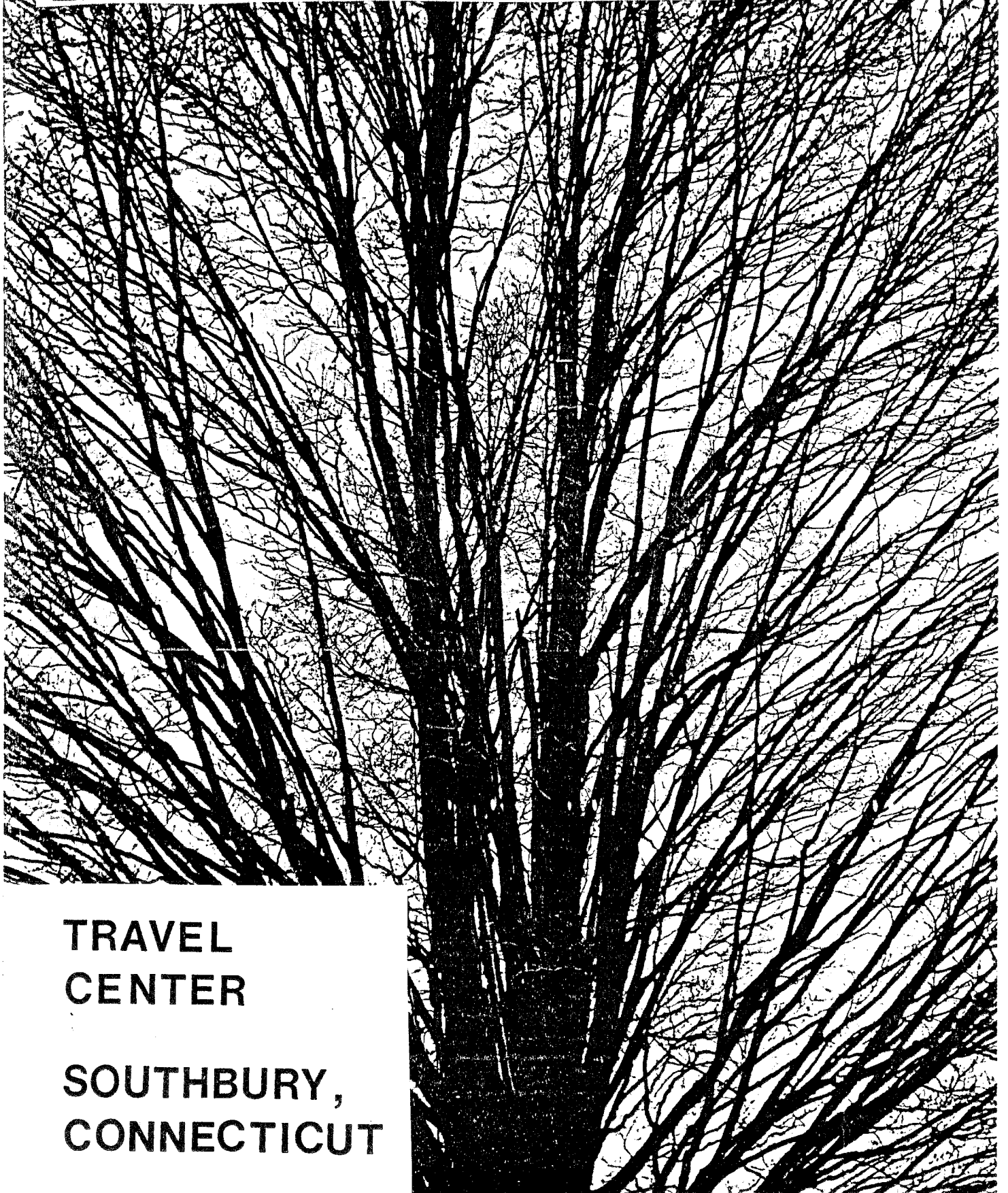


# ENVIRONMENTAL REVIEW TEAM REPORT



**TRAVEL  
CENTER**

**SOUTHBURY,  
CONNECTICUT**



**KING'S MARK RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.**

# TRAVEL CENTER

Environmental Review Team Report

Prepared by the King's Mark Environmental Review Team  
of the King's Mark Resource Conservation  
and Development Area, Inc.

Wallingford, Connecticut

for the

Southbury Inland Wetlands Commission

This report is not meant to compete with private consultants by supplying site designs or detailed solutions to development problems. This report identifies the existing resource base and evaluates its significance to the proposed development and also suggests considerations that should be of concern to the developer and the Town of Southbury. The results of the Team action are oriented toward the development of a better environmental quality and long-term economics of the land use. The opinions contained herein are those of the individual Team members and do not necessarily represent the views of any regulatory agency with which they may be employed.

JUNE 1986

## ACKNOWLEDGEMENTS

The King's Mark Environmental Review Team Coordinator, Keane Callahan, would like to thank and gratefully acknowledge the following individuals whose professionalism and expertise were invaluable to the completion of this study:

- \* William Warzecha, Geohydrologist  
Department of Environmental Protection
- \* Diane Mayerfeld, Senior Environmental Analyst  
Department of Environmental Protection
- \* David Lord, District Conservationist  
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- \* Kip Kolesinskas, Soil Resource Specialist  
USDA - Soil Conservation Service
- \* Duncan Graham, Executive Director  
Council of Governments of the Central  
Naugatuck Valley

I would also like to thank Patricia Newton, Secretary, and Janet Jerolman, Cartographer of the King's Mark Environmental Review Team for assisting in the completion of this report.

Finally, special thanks to Ms. Nancy Murray, Biologist for the Department of Environmental Protection for providing information on endangered plant and animal species, and Mr. Mark Cooper, Chairperson of the Southbury Inland Wetlands Commission and Mr. Kevin Bennett, Architect, of Bennett Sullivan Associates for their cooperation and assistance during this environmental review.

The primary goal of this environmental review was to determine the adequacy of this parcel to support the proposed land use, and determine how it will affect existing wetland communities, water quality, and adjacent land uses with private drinking wells. The Commission specifically asked the ERT to:

- (1) assess the soil and hydrogeological capabilities of the site;
- (2) inventory existing wetland vegetation;
- (3) evaluate surface and ground water quality;
- (4) analyze existing storm water drainage, and determine if the proposal will significantly change storm water drainage patterns;
- (5) determine if the proposal will significantly influence surrounding land uses (i.e., agricultural uses north of proposed site); and
- (6) assess site design compatibility including land use, traffic, access, natural hazards (i.e., flooding), and water and sewer needs.

\* \* \* \* \*

Through the inventory and review process, specific resources, areas of special concern, and development limitations and opportunities were identified. They fall into three broad categories: (1) physical characteristics; (2) biological resources; and (3) land use and planning considerations. They are summarized below.

### PHYSICAL CHARACTERISTICS

#### Topography

Land surface on the site slopes gently southwestward to the inland wetland area in the western portions of the site. Elevations on the site range between approximately 170 feet and 200 feet above mean sea level.

## Soils

The soils on the proposed development site are varied. They range from deep, well-drained, glacial outwash soils to very poorly drained alluvial soils.

## Erosion and Sedimentation

Sediment barriers should be properly installed between the wetlands and all disturbed areas.

Individual control measures to protect this site and off-site areas from soil erosion and sedimentation include: (1) temporary and permanent vegetative cover; (2) mulching; (3) construction entrance; (4) sediment barriers; and (5) outlet protection.

## Bedrock Geology

The bedrock surface may be as much as 120 feet beneath the wetlands in the southwestern limits of the site. It rises to probably about 10 feet below ground surface at the northeast end of the property.

Since the bedrock surface is moderately deep throughout the site, it should not pose any major problems in terms of the proposed development.

It seems likely that if the development has to rely upon on-site wells, the underlying bedrock would probably be the best source of water. As a result, bedrock would have some impact on the quality and quantity of water withdrawn from a potential well(s).

## Surficial Geology

Based on deep test pit information and an unpublished surficial geologic map, the majority of the site is covered by fine-grained stratified drift, consisting of fine sand, silt, and some clay.

## Hydrology

The inland wetland and its accompanying stream in the western parts presently serves as a discharge point for surface and groundwater on the site.

Commercial development of the site as proposed would be expected to increase the amount of runoff during periods of rainfall. These increases would result from soil compaction and replacement of existing vegetation with impervious surfaces (i.e., rooftops and paved parking areas over permeable, sandy soils).

In order to ensure that flooding or erosion problems do not occur due to postdevelopment runoff increases, the Town should require the applicant to conduct a detailed hydrologic study of the site. This study should include calculations for pre- and postdevelopment runoff conditions.

Runoff generated by paved areas within the site is likely to be contaminated with road salt, oils, automobile residue, detergents, and other pollutants. These contaminants represent a potential threat to wetland and stream water quality. This may reduce the effectiveness of the wetland as a natural buffer. As a result, it is encouraged that the applicant protect the wetland, streamcourse, and a nearby irrigation pond (north of the proposed travel center) from parking lot runoff. Consideration should be given to installing gross particle separators, which will require periodic maintenance. Also, parking lot areas should be swept regularly, especially during the spring time to eliminate sediment accumulation.

### Water Supply

No public water facilities are presently available to the site. The applicant is looking at extending a nearby water supply line to serve the site. If the public water line is not extended to the site, the proposed development would need to rely on an on-site well or wells.

The natural quality of the groundwater would be expected to be generally good. Groundwater in the area may be tainted with elevated sodium levels due to road salting on I-84. In addition, the bedrock underlying the site may contain a relatively high percentage of iron-bearing minerals. Some undesirably elevated levels of iron or manganese may taint well water drawn from the site, but there are several types of filters available to overcome these problems.

### Flood Hazards

The site does not lie within the 100 or 500-year flood boundaries. Since wetlands have a natural ability to store water during storm events, the low-lying area in southwestern parts probably experiences some flooding during certain storm events.

### Sewage Disposal

Well-drained soils on the site are known to have rapid seepage rates and, in turn, may not have the ability to provide for good filtration and renovation of septic tank effluent or other types of pollutants, although there may be some types that are not readily removed or broken down.

\* \* \* \* \*

BIOLOGICAL RESOURCES

Wetlands

The most significant wetland impacts from the proposed travel center will be the runoff and sedimentation into the wetland area, and possible nutrient enrichment from the proposed septic system.

When considering the impact the proposed travel center may have on the wetland, it should be taken into account that a large part of the wetland is already highly disturbed. It might be preferable to have the incremental impact from the proposed development on this wetland rather than building on an undisturbed site. On the other hand, Southbury does not have many wooded basin swamps, and every measure should be taken to minimize sedimentation and contamination from runoff.

\* \* \* \* \*

LAND USE AND PLANNING CONSIDERATIONS

Existing Zoning

The following uses are permitted under existing zoning: (1) restaurant, subject to compliance with additional standards (Section 7) and a site development plan; (2) retail space, with conditions; and (3) gas station, with conditions.

