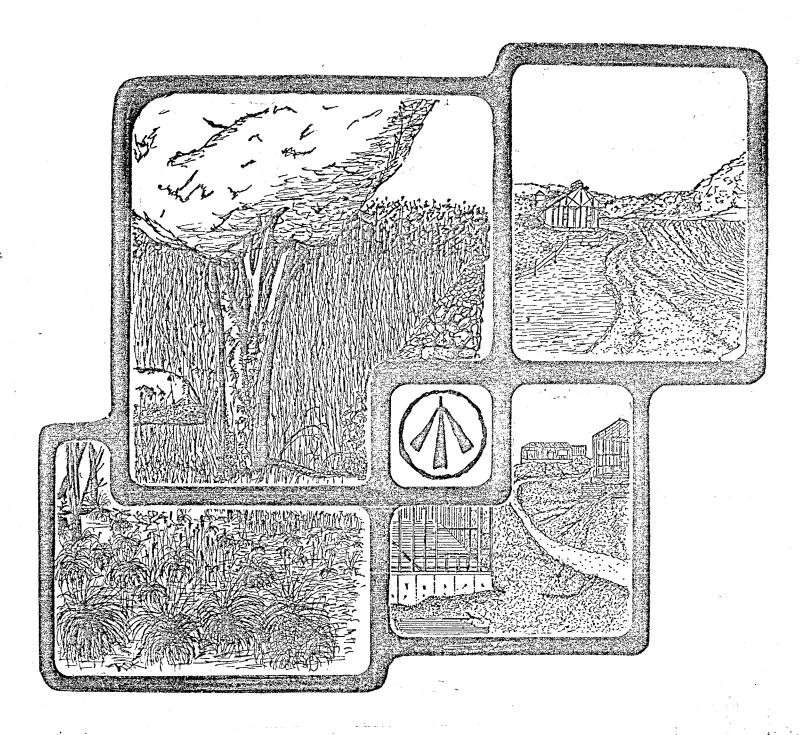
### ENVIRONMENTAL REVIEW TEAM REPORT



# HOFFMAN/JANAZZO PROPERTY Watertown, Connecticut

KING'S MARK
RESOURCE CONSERVATION & DEVELOPMENT AREA

### KING'S MARK ENVIRONMENTAL REVIEW TEAM REPORT

# HOFFMAN/JANAZZO PROPERTY Watertown, Connecticut AUGUST, 1983



King's Mark Resource Conservation and Development Area Environmental Review Team Sackett Hill Road 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

University of Connecticut Cooperative Extension Service

Department of Transportation

#### 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
Central Naugatuck Valley Regional Planning Agency
Housatonic Valley Council of Elected Officials
Southwestern Regional Planning Agency
Greater Bridgeport Regional Planning Agency
Regional Planning Agency of South Central Connecticut
Central Connecticut Regional Planning Agency
American Indian Archaeological Institute
Housatonic Valley Association

#### $x \quad x \quad x \quad x$

FUNDING PROVIDED BY
State of Connecticut

#### POLICY DETERMINED BY

King's Mark Resource Conservation and Development, Inc.
Executive Committee Members

Victor Allan, Chairman, Bethlehem Harold Feldman, Treasurer, Orange Stephen Driver, Secretary, Redding Leonard Assard, Bethlehem Sam M. Chambliss, Ridgefield David Hannon, Goshen Irving Hart, New Hartford Frederick Leavenworth, Woodbury David Brooks, North Canaan John Rabbe, East Hartford Mrs. Julia Wasserman, Newtown Donna Lindgren, Ansonia

