

## IV. EXISTING CONDITONS

### NATURAL FEATURES

#### Topography

The land within the Study Area is generally flat, with no areas of significant steep slopes. The highest area elevation is 100 feet at the northeast corner of the Study Area. The northern boundary of the Study Area generally has an 85 to 90 foot elevation; in the central portion the elevation range is approximately 30 to 60 feet. The lowest elevation is five feet located close to the waterfront at the southern portions of the Study Area along Moriches Bay.

#### Soils

The Study Area is primarily made up of Riverhead, Plymouth, and Carver soils.<sup>1</sup> The northern portion of the site, primarily to the northeast, also contains Plymouth and Carver, nearly level and undulating soils. Riverhead soils are deep, well-drained, moderately coarse textured soils, in level to gently sloping areas outwash plains. Plymouth and Carver soils are deep, excessively drained soils, and are nearly level to steep. Exhibit IV-1 shows the parcels with prime soils within the Study Area.

#### Pine Barrens

As discussed in Chapter II, the northern portion of the Study Area, north of Old Country Road, is located within the Central Pine Barrens. The majority of the land, approximately 3,300 acres, is designated as Core Preservation Area; the remaining 1,600 acres is designated as Compatible Growth Area.

<sup>1</sup>Source of soil types: *Town of Southampton Comprehensive Plan Update*, March 1999, "General Soils Map"; p.50. Source of soils description: *Soil Survey of Suffolk County, New York*, United States Department of Agriculture Soil Conservation Service, 1975.

The greater Pine Barrens area includes native plantings such as: Big bluestem; little bluestem; white birch; grey birch; hackberry; hay scented fern; trailing arbutus, witch hazel; inkberry; American holly; northern bayberry; Virginia creeper; pitch pine; quaking aspen; beach plum; black cherry; bracken fern; white oak, scarlet oak; red oak; Virginia rose; northern blackberry; pussy willow; sassafras; golden rod; spirea; lowbrush blueberry; and highbrush blueberry, among others.<sup>2</sup>

