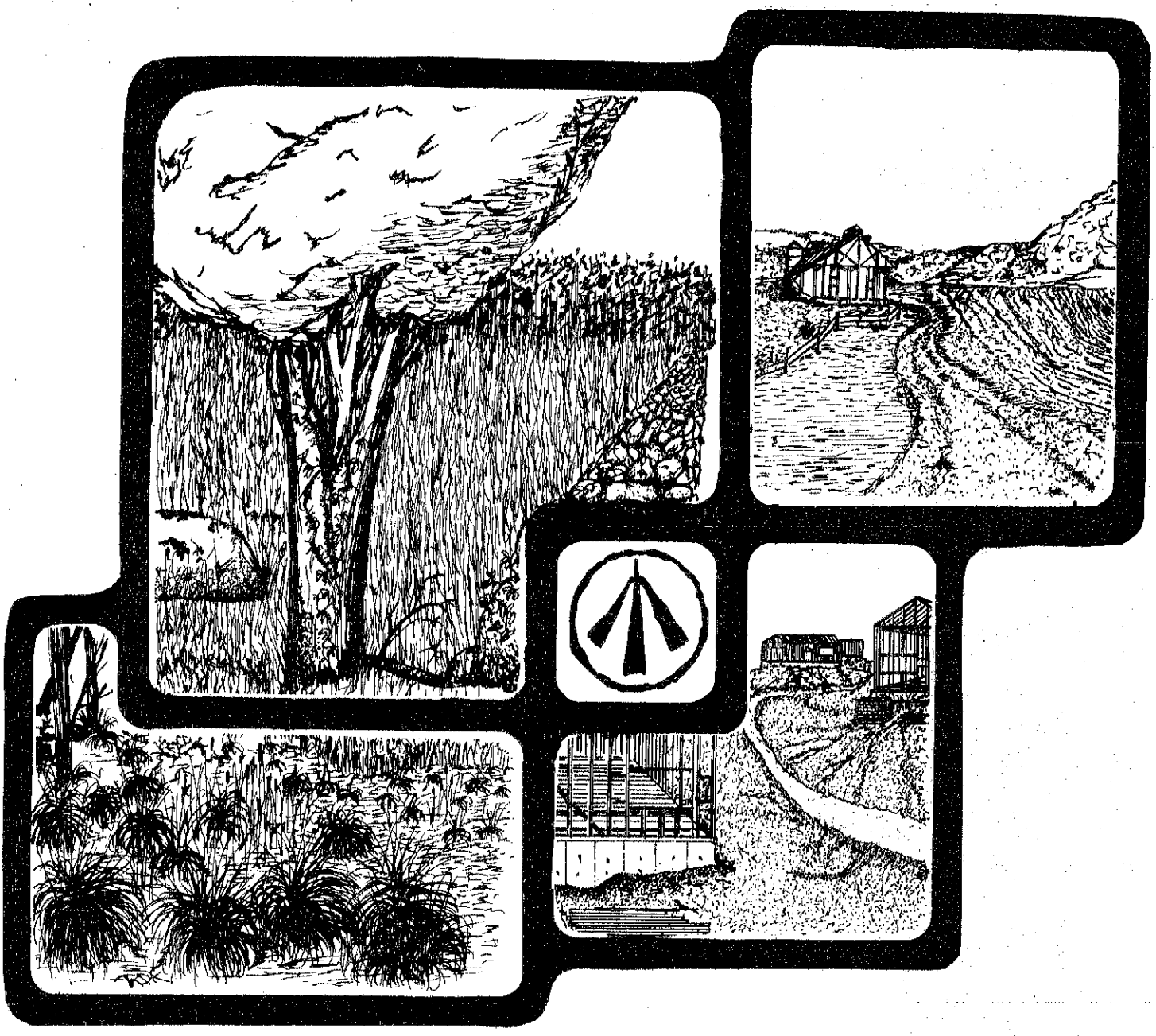
ENVIRONMENTAL REVIEW TEAM REPORT



CENTER FIELD RECREATION COMPLEX
WOODBRIDGE, CONNECTICUT

KING'S MARK
RESOURCE CONSERVATION AND DEVELOPMENT AREA

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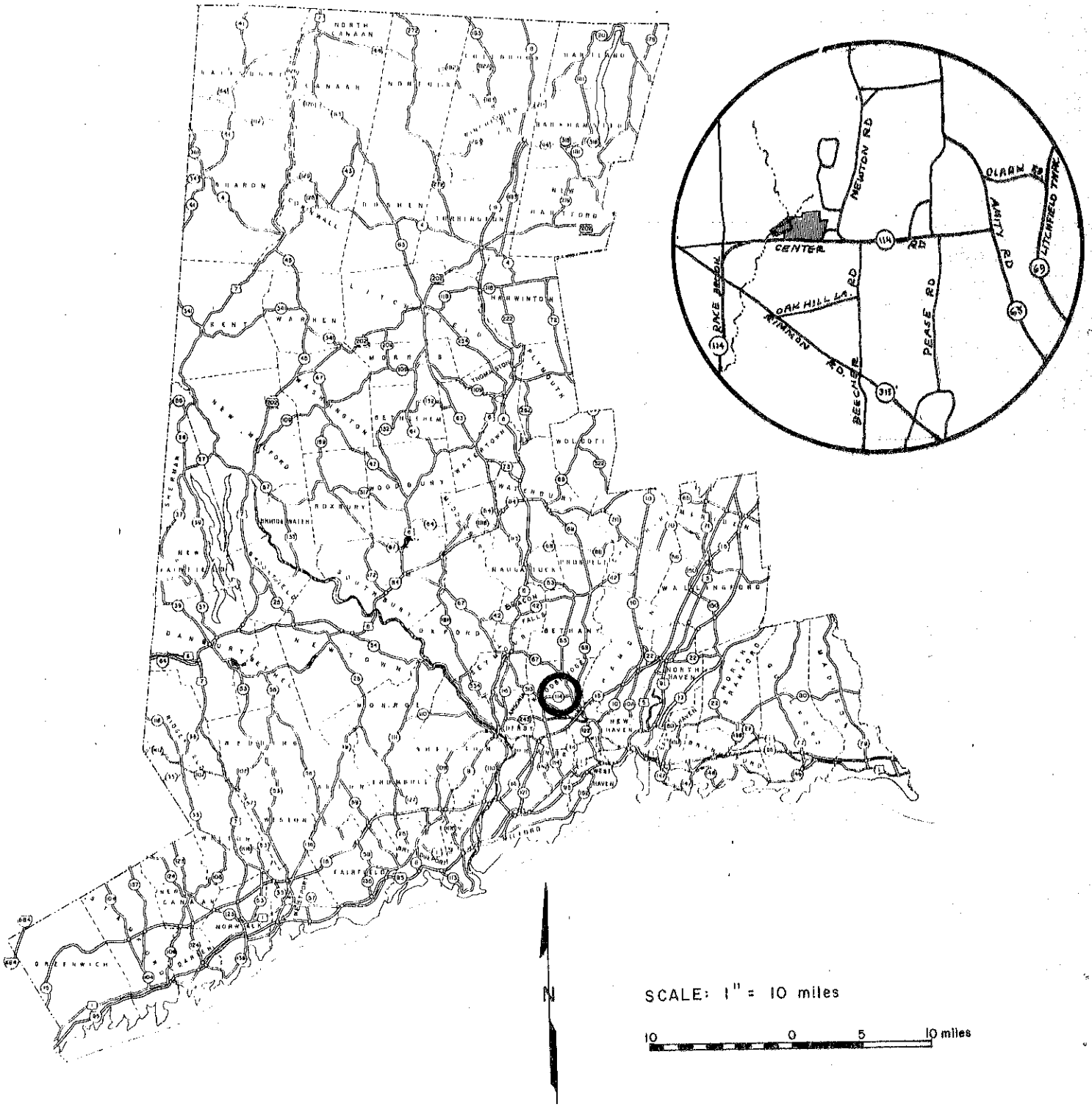