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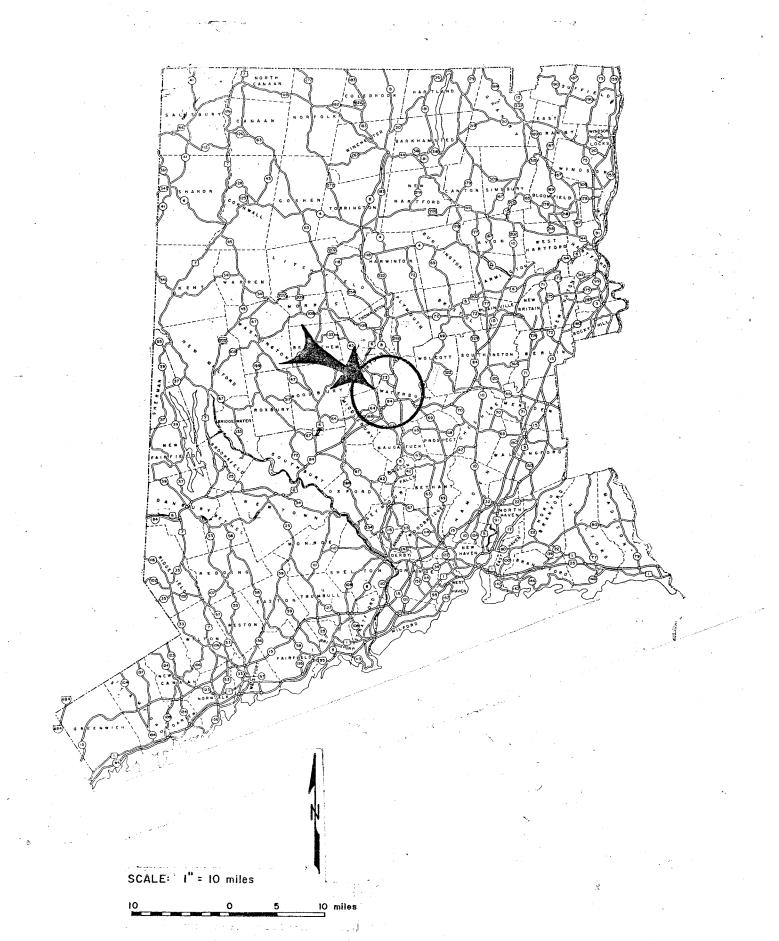
Northwestern Connecticut Regional Planning Agency

Dorothy Westerhoff, Chairman Charles A. Boster, Director Richard Lynn, ERT Coordinator Sandra Bausch, ERT Cartographer Jamie Whitman, Secretary

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### LOCATION OF STUDY SITE



#### ENVIRONMENTAL REVIEW TEAM REPORT

#### ON

### HOFFMAN/JANAZZO PROPERTY WATERTOWN, CT

#### I. INTRODUCTION

The Watertown Town Manager and Economic Development Commission are interested in the developability of a  $\pm$  38 acre tract of land in the southeastern corner of town. The subject site is known as the "Hoffman/Janazzo Property" and is located off Route 63 and New Wood Road. The property is privately owned, mostly wooded, and is zoned predominantly for industrial use (2 and 5 acre lots). Approximately 50% of the site consists of inland wetland soil.

Recently, interest has been expressed in developing the property for industrial use. The Town requested this environmental review to receive advice on the suitability of the land for development. Specifically, the Team was asked to: 1) inventory the natural resource characteristics of the site;

2) comment on the potential for "improving" the property via filling, drainage, pond construction, etc.; 3) comment on the environmental impact of such wetland modifications; 4) discuss the potential of the area for industrial development in an improved or unimproved condition; and 5) if the land is considered largely unsuitable for industrial development, comment on appropriate uses of the area and the advisability of re-zoning.

The King's Mark Executive Committee considered the town's request, and approved the project for review by the Team.

The ERT met and field reviewed the site on May 4, 1983. Team members participating on this review included:

Arthur Cross......District Conservationist.....USDA Soil Conservation Service

Brian Curtis......Sanitary Engineer........CT Dept. of Environmental Protection

Charles Vidich....Regional Planner......Central Naugatuck Valley Regional Planning Agency

Bill Warzecha.....Geohydrologist.................CT Dept. of Environmental Protection

Prior to the review day, each team member was provided with a summary of the proposed study, a checklist of concerns to address, a detailed soil survey map, a soils limitation chart and a topographic map of the study area. 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. 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 the landowner/developer. It is hoped the information contained in this report will assist the Town of Watertown 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, Sackett Hill Road, Warren, Connecticut 06754.

#### II. TOPOGRAPHY AND GEOLOGY

As shown in Figure 1, the northeast section of the site is occupied by a wetland which is approximately 14 acres in size. From the wetland, the land surface rises in elevation throughout the southern and western portions of the site to an area of more rugged and hilly land. Several bedrock outcrops were observed in the hillier areas of the site. The land surface elevation of the property is  $\pm$  680 feet above mean sea level at its highest point and slopes down to approximately  $\pm$  600 feet above mean sea level to the northeast.

