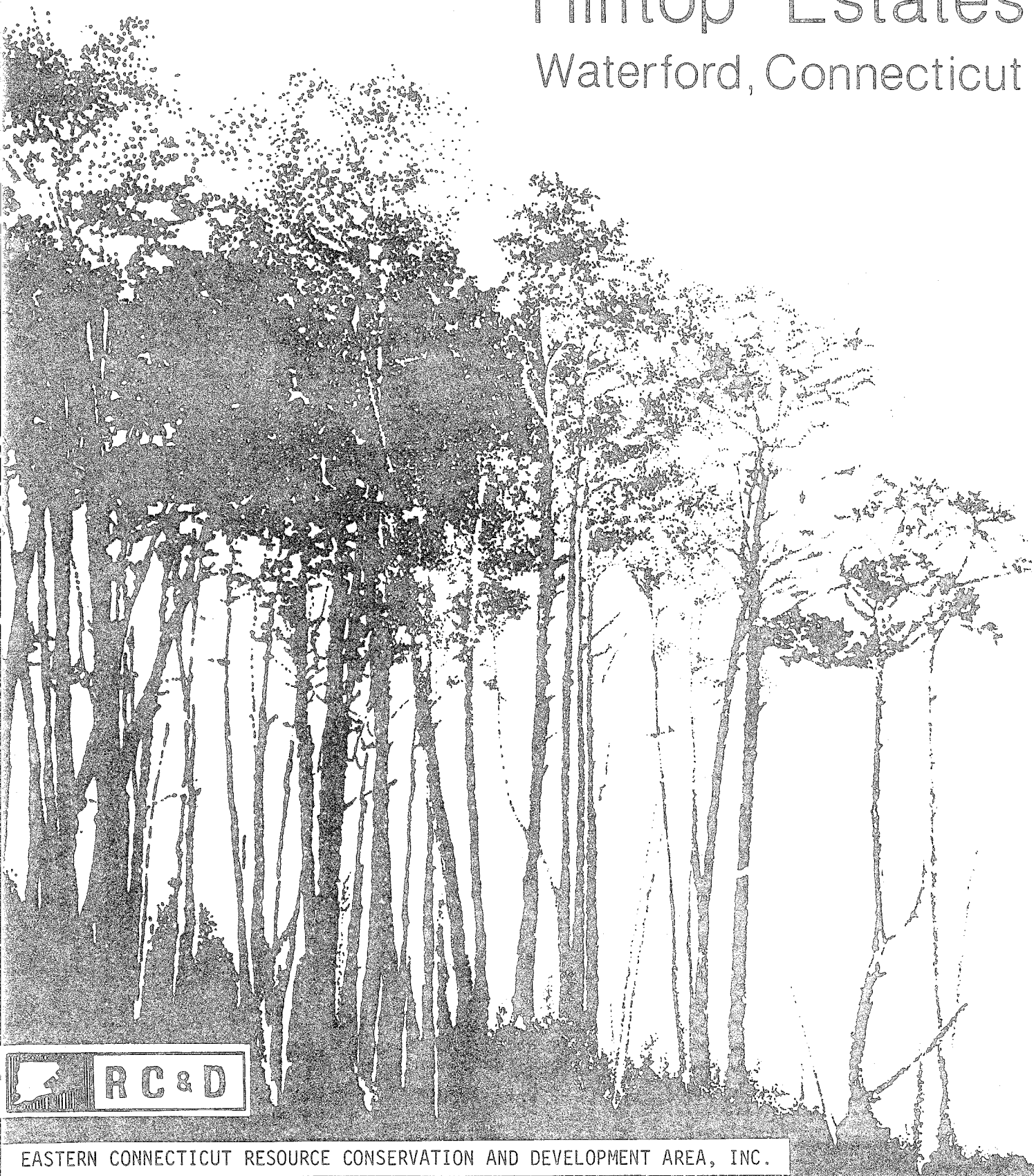


# Environmental Review Team Report

## Hilltop Estates Waterford, Connecticut



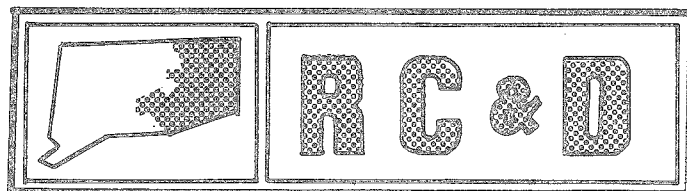
EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.

