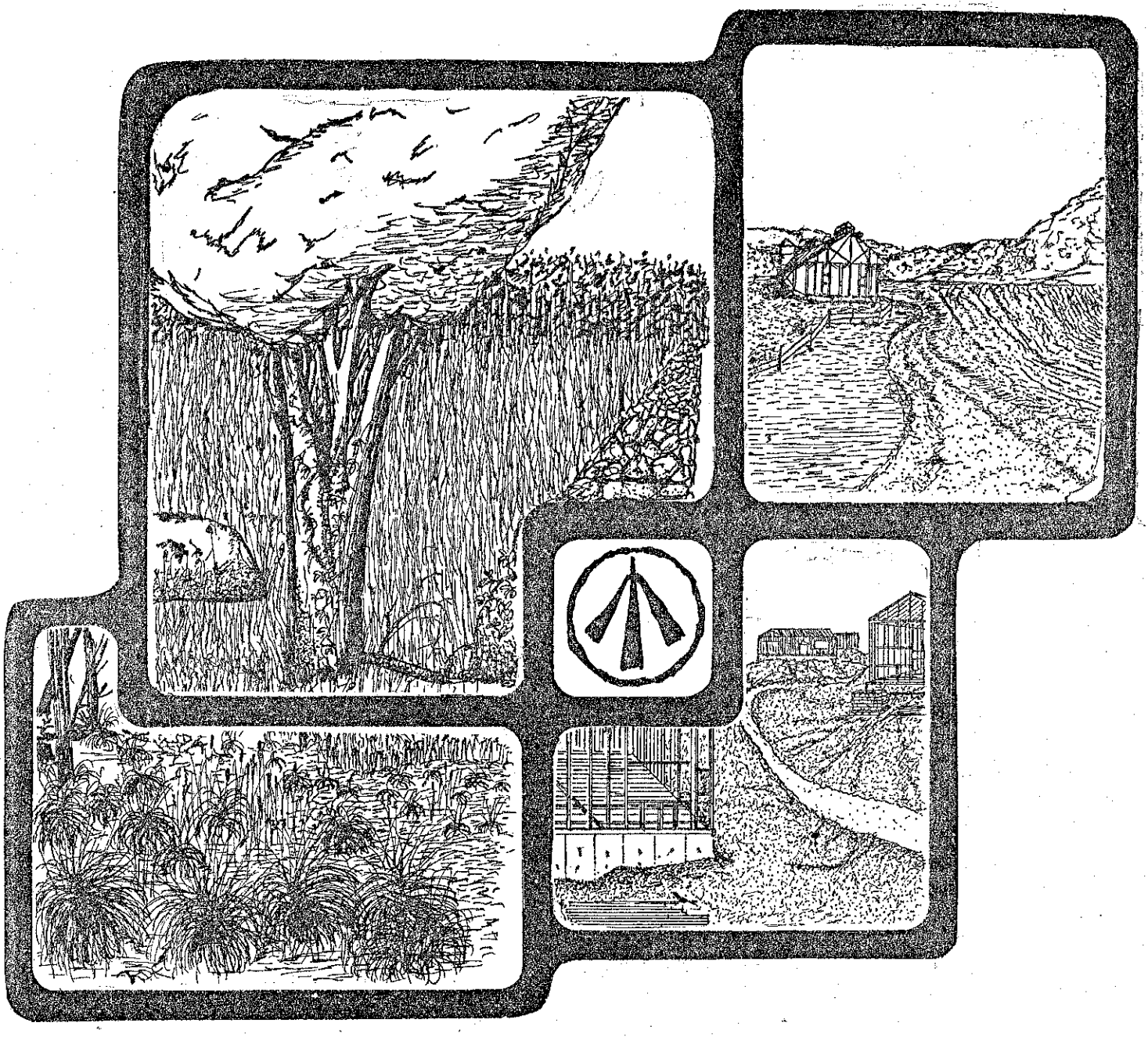
ENVIRONMENTAL REVIEW TEAM REPORT



BREEZY HILL
NEW HARTFORD AND CANTON, CONNECTICUT

KING'S MARK
RESOURCE CONSERVATION & DEVELOPMENT AREA

KING'S MARK
ENVIRONMENTAL REVIEW TEAM REPORT

ON

BREEZY HILL
NEW HARTFORD AND CANTON, CONNECTICUT

AUGUST 1980

King's Mark Resource Conservation and Development Area

Environmental Review Team

P. O. Box 30

Warren, Connecticut 06754

ACKNOWLEDGMENTS

The King's Mark Environmental Review Team operates through the cooperative effort of a number of agencies and organizations including:

Federal Agencies
U.S.D.A. SOIL CONSERVATION SERVICE

State Agencies
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEPARTMENT OF HEALTH
DEPARTMENT OF TRANSPORTATION
UNIVERSITY OF CONNECTICUT COOPERATIVE EXTENSION SERVICE

Local Groups and Agencies
LITCHFIELD COUNTY SOIL AND WATER CONSERVATION DISTRICT
NEW HAVEN COUNTY SOIL AND WATER CONSERVATION DISTRICT
HARTFORD COUNTY SOIL AND WATER CONSERVATION DISTRICT
FAIRFIELD COUNTY SOIL AND WATER CONSERVATION DISTRICT
NORTHWESTERN CONNECTICUT REGIONAL PLANNING AGENCY
VALLEY REGIONAL PLANNING AGENCY
LITCHFIELD HILLS REGIONAL PLANNING AGENCY
CENTRAL NAUGATUCK VALLEY REGIONAL PLANNING AGENCY
HOUSATONIC VALLEY COUNCIL OF ELECTED OFFICIALS
AMERICAN INDIAN ARCHAEOLOGICAL INSTITUTE

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Richard Lynn, ERT Coordinator
Rebecca West, ERT Cartographer
Irene Nadig, Secretary
Patricia Dyer, Secretary

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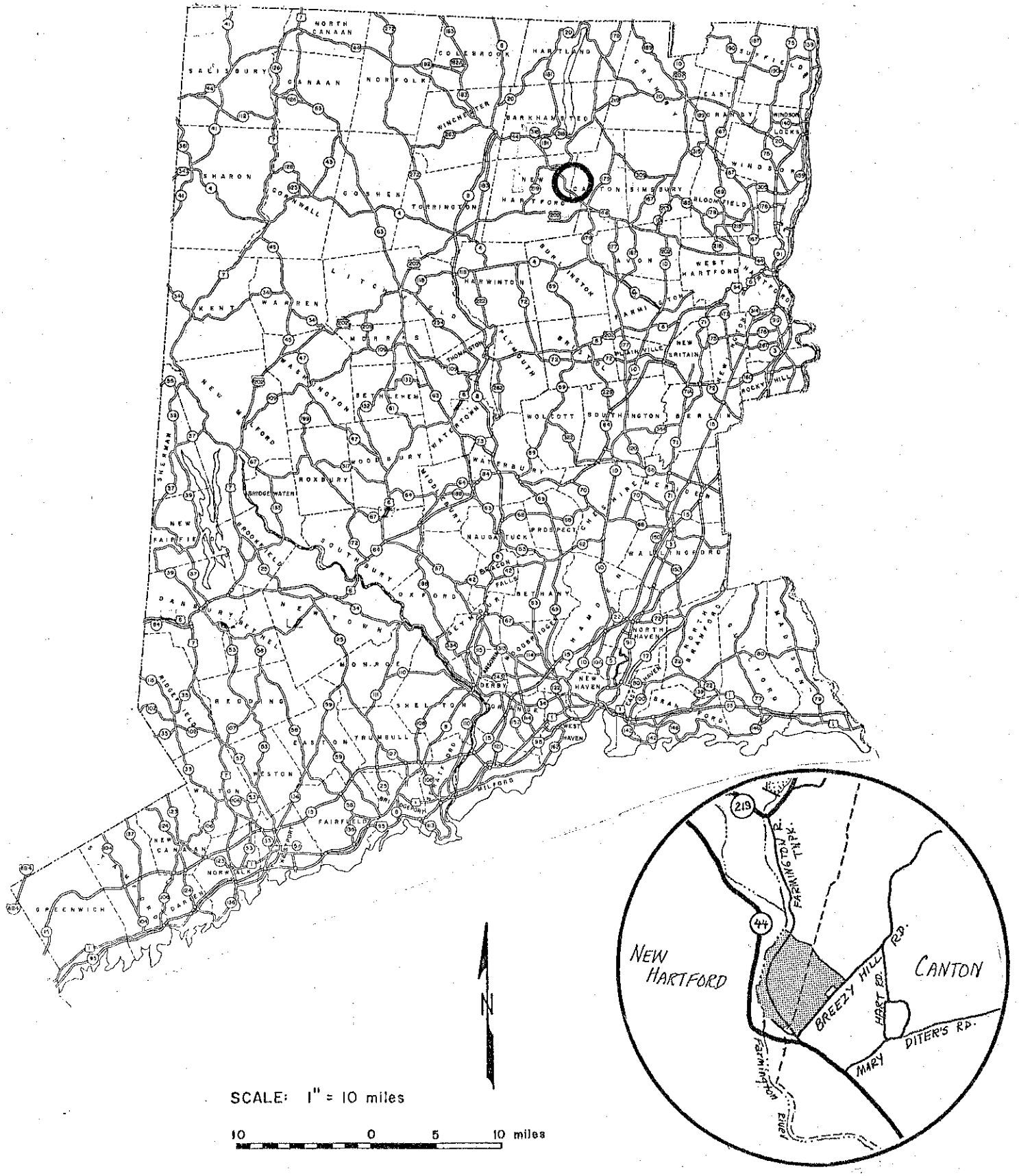


ENVIRONMENTAL REVIEW TEAM REPORT
ON
BREEZY HILL SUBDIVISION
NEW HARTFORD AND CANTON, CONNECTICUT

I. INTRODUCTION

The towns of New Hartford and Canton, Connecticut are presently reviewing an application for subdivision of ± 160 acres of land which lies astride the boundary between the two towns. The site is bordered on the west by Farmington River, on the north by undeveloped wooded land, on the east by Breezy Hill Road, and on the south by Route 44. The site is characterized by moderately sloping farmland in its southern half and steeply sloping wooded land in its northern half (see Figure 1). According to U.S.G.S. mapping, two streams traverse the property. Both of these streams are located in the southern portion of the property and drain directly to Farmington River.

The site master plan for "Breezy Hill" calls for development in four phases. Phase I consists of 31 lots on 66 acres and is located in the southernmost portion of the property. This phase has been submitted to the towns of New Hartford and Canton for approval. Phase II, III, and IV are proposed for the future and only simplified site plans are available for these phases. Figure 2 shows a simplified site plan of the proposed project.

