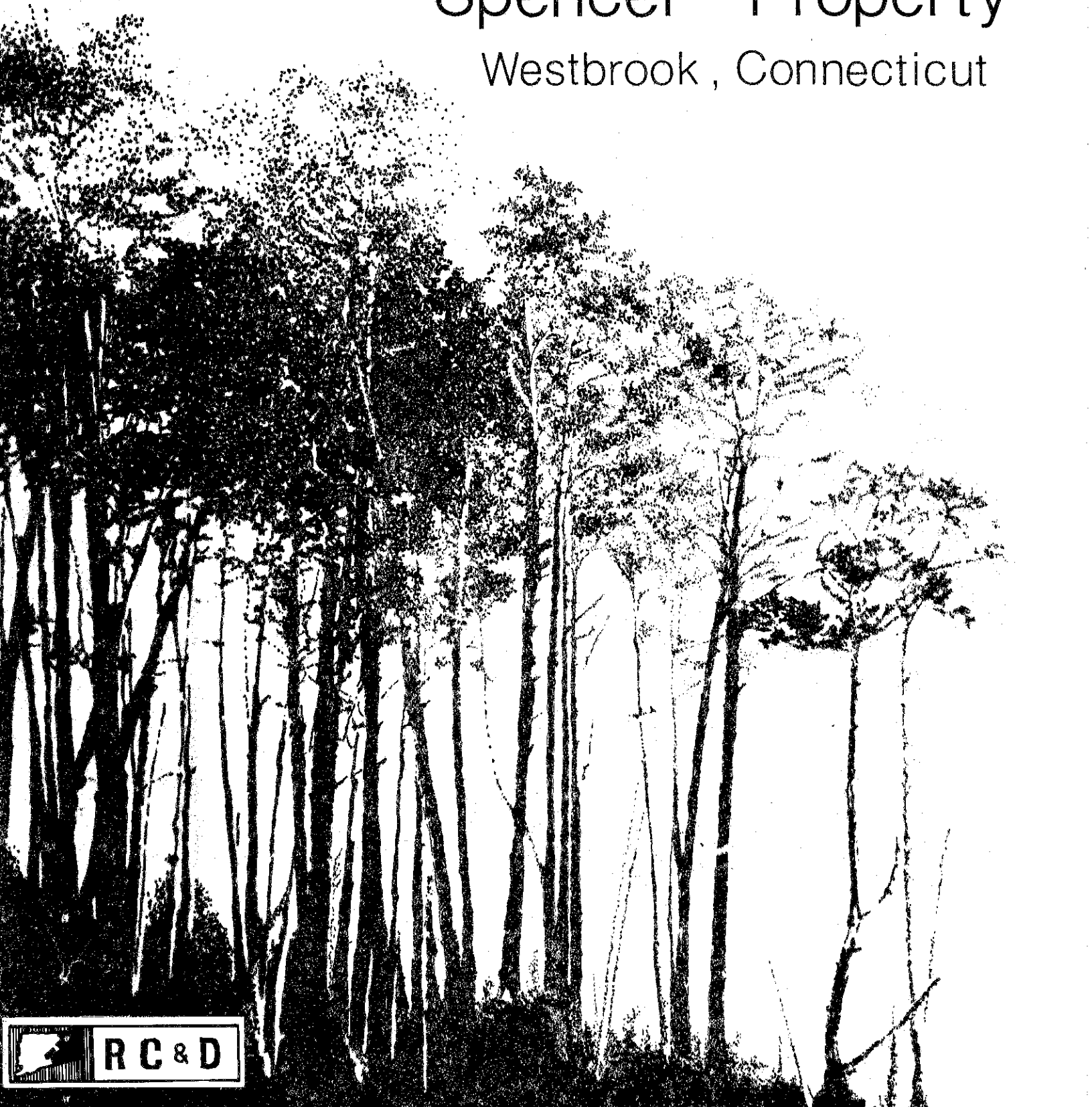


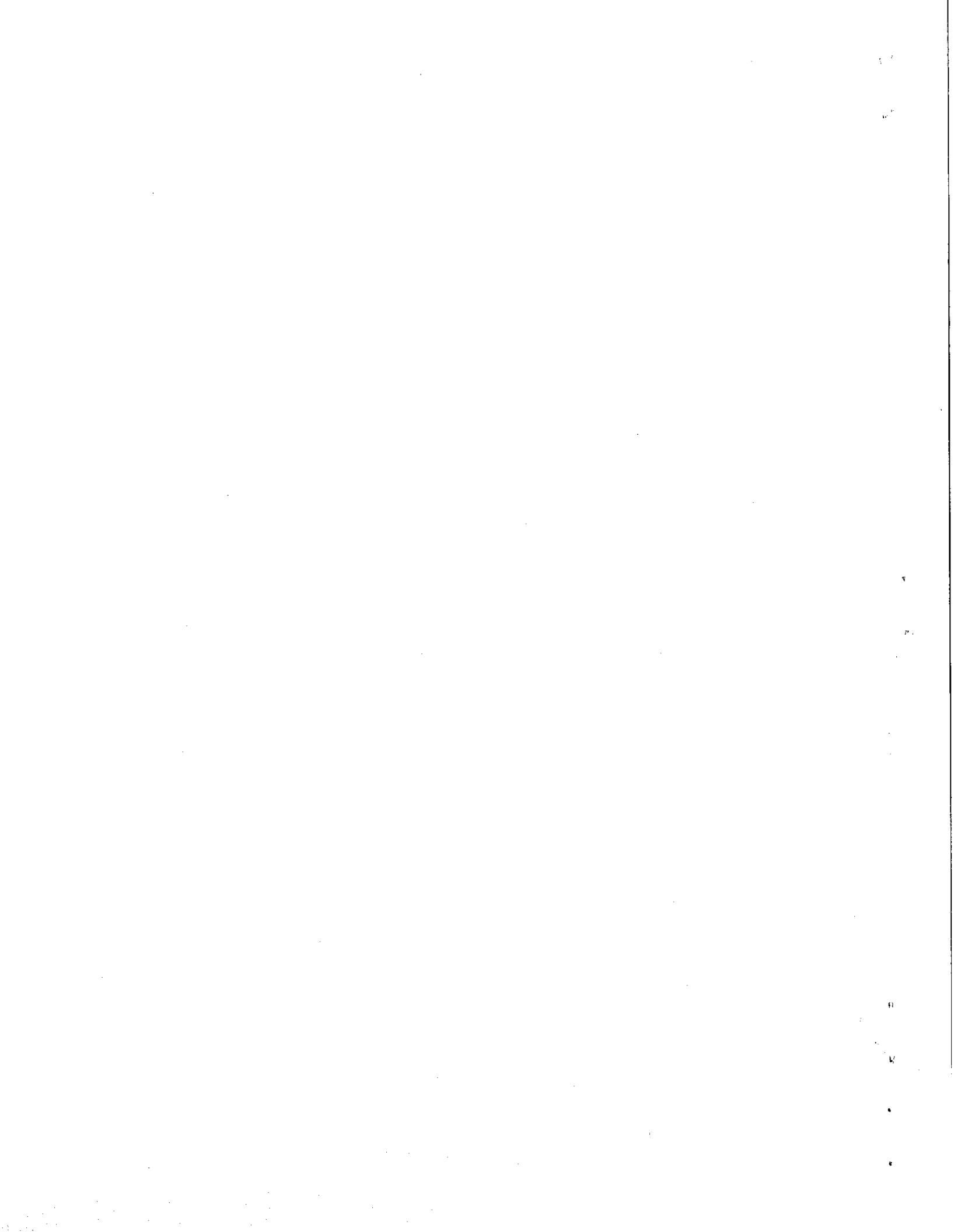
Environmental Review Team Report

# Spencer Property

Westbrook, Connecticut



EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.



Environmental Review Team  
Report  
on

Spencer Property

Westbrook, Connecticut

November 1977



eastern connecticut resource conservation & development area

environmental review team

139 boswell avenue

norwich, connecticut 06360



ENVIRONMENTAL REVIEW TEAM REPORT  
ON  
SPENCER PROPERTY  
WESTBROOK, CONNECTICUT

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

The soils of the site were mapped by a soil scientist from the United States Department of Agriculture, Soil Conservation Service (SCS). Reproductions of the soil survey map, a table of soils limitations for certain land uses and a topographic map showing property boundaries were distributed to all Team members prior to their review of the site.

The ERT that field-checked the site consisted of the following personnel: Barry Cavanna, District Conservationist, Soil Conservation Service (SCS); Tim Dodge, Wildlife Biologist, SCS; Richard Hyde, Geologist, Connecticut Department of Environmental Protection (DEP); Stanley House, Forester, DEP; David Miller, Climatologist, University of Connecticut Cooperative Extension Service; Ed Meehan, Regional Planner, Connecticut River Estuary Regional Planning Agency (CRERPA); Don Capellaro, Sanitarian, State Department of Health; Rudy Favretti, Landscape Architect, University of Connecticut; and Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Area.

The Team met and field checked the site on Wednesday, November 2, 1977. Reports from each contributing Team member were sent to the ERT Coordinator for review and summarization for the final report.