Environmental Review Team  
Report

on

Hilltop Estates  
Waterford , Connecticut

September 1980

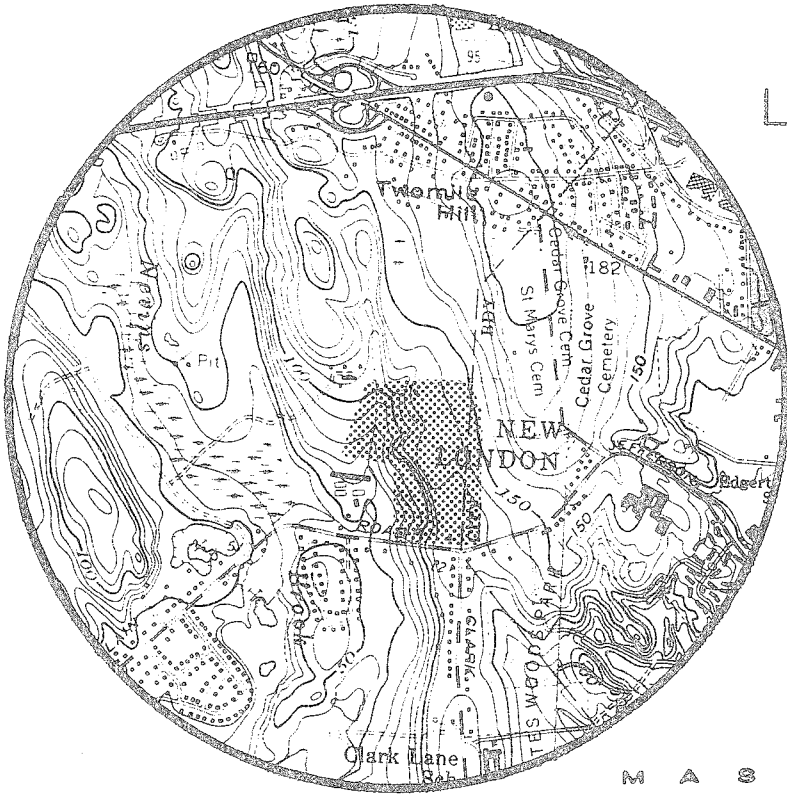


eastern connecticut resource conservation & development area

environmental review team  
139 boswell avenue  
norwich , connecticut 06360

# Location of Study Site

HILLTOP ESTATES  
WATERFORD, CONNECTICUT



EASTERN CONNECTICUT  
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

ENVIRONMENTAL REVIEW TEAM REPORT  
ON  
HILLTOP ESTATES  
WATERFORD, CONNECTICUT

This report is an outgrowth of a request from the Waterford Conservation Commission to the New London County Soil and Water Conservation District (S&WCD). The S&WCD referred this request to the Eastern Connecticut Resource Conservation and Development (RC&D) Area Executive Committee for their consideration and approval as a project measure. The request was approved and the measure reviewed by the Eastern Connecticut Environmental Review Team (ERT).

The soils of the site were mapped by a soil scientist of the United States Department of Agriculture (USDA), Soil Conservation Service (SCS). Reproductions of the soil survey map as well as a topographic map of the site were distributed to all ERT participants prior to their field review of the site.

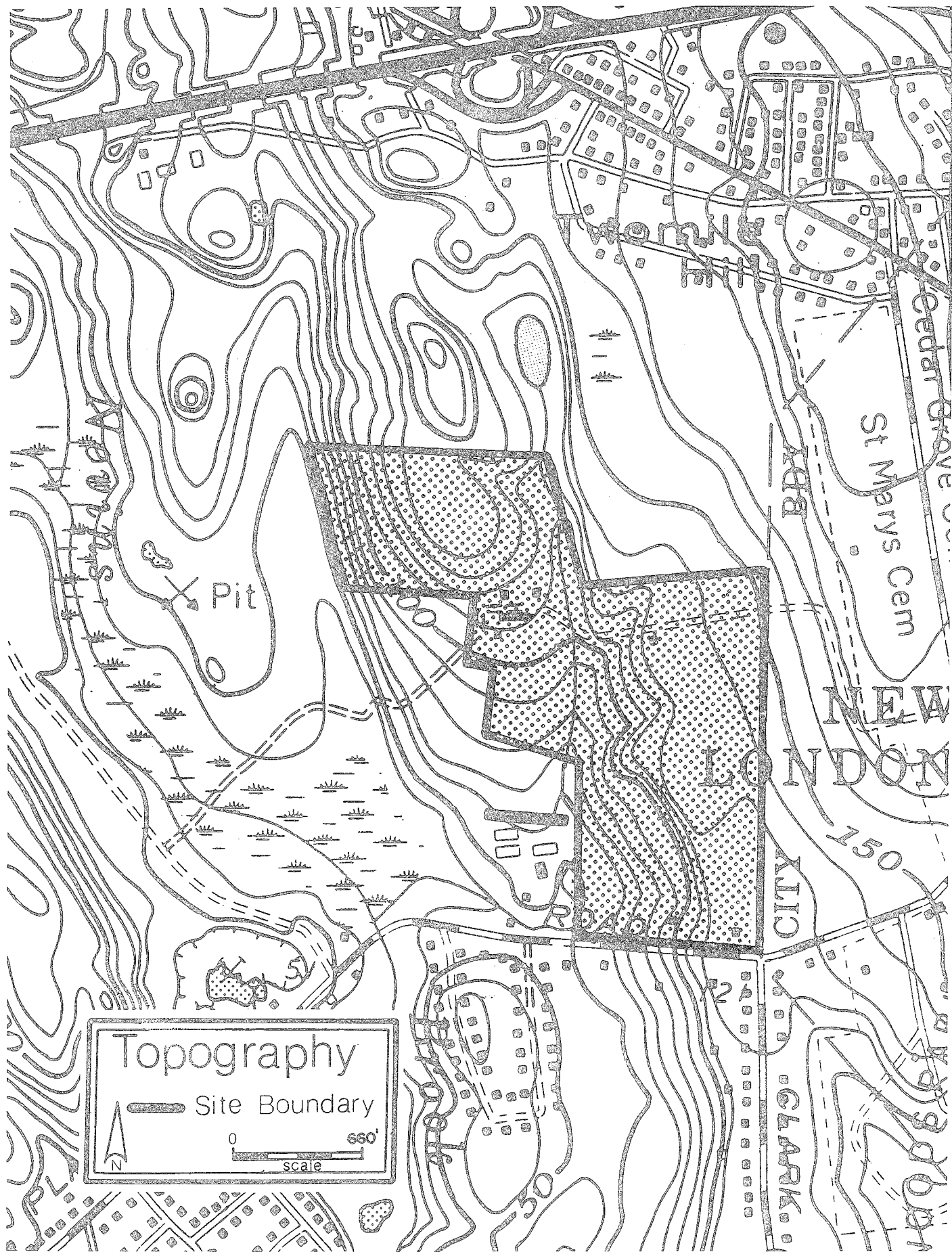
The ERT that field checked the site consisted of the following personnel: Gary Domian District Conservationist, SCS; Mike Zizka, Geologist, Department of Environmental Protection (DEP); Rob Rocks, Forester, DEP; Tom Seidel, Regional Planner, Southeastern Connecticut Regional Planning Agency; and Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Area.