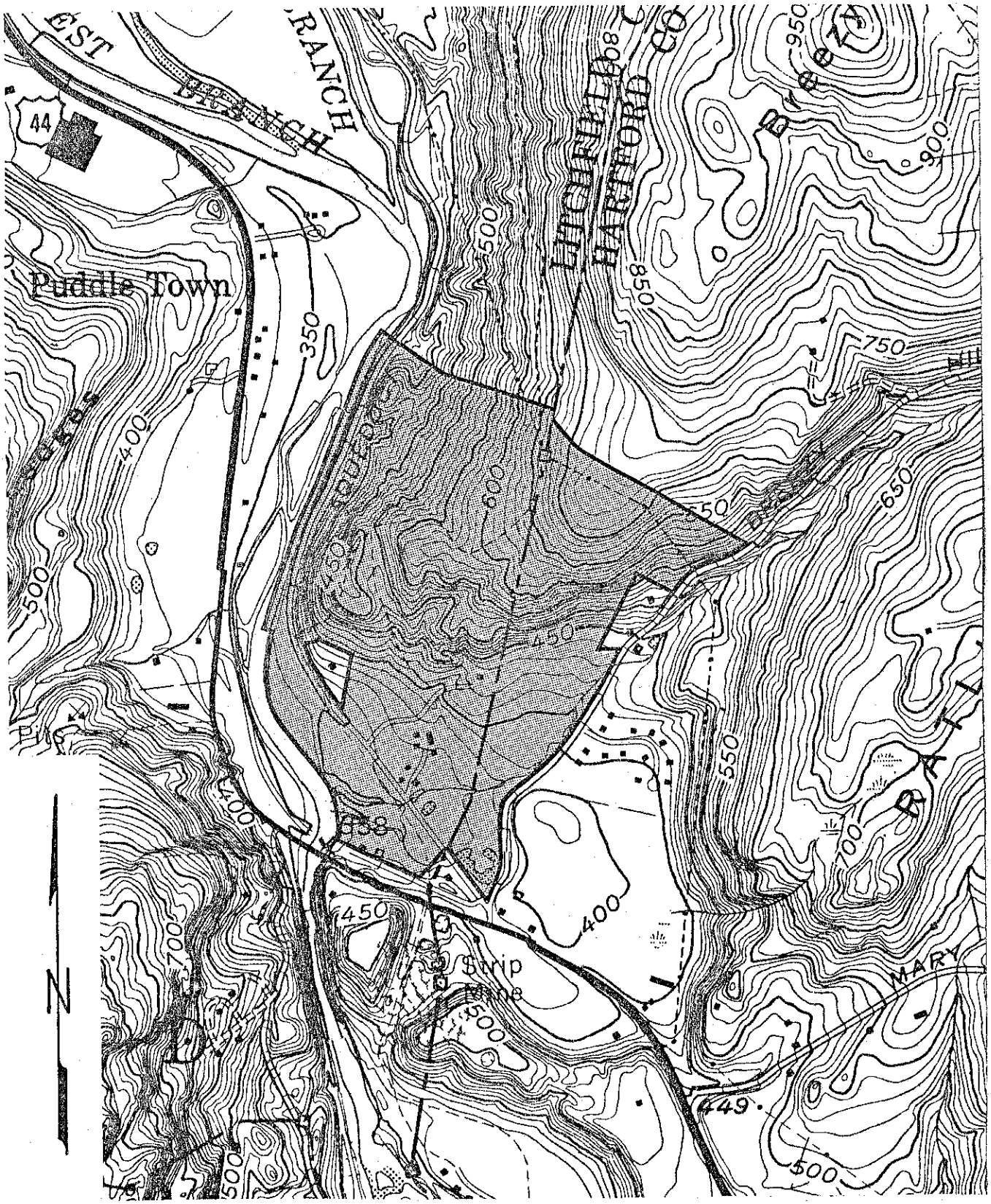
Access to the proposed phase I lots will be provided by Breezy Hill Road, the Farmington River Turnpike, and an interior road to be constructed between these two existing roads. All lots are to be served by on-site wells and septic systems.

Development plans also call for the re-channeling of the two watercourses on the site, the creation of a 3 acre sedimentation lake on the New Hartford side, and the improvement of an existing sedimentation pond on the Canton side.

The Inland Wetlands Commission from the town of New Hartford requested the assistance of the King's Mark Environmental Review Team to help the towns in analyzing the development proposal. Specifically, the Team was asked to identify the natural resource base of the site, to comment on the suitability of the land for the proposed project, and to provide an objective evaluation of the potential development impact. Of major concern to the Inland Wetlands Commission is the proposed rechanneling of water courses on site, the proposed sedimentation lake, and the suitability of the site for septic systems.

FIGURE I.

TOPOGRAPHIC MAP



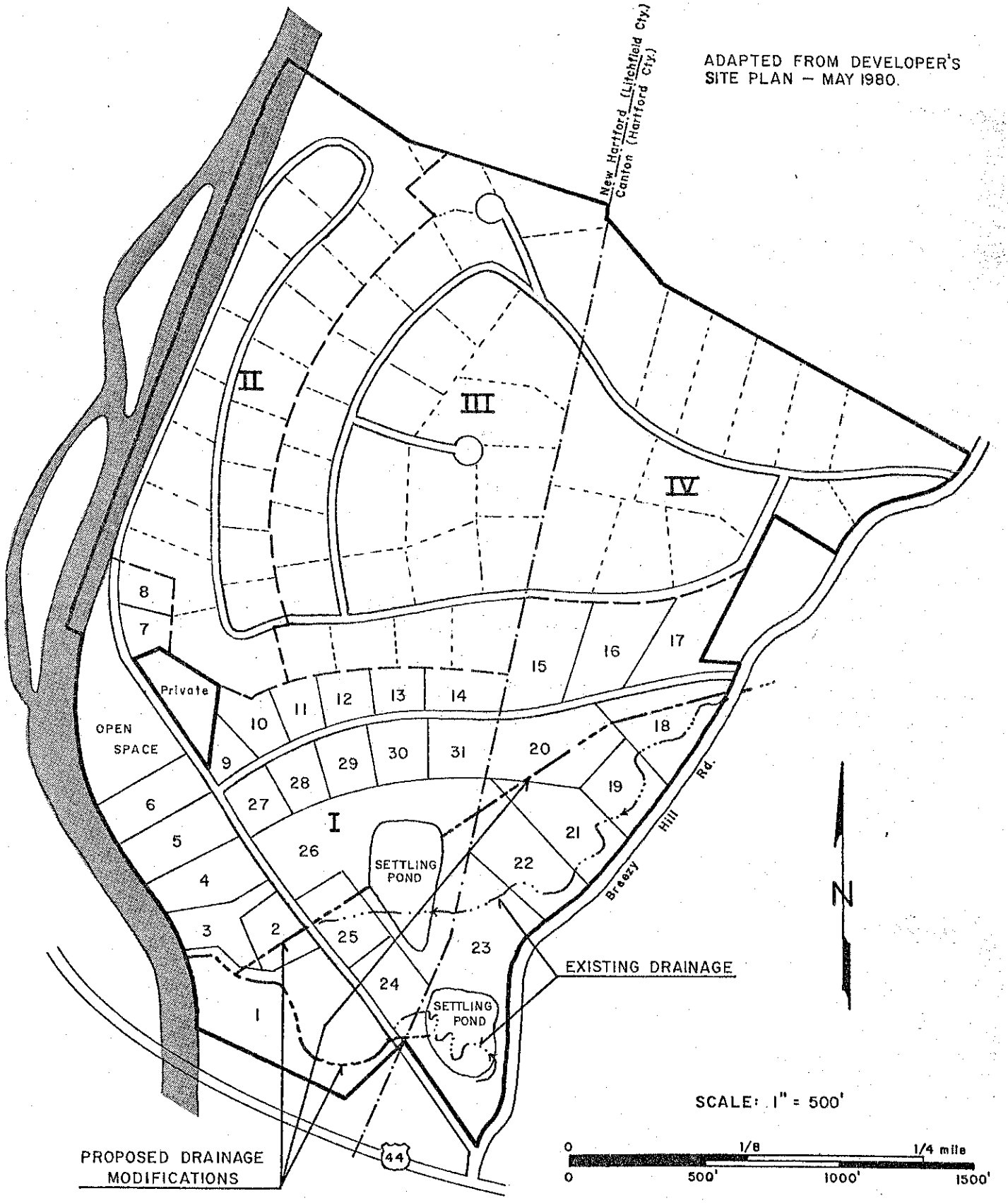
SCALE: 1" = 1000'

0 1/4 1/2 mile

0 1000' 2000' 3000'

FIGURE 2.

SIMPLIFIED SITE PLAN



The ERT met and field reviewed the site on July 2, 1980. Team members for this review consisted of the following:

Vern Anderson	District Conservationist	U.S.D.A. Soil Conservation Service
Art Cross	District Conservationist	U.S.D.A. Soil Conservation Service
Steve Jackson	Wildlife Biologist	State Department of Environmental Protection
Dave Knauf	Sanitarian	Farmington Valley Health District
Bob Orciari	Fishery Biologist	State Department of Environmental Protection
Robert Rocks	Forester	State Department of Environmental Protection
Dwight Southwick	Civil Engineer	U.S.D.A. Soil Conservation Service
Mike Zizka	Geohydrologist	State Department of Environmental Protection

Prior to the review day, each team member was provided with a summary of the proposed project, a checklist of concerns to address, a detailed soil survey map, a soils limitation chart, a topographic map, and a simplified site plan of the development proposal. Following the field review, individual reports were prepared by each team member and forwarded to the ERT Coordinator for compilation and editing into this final report.

This report presents the team's findings and recommendations. It is important to understand that the ERT is not in competition with private consultants, and hence does not perform design work or provide detailed solutions to development problems. Nor does the team recommend what ultimate action should be taken on a proposed project. The ERT concept provides for the presentation of natural resources information and preliminary development considerations--all conclusions and final decisions rest with the town and developer. It is hoped the information contained in this report will assist the towns of New Hartford and Canton, and the landowner/developer, in making environmentally sound decisions.

If any additional information is required, please contact Richard Lynn, (868-7342), Environmental Review Team Coordinator, King's Mark RC&D Area, P.O. Box 30, Warren, Connecticut 06754.

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II. GEOLOGY

The Breezy Hill subdivision site is located in an area encompassed by the Collinsville topographic quadrangle. A bedrock geologic map and report have been prepared for that quadrangle by R. S. Stanley and published by the Connecticut Geological and Natural History Survey (1964). A preliminary surficial geologic map of the quadrangle, prepared by R. B. Colton, is open filed at the Natural Resources Center, State Office Building, in Hartford.

Bedrock of several types underlies or crops out on the site. Figure 3 shows the distribution of the various types. In most cases, the rocks are described as schists. Schists contains prominent foliations and lineations caused by the alignment of flaky, platy, and elongate minerals, the most common of these being muscovite and biotite. The mica minerals often form thin, wavy or crinkled sheets along which the rock may be easily parted. The name "schist" in the rock is preceded by the characteristic assemblage of minerals in the particular unit in order of increasing abundance; thus, a "biotite-muscovite-quartz schist" is a foliated crystalline rock made up largely of quartz, lesser amounts of muscovite, and still lesser amounts of biotite. The other type of rock on the site is granitic rock, which formed from liquid or gaseous intrusions into the surrounding rock. The most common minerals in the granitic rocks are feldspar, quartz, muscovite, and biotite, in that order.