This report is not meant to compete with private consultants. As requested by the Town, this report, which identifies the existing resource base of the Spencer Property, shall constitute the environmental assessment portion of the Town's open space application for Federal Department of the Interior, Bureau of Outdoor Recreation (BOR) funds to assist in the development of the Spencer Property.

The Eastern Connecticut RC&D Area Committee hopes that this report will be of value and assistance in making any decisions regarding this particular site.

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

## DESCRIPTION OF THE PROPOSAL

The Town of Westbrook wishes to develop a portion of a Town-owned parcel, known as the Spencer Property, for recreational purposes. The Town acquired the parcel April 27, 1973. A master plan for the entire 50-acre parcel, which included an educational complex and library facilities, was prepared by Fletcher Thompson, Inc., a private architectural firm, in 1974. At that time, approximately 8.7 acres was set aside for recreational development. This planned recreation area will supplement existing crowded Town recreation facilities. This proposal is also consistent with the Connecticut River Estuary Regional Plan of Development, Proposals for Action, which recommended that Westbrook acquire and develop 75 acres for recreational use.

The site is located in the center of Westbrook bordering on Boston Post Road to the south and Knothe Road to the west. It appears to have been used for agricultural purposes at one time, but has since lapsed into the early stages of forest succession.

It is hoped that with recreational development funding available, the project will reach completion within a two-year time span. The recreation area development is a segment of the larger development phasing for the entire 50-acre parcel owned by the Town.

This proposal is consistent with the comprehensive planning efforts of other Town agencies in addition to the Board of Recreation. The Westbrook Plan of Development, adopted June 13, 1977, identifies the total Spencer Property as 51.9 acres, located within the "Town Center." This is a conceptual element in the Plan which is proposed to be the focus of future Town facilities such as a library, school, ambulance garage, and recreation/open space. The future land use map of the Town Plan also recommends that the Spencer Property be used for public land.

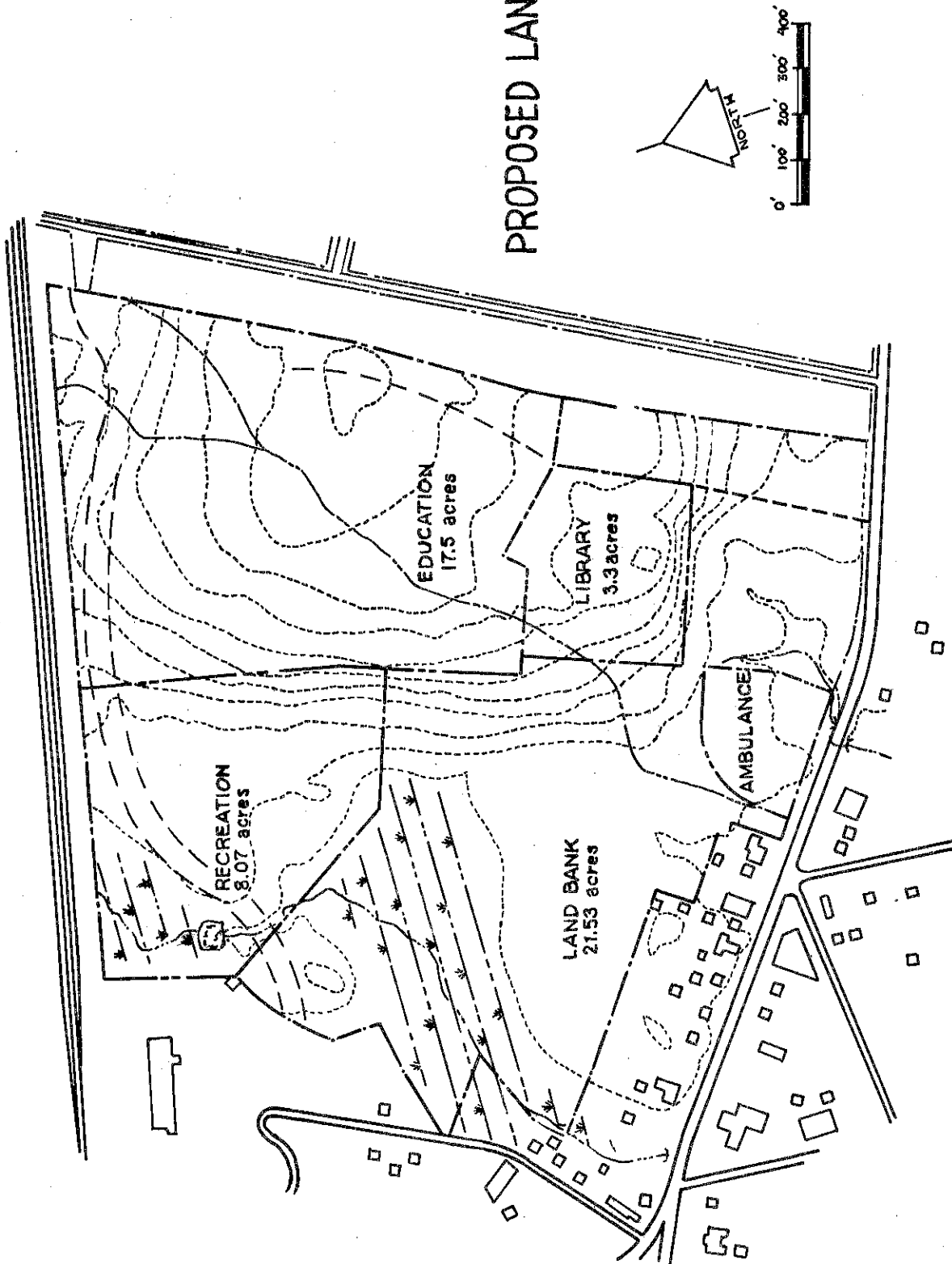
## DESCRIPTION OF THE ENVIRONMENT

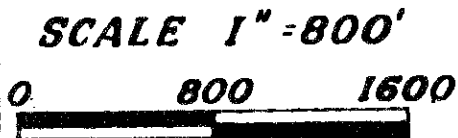
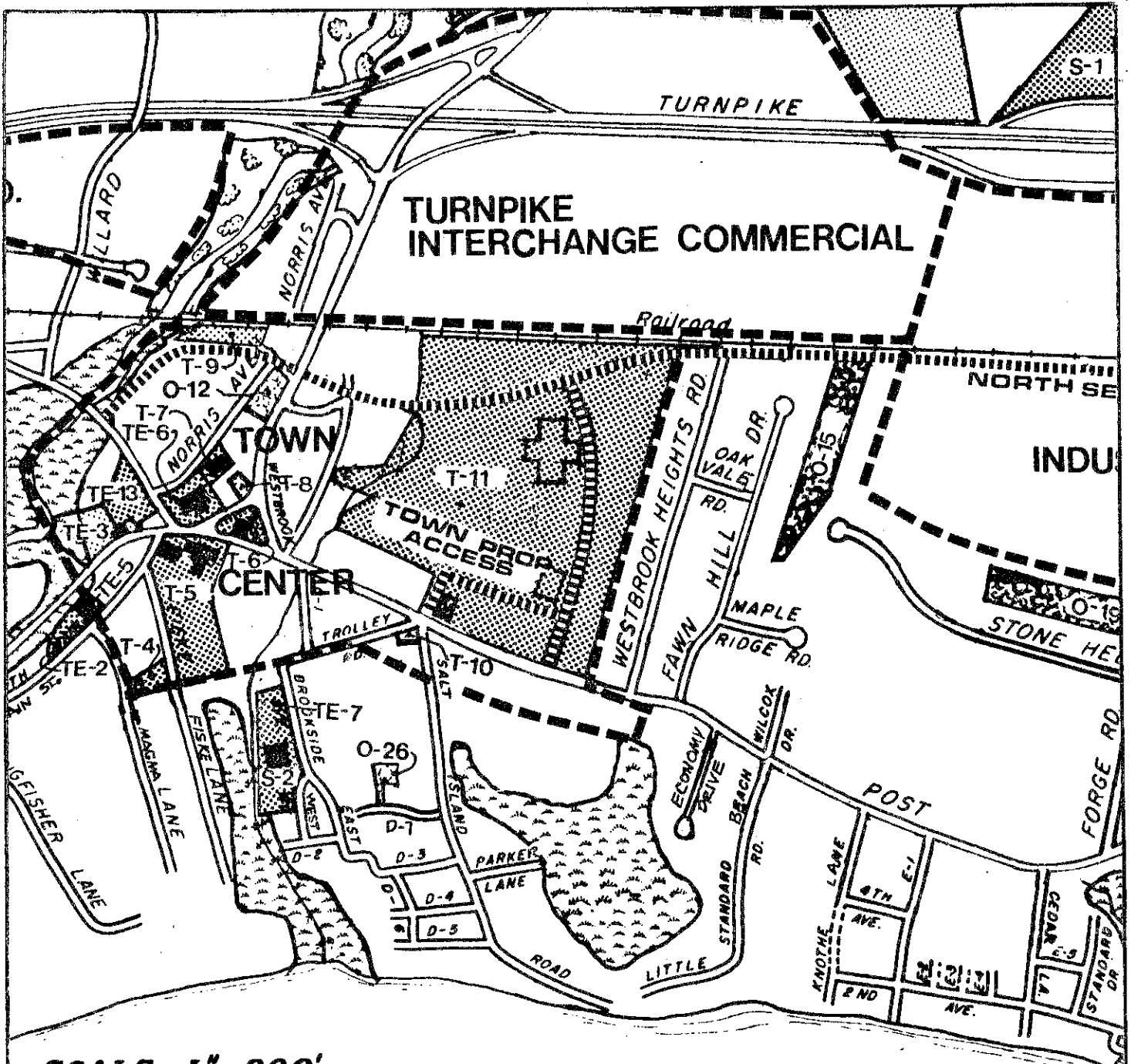
### PRESENT/PAST LAND USES

At present the Spencer Property is open space. It is presently zoned for industrial and commercial use but is suggested as part of the Town Center complex by the adopted Westbrook Plan of Development. The site appears to have been in agricultural use at one time as remnants of the apple orchards and stone walls remain on the site. The portion of the site walked by the ERT comprises approximately 29.6 acres of the total 51.9-acre parcel.