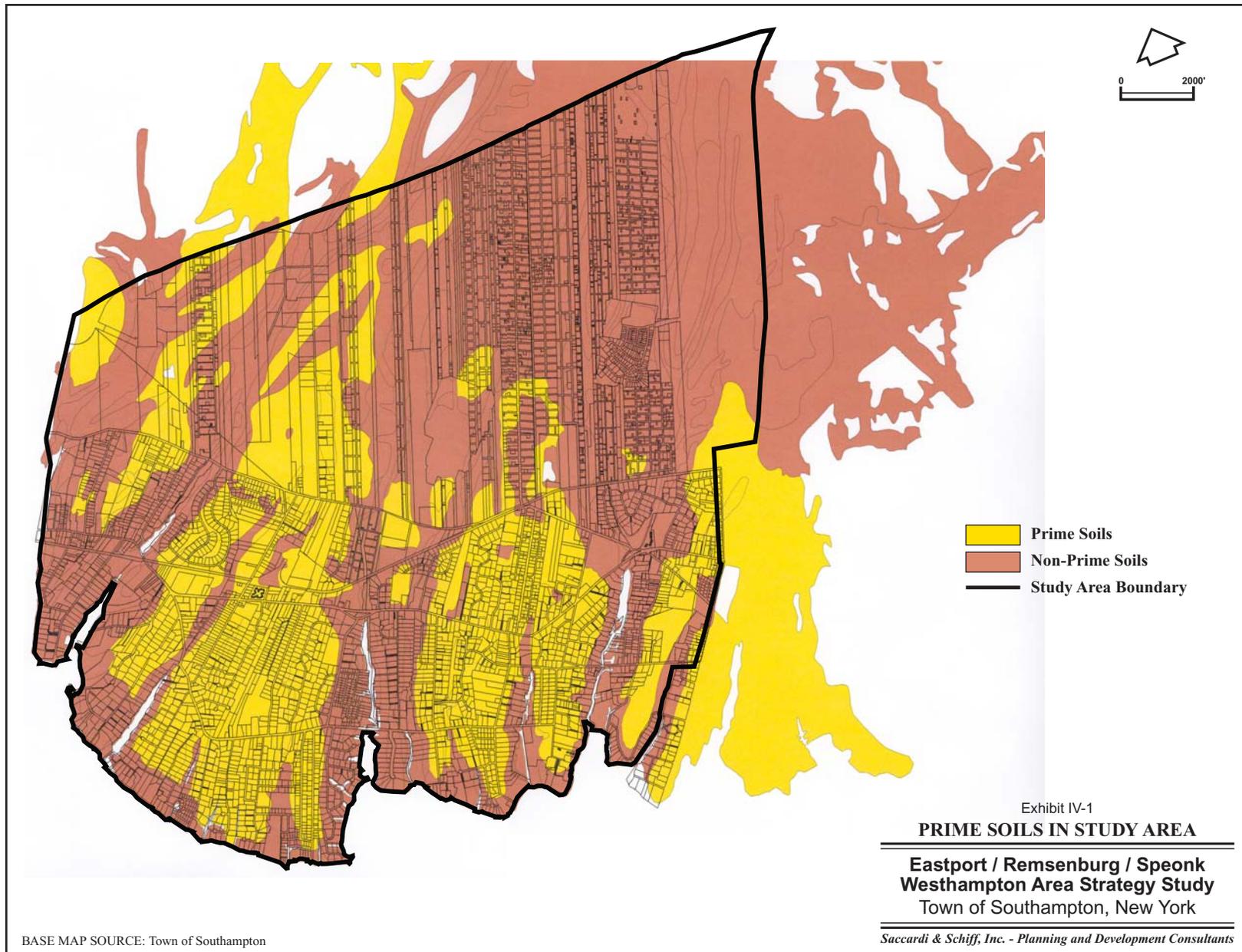
#### Aquifer

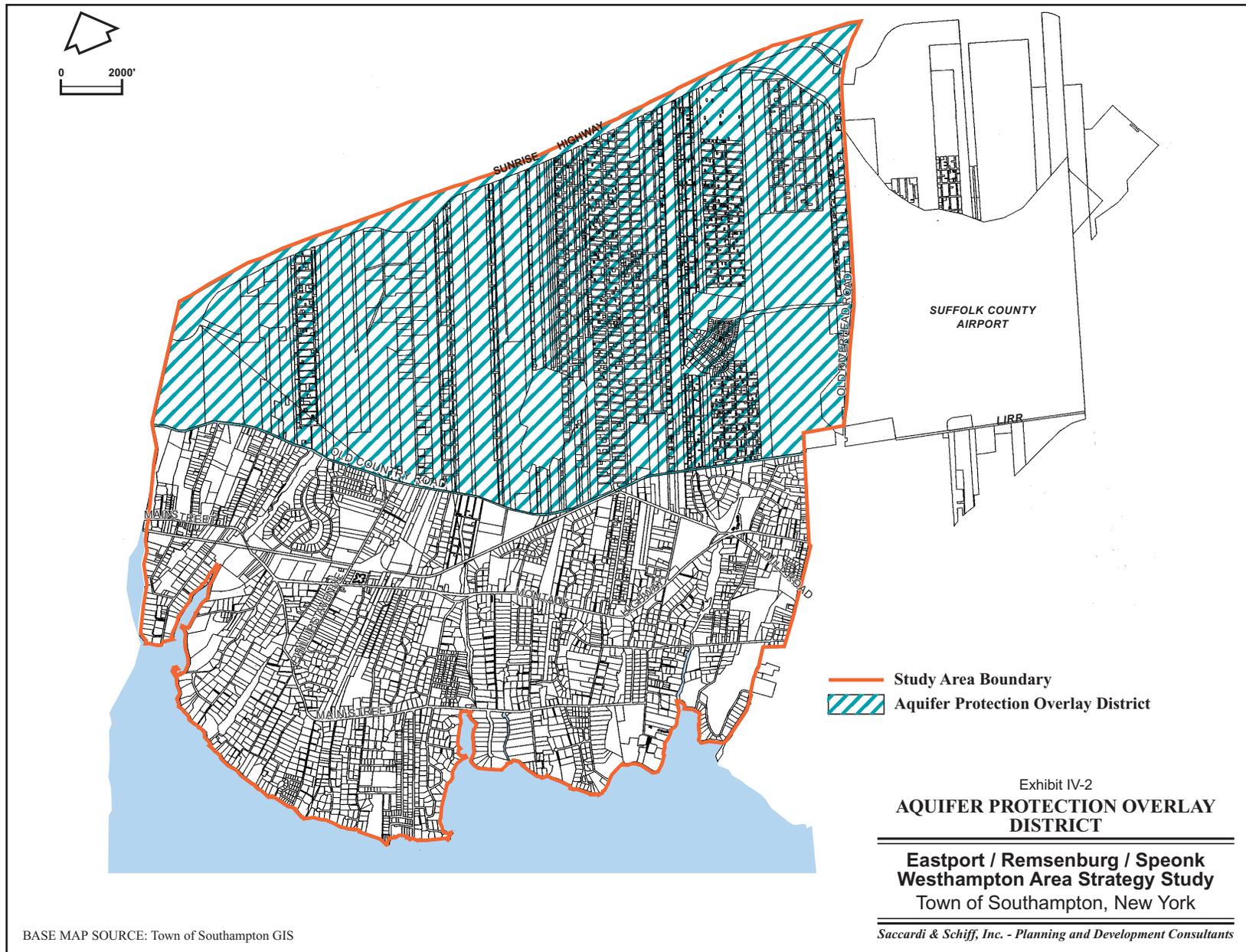
The Study Area is part of two of the eight hydrogeologic zones on Long Island. The northern portion of the Study Area, including primarily the Pine Barrens land, is part of Zone III, which has good groundwater quality in the Upper Glacial and Magothy aquifers. The southern portion of the Study Area is part of Zone IV, which has generally high quality water discharging into streamflow and underflow to Moriches Bay. The Town of Southampton has been designated a sole source aquifer.<sup>3</sup> This sole source aquifer designation means that Southampton has only one groundwater resource for its drinking water supply, making the protection of its groundwater of critical importance. (See Exhibit IV-2).