ENVIRONMENTAL REVIEW TEAM REPORT
ON
CENTER FIELD RECREATION COMPLEX
WOODBRIDGE, CONNECTICUT

I. INTRODUCTION

Just west of the Woodbridge Town Hall is a ± 25 acre parcel of town-owned land presently being considered for additional recreational development. A design report for the proposed project, known as the "Center Field Recreation Complex", has been completed for the Woodbridge Recreation Commission by a consultant. The consultant's report presents a plan for the community recreation complex and cost estimates. A simplified version of that plan is shown in Figure 1 of this report.

The First Selectman from the Town of Woodbridge requested the assistance of the King's Mark Environmental Review Team to help the town in analyzing the site proposed for recreational development. Specifically, the ERT was requested to: 1) identify the natural resource base of the study site, 2) discuss the probable environmental impact of the proposed project, 3) comment on the suitability of the former landfill area for ballfields, 4) comment on drainage necessary for the planned facilities and the effects thereof on the natural environment, and 5) comment on the effect of the project on the pond and the adaptability of the pond for recreational uses.

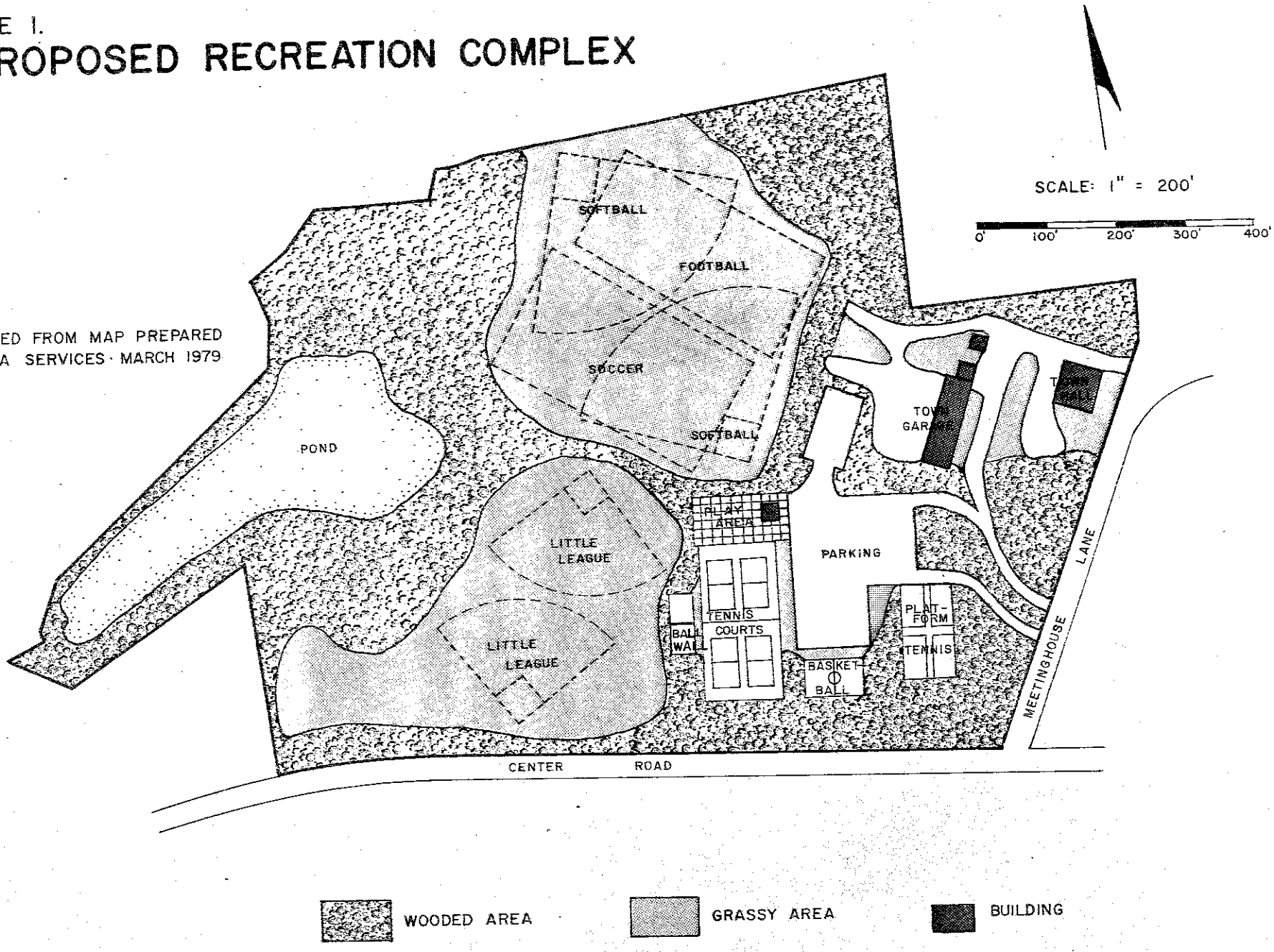
The ERT met and field reviewed the site on July 24, 1979. Team members for this review consisted of the following:

Frank Indorf	District Conservationist	U.S.D.A. Soil Conservation Service
Erin O'Hare	Environmental Planner	Southcentral Ct. Regional Planning Agency
Robert Orciari	Fishery Biologist	State Dept. of Environmental Protection
Edward Rizzotto	Recreation Specialist	State Dept. of Environmental Protection
Robert Rocks	Forester	State Dept. of Environmental Protection
Stephen Sasala	Transportation Planner	Southcentral Ct. Regional Planning Agency
Michael Zizka	Geohydrologist	State Dept. 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.

FIGURE 1.

PROPOSED RECREATION COMPLEX



ADAPTED FROM MAP PREPARED BY TPA SERVICES · MARCH 1979

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 resource information and preliminary environmental impact considerations--all conclusions and final decisions rest with the town. It is hoped the information contained in this report will assist the Town of Woodbridge 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.

* * * * *

II. SUMMARY

- The proposed plan is well designed and promises to meet recognized needs in town for additional ball fields and tennis courts.