The proposed car wash is not a permitted use in the Town of Southbury. Similarly, a bus and limousine station is not a stated permitted use of a structure. The applicant should consider the zoning amendment process and an interpretation of the structure use by proper officials/commissions of the Town. Given approvals of the uses, strict adherence to the existing regulations (i.e., site plan review) the Planning Commission principally should be able to induce quality development of the intersection quadrant.

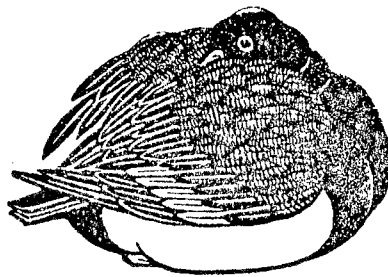
Traffic

The proposed travel center complex will not create traffic congestion problems based on preliminary information on the size of the facility. The adjacent Route 172 - Main Street South Intersection can adequately handle the projected traffic generated by the site. The site provides very good access to I-84 for bus traffic.

Site Planning

Given the aesthetic sensitivity of the subject parcel and the existence of the well-sited and landscaped Catholic Church on the opposite corner, it is extremely important to produce quality development at the proposed travel center. Quality in terms of

design, building materials, color, enclosure of roof mechanical appurtences, and extensive landscaping. On this last point the applicant should be encouraged to innovatively landscape the extensive paved parking/maneuvering areas to mitigate against the visual impact of an extensive parking lot and a truck stop atmosphere. For example, several of the parking bays could be set aside for integrated plantings.





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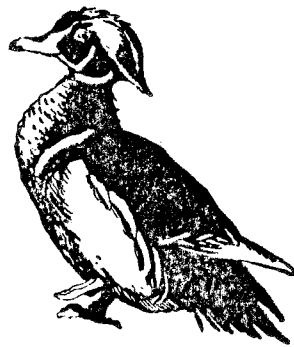
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# INTRODUCTION



## INTRODUCTION

### Introduction

The Southbury Inland Wetlands Commission requested that an environmental review be conducted on a 10-acre site proposed for the development of a travel center. The site is located at the intersection of Route 172 and Main Street South, and immediately north of Interstate 84. Access is provided via Main Street South (Figure 1).

The site is primarily characterized by inland wetlands. The wetlands are partially disturbed by two gas transmission pipelines, and drainage from Interstate 84. The pipelines are owned by Algonquin Gas Transmission Company. A small unnamed brook runs through the property as well.

The proposed travel center would encompass three separate buildings: (1) a bus and limousine terminal, with retail space; (2) a gas station/convenience store, with an attached car wash; and (3) a restaurant. Over 200 long-term and short-term parking spaces will be constructed. The site will be served by on-site wells and septic systems. A detention pond is also proposed (Figure 2).

### Goals and Objectives of the ERT

The primary goal of this environmental review is to determine the adequacy of this parcel to support the proposed land use, and determine how it will affect existing wetland communities, water quality, and adjacent land uses with private drinking wells. The Commission has specifically asked the ERT to:

- (1) assess the soil and hydrogeological capabilities of the site;
- (2) inventory existing wetland vegetation;
- (3) evaluate surface and ground water quality;
- (4) analyze existing storm water drainage, and determine if the proposal will significantly change storm water drainage patterns;
- (5) determine if the proposal will significantly influence surrounding land uses (i.e., agricultural uses north of proposed site); and
- (6) assess site design compatibility including land use, traffic, access, natural hazards (i.e., flooding), and water and sewer needs.

#### The ERT Process

Through the efforts of the Southbury Inland Wetland Commission, the developer, and the King's Mark Environmental Review Team, this environmental review and report was prepared for the Town. This report is not designed or intended to compete with private consultant's proposals or plans for this site. Rather, it provides a natural resource data base allowing the Town and the developer make informed decisions concerning the use of the proposed site.

The review process consisted of four phases: (1) inventory of the study sites's natural resources (collection of data); (2) assessment of these resources (analysis of data); (3) identification of natural resource capabilities; and (4) presentation of planning and development guidelines.

The data collection phase involved both literature and field research. Mapped data, technical reports, or town plans were perused and specific information concerning the site was collected. Field

Figure 1

# LOCATION OF STUDY SITE

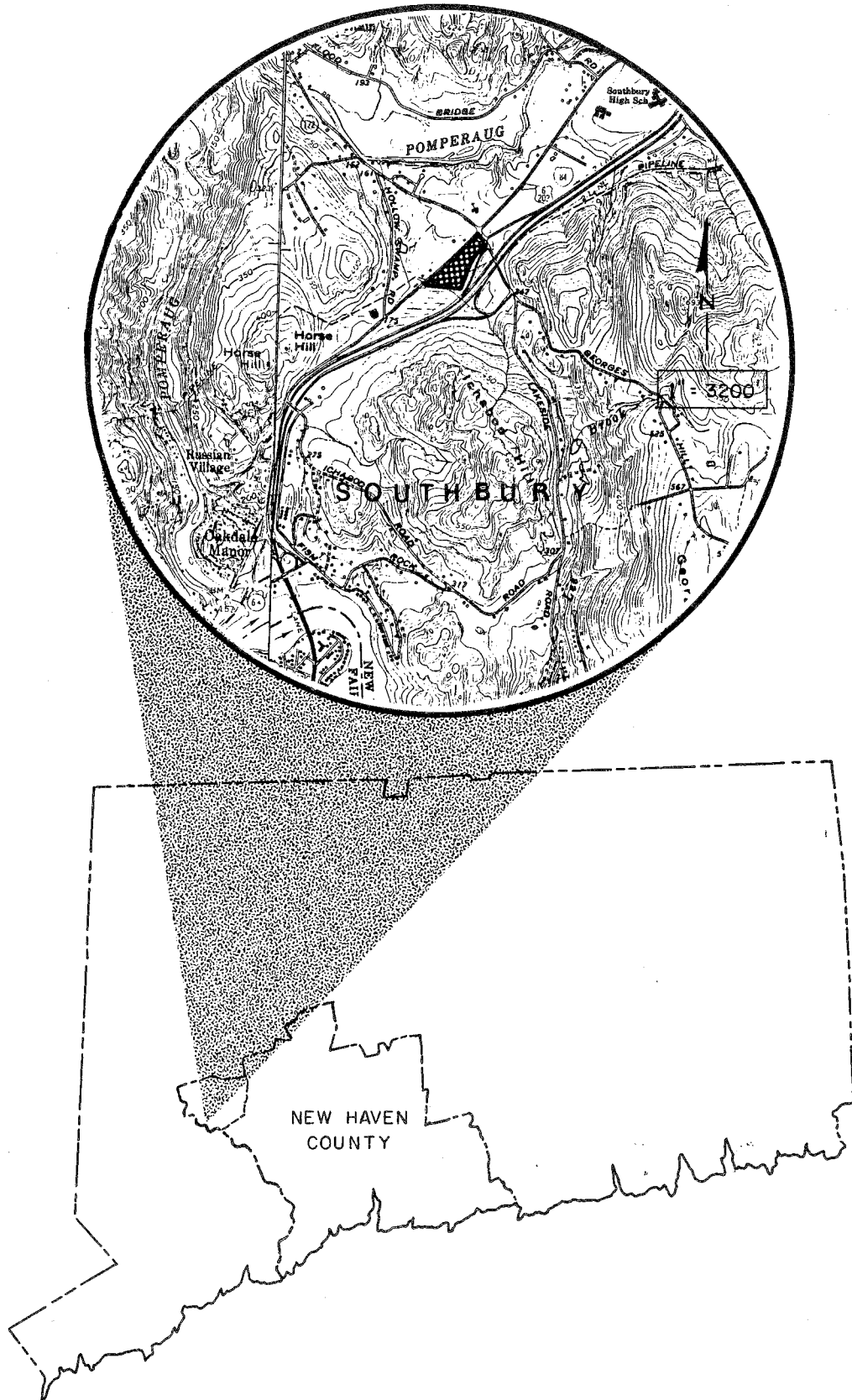
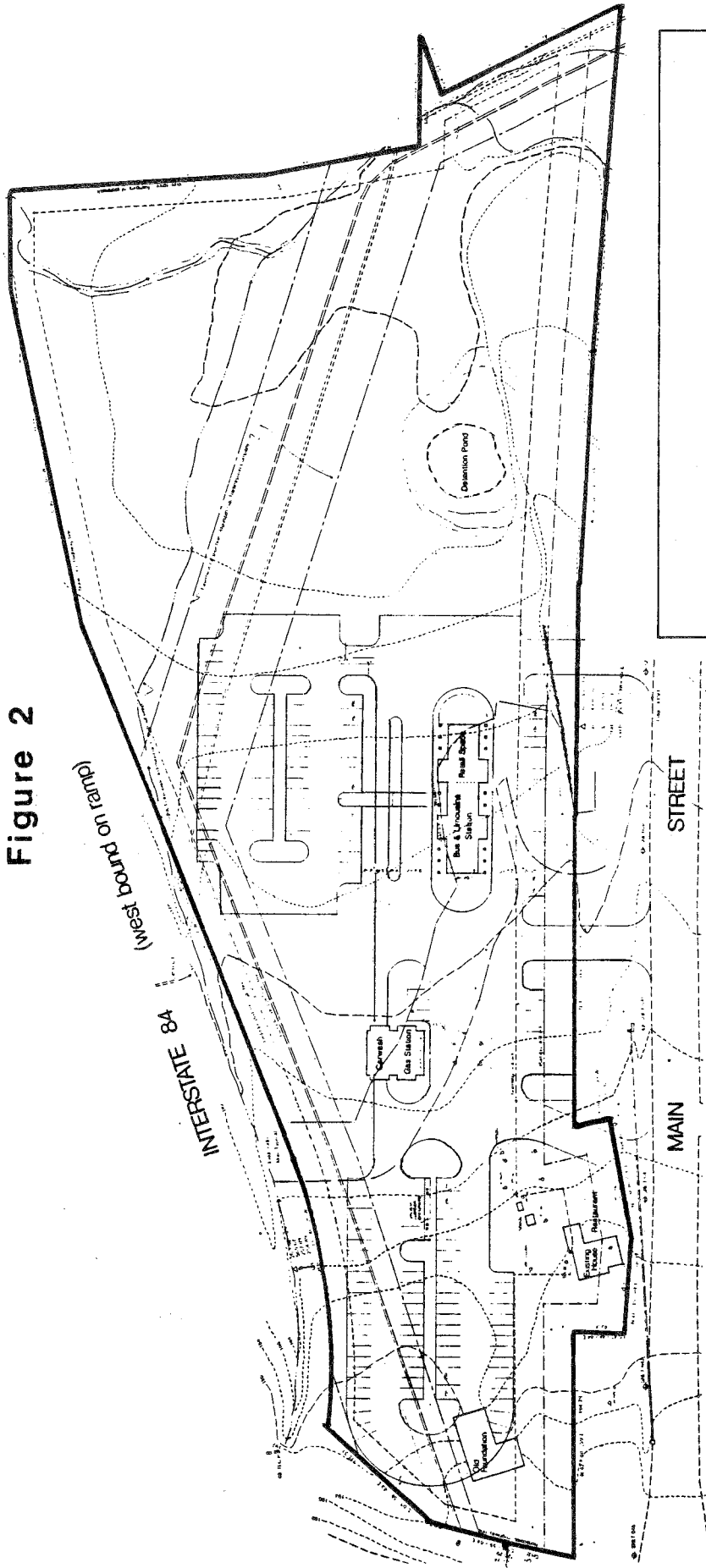


Figure 2



**TRAVEL CENTER**  
**SOUTHURY, CONNECTICUT**

**PRELIMINARY**  
**SITE PLAN**

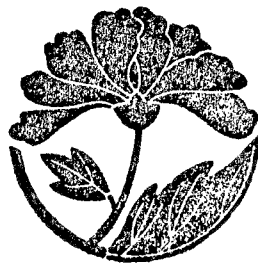
King's Mark Environmental Review Team



0 130' approx.

