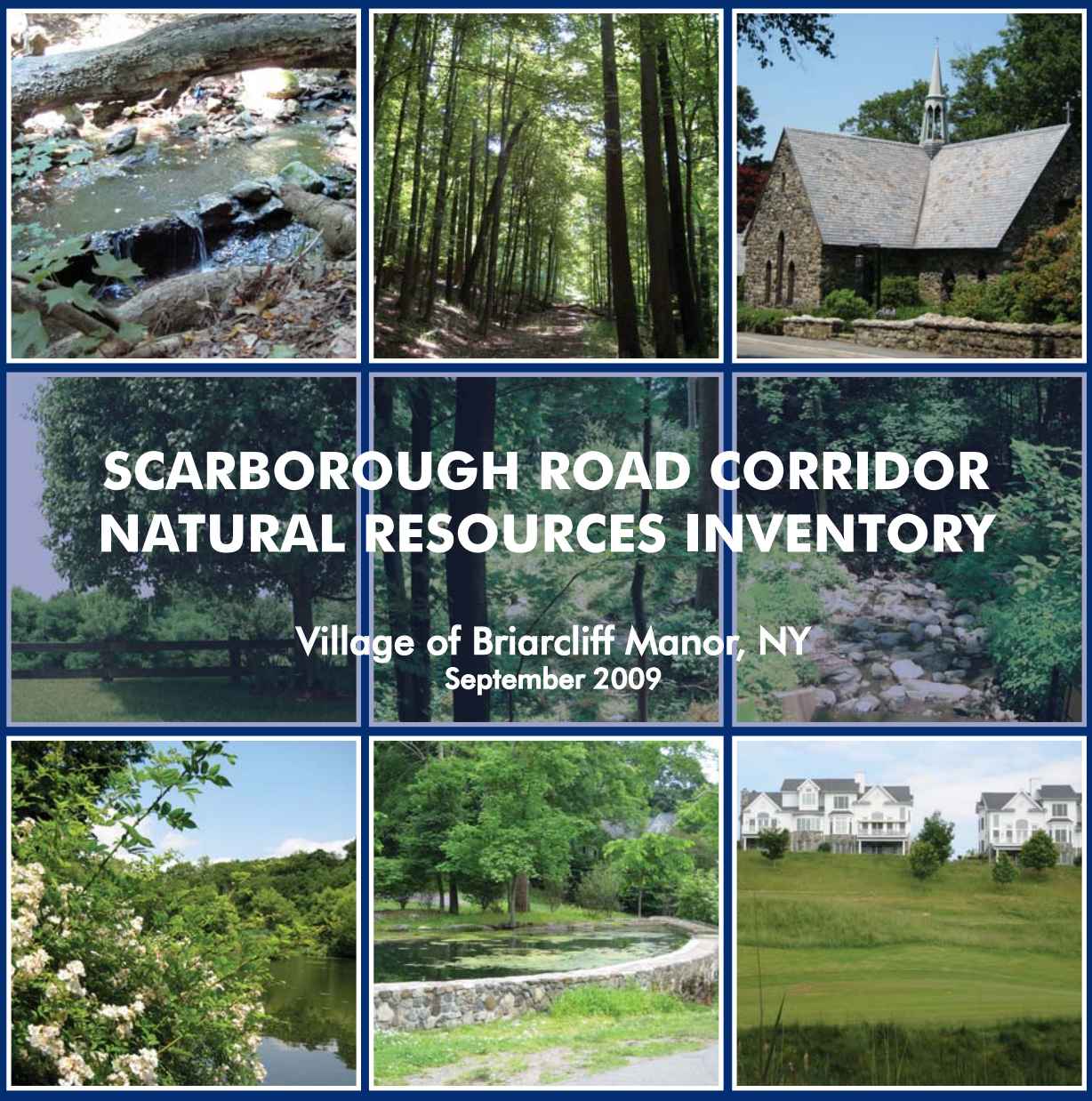

# SCARBOROUGH ROAD CORRIDOR NATURAL RESOURCES INVENTORY

## Village of Briarcliff Manor, NY

September 2009

BFJ Planning

DRAFT

# SCARBOROUGH ROAD CORRIDOR NATURAL RESOURCES INVENTORY
## Village of Briarcliff Manor, New York

**Prepared on behalf of:**

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September, 2009

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SCARBOROUGH ROAD CORRIDOR NATURAL RESOURCES INVENTORY
Village of Briarcliff Manor, New York

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# 1.0 INTRODUCTION

## A. Purpose and Function

The purpose of the Scarborough Road Corridor Natural Resources Inventory ("SRCNRI") is to take stock of the natural features of the Scarborough Road Corridor ("Corridor"), including wetlands, steep slopes, open space, water features, wildlife habitat, forest and vegetation areas, areas of important aesthetic or scenic quality, and sites containing historic significance. The SRCNRI will be a tool the Village of Briarcliff Manor ("Village") can use in targeting future acquisitions of open space as well as in reviewing and approving future development within the Corridor.

## B. Project Location

The Village of Briarcliff Manor is located in the west central portion of Westchester County. Incorporated in 1902, the 5.75-square-mile Village is situated largely within the Town of Ossining, with its eastern portion in the Town of Mount Pleasant. Surrounding municipalities are the Town of Mount Pleasant to the south, Mount Pleasant and the Village of Pleasantville to the east, and the Town of Ossining to the north (see Figure 1-1: REGIONAL LOCATION, Figure 1-2: SCARBOROUGH ROAD CORRIDOR).

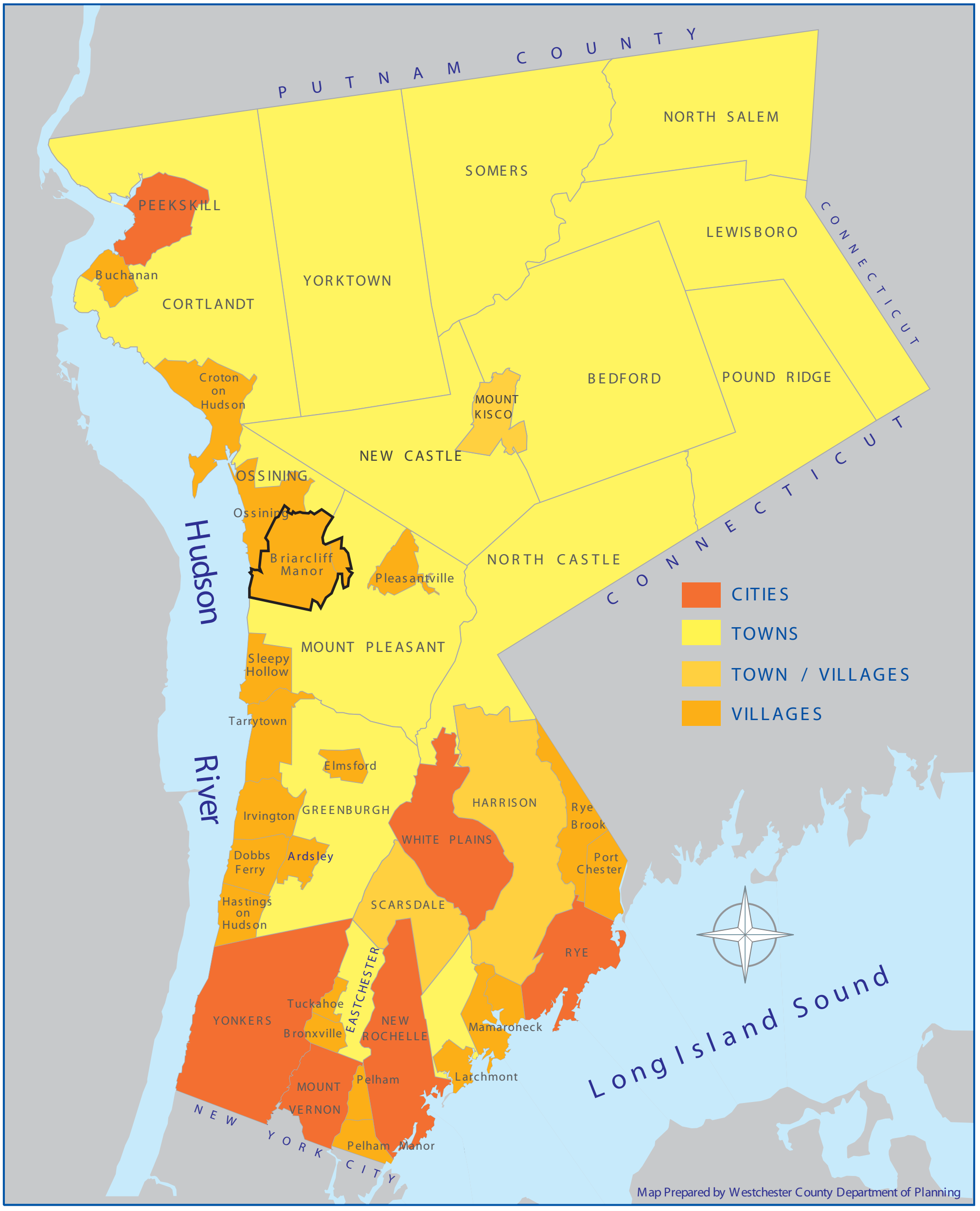
The Scarborough Road Corridor is a 1.6 square mile area (1,011 acres) that is home to some of the largest remaining open space areas in the Village. The Corridor boundary includes parcels fronting on the major east-west thoroughfares of Scarborough, Pine and Dalmeny Roads, which are used for routine travel by those who live and work there. It also includes land fronting on secondary, north-south intersecting roads, such as Holbrook, Old Briarcliff, and Sleepy Hollow Roads (see Figure 1-3: AERIAL).

## C. Context

Scarborough Road Corridor Study

The Village of Briarcliff Manor Board of Trustees ("BOT") commissioned the Scarborough Road Corridor Study in order to explore how the Village could "…Manage future growth in the corridor area and promote development that would maintain its quiet country character and visual charm." (Scarborough Road Corridor Study, July 2001). Among its findings, the Study recommended rezoning approximately 481 acres of the Corridor to a new R80 zone from its current mix of R40A and R60A. With respect to environmental concerns, such a scenario would:

- Reduce the number of potential units in the corridor by a range of 27-31 percent;
- Reduce anticipated traffic impacts by 20-25 percent;
- Result in fewer impacts on environmentally sensitive lands, such as steep slopes and wetlands; and
- Result in less impervious surfaces because of fewer houses.




Scarborough Road Corridor Natural Resources Inventory

Figure 1-1: Regional Location

Village of Briarcliff Manor, NY

Source: Westchester County Department of Planning

NTS

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Key

Scarborough Road Corridor

Village of Briarcliff Manor

Scarborough Road Corridor Natural Resources Inventory

Figure 1-2: Scarborough Road Corridor

Village of Briarcliff Manor, NY

Source: Hagstrom Map Company

NTS

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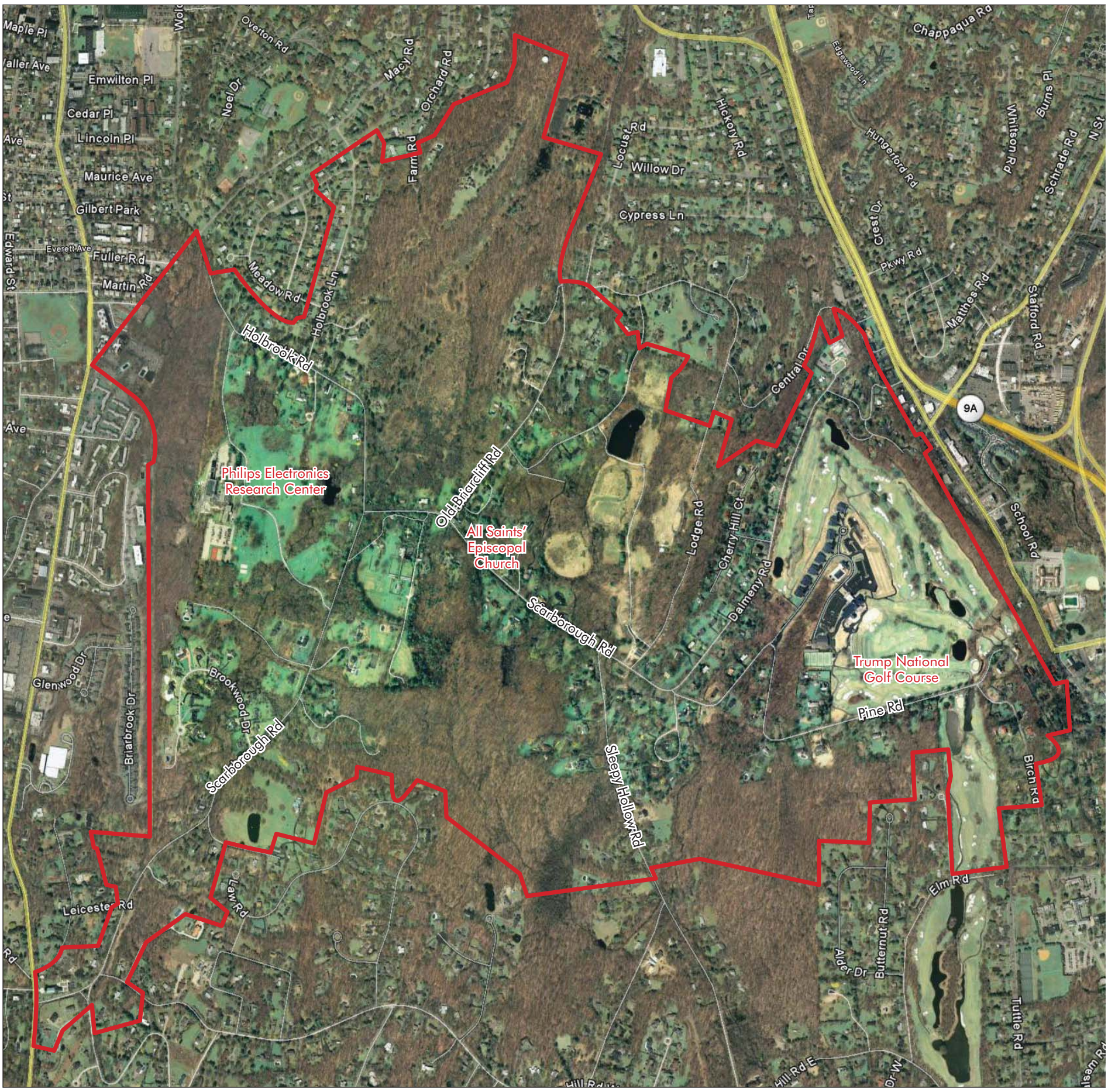


Key

Study Area

Scarborough Road Corridor Natural Resources Inventory

Figure 1-3: Aerial

Village of Briarcliff Manor, NY

Source: Google Earth Maps

0 1040 ft

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Goals for the Corridor

The vision for the future of the Corridor expressed through the 2007 Briarcliff Manor Comprehensive Plan is the:

**Management of future growth along the Scarborough Road Corridor and promotion of development that would maintain the corridor's existing character.**

Thus, the SRCNRI is a necessary follow-up to both the Scarborough Road Corridor Study and the Comprehensive Plan's specific recommendations. It will provide the Village with a tool to preserve critical areas within the Corridor while guiding future development and growth.

# 2.0 LAND USE AND ZONING

## A. Existing Pattern of Land Use

The Scarborough Road Corridor has a total area of 1.6 square miles (1,011 acres) and represents some of the largest remaining open space (both public and private) in the Village. It is predominantly low-density residential, though it includes a number of other uses including the Philips Electronics Research Center, the Trump National Golf Course, the future site of the Club at Briarcliff Manor (a continuing care retirement community CCRC), two churches, and numerous vacant and/or underdeveloped parcels. Half the land in Briarcliff Manor that is undeveloped or underdeveloped (e.g. can be subdivided) is located in large parcels within the Scarborough Corridor. The 2004 land use survey showed that there were 617 undeveloped acres in the Village overall, 17% of the total acreage (2007 Briarcliff Manor Comprehensive Plan). Just over half the vacant land is located within the Scarborough Corridor. Four owners control 317 acres: The 57-acre Club at Briarcliff Manor, owned by the Briarcliff Manor LLC (BCM LLC) and Integrated Development Group LLC (IDG LLC), 65 acres in the Brooke Astor Estate, the 97-acre Erani property, and the 98-acre Philips Electronics Research Center, which is comprised of four separate parcels. The Scarborough Road Corridor properties have the potential to support significant future development (see Figure 2-1: GENERALIZED LAND USE)

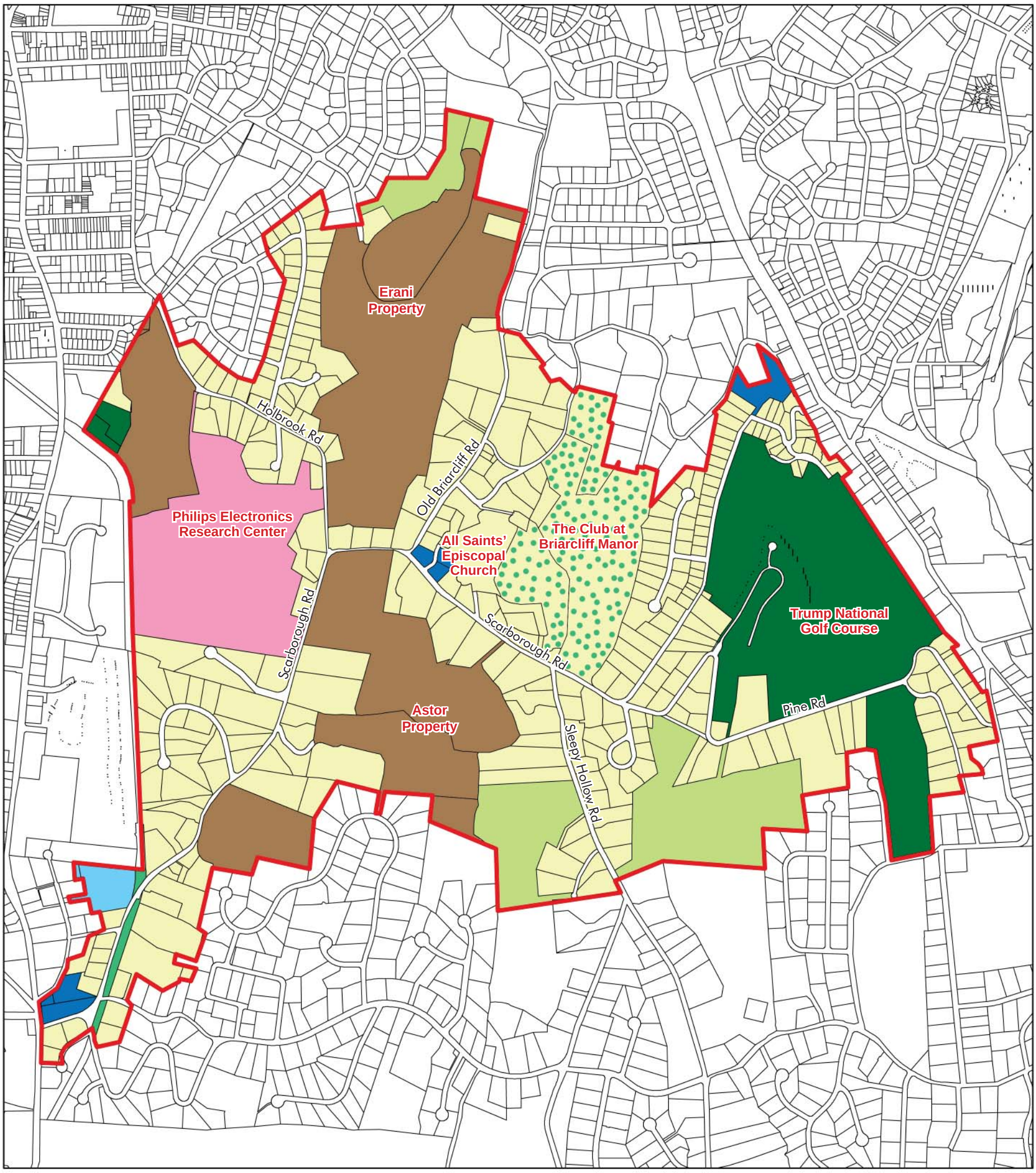
Trump National Golf Course

## B. Land Use by Zoning Districts

Land uses in the Corridor conform to the Village's Zoning Map (see Figure 2-2: ZONING). The Corridor is comprised mostly of R60A, R40A and R40B zoning districts, with a few smaller areas zoned R20B, R30A and B (Philips). Below is a description of the land uses within each zoning district.