- In general, the majority of the soils on the site are compatible with the proposed plan. The eastern portion of the site has fair potential for the proposed active recreational development. This area is limited mainly by stoniness and steepness of slopes. During periods of construction, conservation measures will be needed to prevent excessive erosion and siltation.

- The proposed ball field in the northcentral portion of the property represents an ideal way to reclaim the former landfill area. Additional grading in this area should be accomplished through the use of fill rather than by excavation in order to avoid possible odor problems.

- Based on a Connecticut Department of Health Services formula, approximately 140 swimmers per day could utilize the pond during low flow periods if the initial water quality were adequate and if the pond were otherwise suitable for swimming. The actual quality of water in the pond is questionable. It appears that leachate from the former landfill area may be having an adverse impact on water quality. This can be conclusively determined only through a comprehensive water quality survey.

- Stormwater flow increases resulting from recreational development of the parcel will be insignificant if erosion is controlled on-site. With implementation of the project, it is recommended that an erosion and sediment control plan for the entire development process be prepared and followed.

- Five vegetation types are present on the property. The proposed project should have little negative impact on the surrounding vegetation. Preservation of large, healthy trees on-site will improve over-all aesthetics and provide shade for the parking and tennis areas. As areas are cleared to construct the project, the trees removed should be utilized as fuelwood.

- The pond at the site is shallow and approximately three acres in surface area. The pond should be capable of supporting a variety of warm-water fish species. Considering that the pond would be fished primarily by youngsters, it would best be managed for largemouth bass, brown bullheads, and bluegill sunfish.

- The proposed project is consistent with regional and state plans and should not aggravate traffic flows in the area.

- The recent acquisition by the town of property to the southwest of the Complex may merit reconsideration of the present plan to terminate the existing access point off Center Road.

III. THE SITE

The Center Field site is located in the central portion of town just west of the town hall. The site is bordered by Center Road on the South, Meetinghouse Lane on the east, low-density residential properties on the west, and undeveloped wooded land on the north. Amity Regional High School is located about 1/4 mile northeast of the property.

About half of the property is presently forested, the other half is open land. Two ballfields and a small parking lot are situated in the southwestern quarter of the site adjacent to Center Road. A ± 2 acre pond is located at the western edge of the property.

The slope on the eastern third of the site is moderate (3 - 15% slope). The northcentral portion of the property, formerly used as a landfill, is nearly level, as is the southcentral portion of the property where the ballfields are located. The topography around the pond area varies from nearly level to moderately steep (see Figure 2).

IV. GEOLOGY

Center Field is located within the Ansonia topographic quadrangle. Bedrock and surficial geologic maps of that quadrangle have been published. These are, respectively, Map GQ-426 of the U.S. Geological Survey, by C. E. Fritts (1965), and Quadrangle Report No. 23 of the Connecticut Geological and Natural History Survey, by R. F. Flint (1968).

No bedrock outcrops were observed on the site, but the rock unit underlying the property has been interpreted as Wepawaug Schist. This unit is composed mainly of interlayed medium light gray to dark gray phyllitic schist and medium to dark gray quartz-rich gneiss. Phyllitic schists are metamorphic rocks with a pronounced foliation that allows the rock to be fairly easily split into thin slabs. Such rocks have a silky to shiny appearance on fresh surfaces. Gneisses are rocks in which the alignment into thin layers of platy or elongate minerals between layers of more rounded mineral grains has produced a banded appearance.

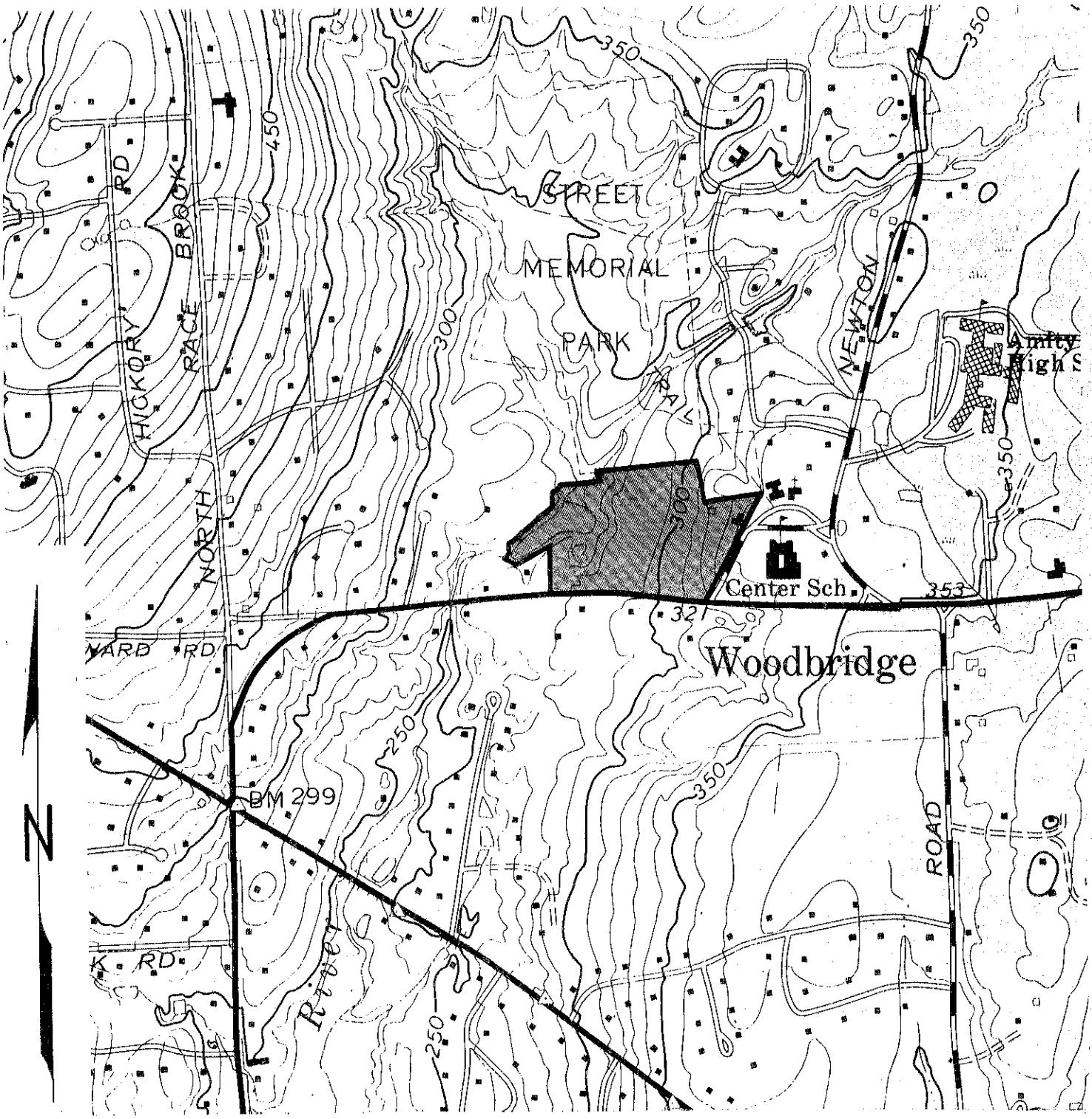
Overlying bedrock on the site is a nonsorted, nonstratified deposit of glacial origin. This deposit, called till, consists primarily of rock particles of widely varying sizes and shapes. Because of its typically compact nature, till is often referred to as hardpan. On the western half of the site, the till is covered by a thin, sandy and gravelly sediment that was deposited by glacial meltwater. Immediately north and northwest of the pond, recent stream and swamp deposits of sand, silt, clay, and organic material form the surficial cover. The sandy deposits in the central part of the site have been extensively altered by cutting and filling. The approximate distribution of the various surficial geologic materials in Center Field is shown in Figure 3.