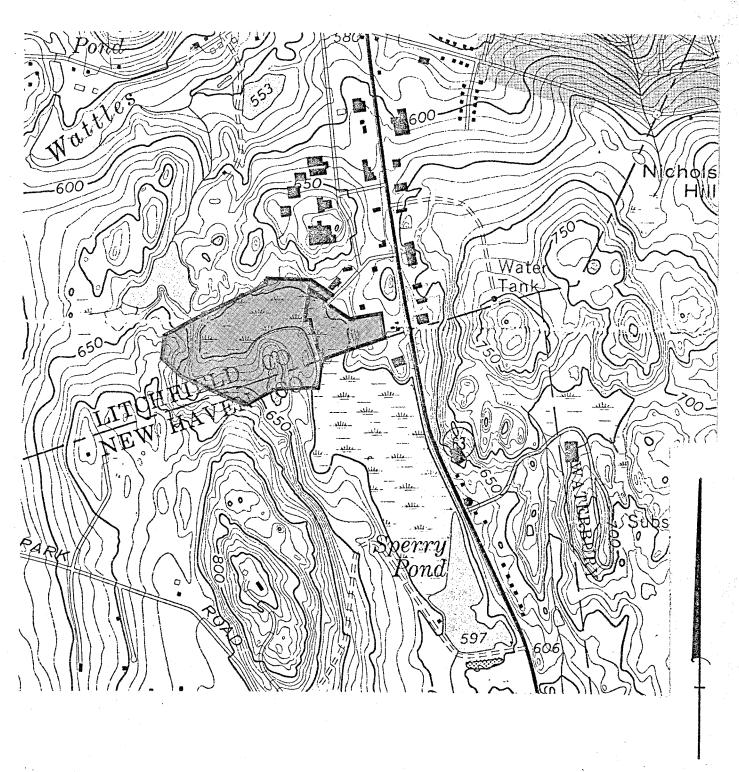
The steepest topography is found in the western and southern sections of the property where slopes range between 20 and 25% in some places. The remaining upland portions of the property slope moderately between 10 and 15%. The wetland area is nearly level.

The bedrock geology of the property is described in the Geologic Map of the Waterbury Quadrangle, Connecticut (Quadrangle Report Number QR-22 by Robert M. Gates and Charles Martin 1962-64). The rock unit which underlies and outcrops on the site is the Waterbury Formation. This formation is a light-to-dark gray, fine to medium grained gneiss composed mainly of muscovite-biotite-oligoclase to adesine-quartz. Most outcrops were observed in the western portion of the site; however, the bedrock geologic map indicates that there are outcroppings by the east side of the site, also.

The term "gneiss" refers to a crystalline, metamorphic rock formed under conditions of high temperature and pressure deep within the earth. Gneisses are characterized by bands, which are produced by alternation of dark and light layers of minerals such as quartz, feldspar and biotite.

While the site is adequately served by a public water supply, it should be noted that the bedrock aquifer underlying the site could be utilized to supplement the current supply. The anticipated yield, however, is comparatively small. Based upon statistics presented in Water Resources Bulletin #19 by the U.S. Geological Survey, 90% of the wells tapping the type of bedrock underlying this site are capable of yielding at least two gallons of water per minute, but less than 10% yield 20 gpm or more.

# FIGURE 1 TOPOGRAPHIC MAP



The surficial deposits (those materials overlying bedrock) on the property are glacial till, swamp deposits and artificial fill (see Figure 2). Till, which was deposited directly from the glacier, is generally non-sorted and contains an undifferentiated mixture of clay, silt, sand, gravel and boulders. The till soils which are found primarily throughout the southern and western portions of the site are those deliniated by the soils map as Hollis, Charleton, Gloucester and Sutton soils. The Hollis series are usually indicative of shallow soils (less than 20" to bedrock) and are generally excessively stony. Although the thickness of till is unknown, it probably ranges from 0 where outcrops occur to less than 10 feet thick throughout the remainder of the site.

Artificial fill, which is composed primarily of earth materials and/or man made materials, has been deposited by man in the area of the access road.

Based on the subsurface and surficial geology (i.e., shallow to bedrock conditions on nearly 50% of the upland, wetlands, outcroppings, extreme stoniness, etc) and topography, this property is not very conducive to use as an industrial park. However, some of the flat or gently to moderately sloping areas could probably accommodate one or two industrial or residential lots.