**R60A District.** This district occupies the entire central portion of the Corridor. It is characterized by homes situated on 1.38 acres or more. Homes are set back from the street, typically surrounded by trees and other natural features. A significant amount of land in this zone is occupied by private recreational and institutional uses. The BCM LLC and IDG LLC own the 57-acre Club at Briarcliff Manor within this district. There is a considerable amount of vacant land, including the 65-acre Brooke Astor Estate.

**R40A District.** This district occupies the western portion of the Corridor, adjacent to the R60 District along Long Hill Road West, Scarborough Road and Old Briarcliff Road. It is characterized by a mix of old and modern homes on .92-acre lots or larger. Much of the land in the district is underdeveloped or vacant, including a portion of the Philips campus and the 97-acre wooded Erani property along Old Briarcliff Road.




Key

**Land Use**

- SRC Boundary
- Single Family Residential
- Residential/CCRC
- Commercial/Office
- Public Institution
- Private Insitution
- Village Owned
- Public Open Space
- Private Recreation
- Large Private Vacant

Scarborough Road Corridor Natural Resources Inventory

Figure 2-1: Generalized Land Use

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

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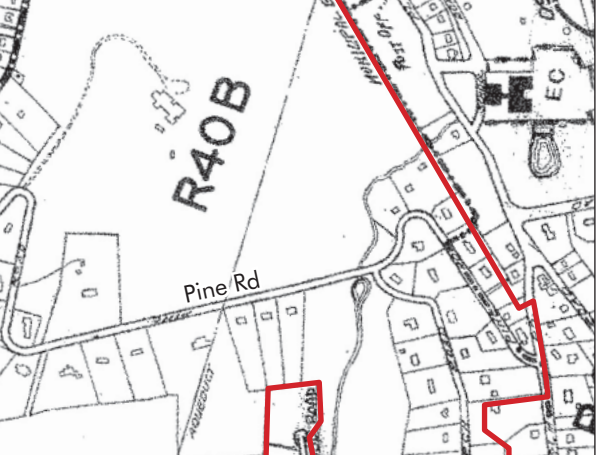
Key

Study Area




Scarborough Road Corridor Natural Resources Inventory

Figure 2-2: Zoning

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

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**R40B District.** This district occupies the eastern portion of the Corridor. It varies from the R40A district only in terms of floor space requirements. It is characterized by a mix of old and modern housing types on lots .92 acre or larger. New homes are typically larger than older ones. The perceived scale of the larger homes varies depending on the topography of the lots. Other uses in the district include Pine Road Park and the Trump National Golf Course.

**R30A District.** This district occupies a small portion of the southwest corner of the Corridor just west of Scarborough Road. It is characterized by homes on .69-acre lots. Detached homes are located west of the Scarborough Presbyterian Church.

**R20B District.** This district occupies the northeastern part of the Corridor. In general, neighborhoods in this district are fully developed with ranch and raised ranch (split level) homes in standard subdivisions. There are few vacant or undeveloped parcels in the R20 districts.

**B Planned Office Building and Laboratory District.** The Philips Laboratories and offices occupy four parcels totaling 98 acres on Scarborough Road (the northwestern part of the site is residentially zoned). Much of the site is undeveloped, with large lawns and scattered trees. In 1999, the Village approved a 70,000 square foot expansion of Philips' office and laboratory buildings; however, the project is currently on hold. While Philips Laboratories does not currently have plans to develop unused portions of its land within the residential district, development opportunities may exist with a maximum of 28-34 residential units, according to the Scarborough Road Study Build Out Analysis.


Philips Electronics Research Center

# 3.0 NATURAL RESOURCES INVENTORY

The Corridor is comprised of significant natural resources, including wetlands, steep slopes, public and private open spaces, water features, wildlife habitat, forest and vegetation areas, and areas of important aesthetic or scenic quality. Additionally, sites containing historic and archaeological significance are also considered in the inventory, though not a natural resource per se. The following sections detail these features.

## 3.1 SOILS

This section describes the types, characteristics, and limitations of soils within the Corridor. Soil is a naturally occurring mixture of mineral and organic ingredients with a definite form, structure, and composition. Soil is defined as "The unconsolidated mineral or organic matter on the surface of the Earth that has been subjected to and shows effects of genetic and environmental factors of: climate (including water and temperature effects), and macro- and microorganisms, conditioned by relief, acting on parent material over a period of time."[1] The exact composition of soil changes from one location to another. The average composition by volume of the major soil ingredients is:

A. 45 percent minerals (clay, silt, sand, gravel, stones).

B. 25 percent water (the amount varies depending upon precipitation and the water-holding capacity of the soil).

C. 25 percent air (an essential ingredient for living organisms).

D. 5 percent organic matter or humus (both living and dead organisms).[2]

The physical properties of soil have, to a great extent, determined land use in given areas and have important implications for future development. Consideration of the engineering properties of the soil present on a site should be an integral part of site design. Misinterpreting the characteristics of soil cover or geological foundations may result in structural failures or higher construction and maintenance costs.

### A. Location and Description

A common classification by the United States Department of Agriculture's (USDA) Natural Resource Conservation Service (NRCS) is by Hydrologic Soil Group (HSG), which is based on the soil's runoff potential[3]. There are four HSGs classified as A, B, C and D. A's generally have the smallest runoff potential and D's the greatest. A soil map of the

[1] USDA's Natural Resource Conservation Service (http://soils.usda.gov/education/facts/soil.html)
[2] USDA's Natural Resource Conservation Service (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)
[3] That part of the precipitation, snow melt, or irrigation water that appears in uncontrolled surface streams, rivers, drains or sewers. Runoff may be classified according to speed of appearance after rainfall or melting snow as direct runoff or base runoff, and according to source as surface runoff, storm interflow, or ground-water runoff. (http://ga.water.usgs.gov/edu/runoff.html)

Corridor is shown in Figure 3.1-1. The characteristics of the Corridor's predominant soil types by HSG are described below (see Table 3.1-1 for a complete list).

Group A is sand, loamy sand or sandy loam types of soils. It has low runoff potential and high infiltration rates[4] even when thoroughly wetted. This group consists chiefly of deep, well to excessively drained sands or gravels and has a high rate of water transmission. While Group A soils exist in Briarcliff Manor, none of the soil in the Corridor is of this type.

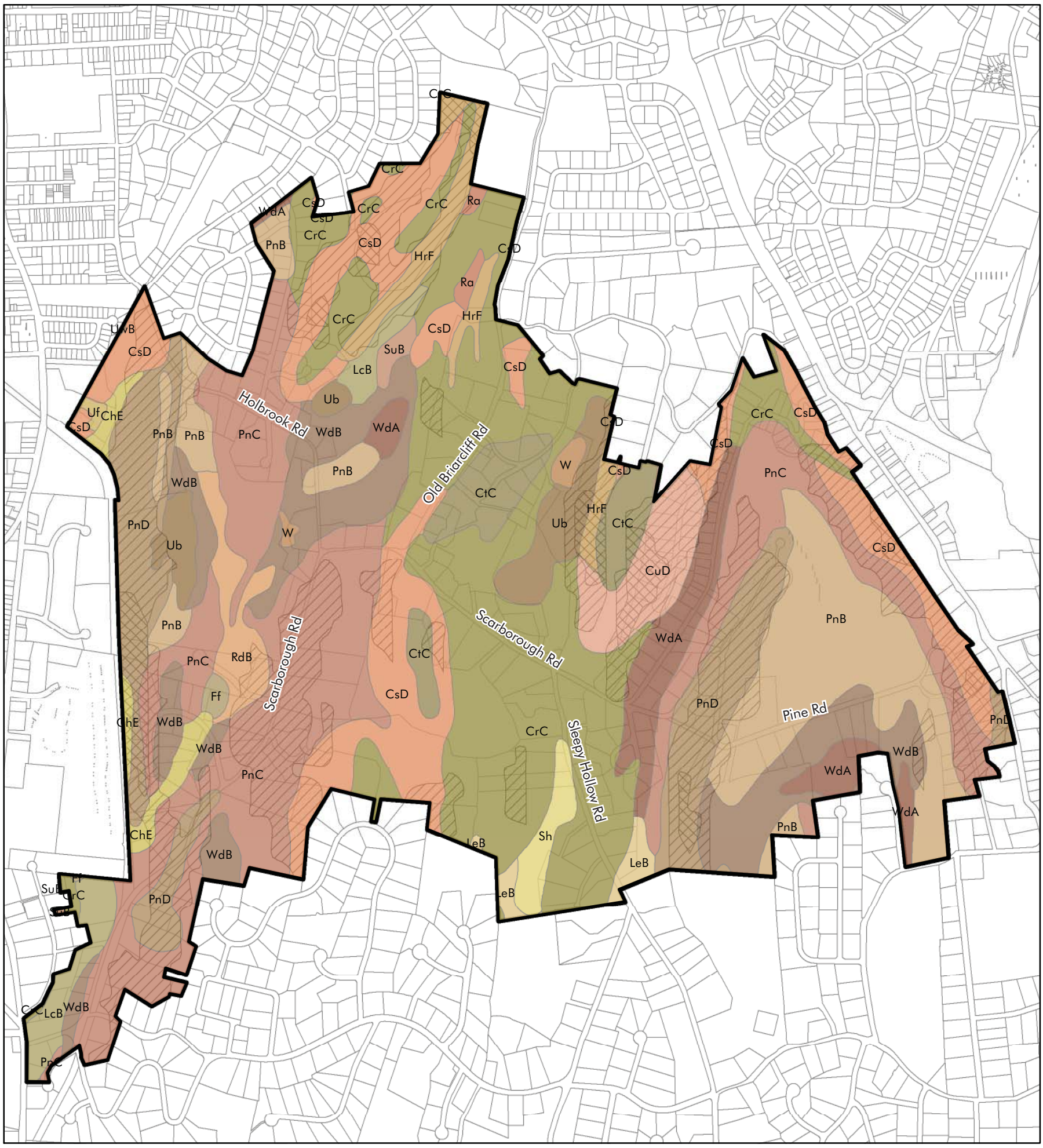
Group B is silt loam or loam. It has a moderate infiltration rate when thoroughly wetted and consists chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. Much of the corridor consists of soils classified as Group B. Predominant soil types in this group include Charlton-Chatfield complex (CrC) and Chatfield-Charlton complex (CsD), both very rocky soil types. These soil types are located throughout the central and northern parts of the Corridor around the east-west segment of Scarborough Road and north of Holbrook Road on the tops and sides of hills with slopes between two and 15 percent.

Group C soils are sandy clay loam. They have low infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine structure. Most of the soil in the Corridor is this type. The most predominant soil type in this group is Paxton fine sandy loam (PnC), located in bands along the western portion of the Corridor (around the north-south segment of Scarborough Rd) on the sides and tops of broad ridges and small hills with eight to 15 percent slopes. Other common soil types include Paxton fine sandy loam (PnB), concentrated in the eastern portion of the Corridor around the Trump National Golf Course, and Woodbridge loam (WdB), located in bands down the western portion of the Corridor and south of Pine Road. PnB is found on gently sloping broad ridges and small hills with slopes between two and eight percent and WdB is on the lower parts of hillsides with slopes between three and eight percent. The risk of erosion of these soils is slight to moderate.

Large areas of Chatfield-Charlton complex (CsD; not to be confused with CrC soils) are located throughout the Corridor on the tops and sides of hills with slopes between 15 and 35 percent. It is primarily concentrated in the northern and southern portions of the Corridor around the Erani and Astor estates, and lines the entire eastern border. Swaths of Paxton fine sandy loam (PnD) are located along the Old Croton Aqueduct (western border) and where Scarborough Road meets Pine Road in the eastern portion of the Corridor. The runoff rate for these soils is rapid and the risk of erosion is severe.

Woodbridge loam (WdA), also classified as Group C, is located in five small scattered areas of the Corridor: the vertical band around Dalmeny Road, one location west of Old Briarcliff Road and east of Holbrook Road, one location in the northwest corner in between Meadow and Macy Roads, and two locations in the southeast corner of the Corridor just south of Pine Road. The soil is very deep and nearly level, however, with slopes between 0 and three percent.

[4] Infiltration is the process of downward water entry into the soil. (http://soils.usda.gov/technical/manual/contents/chapter3c.html)




* see Table 3.1-1 for soil type descriptions

Key

**Soil Type**

| | | | |
|---|---|---|---|
| ChE | HrF | Ra | UwB |
| CrC | LcB | RdB | W |
| CsD | LeB | Sh | WdA |
| CtC | PnB | SuB | WdB |
| CuD | PnC | Ub | |
| Ff | PnD | Uf | |

**Steep Slopes**

over 25%

15%-25%

Scarborough Road Corridor Natural Resources Inventory

Figure 3.1-1: Soil

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

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Table 3.1-1: Soil Type by Hydrologic Soil Group

| Soil Type | Description | Hydrologic Soil Group |
|---|---|---|
| ChE | Charlton loam, 25 to 35 percent slopes | B |
| CrC | Charlton-Chatfield complex, rolling, very rocky | B |
| CsD | Chatfield-Charlton complex, hilly, very rocky | B |
| CtC | Chatfield-Hollis-Rock outcrop complex, rolling | B |
| CuD | Chatfield-Hollis-Rock outcrop complex, hilly | B |
| Ff | Fluvaquents-Udifluvents complex, frequently flooded | B |
| HrF | Hollis-Rock outcrop complex, very steep | C/D |
| LcB | Leicester loam, 3 to 8 percent slopes, stony | C |
| LeB | Leicester loam, 2 to 8 percent slopes, very stony | C |
| PnB | Paxton fine sandy loam, 2 to 8 percent slopes | C |
| PnC | Paxton fine sandy loam, 8 to 15 percent slopes | C |
| PnD | Paxton fine sandy loam, 15 to 25 percent slopes | C |
| Ra | Raynham silt loam | C |
| RdB | Ridgebury loam, 3 to 8 percent slopes | C |
| Sh | Sun Loam | D |
| SuB | Sutton loam, 3 to 8 percent slopes | B |
| Ub | Udorthents, smoothed | |
| Uf | Urban land | |
| UwB | Urban land-Woodbridge complex, 2 to 8 percent slopes | |
| W | Water | |
| WdA | Woodbridge loam, 0 to 3 percent slopes | C |
| WdB | Woodbridge loam, 3 to 8 percent slopes | C |

Notes:
Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

USDA's Natural Resource Conservation Service http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Group D soils are clay loam, silty clay loam, sandy clay, silty clay or clay. This HSG has the highest runoff potential, as it has very low infiltration rates when thoroughly wetted, and has the highest erosion potential. It consists chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. The only Group D soil type found in the Corridor is Sun Loam (Sh), found west and south of Sleepy Hollow Road, towards the southern edge of the Corridor.

