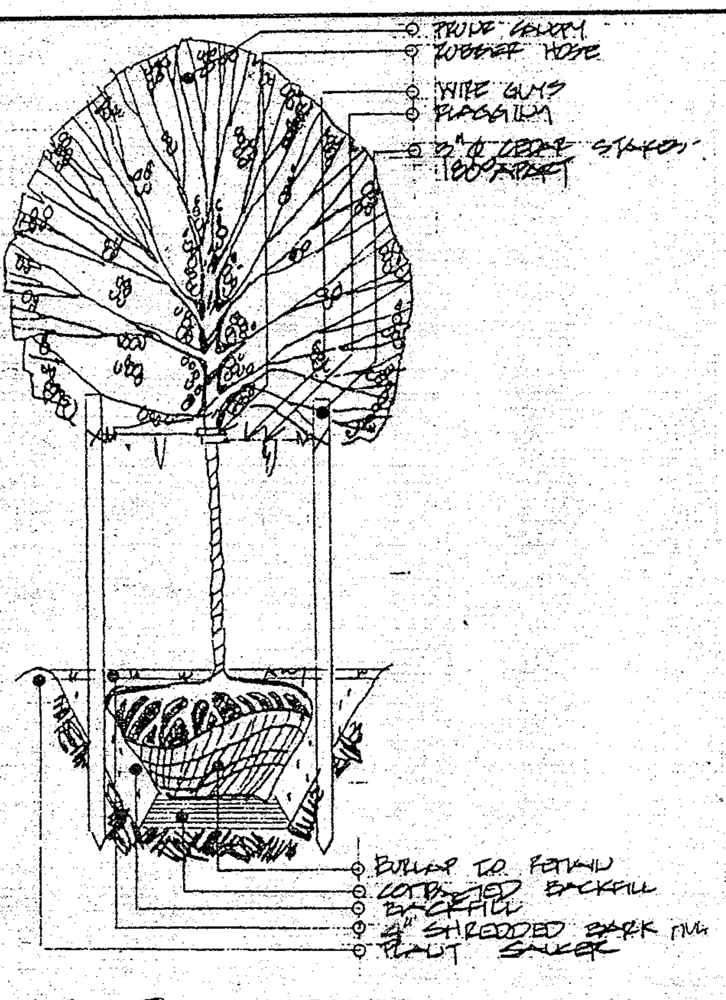
OWNER	APPLICANT	DEVELOPER
KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514

STATE OF NEW YORK
VICTOR DANIEL SCHITTER JR.
No. 49005
LICENSED PROFESSIONAL ENGINEER

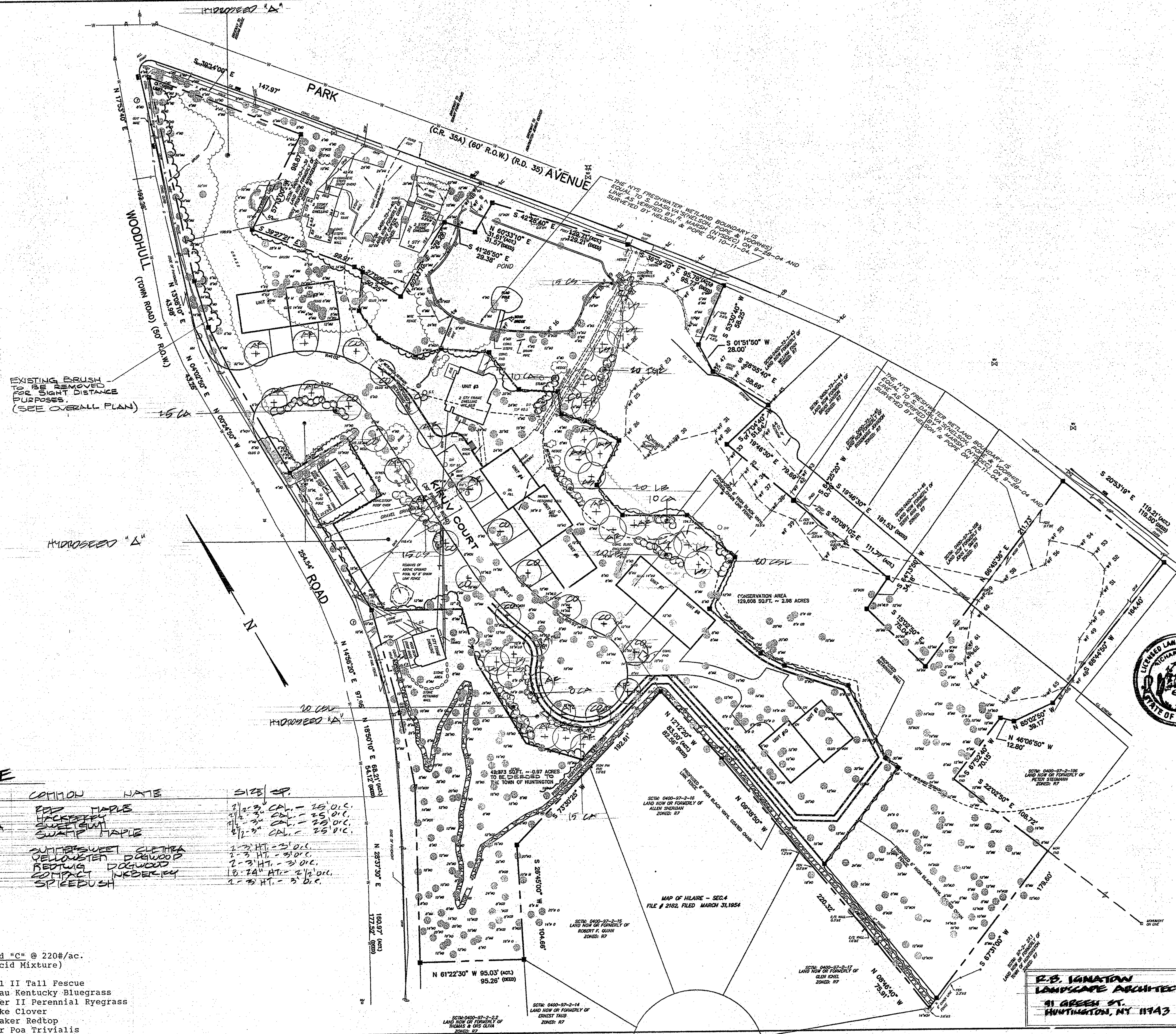
NELSON & POPE
ENGINEERS • DESIGNERS • SURVEYORS
572 WALT WHITMAN ROAD
MELVILLE, N.Y. 11747-2188
(631) 427-5665 FAX (631) 427-5620