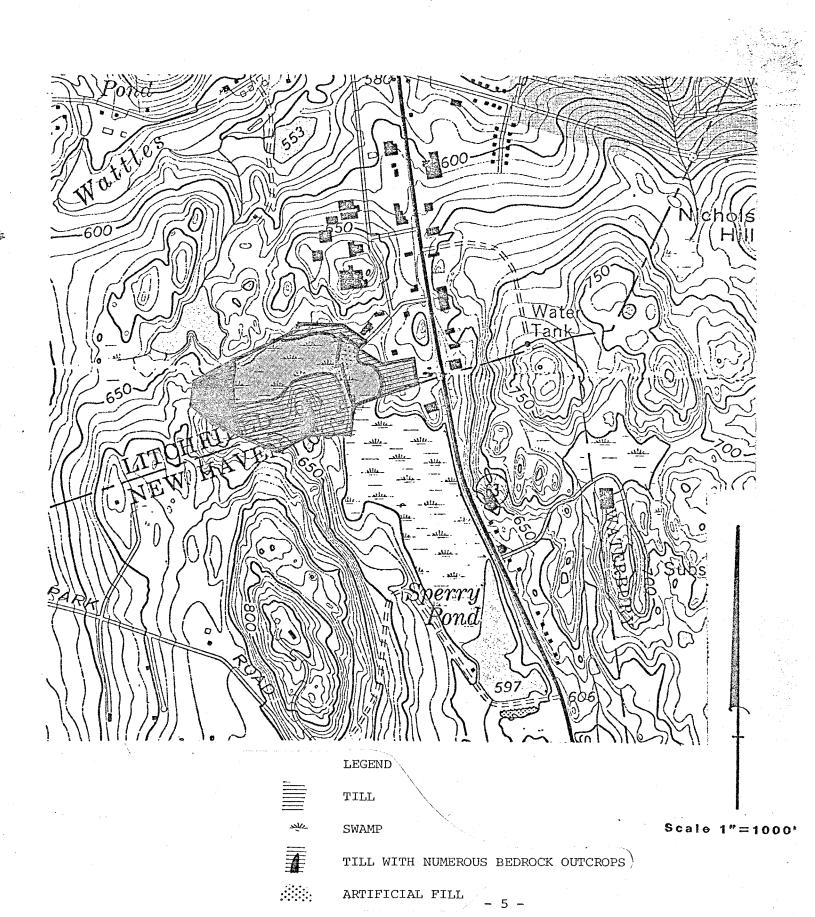
#### III. HYDROLOGY

The site lies within the watershed of Long Swamp Brook. Surface water on the property drains generally northeastward into the wetland on the site which eventually drains southward into Sperry Pond (see Figure 3). Long Swamp Brook, itself, is a tributary to Hop Brook which ultimately drains into the Naugatuck River.

Development of the site can be expected to lead to increases in stormwater runoff. The amount of increased runoff will depend largely on the type and extent of development, amount of vegetation removed, impervious surfaces such as roofs and paved areas, and the timing of development on each lot. For this reason, and because the Town of Watertown requires a zero rate increase in peakflow runoff from new development, a detailed engineering study of the pre-and-post development runoff from the entire site as well as a careful runoff control plan should be prepared and implemented prior to any significant development at this site.

The town raised some concern regarding the filling of the wetlands and/or modification of the wetland with respect to developing the site. Wetlands serve many valuable hydrological purposes, such as: (1) they act as natural retention basins, reducing downstream flood flows during storms; (2) they are capable of trapping sediments from upstream areas; (3) through biochemical processes, wetlands can change water quality often resulting in cleaner water; and (4) from an ecological standpoint, wetlands serve as a habitat for many species of animals and plants. For these and other reasons, wetland filling should be avoided where possible. In some instances, however, a small amount of wetland filling may be necessary and justifiable (e.g. wetland filling for a road crossing). From a hydrological standpoint, it is difficult to assess the risks involved in permitting a portion of a wetland area to be filled. In many instances, a particular act of filling may not in itself significantly reduce the flood storage capacity of a wetlands. On the other hand, a series of small fills or the filling in of portions of a wetland may lead to substantial detriment, such as flooding and potential erosion problems downstream.

# FIGURE 2 SURFICIAL GEOLOGY



## FIGURE 3 WATERSHED MAP



If wetlands are proposed to be filled or modified, it is recommended that the developer first submit a detailed analysis of the potential effects of the modification together with a detailed plan of the proposed project for review by appropriate Town officials.

#### IV. SOILS

A Soils Map of the subject site is presented in the Appendix of this report. The Appendix also contains a Soils Limitation Chart. By comparing the Soils Map with the Soils Limitation Chart, one can gain an appreciation of the suitability of the various soils for alternate land uses.

As shown on the Soils Map, approximately 15 acres of the ± 38 acre site are mapped as Hollis soils (symbols HrC, HrE, and HxE). These soils are very rocky to extremely rocky shallow to bedrock soils, on slopes predominantly greater than 15%. Soil limitations are severe for all urban uses. More suitable uses include woodland (the existing land use), management for wildlife habitat, and passive recreation (e.g. hiking trails). It should be noted that the steep slopes of these soils severely limits equipment operation for woodland improvement operations and tree growth is slow due to shallow soils and droughtiness.