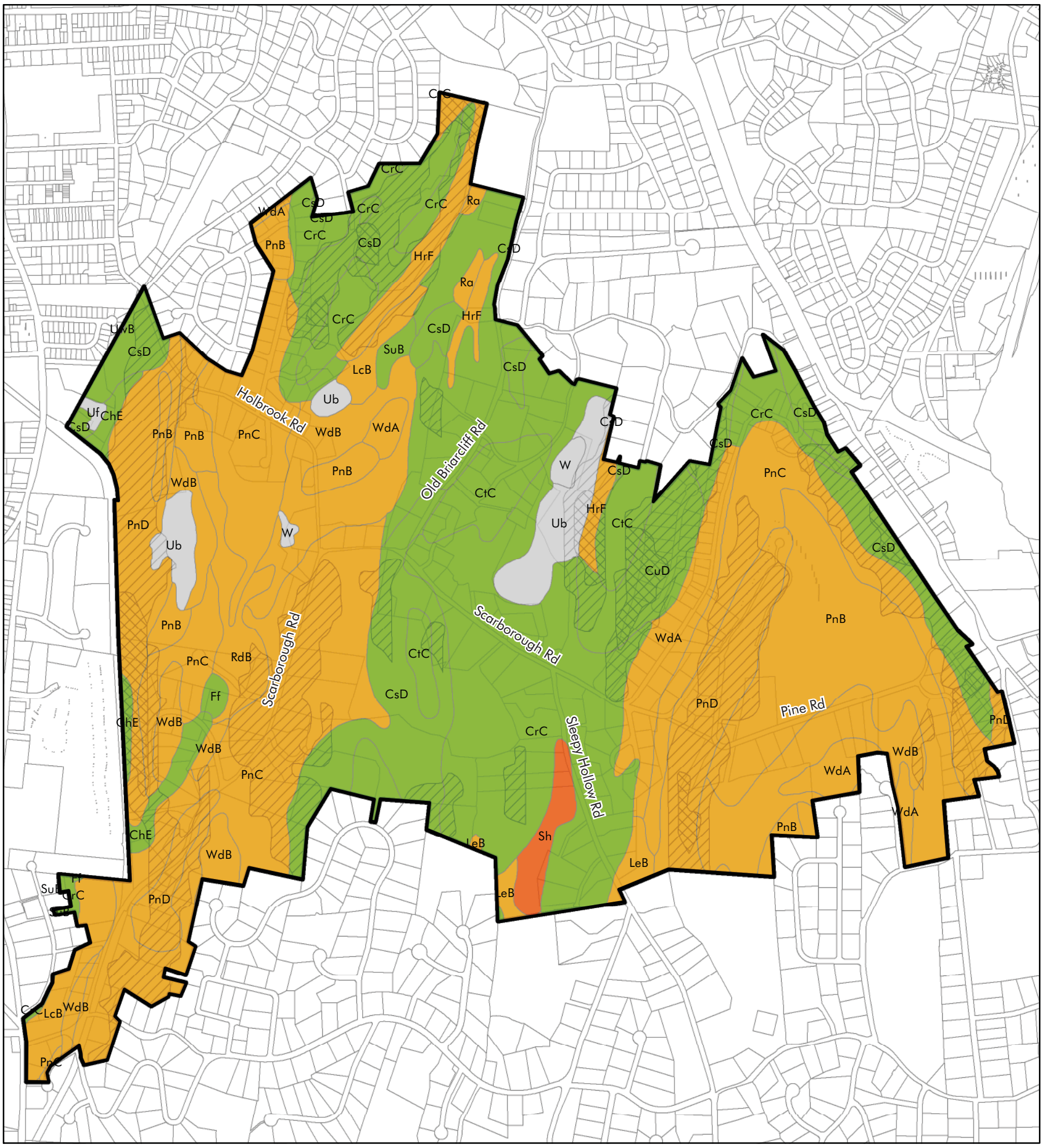
## B. Soil Suitability

Given the potential uses and activities that could occur on any parcel of land, it is important to understand the characteristics of the existing soil in order to assess the suitability of a proposed use. For example, soils that are prone to flooding might limit highly intensive uses while high water tables might limit the use of roads or trails. Likewise, droughty soils may require on-site irrigation while clayey soils may fail to support certain structures unless special design is used. Further, the absorptive capacity of soil will determine whether a septic field will work.[5]

A soil's absorptive capacity, or water infiltration rate, is categorized by Hydrologic Soil Group (HSG). Figure 3.1-2 displays soil type by HSG throughout the entire Corridor. The predominate HSGs are groups B and C, indicating that the central and northern parts of the Corridor (shown in green) have a moderate infiltration rate while most of the western and eastern portions (shown in orange) have a slow infiltration rate. None of the soil types are the most absorptive (category A) while only a small tract in the south central portion of the Corridor has a very slow infiltration rate (category D, shown in red-orange). Given that significant portions of the Corridor contain category C soils, which have a slow infiltration rate and are, thus, more prone to erosion, certain types of development may not be suitable. Additional land features like steep slopes and wetlands impose further constraints (see Section 3.5 D: Development Constraints). In addition to HSG, Table 3.1-1 also provides a soil description, including mineral content and slope grades associated with such soils.

Other factors related to soil suitability that may need to be considered prior to new development include corrosion and roadway capacity. Appendix A describes soil suitability in the Corridor as it relates to the soil's capacity for traffic (i.e. local roads and streets) and its potential for corrosion of both steel and concrete.

[5] USDA's Natural Resource Conservation Service (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)




Key

**Water Infiltration Rate**

- Moderate (B)
- Slow (C)
- Very Slow (D)
- N/A

**Steep Slopes**

- over 25%
- 15%-25%

Scarborough Road Corridor Natural Resources Inventory

Figure 3.1-2: Hydrologic Soil Groups

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

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## 3.2 Surface Hydrology

### A. Drainage

A drainage basin is the land area whose water runoff flows into a particular stream or tributary. One drainage basin is separated from the next by the crests of hills. The Lower Hudson Watershed (extending from the Battery in Manhattan to the Troy Dam) encompasses Briarcliff Manor and its smaller drainage basins. The Corridor is located within four of these drainage basins (see Figure 3.2-1: RIVER BASINS & FLOODPLAINS). Runoff from a particular parcel of land can have an impact on other parcels within the same basin. The eastern half of the Corridor lies within the Pocantico River Basin. Major streams in this basin are Gory Brook, which runs parallel to Andre Way[6], and Caney Brook, which runs east and west of Sleepy Hollow Road. Both drain into the Pocantico River and ultimately into the Hudson River. The southwest part of the Corridor is within the lower Hudson River Basin, with its major stream (just outside the Corridor) draining directly into the river. The western and northern parts of the Corridor are in the Sparta Brook Basin. Sparta Brook, located west of Old Briarcliff and Scarborough Roads, winds its way across Route 9 and drains into the Hudson River. A small portion of the land in the northernmost part of the Corridor near Old Briarcliff Road is within the Oliver Pond Basin which extends north into Ossining. Development within the Corridor has the potential to impact water quality in these waterways and drainage basins.


Sparta Brook

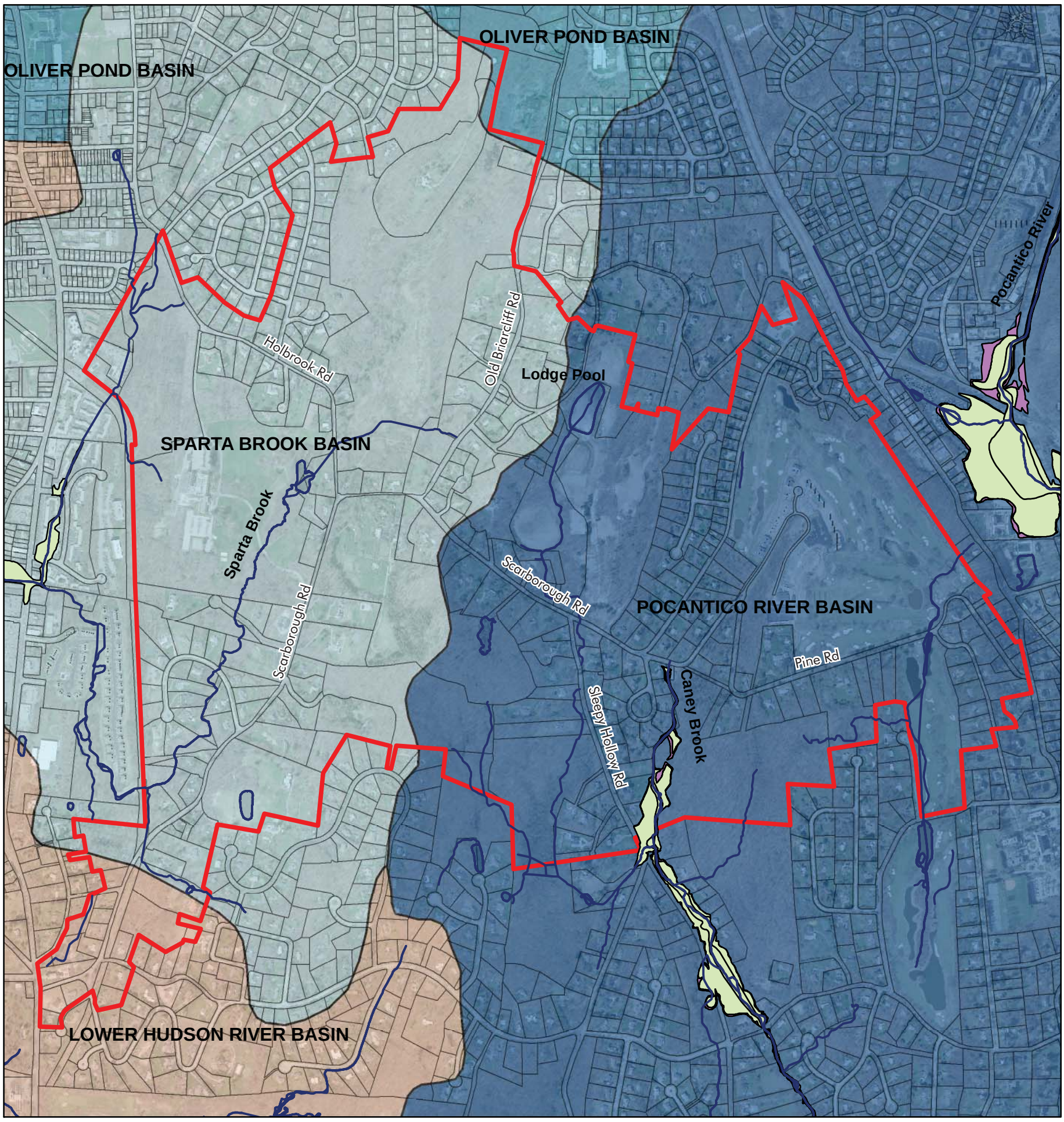
### B. Flood Hazard

The 100-year flood boundary has been determined for all the water bodies in Briarcliff Manor by the Federal Emergency Management Agency (FEMA). For land use planning purposes, the regulatory floodplain is usually viewed as all lands within reach of a 100 year flood, defined as a flood event that has a one percent chance of occurring in any given year (or .2 percent chance within a 500-year flood boundary). FEMA produces floodplain maps, defining which land is in and out of the 100-year floodplain in order to implement the National Flood Insurance Program (NFIP).[7] These flood hazard areas are shown in Figure 3.2-1.

Areas within the Corridor designated by FEMA as within the 100-year floodplain include those parcels to the east and west of Caney Brook, in between the western edge of Pine Road Park and Sleepy Hollow Road. The floodplain continues south around Caney Brook, which snakes Sleepy Hollow Road and continues, to lesser extent, south of Long Hill Road.

[6] While Gory Brook is not located within the Corridor proper, activity in the southern portion of the Corridor around Long Hill Road could potentially have an impact there.

[7] Because homeowners insurance does not cover flooding, Congress created NFIP in 1968 to help property owners financially protect themselves.




Key

Streams, Brooks, Rivers and Ponds

SRC Boundary

**River Basin**

Lower Hudson River Basin

Oliver Pond Basin

Pocantico River Basin

Sparta Brook Basin

**FEMA Flood Plains**

100 yr

500 yr

## C. Streams, Brooks, Rivers and Ponds

The Scarborough Road Corridor is generally situated between the Pocantico River to its eastern edge and the Hudson River to the west. The Corridor itself contains a number of small streams, brooks and ponds, many of which are unnamed (see Figure 3.2-2: BODIES OF WATER). The two longest water bodies are: Sparta Brook, which runs parallel and to the west of the north-south segment of Scarborough Road, and Caney Brook which runs from the east-west segment of Scarborough Road and converges toward Sleepy Hollow Road at the southern edge of the Corridor. Another significant water source is the Lodge Pool, located on the grounds of the Club at Briarcliff Manor. This is the largest body of water within the Corridor and is also listed on the national wetlands inventory (see Section 3.3). A number of the smaller ponds and streams dot the Corridor in the southern part of the Sparta Brook Basin and in the western and eastern portions of the Pocantico River Basin. Wetlands are discussed separately in Section 3.3.

Lodge Pool

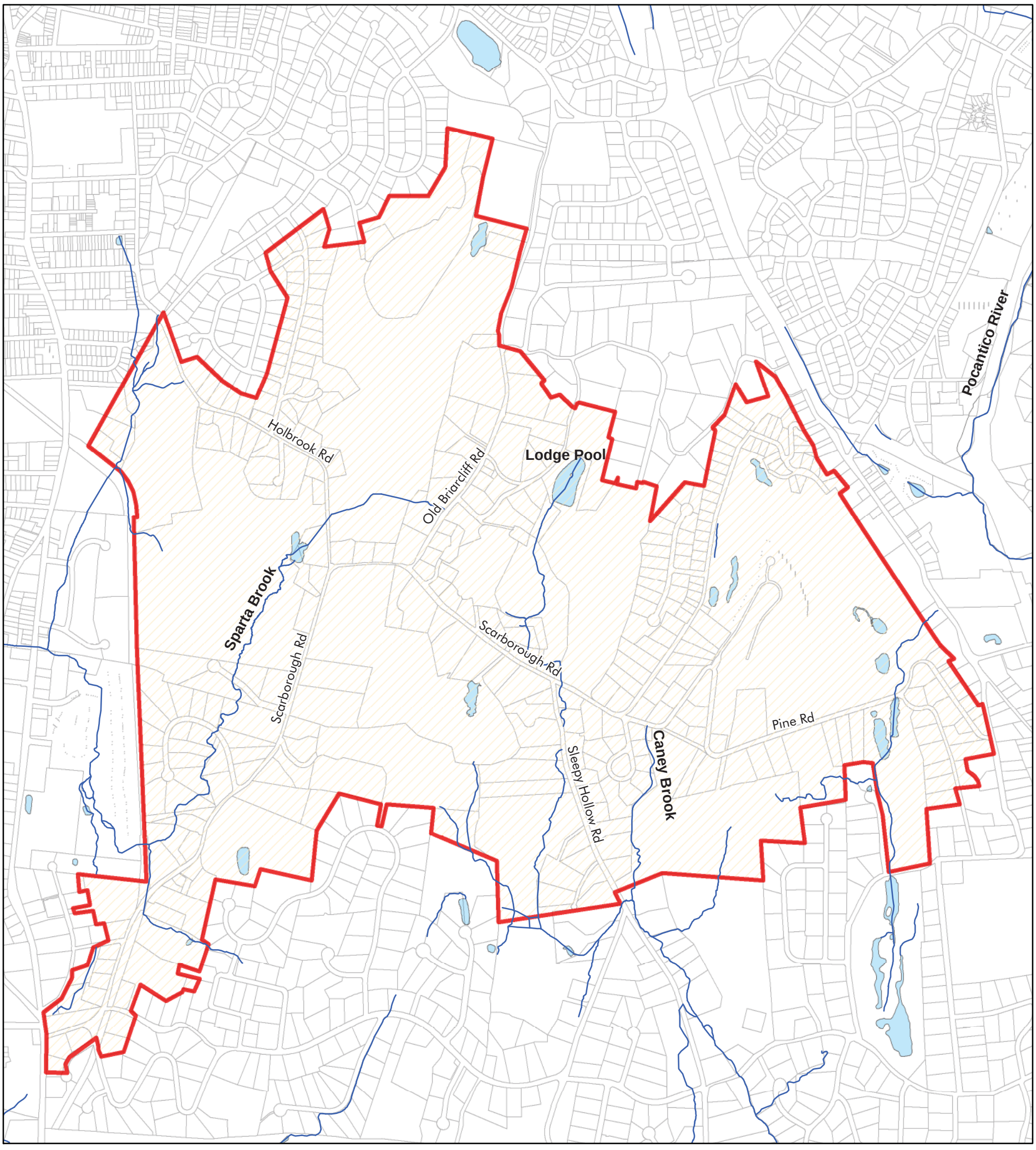
## D. Local Controls Protecting the Environment

Flood Damage Protection

The Village's Flood Damage Protection Ordinance (VC §127) regulates uses that may cause erosion or significantly increase flood heights or velocities. The ordinance also controls the alteration of natural floodplains or other hydrological features, and regulates the construction of flood barriers which may unnaturally divert floodwaters or increase flood hazards. Areas of special flood hazard are identified in Flood Insurance Rate Maps and Flood Boundary-Floodway Maps as prepared by FEMA in 1977. Land within designated special flood hazard areas is subject to construction standards described in Chapter 127 of the Village Code Flood Damage Protection. Conformance to standards is the responsibility of the Code Enforcement Officer who has authority to grant or deny development permit applications. Section 3.2 B (above) lists areas of the Corridor within the 100 and 500 year floodplains.

County Assistance

Through its Flood Action Program, Westchester County also partners with municipalities to provide funding for flood control or flood damage reduction projects. The County's Flood Action Task Force evaluates projects and makes recommendations to the County on funding allocations. Potential projects include flood control structures, improvement to storm water infrastructure, participating in federally sponsored programs and land acquisition/easements.




Key

Streams, Brooks and Rivers

Lakes and Ponds

SRC Boundary

Scarborough Road Corridor Natural Resources Inventory

Figure 3.2-2: Bodies of Water

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

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Phase II Stormwater Management Programs

In 2007, the Village adopted a local law, amending its Code to establish a Phase II stormwater management system in compliance with the New York State Department of Environmental Conservation (VC §184). The law requires developers to submit a Stormwater Pollution Prevention Plan (SWPPP) to the Village with any application for a land use approval. It must also include sanctions for non-compliance. The goal is to retain or absorb stormwater on developed sites to the maximum extent possible. The quantity, rate and quality of runoff should not be significantly different from what they were before the sites were developed.

Stormwater management is a necessary part of all land development projects. Land development often eliminates features that moderate stormwater runoff, exposing soil to erosion. Intensified runoff carries soil and other pollutants into streams, lakes, rivers and estuaries. It can cause bank erosion and flooding to downstream communities and cause road washouts and flooded basements to upstream communities. Excessive stormwater runoff can become a costly and sometimes dangerous problem.

Development in the Scarborough Road Corridor will be subject to the Village's stormwater regulations. Given the hilliness and erosion potential in the Corridor, especially in the Group B and C soil areas, special kinds of development should be considered. Conservation subdivisions may be an effective development tool to reduce the percentage of impervious surface and provide open space and natural areas that are useful for managing stormwater runoff (see Section 4). Further, low-impact development may be used to complement other land use tools in order to mitigate construction and post-construction impacts to land, water and air. By integrating site design and planning techniques such as narrower streets and bioretention areas, the Village could conserve hydraulic functions and natural systems on site and reduce stormwater runoff from the site.

## 3.3 Wetlands

Wetlands are important wildlife habitats. They are defined as:

> "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." (Clean Water Act)[8]

They serve many functions which make them critical for sustainable development:

- Protecting subsurface water resources
- Treating pollutants by serving as biological and chemical oxidation basins
- Controlling erosion by serving as sedimentation areas and filtering basins, absorbing silt and organic matter
- Serving as a source of nutrients for freshwater fish and
- Creating open space corridors which can maintain the natural character of the community.