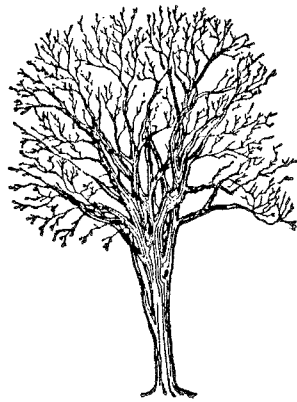
review and inspection of the site proved to be a most valuable component of this phase. The emphasis of the field review was on the exchange of ideas, concerns, or alternatives. Being on site also allowed Team members to check and confirm mapped information and identify other resources.

Once the Team members had assimilated an adequate data base, it was then necessary to analyze and interpret their findings. The results of this analysis enabled the Team members to arrive at an informed assessment of the site's natural resource development opportunities and limitations.





# **PHYSICAL CHARACTERISTICS**



## PHYSICAL CHARACTERISTICS

### Setting and Topography

The proposed 10-acre parcel of land to be commercially developed is located in southcentral Southbury. The applicant plans to construct a travel center, which would house a bus and limousine terminal, with retail space; a gas station/convenience store, with an attached car wash; and a restaurant. The site lies between Interstate 84 (I-84) and Main Street South. Access to the site is off Main Street South. A vacant farmhouse, old foundation, and a few other buildings are visible on the site. Based on the aerial photographs of the site beginning in 1934, past land use on the site had been agricultural. The land is not farmed at the present time.

Land surface on the site slopes gently southwestward to the inland wetland area in the western portions of the site. Elevation on the site range between approximately 170 feet and 200 feet above mean sea level (Figure 3).

### Distribution of Soils

The soils on the proposed development site are varied. They range from deep, well-drained, glacial outwash soils to very poorly drained alluvial soils. A number of areas have been disturbed by cutting and filling operations associated with gas transmission lines and farmsteads.

The soil map for the property has been updated by mapping at a scale of approximately 1" = 130', where more detail could be shown (Figure 4). The map units described were modified exclusively for this report and should not be used to evaluate soils on other sites. Table 1 indicates the major limitations for development on these soils.

AfB - Agawam fine sandy loam, 0-8% slopes

This map unit is dominated by nearly level to gently sloping, deep, well-drained glacial outwash Agawam soils on the west end of the property.

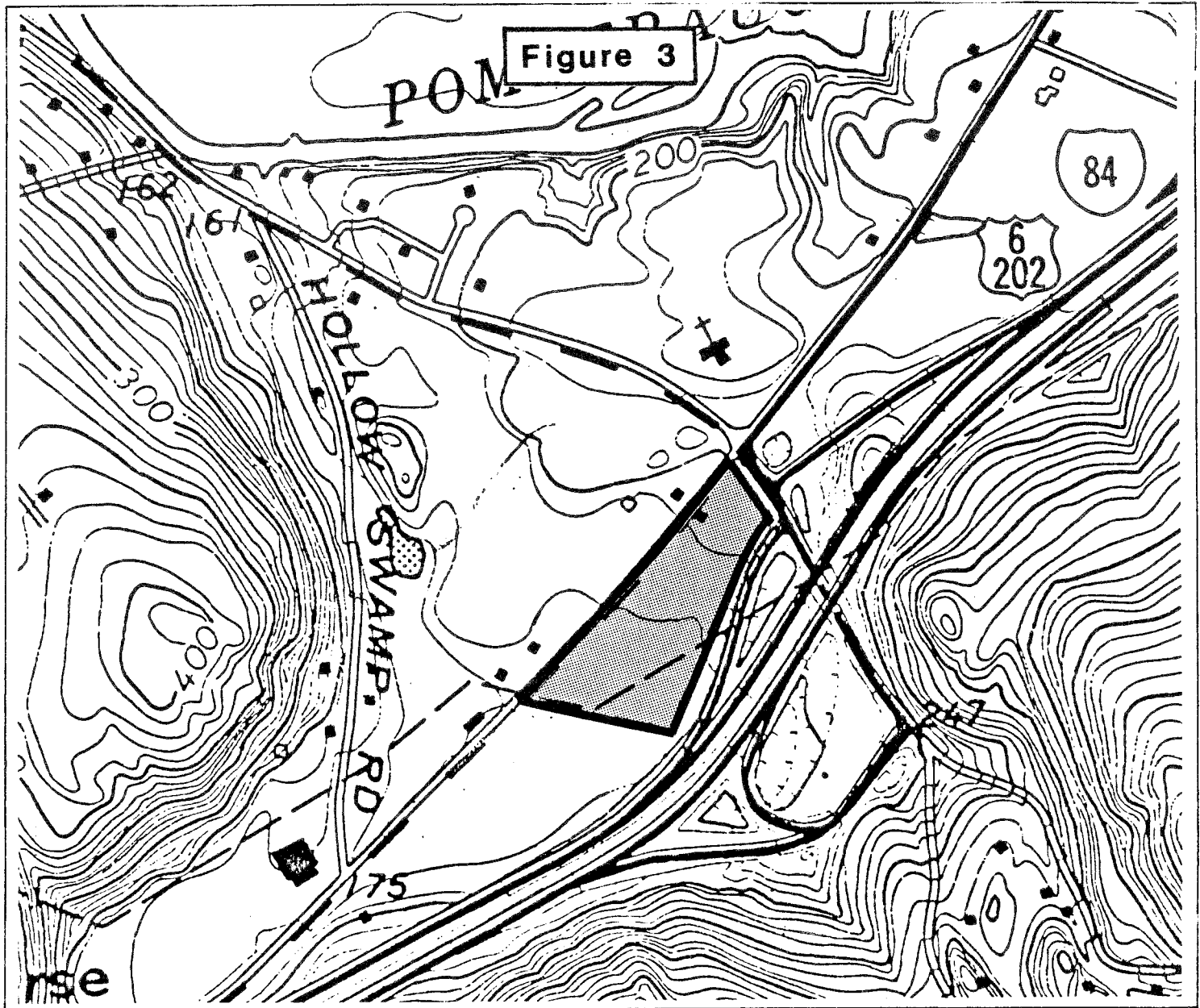
The surface layer is typically fine sandy loam about eight inches thick. The subsoil is dominately fine sandy loam to sandy loam about 24 to 36 inches thick. The substructure is sand with lenses of gravel and loamy sand.

Included with this soil in mapping are small areas of disturbed soils where they have been cut and filled by man.

FA - Fluvaquents

This map unit is dominated by nearly level, deep, very poorly drained Alluvial soils on the eastern side of the parcel. The soils are complex, with changes in texture within short distances. Most of the soils are subject to frequent flooding.

Included in mapping are areas of disturbed soils near the gas lines that are poorly to very poorly drained, and small areas of poorly drained Raypol soils. Also included are very poorly drained soils that may not currently flood but show evidence of past flooding.



STUDY AREA

**TRAVEL CENTER**  
**SOUTHBURY, CONNECTICUT**

**TOPOGRAPHY**

King's Mark Environmental Review Team

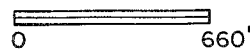
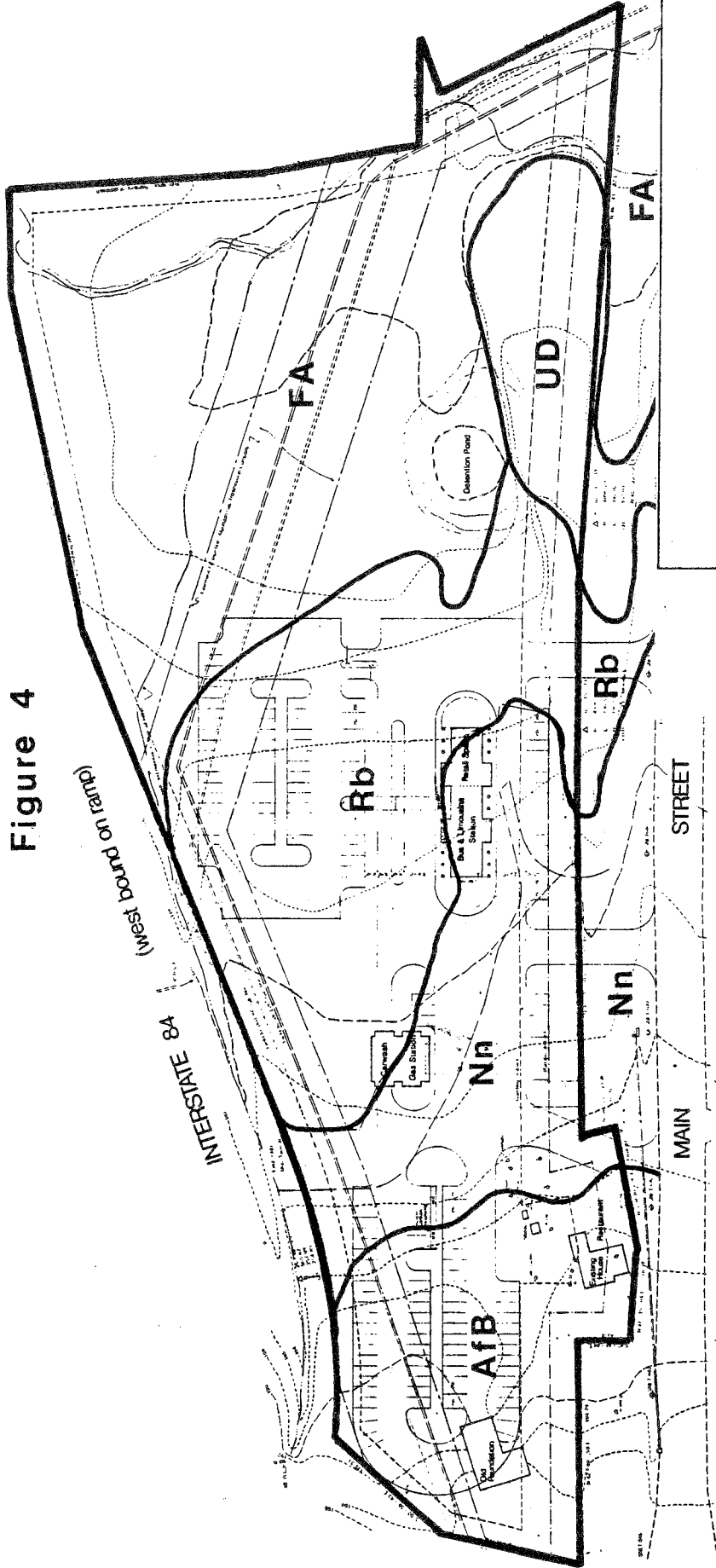


Figure 4

INTERSTATE 84  
(dual to ramp west bound on ramp)



# TRAVEL CENTER

SOUTHURY, CONNECTICUT

# DISTRIBUTION OF SOILS

King's Mark Environmental Review Team



0 130' approx.