The Team met and field checked the site on Thursday, July 8, 1980. Reports from each Team member were sent to the ERT Coordinator for review and summarization for the final report.

This report is not meant to compete with private consultants by supplying site designs or detailed solutions to development problems. This report identifies the existing resource base and evaluates its significance to the proposed development and also suggests considerations that should be of concern to the developer and the Town of Waterford. The results of this Team action are oriented toward the development of a better environmental quality and the long-term economics of the land use.

The Eastern Connecticut RC&D Project Committee hopes you will find this report of value and assistance in making your decisions on this particular site.

If you require any additional information, please contact: Ms. Jeanne Shelburn, Environmental Review Team Coordinator, Eastern Connecticut RC&D Area, 139 Boswell Avenue, Norwich, Connecticut 06360, 889-2324.



## INTRODUCTION

The Eastern Connecticut Environmental Review Team reviewed a 65± acre parcel located on Fog Plain Road at the request of the Waterford Conservation Commission. The property is currently in the private ownership of San Land Development Corporation. Preliminary plans have been prepared by Igor Vechesloff, a Hartford land surveyor and professional engineer. The site had originally been proposed for subdivision, but this proposal had been withdrawn prior to the field review. The Team subsequently reviewed the site for any type of potential residential development.

Two development alternatives had been prepared for this site. Proposal I (dated April 22, 1980) showed 71 lots of approximately 1/2 acre or more. All lots would be served by public water and public sewer. Access would be provided by two roads extending north from Fog Plain Road each ending in a cul-de-sac. Twenty-two lots would be served by the easternmost road. All remaining lots would be served by the westernmost road. Several small open space areas are included in this proposal.

Proposal II (dated May 5, 1980) shows 52 lots of approximately 1/2 acre each. Public water and sewer would also be used in this proposal. Access would be provided from a single road extending north from Fog Plain Road and terminating in a cul-de-sac. Several lots would front on Fog Plain Road. Approximately 10 to 15 acres is designated as open space.

The site is characterized by overgrown open field vegetation with forested areas on the boundaries of two rectangular areas which comprise the site. A wetland area is present on the eastern boundary of the parcel. Intermittent streams flow on the western boundary and through the central portion of the property. Installation of Town sewer lines has disturbed the stream bed/wetland which extends through the center of the property. Steep slopes are prevalent on the western boundary and southeastern section of the site.

The Team is concerned with the impact of proposed development on the natural resource base of the site. Although severe site limitations can often be overcome with proper engineering techniques, these measures can become costly, making a project financially unfeasible for a developer. Wetlands, steep slopes and intermittent streams are the major limitations to development on this site.

Should the parcel be developed, the site will experience storm water runoff increases and significant increases in peak flood flows of local streams. The major effect would be on the tributary that bisects the site. The magnitude of the effect would be controlled by the ultimate density of the development. Immediate impact on Nevin's Brook would not be noticeable due to the size of its drainage area; however, the Team indicates the potential cumulative impact on the brook should be examined for future development in the now relatively undeveloped drainage area. Also, any development planned for this site should prepare a drainage design to minimize the potential for aquifer pollution (see Hydrology section of this report).

An erosion and sediment control plan should be prepared for development on this site and implemented prior to and maintained during construction. Soil Conservation Service personnel can aid the Town or developer in preparing such a plan.

plan. Woodbridge soils dominate the southeastern portion of the property and although these soils are not designated as wetland soils, they do have a seasonal high water table which could present problems with wet basements and frost heaving.

In the Team's opinion a "cluster" approach to development of this site would be most appropriate. In this way, the more easily developed portions of the site could be used for home sites and those more sensitive areas could be reserved for open space. Cluster developments are allowed in other zones in Waterford (R-40 and R-120). It is suggested that allowing "cluster" in this area may be of benefit to the Town and any future developer.

## ENVIRONMENTAL ASSESSMENT

### GEOLOGY

"Hilltop Estates" is located in an area encompassed by the Niantic topographic quadrangle. Bedrock and surficial geologic maps of the quadrangle have been prepared by Richard Goldsmith and published by the U.S. Geological Survey (respectively, Map GQ-575 and GQ-329).

Goldsmith describes the bedrock underlying and cropping out on the site as a light gray, medium-grained to fine-grained, massive gneissic granodiorite. The term "massive" indicates that the rock is not well-layered. "Gneissic" means that the rock is lineated: elongate minerals have become aligned into thin bands. "Granodiorite" describes the mineral composition of the rock: mostly quartz and oligoclase with subordinate microcline and minor percentages of biotite and magnetite. It is the biotite that gives the rock its lineation.