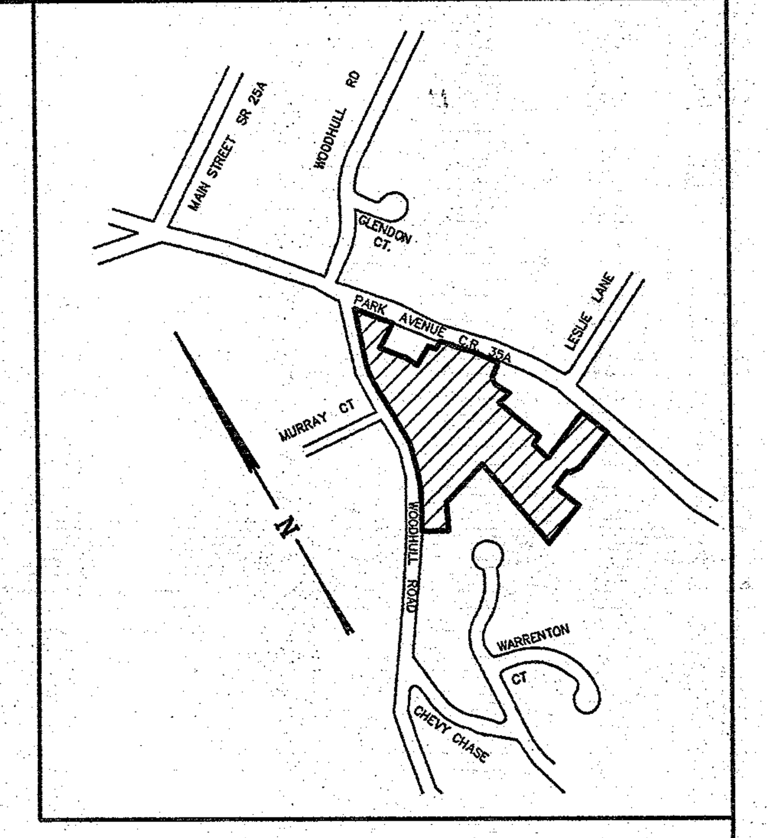
FILE NO.	JOB NO. 97110
DATE: APRIL 2004	SHEET 4 OF 4



TREE PLANTING DETAIL

NTS





KEY MAP

SCALE: 1" = 1,000'

NOTES

All plant material guaranteed for a period of one year following acceptance by owner

All planting beds to be mulched with 4" of shredded bark

All planting areas to receive 4" of screened topsoil prior to plant installation

Landscaping shall be planted and maintained in compliance with the Town of Huntington Subdivision Regulations and Site Improvement Specifications and addenda

There shall be no plant substitutions unless authorized by staff of the Huntington Planning and Environmental Department

No plant material, except lawn or groundcover, is to be located within 2' of any parking lot curbs

All deciduous trees to be secured with two 3" dia. cedar stakes, 180 degrees apart

All ropes and wires surrounding root ball to be removed prior to backfilling of tree pits/ Tree trunk wrap to be removed

No trees to be located within 10' of drywells, walls, or piping and drainage structures as per Town of Huntington standards

All proposed street trees to be limbed up to a height of 7 feet to avoid any interference with pedestrian movements along proposed sidewalks

Planting of street trees and other plant material must be under the supervision of a graduate Landscape Architect. The develope must supply the Town Engineer with the affidavit of the graduate Landscape Architect stating that the quality, variety, size of plants and planting procedures conform to the specifications of the Town of Huntington

PLANTING SCHEDULE

	SYM.	QUA.	BOTANICAL NAME	COMMON NAME	SIZE / SP.
TREES	AR	18	ACER RUBRUM	RED MAPLE	2 1/2-3" CAL. - 25' O.C.
	CO	17	CELTIS OCCIDENTALIS	HACKBERRY	2 1/2-3" CAL. - 25' O.C.
	LS	9	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	2 1/2-3" CAL. - 25' O.C.
	AS	4	ACER SACCHARINUM	SWAMP MAPLE	2 1/2-3" CAL. - 25' O.C.
SHRUBS	CA	68	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	2-3' HT. - 3' O.C.
	CSL	40	CORNUS STOLONIFERA LUTEA	YELLOWSTEM DOGWOOD	2-3' HT. - 3' O.C.
	CS	30	CORNUS STOLONIFERA	REDTWIG DOGWOOD	2-3' HT. - 3' O.C.
	IGC	20	ILEX GLABRA COMPACTA	COMPACT INKBERRY	18-24" HT. - 2 1/2' O.C.
	LB	40	LINDERA BENZOIN	SPICEBUSH	2-3' HT. - 3' O.C.

Hydroseed "C" @ 220#/ac.
(Moist/Acid Mixture)

55% Rebel II Tall Fescue
20% Nassau Kentucky Bluegrass
10% Palmer II Perennial Ryegrass
5 % Alsike Clover
5 % Streaker Redtop
5 % Laser Poa Trivialis

NOTE: BASE TOPOGRAPHIC SURVEY PREPARED BY SEAR-BROWN DATED 1-22-98.