Approximately 14 acres of the site are mapped as Peat and Muck soils (map symbol PK). The water table in these soils is at or near the surface most of the year. Deposits of peat and muck (organic materials) in these soils can range from 3 feet to more than 25 feet in depth.

At present, the peat and muck swamp serves as habitat for wetland wildlife. The swamp also undoubtedly absorbs and stores some storm water runoff from industrial development and paved roads within its watershed.

Future potential uses of the swamp are storm water retention, wetland wild-life habitat, and nature study. The habitat for waterfowl (ducks, geese, heron, etc.) could be enhanced by creating a marsh. This could be accomplished by constructing a low, earthen dam with concrete box spillway and emergency grass spillway at the location of the "filled area" on the soils map. Between 1 and 5 feet of water could be impounded. The marsh could still serve as a storage and slow release area for storm water runoff.

Approximately 8 acres of the site are mapped as Charlton, Gloucester, and Sutton very stony soils. (Map sumbols CrC, GeC, and SxC).

Several homesites could be created in these soil areas pending further onsite examination for septic systems, drives and homesites.

The Sutton soils have a seasonal high water table. Therefore, surface and subsurface drainage measures would need to be considered in these areas.

The remaining + 3 acres are borrow and fill land of variable materials. These areas should be investigated (i.e. with test holes) to determine their suitability for any use.

#### V. VEGETATION

The vegetation for this area can be divided into 3 separate cover types (see Figure 4). In general terms, most of the property is wooded. Upper slopes contain primarily a variety of tree species whereas the wetland area is dominated by red maple and blueberry. There is a small area of old field type vegetation in an old fill area.

In a commercial sense, there is not much value in the wood on this parcel. Other forest amenities however are important and should be recognized. Forested acreage plays a role in the aesthetics of a community, the water storage capacity of the landscape, and provides a diversified wildlife habitat. These values should be of concern, especially in a developing town like Watertown, as undeveloped land becomes more intensely utilized.

#### A. Vegetative Type Descriptions:

TYPE 1, Old Field - Although not really an old field as such, this area is dominated by old field (early successional) species. This type was created when fill material was brought in and dumped across the wetland area and in the eastern portion of the site. Dominate species include grey and white birch, aspen, sweet fern, blackberry, club moss and sumac.

TYPE 2, Maple Swamp - In this area, a high water table limits the growth of species to those well adapted to wet conditions. Red maple dominates this cover type. The only other tree species found were an occasional yellow birch and scattered tulip poplar where the edge of the swamp met drier land. The understory is limited to high bush blueberry and spice bush. The forest floor contains hummocks of vegetation around standing water. Species include skunk cabbage, false hellabore and many varieties of ferns. Along the edges of the swamp one can find lily of the valley and wild strawberry.

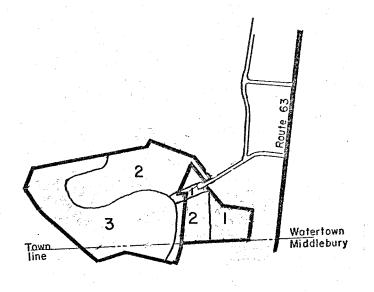
TYPE 3, Mixed Hardwood - This area may be classified as a pole-small sawtimber stand; that is, the dominate tree species are between 8 and 14 inches in diameter. Common tree species include yellow birch, red and sugar maple, red and chestnut oak and scattered tulip popular along the edges of the swamp. The understory consists of high and low bush blueberry, scattered witch hazel, shad bush, blue beech, mountain laurel, beech and chestnut sprouts. The forest floor contains seedlings from the above tree species as well as lily of the valley, princess pine, violets, ferns and trillium.

#### B. Vegetation Impact:

Wetland modification via filling or drainage can significantly alter the vegetation on this site. It should be recognized that wetlands serve several natural functions. Besides offering a diversified wildlife habitat, an important function is water holding and storage. Wetlands collect and store runoff from surrounding areas and release water slowly, thus providing a continuous supply as well as helping to protect downstream communities from excessive flooding

Alterations in or near wetlands which permanently raise or lower the water table and/or restrict natural drainage may have a negative impact on the vegetation in the immediate area. Raising the water table may drown root systems and excessive drainage may create droughty conditions. Both activities can alter species makeup and potentially cause widespread mortality in the plant community.