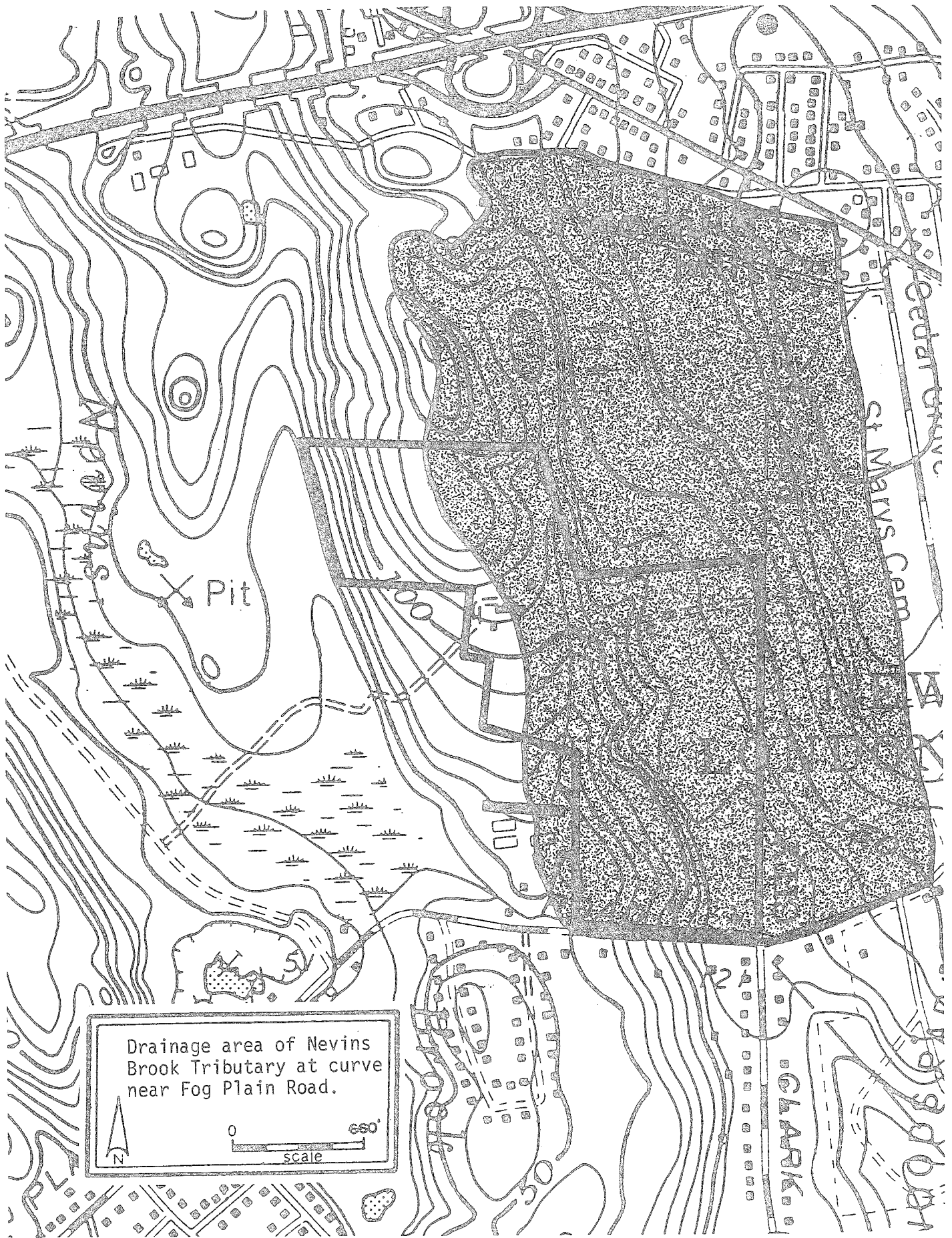
Bedrock crops out in a few places, but on most of the site it is overlain by till. Till is a glacial sediment consisting of rock debris of widely ranging and intermixed sizes and shapes. The debris was produced by the bulldozing action of a moving sheet of ice. The ice collected the rock material as it flowed southward through New England, and redeposited it directly, without transport by meltwaters. The till on the site appears to be mostly coarse, with sand and gravel being the primary constituents and silt and boulders being lesser components. A siltier, more compact unit may be present at depths of three feet or more.

### HYDROLOGY

The property lies within the Nevins Brook watershed. About 47 acres of the site drains to a south-flowing tributary stream that bisects the property. Near Fog Plain Road, the stream bends sharply west, flowing 1,000 feet to join Nevins Brook. At the bend, the tributary drains a total area of approximately 180 acres. The remainder of the site drains westward to a swale, then south into the wetlands along Nevins Brook.

Development of the site would lead to runoff increases which, in turn, could produce significant increases in the peak flood flows of the local streams. The major effect would be on the tributary that bisects the site. The magnitude of the effect would be controlled largely by the ultimate density of the development.







Preliminary analyses of the local hydrology indicate that the proposed 71-lot development could cause peak flow increases of about 15 percent for the 25-year, 50-year, and 100-year storms. The alternate 52 lot development could cause peak flow increases of about 10 percent for the same storms. The impact of the development on Nevins Brook's flood flows would not be very noticeable (peak flow increases for the major storms would probably be less than 5 percent) because the brook drains more than four times the area that its tributary drains. Nevertheless, since the watershed of Nevins Brook is presently largely undeveloped, this particular site should be viewed in the context of its possible role in a cumulative impact on the brook; in other words, although development of this site alone would not significantly increase flows in Nevins Brook, a series of similar developments may have a severe cumulative impact. For this reason, runoff retention measures should be considered.

Overall runoff from the site during larger storms could increase by about one-third with a 71-lot development, or one-fourth with a 52-lot development. Coupled with widespread removal of vegetation, these increases could lead to serious erosion problems. A well-designed and implemented erosion control plan would therefore be essential to the success of either development scheme.

It should also be noted with regard to the development of this site that the valley of Nevins Brook contains thick stratified drift deposits. These deposits are believed to have a good potential for the development of high-yielding groundwater-supply wells (see Connecticut Water Resources Bulletin No. 15, plate D). For this reason, special care should be used in the planning of any subdivision drainage scheme to minimize the potential for pollution of the aquifer (e.g. by road salts). That portion of the valley located immediately west and southwest of the site looks particularly promising, making the development of the site especially worthy of concern.