The surficial geology of the site is difficult to interpret. Colton's preliminary map and the Soil Conservation Service's soils map differ as to the extent of the sandy and gravelly deposits (stratified drift) on the site. Colton's map restricts the deposits to the gently and moderately sloping areas below the 450 foot elevation contour in the southern portion of the property (approximately the area designated as Section I on the subdivision plan) and the knoll in the northwestern corner of the site. The soils maps, on the other hand, indicate that the stratified drift extends uphill from the west as far as the 600 foot elevation contour. Time constraints prevented the Team from resolving the inconsistencies, but the field review on July 2, 1980 and a subsequent walk of the site by the Team geologist indicated that the soils map offers the better interpretation.

Part of the problem with mapping the surficial geology of steep hillsides such as those found on the site is that till and stratified drift are often interspersed with bedrock in a very complex, irregular fashion. This complexity is probably due to the manner in which the bedrock obstructed the movement of glacier ice. Pockets of stratified drift may have been deposited within a larger body of till, and vice versa. Stratified drift is deposited by meltwater, while till is deposited directly from the ice. These processes explain the sorted, rounded nature of stratified drift grains and the nonsorted, angular appearance of till grains. Presumably, a bedrock obstruction could cause local melting of glacier ice, allowing emplacement of sand and gravel, while till was being deposited from surrounding mobile ice.

Figure 4 shows the Team geologist's interpretation of the surficial geology of the site. The landowner and town officials should be aware, however, that the sediments may be more complex than Figure 4 indicates. Individual on-site testing would definitely be necessary in evaluating the potential of the lots planned for Sections II, III and IV.

FIGURE 3.

BEDROCK GEOLOGY (ADAPTED FROM CONN. GEOLOGICAL AND NATL. HIST. SURVEY QUAD. REPORT NO. 16)

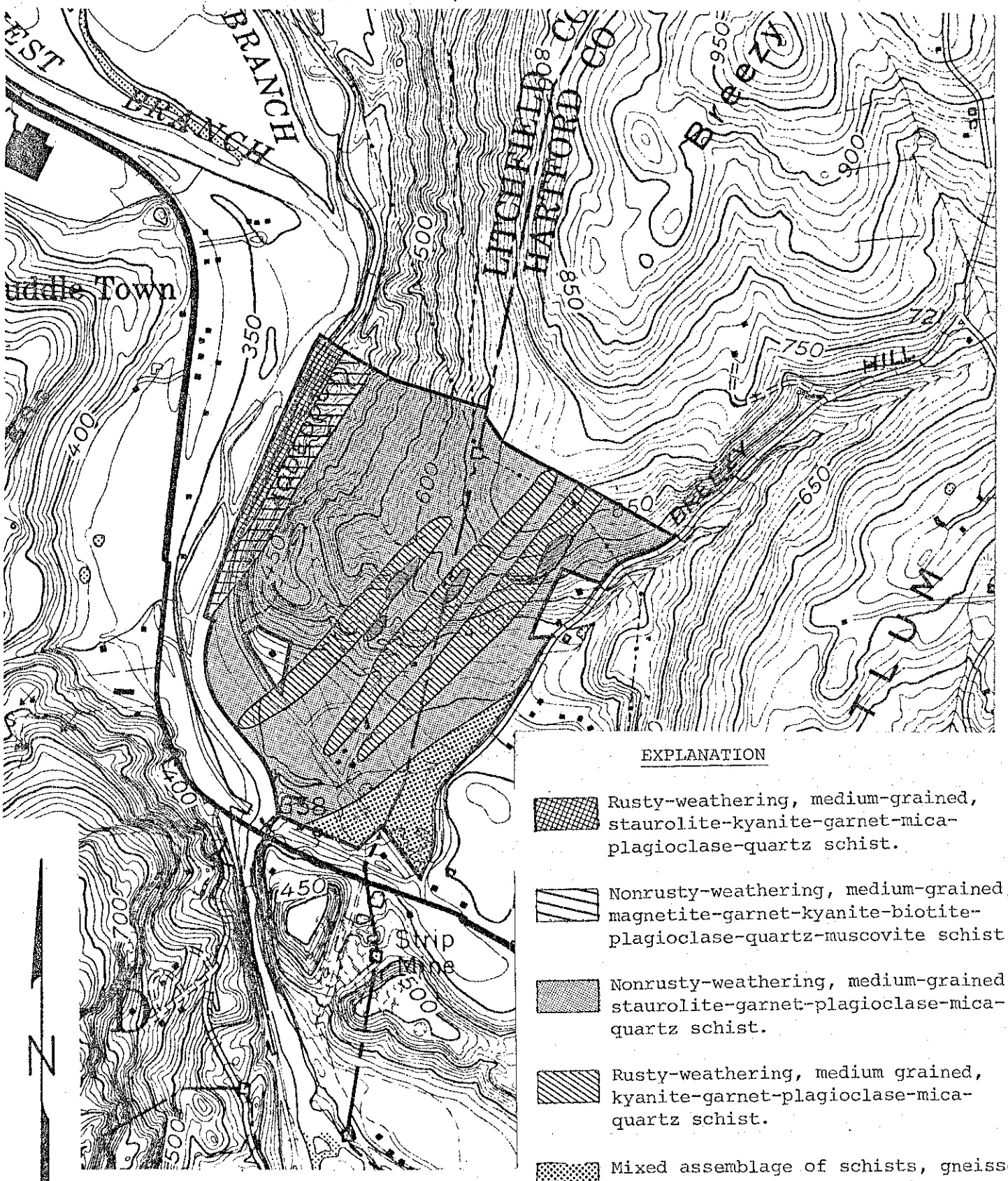
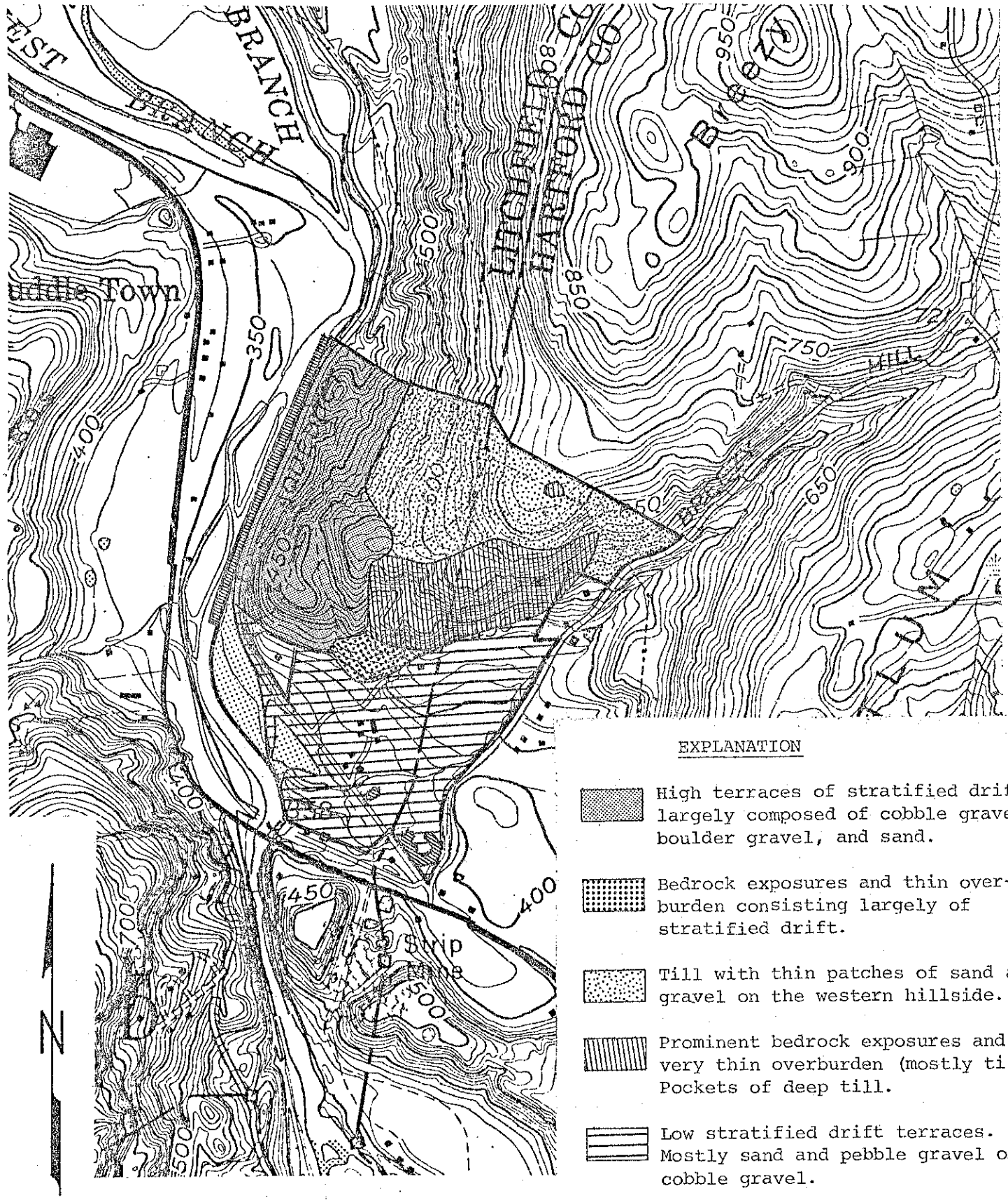


FIGURE 4.

SURFICIAL GEOLOGY (INTERPRETED BY M.A. ZIZKA, JULY 1980, FROM FIELD OBSERVATIONS AND SCS SOILS MAPS.)



EXPLANATION

- High terraces of stratified drift, largely composed of cobble gravel, boulder gravel, and sand.
- Bedrock exposures and thin overburden consisting largely of stratified drift.
- Till with thin patches of sand and gravel on the western hillside.
- Prominent bedrock exposures and very thin overburden (mostly till). Pockets of deep till.
- Low stratified drift terraces. Mostly sand and pebble gravel or cobble gravel.
- Floodplain sediments (thin sand, gravel, and silt) over stratified drift.
- Water bodies.

SCALE: 1" = 1000'

0 1/4 1/2 mile

0 1000' 2000' 3000'

III. SOILS vs. PROPOSED LAND USE

A soils map of the subject site is presented in the Appendix of this report. The Appendix also contains a soils limitation chart which identifies limiting factors for various land uses on individual soil types. By comparing the soils map with the soils limitation chart, one can gain an appreciation of the suitability of this site for residential development according to Soil Conservation Service criteria.

The following information elaborates on the data presented in the soils limitation chart by discussing the major soil limitations of the site and identifying management practices which can be implemented to overcome some of these soil limitations. This information is presented by individual soil types for each of the proposed development phases. For a detailed discussion of the soils on this property, the interested reader is referred to the Litchfield County Soil Survey (available from the Litchfield County Conservation District) and the Hartford County Soil Survey (available from the Hartford County Conservation District).