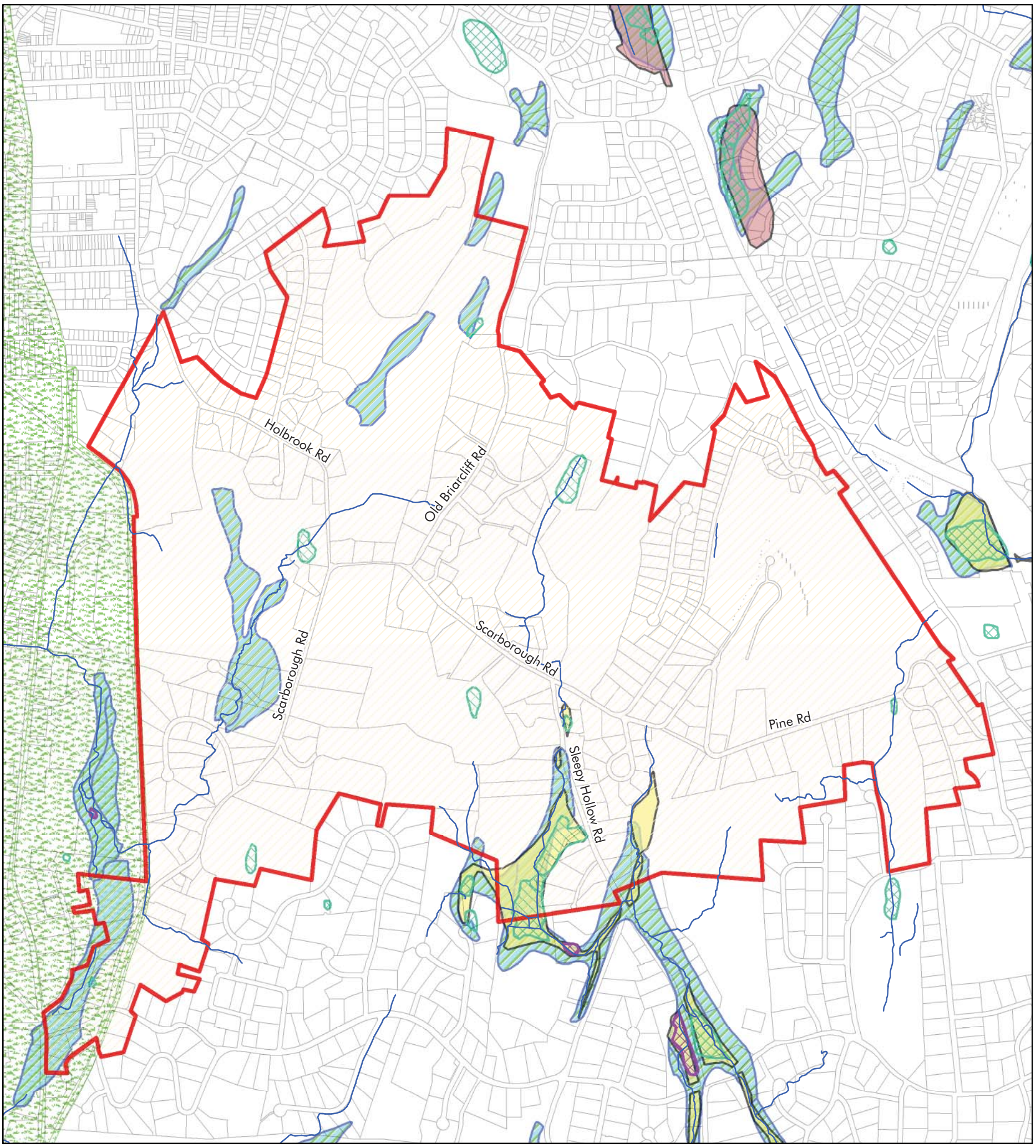
The most important functions are water retention and flood control. Upland wetlands retain runoff from surrounding developed areas and gradually discharge it into their outflow streams, thus preventing a rush of water and increased flooding in low lying areas. While the Corridor hosts only a few of the Village's wetlands, each is an integral part of a larger network of wetlands that collectively stores large quantities of water and helps provide the above-mentioned services, including reducing the risk of property damage from floods.

### A. Classification and Location

Wetlands can be classified at the federal, state or county level and, in some cases, all three. For example, the designated wetlands that cover portions of the Aspinwall Road Open Space and Pine Road Park near Sleepy Hollow Road have overlapping classification at the federal, state and county levels, significantly increasing the size of the coverage area. However, the majority of the mapped wetlands in the Corridor are designated at the county level, many of which are located in the central and western portions of the Corridor. The two largest wetlands, either wholly or partially encompassed by the Corridor, are in the southwest corner near Scarborough Presbyterian Church and to the west of Scarborough Road on the Philips campus. Other county wetlands can be found northeast of Holbrook Road in the northern portion of the Corridor, within the Erani Property (see Figure 3.3-1: WETLANDS).

<u>Federal Designation</u>

[8] United States Environmental Protection Agency, Office of Water
http://www.epa.gov/owow/wetlands/what/definitions.html




Key

Streams, Brooks, Rivers and Pond

SRC Boundary

Critical Environmental Area

**National Wetlands**

Palustrine

Palustrine Vegetated

**NY State Wetlands**

1 (high benefit, most restrictive)

2

3

4 (low benefit, least restrictive)

**County Wetlands**

Hydric Soil Wetlands

Scarborough Road Corridor Natural Resources Inventory

Figure 3.3-1: Wetlands

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

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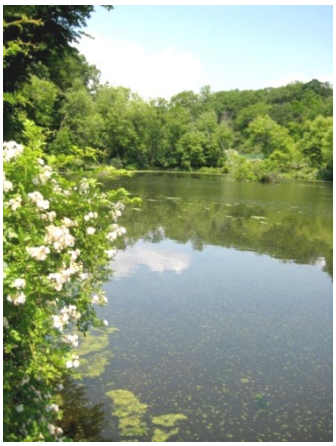
The Emergency Wetlands Resources Act of 1986 required the complete mapping of wetlands within the lower 48 states through the National Wetlands Inventory (NWI). The NWI helps states understand the extent of their wetlands and wetland types.[9] Within the Corridor, those wetlands listed on the NWI are the Lodge Pool and several other smaller wetlands: two in the Aspinall Road Open Space near Sleepy Hollow Road and one flanking Sparta Brook west of Holbrook Road (see Figure 3.3-1: WETLANDS).


Palustrine Vegetated Wetland (Lodge Pool)

All wetlands within the Corridor listed on the NWI are classified as Palustrine (or Palustrine Vegetated), one of the five systems at the highest level of the wetland classification hierarchy (see Figure 3.3-2: WETLANDS HIERARCHY). The Palustrine system covers:

> "…all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below .05 %. It Also includes wetlands lacking such vegetation, but with all of the following characteristics: 1) The area is less than 20 acres; 2) Active wave-formed or bedrock shoreline features are lacking; 3) Water depth in the deepest part of the basin is less than two meters at low water; 4) Salinity due to ocean derived salts is less than 0.5%."[10]

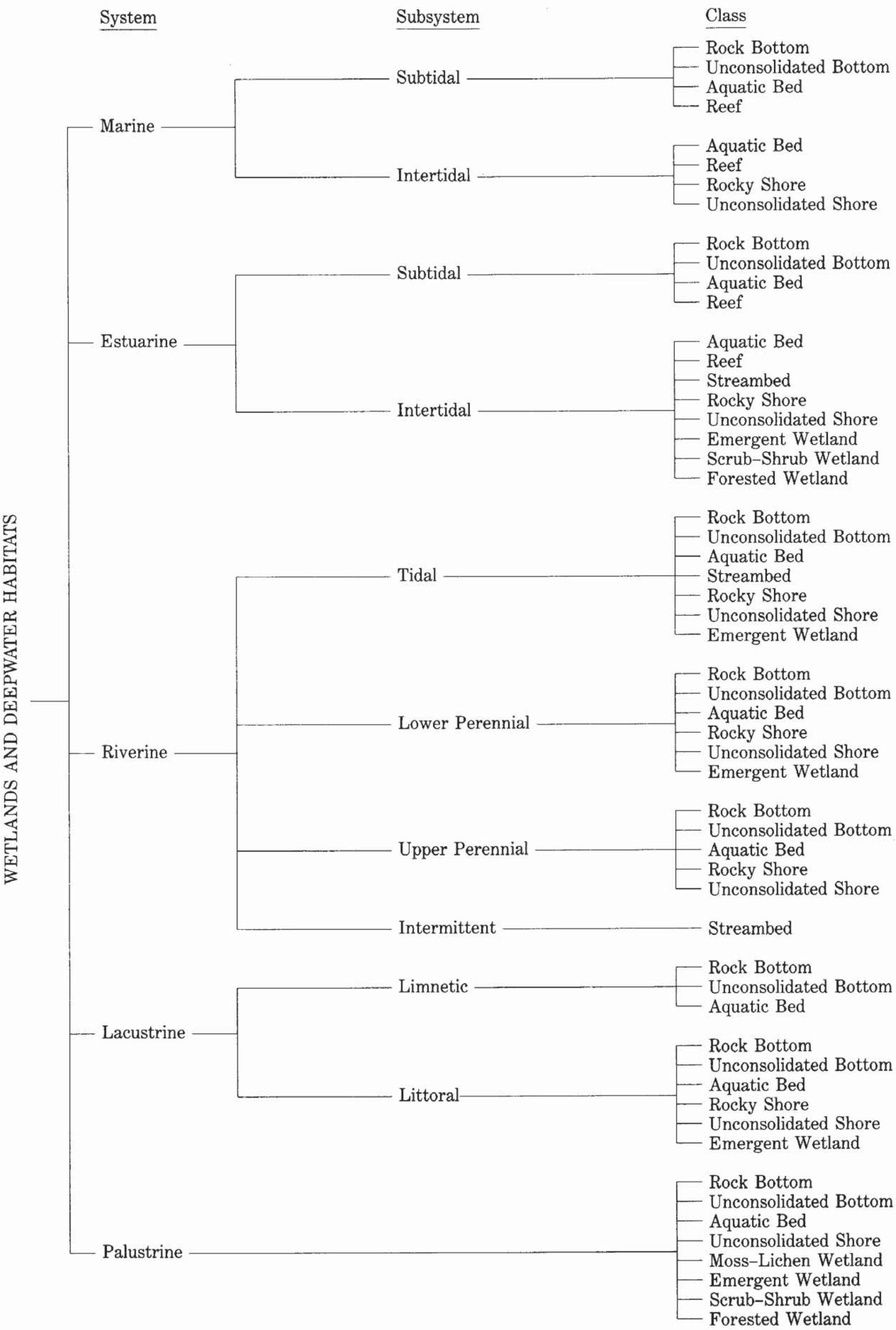
The Palustrine system is characterized by vegetated wetlands known as marshes, swamps, bogs, fens and ponds. Within the Corridor, NWI wetlands are classified as Palustrine Vegetated to denote the aforementioned vegetation. Other Palustrine wetlands exist in the Village without the *vegetated* designation, though they are outside the Corridor (see Figure 3.3-3: PALUSTRINE WETLANDS).

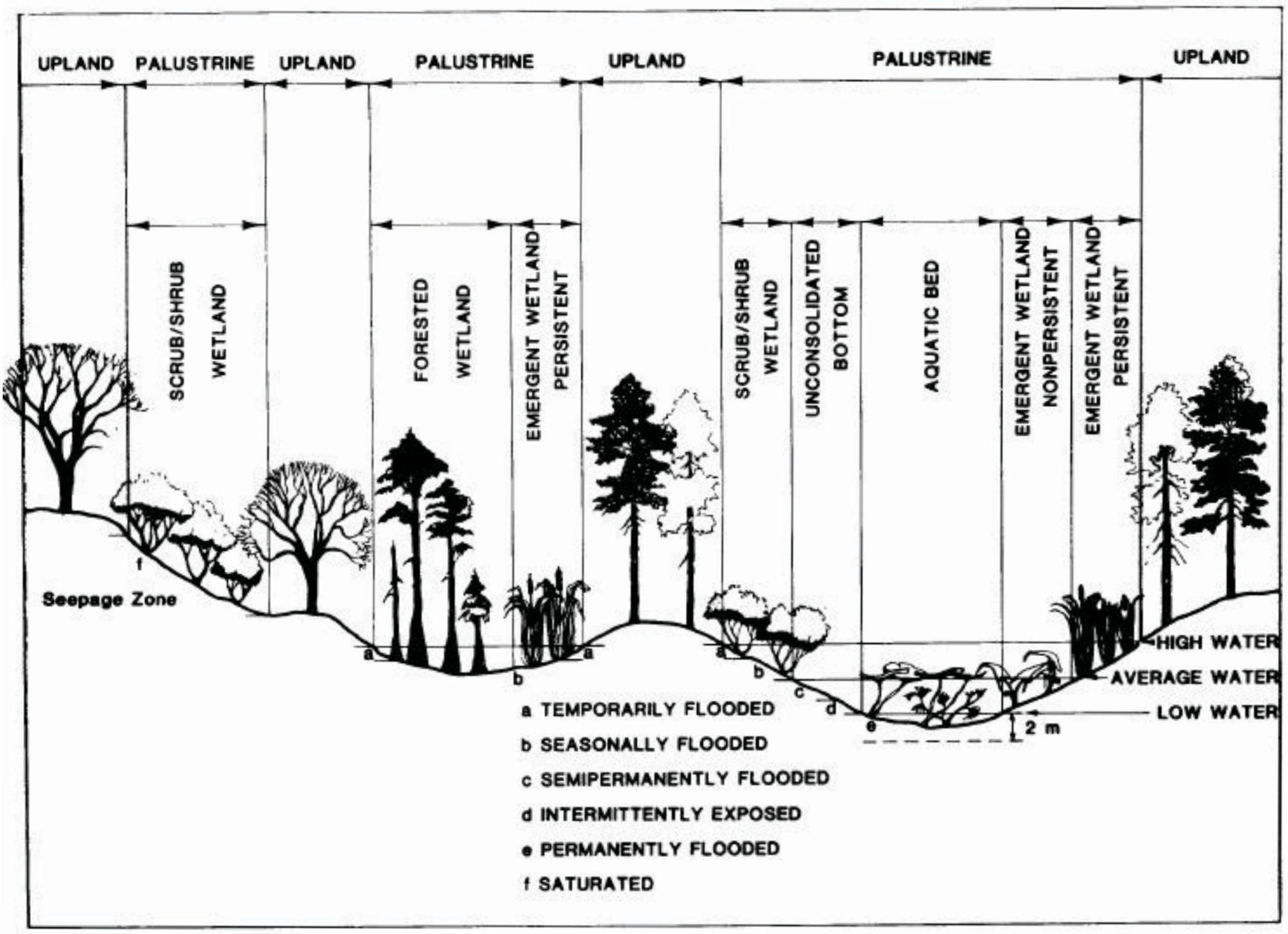
State Designation

In New York State, the Freshwater Wetlands Act requires the Department of Environmental Conservation (DEC) to map freshwater wetlands that are subject to jurisdiction of the law.[11] The Act also requires the DEC to use a ranking system ranging from Class 1, which represents the greatest benefits and is most restrictive, to Class 4, which represents fewer benefits and is the least restrictive.

Given the range and varying degree of ecological services that wetlands provide, each is classified according to its benefit. Those wetland areas that cover portions of the Aspinwall Road Open Space and Pine Road Park near Sleepy Hollow Road are the only areas designated by the state of New York within the Corridor. They are both ranked as Class 1.

[9] United States Environmental Protection Agency, Office of Water (http://www.epa.gov/owow/wetlands/regs/quality.html)
[10] Classification of Wetlands and Deepwater Habitats, United States Fish and Wildlife Service, 1992
[11] The Freshwater Wetlands Act regulates wetlands which are equal to or greater than 12.4 acres in size or which are of "unusual local importance."


System
Subsystem
Class
WETLANDS AND DEEPWATER HABITATS
Marine
Subtidal
Rock Bottom
Unconsolidated Bottom
Aquatic Bed
Reef
Intertidal
Aquatic Bed
Reef
Rocky Shore
Unconsolidated Shore
Estuarine
Subtidal
Rock Bottom
Unconsolidated Bottom
Aquatic Bed
Reef
Intertidal
Aquatic Bed
Reef
Streambed
Rocky Shore
Unconsolidated Shore
Emergent Wetland
Scrub–Shrub Wetland
Forested Wetland
Riverine
Tidal
Rock Bottom
Unconsolidated Bottom
Aquatic Bed
Streambed
Rocky Shore
Unconsolidated Shore
Emergent Wetland
Lower Perennial
Rock Bottom
Unconsolidated Bottom
Aquatic Bed
Rocky Shore
Unconsolidated Shore
Emergent Wetland
Upper Perennial
Rock Bottom
Unconsolidated Bottom
Aquatic Bed
Rocky Shore
Unconsolidated Shore
Intermittent
Streambed
Lacustrine
Limnetic
Rock Bottom
Unconsolidated Bottom
Aquatic Bed
Littoral
Rock Bottom
Unconsolidated Bottom
Aquatic Bed
Rocky Shore
Unconsolidated Shore
Emergent Wetland
Palustrine
Rock Bottom
Unconsolidated Bottom
Aquatic Bed
Unconsolidated Shore
Moss–Lichen Wetland
Emergent Wetland
Scrub–Shrub Wetland
Forested Wetland




Scarborough Road Corridor Natural Resources Inventory

Figure 3.3-3: Palustrine Wetlands



Source: Classification of Wetlands and Deepwater Habitats of the United States: U.S. Fish and Wildlife Service

County Designation

The Freshwater Wetlands Act also enables local governments to regulate wetlands within their boundaries. Local ordinances can adopt existing state laws or may strengthen them. Due to the considerable loss in wetland acreage (over 60% of original acreage in New York State and Westchester County[12]), Westchester County has adopted its own wetland protection ordinance that is more stringent than the state's. It does, however, use federal guidelines for establishing wetland boundaries, which include three parameters: vegetation, soils and hydrology. As such, there are a number of county designated wetlands (also known as hydric soil[13] wetlands) throughout the Corridor. The majority are situated on the western portion of the Corridor, ranging from the southwest corner by the Fire Department and Scarborough Presbyterian Church, to the Philips campus (west of Scarborough Road) and, finally, northeast of Holbrook Road. There is also overlap with both the national and state designated wetlands along the southern border, as previously described. However, the county designated wetlands encompass a larger area, linking to several other smaller wetlands in the vicinity.

Wetland along Sleepy Hollow Road

## B. Local Controls Protecting the Environment

Freshwater Wetland Protection

The Village of Briarcliff Manor adopted wetland legislation (VC §131-4) to recognize the invaluable benefits of wetlands and other water bodies (including streams, rivers, brooks, lakes and ponds). In the past, wetlands in the Village were lost or impaired due to unregulated draining, dredging, filling, excavating, construction and pollution. The legislation addressed these activities to protect and even increase the designated acreage of Village wetlands.

The Village and the Department of Environmental Conservation (DEC) have similar wetlands regulations but with some key differences. The DEC requires a 100-foot wetland buffer within which some construction is allowed. The Village requires a 50-foot wetland buffer within which no building is permitted, except in the case that the wetland appears on either the Wetlands Control District Map or the Freshwater Wetlands Map. In this case, the buffer would be 100 feet rather than 50 feet. Wetland boundaries are indicated on the Wetlands Control District Map (1971) on file with the Village Clerk. The Village's Conservation Advisory Council (CAC) makes recommendations on wetlands permit applications prior to their issuance by the Village. Discrepancies related to the location or designations of wetlands are referred to the DEC and the Soil Conservation Service of the U.S. Department of Agriculture.

[12] Westchester County (http://www.westchestergov.com/planning/environmental/wac4report/Wetland%)
[13] A soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part.