V. HYDROLOGY

The pond on the site was formed by the damming of the two upstream arms of Wepawaug River. The combined drainage areas of these two watercourses, including the pond, total 2.6 square miles (see Figure 4). If it can be assumed that each square mile of watershed would add 50,000 gallons per day to the low flows in the stream (a rough rule of thumb), then the inflow to the pond would total

FIGURE 2.

TOPOGRAPHIC MAP



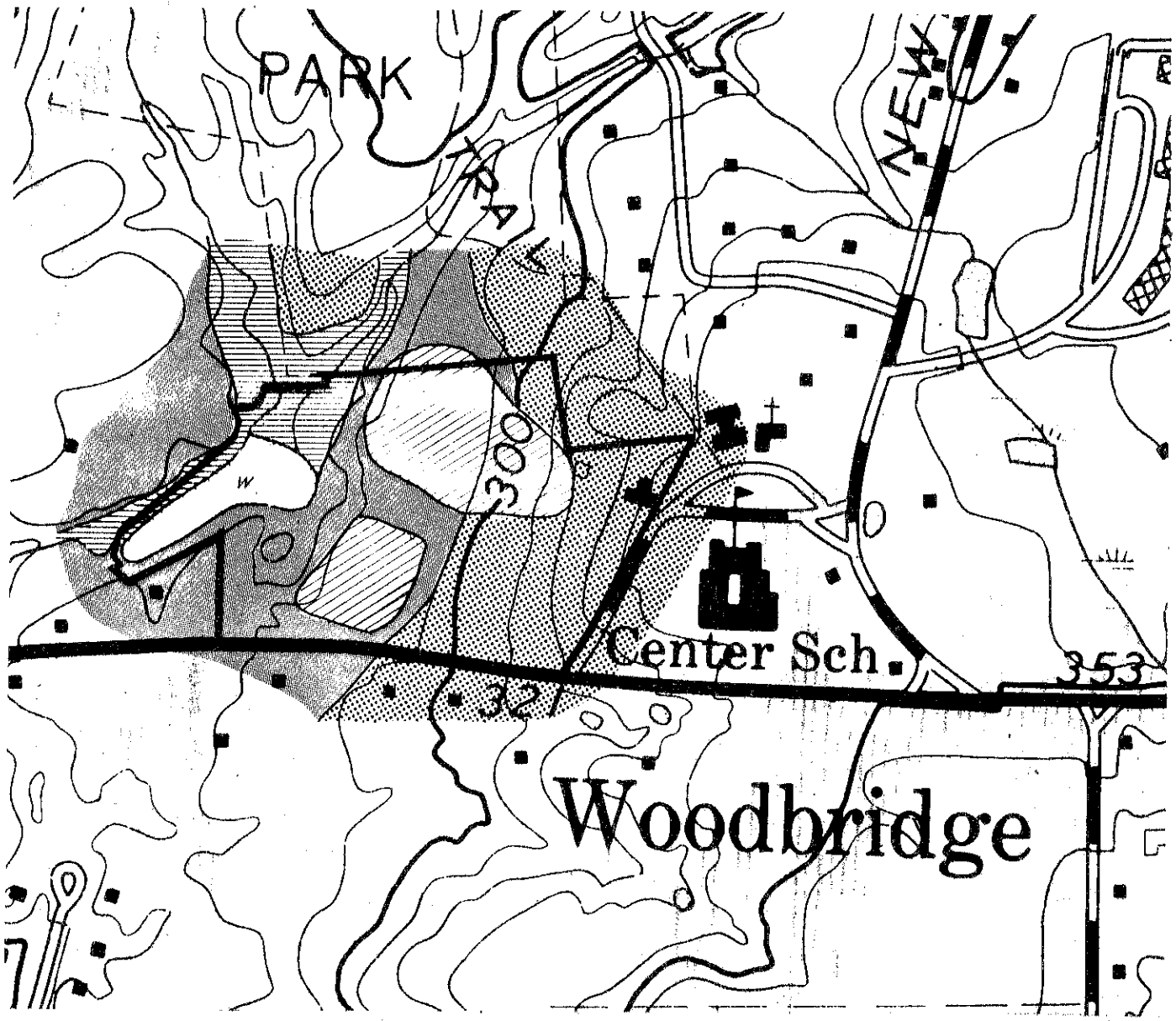
SCALE: 1" = 1000'

0 1/4 1/2 mile

0 1000' 2000' 3000'

FIGURE 3.

SURFICIAL GEOLOGY



EXPLANATION

- Till (nonsorted, nonstratified rock debris)
- Stratified drift (sand and gravel deposits)
- Cut and fill areas (sand, gravel, and rubbish over stratified drift and swamp deposits)
- Alluvium and swamp deposits (sand, silt, clay and organic sediments)