Phase I Lots (30 lots proposed on + 50 acres) (refer to Figure 5)

1. Hartland silt loam, 0-3% slopes (HbA Symbol)
   (± 16 acres or 32% of the Phase I area)

Major limitations and management practices include:
For On-Site Sewage Disposal - This soil has a moderate limitation due to poor renovation potential and filtration capacity of sandy substrata. This soil may be associated with high yielding groundwater supplies. Therefore, sewage effluent may pollute groundwater. Management Practices to overcome soil limitations are: restricted percolation testing; large field, sand filter or mount systems; enlarge leaching area; and avoid construction when wet.

2. Hinckley gravelly sandy loam, 0-3% slopes (HkA)
   (± 1 acre or 2% of Phase I area)

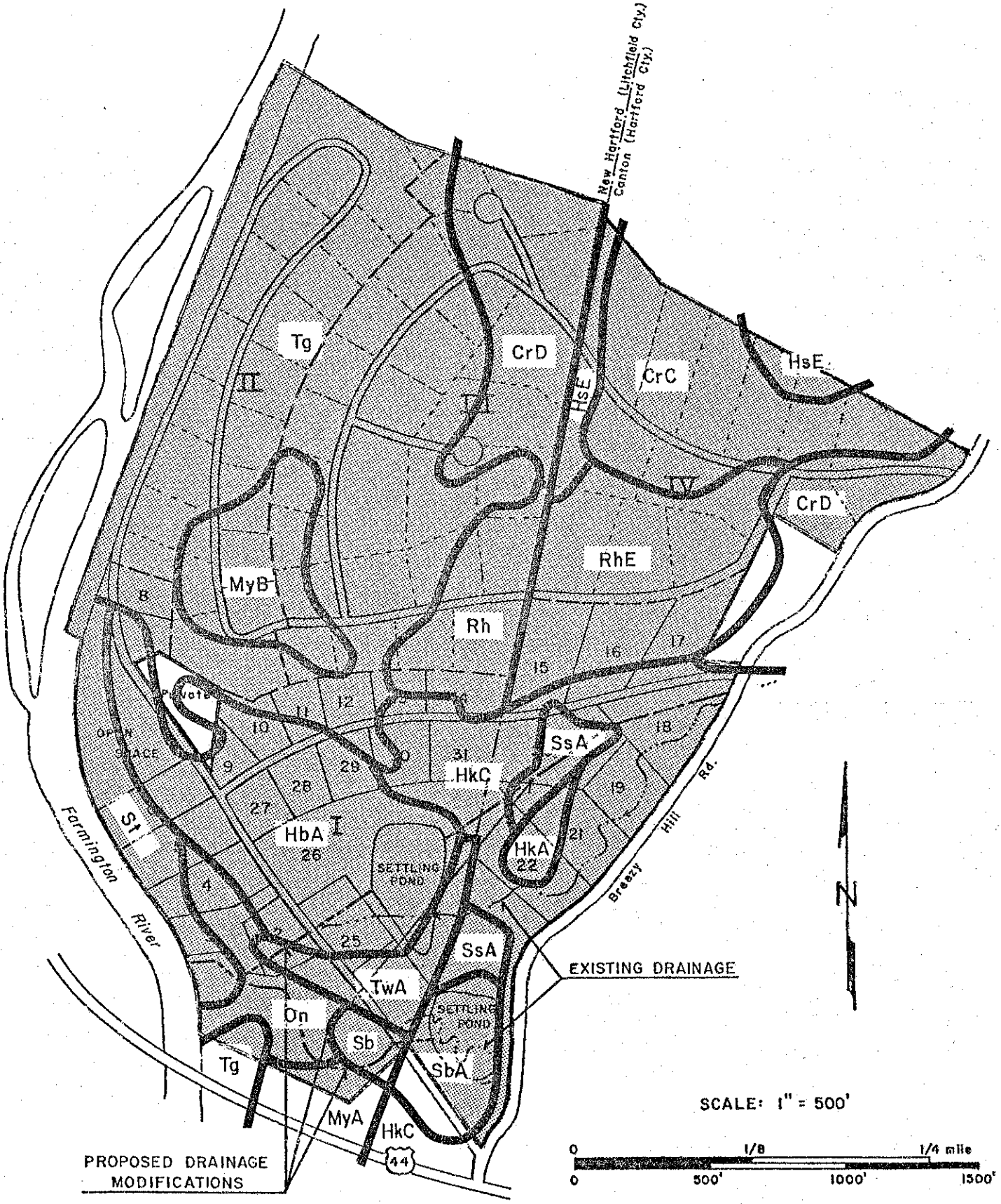
   AND

   Hinkley Gravelly sandy loam, 3-15% slopes (HkC)
   (± 13 acres or 26% of Phase I area)

Major limitations and management practices include:
For On-Site Sewage Disposal - This soil has a severe limitation. It is underlain at about 2 feet by water deposited, stratified layers of sand and gravel. This soil also may be associated with high yielding groundwater supplies. Poor filtration of sewage effluent occurs due to the low clay content and high sand and gravel content of the soil. There is hence a hazard of groundwater contamination. Management practices to overcome soil limitations are: control of housing density; sewage collection; and on slopes of 3-15%, serial tile distribution. For Landscaping This soil has a moderate limitation. Land grading exposes underlying sand and gravel which is excessively drained and low in natural fertility. Management practices, singly and/or in combination to overcome soil limitations are: addition of organic matter (peat, manure, mulched leaves, etc.); topsoiling; liming, fertilizing; using adaptable seed mixes/species; and irrigating.

FIGURE 5

SITE PLAN AND SOIL TYPES



3. Ondawa Fine Sandy Loam (On)
(± 3.5 acres or 7% of Phase I area)

AND

Suncook loamy sand (St)
(± 3 acres or 6% of Phase I area)

Major limitations and management practices include:
For All Urban Uses - These soils have a severe limitation due to the hazard of flooding. Other Uses - Potential exists for recreation uses (picnicking, play areas), and the establishment, improvement or maintenance of wildlife habitat. The Ondawa soil is considered "Prime Farmland", well suited to the production of grasses and legumes, silage corn and late vegetables.

4. Sudbury fine sandy loam, 0-3% slopes (SsA)
(± 2.5 acres or 5% of Phase I area)

AND

Tisbury silt loam, 0-3% slopes (TwA)
(± 3 acres or 6% of Phase I area)

Major limitations and management practices include:
For On-Site Sewage Disposal - This soil has a severe limitation due to a seasonal high water table. It also has a poor renovation and filtration capacity due to the sandy/gravelly substrata found at about 34 inches. Management practices to overcome soil limitations are: restricted percolation testing; regional drainage (such as with "curtain drains" or land fill); sewage collection; and control of housing density. For Homes with Basements - Measures such as footing drains are necessary to prevent seepage into basements. For Roads and Driveways - Subsurface drains are necessary to prevent problems of frost heaving and ice buildup from seepage and seasonal high water table.

5. Terrace Escarpments (Tg)
(± 3 acres or 6% of Phase I area)

Major limitations and management practices include:
For Proposed Urban Uses (homesites/roads) - These soils have severe limitations due to slopes primarily in excess of 25%. Disturbed areas are difficult to stabilize due to droughtiness and the low natural fertility of underlying sand and gravel.

6. Rockland (Rh)
(± 4.4 acres or 9% of Phase I area)

Major limitations and management practices include:
For All Urban Uses - These soils have a severe limitation due to outcropping of rock covering more than 50% of the surface and in Phase I of this site, slopes are generally in excess of 25%. These soil areas serve a purpose in that they are picturesque and enhance adjoining areas.

Phase II (± 20 Acres, ± 18 Tentative Lots with ± 2500 Feet of Interior Road

1. Merrimac sandy loam, 3-8% slopes (MyB)
(± 4 acres or 20% of Phase II area)

For major limitations and management practices refer to Hinckley Soils under Phase I discussion.

2. Terrace Escarpments (Tg)
(± 16 acres or 80% of Phase II area)

For major limitations and management practices refer to Terrace Escarpments under Phase I discussion. In addition, the terrace escarpments located in Phase II are in the immediate proximity of the Farmington River. Development of the escarpments can have adverse environmental effects (e.g., pollution and health hazards, erosion and sedimentation, destruction of ecological systems, loss of scenic value, etc.).

Phase III (± 33 Acres, ± 25 Lots with ± 3,300 Feet of Interior Roads)

1. Merrimac sandy loam, 3-8% slopes (MyB)
(± 2.6 acres or 8% of Phase III area)

Major limitations and management practices are the same as discussed under the Hinckley Soils of Phase I.

2. Terrace Escarpments (Tg)
(± 18 acres or 55% of Phase III area)

For major limitations and management practices, see interpretation under Phase II.

3. Charlton very stony fine sandy loam, 15-35% slopes (CrD)
(± 8.4 acres or 25% of Phase III area)

Major limitations and management practices include:
For On-Site Sewage Disposal - This soil has a severe limitation due to slopes and large stones. Management practices to overcome soil limitations are: land shaping and/or stone removal; serial tile distribution; enlarge leaching area; and avoid construction when wet. For Roads - This soil has a severe limitation due to slopes and large stones. Excavation and construction is difficult. For Homes With Basements - Steep slopes and stoniness limit the operation of equipment used in excavating. For Homesite Landscaping - If lawn is established, management is needed to control erosion. Some slopes are too steep for lawns unless terraces and retaining walls are built. These should be left in natural cover.

4. Rockland (Rh)
(± 4 acres or 12% of Phase III area)

For management practices and limitations see interpretations under Phase I.

Phase IV (± 24 Acres, ± 13 Lots with ± 2600 Feet of Interior Roads)

1. Charlton very stony fine sandy loam, 3-15% slopes (CrC)
(± 12 acres or 50% of Phase IV area)

AND

Charlton very stony fine sandy loam, 15-35% slopes (CrD)
(± 3 acres or 12+% of Phase IV area)

Major limitations and management practices include:
For On-Site Sewage Disposal - See interpretation of CrD, Charlton very stony fine sandy loam, under Phase III. For Roads - This soil has slight to moderate to severe limitations depending upon slope. Large stones also present a problem in excavation and construction.

2. Hollis very rocky loam, 15-35% slopes (HsE)
(± 2 acres or 8% of Phase IV area)

AND

Rockland (RhE)
(± 7 acres or 29% of Phase IV area)

For major limitations and management practices see interpretation under Phase I.

IV. EROSION AND SEDIMENT CONTROL

The slopes of Phase I are generally slight to moderate with a maximum slope of 15% except for some steeper areas along the northern portion. Slopes of the remaining phases are generally at more critical slope, from 15% to 35%.

Due to the steep slopes of much of this property, the existing water courses on-site, and the proximity of Farmington River, it is important that a detailed erosion and sediment control plan be prepared prior to final approval of any of the subdivision phases. This will assist in minimizing the amount of soil erosion and sedimentation both during and after construction. Detailed designs and a timetable for installation should be included as part of the plan. The following comments are offered for consideration in developing the plan.