Critical Environmental Area

A Critical Environmental Area (CEA) is land designated by the DEC requiring special protection under State Environmental Quality Review (SEQR) regulations. To be designated as a CEA, an area must have an exceptional or unique character with respect to one or more of the following:

- A benefit or threat to human health
- A natural setting, such as fish and wildlife habitat, forest and vegetation, open space and areas of important aesthetic or scenic quality
- Agricultural, social, cultural, historic, archaeological, recreational, or educational values or
- An inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any change.[14]

In Westchester County, all land adjacent to the Hudson River is designated as a CEA. In Briarcliff Manor, all land west of the Old Croton Aqueduct as well as an area east of the Old Croton Aqueduct and west of the southern section of Route 9 is within the Hudson River CEA. The southwestern portion of the Corridor (near the convergence of Route 9 and Scarborough Road), which also includes a county designated wetland, is in the Hudson River CEA. While this is the only portion of the Corridor within the CEA, the CEA is adjacent to a significant portion of the western edge (see Figure 3.3-1: WETLANDS) of the Corridor. Thus, any new development in this area must take this into consideration. The potential impact of any Type I or Unlisted Action on the environmental characteristics of land within the CEA is a relevant area of environmental concern and must be evaluated in the determination of significance prepared pursuant to Section 617.7 of the State Environmental Quality Review Act (SEQR). Identification of environmental impacts and associated methods of mitigation are necessary prior to local and state agencies committing to, funding, or approving any proposed action.

[14] State Environmental Quality Review (§617.14 Individual Agency Procedures to Implement)

## 3.4 Land Cover

The Scarborough Road Corridor is primarily composed of deciduous vegetation with significant tracts of low-density residential development around the major thoroughfares of Scarborough, Holbrook, Old Briarcliff, Sleepy Hollow and Pine Roads. Clusters of higher density residential uses can be found in the central and eastern parts of the Corridor. Several large tracts of undeveloped land also exist throughout the Corridor, with significant areas on the Philips property, between Holbrook and Old Briarcliff Roads and the Club at Briarcliff Manor. Finally, areas considered "recreational grass," (as defined by Westchester County) encompass the majority of the eastern portion of the Corridor, roughly the entire site of the Trump National Golf Course (see Figure 3.4-1: LAND COVER).[15]

### A. Vegetation

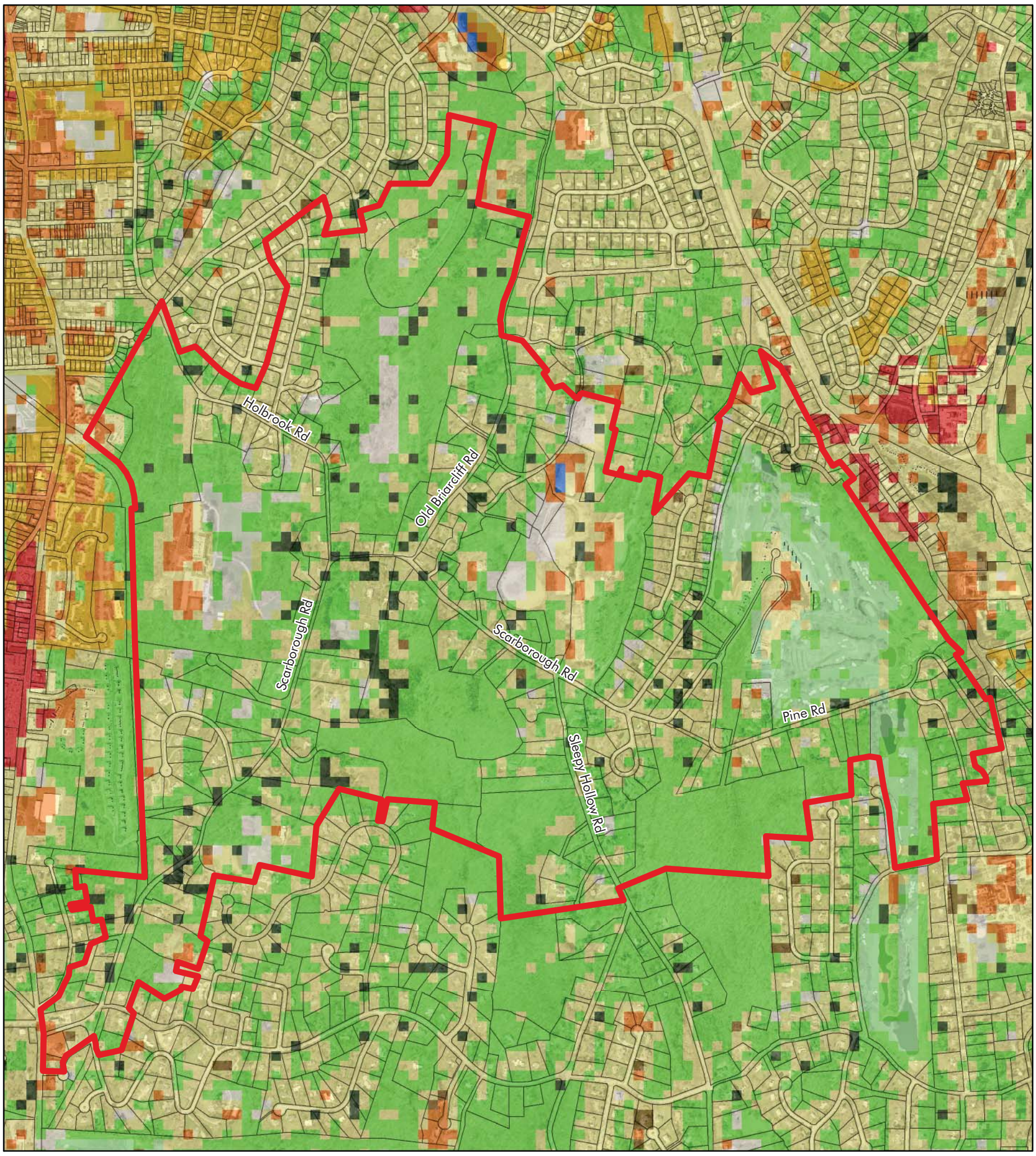
The Village of Briarcliff Manor is located in the Eastern Broadleaf Forest Province, one of several ecoregions designated by the United States Department of Agriculture's Natural Resource Conservation Service (USDA NRCS). Other organizations, like the Nature Conservancy, characterize this area as the Lower New England/Northern Piedmont Ecoregion. This ecoregion is comprised of deciduous forests dominated by tall broadleaf trees that shed their leaves in the winter as well as smaller trees and shrubs. Typical forest vegetation includes American beech, tuliptree (yellow poplar), basswood, sugar maple, red maple, red oak, white oak and eastern hemlock. The Corridor is primarily made up of deciduous vegetation, with clusters of evergreen vegetation to the east and west of Scarborough Road from the southwest corner through the central portion of the Corridor, and to the east and west of Old Briarcliff Road (see Figure 3.4-1: LAND COVER). Another cluster exists to the west and southwest of the Trump National Golf Course.

Deciduous forest along Scarborough Road

### B. Wildlife

Mammals in the area include whitetail deer, gray fox, raccoon, gray squirrel, fox squirrel, eastern chipmunk and white-footed mouse. The most abundant breeding birds include cardinal, tufted titmouse, wood thrush, summer tanager, red-eyed vireo, blue-gray gnatcatcher and Carolina wren. Common reptiles include the box turtle and common

[15] This map was created using data from Westchester County GIS files. Information appears to be accurate in most areas with the exception of the Philips campus, which does not have low or high-density residential development immediately surrounding its main facility.




Key

**Land Cover**

- Evergreen Vegetation
- Deciduous Vegetation
- Water
- Soil/Exposed Rock
- Recreational Grass
- Undeveloped
- Low-Density Residential
- Medium-Density Residential
- High-Density Residential
- Commercial/Industrial
- SRC Boundary

Scarborough Road Corridor Natural Resources Inventory

Figure 3.4-1: Land Cover

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

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garter snake. According to the New York State DEC, no threatened or endangered plant or wildlife species are known to inhabit the Corridor.[16]

[16] The New York State Department of Environmental Conservation's Natural Heritage Program confirmed that they have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of the Scarborough Road Corridor (see Appendix B: NYS DEC LETTER)

## C. Local Controls Protecting the Environment

Tree Preservation

The abundance of trees creates the bucolic character of the Village and the Corridor. In addition to their aesthetic quality, trees provide shade, natural habitat, water absorption and retention, and prevent soil erosion. Trees also reduce the greenhouse effect (created when heat from Earth is trapped in the atmosphere due to high levels of carbon dioxide [$CO_2$] and other heat-trapping gases) by removing and storing the carbon from $CO_2$ while releasing oxygen back into the air.

On privately-held developed property, the Village's tree preservation regulation (VC §202-3) allows the removal of two (or fewer) trees in the regulated setback zone (10-foot width along the perimeter on the rear and sides of a house) within each calendar year without a permit, provided they are not significant trees, meaning they are not unique due to location, aesthetic properties, species or historical value. Significant trees require a permit for removal. The removal of a tree on a property is not regulated if the tree has a DBH (diameter at breast height) of less than seven inches, a DBH of less than four inches when located on slopes under 15%, or if the tree endangers adjoining property, is diseased or threatens the health of other trees.

Evergreen vegetation along Scarborough Road

The Village Engineer has the authority to issue permits for tree cutting and removal, subject to the Tree Preservation Board. This board is comprised of the Village Manager and the chairpersons of the Conservation Advisory Council (CAC) and the Planning Board. Approval of site plan or subdivision applications and special permit applications by the Planning Board and Board of Trustees require either a tree removal permit or a tree preservation plan. These identify trees to be removed and/or planted and set forth measures to protect trees before, during and after construction. These regulations will apply to development throughout the Corridor.

## 3.5 Steep Slopes and Topography

The Corridor is generally hilly with moderate to steep slopes. Land rises from an elevation of between 100-299 feet above sea level, mainly on the western edge along the north-south segment of Scarborough Road. Moving eastward, the elevation ranges from between 300-399 feet, with large areas ranging from 400-499 feet around the Trump National Golf Course, Erani property and the Club at Briarcliff Manor. The latter two properties peak at a range of 500-599 feet in certain areas.

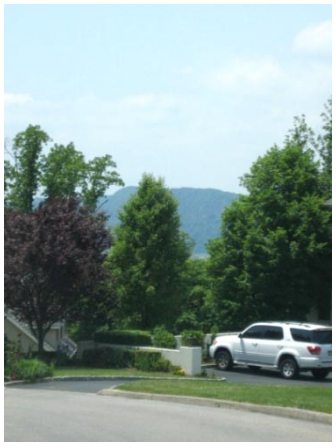
There are steep slope with grades above 15 percent throughout the Corridor, though concentrated in the central portion and along the western and eastern edges. Slopes above 25% are located in much of the same areas, though to a lesser extent (see Figure 3.5-1: STEEP SLOPES). Many of the major remaining undeveloped or underutilized properties contain steeply-sloped land.

### A. Steep Slopes

A steep slope can be defined as any area of land with a gradient of 15% or greater (ratio of vertical distance to horizontal distance). Steep slopes facilitate aquifer recharge and also give rise to microclimates that can host a diversity of plant and wildlife species. Building on steep slopes can result in stormwater sheet flow impacts into neighboring lots downhill and soil erosion, which can lead to a loss of habitat and vegetation. Such impacts are exacerbated when building on steep slopes that directly feed into wetland areas. Such areas include the northern most point of the Corridor to the west of Old Briarcliff Road; the north central portion of the Corridor between Holbrook Lane and Old Briarcliff Road; the area to the west of Scarborough Road and northeast of Brookewood Drive along the western edge of the Corridor; the area to the east of Lodge Pool; and the area to the west of Sleepy Hollow Road in the south central portion of the Corridor (see Figure 3.5-2: STEEP SLOPES & WETLANDS).

### B. View Corridors

Among the benefits that steep slopes offer are highly valued view corridors with unique vistas. View corridors of the Hudson River exist on the western edge of the Philips campus as well as on the hilly topography of Brookewood Drive to the south. Along the eastern portion of the Corridor, steep slopes to the east of the Trump National Golf Course and west of downtown Briarcliff provide views east of the Village (see Figure 3.5-3: VIEW CORRIDORS). The mapped view corridors in Figure 3.5-3 do not represent an exhaustive inventory, as others may exist on private property throughout the Corridor. Other than the Philips campus, views on private property were not surveyed as part of this study. Nonetheless, such features should be taken into account in the context of new development, as aesthetic



View Corridor on Brookewood Drive

Key

SRC Boundary

**Steep Slopes**

15-25%

over 25%

Scarborough Road Corridor Natural Resources Inventory

Figure 3.5-1: Steep Slopes

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

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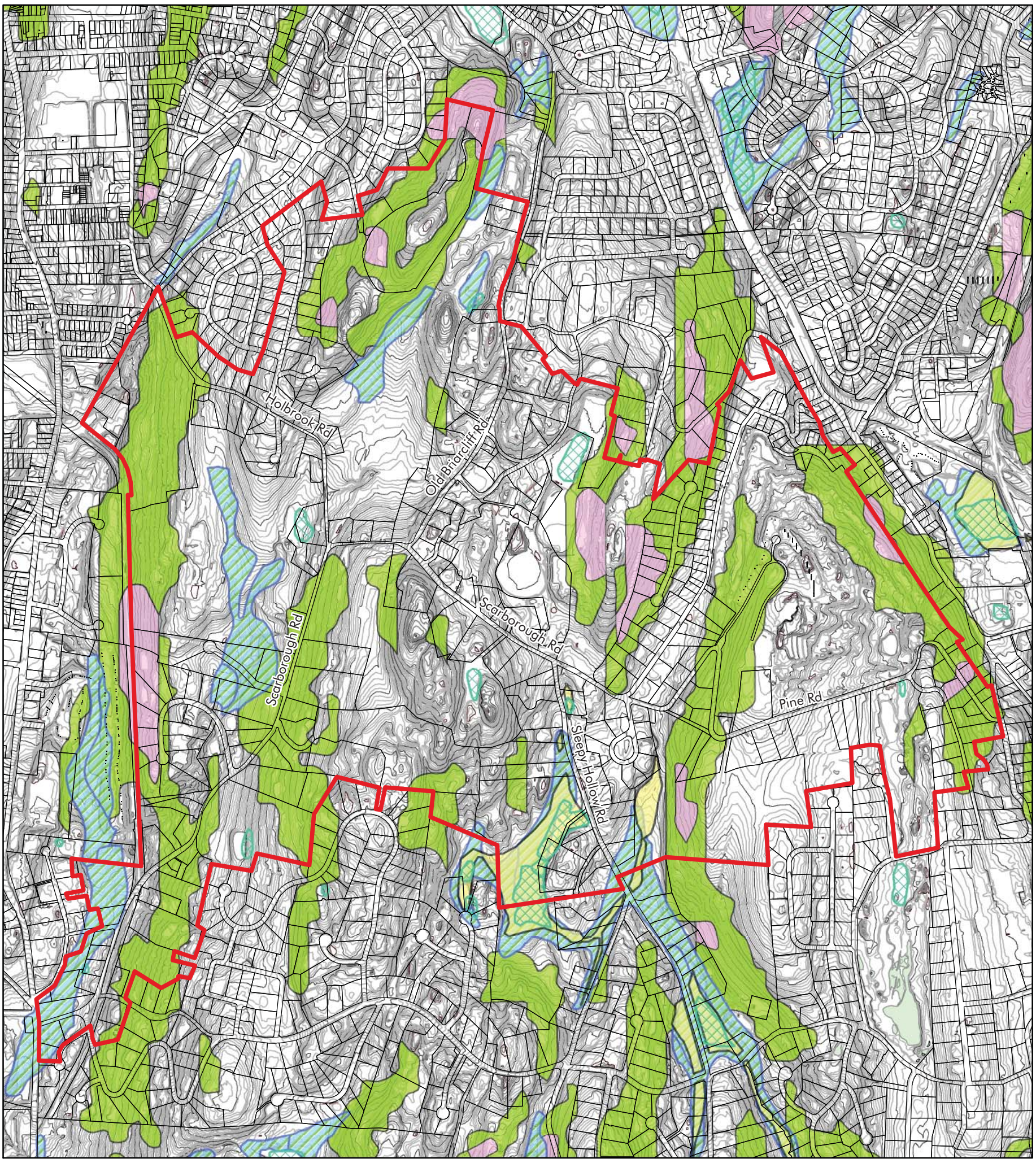


Key

SRC Boundary

**Wetlands**

National Wetlands

State Wetlands

County Wetlands

**Steep Slopes**

15-25%

over 25%

Scarborough Road Corridor Natural Resources Inventory

Figure 3.5-2: Steep Slopes & Wetlands

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

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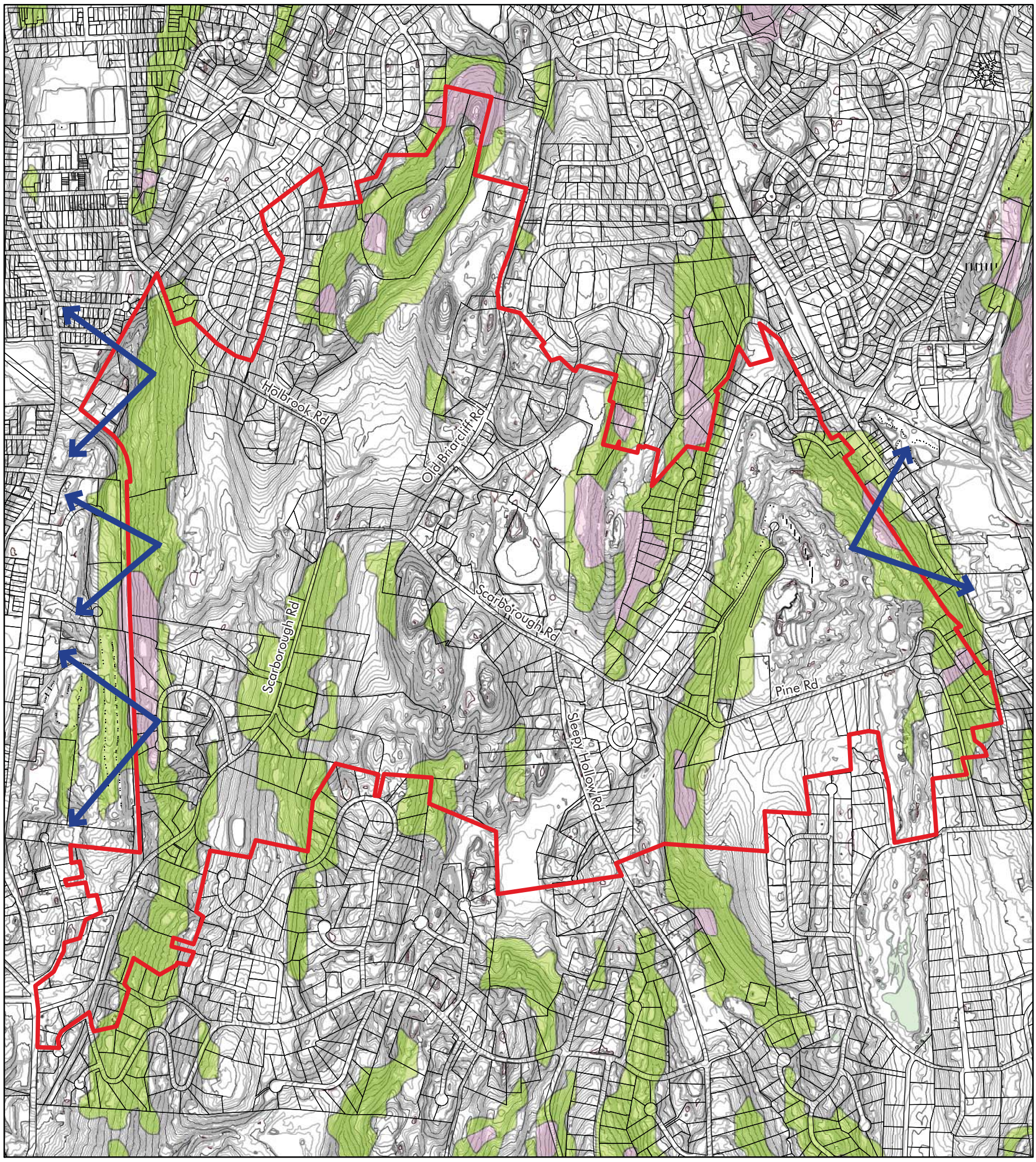


Key

SRC Boundary

Views

**Steep Slopes**

15-25%

over 25%

Scarborough Road Corridor Natural Resources Inventory

Figure 3.5-3: View Corridors

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

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values are often shared among the general population.