Adjacent land uses are the new Westbrook middle school and library along the site's east boundary; the ambulance association garage, a right-of-way into the site and mixed residential/commercial use along the southern boundary (Route 1); single family residential uses and a small manufacturing facility are along the parcel's western perimeter (Knothe Road); and the AMTRAK rail corridor is on the northern boundary.

# PROPOSED LAND USE





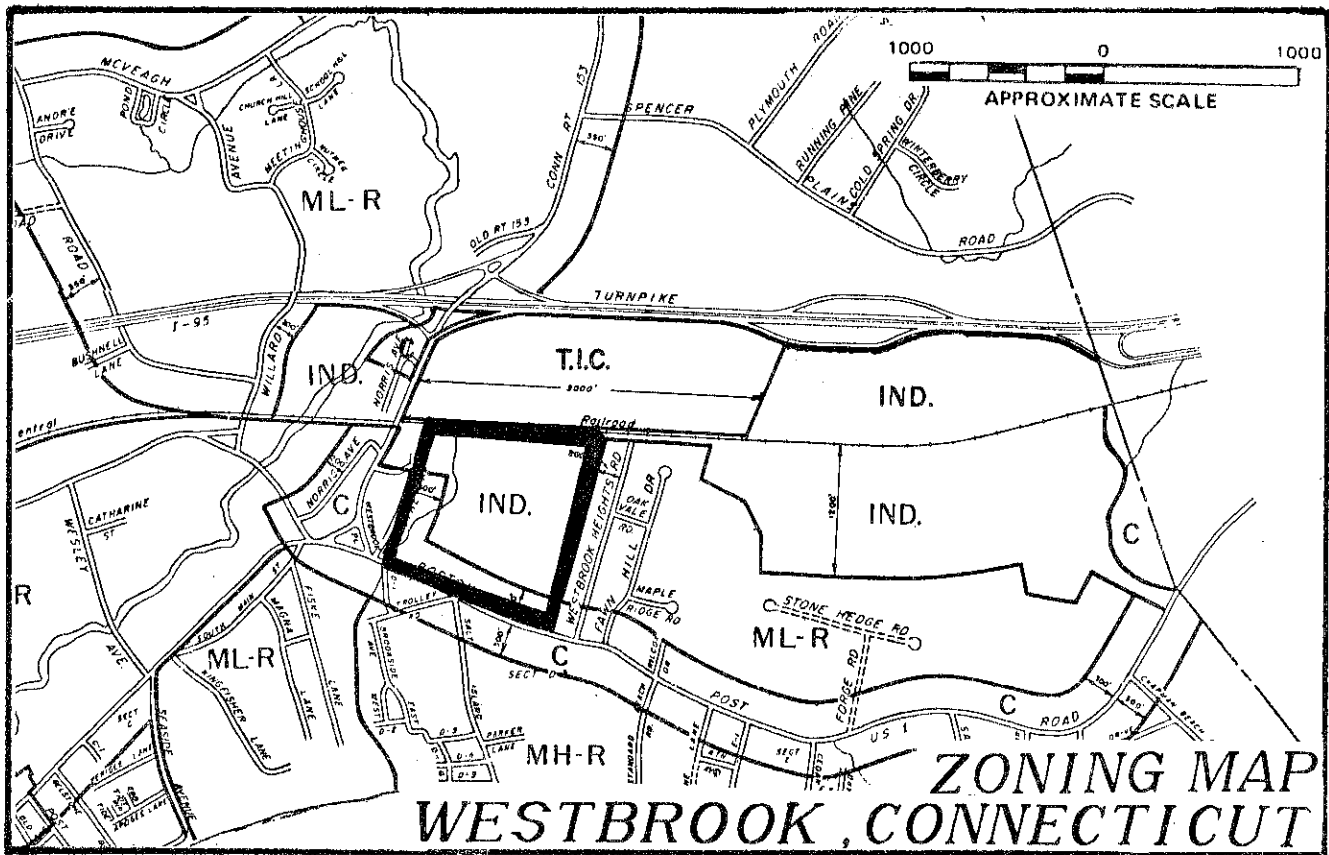
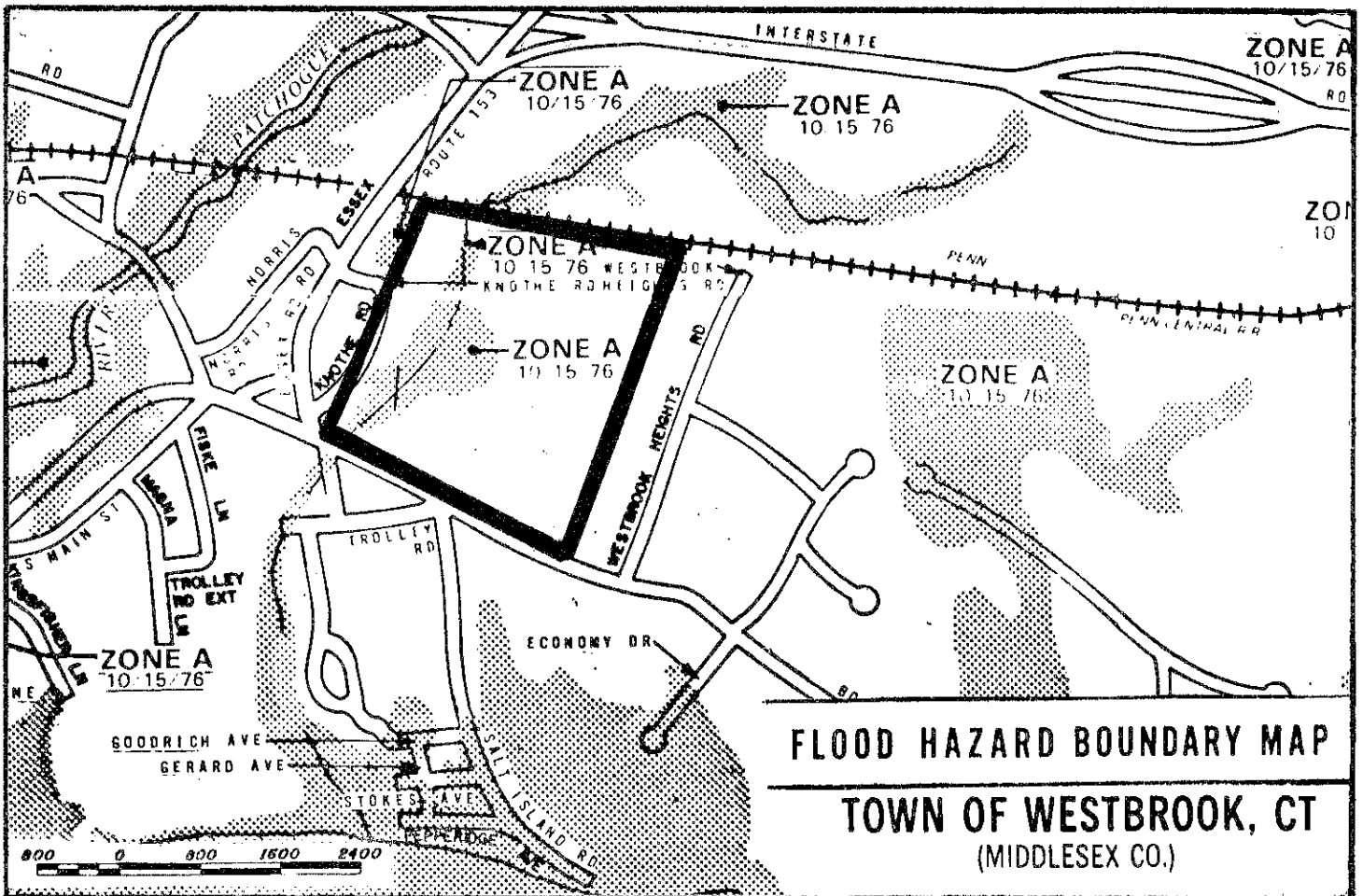
SALT ISLAND OPEN SPACE



# PLAN OF DEVELOPMENT WESTBROOK, CONNECTICUT

ADOPTED JUNE 13, 1977 BY THE  
WESTBROOK PLANNING COMMISSION





## EXISTING SOCIO-ECONOMIC CONDITIONS

The proposed parcel for recreational development is within the Connecticut River Estuary Planning Region. This Region has experienced accelerated residential development during the 1960s and was the fastest growing non-metropolitan area in the state during the 1960 decade. Westbrook's population increased by 59.2%, or 1,421 persons, between 1960-70. This growth rate is attributed to a natural increase of 25% and a net in-migration of 75%, which is typical of the Estuary Region during the 1960s. Between 1970-75 the trend toward suburbanization has continued. In 1970 the U.S. Census indicated that Westbrook's population stood at 3,820. In 1975, the population was estimated at 4,700 by the Connecticut Department of Health. The most densely populated part of Town lies south of the turnpike. Studies prepared by the Connecticut River Estuary Regional Planning Agency and the Connecticut Office of Policy and Management project the future population of the Town of Westbrook to be 5,300 in 1980, 6,300 in 1990 and 7,500 in 2000.