- Plan for a minimum amount of earthen disturbances between November and March.

- Have all disturbed areas stabilized prior to October 15. It should be noted that stabilization of cuts proposed for the steeper lots seems impractical due to grade (up to 1½: 1 slopes), soil droughtiness, and soil infertility.

- Seed mixes, seeding rates, and timetable for vegetative measures should be specified.

- Haybales and perhaps structural measures should be utilized to keep erosion and sediment runoff at each construction site. Sediment basins, if appropriately located, will help to control sediment runoff not controlled at the construction site from flowing down stream.

- Maintenance and replacement procedures for erosion and sediment controls are important and can be assured of attention if stipulated on the plan.

- Detailed designs for diversions, ditches and waterways should also be provided. Again, maintenance measures for such structures are important to their continued effectiveness and should be noted in the plans.

Some storm water from roofs and roads can be controlled at the site by use of drywells, especially in the well drained deep gravel and sand soils. Detention basins, if properly designed to handle peak flows, will also aid in controlling increased water flows downstream.

It should be recognized that the proposed building and road construction on Phases II, III and IV will require extensive cuts and fills on the hillside. These disturbed areas will present critical soil erosion concerns. Erosion and sedimentation controls will need to be carefully planned, receiving even greater attention than those used during Phase I. Just as with the steep sloped lots encountered in Phase I, vegetative stabilization will be extremely difficult to establish.

Staff at both the Hartford and Litchfield County Soil and Water Conservation Districts are available to work with town inspectors to properly implement structural and vegetative measures for erosion and sediment control.

V. HYDROLOGY

The Breezy Hill Subdivision site contains only one prominent stream course. The stream flows southwestward along Breezy Hill Road, cuts across the southeastern corner of the site, and enters Farmington River, which forms the western boundary of the property. Despite a watershed of substantial size (approximately 680 acres), the stream is intermittent: during a follow-up tour of the site on July 31, 1980 the Team geohydrologist noted that flow in the stream diminished and finally disappeared as it passed through the stratified drift area in the southern section of the property. Other seasonal stream courses on the site have very small drainage areas and probably are dry for most of the year. Two man-made ponds are located in the southern portion of the tract.

Development of the site as planned would lead to increases in runoff. These increases, in turn, would cause peak flows in local streams to rise unless runoff retention measures were employed. Several methods are available to estimate the magnitude of runoff and peak flow increases. A method described in Technical Release No. 55 of the Soil Conservation Service was used to estimate peak flow changes in the stream flowing along Breezy Hill Road. The design point studied was the point at which the stream now merges with the outlet brook from the pond in the southeastern corner of the site. The Team's analysis indicates that full development of the site as planned (all phases included) would result in peak flow increases of only about five percent for 25 year, 50 year, and 100 year storms. Development of Phase I only would increase peak flows by about three percent. These increases are minor, and since Farmington River is immediately downstream of the design point, no increased flood hazards would be anticipated from development. However, since the cumulative effect of numerous developments in a watershed may be significant, it is generally desirable to employ measures in large subdivisions such as this that would mitigate the effects of development on peak flows. Retention basins are the usual solutions.

The developers have proposed the creation of two large sediment basins in the southeastern section of the property. One basin would intercept water diverted from the stream near Breezy Hill Road. The diversion would consist of a wide, terraced, artificial channel. The basin would be created by the removal of 150,000 cubic yards of gravel from the site. The other basin would be created by the removal of 50,000 cubic yards of gravel from the pond now existing in the southeastern corner of the site. Only a very small portion of the project site now flows into this pond. The basins theoretically are designed to collect sediment, but not specifically to mitigate peak flow increases, from fully developed watersheds. At present, both watersheds are only lightly developed.

Several considerations arise with respect to the proposed sedimentation basins. One is a policy consideration: should a developer of a subdivision design drainage facilities to accommodate not only the effects of his own subdivision, but also the effects of potential development upstream? If upstream development consistently took place a few lots at a time, making individual storm drainage systems impractical, the overdesign of the downstream facility would be crucial to maintaining the hydrologic status quo. However, in a project such as the Breezy Hill Subdivision, the upstream watershed of the major

sediment or retention basin may be many times larger than the runoff contributing portion of the subdivision (the upstream area to the Breezy Hill site is more than seven times as large). In such a case, it would certainly be unfair to demand overdesign from the developer, as this may be prohibitively expensive. Moreover, it may be impossible to estimate the ultimate amount of upstream development that would occur. Thirdly, reliance on downstream measures may allow serious flooding or sedimentation problems to arise in the middle sections of the watershed. Finally, the question of maintenance of the basins becomes complex: should the developer be responsible? Should the town take care of the facilities? Should upstream landowners contribute to the upkeep? The resolution proposed in this case is that the owners of the lots on which the basins are located should bear total responsibility for their maintenance. This approach seems both unfair and impractical--lots with such legal ramifications are likely to go unsold.

The developers in this case are the proponents of overdesign and hence cannot object to it as being "unfair". However, to the extent that any town decision may set a precedent, it may be unwise to free upstream developers of environmental responsibilities based on the design of a downstream drainage system. Such a precedent may discourage individual initiative in other areas. Also, as mentioned above, in a large watershed, serious problems may still occur in central sections.

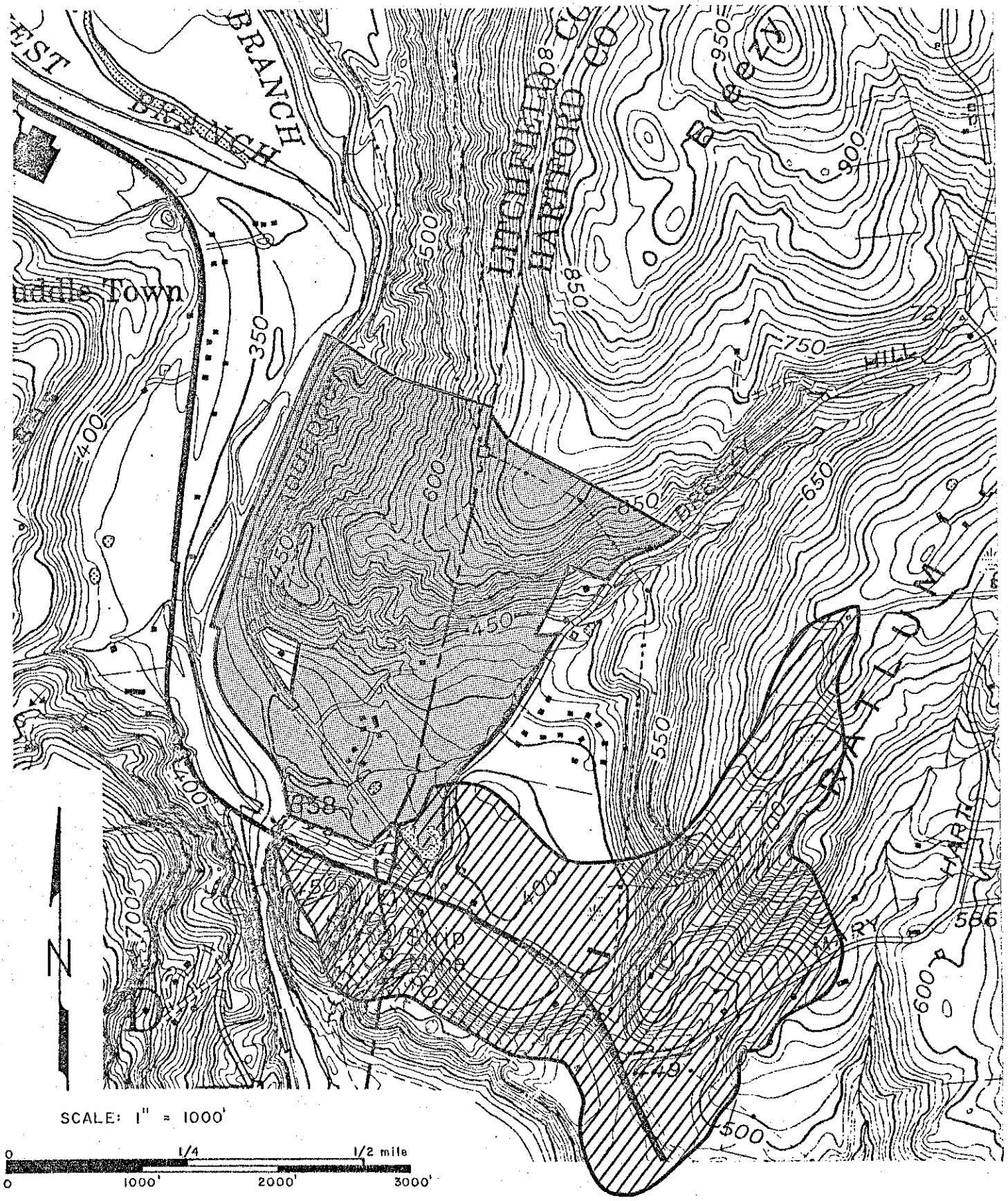
A second consideration with regard to the proposed sediment basins is their lack of floodwater retention capacity. With an uncontrolled outflow during heavy storms, the basins will pass most of the peak flow increases from development downstream. If the basins are to be designed to accommodate increased sediment production for their entire watersheds once those watersheds are fully developed, they should be designed also to prevent peak flow increases for their entire watersheds. Otherwise, in order to control peak flows, upstream landowners would still have to develop their own drainage facilities, defeating one of the apparent objectives of overdesigning the downsteam basins.

A third consideration is the method used to estimate peak flows for fully developed watersheds. The developers have used the Soil Conservation Service Technical Release No. 55 to estimate peak flows to the settling basins. This method calls for the assignment of a "runoff curve number" (CN) to the watershed land. The curve number reflects the drainage characteristics of different soil types under different land uses. The developers have assumed two-acre residential development for the larger watershed, but have estimated a CN of 92. This number seems to be much too high and would be another element of overdesign. A CN of about 75 to 80 seems more reasonable. A similar conclusion is indicated for the other settling basin (the existing pond). However, the watershed of the second basin appears to be larger than the developers have shown in their report to the New Hartford Inland Wetlands Commission, dated May 27, 1980 (see Figure 6). The Team encourages a review by the developers of the items mentioned above.

Officials of the Town of Canton expressed concern that the proposed new stream channel would "surcharge" the local water table, causing wetness problems in some lots. The sand and gravel underlying the proposed channel seems capable of rapid transmission of surface water to the water table, and would

FIGURE 6

APPROXIMATE DRAINAGE AREA OF THE POND IN THE SOUTHEASTERN CORNER OF THE BREEZY HILL SUBDIVISION SITE. (AREA INCLUDES APPROXIMATELY 160 ACRES.)



therefore allow some "surcharging" in lots 18-22. Lot 18 may be most affected since the new and old channels would be relatively close together. In the other lots, however, it is not clear whether the "surcharge" would cause problems. The engineering report on the deep pits dug in the Phase I section does not indicate that the groundwater levels are presently troublesome in the area of lots 18-22. Hence, the additional groundwater flow through those lots might never be problematic.