## SOILS

A detailed soils map of this site is included in the Appendix to this report, accompanied by a chart which indicates soil limitations for various urban uses. As the soil map is an enlargement from the original 1,320'/inch scale to 660'/inch, the soil boundary lines should not be viewed as absolute boundaries, but as guidelines to the distribution of soil types of the site. The soil limitation chart indicates the probable limitations for each of the soils for on-site sewage disposal, buildings with basements, streets and parking, and landscaping. However, limitations, even though severe, do not preclude the use of the land for development. If economics permit large expenditures for land development and the intended objective is consistent with the objectives of local and regional development, many soils and sites with difficult problems can be used. The soils map, with the publication "Special Soils Report: Southeastern Connecticut Region," can aid in the identification and interpretation of soils and their uses on this site. "Know Your Land: Natural Soil Groups for Connecticut" can also give insight to the development potentials of the soils and their relationship to the surficial geology of the site.

The gently sloping to sloping landforms are occupied by Canton-Charlton very stony fine sandy loams. The soils are designated by the mapping unit symbols 11XB and 11XC. The symbol "X" denotes very stony. "B" indicates 3 to 8 percent slopes and "C" indicates 8 to 15 percent slopes. Canton-Charlton soils formed in deep loamy glacial till. The soils are well-drained. Permeability of the soils ranges from rapid to moderate. Surface runoff is rapid to medium.

The gently sloping to steep landforms are occupied by Canton-Charlton extremely stony fine sandy loams. The soils are designated by the mapping unit symbols 11MC and 11MD. The symbol "M" denotes extremely stony, "C" indicated 3 to 15 percent slopes and "D" indicates 15 to 35 percent slopes. These soils formed in deep loamy glacial till. The soils are well-drained. Permeability of the soils ranges from rapid to moderate. Surface runoff is rapid to medium.

The gently sloping to sloping landforms are occupied by Charlton-Hollis fine sandy loams. These soils are designated by the mapping unit symbol 17LC. The Charlton soils are formed in deep friable glacial till, and the Hollis soils formed in glacial till less than 20 inches deep over bedrock. Both soils are well-drained. Charlton soils have moderate to moderately rapid permeability, and the Hollis soils have moderate permeability. Surface runoff is medium to very rapid for Hollis soils and medium to rapid for Charlton soils.

The nearly level to gently sloping landforms are occupied by Woodbridge fine sandy loam. The soils are designated by the mapping unit symbols 31A and 31B. The symbol A denotes 0 to 3 percent slopes and B denotes 3 to 8 percent slopes. Woodbridge soils formed in compact glacial till. The soils are moderately well drained. The soils have moderate permeability in the surface layer and subsoil, and slow to very slow permeability in the substratum (fragipan). The seasonal high water table is at 10 to 24 inches. Woodbridge soils have slow to rapid surface runoff.

The nearly level to gently sloping landforms are occupied by Woodbridge very stony fine sandy loam. The soils are designated by the mapping unit symbol 31XB. The symbol "X" indicates very stony surface conditions and the symbol B denotes a 0 to 8 percent slope. Woodbridge soils formed in compact glacial till. The soils are moderately well drained. They have moderate permeability in the surface layer and subsoil and slow to very slow permeability in the substratum (fragipan). The seasonal high water table is at 18 to 24 inches. Woodbridge soils have slow to rapid surface runoff.

Land areas that have been disturbed to an extent that the natural sequence of soil layers are no longer recognizable are mapped as Udorthents. These soils are designated with the mapping unit symbol ML2. Interpretations and limitations are too variable to rate because of the disturbed nature of the soil.

The low lying, nearly level areas along drainageways in the landscape are occupied by Ridgebury, Leicester and Whitman extremely stony fine sandy loams. The soils are designated by the mapping unit symbol 43M. The Ridgebury and Whitman soils formed in compact glacial till; the Leicester soils formed in friable glacial till. The Ridgebury and Leicester soils are poorly drained and the Whitman soil is very poorly drained. The Ridgebury and Whitman soils have moderate to moderately rapid permeability in the surface layer and subsoil and slow or very slow permeability in the substratum (fragipan). The Leicester soils have moderately rapid permeability throughout. The seasonal highwater table for Ridgebury and Leicester soils is at or near the surface 7 to 9 months of the year. The Whitman soil has a highwater table at or near the surface 9 to 10 months of the year. Whitman soils have high runoff potential. Runoff is slow to medium in Ridgebury soils and slow in Leicester soils. This soil is designated as a wetland soil and is regulated under Public Act 155.

The following soils qualify as Prime Farmlands soils: Woodbridge fine sandy loam (31A) and (31B).

Prime farmland, as defined by the U.S. Department of Agriculture, is the land that is best suited to producing food, feed, forage, fiber and oilseed crops. It has the soil quality, growing season, and moisture supply needed to economically produce a sustained high yield of crops when it is treated and managed using acceptable farming methods. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment.

The planned proposal indicates public water and sewer will be used. This would eliminate the moderate and severe limitations for on site sewage use. Other land uses will be limited by slope, wetness and depth to bedrock.

Two areas on the property, mapped as 11MD, do have severe limitations for homesite location due to slope. These moderately steep slopes would require roads and homesites to be cut into slopes. Cut and fill operations will interrupt the natural runoff flow from these slopes, which is in a southwesterly direction. Diversion of runoff water above these slopes would be necessary to prevent sideslope erosion, water seeping into basements and water ponding behind road fill areas. Culverts and stable outlets would also be necessary to control excess water along the road. Increased development on an area will increase the rate of runoff, so lot location must also consider runoff routes between homes. Surface stones are a limitation to equipment, particularly during the land clearing phase of development.