The per capita median income for Westbrook as reported at the 1970 Census was \$12,332. An estimated 528 people lived and worked in Westbrook in 1970. Approximately 900 people commuted outside of Westbrook for employment. Future employment projections by the Connecticut River Estuary Regional Planning Agency indicate that employment opportunities will increase to 800 jobs in Town by 1980. In 1970 the Town had 53 families, 5.4% of the total families, with incomes below the poverty level. The minority population of Westbrook in 1970 was 24 persons, 0.62% of the total 1970 population.

## EXISTING TRANSPORTATION ROUTES

The site is accessible via two rights-of-way from the south side of the parcel along its Boston Post Road boundary. Non-vehicular access into the site is possible from the library and middle school parcels on the eastern boundary. A right-of-way of undetermined width exists on the site's western boundary from Knothe Road. Access along the northern perimeter is restricted by the AMTRAK right-of-way.

## TOPOGRAPHIC FEATURES

The Spencer Property is situated within a small coastal drainage system, discharging surface waters directly into Long Island Sound. The property is bounded by AMTRAK on the north, the Westbrook middle school/library complex to the east, U.S. Route 1 to the south and a strip of commercial development along Knothe Road to the west. The land has very few distinctive topographic features, it is very low and flat, with a large wetland area associated with the southerly flowing brook, which is west of the center of the property. Much of the land is subject to periodic flooding.

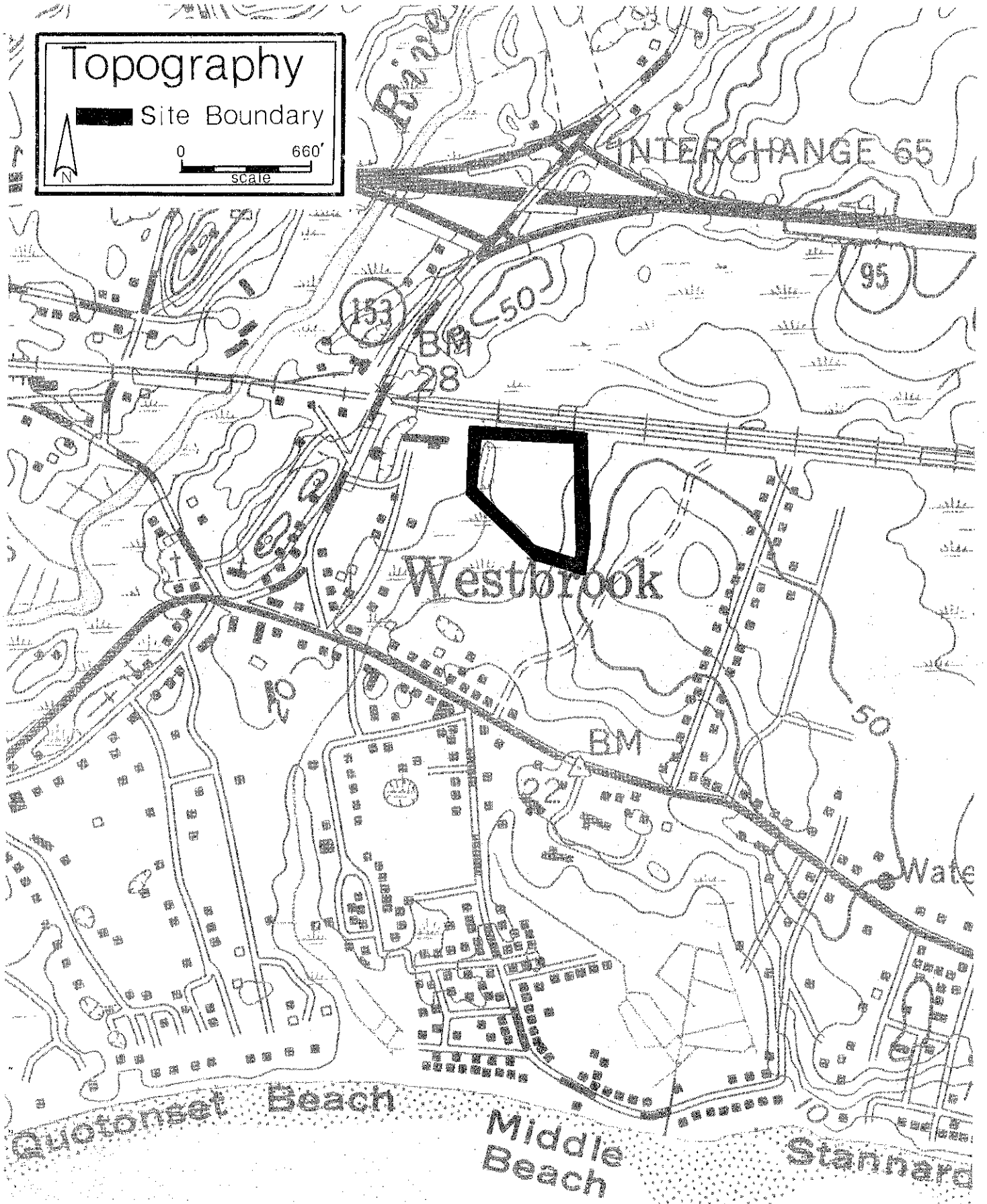

## SURFACE AND SUBSURFACE GEOLOGIC CHARACTERISTICS

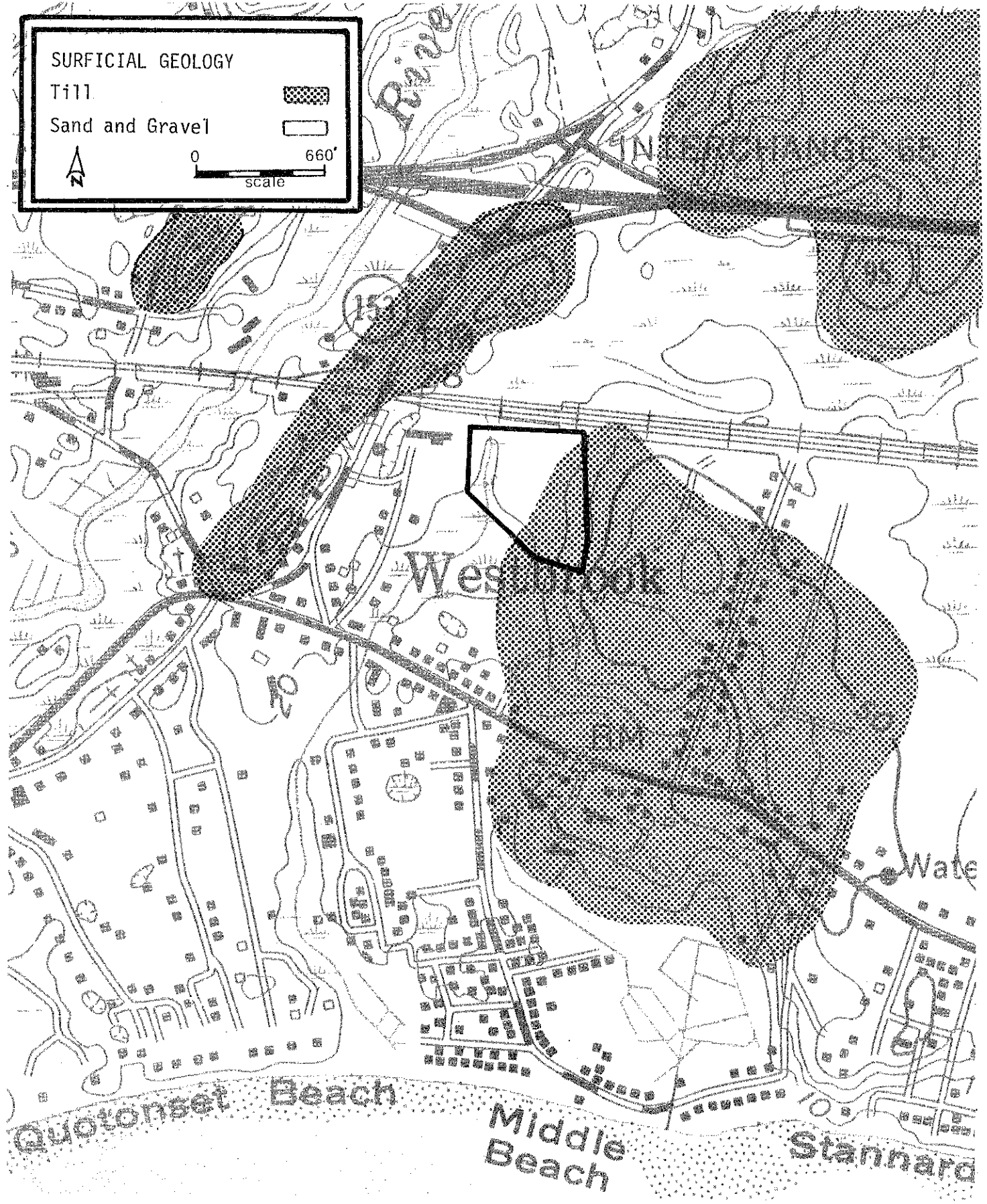
The land surface is characterized by stone outcrops, underlain by stratified sands and gravels which were deposited through glacial processes during the last ice advance. These materials were produced from the outwash which preceded the active glacial ice. As the melt waters carried sediments away from the glacier

**Topography**

■ Site Boundary

0 660'  
scale





Taken from the Construction Aggregate Study conducted by the Connecticut Department of Transportation.

the stream velocities decreased with increasing distance from the glacier, thus allowing suspended particles to settle out.