TABLE 1.

SOILS LIMITATION CHART

MAP UNIT SYMBOL	DRAINAGE CLASS	DEPTH TO SEASONAL HIGH WATER TABLE	MAJOR LIMITATIONS TO DEVELOPMENT				OTHER FEATURES
			SEPTIC TANK ABSORPTION FIELDS	SMALL COMMERCIAL BUILDINGS	LOCAL ROADS PARKING LOTS		
AFB	Well Drained	> 3 ft.	Poor Filtering Capacity	--	--	--	--
FA	Very Poorly Drained	+1-0.5 ft.	Wetness Flooding	Wetness Flooding	Wetness Flooding	Dominated by Inland Wetland Soils	
Nn	Moderately Well Drained	1.5-3 ft.	Seasonal Wetness Poor Filtering Capacity	Seasonal Wetness	Frost Action	--	
Rb	Poorly Drained	0-1 ft.	Wetness	Wetness	Wetness Frost Action	Dominated by Inland Wetland Soils	
UD	Well Drained to Excessively Drained	> 2 ft.	Variability of Material				--

Nn - Ninigret fine sandy loam, 0-3% slopes

This map unit is dominated by nearly level, deep, moderately well-drained glacial outwash Ninigret soils on slightly depressional parts of the landscape.

The surface layer is typically fine sandy loam about eight inches thick. The subsoil is dominately fine sandy loam to sandy loam about 24 to 36 inches thick. The lower part of the subsoil is mottled. The substratum is sand with lenses of gravel and loamy sand.

Included with this soil in mapping are small areas of disturbed soils near the gas transmission lines.

Rb - Raypol fine sandy loam, 0-3% slopes

This map unit is dominated by nearly level, deep, poorly drained glacial outwash Raypol soils on depressional parts of the landscape.

The surface layer is typically fine sandy loam about eight inches thick. The subsoil is mottled fine sandy loam about 24 inches thick. The substratum is mottled sand with thin lenses of gravel.

Included with this soil in mapping are areas of disturbed soils near the gas transmission lines. Also included are small areas of very poorly drained soils.

UD - Udorthents, smoothed

This map unit consists of well-drained to excessively drained soils. The unit is on the northwest portion of the parcel, and is composed of soil, wood, and construction materials. The soils have a wide range of physical and chemical characteristics.

### Erosion and Sediment Control Measures

Soil erosion and sediment control planning should follow the principles outlined in Chapters 3 and 4 of the Guidelines for Soil Erosion and Sediment Control (1985).

As proposed on the latest drawings, approximately 70 percent of the development site will be on inland wetlands or immediately adjacent to them.

It is not known at this time how much filling of inland wetlands will be proposed. At a minimum, sediment barriers should be properly installed between the wetlands and all disturbed areas.

In addition, the internal drainage system and outlet locations will be critical in minimizing the impacts on the wetland areas that are not proposed for development. Proper design of storm drain outlet protection measures will be very important.

Individual control measures to protect this site and off-site areas from soil erosion and sedimentation include:

- (1) temporary and permanent vegetative cover;
- (2) mulching;
- (3) construction entrance;
- (4) sediment barriers; and
- (5) outlet protection.

These and any additional measures should be carefully planned, correctly installed, and adequately maintained.





## Geology

The site lies entirely within the Southbury topographic quadrangle. A bedrock geologic map (QR-30) by Robert B. Scott has been published for the quadrangle by the U.S. Geological Survey. A surficial geologic map for the quadrangle has not been published to date, but there is information available for the quadrangle on file at the DEP's Natural Resources Center in Hartford.

### Bedrock Geology

The bedrock surface may be as much as 120 feet beneath the wetlands in the southwestern limits of the site. It rises to probably about 10 feet below ground surface at the northeast end of the property.

Scott identifies the bedrock underlying site as very old metamorphic rocks (i.e., rocks geologically altered by great heat and pressure) of Cambro-Ordovician age, known as Hartland Unit II (Figure 5). The rock is generally light gray to silvery, well-foliated, medium to coarse-grained schist composed of the minerals quartz, biotite, plagioclase, muscovite, staurolite, garnet, and kyanite. Since the bedrock surface is moderately deep throughout the site, it should not pose any major problems in terms of the proposed development. However, it seems likely that if the development has to rely upon on-site wells, the underlying bedrock would probably be the best source of water. As a result, bedrock would have some impact on the quality and quantity of water withdrawn from a potential well(s). (See Water Supply Section of this report for further discussion).

Since a public water supply line is not presently available to this area, the underlying bedrock is undoubtedly a source of water for many homes in the vicinity of the site.

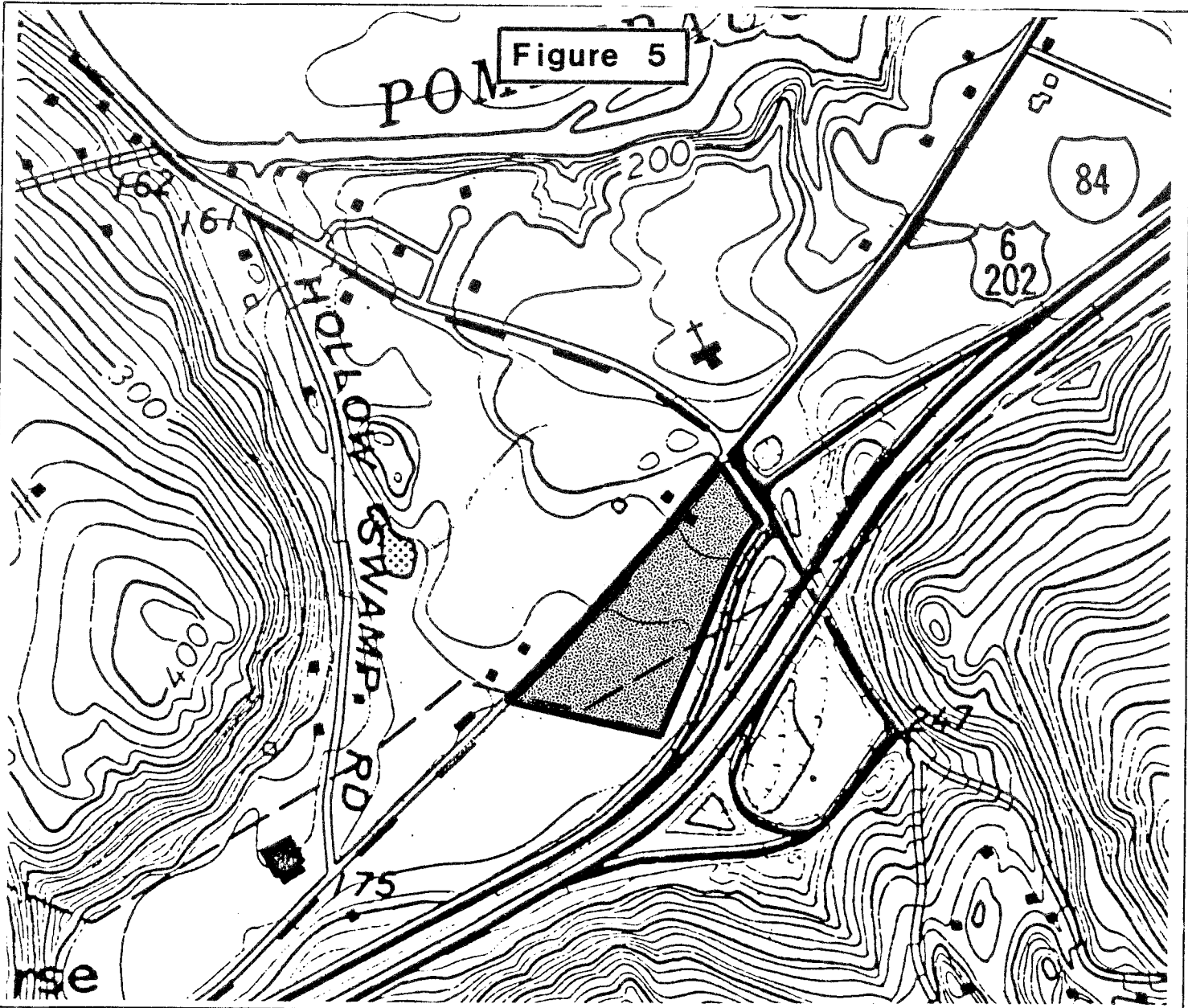
### Surficial Geology

Three deep test pits, two of which were 15 feet deep and the third at 16 feet were excavated on the site and witnessed by the project engineer. This information was made available to Team members. Based on deep test pit information and an unpublished surficial geologic map, the bulk of the site is covered by fine-grained stratified drift, consisting of fine sand, silt, and some clay (Figure 6).

These sediments were deposited by meltwater streams into glacial Lake Pomperaug, which formerly occupied the area. The outlet of the lake may have been blocked by a chunk of glacier ice that contained glacial debris. Once this naturally created dam broke, water in the Lake Pomperaug disappeared, leaving behind the fine-grained lake deposits as they exist on the site today.

A log of a boring drilled on the west side of Hollow Swamp Road, at its intersection with Main Street South, which is about 1,000 feet west of the site, indicates that the fine-grained material extends to a depth of about 39 feet below ground surface. Beneath the fine sand, at a depth between 34 feet and 51 feet, the material grades into a coarse sand. Underlying the coarse-grained material is about 20 feet of another type of glacial sediment called till.