The soils mapped as 31A, 31B and 31XB have severe limitations due to a seasonal high watertable. A firm subsoil layer called a fragipan occurs at approximately 26 inches and impedes vertical drainage, and can cause water to run horizontally on top of the fragipan. This situation can cause wet basements and seep areas in lawns and roadways. Frost heaving is a problem for buildings without basements and on roads and streets.

The soils mapped as 17LC have limitations due to shallow to bedrock conditions. This area would have limited use except for open space. Rock outcrops are obvious in this area.

Limitations in the soil areas mapped as 11MC and 11XC are due primarily to slope and surface stoniness. The soils mapped as 11XB are limited primarily because of surface stoniness. The soils are well drained and suitable for urban uses.

Variable limitations exist on the soils mapped as ML2. These soils are occupied by an apartment complex on the east side of the property and by the sewer line going south through the property.

The wetland soils 43M are regulated by the local wetlands commission. Prior approval is needed from the commission to alter designated wetlands. Wetlands are best left undisturbed to function as storm water storage areas and as buffer zones within the development area.

## VEGETATION

The 65<sup>±</sup> acre parcel may be divided into three major vegetation types. These include mixed hardwoods, 26<sup>±</sup> acres; old field, 25<sup>±</sup> acres; and hardwood swamp, 8<sup>±</sup> acres. The remaining 6 acres were used for the sewer line (4 acres), and residential development (2 acres). (See Vegetation Type Map and Vegetation Type Description.) If the forested areas are to be developed, some of the healthiest trees should be retained for aesthetic purposes. If not, the forested areas should receive thinnings to improve tree health and vigor. Windthrow is a potential hazard in the hardwood swamp and streambelt areas. Development in these areas will increase windthrow potential.

### Vegetation Type Descriptions

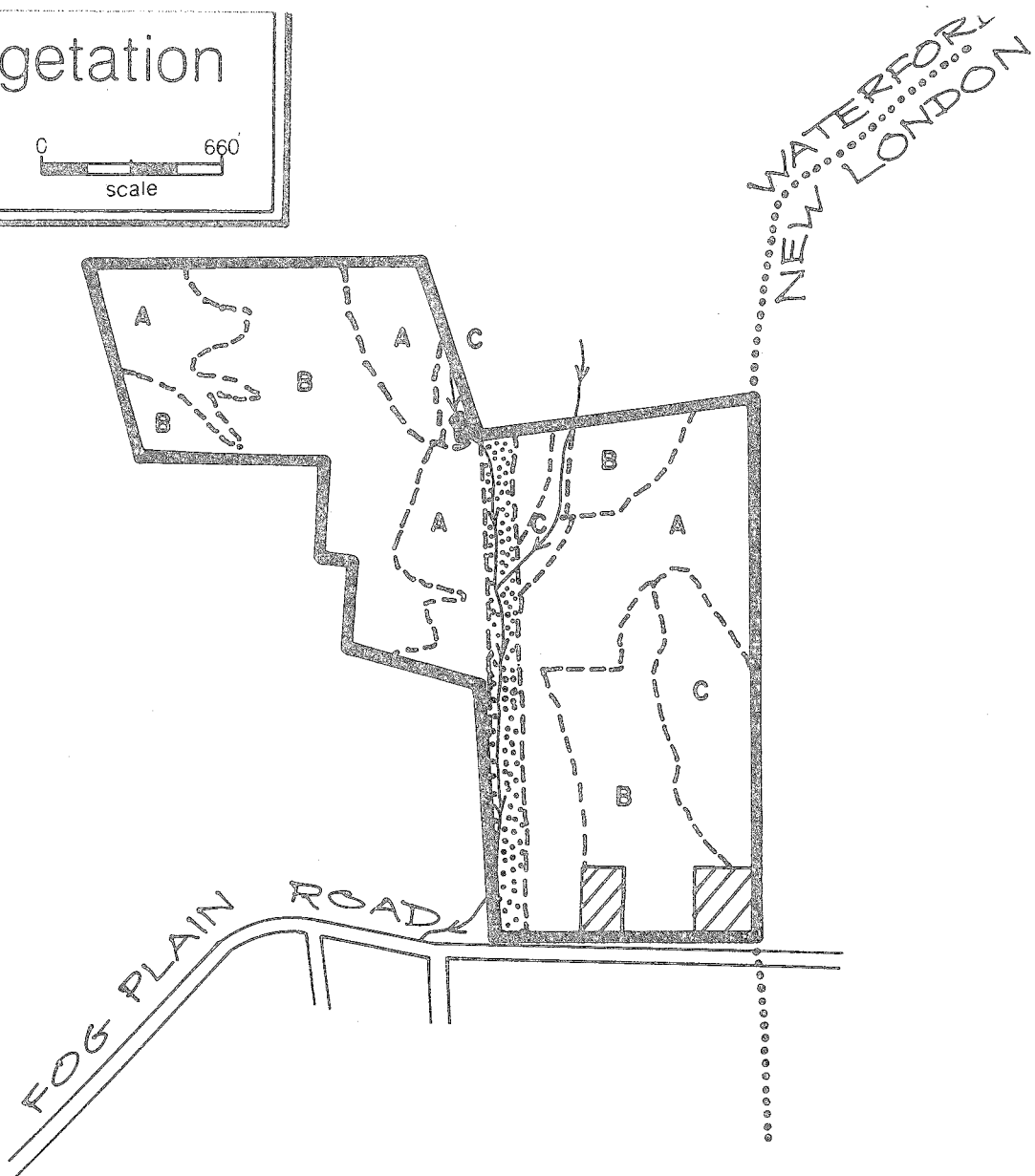
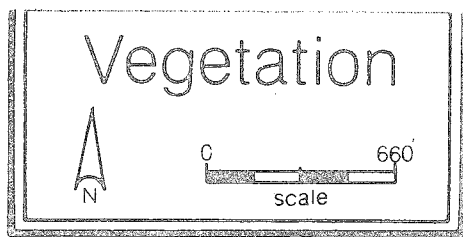
Type A (Mixed Hardwoods). This 26<sup>±</sup> acre fully stocked stand is made up of poor to medium quality, pole to sawtimber-size white oak, red oak, black oak, black birch, pignut hickory, and red maple with occasional yellow birch, black cherry and American beech. Hardwood tree seedlings, maple-leaved viburnum, witch hazel, arrowwood and flowering dogwood form the understory in this stand. Ground cover vegetation consists of grasses, barberry, poison ivy, Virginia creeper, broad beech fern, and Christmas fern with sedges, wild chives, St. John's wort, spirea and Solomon's Seal in the wettest areas.