## C. Local Controls Protecting the Environment

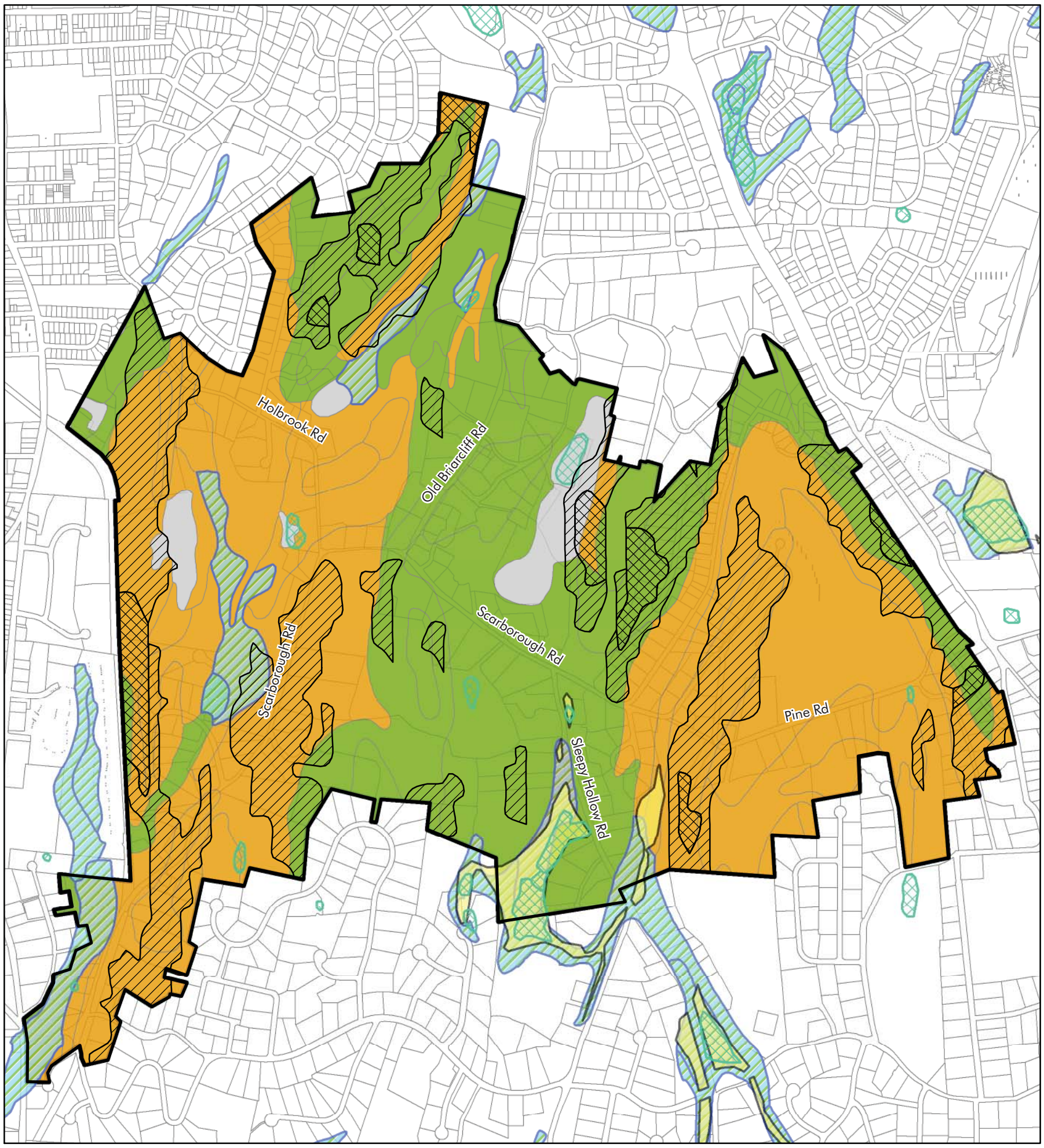
Steep Slopes

Briarcliff Manor regulates steep slopes as part of its zoning code. These regulations provide the Planning Board with some flexibility in administering the regulations. The Village amended its zoning ordinance in 1984 to add provisions to restrict development on slopes of 15 percent or greater. The law was again amended in 2007 to require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) for any steep slope approval. The Planning Board determines the impacts of development on the sloped area and is empowered to mitigate the impacts. Development on slopes between 15 and 25 percent is prohibited except when, in the opinion of the Planning Board, the use is permitted within the zoning district, and will not create an adverse impact on the natural resources of the Village (e.g. land erosion and flooding). Development on slopes 25 percent or greater is prohibited unless the Planning Board determines that such development is deemed necessary for access, land or natural resources preservation or enhancement or some other necessary purpose. With these exceptions, the Planning Board may require additional conditions during development to protect steep slopes. Provisions to control development in areas with steep slopes (e.g. slopes of 15% or greater) are described in the zoning ordinance, Section 220-15 Protection of Natural Resources.

Steep slope on Farm Road

## D. Development Constraints

As a result of steep slopes, wetlands and soil type, certain areas of the Corridor are more constrained than others. As can be seen in Figure 3.5-1, steep slopes occupy nearly the entire western side of the Corridor, significant areas in the south central area, northern tip, and eastern portions of the Corridor near the Club at Briarcliff Manor and around the Trump National Golf Course. Furthermore, large wetlands (see Figure 3.5-2: STEEP SLOPES & WETLANDS) occupy land alongside or in between many of these slopes, with the most significant areas on the Philips Campus, Aspinwall Open Space Area, the eastern edge of the Erani property and west of Pine Road Park. Finally, soil quality, as it relates to water infiltration (categorized by Hydrologic Soil Group), further dictates suitable areas for development. Large tracts of Group C soil types, which have a slow rate of water infiltration, are found along the western edge of the corridor, along the eastern edge of the Erani property (adjacent to the wetlands on the southeastern side), both the western and eastern edges of the Trump National Golf Course, and the western portion of the Astor Estate. Figure 3.5-4 shows areas that are most constrained (i.e. factoring steep slopes, wetlands and soil type) by natural features, including the southeastern edge of the Erani property, the western edge of the Astor Estate and the wetland area southeast




Key

SRC Boundary

**Steep Slopes**

over 25%

15%-25%

**Wetlands**

National Wetlands

State Wetlands

County Wetlands

**Rate of Water Infiltration (HSG)**

Moderate (B)

Slow (C)

Very Slow (D)

N/A

Scarborough Road Corridor Natural Resources Inventory

Figure 3.5-4: Steep Slopes, Wetlands & Soil



Source: Westchester County Department of Information Technology

0 1040 ft

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of the Philips campus. Particular attention should be paid to these constraints in reviewing any future development applications.

## 3.6 Open Space

### A. Classification and Location

The Corridor is comprised of about 183[17] acres of public and semi-public open space, providing opportunity for both active and passive recreation. Open space within the Corridor includes local parks, open space areas, public non-park land and private recreation (see Figure 3.6-1: OPEN SPACE):

Local Parks

**Pine Road Park.** This 66-acre parcel, located between Pine Road and Long Hill Road East, was acquired in 1948 and expanded in 1963. The park, which is currently undeveloped, is centrally located and also accessible from Sleepy Hollow Road. The J-shaped parcel has varying terrain, with limited parking available at the southeast corner water pump station area. About one half of this parcel is located within the Corridor.

**Aspinwall Road Open Space.** This 39-acre site, located on the west side of Aspinwall and Sleepy Hollow Roads and north and east of Cottonwood Lane, was acquired in 1963. The property has varying slopes and a good mix of flora, with mature species, healthy undergrowth and a mix of wildlife habitats. The site also has a small pond at the Cottonwood Lane area, a stream and some evidence of former/existing stonewalls in the north and south areas. Due to the location of wetlands on Aspinwall and Sleepy Hollow Roads, development of parking is restricted. About three-fifths of this parcel is located within the Corridor.


Old Croton Aqueduct Trail

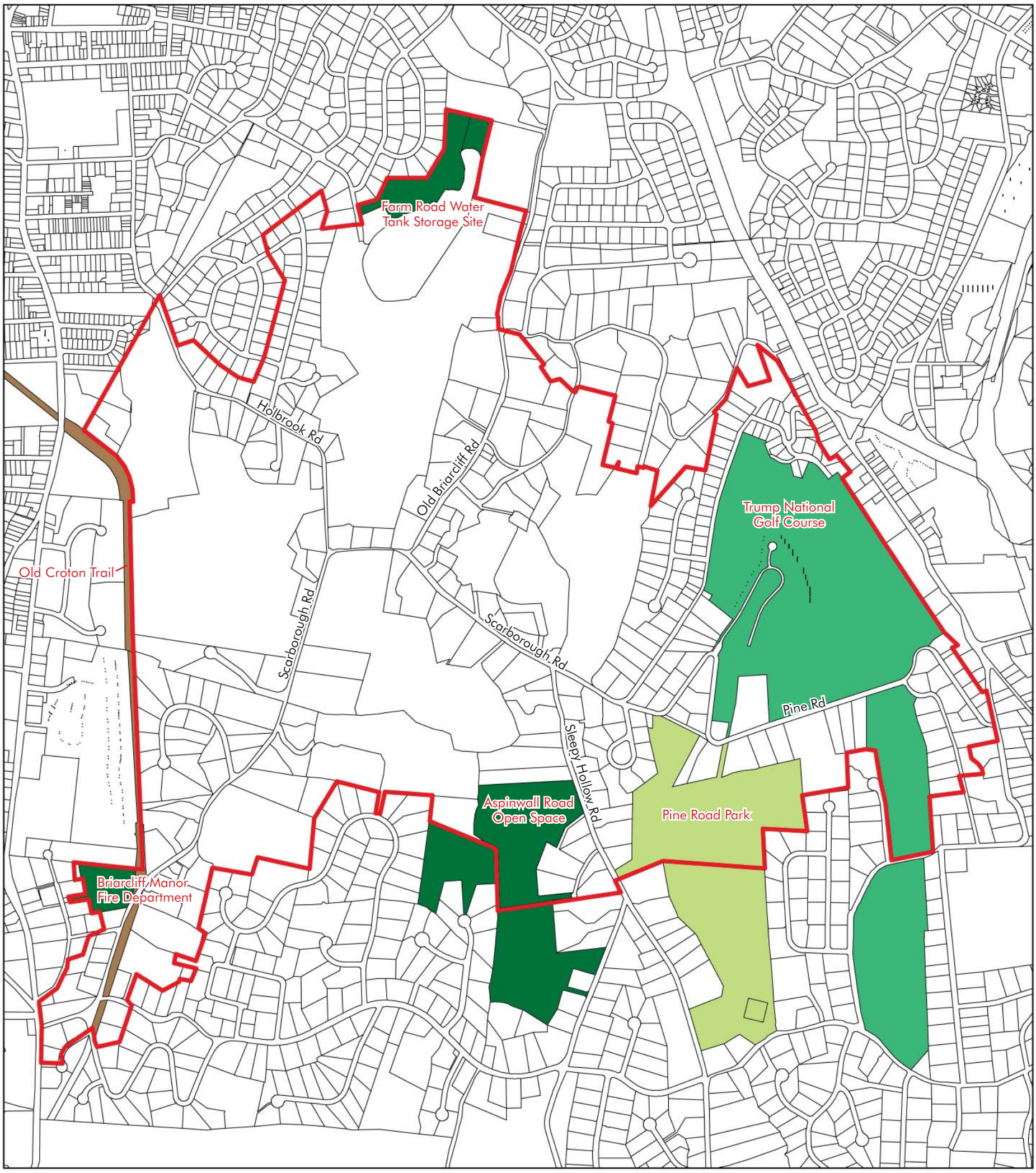
State Parks

**Old Croton Aqueduct Trail** (New York State). The Westchester County section of this trail (known as OCAT) follows 26.2 miles of the 42-mile aqueduct from Croton to New York City. It is operated and maintained by the State Office of Parks, Recreation and Historic Preservation. Village access to the trail is at Scarborough Road, just north of the Scarborough Fire Station. Currently, the fire station lot is used for parking. These sections of the OCAT are projected to be used for the proposed Westchester County RiverWalk project. Less than a mile of the trail runs through the Corridor.

Private Land and Corporate Campuses Allowing Public Access

**Trump National Golf Course.** This 147.4-acre course, located at 339 Pine Road, was originally constructed in 1923 as the Briar Hall Country Club. It reopened in 2001 as Trump National Golf Club, a private 18-hole golf course. Cart paths are available for Village pedestrian use from December 1 to March 1. Walking is permitted on Parcels 2

[17] This figure does not include areas accessible on the Philips campus and it estimates those portions of parks occupying land both within and outside the Scarborough Road Corridor boundary.




Key

**Open Space Classification**

- SRC Boundary
- Local Parks & Open Space
- Private Recreation
- Public Non-Park Lands
- State Park Land

Scarborough Road Corridor Natural Resources Inventory

Figure 3.6-1: Open Space

Village of Briarcliff Manor, NY

Source: Westchester County Department of Information Technology

0 1040 ft

BFJ Planning

and 3 and along the service road adjacent to Pine Road on Parcel 1. Residents are able to access portions of the golf course during winter months for cross country skiing and sledding. To direct people to appropriate areas, signs are posted at the golf course. The majority of the golf course is located within the Corridor.

Trump National Golf Course

**Philips Electronics Research Center.** The 78.2-acre campus is located at 345 Scarborough Road, in the northwest section of the Corridor, at the former Macy estate. Philips has granted permission to Village residents to walk on its trails.

## B. Remaining Large Parcels for Development

The 57-acre former site of King's College, located to the east Old Briarcliff Road and north of Scarborough Road, was a public institution that relocated its facilities out of the Village in 1994. Current plans for the site include the Club at Briarcliff Manor (a continuing care retirement community or CCRC), which was approved by the Planning Board in November 2008. The extent to which residents will be able to use this land is not yet known. The Erani property (97 acres) and Brooke Astor estate (65 acres), two of the largest properties within the Corridor, could provide considerable open space to Village residents. Both the Erani property, located between Old Briarcliff Road and Holbrook Road, and the Astor estate, located south of Scarborough Road between Sleepy Hollow and Holbrook Roads, have a forested character that contribute to the semi-rural quality of the Corridor.

Unless the Village acquires the Erani and Astor properties to create dedicated open space, the properties are likely at some point to be the subject of residential subdivision applications. Development could have an impact on the character of the Village, especially if conventional subdivisions are built. According to a survey administered in conjunction with the 2007 Briarcliff Manor Comprehensive Plan, 72% of respondents expressed support for conservation subdivisions as a mechanism to maintain Briarcliff Manor's semi-rural character. With a conventional layout, there is typically no open space set aside and no buffering of the perimeter to keep the new development from being visible. On the other hand, a conservation subdivision enables the Village to allow private development to go forward in a way that directly preserves open space. Using the existing Section 220-7 of the Village Code, areas having meaningful scenic, ecological, environmental and/or recreational characteristics can be protected using the conservation subdivision mechanism. Without increasing the density beyond that which is allowed by zoning, new housing would be located on lots smaller than those typically allowed and thus preserving portions of the parcels. These areas ideally should have meaningful open space value, and not simply be unbuildable land (see Appendix C: CONSERVATION DEVELOPMENT).