LANDSCAPE PLAN
KIRUV ESTATES

LOCATED AT
HUNTINGTON
TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK
S.C.T.M. DIST. 0400, SECT. 073.00, BLK. 01.00
LOTS 038.000, 041.0001, AND 042.0000
S.C.T.M. DIST. 0400, SECT. 097.00, BLK. 02.00, LOT 107.0000

SCALE: 1"= 50'

50 0 25 50 100 200

(IN FEET)

LICENSED LANDSCAPE ARCHITECT RICHARD IGNATOW STATE OF NEW YORK

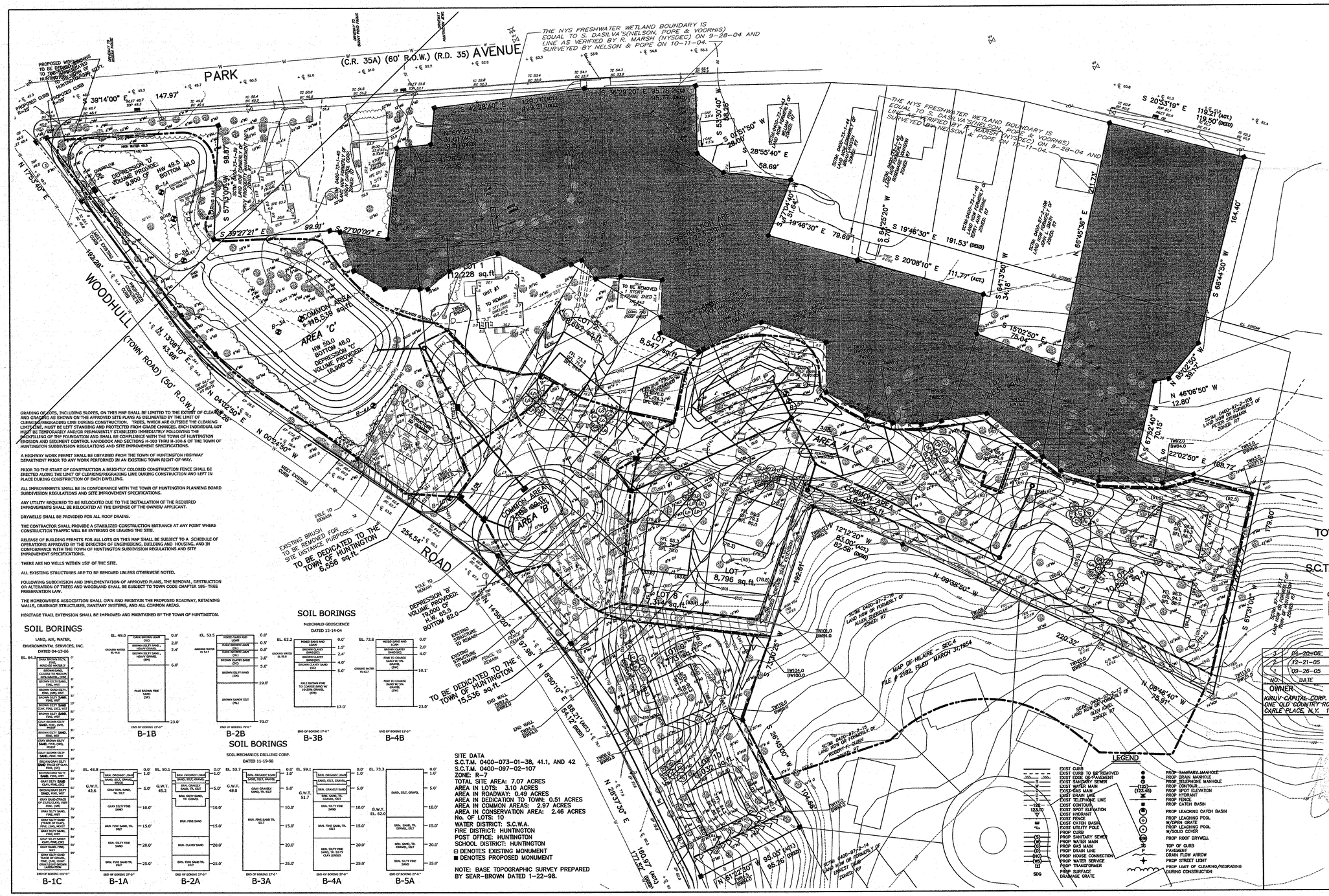
NO.	DATE	DESCRIPTION	BY
2	12-20-05	REVISE PER TOWN COMMENTS OF OCT. 27, 2005	GC
1	9-26-05	REVISE PER TOWN COMMENTS OF JUNE 2, 2005	GC

OWNER	APPLICANT	DEVELOPER
KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514

R.B. IGNATOW
LANDSCAPE ARCHITECT
91 GREEN ST.
HUNTINGTON, NY 11743

NELSON & POPE
ENGINEERS • DESIGNERS • SURVEYORS
572 WALT WHITMAN ROAD
MELVILLE, N.Y. 11747-2188
(631) 427-5665 FAX (631) 427-5620

FILE NO.	JOB NO. 97110
DATE: APRIL 2005	SHEET 1 OF 1



GRADING OF LOTS, INCLUDING SLOPES, ON THIS MAP SHALL BE LIMITED TO THE EXTENT OF CLEARING AND GRADING AS SHOWN ON THE APPROVED SITE PLANS AS DELINEATED BY THE LIMIT OF CLEARING/REGRADING LINE DURING CONSTRUCTION. TREES, WHICH ARE OUTSIDE THE CLEARING LIMIT LINE, MUST BE LEFT STANDING AND PROTECTED FROM GRADE CHANGES. EACH INDIVIDUAL LOT MUST BE TEMPORARILY AND/OR PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING THE BACKFILLING OF THE FOUNDATION AND SHALL BE COMPLIANCE WITH THE TOWN OF HUNTINGTON EROSION AND SEDIMENT CONTROL HANDBOOK AND SECTIONS H-100 THRU H-100.6 OF THE TOWN OF HUNTINGTON SUBDIVISION REGULATIONS AND SITE IMPROVEMENT SPECIFICATIONS.