Type B (Old Field). Twenty five acres of old fields are present within this tract. Shrub species are becoming abundant. These include gray stemmed dogwood, multiflora rose, barberry, smooth sumac, and staghorn sumac. Grasses, sedges, raspberry, blackberry, elderberry, pokewood, spirea, rhubarb, milkweed, Queen Anne's lace, touch-me-not, bittersweet, nightshade, goldenrod, tall cinquefoil, ox-eye daisy, blue phlox, blue toadflax, depthford pink, great lobelias, stinging nettle and several species of thistle are also present. Vine species common to this area include poison ivy, Japanese honeysuckle, and oriental bittersweet.

Type C (Hardwood Swamp). Pole-size red maple, white ash and yellow birch are present in this 8 acre fully stocked stand. Red oak and black birch are present where this stand blends into the mixed hardwood stand. A dense understory of spicebush and sweet pepperbush is present throughout this stand. Ground cover species in this area include sedges, skunk cabbage, hayscented fern, cinnamon fern and false hellebore.

If forested areas are to be developed, it would be desirable to retain some of the largest, healthiest trees for their aesthetic and shade value. Recent research has shown that healthy trees on a house lot may enhance the value of that lot by as much as twenty percent.

Where possible, trees that are to be retained should be protected from mechanical injury and soil disturbances within the entire area under their crowns. Trees in general are very sensitive to disturbances, such as grading and excavating, which affect soil aeration, soil moisture levels and soil composition. Such disturbances may lower the health and vigor of trees and in severe cases may even cause tree mortality within three to five years after the disturbance. Trees that are to be retained should be temporarily but clearly marked so that they may be more easily avoided during construction.



#### LEGEND

- Road
- Property Boundary
- Vegetation Type Boundary
- Sewer Line 4<sup>±</sup> Acres
- Residential Area 2<sup>±</sup> Acres
- Stream With Pond

#### VEGETATION TYPES\*

- TYPE A. Mixed hardwoods, 26<sup>±</sup> acres, Fully stocked, pole to sawtimber-size.
- TYPE B. Old field, 25<sup>±</sup> acres, old field brush species.
- TYPE C. Hardwood swamp, 8<sup>±</sup> acres, fully stocked, pole-size.

- \* Seedling-size = Trees less than 1 inch in diameter at 4 1/2 feet above the ground (d.b.h.)
- Sapling-size = Trees 1 to 5 inches in d.b.h.
- Pole-size = Trees 5 to 11 inches in d.b.h.
- Sawtimber-size = Trees 11 inches and greater in d.b.h.

If preservation of the sensitive wetland and streambelt areas for open space is desired by the town, retention of an undeveloped buffer strip of 50 feet or more in these areas will help to preserve their quality, and lessen the chances of windthrow.

Windthrow is a potential hazard in the hardwood swamp (Vegetation Type C), and along the streams which pass through this property.

In these areas tree root systems are of limited depth, as a result of the high water table. The windthrow potential is high because tree roots cannot become securely anchored in these saturated soils. Openings created in or along side these areas, which allow wind to pass through rather than over these areas may increase the windthrow hazard and therefore should be avoided if at all possible.

### Suggested Management

If the forested portions of this tract are to be retained as open space, the health and vigor of the trees present could be enhanced by a commercial thinning. The removal of approximately one-third of the total volume in all size classes, would open the canopy to allow more light to reach the residual trees. This thinning would reduce competition for space, sunlight, water and nutrients, thus improving the health and vigor of residual trees over time. This thinning should be focused on removing the poorest trees in this stand. It should provide between 5 and 7 cords of fuelwood per acre.

If areas of the mixed hardwood stand (Vegetation Type A) are cleared for development of roads or house lots, the trees that are removed should be utilized as fuelwood. These areas will provide between 17 and 21 cords of fuelwood per acre.

A consultant forester or public service forester should be contacted to help mark the trees that are to be removed if this thinning is planned.

### WATER SUPPLY/WASTE DISPOSAL

Public water supply and public sewage disposal is available at this site. Higher housing densities would be more feasible with these facilities, than in areas where on-site systems would be necessary.

### SURROUNDING LAND USES

Surrounding land uses are high density residential in New London and moderate density residential, agriculture and open space in Waterford.

### ROADS/ACCESS

Access to the site is from Fog Plain Road. This road has both a horizontal and vertical curve in the vicinity of this site. Right angle road access should be made directly across from Clark Lane if enough land for a right of way is available or could be made available at the eastern border. This would provide a good location for a future traffic light and could also serve as an eventual extension of Clark Lane, north to the vicinity of Routes 85 and 95.



Long deadend streets on the site could be avoided in part by using the old east-west farm road and connecting it to Michael and Anthony Streets in New London immediately to the east.

Hourly bus service is also available immediately east of the site at Anthony Street.