Recognizing the regional relevance of the local groundwater quality, the Town of Southampton has established an Aquifer Protection Overlay Zone, which controls the lands that have been designated as water catchment regions. This overlay zoning district affects the portion of the Study Area north of Old Country Road and properties are subject to clearing

<sup>2</sup>*Central Pine Barrens Comprehensive Land Use Plan*; Figure 5-2.

<sup>3</sup>*Town of Southampton Comprehensive Plan Update*, 1999; pp. 52-53.





restrictions, and sets limits on fertilizing vegetation. The Town Ordinance recognizes that increased density and types of land use can affect water quality. In addition, the transfer of development rights can help to preserve open space, specifically within the Pine Barrens, to protect groundwater.

Groundwater contamination is a concern among many community members in the Study Area, as public water mains have only recently been installed in some areas and many residents still rely on private wells for potable water. Remediation of polluted sites is regulated and overseen by the U.S. Environmental Protection Agency (EPA) and the N.Y.S. Department of Environmental Conservation (DEC). Two known pollution remediation sites include “BB&S Lumber”<sup>4</sup> on the east side of Speonk-Riverhead Road and “Speonk Solvent VOC Plume”<sup>5</sup> on the west side of Speonk-Riverhead Road and North Phillips Avenue.

### **Waterways**

There are several notable waterbodies located within the Study Area, including the East River in Eastport and the Speonk River and Cook’s Pond in Westhampton, among other local ponds. One of the greatest natural assets that the Study Area offers to residents and visitors alike is the natural beauty of and access to Moriches Bay, which forms the southern boundary of the Study Area. As will be discussed further in later sections, several public roads within the Study Area provide access to Town Trustee properties fronting public rights to Moriches Bay. Beyond Moriches Bay is the Coastal Barrier Island (Dune Road) and then the Atlantic Ocean.

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<sup>4</sup>*Record of Decision, BB&S Treated Lumber Corporation Site, Town of Southampton, Suffolk, Site Number 1-52-123; NYSDEC; February 2000.*

<sup>5</sup>Letter from NYSDEC, Ray E. Cowen, P.E., Regional Director; dated October 29, 2002.

## **LAND USE AND ZONING**

### **Land Use**

Exhibit IV-3 provides a graphic depiction of the existing land use pattern within the Study Area, which is primarily residential in nature, with selected exceptions in and around the hamlet cores, North Phillips Avenue and Speonk-Riverhead Road. Lands north of Old Country Road are primarily vacant; with agricultural, industrial and other commercial uses situated on large lots. The only significant concentration of residential development located north of Old Country Road is Hampton West Park in Westhampton, located off of Old Riverhead Road. Provided below is a further description of the land use pattern.

### ***Agricultural***

There are approximately 350 acres of active agricultural lands within the Study Area. The primary agricultural uses are nurseries and fruit and vegetable farms. These lands often face significant development pressures and the threat of diminishing farmland is real within Suffolk County.

The Town provides strategies for farmland preservation including the use of transfer or purchase of development rights (TDRs/PDRs). As previously discussed, through the use of TDRs, property owners can transfer development density to another property, in return for not developing further on the agricultural parcel. The Town can also purchase development rights from a farm property and allow the landowner to continue agricultural uses on-site, precluding any future development not related to farming – such as residential housing or commercial stores.

To slow the decline of farming, the County has also established a Farmland Preservation Program. This program allows the County to purchase the development rights of