Figure 5



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**SOUTHBURY, CONNECTICUT**



HARTLAND UNIT II FORMATION

**BEDROCK**  
**GEOLOGY**

King's Mark Environmental Review Team

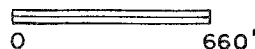
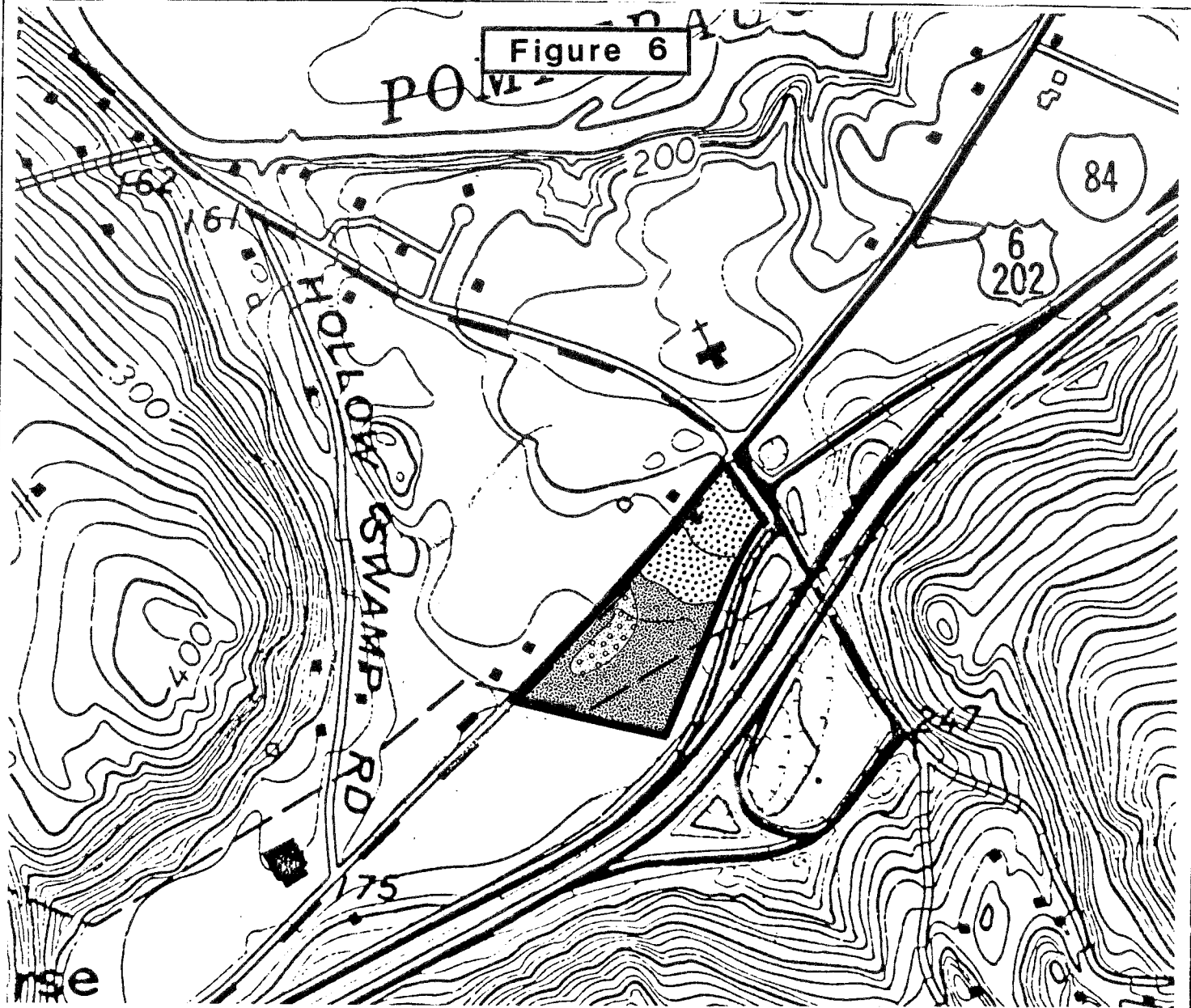





Figure 6

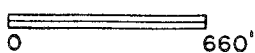


-  GLACIAL LAKE DEPOSITS  
(ie, fine sand)
-  INLAND WETLAND SOILS  
(approximate boundaries)
-  ARTIFICIAL FILL

**TRAVEL CENTER**  
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**SURFICIAL**  
**GEOLOGY**

King's Mark Environmental Review Team



Overlying the glacial lake deposits in the western parts are a postglacial sediments called swamp deposits. Sediments there consist of silt, sand, clay, and a high percentage of decayed organic materials. Water is at or near ground surface in this area, mainly during spring and winter months. The soil deposits comprising the swampy area are protected under Connecticut General Statutes, Section 22A-29 through Section 22a-45, inclusive, because of the important hydrological and ecological functions they perform. Some of these important functions include streamflow regulation, erosion control, surface water quality protection, and a habitat for wildlife. Filling, disturbing, or modifying inland wetland soils can have numerous environmental impacts on the important functions mentioned above. As a result, any activity including filling or disturbing of inland wetlands will require a permit from the Town's inland wetlands commission. A certified soil scientist has flagged the wetlands on the site and superimposed the boundaries on the preliminary site plan. Based on the wetland boundary, nearly 70 percent of the 10-acre site is covered by regulated inland wetland soils.

The wetlands on the site were disturbed by the installation of the Algonquin Gas Line, which traverses the central parts of the site. Since wetlands are characterized by poor drainage and seasonal flooding as well as conducting important hydrological and ecologic functions, wetlands occurring on this site present development limitations for most land uses.

A final type of material covering the site in the northern areas along Main Street South is a man-made deposit called artificial fill. Fill material appears to have been placed on wetland soils in

this area. According to Town residents, a mobile home formerly occupied the fill area.

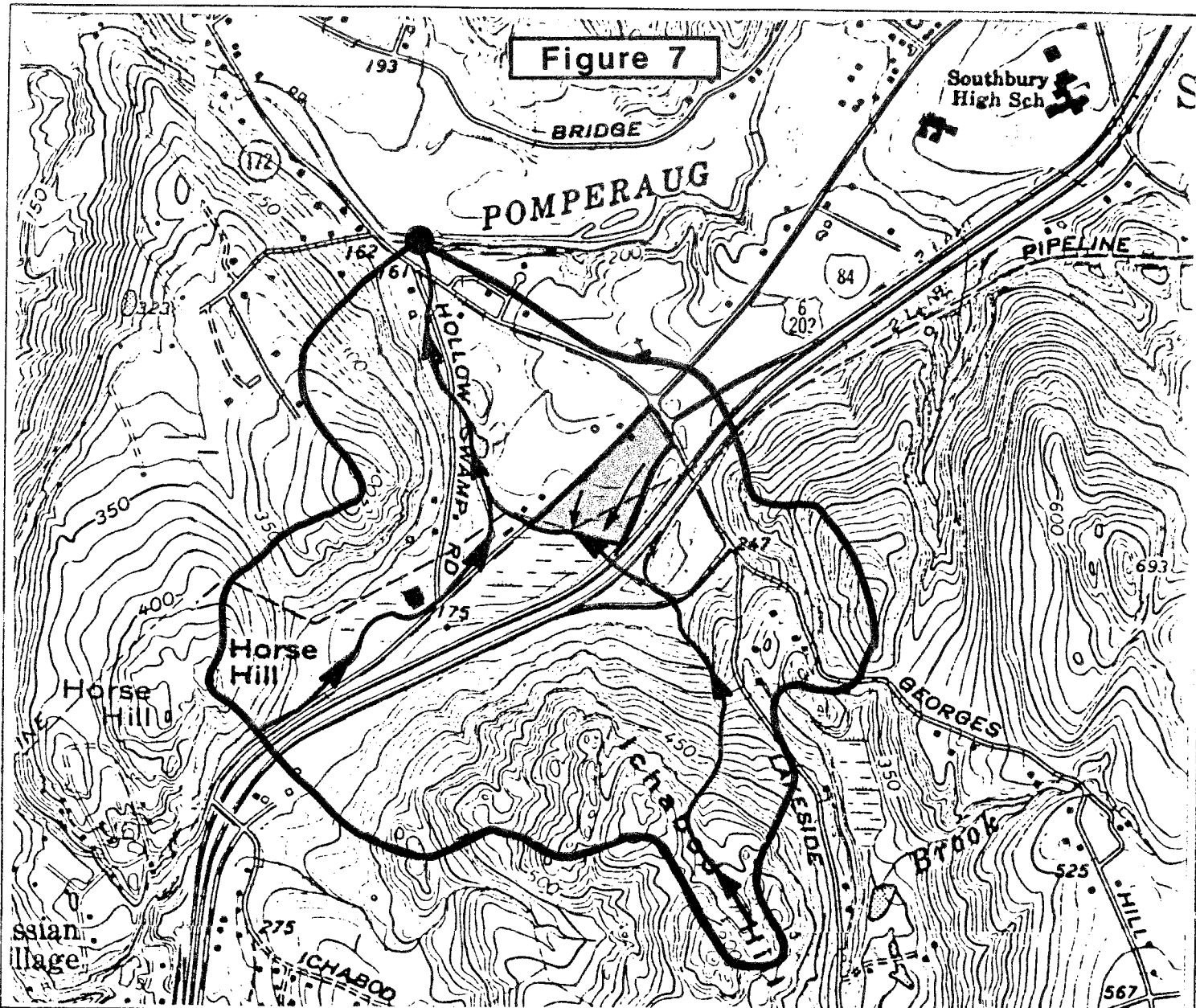
### Hydrology

The site lies entirely within the drainage area of an unnamed stream originating in a small wetland on top of Ichabod Hill. This stream, flowing through the western part of the site is tributary to the Pomperaug River to the north. Another unnamed streamcourse, originating near Horse Hill in the western parts of the drainage area, joins the aforementioned stream just north of Main Street South. The total drainage area for both streams is about 430 acres (Figure 7).

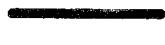
The topography within the drainage area is characterized by very steep slopes in the eastern, western, and southern parts. As a result, the density of development in the drainage area is relatively low. It seems likely that even with the availability of public sewers, which presently do not serve the drainage area nor are they anticipated, much of the land in the drainage area is dominated by thin soils and steep slopes, and would not be very favorable for development purposes. The most favorable areas appear to be along Main Street South and Route 172. Because I-84 bisects the drainage area in an east-west direction, the natural drainage has been altered to some degree in this area.

The inland wetland and its accompanying stream in the western parts presently serves as a discharge point for surface and groundwater on the site. Precipitation, taking the form of surface

Figure 7



STUDY SITE



DRAINAGE AREA FOR STREAM  
PASSING THROUGH THE SOUTH-  
WESTERN PARTS OF THE PROP-  
ERTY, WHICH ALSO INCLUDE A  
TRIBUTARY



POINT OF OUTFLOW



DIRECTION OF SURFACE FLOW

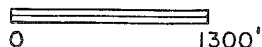


WATERCOURSES SHOWING  
DIRECTION OF FLOW

**TRAVEL CENTER**  
**SOUTHURY, CONNECTICUT**

**WATERSHED**  
**BOUNDARY**

King's Mark Environmental Review Team



to locate the pond on upland soils. It seems likely that this could require reconfiguration of buildings and parking areas within the site resulting in the possible reduction of development on the site. Close examination of the 18-inch pipe under Main Street South is also warranted.