A HIGHWAY WORK PERMIT SHALL BE OBTAINED FROM THE TOWN OF HUNTINGTON HIGHWAY DEPARTMENT PRIOR TO ANY WORK PERFORMED IN AN EXISTING TOWN RIGHT-OF-WAY.

PRIOR TO THE START OF CONSTRUCTION A BRIGHTLY COLORED CONSTRUCTION FENCE SHALL BE ERECTED ALONG THE LIMIT OF CLEARING/REGRADING LINE DURING CONSTRUCTION AND LEFT IN PLACE DURING CONSTRUCTION OF EACH DWELLING.

ALL IMPROVEMENTS SHALL BE IN CONFORMANCE WITH THE TOWN OF HUNTINGTON PLANNING BOARD SUBDIVISION REGULATIONS AND SITE IMPROVEMENT SPECIFICATIONS.

ANY UTILITY REQUIRED TO BE RELOCATED DUE TO THE INSTALLATION OF THE REQUIRED IMPROVEMENTS SHALL BE RELOCATED AT THE EXPENSE OF THE OWNER/ APPLICANT.

DRYWELLS SHALL BE PROVIDED FOR ALL ROOF DRAINS.

THE CONTRACTOR SHALL PROVIDE A STABILIZED CONSTRUCTION ENTRANCE AT ANY POINT WHERE CONSTRUCTION TRAFFIC WILL BE ENTERING OR LEAVING THE SITE.

RELEASE OF BUILDING PERMITS FOR ALL LOTS ON THIS MAP SHALL BE SUBJECT TO A SCHEDULE OF OPERATIONS APPROVED BY THE DIRECTOR OF ENGINEERING, BUILDING AND HOUSING, AND IN CONFORMANCE WITH THE TOWN OF HUNTINGTON SUBDIVISION REGULATIONS AND SITE IMPROVEMENT SPECIFICATIONS.

THERE ARE NO WELLS WITHIN 150' OF THE SITE.

ALL EXISTING STRUCTURES ARE TO BE REMOVED UNLESS OTHERWISE NOTED.

FOLLOWING SUBDIVISION AND IMPLEMENTATION OF APPROVED PLANS, THE REMOVAL, DESTRUCTION OR ALTERATION OF TREES AND WOODLAND SHALL BE SUBJECT TO TOWN CODE CHAPTER 186- TREE PRESERVATION LAW.

THE HOMEOWNERS ASSOCIATION SHALL OWN AND MAINTAIN THE PROPOSED ROADWAY, RETAINING WALLS, DRAINAGE STRUCTURES, SANITARY SYSTEMS, AND ALL COMMON AREAS.

HERITAGE TRAIL EXTENSION SHALL BE IMPROVED AND MAINTAINED BY THE TOWN OF HUNTINGTON.

SOIL BORINGS

LAND, AIR, WATER, ENVIRONMENTAL SERVICES, INC.
DATED 04-13-06

SOIL BORINGS

McDONALD GEOSCIENCE
DATED 12-14-04

SOIL BORINGS

SOIL MECHANICS DRILLING CORP.
DATED 11-19-98

SITE DATA
S.C.T.M. 0400-073-01-38, 41.1, AND 42
S.C.T.M. 0400-097-02-107
ZONE: R-7
TOTAL SITE AREA: 7.07 ACRES
AREA IN LOTS: 3.10 ACRES
AREA IN ROADWAY: 0.49 ACRES
AREA IN DEDICATION TO TOWN: 0.51 ACRES
AREA IN COMMON AREAS: 2.97 ACRES
AREA IN CONSERVATION AREA: 2.46 ACRES
No. OF LOTS: 10
WATER DISTRICT: S.C.W.A.
FIRE DISTRICT: HUNTINGTON
POST OFFICE: HUNTINGTON
SCHOOL DISTRICT: HUNTINGTON
⊡ DENOTES EXISTING MONUMENT
■ DENOTES PROPOSED MONUMENT

NOTE: BASE TOPOGRAPHIC SURVEY PREPARED BY SEAR-BROWN DATED 1-22-98.

DRAINAGE CALCULATIONS

LOTS 2 THRU 10 ROOF DRYWELLS
REQUIRED: ROOF: 1,600 x 2/12 x 1.0 = 267 CF

PROVIDED: (1) 8'Øx 7' ED LP = 295 CF

AREA A
IMPERVIOUS: 16,000 x 6/12 x 1.0 = 8,000 CF
PERVIOUS: 106,900 x 6/12 x 0.3 = 16,035 CF
24,035 CF

PROVIDED: 10,500 CF (DEPRESSION A)

AREA B
IMPERVIOUS: 5,400 x 6/12 x 1.0 = 2,700 CF
PERVIOUS: 15,100 x 6/12 x 0.3 = 2,265 CF
OVERFLOW AREA A = 13,535 CF
18,500 CF

PROVIDED: 19,000 CF (DEPRESSION B)

AREA C
IMPERVIOUS: 3,350 x 6/12 x 1.0 = 1,675 CF
PERVIOUS: 50,150 x 6/12 x 0.3 = 7,522 CF
9,197 CF

PROVIDE: 28,800 CF (DEPRESSION C & D)

CONSERVATION AREA

AREA TO BE DEDICATED TO THE TOWN OF HUNTINGTON

ALTERNATIVE 2
KIRUV ESTATES
GRADING AND DRAINAGE
LOCATED AT
HUNTINGTON
TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK
S.C.T.M. DIST. 0400, SECT. 073.00, BLK. 01.00
LOTS 038.000, 041.0001, AND 042.0000
S.C.T.M. DIST. 0400, SECT. 097.00, BLK. 02.00, LOT 107.0000