Swamp deposits and till deposits are also found on this site. Swamp deposits are characteristic of the land surfaces immediately adjacent to the watercourses on the property. These consist of silts, sands and clay mixed with organic materials in poorly drained areas.

Along the eastern margin of the 8.7-acre parcel, near the hill on which the library/school complex is located, glacial till is found to be the characteristic land surface. Till is the predominant primary overburden found in Connecticut and forms from the melting of glacial ice. The materials making up till were those particles carried on, in, and pushed along under the active ice but once extensive melting began, they remained in place. By definition, till, "hardpan," or "boulder clay," is a heterogeneous material composed of various mixtures of boulders, gravel, sand, silt, and clay, none of which are significantly sorted or stratified according to particle grain sizes, as is the case with waterlain and windblown deposits. Till is simply the mass of various sized materials mixed together, that remained after all glacial ice melted.

The bedrock found within this region has been mapped and is described in the "Geologic Map of the Essex Quadrangle, Connecticut" Quadrangle Report No. 15, by Lawrence Lundgren, Jr., 1959. It is shown to be of the Brimfield formation, which is a rust-stained rock with the predominant mineral being biotite mica, orthoclase feldspar, siltimanite and garnet in a schistose fabric. There is no data from test holes or surface exposures of the rock to indicate any other type of underlying bedrock.

The property contains no significant mineral deposits of commercial value. Sand and gravel is of obvious economic importance, but these deposits are fairly thin, no more than 20 feet in depth, and all is principally below the water table making its extraction economically unfeasible. There are many sand and gravel deposits within the immediate area that are many times more accessible, which also act to decrease the commercial value of the deposits on this site.

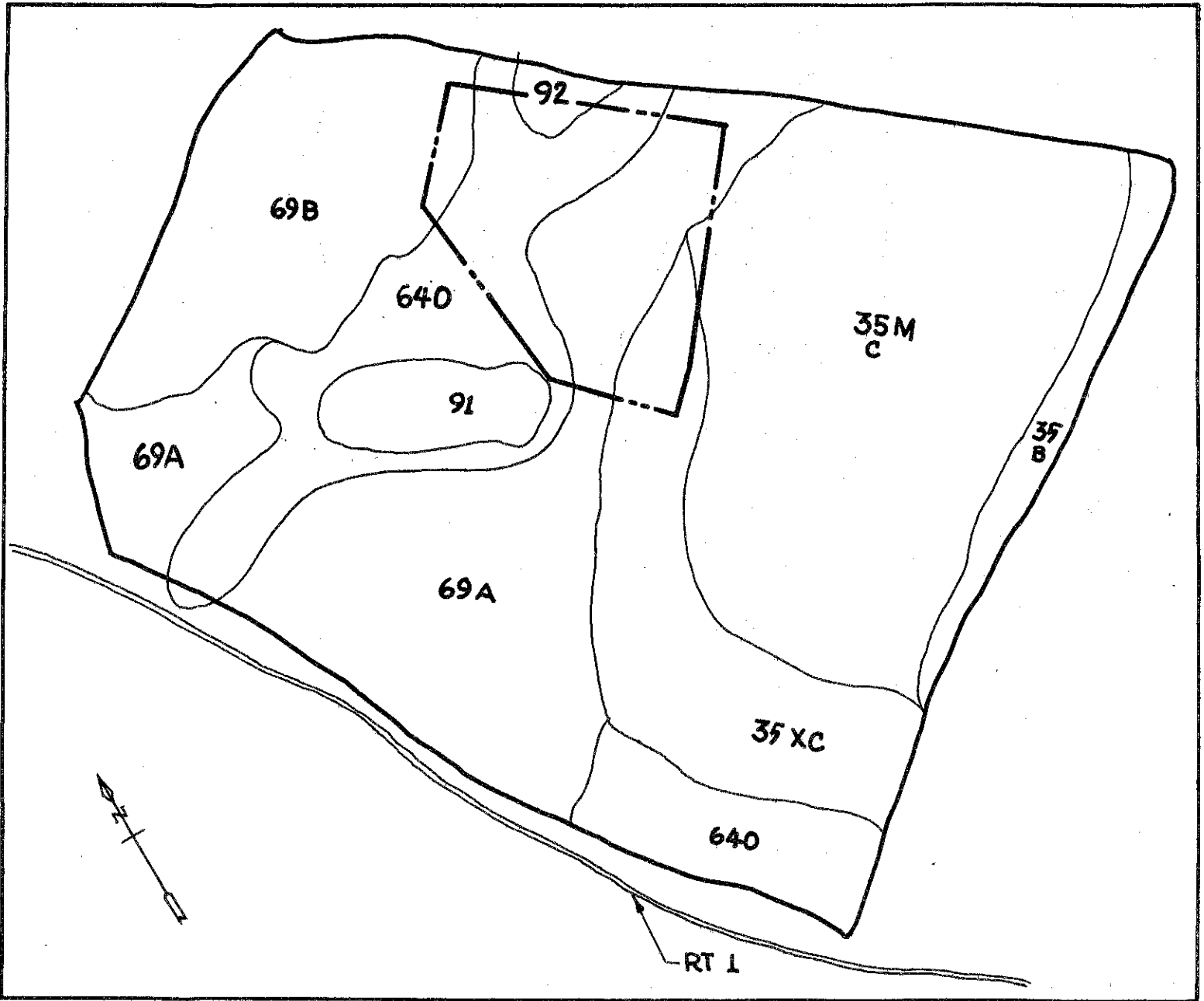
## SOILS

Due to the nature of the soils it may be difficult to develop all of the high intensity athletic fields which are presently planned for this site. Generally, the soils on the Spencer Property fall into these following categories:

- 1) The Agawam series (69a, 69b) comprises 39.4% of the proposed recreation site. They consist of deep well drained soils on outwash plains and stream terraces. They were originally formed in water deposited sands. Typically, these soils have a very dark grayish brown fine sandy loam surface layer approximately 10 inches thick, a yellowish brown fine sandy loam subsoil from 10 to 25 inches and a substratum which is light olive brown loamy fine sand at 25 to 30 inches in depth. The slopes of these soils range from 0 to 35%. These soil types are the best suited for development on the site with more than 60" depth to bedrock and rapid drainage.

- 2) Wetlands soils, Raynham, Adrian-Palms and Carlisle series (640, 91, 92), constitute 50.7% of the site. These soils are generally formed from deposits of decayed plant materials mixed with deposits of sand, silt and clay. Adrian-Palms

SOIL MAP  
SPENCER PROPERTY  
WESTBROOK, CONNECTICUT



1" = 330' (approximately)

Prepared by: United States Department of Agriculture, Soil Conservation Service.  
Advance copy, subject to change.

and Carlisle series are deep layers of plant material with sandy or loamy subsoils. The Raynham series are characterized by relatively thin dark colored horizons over a mottled subsoil, which indicates a waterlogged condition from late fall through early spring. All of these soil types are poorly drained with a very high water table during the spring and fall. Slope for these soils is negligible. As shown on the Soils Limitation Chart, none of these soils are suitable for high intensity recreational development, due to the wetness, flooding and frost heaving associated with them.

3) Paxton soils (35XC, 35MC) are also found on 9.9% of the site. They are well drained soils with a slowly to very slowly permeable fragipan at approximately 2 feet in depth. The surface and subsoil textures are comprised of friable fine sandy loams above the fragipan. The fragipan restricts internal drainage and forms a temporary perched water table in wet seasons and after heavy rains. Seep spots may occur seasonally on slopes as water moves laterally down slope over the pan. Slopes associated with Paxton soils range from 0 to 35%. Surface stoniness varies from extremely stony to relatively stone-free, where stones have been removed. Development limitations vary on this soil from moderate to severe. The chief problems are slow percolation rate, surface stoniness, and the effects of frost action.

The scope of the intensive recreation area proposed for this site may have to be amended due to the nature of the soils on this site. The proposed plans show the desire for a basketball court and parking area to be located in areas which are covered by wetlands soil types. This would not only be costly to develop and maintain but also destroy a wetland and flood plain complex. Any decision to follow the proposed plan should be carefully considered. The Team recommends that any proposed activity in the area should avoid the wetlands, and a buffer should be provided between the wetlands and any proposed activity on the site. If this is done in conjunction with implementing the sediment and erosion control plan, any adverse environmental effects should be negligible.