Considering all of the factors listed above, it seems that the most practical solution with regard to this subdivision proposal would be to scale down the drainage plan and tailor it more to the needs of this site and less to hypothetical future needs arising from upstream development. In view of the minimal peak flow changes that the Breezy Hill subdivision itself would cause, the extensive rechanneling is not necessary. Provision could be made for a much smaller sediment basin with a controlled outlet to prevent peak flow increases. Perhaps a small channel from the existing stream near lot 23 could be extended to the existing pond to direct exceptionally heavy flows to that pond (there appears to be a great deal of storage space available in the pond). The bed elevation of the new channel could be calculated on the basis of the estimated level of the present steam during a 10 year or 25 year storm. Other ideas may suggest themselves to the developers, but the present plan seems needlessly ambitious and may produce more of an environmental disruption than a benefit.

VI. WATER SUPPLY

The geology of the subdivision suggests two alternatives for water supply: either individual on-site wells or a community well. A community well may be feasible because of the substantial stratified drift deposits in the Phase I section. Several stratified drift wells with yields of 20 gallons per minute (gpm) or more have been developed in the stratified drift of the Farmington River valley within one mile of the site. This does not guarantee a high yield on the site; individual locations must be tested first. However, the existence of the nearby wells increases the likelihood of finding productive zones on the property. Ample separating distances from septic systems and other sources of potential contamination should be allowed. Also, since the probability of contamination would be greater in a shallow well (as would the probability of occasional "drying up" of the well), a well with a productive zone several tens of feet below the surface and casing above would be most desirable. The designated open space area on the site may be a good location for a community well. It should be noted in this regard, however, that the water quality of Farmington River may influence the quality of water withdrawn from nearby wells.

If individual wells are used, it may be more desirable to tap bedrock. Since water moves quickly through coarse stratified drift, the groundwater may be contaminated, particularly in its upper levels, by septic system leachate. The towns also expressed concern about the effects of the proposed sediment basins on groundwater quality. Any effect that did occur would be most likely to influence well water withdrawn from stratified drift wells on lots 23-26; would be less likely to influence well water withdrawn from stratified drift wells on lots 18-22 and 1-3; and would be unlikely to have any influence on any wells in other lots or bedrock wells in any lot. The greatest potential threat would be from road de-icing chemicals, although the present lack of upstream development minimizes this danger. Slightly increased turbidity or acidity are less serious potential problems.

Bedrock wells are generally producers of small yields, but in most cases a yield sufficient for domestic needs (3 gpm) may be obtained within the upper 200 feet of rock. As stated above, these wells are less susceptible to (but not always immune from) contamination. In the shallow to bedrock soils of Phase III and IV, bedrock is the only credible water source and is particularly prone to septic system contamination. In Phase II, bedrock would be the most probable water source and would seem to be better protected from septic leachate on the extremely steep slopes than would stratified drift wells. On Phase I lots, bedrock wells would be more expensive and probably less productive, but as stated above, better protected from pollution. Nevertheless, stratified drift wells may be reasonable and satisfactory in some lots where conservative separating distances from pollution sources can be maintained.

VII. SEPTIC SYSTEMS

Deep test pits and percolation tests have been conducted for Phase I by a consulting engineer for the applicant. Based upon a review of these test results, together with an analysis of project plans and on-site inspection, the following comments are offered for consideration:

- Lots 18, 19, 20, 21 and 22 will be directly and possibly adversely affected by the proposed 50' drainage ditch. Each lot has approximately 1½ to 3 feet of topsoil and loam over gravelly sand with cobbles ("boney sand and gravel"). It would appear that water fluctuates freely through this gravelly layer without leaving traces such as mottling. If the ditches are constructed, this gravel layer will have more water. As a result, septic systems should be kept out of the porous soil and in the upper loam layer. New percolation tests to reflect this change should be conducted in this upper layer to ensure suitability for subsurface sewage disposal.

- Lots 23, 24, and 25 have high water problems that will be difficult if not impossible to control. Water pours through the gravelly soils as evidenced by the test pit data (the water filled the test hole faster than the hole was dug). The topsoil and loam in this area appear to be a lid for the water table. Due to the problematic nature of the soils underlying these lots, a more detailed hydraulic study should be made on the water table in this area.

- The leaching system for lot 3 is in a swale that contained water this past winter. This is an unacceptable location for a septic system.

- Lot 11 has a high ground water table as evidenced by deep pit #23 which had water running into the test hole. A curtain drain will definitely be needed on this lot.

- Lots 7 and 8 present many areas of concern. For example:
  - How will the slopes be stabilized?
  - Will septic systems be pump systems since the leach fields are higher than the house elevation?
  - Driveway cuts directly downhill of leaching systems are unacceptable according to Farmington Valley Health District criteria.
  - Finished grades should be shown on the plans.
  - Side slopes will definitely cut into leaching areas and adjacent properties.

- There will be a 59 foot cut on Lot 7 at the toe of the slope and Lot 8 will have a 68 foot cut at the toe of the slope. Ground water may be a problem at these depths. In the opinion of the Farmington Valley Health District, these lots should not be approved without more detailed plans and testing.

● The proposed driveway cuts downhill of the leach fields on Lot 12 are unacceptable (according to Farmington Valley Health Permit criteria) since septic effluent may bleed out onto the driveway.

● Some wells are closer than 75 feet from leaching fields (e.g. lot 16 well vs. lot 17 leaching field). These areas will require re-design.

● The remaining sections of the proposed development cannot be adequately evaluated without detailed soil test results (percolation tests and deep test pits). However, based upon Soil Conservation Service mapping and limitation ratings (see Appendix), it appears that major problems will be encountered in trying to locate subsurface sewage disposal facilities in most of this area.

VIII. VEGETATION

The 160+ acre parcel proposed for development into "Breezy Hill Subivision" may be divided into six vegetation types. These include open fields, 50 acres; pine, 45 acres; softwoods-hardwoods, 30 acres; hemlock, 14 acres; mixed hardwoods, 8 acres; and open marsh, 2 acres. (See Vegetation Type Map and Vegetation Type Descriptions.)

The largest, healthiest trees scattered throughout this tract should be retained for their aesthetic and shade value. Excessive slope limits timber management and development potential in vegetation type D and parts of vegetation type B. Windthrow is a potential hazard in vegetation type B due to shallow to bedrock soils. A fuelwood thinning in vegetation type C would improve the condition of this stand by reducing competition between residual trees.

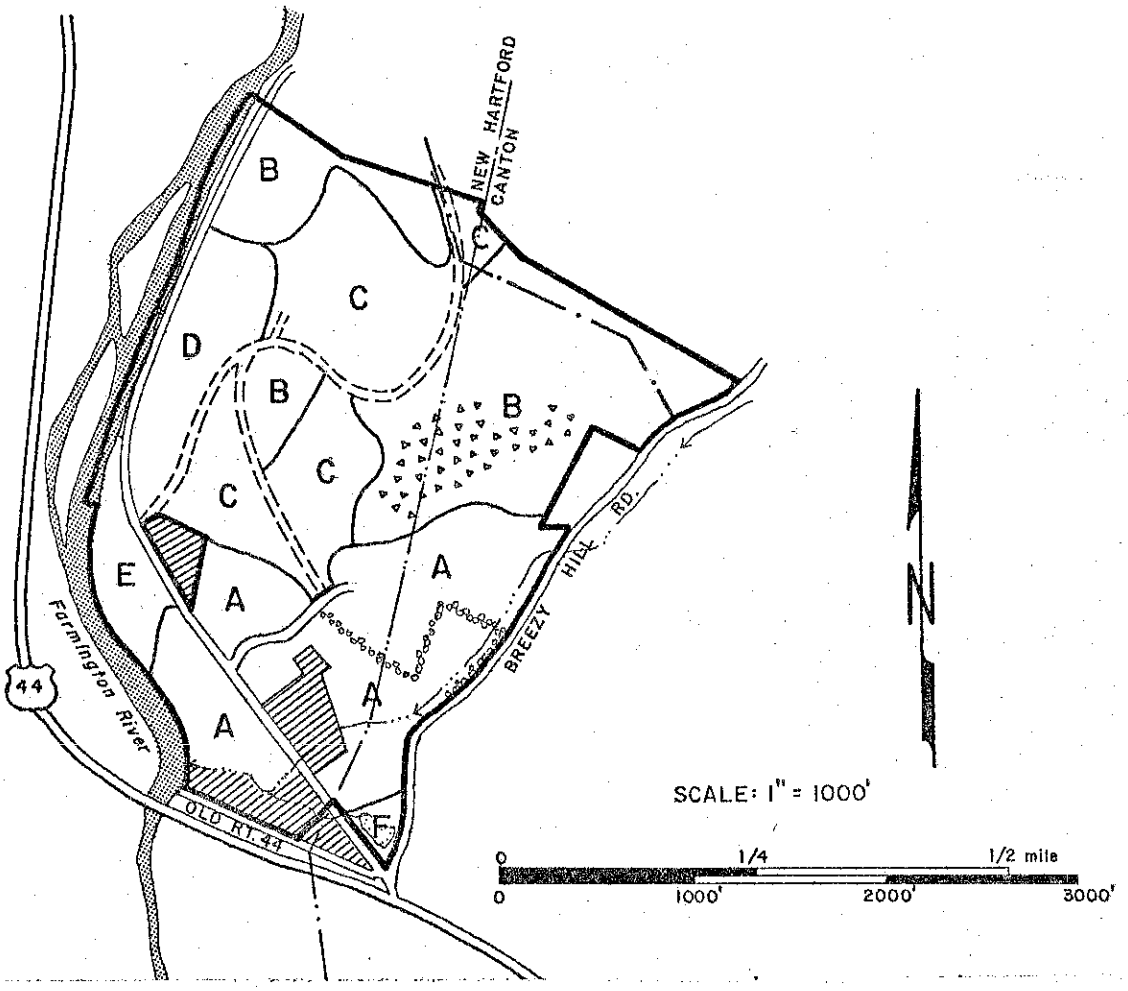
Vegetation Type Descriptions

TYPE A. OPEN FIELDS. Approximately 50 acres of open fields are present on this tract. These fields are vegetated with grasses, Queen Anne's Lace, goldenrod, clover, black eyed Susan, common cinquefoil and blue phylox. Raspberry, smooth sumac and staghorn sumac form dense thickets around the perimeter of these fields. High quality pole to sawtimber size sugar maple, white ash, shagbark hickory, red oak, red maple and blackberry are present along the stone walls and fence rows which divide these fields.

TYPE B. PINE. This 45 acre fully stocked stand is made up of pole to sawtimber size eastern white pine and eastern hemlock with occasional pitch pine and black birch. The largest white pine in this stand have multiple stems and are located on steep slopes. The understory is dominated by witch hazel, black birch seedlings, hemlock seedling and occasional patches of mountain laurel. Hay scented fern and Canada Mayflower form the ground cover in this stand.

FIGURE 7.