SCALE: 1"= 40'

0 50 100 200

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1	09-26-05	REVISED PER TOWN COMMENTS OF JUNE 2, 2005	GEO

OWNER	APPLICANT	DEVELOPER
KIRUV CAPITAL CORP.	KIRUV CAPITAL CORP.	KIRUV CAPITAL CORP.
ONE OLD COUNTRY ROAD	ONE OLD COUNTRY ROAD	ONE OLD COUNTRY ROAD
CARLE PLACE, N.Y. 11514	CARLE PLACE, N.Y. 11514	CARLE PLACE, N.Y. 11514

LEGEND

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EXIST CURB TO BE REMOVED
EXIST CONC SF/PAVEMENT
EXIST SANITARY SEWER
EXIST WATER MAIN
EXIST GAS MAIN
EXIST DRAIN LINE
EXIST TELEPHONE LINE
EXIST CONTOUR
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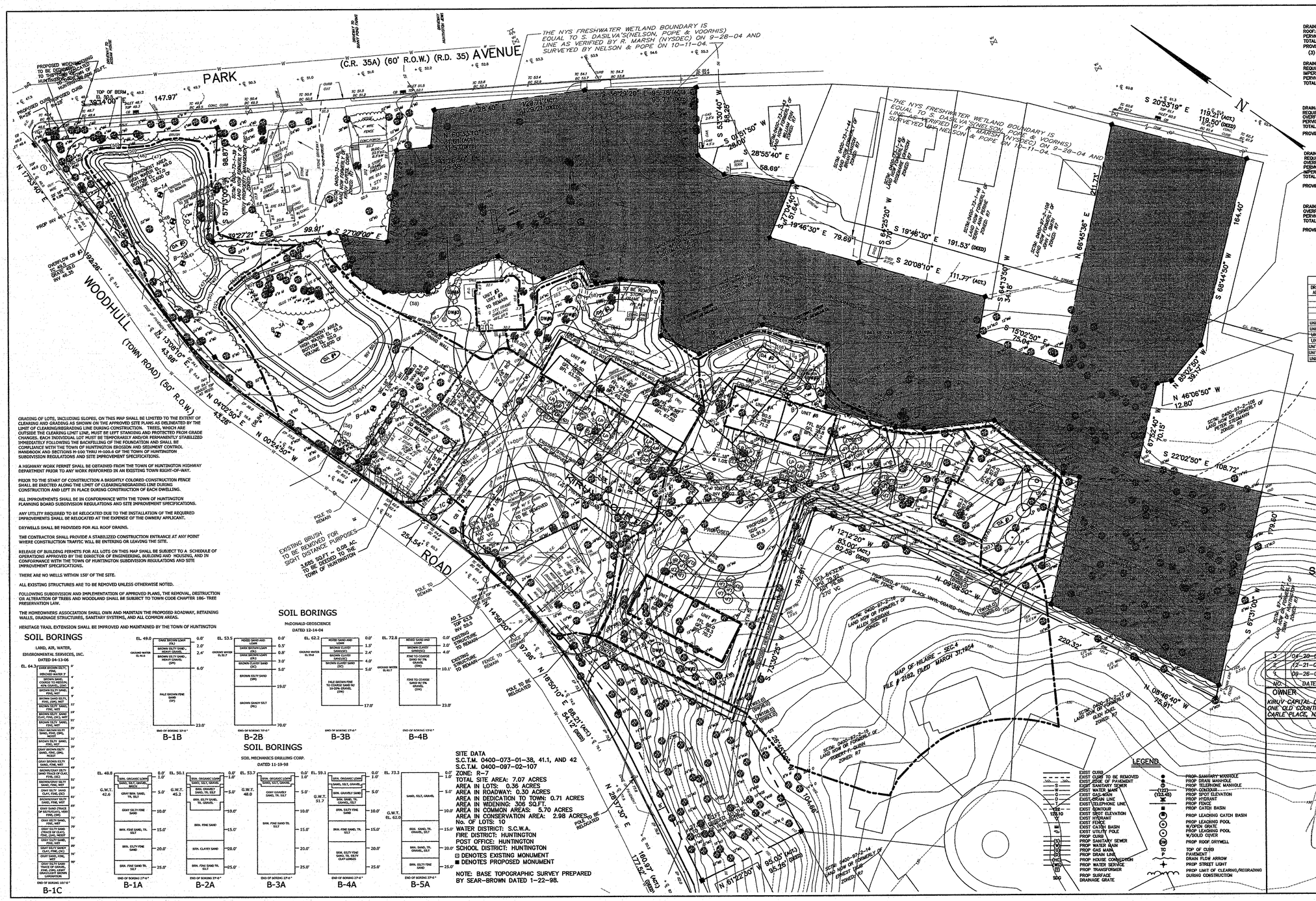
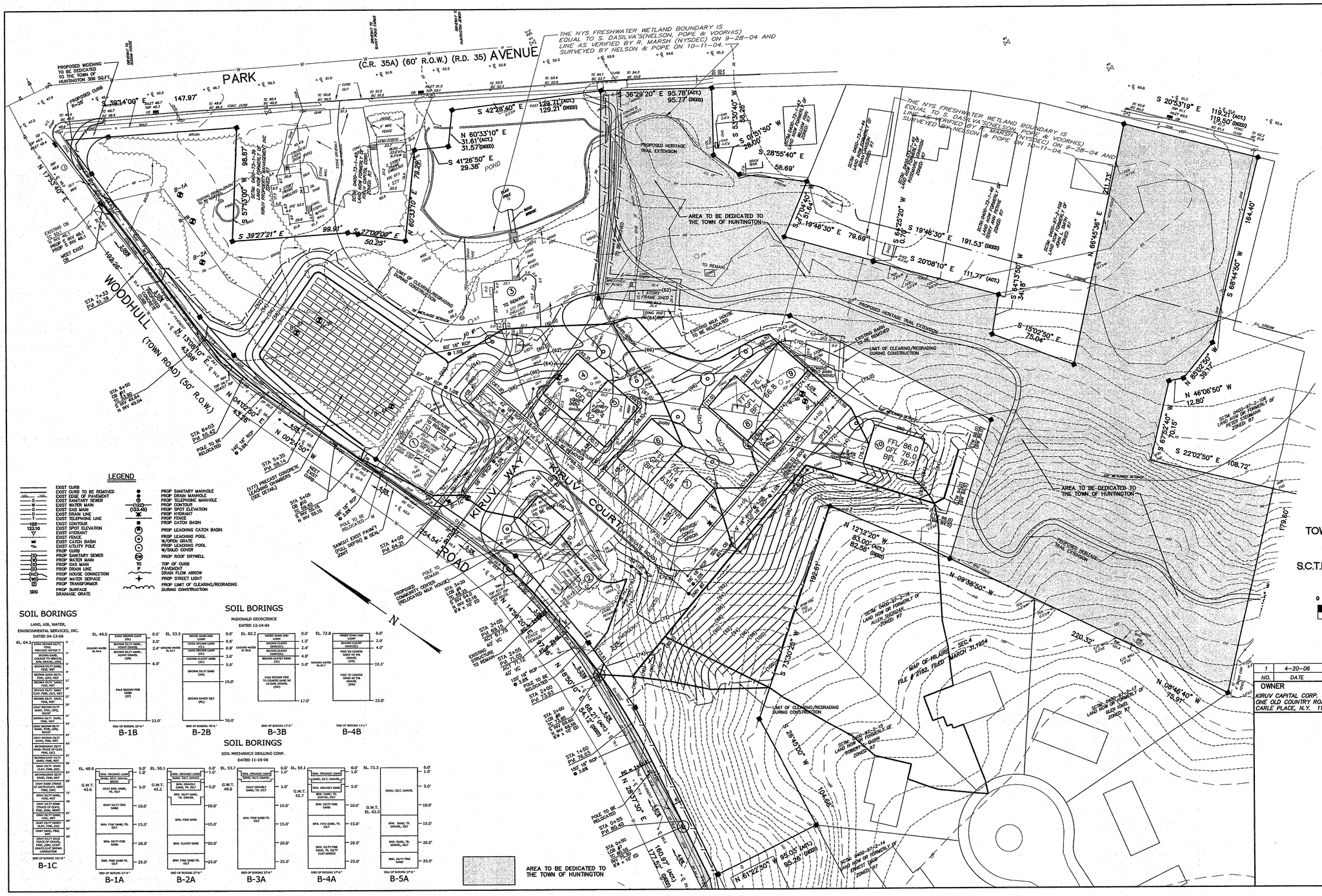
PROP ROOF DRYWELL
TOP OF CURB
PAVEMENT
DRAIN FLOW ARROW
PROP STREET LIGHT
PROP LIMIT OF CLEARING/REGRADING DURING CONSTRUCTION