### FIGURE 4 VEGETATION TYPE MAP





Scale 1"= 1000'

LEGEND

- ! OLD FIELD
- 2 RED MAPLE SWAMP
- 3 MIXED HARDWOOD FOREST

#### C. Management Considerations:

If this property is developed for residential or industrial use, consideration should be given to preserving the existing vegetation where possible. Scattered "clumps" of natural forest in a variety of sizes and shapes can make for an attractive landscape. Such islands can add beauty to a development as well as attract urban adapted varieties of wildlife.

If clumps of vegetation could be left, they should be identified on the ground and marked so as to insure their retention. Clumps are preferred over individual trees or shrubs not only for aesthetic reasons but also individual stems are more apt to suffer from mechanical injury during the development process.

Although the wood on the property is not particularly valuable, the cutting which will have to take place should be done to take advantage of the demand for all wood products. Products derived would be small hardwood sawlogs and firewood. The proper marketing of these products should be a concern and should be planned for.

A public service forester (available at 485-0226) or a private forester may be of assistance in either on-the-ground planning or the marketing of the wood products.

#### VI. ENGINEERING CONSIDERATIONS

In general this parcel of land is not well suited for industrial development due to the very small percentage of the total acreage that is suitable for building location and construction. Most of the parcel could not be built upon economically due to ledge or wetland conditions. Even the best part of the "back" property, which is mapped as Gloucester, would be limited for construction of a large building due to its configuration and slope. Costs associated with site improvements for access to this area will be very high in relation to the possible industrial development area it will provide. Perhaps the best part of the property for industrial development is the smaller area located due east of the large wetland adjacent to Rt. 63. The positive features of this portion of the property are that public water and sewers are readily available along Rt. 63 and road access to the site is available within a fairly short distance.

In terms of wastewater disposal the only parts of the site which are suitable for subsurface sewage disposal systems are the areas mapped as Gloucester, Charlton and possibly the borrow and fill land if sand fill was used. Even in these more favorable soil types, only small to moderate septic systems could be accommodated due to hydraulic limitations of ground water flow and available area. The only wastes suitable for disposal would be domestic sewage. No process wastewaters would be permitted for discharge since the area is mapped as GA in Connecticut's Water Quality Standards and Criteria. Domestic sewage systems with flows less than or equal to 5000 gallons per day would be permitted through the Watertown Health Department. Those larger than 5000 gallons per day would be permitted through the Department of Environmental Protection.

Providing sewers is feasible for the corner of the property closest to Rt. 63 due to the short separation distance from the interceptor sewer. Sewering

costs for the balance of the property would be quite high due to wetlands crossings, blasting ledge, distance required and the need for a pump station. In terms of the return price for industrial parcels that could be made available, this sewering cost would probably prove to be prohibitive.

Since ground water flow is in the direction of the wetlands, and the site if developed would most likely be served by public water, it is not anticipated that industrial development of the site would have detrimental impacts on ground water quality anywhere off site.

#### VII. PLANNING CONSIDERATIONS

The Watertown Comprehensive Plan of Development, prepared in 1965, identified about 10 out of the 38 acres as suitable for industrial development. The balance of the 38 acre tract is shown as best suited for low density residential development. Similarly, the Regional Plan of Development reflects the same basic land use plan for the 38 acre tract of land.

The Watertown zoning map designates most of the tract as suitable for industrial development and has zoned a portion of the tract for Restricted Industrial Use (IR-200) and a portion for General Industrial Use (IG-80). The western edge of the property, however, is zoned for residential development with minimum lot sizes of 60,000 square feet. (see Figure 5).

The IR-200 district which occupies most of the site permits manufacturing activities along with a limited number of commercial activities. However, dwelling units, motor vehicle service stations, bowling alleys and retail stores are not permitted in this zone. In the IR-200 district lot sizes must be a minimum of 200,000 square feet or approximately 4.6 acres a piece. Based on this lot size requirement the maximum number of lots that could be created in this ± 25 acre area of the site would be 5. However, wetland soils and steep slopes clearly make this IR-200 area of land a marginal site for an industrial park, and would probably only permit the creation of a few lots. Given the limitations of this area and the relative abundance of suitable and buildable land elsewhere in Watertown, consideration should be given to re-zoning this portion of the site to land uses other than industrial.

The easternmost portion of the site (particularly Bl on Soils Map) appears to be more suitable for industrial development and perhaps one or two individual lots could be created on this + 4 acres of land.