Town officials raised concerns on the review day regarding the potential impact of development on water quality in an irrigation pond presently used for agricultural purposes northwest of the site. The stream flowing through the western parts of the site flows along the western side of the pond. It appears water from the stream is diverted into the pond, but the pond was probably man-made, created by excavating beneath the local watertable. Runoff from the parking area on the site will probably drain into the wetlands and its accompanying stream. It may also, be detained, temporarily in a detention basin for runoff control purposes before it reaches the wetland. As discussed earlier, one hydrologic function performed by wetlands is the purification of surface runoff. A detention basin may also be designed to trap sediments washed from the proposed parking area. Sediment would have to be removed periodically so that the capacity of the pond to store runoff is not diminished. Runoff generated by paved areas within the site is likely to be contaminated with road salt, (because of generally flat slopes, only minor amounts of road salt would probably be required), oils, automobile residue, detergents, and other pollutants. The wetland may remove some of the contaminants from runoff although it is unlikely that they could completely remove all of them. These contaminants do, therefore, represent a potential threat to wetland and stream water quality.



This may reduce the effectiveness of the wetland as a natural buffer. As a result, it is encouraged that the applicant protect the wetland, streamcourse, and the nearby irrigation pond from parking lot runoff. Consideration should be given to installing gross particle separators, which will require periodic maintenance. Also, parking lot areas should be swept regularly, especially during the spring time to eliminate sediment accumulation. The other major stream in the drainage area joins the aforementioned stream about 300 feet south of the pond. This undoubtedly would provide for some mixing of the water before it reaches the pond. However, it should be pointed out that, runoff generated by I-84, which may contain the same type of contaminants from the proposed parking area, may already be contributing contaminants to both streams to some degree.

#### Water Supply

No public water facilities are presently available to the site. The public water supply lines, terminating about 7,000 feet northeast of the site, is owned by Heritage Village. According to the project spokesman, the applicant is looking favorably at extending the water supply line to serve the site. If the public water line is not extended to the site, the proposed development would need to rely on an on-site well or wells.

According to Groundwater Availability Map in Connecticut (Meade, 1978), the site is thought to be underlain by fine-grained stratified drift (sand). Depending on the thicknesses of the materials covering the site, closeness to streamcourses, saturated thickness, and other hydrogeologic factors, these type of deposits may be capable of

yielding small to moderate amounts of water (i.e., 1-100 gallons per minute). An exploratory well would need to be drilled in order to determine the potential of the stratified drift on the site. It seems likely that the southwest corner of the site near the wetland would be the most favorable, since the deposits are thickest in that area. Water quality testing should also be conducted at the same time. It should be pointed out that the sand deposits on the site are relatively poor filters for contaminated groundwater. On the other hand, these deposits have the ability to absorb more rainfall than other types of soils resulting in added dilution.

The crystalline, metamorphic bedrock underlying the site is commonly capable of providing small but reliable yields of groundwater to individual wells serving residential homes. Bedrock transmits water by way of interconnected fractures. A survey of bedrock in the lower Housatonic River basin (See: Connecticut Water Resources Bulletin 19) indicates that more than 80 percent of those wells that were drilled into a rock type similar to that found on the site yielded 2.5 gallons per minute. This yield, based on an 18-hour pumping rate is equivalent to 2,700 gallons per day. There was no information available to Team members regarding potential daily needs for the proposed development. It seems likely that the proposed land uses, (i.e., restaurant, car wash, gas station and terminal), would require a substantial amount of water. As a result, it would probably require drilling more than one bedrock well and providing adequate water storage facilities.

The natural quality of the groundwater would be expected to be generally good. Groundwater in the area may be tainted with elevated

sodium levels due to road salting on I-84. In addition, the bedrock underlying the site may contain a relatively high percentage of iron-bearing minerals. Some undesirably elevated levels of iron or manganese may taint well water drawn from the site, but there are several types of filters available to overcome these problems.

If the project needs to rely upon on-site water supply well(s), the Public Water Supply Section of the State Health Department should be contacted as soon as possible regarding the projected needs of the development in terms of water quantity, location of the well or wells, storage facilities, test wells to determine potential yield of well(s) particularly in the stratified drift, and water quality testing requirements.

It seems that the risk of significant groundwater contamination or possible water shortages, (which may be encountered with on-site wells, tapping the fine-grained sand or underlying bedrock), could be eliminated by providing public water to the site.

#### Flood Hazards

According to Flood Boundary Maps prepared by the Federal Emergency Management Agency for the Town of Southbury, the site does not lie within the 100 or 500-year flood boundaries. Since wetlands have a natural ability to store water during storm events, the low-lying area in southwestern parts probably experiences some flooding during certain storm events.

### Sewage Disposal

The property is located in a part of Southbury which does not have public sewage facilities. Therefore, the property in question would be served by on-site subsurface sewage disposal facilities. Although there was no design information available to Team members on the review day, it seems likely that individual systems would probably be provided for each of the proposed buildings. A central system may be a possibility if technical reasons and/or site limitations indicate this would be a preferred method.

Preliminary soils information and visual observations generally indicate that the northeast portions of the site which is comprised of sandy, upland soils would be the most suitable area to develop. However, well-drained soils are known to have rapid seepage rates and, in turn, may not have the ability to provide for good filtration and renovation of septic tank effluent or other types of pollutants although there may be some types that are not readily removed or broken down. Ultimate dilution and dispersion in the groundwater may occur where concentrations, hopefully, will not cause any significant or potentially harmful degree of degradation.

If the soil is especially porous and if there is any shallow underlying bedrock, extensive on-site testing and detailed analysis to determine groundwater levels should be conducted. Although minimum separating distances are required above the maximum groundwater level or bedrock, increasing the vertical distance would provide more treatment area and create better safeguards. Development should also be within the limits of acceptable density as to the capacity of the soil, and particularly not to overload the

site with too great a volume of sewage waste water discharge.

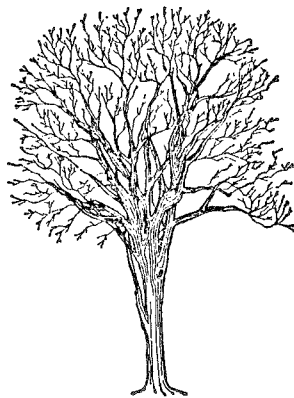
If the site is developed, it seems likely that the septic system(s) would probably be covered by paved parking areas. As a result, provisions should be made to allow for quick and easy access to critical parts of the system such as septic tank(s) or distribution boxes. Along the same line, any prefabricated concrete structures such as septic tanks, distribution boxes, and leaching galleries should be able to support the weight of trucks, buses, or cars which may be parked over them.

Depending upon the anticipated flows discharged from the proposed commercial developments on the site, engineered plans for septic systems will require review and permits from local and State Health Departments and possibly the Department of Environmental Protection. Special testing such as permeability testing, and seepage analysis may also be required as part of the septic system design and permit process.

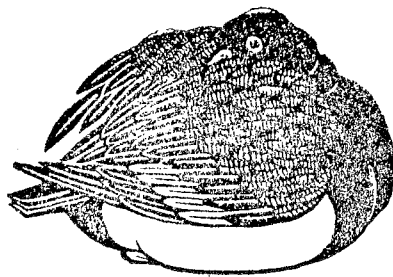
Groundwater on the site is classified by the Department of Environmental Protection as GA (See: Water Quality Standards For Lower Housatonic River Basin). A GA classification indicates that groundwater is suitable for private drinking water supplies without treatment. As a result, a permit may be required by the Department of Environmental Protection's Water Compliance Unit for certain discharges. For example, the preliminary site plan depicts a car wash facility. Unless it can be proven that the car wash system is completely recyclable (i.e., closed system) without a discharge, a car wash facility would not be permitted in an area classified as GA. Along the same line, fuel storage tanks serving the proposed gas

station would require approval and permit from the Leaking Underground Storage Tanks program within the Department of Environmental Protection's Water Compliance Unit and also the Department of Motor Vehicles. Therefore, it is suggested that the applicant first discuss the development proposal with the Department of Environmental Protection's Water Compliance Unit and the Department of Motor Vehicles, particularly if a car wash and gas station is still being considered on the site.

A survey of all nearby water supply wells should be conducted and delineated on the plan for any septic system designs serving the proposed development. All septic systems should be horizontally separated as far as possible from any well to reduce the possibility of contamination by sewage effluent or any other type of pollutant which may be generated by future commercial development on the site.



# **BIOLOGICAL RESOURCES**



## BIOLOGICAL RESOURCES

### Introduction

The site for the proposed Southbury Travel Center includes a large portion of wetland. Most of the development is proposed for the upland section of the property immediately adjoining the wetland.

The site can be divided roughly into three broad vegetative categories, as indicated in Figure 8. The vegetative zones are approximate boundaries based on visual observations.

### Vegetative Zones of the Travel Center Site

#### Zone 1

This zone supports mesic old field vegetation, including a variety of grasses and sedges, silky dogwood, red cedar, red maples, and lyonia. Although this area does not have standing water, the species present are tolerant of a relatively high watertable. In this context it is perhaps worth noting that the past few years have been unusually low in rainfall (see Figure 8).

#### Zone 2

Zone 2, located in the southeastern part of the wetland, has been disturbed by Interstate 84 and by the installation and maintenance of a gas pipeline (see Figure 8). Right along the base of the highway causeway, the vegetation includes phragmites and pussy willow. The phragmites are tolerant to disrupted drainage and brackish runoff from road salt. Just north of this area, the vegetation is limited to sedges and mosses, with puddles of standing water and algae. This



area would probably be dominated by trees and shrubs, but the corridor above the pipeline is regularly mowed, thus denying the establishment of woody species. Woody stumps of shrubs and trees are visible.

### Zone 3

Zone 3, the remainder of the wetland, supports swamp vegetation, with red maples, scattered red cedars, skunk cabbage, tussock sedge, ferns, and mosses, including a few patches of sphagnum moss.