NELSON & POPE
ENGINEERS • DESIGNERS • SURVEYORS
572 WALT WHITMAN ROAD
MELVILLE, N.Y. 11747-2188
(631) 427-5665 FAX (631) 427-5620

FILE NO.	JOB NO. 97110
DATE: APRIL 2004	SHEET 1 OF 1


PARK AVENUE (C.R. 35A) (60' R.O.W.) (R.D. 35)
WOODHULL ROAD (TOWN ROAD) (50' R.O.W.)
THE NYS FRESHWATER WETLAND BOUNDARY IS EQUAL TO S. DASILVA'S(NELSON, POPE & VOORHIS) LINE AS VERIFIED BY R. MARSH (NYSDEC) ON 9-28-04 AND SURVEYED BY NELSON & POPE ON 10-11-04.
PROPOSED WIDENING TO BE DEDICATED TO THE TOWN OF HUNTINGTON
EXISTING BRUSH TO BE REMOVED FOR SIGHT DISTANCE PURPOSES
3,692 SQ.FT. - 0.08 AC. TO BE DEDICATED TO THE TOWN OF HUNTINGTON
POLE TO REMAIN
POLE TO BE RELOCATED
EXISTING STRUCTURE TO REMAIN
FENCE TO REMAIN
TO BE REMOVED
UNIT #5 TO REMAIN
UNIT #8 TO BE REMOVED
DRAINAGE AREA #4 HIGH WATER EL. 62.0 BOTTOM EL. 50.0 VOLUME 12,600 CF
DRAINAGE AREA #3 HIGH WATER EL. 60.0 BOTTOM EL. 56.0 VOLUME 9,000 CF
DRAINAGE AREA #1 HIGH WATER EL. 67.5 BOTTOM EL. 64.0 VOLUME 15,600 CF
OVERFLOW CB #1 TO BE REMOVED
OVERFLOW CB #2 TO BE REMOVED
OVERFLOW CB #3 TO BE REMOVED
EXISTING TREE TO REMAIN
EXISTING TREE TO BE REMOVED
PROPOSED 8" HIGH BLACK VINYL-COATED CHAIN LINK FENCE
MAP OF HILAIRE SEC.4 FILE # 2182, FILED MARCH 31, 1954
SCTM. 0400-073-01-38 LAND NOW OR FORMERLY OF ROBERT & LAURIE ZONED: R7
SCTM. 0400-073-01-41 LAND NOW OR FORMERLY OF ALLEN & SHERMAN ZONED: R7
SCTM. 0400-097-02-14 LAND NOW OR FORMERLY OF ERNEST & LORI ZONED: R7
SCTM. 0400-097-02-15 LAND NOW OR FORMERLY OF ROBERT & LAURIE ZONED: R7
SCTM. 0400-097-02-17 LAND NOW OR FORMERLY OF GLEN & CHRIS ZONED: R7
SCTM. 0400-097-02-106 LAND NOW OR FORMERLY OF PETER & STEPHANIE ZONED: R7
SCTM. 0400-097-02-108 LAND NOW OR FORMERLY OF ROBERT & LORI ZONED: R7
SCTM. 0400-097-02-109 LAND NOW OR FORMERLY OF ALLEN & SHERMAN ZONED: R7
SCTM. 0400-097-02-110 LAND NOW OR FORMERLY OF ROBERT & LAURIE ZONED: R7
SCTM. 0400-097-02-111 LAND NOW OR FORMERLY OF ROBERT & LAURIE ZONED: R7
SCTM. 0400-097-02-112 LAND NOW OR FORMERLY OF ERNEST & LORI ZONED: R7
SCTM. 0400-097-02-113 LAND NOW OR FORMERLY OF ERNEST & LORI ZONED: R7
SCTM. 0400-097-02-114 LAND NOW OR FORMERLY OF ERNEST & LORI ZONED: R7
SCTM.