The soil survey map and the accompanying charts indicating soil limitations for certain land uses further distinguish the soil types and their potential for the listed land uses. As the detailed soils map provided here is an enlargement from the original 1,320'/inch to 660'/inch scale, the soil boundary lines shown should not be viewed as absolute boundaries but rather as guidelines to the distribution of soil types on the property. The soils map along with the "Special Soils Report, Middlesex County" (USDA, SCS, 1975), can serve as an educational tool regarding the identification and interpretation of soils.

## CLIMATOLOGY

The area is in the Connecticut coastal region, therefore the climate is basically mild and humid in all seasons. During fair weather the area is subject to the normal on-shore, off-shore breezes which increase human comfort in the summertime.

The surrounding topography is gentle and therefore does not influence the local climate in any limiting manner. The air pollution load from I-95 is relatively high at this site. The use of this site for recreation will not change the condition. Although the possibility exists that increased auto traffic generated by the recreation area will add slightly to the problem.

The following data was taken from The Climate of Connecticut, Connecticut Geological and Natural History Survey, Bulletin 99, 1965.

Mean Annual Precipitation:	48"
Mean Annual Temperature:	51°F
Average date of last occurrence of 32°F temperature in spring:	April 15
Average date of first occurrences of 32°F temperature in fall:	October 25
Average length of freeze-free season:	190 days
Average winter wind velocity and direction:	7.5 mph, south
Average heating degree days:	5600

## WATER RESOURCES

The area contains no significant surface or subsurface water supplies that could be utilized for major municipal use. Potable water for the general area is from the public supply of the Connecticut Water Company. Therefore, obtaining or protecting such water for the contemplated project should not present a problem.

A portion of the land is low and wet, having a defined watercourse on the western edge of the site. This stream also takes drainage from a larger swampy area lying between the AMTRAK right-of-way and Interstate 95. The watercourse eventually crosses under Route 1 and empties into Long Island Sound at a point between Quotonset and Middle Beaches. It would seem the most restrictive streamflow factor would be the pipe size of the cross culvert under Route 1 and any smaller piped portion beyond that point. Future commercial development is planned on the east side of Route 153 between Interstate 95 and the AMTRAK right-of-way which will add additional surface drainage to the area. In general, it would be expected that water quality would be good due to considerable wetlands area and a lack of development on the bordering terrain.

The property is within the coastal zone where the salt water wedge intrudes inland under the land mass. Above this wedge, due to its lighter density, the fresh water lens seeps into Long Island Sound through the bedrock. This fluctuating condition causes the lens along the coast to be relatively thin, making heavy, large volume and deep pumping wells susceptible to salt water contamination from Long Island Sound waters. Single family homes and other small water use situations could probably be supplied by the fresh water lens, if development has not significantly impacted on the lens configuration.

Much of the property is near or acts as a discharge area for ground water to the surface watercourse and, for these reasons, few if any recharge areas will be affected. The property is low lying and subject to seasonal flooding as well as periodic flooding from ocean storms.

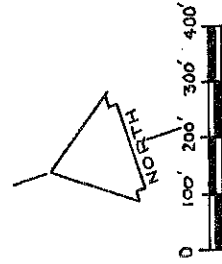
## VEGETATION

The old field areas which make up the majority of the site are dominated by shrubby growth six to ten feet high and contain perennials including ragweed and goldenrod. The fleshy fruit-producing shrubs include but are not limited to black cherry, stag horn sumac, multiflora rose, crab apple, greenbriar, winter berry,

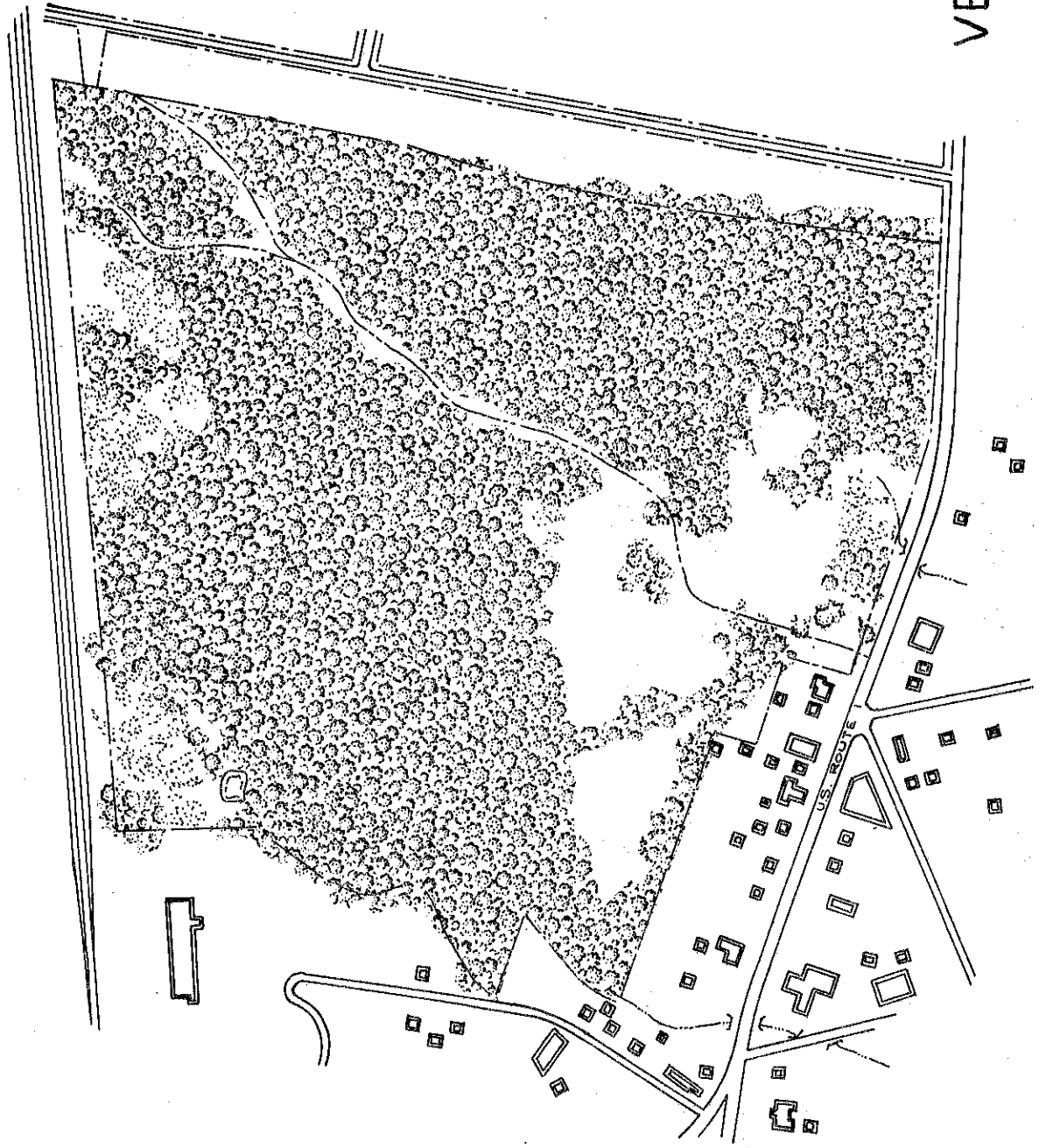


LEGEND

- OPEN LAND
- SHRUB GROWTH
- MATURE VEGETATION



VEGETATION



barberry, bittersweet, dogwood, arrow-wood, tatarian honeysuckle, autumn olive and bayberry. The perimeters in wetland areas are primarily vegetated to trees including red maple, black birch, and ash, with sweet pepperbush and other water tolerant shrubs present. Other trees on the site include sassafras, oak, poplar, red cedar, black cherry and musclewood or bluebeech. There do not appear to be many trees on the site with commercial value. No unique species were identified.

## WILDLIFE

The entire site provides excellent food and cover to small game and nongame animals and to birdlife. Typical animal species which use this type of habitat include cottontail rabbit, eastern chipmunk, field mouse, gray squirrel, raccoon, ruffed grouse, and possibly woodcock in the wetter areas, where some alder is present. Seasonal songbirds also use this area. The greatest drawback to wildlife usage is the disturbance factor created by humans, free-roaming cats and dogs, and the railroad.

The abundance of unused fleshy fruit indicates that the area is not utilized to its full potential as a wildlife habitat during the fall season. However, as a wintering habitat, it contains fruiting shrub species which may provide starvation protection, and during this season the area may be used to its potential. No rare or endangered species were noted during the field review.

## PROBABLE FUTURE ENVIRONMENT

Should the area remain in its largely undisturbed state, it would provide approximately five to ten years of high quality habitat for wildlife. Recreation needs would not be met. After this time, habitat quality would decrease as growth and closure of the vegetative canopy reduced the sunlight penetration which now stimulates understory growth. To maintain existing quality, maintenance work should be required now, and repeatedly every three to five years.