## 3.7 Historic Sites and Archaeological Sensitivity

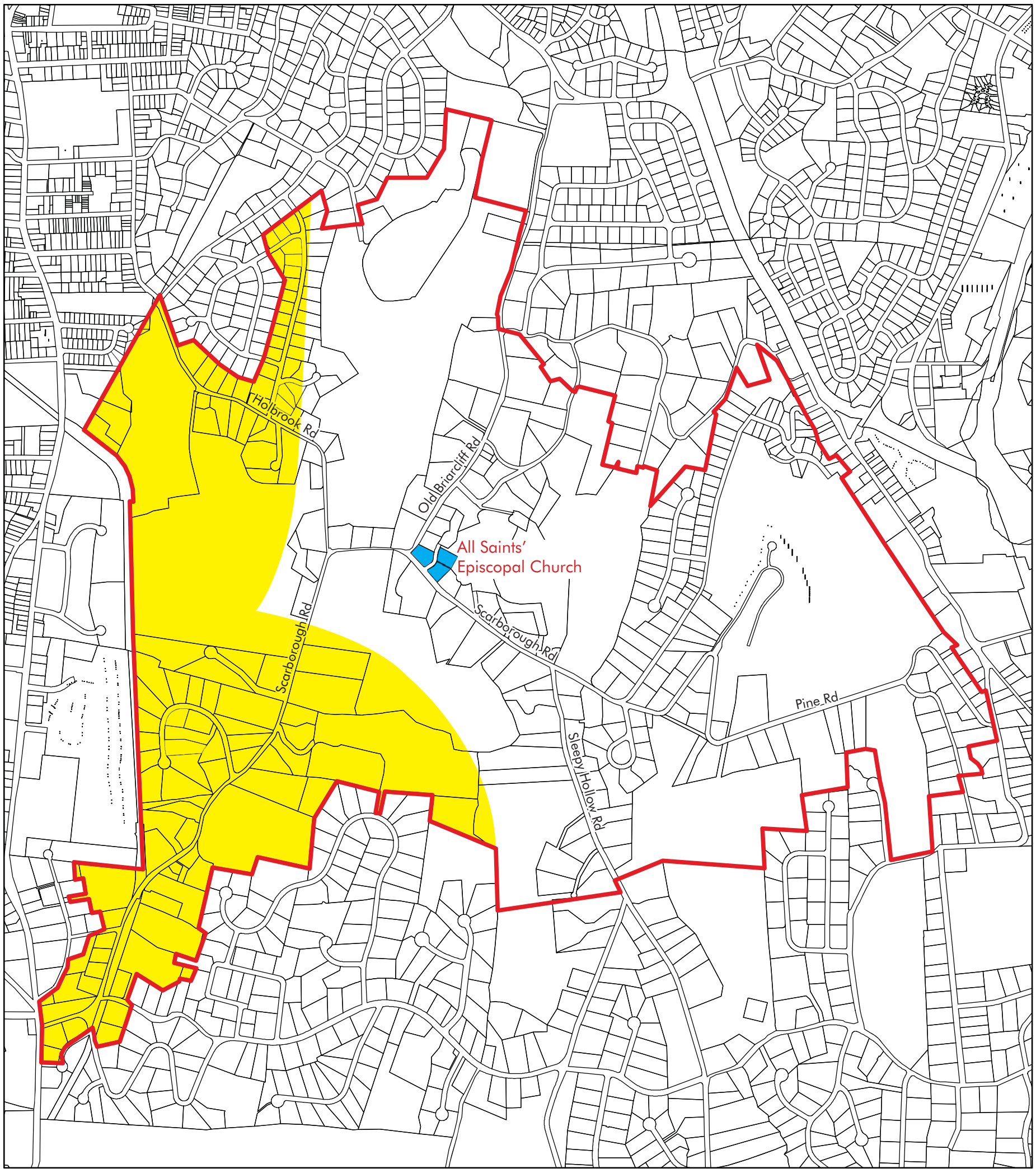
### A. Historic Sites

While there are historic buildings scattered throughout the Corridor there is only one site listed on the State and National Register of Historic Places. All Saints' Episcopal Church and Rectory (201 Scarborough Road) were listed on the Register in 2002. The church was built in 1854 and continues to serve local residents. Scarborough Presbyterian Church, while not listed on the State or National Register, was built in 1893 and also continues to serve local residents. It is located in the southwest corner of the Corridor at Route 9 and Scarborough Road.


All Saints' Episcopal Church

### B. Archaeological Sensitivity

According to the New York State Historic Preservation Office (SHPO), the area stretching nearly the entire western perimeter of the Corridor is considered to be an area of archaeological sensitivity, where archaeological sites are predicted exist. The area includes the north-south segment of Scarborough Road and its neighborhoods to the west and southwest, most of the Philips campus and neighborhoods around Holbrook Road (see Figure 3.7-1: HISTORIC SITES & ARCHAEOLOGICAL SENSITIVITY). These areas have all known sites included in the SHPO Archaeological site files and the New York State Museum Archaeological Site files. The exact locations are not displayed on the New York SHPO site, as they are protected from disclosure under the State and National Historic Preservation Acts. The site information presented in Figure 3.7-1 reflects known sites protected by randomly placed buffer zones, which are used by the SHPO to provide recommendations to state and federal agencies regarding the need for archaeological surveys. Future development within areas having archaeological sensitivity may require the preparation of a Phase 1A Archaeological Sensitivity Report.




Key

- SRC Boundary
- Area of Archaeological Sensitivity
- The New York State and National Registers of Historic Places

## 4.0 Recommendations

Based on the unique natural features that define the Corridor's landscape, a number of steps can be taken to both preserve its semi-rural character as well as its rich natural resources. Listed below are a few key actions that could help the Village to achieve such goals. They range from guiding and restricting development, designating the Corridor as a critical environmental area (CEA) to preserving land in perpetuity.

### A. Conservation Development

Given the potential for new development within the Corridor, potential growth should be managed using conservation subdivisions. According to the Village Code (§220-7), a conservation subdivision is a subdivision whose density (houses per acre) and housing type remain determined by the site's zoning but where the lots are allowed reduced setbacks, overall area, and parking requirements, and the lots are clustered. The land that is not a road or house lot is then set aside as open space; thus the "conservation" aspect of this type of subdivision. The code states that such land shall be "open space areas having meaningful scenic, ecological, environmental and/or recreational characteristics." Further, such open space must be legally preserved, with development rights removed. The land is either held in common by the private lot owners, deeded to a "recognized conservation organization," or offered for dedication to the Village for public ownership. It is at the applicant's discretion whether to submit an application as a conventional or conservation subdivision. Section 220-7 of the Village Code's Zoning chapter defines and regulates conservation subdivisions.

Undeveloped land along Scarborough Road

Implementing a conservation subdivision requires a deeper site analysis than occurs in traditional residential development (see Appendix C: CONSERVATION DEVELOPMENT). The first step involves identifying wetlands, soils and steep slopes, "greenlining" a portion of the land for conservation (both primary and secondary conservation areas) and then identifying a "potential development area," such that the special features and natural beauty of the site are conserved. The second step is to identify potential house locations with regard to the conservation areas, "siting new homes carefully and deliberately to maximize the number having interesting views of the conservation land." [18] Average lot size should allow room for wells and septic systems, if necessary. The last two steps involve designing street routes (and a footpath system) and drawing lot lines midway between the houses. Each house should be provided with direct views of permanently protected open space. [19] This report can be used as a tool by applicant's seeking to apply for a conservation subdivision.

[18] Designing Open Space Subdivisions: A Practical Step-by-Step Approach. Arendt, Randall. Natural Lands Trust. 1994. p. 45-46

[19] Ibid.

Currently, applications for conservation subdivisions are pending in towns throughout Westchester County, both in areas where conservation subdivision ordinances have been passed as well as areas that have not adopted formal regulations. North Castle, for example, has adopted a similar ordinance as Briarcliff Manor. However, Mt. Pleasant and Greenburgh, without having adopted formal ordinances, allow for applicants to apply for such developments through a formal process. Having already passed its ordinance, Briarcliff Manor is in a good position to design and adopt other mechanisms that might incentivize or guide this type of development within the Corridor. Features identified in this report, such as steep slopes, wetlands, soil and view corridors, can be used to both identify areas where conservation subdivisions might be appropriate and as a guide in the early planning phases of such developments.

## B. Conservation Easements

Another option to preserve land within the Corridor is to seek conservation easements from local property owners. According to the NYS Department of Environmental Conservation:

> "The primary function of an easement is to limit or eliminate future development and undesirable land uses on a property, while allowing for continued private ownership and traditional management. Some conservation easements allow public access to the protected property and some do not; either way the public benefits by the substantial environmental protection achieved."

The easement is a legal agreement entered into by a landowner and state or local government, or non-profit land trust. The easement document identifies the open space to be protected and describes the restrictions on the land, while an appraiser determines the value of the rights given up by the owner. The easement is then either purchased (by the government or non-profit) or donated and recorded with the deed, which is binding for future land owners.[20]

In terms of income tax savings, the IRS considers certain conservation easements to be tax deductible. According to the Westchester Land Trust (WLT):

> "The value of the donation is equal to the fair market value of the property before the easement, with its development rights intact, minus the fair market value after the easement. The law gives easement donors up to 16 years to take their income tax deduction, and allows donors to deduct up to 50 percent of their adjusted gross income each of those years. In addition, there is a New York State Income Tax Credit equal to 25% of the property taxes on easement-restricted land, excluding structures, up to $5,000."[21]

Property taxes are not likely to decrease if the easement is on the land of an individual's primary residence. However, they are more likely to decrease if located on a vacant parcel of land.

[20] New York State Department of Environmental Conservation (http://www.dec.ny.gov/lands/41156.html)
[21] Westchester Land Trust (http://www.westchesterlandtrust.org/easements-qa)

There are numerous land trusts that are active in the New York metropolitan area. One is the WLT, which has worked with private landowners for 21 years and has managed to complete over 170 easements, resulting in the protection of 5,000 acres of land. The WLT works with the landowner throughout the entire process, helps prepare the written easement and makes sure the appraisal work and any engineering work are coordinated to provide the best result for the landowner. The latter generally takes anywhere between five to seven months. If major variances are not required, an engineer can certify that the lot meets local regulations without going before planning or zoning boards.

Other national non-profit organizations, such as the Trust for Public Land (TPL), work at the federal, state and local levels on conservation-related initiatives. Through its efforts, the TPL has protected 2.8 million acres in 47 states since 1972. In addition to helping communities and government agencies identify land, the TPL helps identify and raise funds to protect that land through campaigns and legislative initiatives. The TPL can also purchase a property until it can be permanently protected by a government or community land trust.[22] This report, having inventoried important environmental features, can be used help identify and prioritize land that could be preserved through a conservation easement.

## C. Scarborough Road Corridor Rezoning

Another mechanism that would limit environmental impact is upzoning[23] the Scarborough Road Corridor. The 2001 Scarborough Road Corridor Study and the 2007 Village of Briarcliff Manor Comprehensive Plan both recommended upzoning. As a means of implementing these recommendations, the Village of Briarcliff Manor Board of Trustees (BOT) is currently considering amendments to the Village Zoning Map to remap approximately 163 acres within the Corridor from R40A to R60A and 318 acres of the Corridor from R60A to a new R80A zoning district. The proposed action also includes amendments to the Village Zoning Code (§220-3) to add a new R80A (2-acre) single-family residential zoning district and district regulations.

## D. Critical Environmental Area (CEA) Designation

As mentioned in Section 3.3, the Corridor is adjacent to the Hudson River Critical Environmental Area (CEA) and contains a small portion of the CEA, which covers much of the western edge of Westchester County. Although this CEA is state designated, local agencies may also designate specific geographic areas within their boundaries as CEAs (see Appendix D: CEA REQUIREMENTS). According to the State Environmental Quality Review Act (SEQR):

> "A local agency may designate a specific geographic area within its boundaries as a critical environmental area (CEA). A state agency may also designate as a CEA a specific geographic area that is owned or managed by the state or is under its regulatory authority. Designation of a

[22] The Trust for Public Land (http://www.tpl.org/tier2_kad.cfm?folder_id=1325#q2)
[23] Decreasing the density of an area by increasing minimum lot size

> CEA must be preceded by written public notice and a public hearing. The public notice must identify the boundaries and the specific environmental characteristics of the area warranting CEA designation."[24]

According to SEQR, "…To be designated as a CEA, an area must have an exceptional or unique character covering one or more of the following:

a. A benefit or threat to human health;
b. A natural setting (e.g. fish and wildlife habitat, forest and vegetation, open space and areas of important aesthetic or scenic quality);
c. Agricultural, social, cultural, historic, archaeological, recreational, or educational values; or
d. An inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any change." [25]


Hudson River CEA

After an area is designated, the potential impact of any Type I or Unlisted Action on the environmental characteristics of land within the CEA is a relevant area of environmental concern and must be evaluated in the determination of significance prepared pursuant to Section 617.7 of the State Environmental Quality Review Act (SEQR). CEA designation can also alert project sponsors to the local agency's concern for the resources within the CEA.

While it is more difficult to develop land within a CEA, designation does not ensure long term protection comparable to that afforded by land use controls, such as zoning, environmental resource protections, open space creation, easements or direct management. According to the New York State DEC, if an agency:

> "…Lacks a specific jurisdiction over an action within a CEA (for example, a local government without zoning or subdivision regulations) it cannot act as an involved agency in any environmental review for that action, even if it is the local government that actually designated the CEA."[26]

Furthermore, CEA designation does not create a new jurisdiction or grant any permitting authority for the designating agency that did not exist before. Rather, it raises awareness to the sponsor about the importance of the area and informs the agency reviewing a particular action that significant concerns should be taken into account.

If a proposed action is in, or "substantially contiguous" to, a CEA, the agency that made the CEA designation should be consulted to understand why it was designated. With this information, it is easier to determine if a project sponsor's action will have a significant adverse environmental impact.

[24] State Environmental Quality Review (§617.14 Individual Agency Procedures to Implement)
[25] State Environmental Quality Review (§617.14 Individual Agency Procedures to Implement)
[26] New York State Department of Environmental Conservation (http://www.dec.ny.gov/permits/45500.html)

The designation of the Scarborough Road Corridor as a local CEA by the Village Board of Trustees would provide the Village with another mechanism for demonstrating the importance of the area's natural resources. Such designation, in combination with other mechanisms outlined out in this section, would help the Village guide future development, balancing the need for growth and conservation. Furthermore, having an inventory will enable decisions to be made with the broader environmental context in mind. As the report provides information on a general area, more site specific analysis may be warranted in certain instances. In this sense, the SRCNRI should be used as both a guide for future planning efforts as well as a springboard for further research.

Appendix A

# Soil Suitability

| | | TRAFFIC-SUPPPORTING CAPACITY | | | RISK OF CORROSION | |
|---|---|---|---|---|---|---|
| | | LOCAL ROADS AND STREETS | | | CONCRETE | STEEL |
| Soil Type | Description | Rating | Component Name (by percent) | Rating Reasons | Rating | Rating |
| ChE | Charlton loam, 25 to 35 percent slopes | Very limited | Charlton (80%) | Slope (1.00) | High | Low |
| CrC | Charlton-Chatfield complex, rolling, very rocky | Somewhat limited | Charlton (50%)<br>Chatfield (30%) | Slope (0.04)<br>Frost action (0.50)<br>Depth to hard bedrock (0.42)<br>Slope (0.04) | High | Low |
| CsD | Chatfield-Charlton complex, hilly, very rocky | Very limited | Chatfield (45%)<br><br><br>Charlton (35%) | Slope (1.00)<br>Frost action (0.50)<br>Depth to hard bedrock (0.42)<br>Slope (1.00) | Moderate | Low |
| CtC | Chatfield-Hollis-Rock outcrop complex, rolling | Very limited | Hollis (30%) | Depth to hard bedrock (1.00)<br>Frost action (0.50)<br>Slope (0.04) | High | Low |
| CuD | Chatfield-Hollis-Rock outcrop complex, hilly | Very limited | Chatfield (30%)<br><br><br>Hollis (30%) | Slope (1.00)<br>Frost action (0.50)<br>Depth to hard bedrock (0.42)<br>Depth to hard bedrock (1.00)<br>Slope (1.00)<br>Frost action (0.50) | High | Low |
| Ff | Fluvaquents-Udifluvents complex, frequently flooded | Very limited | Fluvaquents (35%)<br><br><br><br>Udifluvents (35%) | Ponding (1.00)<br>Depth to saturated zone (1.00)<br>Frost action (1.00)<br>Flooding (1.00)<br>Flooding (1.00)<br>Frost action (0.50) | High | High |
| HrF | Hollis-Rock outcrop complex, very steep | Very limited | Hollis (60%) | Depth to hard bedrock (1.00)<br>Slope (1.00)<br>Frost action (0.50) | High | Low |
| LcB | Leicester loam, 3 to 8 percent slopes, stony | Very limited | Leicester (75%) | Frost action (1.00)<br>Depth to saturated zone (1.00) | High | Low |
| LeB | Leicester loam, 2 to 8 percent slopes, very stony | Very limited | Leicester (75%) | Frost action (1.00)<br>Depth to saturated zone (1.00) | High | Low |
| PnB | Paxton fine sandy loam, 2 to 8 percent slopes | Somewhat limited | Paxton (75%) | Frost action (0.50)<br>Depth to saturated zone (0.19) | Moderate | Low |
| PnC | Paxton fine sandy loam, 8 to 15 percent slopes | Somewhat limited | Paxton (75%) | Slope (0.63)<br>Frost action (0.50)<br>Depth to saturated zone (0.19) | Moderate | Low |
| PnD | Paxton fine sandy loam, 15 to 25 percent slopes | Very limited | Paxton (70%) | Slope (1.00)<br><br>Frost action (0.50)<br>Depth to saturated zone (0.19) | Moderate | Low |
| Ra | Raynham silt loam | Very limited | Raynham (75%) | Frost action (1.00)<br>Depth to saturated zone (1.00) | Moderate | High |
| RdB | Ridgebury loam, 3 to 8 percent slopes | Very limited | Ridgebury (75%) | Frost action (1.00)<br>Depth to saturated zone (1.00) | High | High |
| Sh | Sun Loam | Very limited | Sun (80%) | Ponding (1.00)<br>Depth to saturated zone (1.00)<br>Frost action (1.00) | Moderate | High |
| SuB | Sutton loam, 3 to 8 percent slopes | Very limited | Sutton (80%) | Frost action (1.00)<br>Depth to saturated zone (0.19) | High | Moderate |
| Ub | Udorthents, smoothed | Very limited | Udorthents, smoothed (75%) | Frost action (1.00) | | |
| Uf | Urban land | Not rated | Urban land (70%) | | | |
| UwB | Urban land-Woodbridge complex, 2 to 8 percent slopes | Not rated | Urban land (55%) | | | |
| W | Water | Not rated | Water (100%) | | | |
| WdA | Woodbridge loam, 0 to 3 percent slopes | Very limited | Woodbridge (80%) | Frost action (1.00)<br>Depth to saturated zone (0.19) | Moderate | Low |
| WdB | Woodbridge loam, 3 to 8 percent slopes | Very limited | Woodbridge (80%) | Frost action (1.00)<br>Depth to saturated zone (0.19) | Moderate | Low |

Source: USDA Natural Resource Conservation Service
http://websoilsurvey.nrcs.usda.gov

Appendix B

**New York State Department of Environmental Conservation Letter**

**NEW YORK STATE DEPART**MENT OF ENVIRONMENTAL CONSERVATION
**Division of Fish, Wildlife & Marine Resources**
**New York Natural Heritage Program**
625 Broadway, Albany, New York 12233-4757
**Phone:** (518) 402-8935 • **FAX:** (518) 402-8925

Alexander B. Grannis
Commissioner

June 13, 2009

Sarah K. Yackel
B F J Planning
115 Fifth Avenue
New York City, NY 10003

Dear Ms. Yackel:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed Natural Resources Inventory of the Scarborough Road Corridor, area as indicated on the map you provided, located in the Village of Briarcliff Manor, Westchester County.