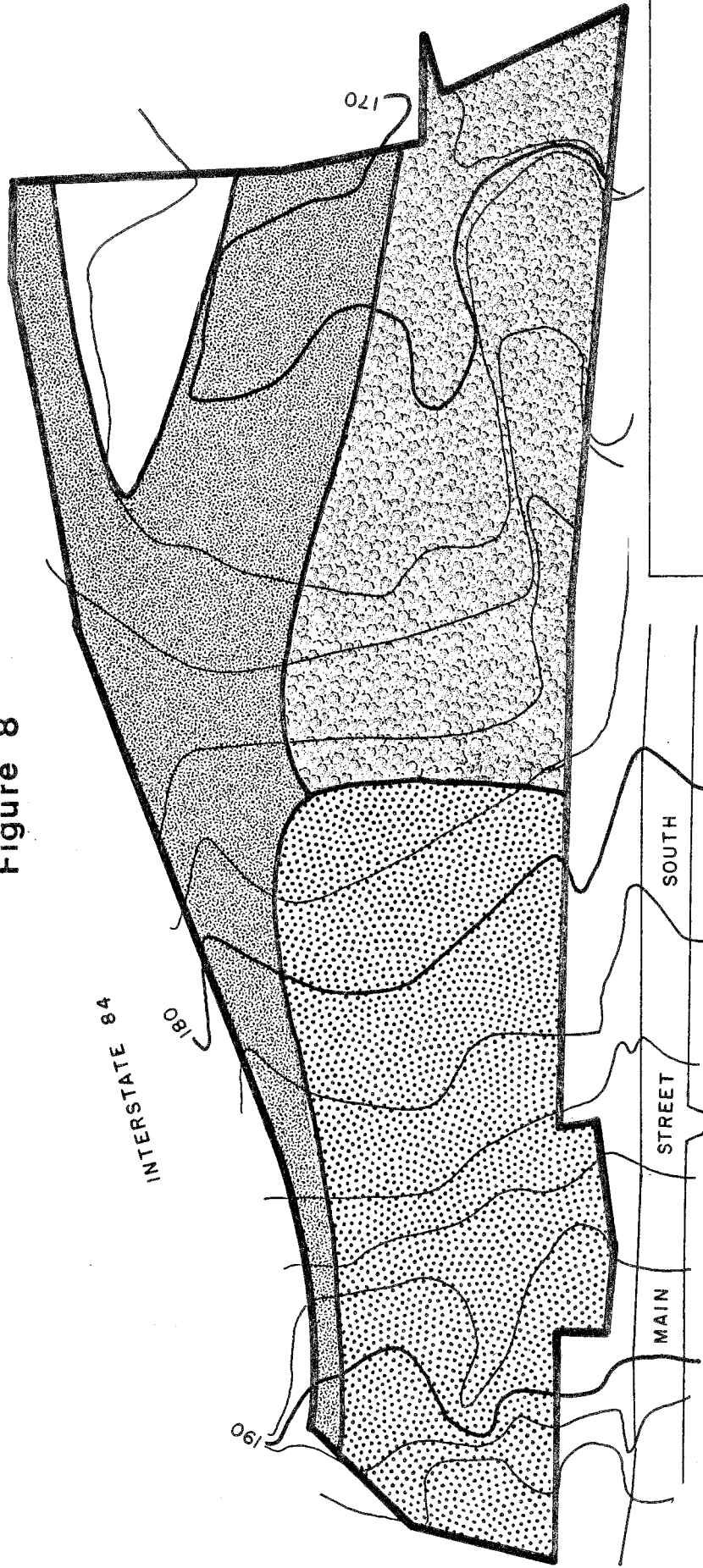
### Discussion

The proposed development is certain to have some impact on the wetland. A portion of the southwestern parking lot (as proposed) will overlie part of Zone 2 wetland. The most significant impacts, however, will be the runoff and sedimentation into the wetland, and possible nutrient enrichment from the septic system.

Sedimentation of the wetland is likely to be particularly severe during construction of the travel center. Erosion control measures will reduce but not eliminate the amount of sediment deposited in the wetland during construction. Once construction is complete, the main source of sediment is likely to be sand put on the roads and parking areas in winter.




Surface water runoff into the wetland will increase with the substitution of impervious surfaces for vegetative cover. The proposal to build a detention pond to handle this increased runoff may be unnecessary for the prevention of flooding, since the wetland is already capable of performing much the same hydrological function.

Figure 8



**TRAVEL CENTER**  
**SOUTHURY, CONNECTICUT**

**VEGETATIVE**  
**PATTERNS**

-  MESIC OLD FIELD VEGETATION ( ZONE 1 )
-  SCRUB/SHRUB WETLAND ( ie : Phragmites and Pussywillow; ZONE 2 )
-  WOODED WETLAND ( ie : Red Maples, Red Cedars, Skunk Cabbage; ZONE 3 )

King's Mark Environmental Review Team



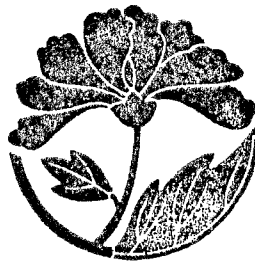
0 130' approx

If properly sited, however, a detention pond might serve to divert contaminants and sediment from the least disturbed section of the wetland Zone 3. It is suggested that the detention pond not be located in Zone 3, since it would simply form another disturbance to the wetland. If a pond is constructed, the material removed must be disposed of properly and away from wetland areas. Increased runoff will also affect the distribution of herbaceous plants in the wetland, but is unlikely to harm the woody species.

When considering the impact the proposed travel center will have on the wetland, it should be taken into account that a large part of the wetland is already highly disturbed. It might be preferable to have the incremental impact from the proposed development on this wetland rather than building on an undisturbed site. On the other hand, Southbury does not have many wooded basin swamps, and every measure should be taken to minimize sedimentation and contamination from runoff, particularly in Zone 3 of the site.



**LAND USE  
AND  
PLANNING CONSIDERATIONS**



## LAND USE AND PLANNING CONSIDERATIONS

### Existing Land Use

The subject parcel is at the southeast quadrant of the intersection of Route 172 and Main Street South. The other three quadrants at the intersection are utilized by (in a clockwise direction) the following land uses:

- (1) Wayside Gardens - a retail nursery and gardening center;
- (2) Sacred Heart Church - Roman Catholic, and;
- (3) Commuter Park & Ride Lot (84 car capacity) owned by the State of Connecticut

A full four movement Interchange of Interstate 84 (Exit 14) at Connecticut Route 172 backs onto the proposed travel center property. While the Interstate provides a physical barrier to the southeast, land immediately adjacent and across Main Street South in the area bounded by Hollow Swamp Road and Route 172 contain mixed, relatively low density land uses with open land predominating. In addition to single-family, large farm houses, strawberry and other farming, there is an excavation contractor's yard, Antonios Restaurant, Romatic Manufacturing Co., Algonquin Gas building facility, H. H. Stone (Contractors), and River Glen Continuing Care Center, a Nursing home with a 120-bed capacity.

### Existing Zoning

From the zoning map amended to June 28, 1985 it appears that the proposed structures and parking areas are within the B-2E zone

classification. Review of each of the five proposed uses of the property in relation to the B-2E zoning indicates the following:

Restaurant

Existing residential structure, square footage not known; permitted in the district subject to compliance with additional standards (Section 7) and a site development plan.

Retail Space

Ground floor footage take off is approximately 2,090 sq.ft.; permitted, subject to the requirements as above stated. If retail/office space is on more than the ground floor, the applicant should reference the regulations directly.

Gas Station

Permitted subject to the requirements as above stated. Diesel fuel storage must be less than 12,000 gallons.

Car Wash

There is no specific reference to a car wash as an individual permitted use. Neither is there a reference to a car wash as an incidental use to a motor vehicle service station.

Bus and Limousine

There is no specific reference to a bus station or limousine station in the regulations.

A bus terminal is specifically prohibited in the B-2E zone. Webster defines "terminal" as a freight or passenger station that is central to a considerable area or serves as a junction at any point with other lines - a part that forms the end. Station is defined as a regular stopping place in a transportation route. It appears from the information available that the applicant is not seeking a terminal, simply a bus/limousine stop. However, the regulations do not specifically permit these uses when, as in this instance, the use is in a specified structure.

It is apparent that the applicant must follow the amendment procedures as specified in Section 15 of the December 31, 1985 Zoning Regulations of the Town of Southbury, Connecticut concerning the proposed car wash and bus/limousine station uses.

### Traffic Analysis

The proposed travel center complex will not create traffic congestion problems based on preliminary information on the size of the facility. The adjacent Route 172 - Main Street South intersection can adequately handle the projected traffic generated by the site. Moreover, the site provides very good access to I-84 for bus traffic. The specific traffic analysis is presented below and consists of projections of trips generated by the site, the distribution of this traffic in the vicinity of the site, and an intersection capacity analysis of Route 172 and Main Street South.

### Trip Generation

The facility is projected to generate 330 vehicle trips during the daily peak hour. The estimates and assumptions for projecting the number of vehicle trips during the daily peak hour of street traffic (i.e., the afternoon peak) are presented in Table 2. The estimated size data for the travel center is based on preliminary information from the architecture firm of Bennett Sullivan Associates and the site plan. Peak hour trip generation rates come primarily from the January 1985 FHWA Report, Development of Trip Generation Rates. These rates tend to be higher than those in ITE's Trip Generation Report, which was used as a second source of trip rate data.

TABLE 2.  
PEAK HOUR TRIP GENERATION - SOUTHBURY TRAVEL CENTER

Facility	Size	Peak Hour Trip Generation Rate	Peak Hour Trips (In vehicles)
<u>Bus/Limousine Terminal</u>			
Passengers	150 pass./ day	10% of daily volume 2 vehicle trips/pass.	30
Bus/Limousines	2 buses, 2 limos during peak hour	2 vehicle trips/ vehicle	10
Retail Space	2000 sq.ft.	10 vehicle trips/ 1000 sq.ft.	20
<u>Gas Station/Convenience Store</u>			
Gas Station	4 pumps	14.4 vehicles trips/ pump	60
Store	1200 sq.ft.	50.9/1000 sq.ft.	60
Car Wash	1 bay	110 vehicle trips/ site	110
<u>Restaurant</u>			
	1500 sq.ft.	25 vehicles trips/ 1000 sq.ft.	40
Total			330

Trip Distribution

Given the variety of activities proposed at the site, a 50/50 split in trip ends was assumed for the peak hour analysis. That is,



TABLE 2.  
PEAK HOUR TRIP GENERATION - SOUTHBURY TRAVEL CENTER

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Bus/Limousines	2 buses, 2 limos during peak hour	2 vehicle trips/ vehicle	10
Retail Space	2000 sq.ft.	10 vehicle trips/ 1000 sq.ft.	20
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Gas Station	4 pumps	14.4 vehicles trips/ pump	60
Store	1200 sq.ft.	50.9/1000 sq.ft.	60
Car Wash	1 bay	110 vehicle trips/ site	110
<u>Restaurant</u>			
	1500 sq.ft.	25 vehicles trips/ 1000 sq.ft.	40
Total			330

Trip Distribution

Given the variety of activities proposed at the site, a 50/50 split in trip ends was assumed for the peak hour analysis. That is,

half of the site-generated traffic will be entering the facility, half will be leaving it. Trip distribution was assumed to be proportional to the peak hour approach volumes at the Route 172 - Main Street South Intersection. In other words, the more background traffic a particular approach has, the more site-generated traffic it would be given. The peak hour site-generated trip distribution in the vicinity of the Route 172 - Main Street South Intersection is presented in Figure 9. The combination of site-generated traffic plus background traffic is shown in Figure 10.