LEGEND

- EXIST CURB
- EXIST CURB TO BE REMOVED
- EXIST EDGE OF PAVEMENT
- EXIST SANITARY SEWER
- EXIST WATER MAIN
- EXIST GAS MAIN
- EXIST DRAIN LINE
- EXIST TELEPHONE LINE
- EXIST CONTOUR
- EXIST SPOT ELEVATION
- EXIST HYDRANT
- EXIST FENCE
- EXIST CATCH BASIN
- EXIST UTILITY POLE
- PROP CURB
- PROP SANITARY SEWER
- PROP WATER MAIN
- PROP GAS MAIN
- PROP HOUSE CONNECTION
- PROP WATER SERVICE
- PROP TRANSFORMER
- PROP SURFACE DRAINAGE GRATE
- PROP SANITARY MANHOLE
- PROP DRAIN MANHOLE
- PROP TELEPHONE MANHOLE
- PROP CONTOUR
- PROP SPOT ELEVATION
- PROP HYDRANT
- PROP FENCE
- PROP CATCH BASIN
- PROP LEACHING CATCH BASIN
- PROP LEACHING POOL W/OPEN GRATE
- PROP LEACHING POOL W/SOLID COVER
- PROP ROOF DRYWELL
- TOP OF CURB
- PAVEMENT
- DRAIN FLOW ARROW
- PROP STREET LIGHT
- PROP LIMIT OF CLEARING/REGRADING DURING CONSTRUCTION

SOIL BORINGS

LAND, AIR, WATER, ENVIRONMENTAL SERVICES, INC.
DATED 04-13-06

SOIL BORINGS

McDONALD GEOSCIENCE
DATED 12-14-04

SOIL BORINGS

SOIL MECHANICS DRILLING CORP.
DATED 11-19-08

AREA TO BE DEDICATED TO THE TOWN OF HUNTINGTON

DRAINAGE CALCULATIONS

IMPERVIOUS: 16,874 SF x 6/12 x 1.0 = 8,437 CF
PERVIOUS AREA: 94,685 SF X 6/12 X 0.3 = 14,203 CF
TOTAL REQUIRED STORAGE VOLUME: 22,640 CF

PROVIDED STORAGE VOLUME:
(177) 8' X 4' ED LEACHING CHAMBERS = 22,656 CF

UNITS #4, #5, #6, #7, #8 & #9 ROOF DRAINAGE:
REQUIRED STORAGE VOLUME (PER DUPLEX):
3,150 SF X 2/12 X 1.0 = 525 CF

PROVIDED STORAGE VOLUME:
(2) 12'ø X 4' ED LP = 807 CF

UNIT #10 ROOF DRAINAGE:
REQUIRED STORAGE VOLUME:
1,575 SF X 2/12 X 1.0 = 263 CF

PROVIDED STORAGE VOLUME:
(1) 12'ø X 4' ED LP = 403 CF

ALTERNATIVE #4
KIRUV ESTATES
GRADING AND DRAINAGE
LOCATED AT
HUNTINGTON
TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK
S.C.T.M. DIST. 0400, SECT. 073.00, BLK. 01.00
LOTS 038.000, 041.0001, AND 042.0000
S.C.T.M. DIST. 0400, SECT. 097.00, BLK. 02.00, LOT 107.0000
SCALE: 1"= 40'

0 50 100 200

NO.	DATE	DESCRIPTION	BY
1	4-20-06	ADD TEST HOLE LOG	SWM

OWNER	APPLICANT	DEVELOPER
KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514	KIRUV CAPITAL CORP. ONE OLD COUNTRY ROAD CARLE PLACE, N.Y. 11514