> We have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain any information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of rare or state-listed species, or of significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

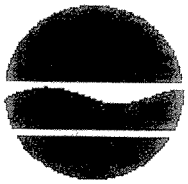
Sincerely,

Tara Salerno

Tara Salerno, Information Services
NY Natural Heritage Program

Enc.
cc:

New York State Department of Environmental Conservation
Division of Environmental Permits, Region 3
21 South Putt Corners Road, New Paltz, New York 12561-1620
Phone: (845) 256-3054 • FAX: (845) 255-4659
Website: www.dec.ny.gov



Alexander B. Grannis
Commissioner

Sent Via Facsimile to 212-353-7494 + U.S. MAIL

Date: 9-2-09

Ms. Sarah K. Yackel

BFJ Planning
115 Fifth Ave
New York, NY 10003

RE: Scarborough Rd. Corridor per attached location map CH# 2720

Location: T/ Ossining County Westchester

Dear Ms. Yackel:

Based upon our review of your inquiry dated 8-11-09 we offer the following comments:

**PROTECTION OF WATERS**

☑ The following stream(s)/pond(s)/waterbody(ies) is(are) located within or near the site you indicated:

| Name | Class | DEC Water Index Number | Status |
|---|---|---|---|
| (See numerous waterbodies on attached map) | | | [Protected, non-protected, navigable] |
| | | | [Protected, non-protected, navigable] |

☑ A Protection of Waters permit is required to physically disturb the bed or banks (up to 50 feet from stream) of any streams identified above as "protected." A permit is not required to disturb the bed or banks of "non-protected" streams.

☐ A Protection of Waters permit is required for any excavation or filling below the mean high water line of any waterbodies identified above as "navigable."

☐ There are no waterbodies that appear on our regulatory maps at the location/project site you identified. Therefore, if there is a stream or pond outlet present at the site with year-round flow, it assumes the classification of the watercourse into which it feeds, _____, Class "_____", and a Protection of Waters permit is/is not required. If there is a stream or pond outlet present at the site that runs intermittently (seasonally), it is not protected, and a Protection of Waters permit is not required.

If a permit is not required, please note, however, you are still responsible for ensuring that work shall not pollute any stream or waterbody. Care shall be taken to stabilize any disturbed areas promptly after construction, and all necessary precautions shall be taken to prevent contamination of the stream or waterbody by silt, sediment, fuels, solvents, lubricants, or any other pollutant associated with the project.

**FRESHWATER WETLANDS**

☑ Your project/site is near or in Freshwater Wetland 0-9, Class 1. Be aware that a Freshwater Wetlands permit is required for any physical disturbance within these boundaries or within the 100 foot adjacent area. To have the boundary delineated, please read the attached notice.

(-OVER PLEASE -) →

Ms. Sarah K Yackel

RE: Scarborough Rd. Corridor per attached location map Date: 9-2-09

☐ Your project/site is not within a New York State protected Freshwater Wetland. However, please contact your town officials and the United States Army Corps of Engineers in New York City, telephone (917) 790-8511 (Westchester/Rockland Counties), or (917) 790-8411 (other counties), for any permitting they might require.

**STATE-LISTED SPECIES**

☐ DEC has reviewed the State's Master Habitat Databank (MHDB) records. We have determined that the site is located within or near record(s) of the following state-listed species:_____
If your inquiry is related to a specific development project, additional evaluation of the potential impacts of this project related to the sensitive resource(s) identified by this review, may be required. Please contact the person noted below.

☐ No records of sensitive resources were identified by this review.

OTHER: Please see the attached website list for links containing more detailed information, in particular the Environmental Resource Mapper, for this large area.

Please note that this letter only addresses the requirements for the following permits from the Department:

☑ Freshwater Wetlands ☐ Master Habitat Databank ☐ Other:_____
☑ Protection of Waters

and that other permits from this Department or other agencies may be required for projects conducted on this property now or in the future. Also, regulations applicable to the location subject to this determination occasionally are revised and you should, therefore, verify the need for permits if your project is delayed or postponed. This determination regarding the need for permits will remain effective for a maximum of one year unless you are otherwise notified. Applications may be downloaded from our website at www.dec.ny.gov under "Programs" then "Division of Environmental Permits."

Please contact this office if you have questions regarding the above information. Thank you.

Sincerely,

Judith A. Blauvelt

Judith A. Blauvelt
Division of Environmental Permits
Region 3, Telephone No. 845/256-2250

☑ Freshwater Wetland Delineation material
☐ Information/Permit Materials/Regulations/Map (Ossining Quadrangle) Attached.
☑ Web page information
☐ NYC DEP Contact Information (this site is within the NYC Watershed).

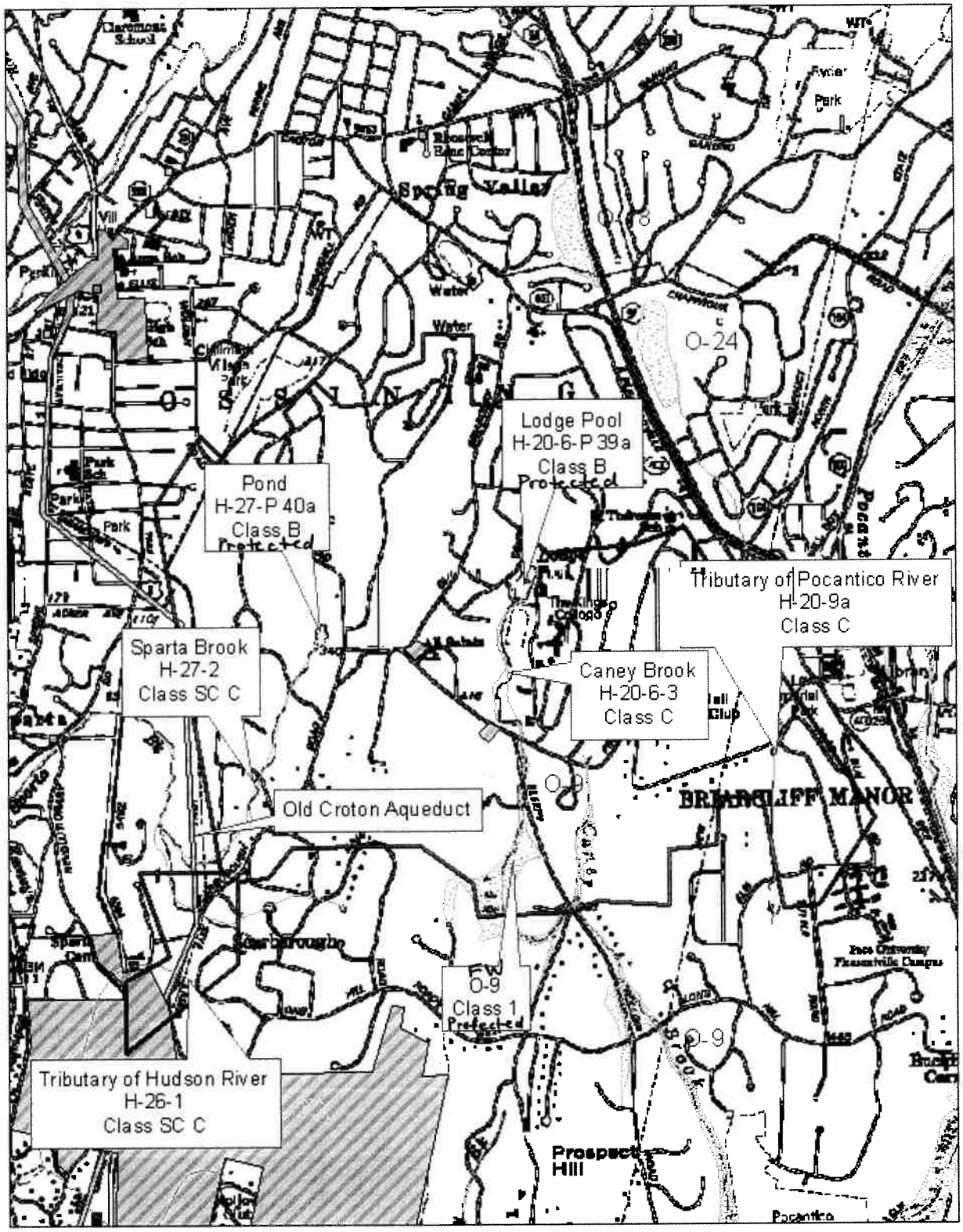
cc: _____ _____

**NOTE: Regarding erosion/sedimentation control requirements:**
Stormwater discharges require a SPDES Stormwater permit from this Department if they either:

- occur at industrial facilities and contain either toxic contaminants or priority pollutants OR
- result from construction projects involving the disturbance of 5000 square feet or more of land within the NYC Department of Environmental Protection East of Hudson Watershed or for proposed disturbance of 1 acre or more of land outside the NYC DEP Watershed

Your project may be covered by one of two Statewide General Permits or may require an individual permit. For information on stormwater and the general permits, see the DEC website at http://www.dec.ny.gov/chemical/8468.html. If this site is within an MS4 area (Municipal Separate Storm Sewer System), the stormwater plan must be reviewed and accepted by the municipality and the MS-4 Acceptance Form must be submitted to the Department. If the site is not within an MS4 area and other DEC permits are required, please contact the regional Division of Environmental Permits.

# Scarborough Road Corridor
# Town of Ossining, Westchester County




Map by M. Sheehan
NYS DEC - Division of Environmental Permits
For Reference Only

Appendix C

# Conservation Development

Scarborough Road Corridor Natural Resources Inventory

1: Conservation Development: Before Development

Village of Briarcliff Manor, NY

Source: Randall Arendt "Designing Open Space Subdivisions"

NTS

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Scarborough Road Corridor Natural Resources Inventory

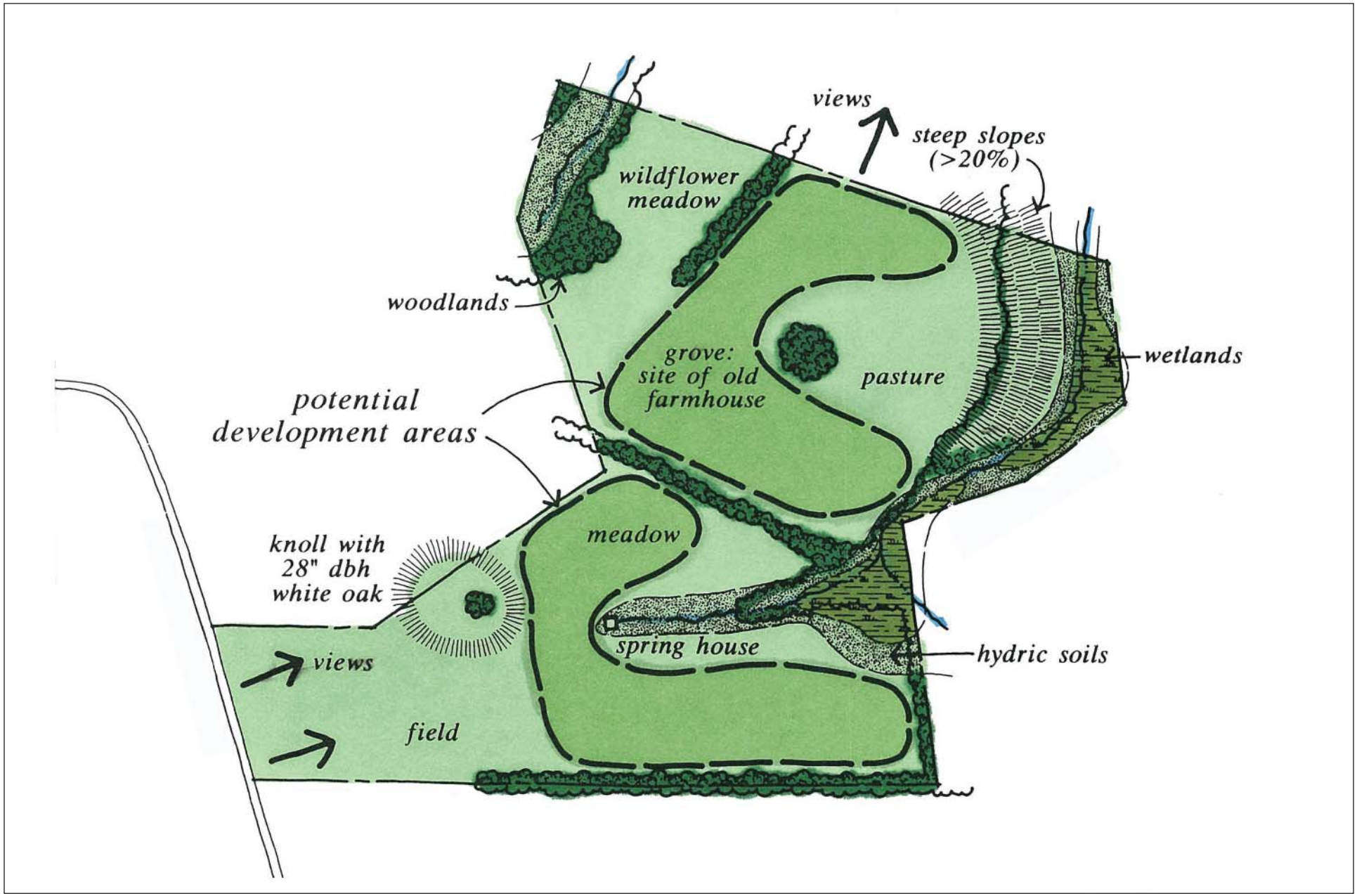
2: Yield Plan

Village of Briarcliff Manor, NY

Source: Randall Arendt "Designing Open Space Subdivisions"

0 400 ft

BFJ Planning

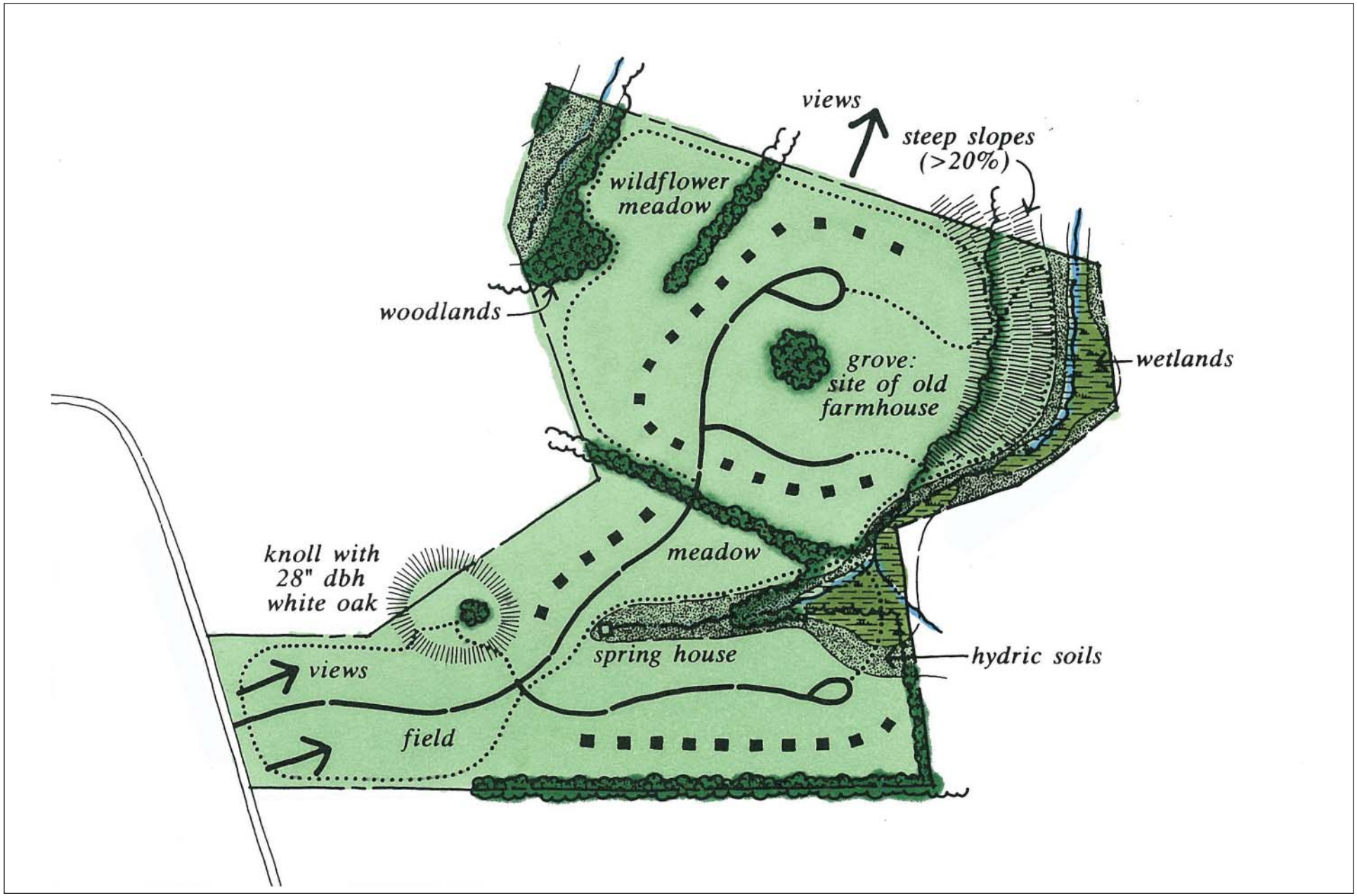





Source: Randall Arendt "Designing Open Space Subdivisions"

0 400 ft

BFJ Planning




Scarborough Road Corridor Natural Resources Inventory

4: Designing Road Alignments and Trail Links

Village of Briarcliff Manor, NY

Source: Randall Arendt "Designing Open Space Subdivisions"

0 400 ft

BFJ Planning




Source: Randall Arendt "Designing Open Space Subdivisions"

0 400 ft

BFJ Planning

Appendix D

# Critical Environmental Area (CEA) Guidelines

## CEA Requirements - §617.4(g)

## §617.14 Individual agency procedures to implement SEQR

(g) A local agency may designate a specific geographic area within its boundaries as a critical environmental area (CEA). A state agency may also designate as a CEA a specific geographic area that is owned or managed by the state or is under its regulatory authority. Designation of a CEA must be preceded by written public notice and a public hearing. The public notice must identify the boundaries and the specific environmental characteristics of the area warranting CEA designation.

(1) To be designated as a CEA, an area must have an exceptional or unique character covering one or more of the following:

(i) a benefit or threat to human health;

(ii) a natural setting (e.g., fish and wildlife habitat, forest and vegetation, open space and areas of important aesthetic or scenic quality);

(iii) agricultural, social, cultural, historic, archaeological, recreational, or educational values; or

(iv) an inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any change.

(2) Notification that an area has been designated as a CEA must include a map at an appropriate scale to readily locate the boundaries of the CEA, the written justification supporting the designation, and proof of public hearing and, must be filed with:

(i) the commissioner;

(ii) the appropriate regional office of the department; and

(iii) any other agency regularly involved in undertaking, funding or approving actions in the municipality in which the area has been designated.

(3) This designation shall take effect 30 days after filing with the commissioner. Each designation of a CEA must be published in the ENB by the department and the department will serve as a clearinghouse for information on CEAs.

(4) Following designation, the potential impact of any Type I or Unlisted Action on the environmental characteristics of the CEA is a relevant area of environmental concern and must be evaluated in the determination of significance prepared pursuant to Section 617.7 of this Part.