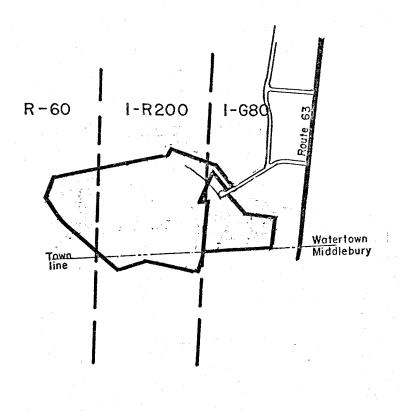
#### A. Land Use Issues

An industrial park at this site could create land use conflicts with the adjoining residentially zoned land in Watertown and Middlebury. While land use conflicts could be minimized by providing vegetative buffers along property lines and 50 foot building setbacks, these actions would not improve the compatability of an industrial park in an area which is essentially a wetland preserve.

#### B. Traffic Circulation

The 38 acre tract of land has access to Route 63 over Wood Road. Route 63 has recently been widened and resurfaced. In its present condition, it provides

# FIGURE 5 ZONING MAP



Scale 1"= 1000'

#### LEGEND

**|-G80** GENERAL INDUSTRIAL( min. lot area = 80,000 sq. ft.)

I-R200 RESTRICTED INDUSTRIAL (min. lot area = 200,000 sq. ft.)

R-60 RESIDENCE ( min. lot area = 60,000 sq. ft.)

excellent access to the proposed site. Wood Road provides a direct connection between the site and Route 63 and is in an acceptable state of repair for heavy truck traffic. Sightlines at Route 63 and Wood Road are adequate for vehicles turning left or right onto Wood Road from Route 63.

The principal limitation to the proposed site, from a traffic standpoint, is the high traffic volumes found on Route 63 near its junction with Route 64 and Interstate 84. In 1980, Route 63 between Route 64 and Route 73 had an average daily traffic count of 10,600 vehicles. This traffic level results in a vehicle to capacity ratio of .654 or slightly less than the .75 threshold where traffic congestion and queing begins to occur. Because of the relatively small number of lots that could be created on the 38 acre tract of land there probably will not be any measurable increase in traffic congestion or queing on Route 63 due to development that takes place at this site.

#### C. Traffic Impact

Assuming an industrial park is considered at this site, it is anticipated that a maximum of 1,050 additional vehicles would use Route 63 daily at ultimate development of the tract. This increased volume assumes that only 50% of the 38 acre tract of land will be developed and that the tract will generate 55.3 vehicle trips per acre. It is estimated that 50% of the increased traffic volume will utilize Bunker Hill Road resulting in a maximum of 11,125 vehicles per day on Route 63 between Wood Road and the Intersection of Route 64.

This level of average daily traffic will increase the volume to capacity ratio of Route 63 to .717. At this volume to capacity ratio there may be occassional periods of unstable flow of traffic but no serious stop and go driving conditions are likely to occur.

#### D. <u>Development Alternatives</u>

While an industrial park at the site is not likely to create any serious traffic congestion problems or result in poor vehicle circulation patterns, it is not the most appropriate use of the land in the opinion of the Team's planner. An industrial park development would be limited to a few small areas on the tract and would require considerable investment for engineered septic systems or for lengthly sewer line extension with the possible exception of the easternmost portion of the site. Moreover, soil conditions on much of the site would probably require greater structural reinforcement of foundations and upgraded road construction standards.

Given these significant cost factors and the availability of numerous other suitable and buildable sites within Watertown, the majority of the 38 acre tract of land would be better suited for residential or recreational uses.

The 38 acre site might be able to support a few single family dwelling units but these units would probably require engineered septic systems and careful building construction due to the high water table and poor soil conditions on most of the site. One possible option would be to consider a planned residential development at this site since a large development might be able to better handle some of these initial development costs than a few single family dwelling units. A planned residential development consisting of condominium units or multi family rental units would benefit by easy access to Route 63 and would be within close proximity to the nearby shopping mall and commercial and

industrial employment centers in Watertown and Middlebury.

A final, less obtrusive and more compatible development alternative would be to simply preserve the tract for passive recreational uses. Since the site is adjacent to a large wetland preserve in Middlebury it would be logical to include this site in an existing land trust. If the tract is to be preserved for recreational and open space uses, the Watertown Planning and Zoning should consider revising the zoning map for the site accordingly.

If there is no interest in deeding the land to a land trust, then the Watertown Planning and Zoning Commission should consider zoning the present IR-200 zone in this area as best suited for residential development with minimum lot sizes of 60,000 square feet.