# ENVIRONMENTAL IMPACT

## QUANTIFIABLE LAND USE CHANGES

There will be no acquisition of real property as a part of this proposal. The project involves the potential development of 8.7 acres of vacant/wetland open space into active recreational facilities. The Town of Westbrook currently has 13.3 acres of active recreational use. The proposed project, if implemented, would increase this amount to 22 acres. (The CRERPA Development Plan recommended that Westbrook acquire and improve 75 acres for recreational use.)

## SOCIO-ECONOMIC CHANGES

The proposed project would not displace or require the taking of any residential uses. The project is located in an area of convenient access and within

one of the highly populated sections of the Town. The proximity of the site to the new middle school and library will permit an exchange of recreational uses. The proposed land use allocation plan for the total 50 acres of the Spencer parcel provides for a land bank of 21.5 acres at the front of the site. This reserve will permit flexibility in locating future municipal facilities as well as economy in extending the infrastructure needed to service these uses.

#### TRANSPORTATION ROUTES

Existing transportation routes will not be adversely affected by development of the proposed project. Route 1 (Boston Post Road) is of adequate capacity to carry the traffic which may be attracted to the planned recreation facilities. Off-street parking as planned for the interior of the site would eliminate this hazard along the Boston Post Road.

#### AIR QUALITY AND AMBIENT NOISE LEVEL

Use of the property as an intensive or extensive recreation area should not have a significant effect on air quality levels in the area. Intensive recreation is sure to increase the ambient noise levels significantly with resulting effects on nearby residences. This effect will be most severe in the 6 warm months. Extensive recreation activities such as nature trails, hiking, picnicking, etc., will not have a major noise impact except in the case of off-road vehicles. The area is not suitable to snowmobile usage because the area only averages 30 days of snow cover a year and then the snow is shallow. The excess of rainfall will require good drainage designs on playing fields and careful designs of parking and paved area to control storm runoff. This can be addressed in the Sediment and Erosion Control Plan prepared for the property.

#### SOLID WASTES

While it would be expected that a limited quantity of solid wastes would be generated, it should remain a relatively minor problem. This should be particularly true if no future snack bar is planned to operate in conjunction with Little League and/or other spectator sports located on the site. Adequate and convenient storage containers need to be provided until refuse is collected. The material can then be disposed of off-site at the Town refuse disposal area.

#### SANITARY FACILITIES

Although no specific reference was made for the inclusion of public comfort facilities, recreational areas should address this subject. Many types of recreational facilities do require that certain types of sanitary fixtures be provided. The availability of such facilities also prevents the indiscriminate use of wooded or other secluded areas for restroom purposes.

Facilities should be designed to withstand hard use, possible vandalism, and to minimize the long-term maintenance and operational costs. Water carriage type facilities would require the installation of an on-site subsurface sewage disposal system. Visual observations and soil survey mapping data indicate certain areas

of the site would not be favorable or suitable for that purpose. However, other areas should be capable of supporting a sewage disposal system for seasonal or intermittent use without adverse effects. In the site development plan, an area should be indicated, tested and be found suitable for a system. If the plan does not actually incorporate facilities at that time, an area should be reserved and left unencumbered in order that in the future it would be possible to provide sanitary and related facilities.

#### EFFECT ON WATER RESOURCES

It would appear that the proposed recreational facilities would have a minimal effect on the water quality. There would likely be some increase in the total amount of runoff, particularly from areas which may be paved. In addition, certain facilities (ball field, multi-purpose field) may generate the use of chemical fertilizers and weed killers for routine maintenance purposes.

#### EFFECT ON VEGETATION

The final design layout for the playing fields will determine the amount of vegetation which will ultimately be removed from the site. The proposed plan indicates that 50% or more of the existing vegetation will be removed. After development, these areas will be seeded to grasses or will be involved in hard surface play areas. Removal of existing vegetation will represent a loss in habitat quality and quantity and ultimately result in a lower carrying capacity for various species of wildlife.

#### EFFECT ON WILDLIFE

Wildlife mobility will probably not be restricted by development; however, human disturbance factors will increase. Food chains could remain stable with proper considerations during development.

#### MANAGEMENT PRACTICES

Management practices should be organized to foster the interests of active recreation as well as a valuable habitat for wildlife. A wildlife habitat management program can be developed by the State SCS office in Storrs, Connecticut. The use of this management program in conjunction with a naturalistic landscape plan using native plants for the buffer areas between playing fields, should provide an equivalent area for wildlife habitat as that destroyed by construction of the facility.

### MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

During the preparation of the final site plan for the proposed recreational facilities, consideration should be given to avoiding all mapped inland wetlands on the property. These areas should be preserved as part of the site's natural

drainage pattern. These wetlands are recognized as being flood-prone on the Westbrook Flood Hazard Boundary Map (prepared by the Federal Department of Housing and Development, October 15, 1976). Proposed development activities which may affect this area should recognize the federal requirement not to increase flood hazard potential. The water retention capacity of the parcel's wetland system in relation to the flows of upstream runoff should be considered if plans develop to rebuild the existing dam on the site. Erosion stabilization practices and an adequate storm water runoff control design system should be part of the detailed site plan. Examples of conservation management practices used here would be hay bale erosion checks, critical area planting, and diversions. The Soil Conservation Service, through the Middlesex County Soil and Water Conservation District, is available for technical assistance in developing the sediment and erosion control plans.

Development consideration should be given to stockpiling valuable plant species and re-establishing them following project completion. A layout or design which would create or retain natural vegetation buffers between organized play areas, acting as "corridors" which could connect the wetland to other natural areas as they exist, would be most beneficial. Plantings of softwoods such as pine, hemlock or spruce along the northern perimeter and between some of the playing fields may help to alleviate noise problems from the playing fields and the AMTRAK trains which pass through the area. Additionally, these buffer plantings of stockpiled shrubs and trees between playing areas would lessen the impact on wildlife.

The proposed recreation projects will abut the AMTRAK right-of-way, which is now in the early stages of improvement planning. The Northeastern Corridor Improvement Project Draft Programmatic EIS, August, 1977, does not identify project changes which will affect this site; i.e., curve alignment, bridge, or culvert modifications. The proposal to construct protective fencing along the entire rail corridor has been eliminated from the project improvements. Town officials are strongly urged to seek assurances from AMTRAK, that the existing chain link fence along the northern boundary of the middle school will be extended west along the rail right-of-way to protect the entire length of the Spencer Property.

## SHORT-TERM VS. LONG-TERM PRODUCTIVITY

The proposed recreational development of this phase of the Spencer Property will substantially increase the active recreational facilities available to the general public. The project site has an excellent geographic location in relation to adjacent residential uses and recently constructed town facilities. The proposed project will complement both the library and middle school sites and, based on the types of facilities planned, will provide recreation for various age groups.

The long-term impact on the project area without construction of the proposed project would be the under-utilization of a strategically located parcel of Town property. The staged development of the Spencer site reviewed by the ERT (Recreation 8.7 acres and Land Bank 21.5 acres) will permit the Town to proceed with a plan which has considered the property's environmental constraints and attributes. The community, through its appointment and use of reports prepared by the Spencer Site Committee (September, 1975), private architects Fletcher Thompson, Inc., and the ERT, has shown that it has given serious consideration to the maximum enhancement of the project parcel.

## IRREVERSIBLE COMMITMENTS OF RESOURCES

Protection of the identified inland wetlands and flood prone areas on the site should be given consideration. Drastic alteration of these resources may result in the irreversible loss of an important natural drainage system. Rather than committing this area to intensive development, the final site plan should use this resource as a design element, an efficient natural drainage resource and an environmental attribute of the site.

## ALTERNATIVES TO THE PROPOSAL

The site is well situated for recreational purposes as well as open space relief from the congested center of Westbrook. It contains many important and varied landscape features such as slopes, wetlands, varied vegetation patterns and stonewalls. Any proposed site plan should express sensitivity to these features.

The present site design proposal is lacking in many aspects concerning the environment. The proposed basketball courts, little league field and parking area are dangerously close to the wetlands on the site. In addition, relatively few spaces have been left for vegetative buffers between the playing fields. Although construction methods were not outlined in the present proposal, it appears that most of the land would have to be stripped to allow for development. Consideration should be given to preserving as much of the native vegetation as possible during construction and after establishment of the playing fields.

Moving the planned activities to the east would entail additional cut and fill work which could result in siltation problems but may be necessary to consider in order to avoid construction in the wetlands. Redesign of the area is a possibility, but some of the facilities may have to be cut in size or eliminated to allow for the best combination of facilities and open spaces for the site.

Natural vegetation buffers should be utilized to break up large expanses of parking. In an effort to reduce runoff from the impervious surface, projected parking should not be developed in one large parcel, but rather in several small parcels separated by vegetation.

A proposal for the site which might be considered is one which fosters a low maintenance naturalistic landscape, using the native vegetation with evergreen supplements, in the buffer areas. This would not only enhance the habitat for wildlife and aid in noise abatement, but also cut down on maintenance costs for the Town.