VEGETATION TYPE MAP



LEGEND

- Road
- Utility Line
- Sod Road
- Property Boundary
- Vegetation Boundary
- Stream
- Stone walls/fence rows
- Residential Area, 10 Acres
- Extremely rocky shallow to bedrock areas

VEGETATION TYPE DESCRIPTIONS*

TYPE A Open fields, sod roads, 50 acres

TYPE B Pine, 45 acres, fully to overstocked, pole to sawtimber size

TYPE C Softwoods - Hardwoods, 30 acres, overstocked, pole size

TYPE D Hemlock, 14 acres, overstocked, pole size

TYPE E Mixed hardwoods, 8 acres, 2-aged, fully stocked, sapling and sawtimber.

TYPE F Open marsh, 2 acres, wetland shrubs

* Seedling size - trees less than 1" in diameter at 4½' 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.

TYPE C. SOFTWOODS - HARDWOODS. Pole size eastern white pine, eastern hemlock, red oak, black oak, white oak, shagbark hickory, black birch, red maple and black cherry are present in this overstocked 30 acre stand. Scattered sawtimber size eastern white pine and eastern hemlock are also present but not abundant. Witch hazel, blue beech and occasional mountain laurel make up this stand's understory. Canada may flower, bracken fern, cinnamon fern, hayscented fern, New York fern and scattered pink lady slipper form the ground cover in this area.

TYPE D. HEMLOCK. Pole size eastern hemlock with occasional eastern white pine and black birch are present in this 14 acre overstocked stand. The understory is made up of hemlock seedlings and occasional witch hazel. Ground cover is scarce in this stand however localized patches of Canada may flower and hayscented fern are present.

TYPE E. MIXED HARDWOODS. This 8 acre, fully stocked, two aged stand is made up of sapling and sawtimber size sugar maple, red maple, white ash, red oak and eastern white pine. Understory vegetation includes hardwood tree seedlings, witch hazel and blue beech. Enchanters night shade, Virginia creeper, poison ivy, Solomon's seal, false Solomon's seal and Jack-in-the-pulpit form this areas ground cover.

TYPE F. OPEN MARSH. A two acre open marsh is located around the ponds on the southern tip of this property. This marsh is vegetated with speckled alder, silky willow, spirea, elderberry, sycamore seedlings, eastern cottonwood seedlings, red maple seedlings, cattail, whorled loosestrife, tussock sedge and skunk cabbage.

Aesthetics and Preservation

Many of the large healthy trees which are scattered throughout this property have high aesthetic and shade value. Those located within the open field and along the fence rows and stream channels are especially valuable. These larger trees should be retained to the greatest extent possible.

Trees are very sensitive to the condition of the soil within the entire area under their crowns. Development practices near trees such as excavating, filling and grading for construction of roadways and buildings may disturb the balance between soil aeration, soil moisture level and soil composition. These disturbances may cause a decline in tree health and vigor, potentially resulting in tree mortality within three to five years. Mechanical injury to trees may cause the same results. Dead trees reduce the aesthetic quality of an area and may become hazardous and expensive to remove if near roadways, buildings or utility lines.

Care should be taken during the construction period not to disturb the trees that are to be retained. Special care should be taken near hemlock trees, because of their shallow root system. In general, healthy and high vigor trees should be favored over unhealthy trees because they are usually more resistant to the environmental stresses brought about by construction.

Where feasible, trees should be saved in small groups or "islands". This practice lowers the possibility of soil disturbance and mechanical injury. Individual trees and "islands" of trees should be temporarily, but clearly marked so they may be avoided during construction.

The scattered dense patches of mountain laurel which are present in vegetation type B and C have high aesthetic value and should be retained if possible. The flowering of these shrubs may be stimulated by allowing direct sunlight to reach them. This may be accomplished by complete or partial removal of the overstory trees over these shrubs.

To help preserve the rural atmosphere in this area, it would be desirable to retain the fence rows along with most of the vegetation in these areas, in their natural condition. Lot boundaries in Phase I of this project could be redesigned to incorporate these natural boundaries.

Limiting Conditions by Stand

Excessive slope not only severely limits operability for timber management practices on portions of vegetation types B and D, but it also limits revegetation practices if areas are cleared for lot development. Rapid revegetation of the steeply sloped cleared areas with sod will be imperative to reduce and avoid erosion problems. Without intensive terracing, revegetation will be at best difficult. Ideally lot development should be restricted to areas without excessive slope.

The lack of adequate moisture reserves in the extremely rocky portions of vegetation type B (see Vegetation type map), has a limiting effect on tree growth. In these areas, many of the pine trees which are present are stunted and of poor quality.

Potential Hazards

Windthrow is a potential hazard in the steeply sloped, shallow to bedrock areas of vegetation type B. The trees in these areas are unable to become securely anchored because their root systems are shallow. The windthrow hazard is lessened where underlying bedrock is highly fractured because tree roots can penetrate deeper into cracks, making trees more stable.

Establishment of openings and clearings which allow wind to pass through this stand rather than over it may increase the windthrow potential.

There are a considerable number of sawtimber size trees in vegetation type B, and a few in vegetation type C, which are dead or have large dead branches. These trees will become a hazard if buildings, roadways, or utility lines are constructed near them. Potentially hazardous trees should be removed prior to the completion of any construction to avoid this hazard.

Suggested Management Techniques

The trees in vegetation types C and D are declining in health and vigor as a result of their crowded condition.

A fuelwood thinning in vegetation type C (softwoods-hardwoods) that would remove approximately one third of the total volume, or between five and seven cords per acre, would be beneficial. This thinning will reduce competition between residual trees for space, sunlight, water and nutrients, allowing them to respond by growing more vigorously and becoming more stable over time. This thinning should be focused on removing unhealthy and poor quality trees and those trees which are directly competing with healthy high quality trees.

Ideally this management practice should be implemented several years before any development in this area takes place. This will provide time for the residual trees to improve in health, vigor and stability prior to the environmental stresses brought about by development.

If the proposed thinning is agreed to, a publicly employed service forester or a consultant forester should be contacted to help mark the trees to be removed. If the proposed project is approved, trees cleared for roadways, buildings and septic systems should be utilized when possible as sawlogs or fuelwood.

IX. WILDLIFE

The "Breezy Hill" site consists of three major wildlife habitat types. These include:

- Open fields which provide good wildlife habitat for deer, rabbits, woodchucks, and a variety of small mammals and birds. The open fields on this particular site are not exceptional because of their exposure to human vision from so many roads.

- Woodland which is characterized by steep slopes in almost all areas. Wildlife values are limited to edges and the drier sites.

- Wetlands. The river edge and pond sites have good wildlife values. Beavers, muskrat, a variety of ducks, Canada goose, shorebirds, frogs, and a variety of small birds use this area.

Effects of Proposed Development and Mitigating Measures

Phase I of this project would virtually eliminate wildlife use of the ponds and open land. There would simply be too much human presence in the area. In addition, the nutrient loading of the ponds, streams, and river from the project's lawns, gardens, and septic fields can be expected to degrade water quality. This, in turn may lessen the use of these water resources by wildlife. Phase II, III and IV would also have a devastating effect on wildlife.

From a wildlife standpoint, the best way to develop this property would be to cluster development in the southern portion of this property on the better soils. Open space should be provided in the steep slope areas, along the total river edge, and around the pond sites. Such a plan would still affect wildlife use of the area but the impact would be much less than the current proposal.

X. FISHERIES

Located within the Breezy Hill Subdivision are two small streams, having little discharge. Even the larger stream was observed not to have fish present at the time of inspection. Although the larger stream may not have an existing population of fish, it does have importance in providing some cool, clean water to the Farmington River. The Farmington River flows along the western boundary of the proposed subdivision. This adjacent river section is stocked with brown, brook and rainbow trout. Also, Atlantic salmon juveniles, inhabiting the upper reaches of the Farmington River system, will become smolts in the early spring and will undergo a seaward migration beyond the site's river section. Furthermore, it is anticipated that, when returning adult salmon are allowed to pass beyond fishways, some individuals may hold in the deep pool or, perhaps, even spawn in the riffles located within this section. Trout and Atlantic salmon require cool and clean water. Preserving water sources having these qualities is vital for maintaining the excellent trout fishery and for restoring the Atlantic salmon in the Farmington River.

Site preparation for Phase I of the proposed subdivision would likely impact the Farmington River. Excavation of both ponds and terracing of lots 7 and 8 could cause serious siltation problems. Constructing a pond on the larger stream would cause the stream's cool water to become warmed before entering the Farmington River. The stream's water temperature would increase even more, if a major portion of its water were to be diverted into a drainage ditch before entering the pond.

Impacts associated with site preparation could, in some instances, be mitigated. Proposed terracing of sites 7 and 8 should be reconsidered. Excavation of the ponds, if approved, should be carried out in mid-summer to reduce silt loads and their effects on the trout fishery. After construction, trees should planted around the ponds to shade them from the heating effects of the sun. Preferably, the trees should be conifers, which will not cause an accumulation of leaf litter on the pond bottoms. Also, a ten foot belt of natural vegetation should be maintained along both sides of the streams. Finally, there does not appear to be any significant advantage, with regard to fish or water quality within the northern pond, to adding water at the drainage ditch location over that of the expected location of the existing stream. However, if the ditch is to be constructed, it should be allowed to pass only high water flows.

The small, shallow pond on the subdivision is inhabited by largemouth bass and sunfish and should provide limited fishing for these species. If this pond is enlarged and the northern pond is completed, both should have substantial value as fishery resources. Considering their proposed small surface area and the likelihood of water inflow from submerged springs, the ponds should support trout if dug deeper than a maximum depth of 17 feet. If maximum depths are shallower than about 10 feet, the ponds would be best suited for warm-water species such as largemouth bass, bluegill sunfish, brown bullhead, and golden shiner. Since these ponds would have fisheries and other recreational values, and since they would likely pose some maintenance and liability problems under private ownership, some consideration should be given to turning both ponds and surrounding lots (23-26) into open space with project implementation.

Finally, the Farmington River along the western boundary of the proposed Breezy Hill Subdivision is a popular area for sport fishermen. With the eventual presence of adult Atlantic salmon in the River, interest in this section should become even greater. As proposed on the site plan, lots 1 and 3-6 extend directly to the Farmington River. Under private ownership, fishermen may be prevented from having access to the River along this section of river bank. Also, private owners may wish to remove natural vegetation along the River's edge. Removal of this vegetation could 1) increase siltation and erosion, 2) increase water temperatures, 3) eliminate cover for trout, and 4) lower the river section's aesthetic value. To insure that public access to the Farmington River is provided along this bank and that natural vegetation is preserved along the River's edge, a 25-50 foot "green belt" from proposed lots 1 and 3-6 should be turned over to the State of Connecticut or to the Township of New Hartford, as open space. Transferal of this "green belt" to public ownership is a major fisheries concern. Consideration should be given to requiring this transferal prior to acceptance of the proposed Breezy Hill Subdivision's Phase I development.