N

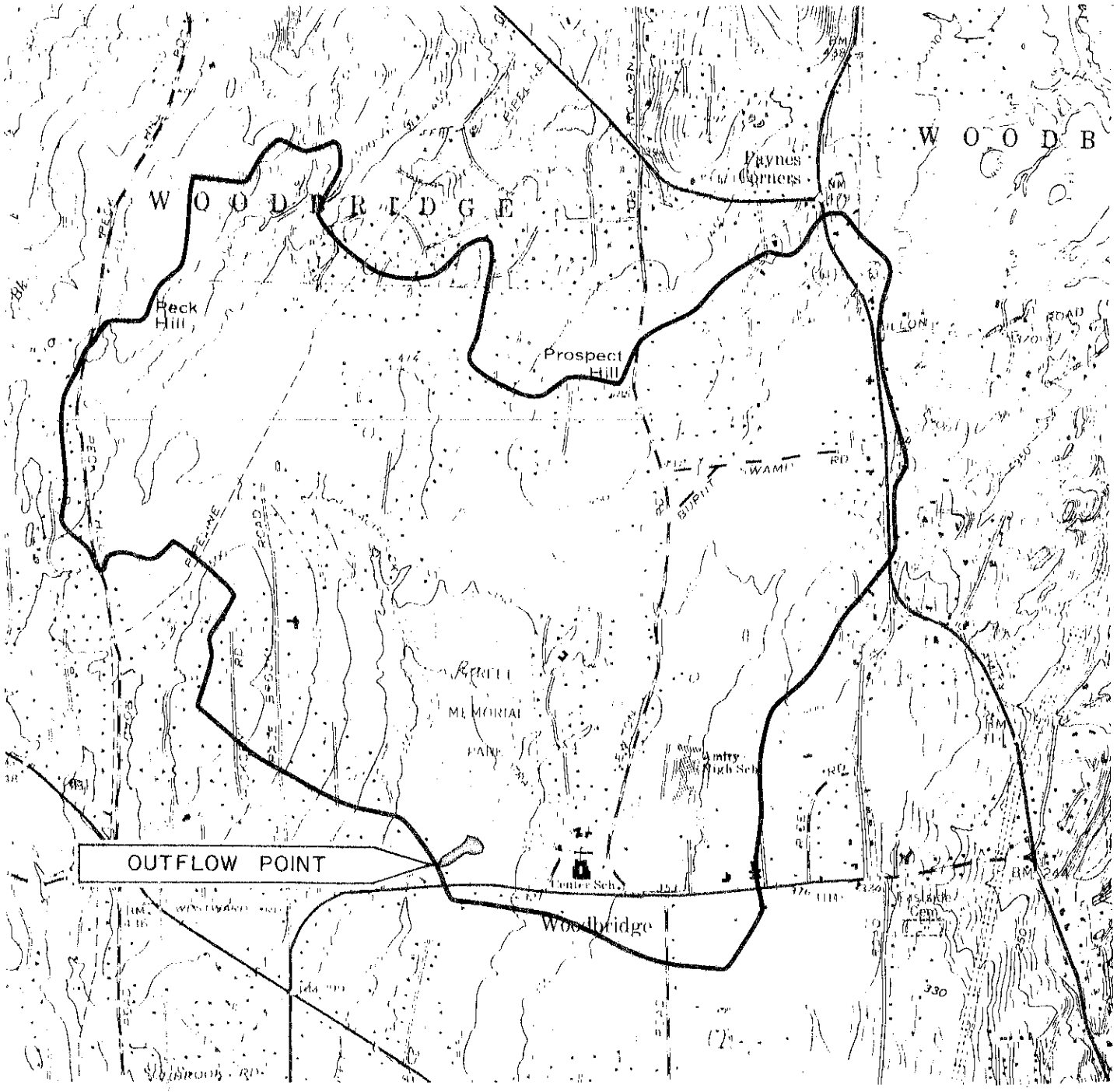
SCALE: 1" = 500'

0 1/8 1/4 mile

0 500' 1000' 1500'

FIGURE 4.

WATERSHED MAP



130,000 gallons per day during such low flow periods. The pond's volume, assuming a 2.7 foot average depth, would be approximately 1,681,400 gallons. Based on a Connecticut Department of Health Services formula, approximately 140 swimmers per day could utilize the pond during low-flow periods if the initial water quality were adequate and if the pond were otherwise suitable for swimming.

The actual quality of water in the pond is questionable. The day of the field review, leakage of pond water was occurring along the retaining berm on the northwest side; as the water emerged to form a small rivulet, oxidation of mineral matter turned the water a bright orange-brown color. It is likely that much of the suspended and dissolved material in the water was coming from groundwater flow through the old landfill on the site. It may therefore be difficult to clean up the pond enough to allow for swimming; much depends upon the exact nature and quantity of materials buried in the fill. Only through a comprehensive water quality survey can the suitability of the pond for swimming be conclusively determined.

Since runoff from the site drains almost entirely into the pond or its outflow stream, any increases in runoff from recreational development of the site could increase rates of outflow during storms. However, since the drainage area involved is so large with respect to the site, the flow increases would be negligible.

VI. WATER SUPPLY

In general, the quality of the groundwater in that part of the site proposed for recreational development is likely to be fair to poor. A number of sources of contamination exist: these include materials already buried in the landfill, road salts included in the sweepings that are presently dumped on the site, and poorly operating septic disposal systems. Water derived from wells drilled into the surficial materials on the property would have the greatest potential for being polluted. Water derived from a bedrock-based well in the same area may be of acceptable quality if the well casing extends completely through the surficial materials. If an additional source of water is needed for the desired recreational activities, a bedrock-based well located near the eastern boundary of the site as far as possible from the present or future septic disposal facilities would be most preferable.

VII. SOILS

Soil Descriptions

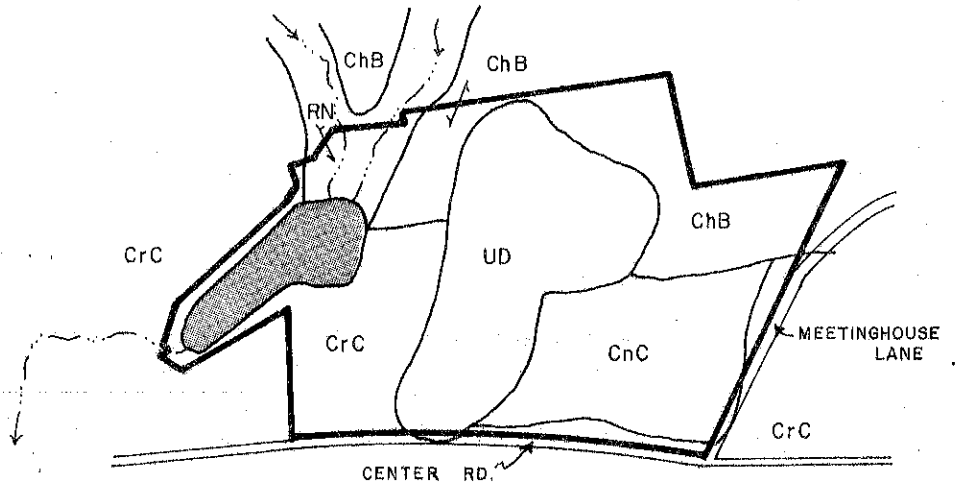
According to the New Haven County Soil Survey, five soil types are present on the subject site (see Figure 5). A brief description of each of these soil types follows:

ChB - Charlton very stony fine sandy loam, 3 to 8% slopes: This is a gently sloping, well drained soil. Up to 3% of the surface is covered with stones and boulders in this soil type. Typically, the surface layer of this soil is dark brown fine sandy loam 6 inches thick. The subsoil is yellowish brown and light

FIGURE 5.

SOILS MAP

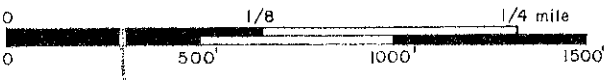
NOTE • SOIL BOUNDARY LINES WERE DERIVED FROM A SMALLER SCALE MAP (1" = 1320') AND HENCE SHOULD NOT BE VIEWED AS PRECISE BOUNDARIES BUT RATHER AS A GUIDE TO THE DISTRIBUTION OF SOILS ON THE PROPERTY.



ADAPTED FROM NEW HAVEN COUNTY SOIL SURVEY, U.S.D.A. – S.C.S.

N

SCALE: 1" = 500'



olive brown fine sandy loam 20 inches thick. The substratum, to a depth of 60 inches, is grayish brown gravelly fine sandy loam that has a few firm lenses up to 4 inches thick. Permeability is moderate or moderately rapid. This soil has a high available water capacity. Runoff is medium. This soil tends to dry out and warm up fairly early in the spring. It has a low shrink-swell potential. Unless limed, this soil is very strongly acid through medium acid.