# Appendix

SPENCER PROPERTY

PROPORTIONAL EXTENT OF SOILS AND THEIR LIMITATIONS FOR CERTAIN LAND USES

Soil Series	Natural Soil Group	Soil Symbol	Approx. Acres	Percent of Acres	Principal Limiting Factor	Urban Use Limitations*				Athletic Fields
						On-Site Sewage	Buildings with Basements	Streets & Parking	Land-Scaping	
Adrian-Palms		91			Flooding, high water table	3	3	3	3	3
Agawam		69A			Depth to bedrock	2	1	1	1	1
Agawam		69B			Slope	1	1	1	1	2
Carlisle		92			Wetness, floods	3	3	3	3	3
Hollis-Charleton		17LC			Slope, depth to bedrock, large stones	3	3	3	3	3
Paxton		35XC			Percs slowly, slope, large stones, frost action	3	2	2	2	3
Paxton and Montauk		35MC			Percs slowly, large stones, slope	3	3	3	3	3
Raynham		640			Frost action, wetness	3	3	3	3	3

\* Urban Use Limitations: 1 = slight; 2 = moderate; 3 = severe.



## SOIL INTERPRETATIONS FOR URBAN USES

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

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

### Slight Limitations

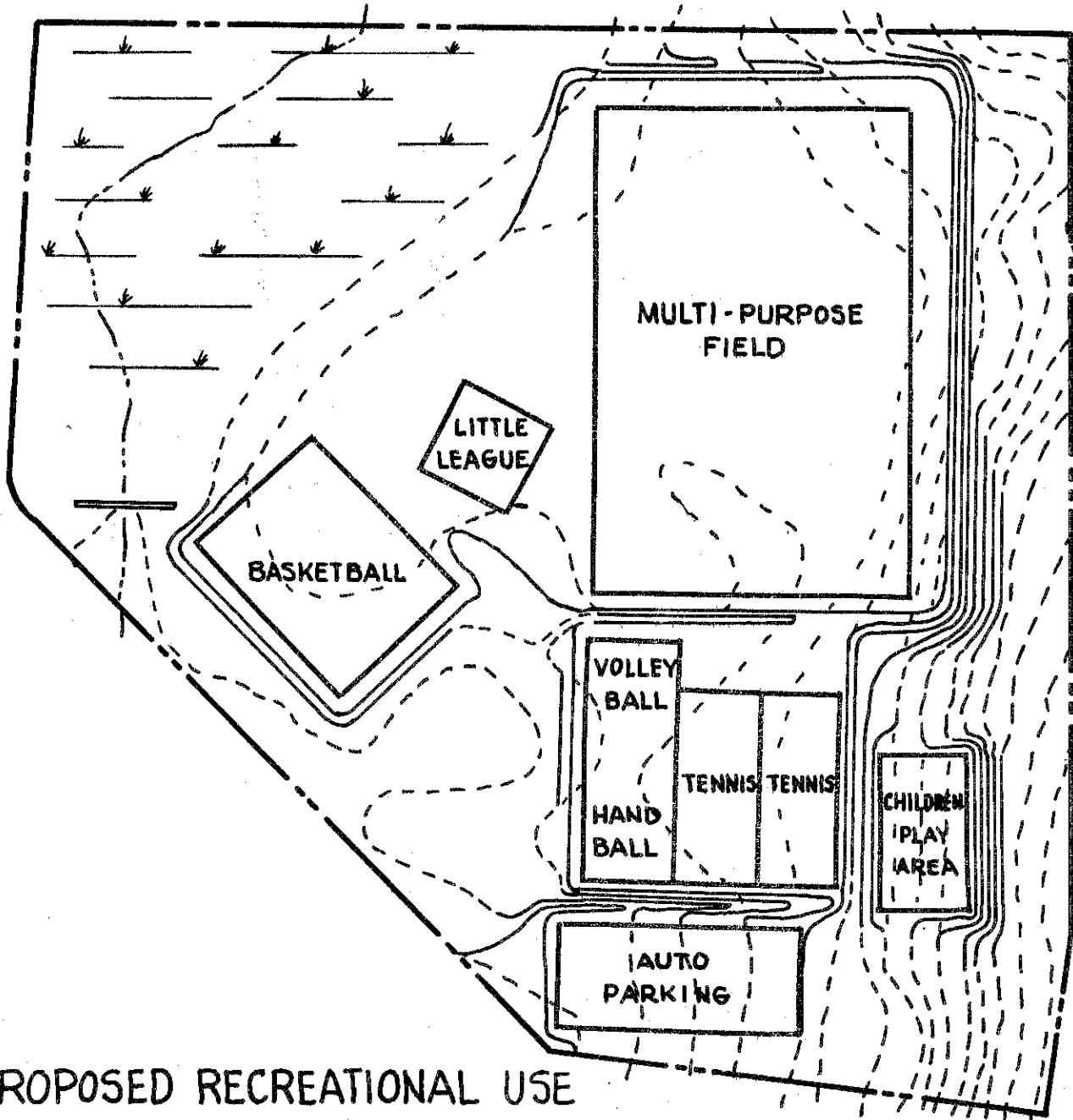
Areas rated as slight have relatively few limitations in terms of soil suitability for a particular use. The degree of suitability is such that a minimum of time or cost would be needed to overcome relatively minor soil limitations.

### Moderate Limitations

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

### Severe Limitations

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

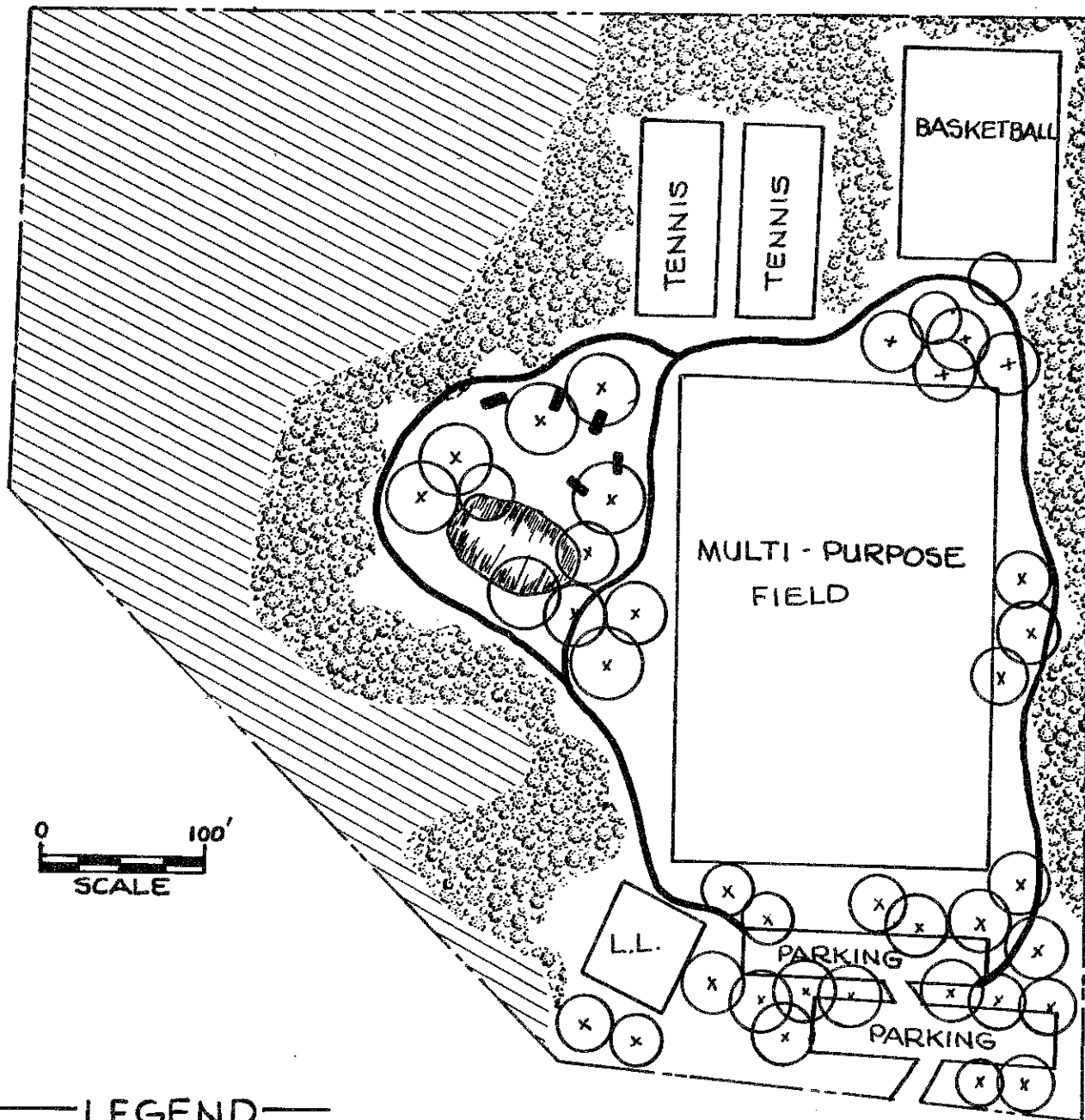







PROPOSED RECREATIONAL USE



SCALE 1" = 100'





- LEGEND —
-  VEGETATION BUFFERS
  -  PATH
  -  PICNIC TABLES
  -  CHILDRENS PLAY AREA
  -  WETLANDS

## ALTERNATIVE DESIGN PROPOSAL



This plan adds a picnic area and moves most activities to the east to avoid wetlands soils. Planned activities which will draw the heaviest traffic have been moved closer to the parking area. A small trail offers access to all playing fields and provides a place for hiking and jogging.