XI. ADDITIONAL ENGINEERING CONSIDERATIONS

Cuts and Fills Required For Phase I

The excavating of terrace escarpment soils for the installation of lots 7 and 8 will, according to ERT estimates, result in the removal of about 300,000 cubic yards of material. To obtain gravity flow from the house to the septic system of lot 7, the leaching fields could not be installed as shown without excavating into Mr. & Mrs. Popowski's lot. The 2:1 slope shown on section AA, sheet C-7 of the developer's application would extend back about 460 feet from the edge of the road, which means that the owner of lot 7 would have about two acres of steep, 2:1 slope soils contributing water to his backyard. This length of slope would be very difficult to stabilize without about 2 or 3 berms along the slope to intercept surface water and carry it safely to an outlet. It is quite apparent that the sale or use of the gravel is essential to the building of lots 7 and 8. Just based on these two lots alone, it is apparent that the gravel removal will be a major operation.

The slope of the land for lot 17 and 16 is about 29% in the front yard and about 25 - 30% in the backyard. Providing a level spot for sitting outside or a picnic table, etc., would require excavation into the hillside. The style of house construction could be modified to require less or more excavation. For instance, a raised ranch with grading in back four to five feet higher than the front would require less excavation.

Cuts and Fills Required For Phases II and III

The proposed road system off the Farmington River Turnpike winds up around the side of the steep hill on natural slopes of up to 50%. This will result in a lot of excavation in order to keep the road grade at or less than 8 percent. To install houses on these steep land slopes (mostly 20 - 50%), it will be necessary to do one of several things before construction. One, excavate the road to allow a house to be built on less sloping land. Two, build exotic houses with high retaining walls and steep drives. Three, build on one side of the road only. Four, provide access through less steep terrain and increase lot size to 5+ acres for mini-estate layout. The first choice would necessitate large volumes of excavation and then very difficult building conditions on lot size as laid out. The construction of lots 7 and 8 would interfere with the proposed road for Phase II.

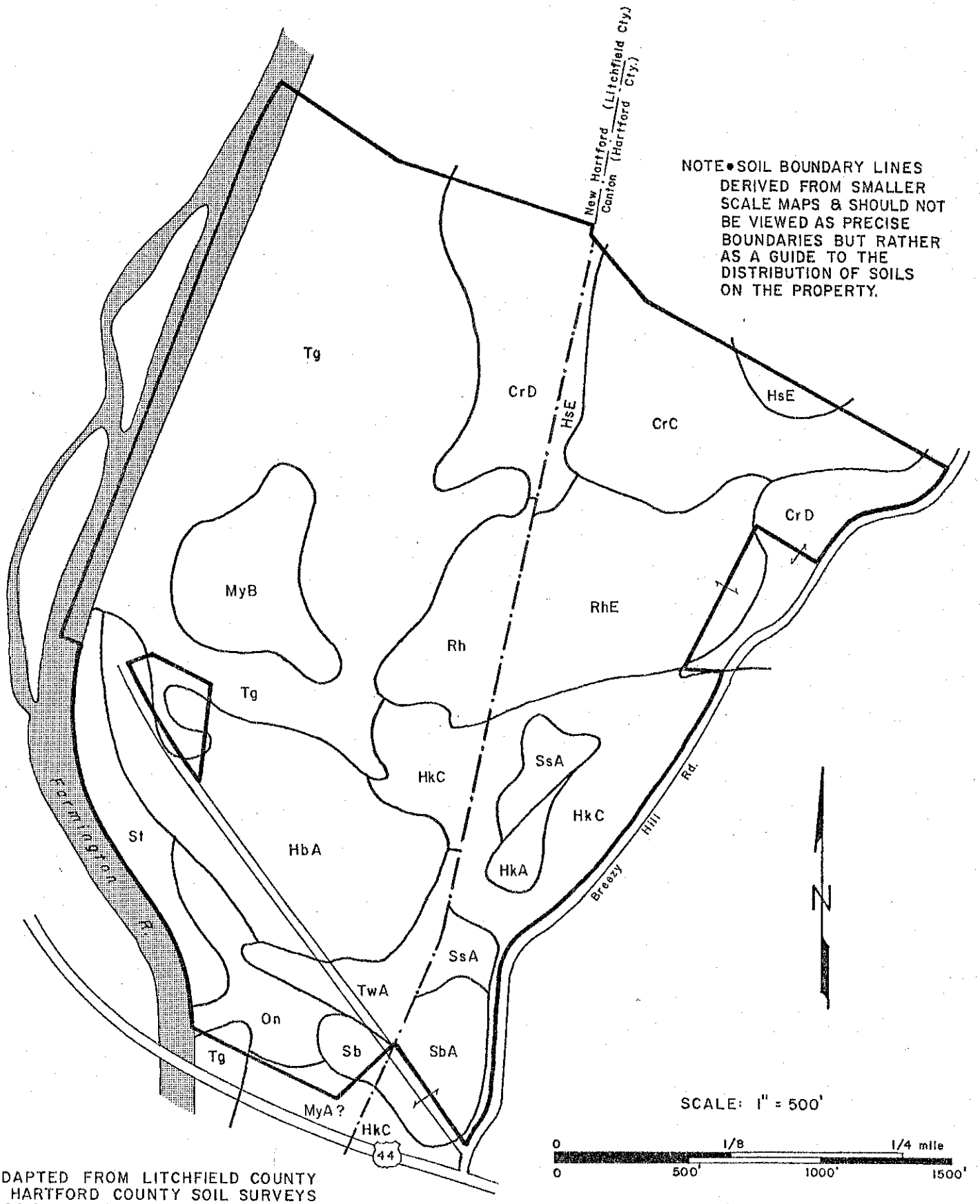
Phase One Road Drainage

Provisions for storm water runoff across Solar Heights Drive is provided along the edge of lot 31, and another along the edge of lot 29. There is no detail to determine the adequacy of these provisions. The area for natural drainage is from lot 15 through the center of lot 20. Under current plans, this natural drainage ditch seems to stop at the lot 15 and 16 line with no culvert or provisions to get the drainage ditch to the pipe at the drainage right of way. The drainage sheet E-3 of the subdivision plans shows the drainage from 18.5 acres draining through the easement of lot 29. This is shown incorrectly because about 10 acres of the 18.5 acres, drains into the west side of lot 12 and into lot 11. This could be a significant amount of water because the trees will be removed and the steep grass slopes, houses, and drives will remain, which will increase the runoff and erosion potential.

* * * * *

APPENDIX

SOILS MAP



ADAPTED FROM LITCHFIELD COUNTY & HARTFORD COUNTY SOIL SURVEYS U.S.D.A – S.C.S.

"BREEZY HILL SUBDIVISION" - SOILS LIMITATION CHART

MAP SYMBOL	SOIL NAME	SEPTIC SYSTEMS	BUILDINGS W/ BASEMENTS	ROADS AND DRIVEWAYS	LANDSCAPING
CrC	Charlton very stony fine sandy loam, 3-15% slopes	Moderate; Smears, Slope	Moderate; Large stones, Slope	Slight - Moderate; Slope	Moderate; Large stones
CrD	Charlton very stony fine sandy loam, 15-35% slopes	Severe; Smears, Slope	Severe; Slope	Severe; Slope	Severe; Slope
HbA	Hartland silt loam 0-3% slopes	Moderate; Percs slowly, Smears	Moderate; Low strength	Severe; Frost action	Slight
HkA	Hinckley gravelly sandy loam, 0-3% slopes	Severe; Poor filter	Slight	Slight	Moderate; Too sandy
HkC	Hinckley gravelly sandy loam, 3-15% slopes	Severe; Poor filter, Slope	Slight - Moderate; Slope	Slight - Moderate; Slope	Moderate; Too sandy, Slope
HsE	Hollis very rocky loam, 15-35% slopes	Severe; Depth to rock, Slope	Severe; Depth to rock, Slope	Severe; Slope, Depth to rock	Severe; Slope, Depth to rock
MyA	Merrimac sandy loam, 0-3% slopes	Severe; Poor filter	Slight	Slight	Slight
MyB	Merrimac sandy loam, 3-8% slopes	Severe; Poor filter	Slight	Slight	Slight
On*	Ondawa fine sandy loam	Severe; Floods, Poor filter	Severe; Floods	Severe; Floods	Moderate; Floods
Sb, SbA*	Saco silt loam	Severe; Floods, Wetness	Severe; Floods, Wetness	Severe; Floods, Wetness, Frost action	Severe; Floods, Wetness

"BREEZY HILL SUBDIVISION" - SOILS LIMITATION CHART

MAP SYMBOL	SOIL NAME	SEPTIC SYSTEMS	BUILDINGS W/ BASEMENTS	ROADS AND DRIVEWAYS	LANDSCAPING
SsA	Sudbury fine sandy loam, 0-3% slopes	Severe; Wetness, Poor filter	Severe; Wetness	Moderate; Wetness, Frost action	Slight
St*	Suncook loamy fine sand	Severe; Floods, Poor filter	Severe; Floods	Severe; Floods	Moderate; Too sandy
Tg	Terrace escarpments	Severe; Poor filter, Slope	Severe; Slope	Severe; Slope	Severe; Slope
TwA	Tisbury and Sudbury soils 0-3% slopes	Severe; Wetness, Poor filter	Severe; Wetness	Severe; Frost action	Slight
Rh, RhE	Rockland	Severe; Depth to rock, Slope	Severe; Depth to rock, Slope	Severe; Depth to rock, Slope	Severe; Depth to rock, Slope

* Inland Wetland Soils

EXPLANATION OF RATING SYSTEM:

SLIGHT LIMITATION: indicates that any property of the soil affecting use of the soil is relatively unimportant and can be overcome at little expense.

MODERATE LIMITATION: indicates that any property of the soil affecting use can be overcome at a somewhat higher expense.

SEVERE LIMITATION: indicates that the use of the soil is seriously limited by hazards or restrictions that require extensive and costly measures to overcome.

ABOUT THE TEAM

The King's Mark Environmental Review Team (ERT) is a group of environmental professionals drawn together from a variety of federal, state, and regional agencies. Specialists on the team include geologists, biologists, foresters, climatologists, soil scientists, landscape architects, recreation specialists, engineers, and planners. The ERT operates with state funding under the aegis of the King's Mark Resource Conservation and Development (RC&D) Area - a 47 town area in western Connecticut.

As a public service activity, the team is available to serve towns and developers within the King's Mark Area ---- free of charge.

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 the review of a wide range of significant activities including subdivisions, sanitary landfills, commercial and industrical developments, and recreation/open space projects.

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 official of a municipality or the chairman of an administration agency such as planning and zoning, conservation, or inland wetlands. Requests for reviews should be directed to the Chairman of your local Soil and Water Conservation District. This request letter must include a summary of the proposed project, a location map of the project site, written permission from the landowner/developer 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 King's Mark RC&D Executive Committee, the team will undertake the review. At present, the ERT can undertake two reviews per month.

For additional information regarding the Environmental Review Team, please contact your local Soil Conservation District Office or Richard Lynn (868-7342), Environmental Review Team Coordinator, King's Mark RC&D Area, P.O. Box 30, Warren, Connecticut 06754.