CnC - Charlton extremely stony fine sandy loam, 3 to 15% slopes. About 3 to 25 percent of the surface of this well drained soil is covered with stones and boulders. Slopes are mostly smooth and convex. Typically, the surface layer is dark brown fine sandy loam 2 inches thick. The subsoil is dark brown and light olive brown fine sandy loam 24 inches thick. The substratum, described to a depth of 60 inches, is grayish brown, gravelly fine sandy loam with a few firm lenses up to 4 iches thick. This soil has moderate or moderately rapid permeability. It has high available water capacity. Runoff is medium to rapid. This soil tends to dry out and warm up fairly early in spring. It has low shrink-swell potential. Unless limed, it is very strongly acid through medium acid.

CrC - Charlton-Hollis fine sandy loams, 3 to 15% slopes. The Charlton and Hollis Soils in this complex are present in such an intermingled pattern that they could not be seperated in soils mapping. Approximately 45 percent of these areas are Charlton fine sandy loam, 30 percent are Hollis fine sandy loam, and about 25 percent are other soils. The complex consists of gently sloping and sloping, well drained soils on uplands where the relief is affected by the underlying bedrock. The Charlton Soil has a dark brown fine sandy loam surface layer two inches thick. The subsoil is dark brown, yellowish brown, and light olive brown fine sandy loam 24 inches thick. The substratum to a depth of 60 inches, is grayish brown, gravelly fine sandy loam that has a few firm lenses up to four inches thick. The typical Hollis Soil has a very dark brown fine sandy loam surface layer three inches thick. The subsoil is dark brown fine sandy loam 11 inches thick, and it overlies hard, unweathered shist bedrock. The Charlton Soil has moderate or moderately rapid permeability. It has a high available water capacity. Runoff is medium to rapid. This soil has a low shrink-swell potential. The Hollis Soil has moderate or moderately rapid permeability above the bedrock. It has a low available water capacity. Runoff is medium to rapid. Both soils are very strongly acid through medium acid, if they are not limed.

UD - Udorthents, smoothed. This map unit consists of a well drained to excessively drained soil. It is composed of cut or borrow areas, filled areas, and areas consisting of both cut and fill. The slopes are mainly less than 15 percent, however there are steep escarpments at the edges of some borrow areas. The cut or borrow areas consist of places where the surface layer and the subsoil have been removed. In filled areas, more than 20 inches of soil material has been placed on the surface. In many places, the landscape has been smoothed, and the cut and fill areas occur in an intricate and complex pattern. The soil in this unit has a wide range of characteristics. Texture ranges mainly from sandy loam to silt loam or the gravelly analogs. Consistence ranges from loose to very firm. Permeability ranges from very rapid to slow. This unit requires onsite investigation and evaluation for most uses because the characteristics of the soil are so variable.

RN - Ridgebury, Whitman and Leicester, extremely stony fine sandy loams. This mapping unit includes poorly and very poorly drained soils. These soils are extremely stony on the surface and throughout the soil profile. More than 3 percent of the surface is covered with stones and boulders. These soils have

a perched water table at or near the surface from fall to spring and after heavy rains during the summer. The predominant soils in this mapping unit are the Ridgebury and Whitman Soils which are underlain by a fragipan at 20 to 25 inches. The topsoil and subsoil texture is a fine sandy loam. The fragipan is a very compact fine sandy loam. The upper solum above the fragipan has a moderate permeability and the fragipan itself has a slow to very slow permeability. The Ridgebury Soil is poorly drained and the Whitman Soil is very poorly drained. The Leicester Soils are also a fine, sandy loam, but do not have a fragipan within 40 inches of the surface. All of these soils are considered inland wetland soil types as defined by Connecticut Public Law 155, as amended.

Soils vs. Proposed Land Use

In general, the majority of the soils on the site are compatible with the proposed plan.

The eastern portion of the site, underlain by a stony Charlton soil, has fair potential for development of tennis courts, parking, a basketball court and a play area. This area is limited mainly by stoniness and steepness of slope. Removal of stones and boulders will be costly. During periods of construction, conservation measures will be needed to prevent excessive erosion and siltation.

The proposed softball and soccer field is an ideal way to reclaim the former landfill area. Additional grading in this area should be accomplished through the use of fill rather than by excavation in order to avoid possible odor problems. Any dugouts located in this area should be located above ground to avoid leachate or odor problems.

The proposed plan allows a buffer zone between the wetlands and area of construction. This will serve to minimize any wetland disturbances.

Soil Loss and Sedimentation

With implementation of the proposed project, it is recommended that an erosion and sediment control plan for the entire development process be prepared and followed. Erosion and sediment control practices are described in the "Erosion and Sediment Control Handbook--Connecticut" (U.S.D.A. Soil Conservation Service, 1976). Additional assistance in the preparation and review of erosion and sediment control plans is available from the New Haven County Conservation District.

The following practices should be implemented as part of the sediment and erosion control plan:

1) Keep soil disturbance during construction to a minimum.
2) Regrade and re-vegetate exposed areas as soon as possible.
3) Attempt to keep cuts and fills at a minimum 2:1 side slope.
4) Place staked hay bales below any disturbed areas bordering wetlands. Hay or straw erosion checks should also be considered at the base of the steep slope area in the eastern portion of the site during construction of the proposed tennis courts and parking lot.
5) Stormwater run off from the proposed parking lot and tennis courts should be directed to either a grassed waterway or piped storm drainage system with catch basins. Outflow from either measure could be directed to the pond on-site.

VIII. VEGETATION

There are a variety of vegetation types present on this ± 25 acre parcel. In all, five are described (see Figure 6 and vegetation stand descriptions).

Vegetation Stand Descriptions

STAND A. Mixed Hardwoods. This fully-stocked, 8 acre, two aged stand is made up of scattered healthy sawlog size red oak, sugar maple and hemlock with sapling size sugar maple, red maple, white ash and black birch. The sapling size trees are becoming crowded. The understory is dominated by mapleleaf viburnum, highbush blueberry, barberry, black cherry seedlings and bittersweet. Poison ivy, Canada Mayflower, Virginia creeper, Christmas fern and cinnamon fern form the ground cover in this stand.

STAND B. Disturbed Area/Landfill. Pioneer species and weed species have become established on this 6 acre site. Grasses, goldenrod, sweet fern, winged sumac, smooth sumac, staghorn sumac, honey locust, silky dogwood and quaking aspen are the dominant species present.

STAND C. Hardwood Swamp. Poor quality sapling to pole-size red maple are present in this over-crowded 2 acre stand. Sweet pepperbush, buttonbush, speckled alder, red maple seedlings, silky dogwood, spirea and bittersweet form a dense understory in many parts of this stand. Groundcover vegetation is made up of poison ivy, sensitive fern, skunk cabbage and tussock sedge.

STAND D. Softwoods/Open fields. This 2 acre area is dominated by highly aesthetic sawlog-size eastern white pine with pole-size crab apple and American beech. Silky dogwood and Hawthorn with bittersweet and poison ivy are present around the open grassy areas which cover approximately 40% of this area.