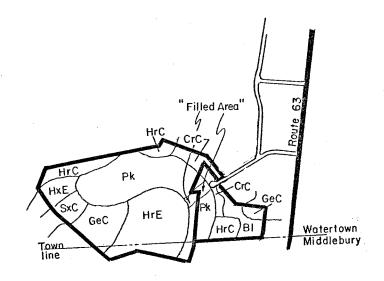
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• •#Edition

VIII. APPENDIX

APPENDIX

### SOILS MAP



Scale 1"= 1000'

Soil boundary lines derived from smaller scale map (1"=1320') and should not be viewed as precise boundaries but rather as a guide to the distribution of soils on the property.

Adapted from Litchfield County Soil Survey, U.S.D.A. - S.C.S.

1				1	<del></del>	1		· · · · · · · · · · · · · · · · · · ·	<del></del>		
MAP SYMBOL	SOIL NAME	SMALL COMMERCIAL BLDGS. RATING REASON		BLDGS. W/ BASEMENTS RATING REASON		BLDGS. WITHOUT BASEMENTS RATING REASON		LOCAL ROADS OR DRIVEWAYS RATING REASON		LAWNS & LANDSCAPING RATING REASON	
ві	Borrow & fill land, loamy material	Old CO GO GO GO AND GO	ON SITE INVESTIGATION NEEDED						000 tils tils 000 000 000 000 000 000 000 000 000 0		
CrC	Charlton very stony fine sandy loam, 3-15% slopes	Moderate Slopes 3-8%	Large Stones	Slight Slopes 3-8%	CORP ECCS	Slight Slopes 3-8%	cue con	Slight Slopes 3-8%	old- out	Moderate 3-8% slopes	Large stones
		Severe Slopes 8-15%	Slope	Moderate Slopes 8-15%	Slope	Moderate Slopes 8-15%	Slope	Moderate Slopes 8-15%	Slope	Moderate 8-15% slopes	Large stones
GeC	Gloucester very stony sandy loam, 3-15% slopes	Moderate Slopes 3-8%	Large stones	Moderate Slopes 3-8%	Large stones	Moderate Slopes 3-8%	Large stones	Moderate Slopes 8-15%	Large stones	Moderate	Small stones Drought
·		Severe Slopes 8-15%	Slope, Large stones	Moderate Slopes 8-15%	Large stones, Slope	Moderate Slopes 8-15%	Large stones, Slope	Moderate Slopes 8-15%	Slope, Large stones	Moderate Slopes 8-15%	Slope, Small stones Droughty
HrC	Hollis Very rocky fine sandy loam, 3-15% slopes	Severe Slopes 3-8%	Depth to rock	Severe Slopes 3-8%	Depth to rock	Severe Slopes 3-8%	Depth to rock	Severe Slope 3-8%	Depth to rock	Severe	Thin soil layer
		Severe Slopes 8-15%	Depth to rock	Severe Slopes 8-15%	Depth to rock	Severe Slopes 8-15%	Depth to rock	Severe Slopes 8-15%	Depth to rock		
HrE	Hollis very rocky fine sandy loam, 15-35% slopes	Severe	Depth to rock	Severe	Depth to rock	Severe	Depth to rock	Severe	Depth to rock	Severe	Thin soil layer

#### SOILS LIMITATION CHART CONT'D.

MAP	ant ways	SMALL COMMERCIAL BLDGS.		BLDGS. W/ BASEMENTS		BLDGS. WITHOUT BASEMENTS		LOCAL ROADS OR DRIVEWAYS		LAWNS & LANDSCAPING	
SYMBOL	SOIL NAME	RATING	REASON	RATING	REASON	RATING	REASON	RATING	REASON	RATING	REASON
HxE	Hollis extremely rocky fine sandy loam, 15-35% slopes	Severe	Depth to rock, Slope	Severe	Depth to rock, Slope	Severe	Depth to rock, Slope	Severe	Depth to rock, Slope	Severe	Depth to rock, Slope
Pk	Peat and muck	Severe	Ponding, Low strength	Severe	Ponding, Low strength	Severe	Ponding, Low strength	Severe	Ponding, Frost action, Low strength	Severe	Ponding, Excess humus
SxC	Sutton very stony fine sandy loam, 3-15% slopes	Moderate Slopes 3-8%	Wetness, Slope	Severe	Wetness	Moderate Slopes 3-8%	Wetness	Severe	Frost action	Moderate Slopes 3-8%	Small stones, Wetness
		Severe Slopes 8-15%	Slope			Moderate Slopes 8-15%	Slope, Wetness			Moderate Slopes 8-15%	Slope, Wetness, Small stones

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 RCSD 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.