#### DESIGN CONSIDERATIONS

In locating housing on this site, it would be best to avoid areas of steep slopes and wetlands, and to use the forested areas for buffers and open space. Fortunately, on this site the open areas are located approximately in the center of the two rectangular areas which form the 65± acre parcel. The wetlands, slope and forested areas are along the edges of these rectangular formations. This can be used to advantage by having the wetlands and forested areas buffer the multi-family development to the east, and the forested areas and steep slopes buffer any future industrial development to the north-northwest. The stream and sewer interceptor line running north-south could form an open space-greenbelt in the middle of the property.

Design of the site could also be enhanced by use of the cluster development principle, whereby individual dwelling units are grouped close together on individual lots with the remainder of the land remaining as permanent open space. Section 3.16 of the Waterford zoning regulations currently permit cluster in the R-40 and R-120 zones. If this provision were extended to R-20 zones also, then the principle could be used in this area of town.

# Appendix

# Soils



0

660<sup>b</sup>

SCALE



43M

17LC

35XB

31XB

NEW LONDON WATERFORD



11MC

MD

43M

UINC

17LC

IXC

ML:2

11XB

KIXED

31XB

ML2

ML2

31A

43  
M

92

11MD

318

63A

63A

31A

FOG PLAIN RD

HILLTOP ESTATES  
WATERFORD, CONNECTICUT  
PROPORTIONAL EXTENT OF SOILS AND THEIR LIMITATIONS FOR CERTAIN LAND USES

Soil Series	Soil Symbol	Approx. Acres	Percent of Acres	Principal Limiting Factor	Urban Use Limitations*			
					On-Site Sewage	Buildings with Basements	Streets & Parking	Land-Scaping
Canton-Charlton	11XB	12	15	Large stones	2	2	2	2
Canton-Charlton	11XC	8	10	Slope, large stones	2	2	2	2
Canton-Charlton	11MC	3	4	Large stones	3			
Canton-Charlton	11MD	14	17	Slope, large stones	3	3	3	3
Charlton-Hollis Charlton Part Hollis Part	17LC	4	5	Slope, large stones, depth to bedrock	2 3	2 3	2 3	2 3
Ridgebury, Leicester, Whitman*	43M	4	5	Large stones, percs slowly	3	3	3	3
Woodbridge	31A	5	6	Percs slowly	3	3	3	1
Woodbridge	31B	2	3	Percs slowly	3	3	3	1
Woodbridge	31XB	8	10	Percs slowly	3	3	3	2
Udorthents	ML2	$\frac{20}{78}$	$\frac{25}{100}$					

Limitations: 1=slight, 2=moderate, 3=severe.

\* Regulated wetland soil under P.A. 155.

## SOIL INTERPRETATIONS FOR URBAN USES

The ratings of the soils for elements of community and recreational development uses consist of three degrees of "limitations:" slight or no limitations; moderate limitations; and severe limitations. In the interpretive scheme various physical properties are weighed before judging their relative severity of limitations.

The user is cautioned that the suitability ratings, degree of limitations and other interpretations are based on the typical soil in each mapping unit. At any given point the actual conditions may differ from the information presented here because of the inclusion of other soils which were impractical to map separately at the scale of mapping used. On-site investigations are suggested where the proposed soil use involves heavy loads, deep excavations, or high cost. Limitations, even though severe, do not always preclude the use of land for development. If economics permit greater expenditures for land development and the intended land use is consistent with the objectives of local or regional development, many soils and sites with difficult problems can be used.

### Slight Limitations

Areas rated as slight have relatively few limitations in terms of soil suitability for a particular use. The degree of suitability is such that a minimum of time or cost would be needed to overcome relatively minor soil limitations.

### Moderate Limitations

In areas rated moderate, it is relatively more difficult and more costly to correct the natural limitations of the soil for certain uses than for soils rated as having slight limitations.

### Severe Limitations

Areas designated as having severe limitations would require more extensive and more costly measures than soils rated with moderate limitations in order to overcome natural soil limitations. The soil may have more than one limiting characteristic causing it to be rated severe.

# About the Team

The Eastern Connecticut Environmental Review Team (ERT) is a group of professionals in environmental fields drawn together from a variety of federal, state, and regional agencies. Specialists on the Team include geologists, biologists, foresters, climatologists, soil scientists, landscape architects, archeologists, recreation specialists, engineers and planners. The ERT operates with state funding under the supervision of the Eastern Connecticut Resource Conservation and Development (RC&D) Area.

The Team is available as a public service at no cost to Connecticut towns.

## PURPOSE OF THE TEAM

The Environmental Review Team is available to help towns and developers in the review of sites proposed for major land use activities. To date, the ERT has been involved in reviewing a wide range of projects including subdivisions, sanitary landfills, commercial and industrial developments, sand and gravel operations, elderly housing, recreation/open space projects, watershed studies and resource inventories.

Reviews are conducted in the interest of providing information and analysis that will assist towns and developers in environmentally sound decision-making. This is done through identifying the natural resource base of the project site and highlighting opportunities and limitations for the proposed land use.

## REQUESTING A REVIEW

Environmental reviews may be requested by the chief elected officials of a municipality or the chairman of town commissions such as planning and zoning, conservation, inland wetlands, parks and recreation or economic development. Requests should be directed to the Chairman of your local Soil and Water Conservation District. This request letter should include a summary of the proposed project, a location map of the project site, written permission from the landowner allowing the Team to enter the property for purposes of review, and a statement identifying the specific areas of concern the Team should address. When this request is approved by the local Soil and Water Conservation District and the Eastern Connecticut RC&D Executive Council, the Team will undertake the review on a priority basis.

For additional information regarding the Environmental Review Team, please contact Jeanne Shelburn (889-2324), Environmental Review Team Coordinator, Eastern Connecticut RC&D Area, 139 Boswell Avenue, Norwich, Connecticut 06360.