STAND E. Mixed Hardwoods. Medium quality pole-sized red maple are present in this 1+ acre over-stocked stand. Seedling size red maple and black cherry form a spotty understory. Ground cover vegetation is primarily poison ivy, Canada Mayflower, grasses and sedges.

Environmental Impact of the Proposed Action on Vegetation

Grading the former landfill area, adding topsoil, lime, fertilizer and grass seed will have little impact on the surrounding vegetation. Runoff carrying lime, fertilizer, and sediment should be kept to a minimum, utilizing the practices outlined in Erosion and Sediment Control Handbook for Connecticut, 1976, U.S.D.A., Soil Conservation Service.

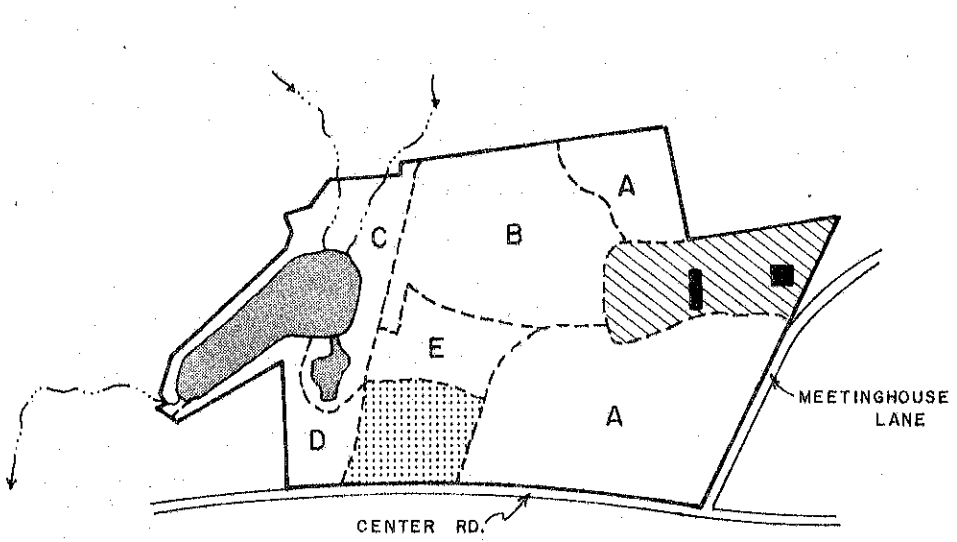
If some runoff and subsequent erosion does occur from this area, the greatest impact will be to the wetland and pond; however, increases in fertility will be difficult to detect because of the already high fertility of the pond and associated wetland.

Although increased growth of herbaceous vegetation around the perimeter of the converted landfill may occur, this should cause little negative impact.

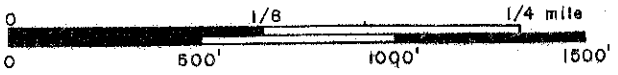
The proposed development of the parking areas and tennis courts in Stand A may create a slight impact. When areas are completely cleared of vegetation,

FIGURE 6.

VEGETATION TYPE MAP



SCALE: 1" = 500'



LEGEND

- Road
- Property boundary
- Vegetation type boundary
- Stream
- Town facilities
- Athletic Field
- Buildings
- Pond

VEGETATION STAND DESCRIPTIONS*

STAND A Mixed hardwood, fully-stocked, 2-aged sapling and sawlog-size, 8 acres.

STAND B Disturbed area/landfill, 6 acres.

STAND C Hardwood swamp, over-stocked, sapling to pole-size, 2 acres.

STAND D Softwood/Open fields, 2 acres.

STAND E Mixed hardwoods, over-stocked, pole-size, 1+ acre.

*Seedling-size = trees 1 inch and smaller in diameter at breast height (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.
Sawlog-size = trees 11 inches and greater in d.b.h.

stormwater runoff is usually increased because trees and vegetation are no longer present to slow water movement or intercept, utilize and transmit water back into the atmosphere. This increase in runoff may cause erosion, leading to further sedimentation and siltation of the pond and wetland area. Here again, appropriate erosion and sediment control practices should be implemented during construction.

If foot trails are developed through the vegetated parts of this property, direct trampling and soil compaction may destroy herbaceous vegetation and trees. Well marked trails will limit the size of the area being trampled and the use of woodchips, crushed stone or cinders as a trail surface will reduce soil compaction. These practices will limit the impact of trail development through this area on vegetation.

Suggested Management Techniques

The establishment of a sod cover for the athletic fields proposed to be developed on the former landfill area is feasible provided certain guidelines are followed. As the area is graded, large stones, asphalt chunks and other debris should be removed. Approximately six inches of suitable topsoil should be spread over the area. Lime should be added according to soil tests followed by the application of fertilizer. Soil conditions and time of year will dictate fertilizer application rates. Kentucky 31 Tall fescue seed is recommended for athletic fields and heavy use areas at rates between 150 and 250 pounds per acre.[1] The newly seeded area should be mulched[2] with hay or straw (75 to 100 lbs. per 1,000 square feet) until vegetation is re-established. Liquid asphalt should be used to anchor the mulch at an application rate of 0.1 gal./square yard.

As areas in Stands A and E are cleared for parking and recreational facilities, trees removed should be utilized as fuelwood. The healthy sawlog size trees present in these stands should be identified and incorporated into the actual site design of this area where possible. These trees, if preserved, will provide shade and increase the aesthetics of the area.

Grading near trees that are to be saved should be limited. Where grading is necessary, it should be carefully executed so as not to damage trees or tree root systems. Soil disturbances within the drip lines of a tree, and/or mechanical injury, may reduce the health and vigor of that tree, and perhaps cause death within three to five years.

Areas in Stands A and E which are not cleared would become healthier if the crowded conditions were reduced. Removing approximately one-third of the total number of stems would provide room for the residual trees to grow and become healthier. This thinning should be focused on removing poor quality trees, unhealthy trees and those trees that are directly competing with healthy high quality trees. The trees removed should be utilized as fuelwood.

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[1] Erosion and Sediment Control Handbook for Connecticut, 1976, U.S.D.A., Soil Conservation Service.

[2] Note: If seeding is done in the fall, mulching may not be necessary.

Management of the hardwood swamp (Stand C) for timber production is not feasible because of operational limitations and also because tree growth potentials are limited by the permanently high water table.

Poison ivy is present throughout much of this property. To avoid potential problems it should be eradicated in the heavy use areas. Great care should be used in selecting and applying herbicides, especially in a recreational area.

IX. FISHERIES

The pond, located in the Woodbridge recreational complex area, is shallow and approximately three acres in surface area. It is fed by two tributaries of the Wepawaug River. Both tributaries flow from a moderately developed residential watershed and water quality in the streams should be generally good. The water quality in the pond itself is dependent upon the effect of the leachate from the landfill. To determine the impact of the landfill on water quality, a water quality survey during the summer time would be advisable.