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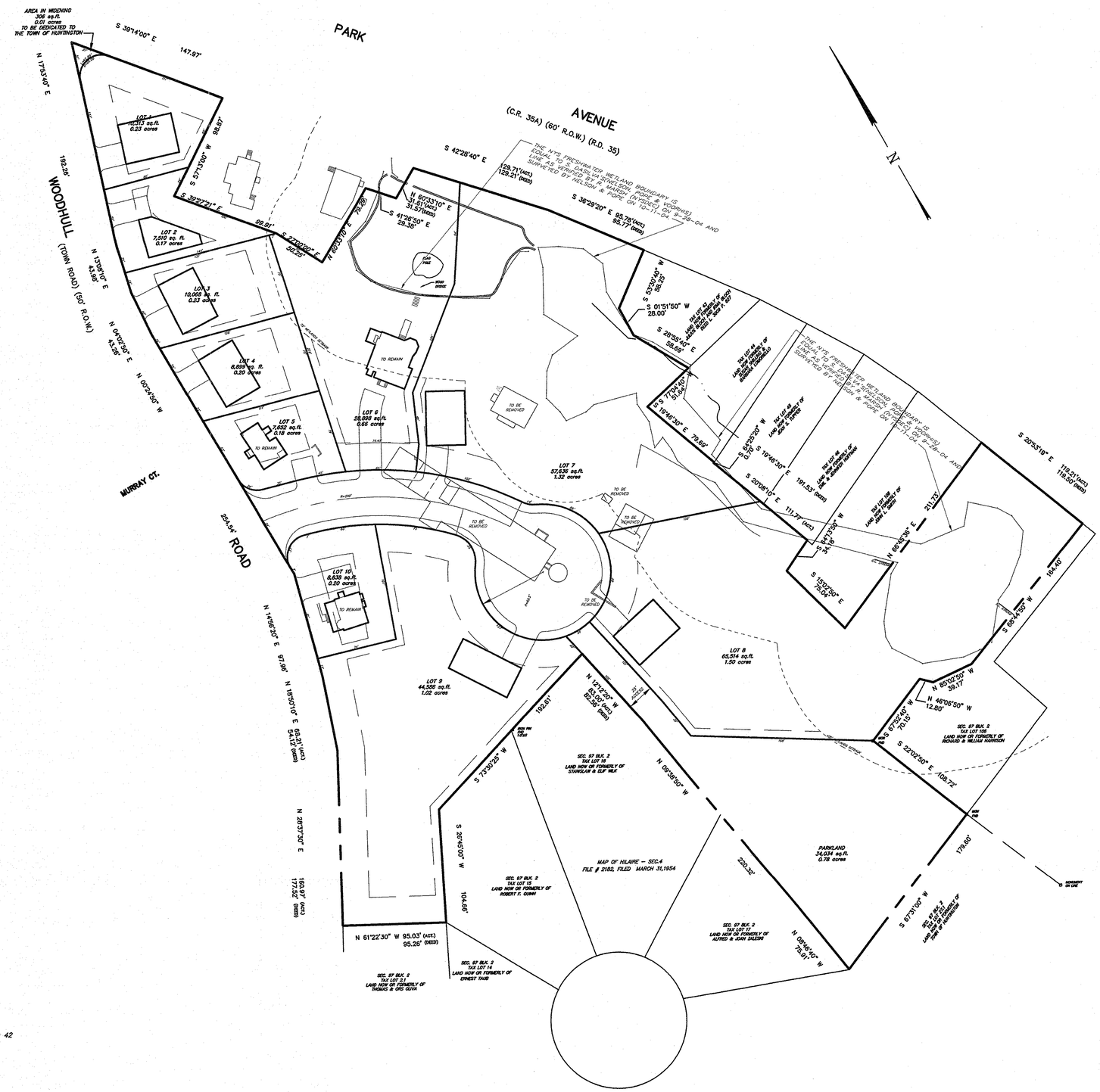
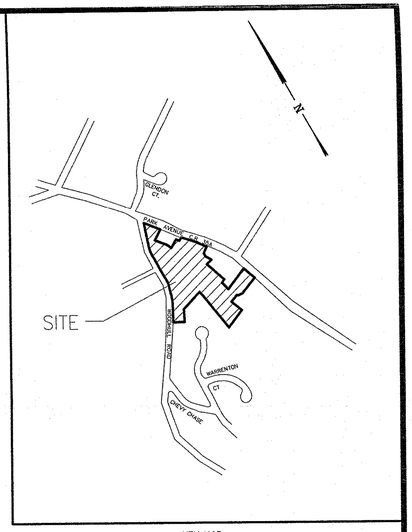
FILE NO.	JOB NO. 97110
DATE: FEB 2006	SHEET 1 OF 1





KEY MAP
SCALE: 1"=600'

SITE DATA
S.C.T.M. 0400-073-01-38, 41.1, AND 42
S.C.T.M. 0400-097-02-107
ZONE: R-7
TOTAL SITE AREA: 7.07 ACRES
AREA IN LOTS: 5.73 ACRES
AREA IN WIDENING: 0.01 ACRES
AREA IN ROADWAY: 0.55 ACRES
AREA IN PARKLAND: 0.78 ACRES
No. OF LOTS: 10
WATER DISTRICT: S.C.W.A.
FIRE DISTRICT: HUNTINGTON
POST OFFICE: HUNTINGTON
SCHOOL DISTRICT: HUNTINGTON

No.	DATE	REVISION	BY:
5	12/05/05	REVISED PER TOWN COMMENTS 10/27/05	CCV
4	10/21/15	REVISED LOTS 6 AND 7 PER TOWN COMMENTS	GEO
3	08/02/05	REVISED PER TOWN COMMENTS DATED 06/02/05	LAB
2	08/09/04	REVISED LAYOUT	GEO
1	07/06/04	REVISED PER TOWN COMMENTS DATED 06/14/04	TCD

ALTERNATIVE #5
KIRUV ESTATES

S.C.T.M. DIST. 0400, SECT. 097.00, BLK. 02.00, LOT 107.0000
S.C.T.M. DIST. 0400, SECT. 073.00, BLK. 01.00, LOTS 38, 41.1, AND 42

LOCATED AT

HUNTINGTON

TOWN OF HUNTINGTON, SUFFOLK COUNTY, NEW YORK

NELSON & POPE, LLP
ENGINEERS • DESIGNERS • SURVEYORS
572 WALT WHITMAN ROAD, MELVILLE, N.Y. 11747-2188
(631) 427-5665 FAX (631) 427-5620

DWN. BY:	CCV
DATE:	3/30/06
CHK'D BY:	TCD
DATE:	3/30/06
JOB No.:	97110
FILE No.:	
CADD:	97110ALT5
SCALE:	1"=50'
SHEET:	1 of 1