Water exchange should be sufficient in the pond to reduce the potential for natural summer kills of fish, which commonly occur in small shallow bodies of water. The water is tea-colored, due to tannic and humic acids entering the pond from the swampy surroundings. By reducing light penetration, the stained water will limit growth of many forms of aquatic vegetation. Therefore, the pond should not be affected by nuisance growths of filamentous algae and rooted aquatic plants. In fact, only a few small patches of white water lilies are present. However, an over abundance of unicellular algae, duckweed or watermeal could be possible, if excessive loading of nutrients were to occur. A clear oily film was present on the ponds surface, but this may be attributable to the natural oils which remain from decomposing vegetation in the adjacent swampy area.

Due to the stained water, direct observation of fish in the pond was difficult. However, it should be capable of supporting a variety of warm-water species. Considering that the pond would be fished primarily by youngsters, it would best be managed for largemouth bass, brown bullheads and bluegill sunfish. Golden shiners, which are an important forage fish for largemouth bass, should also be present. Any of these species not caught or observed in the pond after a period of time, should be stocked from a private commercial hatchery. Although trout could be stocked in the spring or fall, on a put-and-take basis, they would not survive in the pond through the summer. A few trout could possibly inhabit the cooler feeder streams during this period.

The one cleared shore area should be sufficient for launching canoes and cartop carried boats, but access to the pond from other areas is rather limited. Fishing from shore could be facilitated by clearing a few paths to the pond.

During construction of the proposed recreational complex, adequate precautions should be carried out to prevent silt from entering the pond. However, after construction is completed, the Center Field recreational facilities should have little effect on the pond, provided that fertilizers are applied to the ball fields with moderation in order to minimize the amount of nutrients entering the pond.

X. LAND USE AND TRAFFIC CONSIDERATIONS

Consistency of Project with Local, Regional, and State Plans

A town plan is presently under preparation.

The Regional Plan-Proposed Land Use Plan--2000, South Central Connecticut Planning Region, adopted 1968, recommends the area in question as an open space area.

The State Plan-State of Connecticut Conservation and Development Policies Plan, 1979-1982, "Locational Guide Map" indicates the area in question as "existing preserved open space". The State action strategy is in support of permanent continuation as public, quasi-public open space and discouragement of sale and structural development of such areas except as may be consistent with the open space functions served.

Existing Zoning

The area in question is zoned Park District in the central section. The western side including the pond, and the eastern side abutting Meetinghouse Lane are both zoned Residence A District (65,000 square foot minimum lot size).

Adjacent Land Use

Land use in the surrounding area would be compatible with the proposed recreational use. The area to the west and south of the piece is low density residential. To the east, land use is institutional with a church and school (now closed). To the north is Street Memorial Park, an undeveloped natural area which is maintained by the Woodbridge Park Association.

Demographic Profile and Recreational Needs

Woodbridge population estimates,(from revised Office of Policy & Management, State Department of Health, Regional Planning Agency of South Central Connecticut estimates) are as follows:

1975	8,129
1980	8,400
1985	8,600

Population estimates for Woodbridge in the age 5 - 54 range are presented in the following chart for the years 1980 and 1985. (Source: State of Connecticut Revised Preliminary Population Projections for Connecticut Municipalities by Age and Sex to the Year 2000.)

AGE GROUP	POPULATION ESTIMATES	
	1980	1985
5-9	380	334
10-14	670	484
15-19	951	679
20-24	905	936
25-29	778	912
30-34	504	855
35-39	642	709
40-44	752	774
45-49	628	770
50-54	740	659

Currently there are four ball leagues in Woodbridge, comprised of approximately 32 teams and several recreational leagues comprised of from 16 to 22 teams. There are but five ball fields available at present in town to serve these teams. The need for additional ball fields is therefore apparent.

In 1976, the residents of Woodbridge were surveyed to ascertain their preference for use of leisure time. The report completed by the Department of Community Affairs, Woodbridge Leisure Time Questionnaire, indicates that tennis was the facility most desired to be developed or expanded in the Town. There are tennis courts open to the public at Beecher School and Amity Regional High School and there are several private clubs with tennis facilities. The park as proposed would help meet the perceived need for additional tennis facilities.

Traffic Analysis

Traffic information in the area near the project site indicates that volumes on Center Road (Route 114), a two-lane facility which abuts the site, are in the 5,000-6,000 ADT (Average Daily Traffic) range. The design capacity of the existing roadway is adequate to handle the additional traffic that would be generated by the proposed use of the project site--which, by the way, will be minimal because of the proposed recreational use. Further, due to the nature of the proposed use, those vehicle trips which are generated by the site will be dispersed throughout the day (as opposed to a concentrated peak period) and will further reduce the impact on existing capacity to a negligible level.

XI. GENERAL RECREATION CONSIDERATIONS

The recreational design layout (see Figure 1) is relatively simplistic and appears to be feasible. The project will require considerable re-grading or terracing of the eastern sloped portion of the site to accommodate the proposed land uses, but elsewhere environmental disturbances will be minimal.

Consideration should be given to relating and coordinating the proposed Complex with surrounding land uses. For example :

- Street Memorial Park, located just north of the Complex, offers opportunities for passive recreation. The opportunities provided by the Park could be tied in with those offered by the Complex through interconnecting access trails.

- The recently abandoned Center School is now being considered, at least partially, for community recreation. Use of this facility should be related to Complex plans so that they may compliment one another.

- Use of the adjacent town-owned parcel to the southwest (house and property at west end of Pond) should also be coordinated with Complex plans in time.

The recent acquisition by the town of property to the southwest of the Complex may merit reconsideration of the present plan to terminate the existing access point off Center Road. While a second access point is somewhat of a management nuisance, the existing access point off Center Road is safe (sight line distances are adequate) and would enhance access to the pond, ball field area, and surrounding land.

Maintenance requirements for recreation complexes can vary tremendously depending upon the quality of original construction (building materials and fixtures, depth and type of topsoil, selection and installation of plant materials, etc.). Care should be taken to select and preserve as many healthy trees as possible during construction. Trees provide an important aesthetic amenity and are costly, both in time and money, to re-establish. Plantings close to vehicular access points should consist of salt-resistant species.

Use of the pond on-site could include fishing (see discussion above), simple boating, and perhaps a limited amount of swimming. Skating is possible though perhaps limited by areas of excessive shallowness and heat-producing decomposing plant material deposits. The pond area provides a scenic backdrop for picnicking or nature study with the pine grove abutting the southern edge of the pond particularly attractive. If so desired, a combination trail and floating boardwalk could be built around the pond to enhance nature study and access in this area.

* * * * *

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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Policy Determined By

KING'S MARK RESOURCE CONSERVATION AND DEVELOPMENT AREA

Victor Allan, Chairman, Executive Committee
Stephen Driver, ERT Committee Chairman
Moses Taylor, Coordinator

Staff Administration Provided By

NORTHWESTERN CONNECTICUT REGIONAL PLANNING AGENCY

Bruce M. Ridgway, Chairman
Thomas A. J. McGowan, Director
Richard Lynn, ERT Coordinator
Rebecca West, ERT Draftsman
Irene Nadig, Secretary

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.