Peak hour background traffic volumes are based on a 1984 turning movement survey (Table 3 and Figure 11) using the assumption that traffic will increase two percent annually (Figure 12). Following 1985 Highway Capacity Manual procedures, the hourly traffic volume rate for the peak 15 minute period is used in this analysis (peak hour volume/peak hour factor).

#### Intersection Capacity Analysis

The 1985 Highway Capacity Manual planning procedure for intersection capacity analysis were used to evaluate the site's traffic impact on the Route 172 - Main Street South Intersection. The capacity analysis indicated that 1986 peak hour background traffic volumes can be easily handled by the intersection (Table 4). Moreover, the 330 trips generated by the site will not present any intersection capacity problems (Table 5). The sum of the critical volumes is about 890 vehicles during the afternoon peak hour with the travel center in place, well below the 1200 mark where an intersection is nearing its capacity.

Figure 9.

Projected Site-Generated Traffic - PM Peak

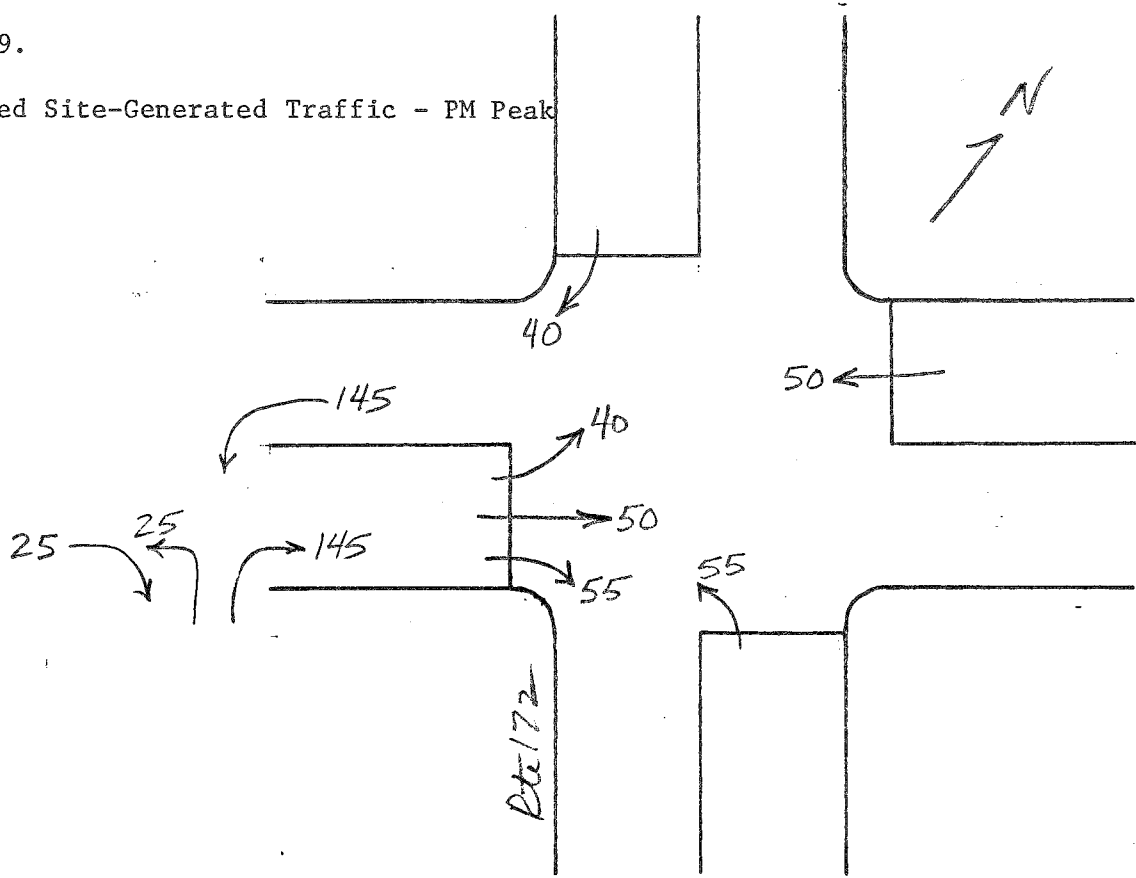


Figure 10.

Site-Generated Traffic Plus Background Traffic - PM Peak, 15 Minute Peak Rate

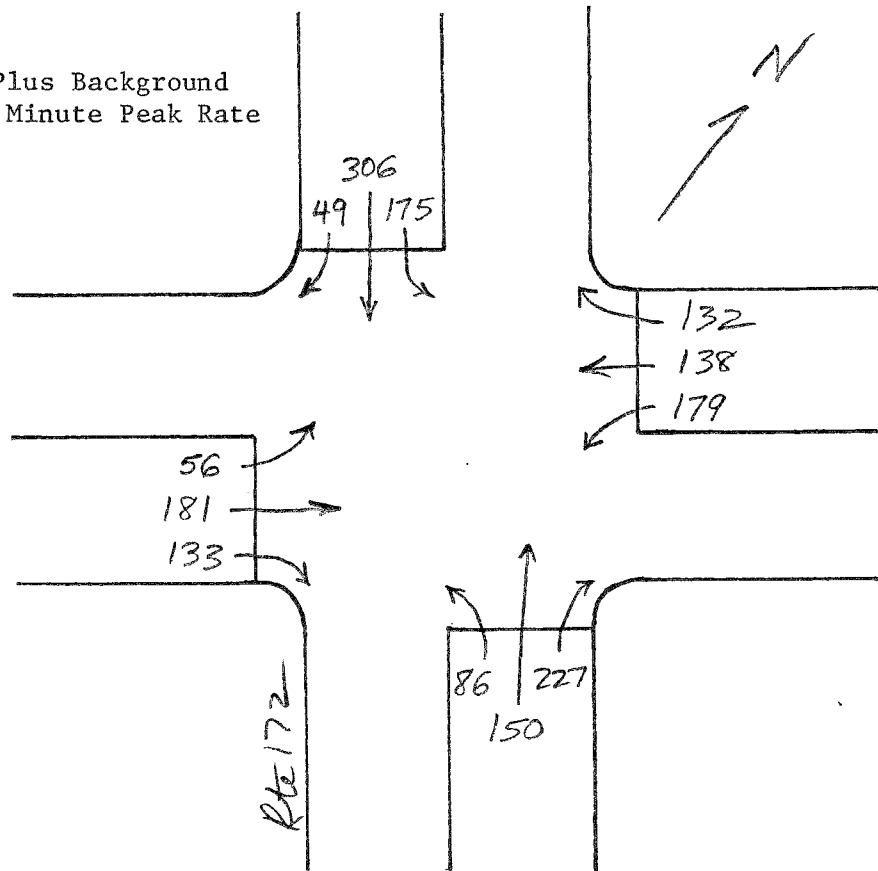


TABLE 3

PEAK HOUR BACKGROUND TRAFFIC VOLUME

COBCNV Intersection Turning Movement Survey

Survey Date: 8/22/84

Municipality: Southbury  
 Intersection: Rte 172 @ Main St

Time	-----Eastbound-----				-----Westbound-----				-----Northbound-----				-----Southbound-----			
	LT	TH	RT	Total	LT	TH	RT	Total	LT	TH	RT	Total	LT	TH	RT	Total
4:00-4:15	2	14	6	22	39	19	22	80	6	16	51	73	36	80	2	118
4:15-4:30	3	20	4	27	21	26	23	70	11	22	36	69	22	25	1	48
4:30-4:45	1	25	13	39	33	18	14	65	8	28	35	71	18	34	2	54
4:45-5:00	2	16	13	31	20	27	18	65	2	29	55	86	15	20	0	35
5:00-5:15	2	15	11	28	31	12	24	67	5	25	54	84	27	21	2	50
5:15-5:30	2	17	6	25	40	21	35	96	9	39	42	90	22	12	1	35
5:30-5:45	5	31	18	54	40	20	27	87	6	35	51	92	14	11	1	26
5:45-6:00	2	30	20	52	32	18	20	70	8	35	55	98	20	10	0	30
Peak Hr	11	93	55	159	143	71	106	320	28	134	202	364	91	159	5	255
PH Factor				0.74				0.83				0.93				0.54

Prepared:  
 12-May-86

Traffic Count Source: Environmental Research & Technology (for IBM)

PM Peak Hour Turning Movements

	LT	TH	RT	Total	PHF Factor
EB	11	93	55	159	0.74
WB	143	71	106	320	0.83
NB	28	134	202	364	0.93
SB	91	159	5	255	0.54

Figure 11.

1984 PM Peak Hour Traffic - Peak 15 Minute Hourly Rate

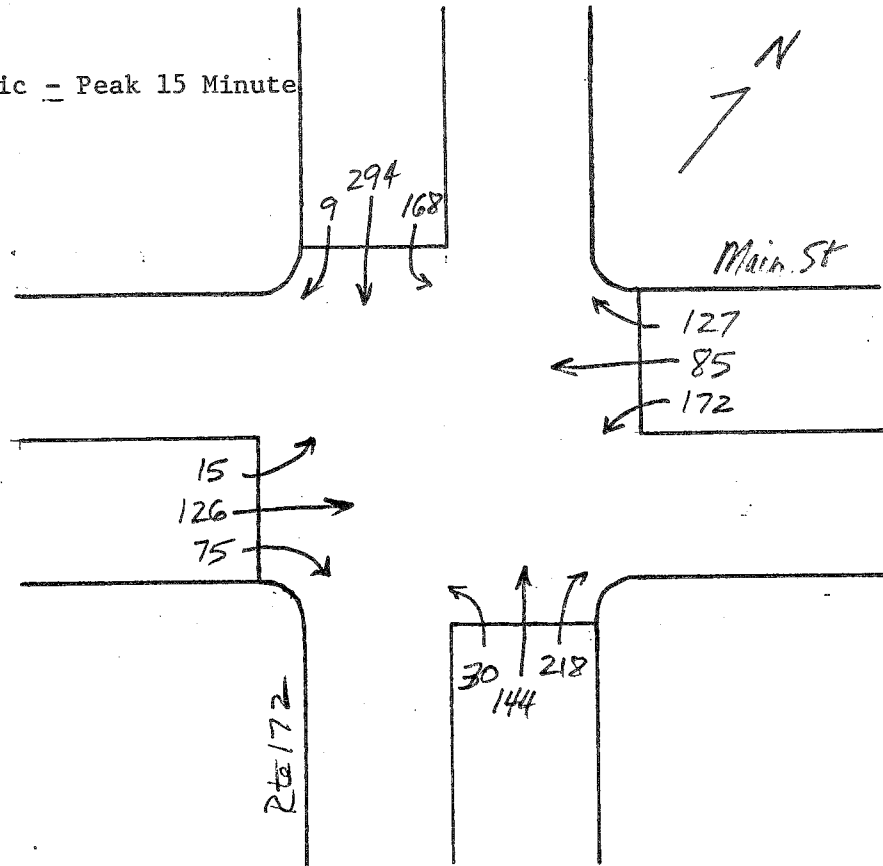
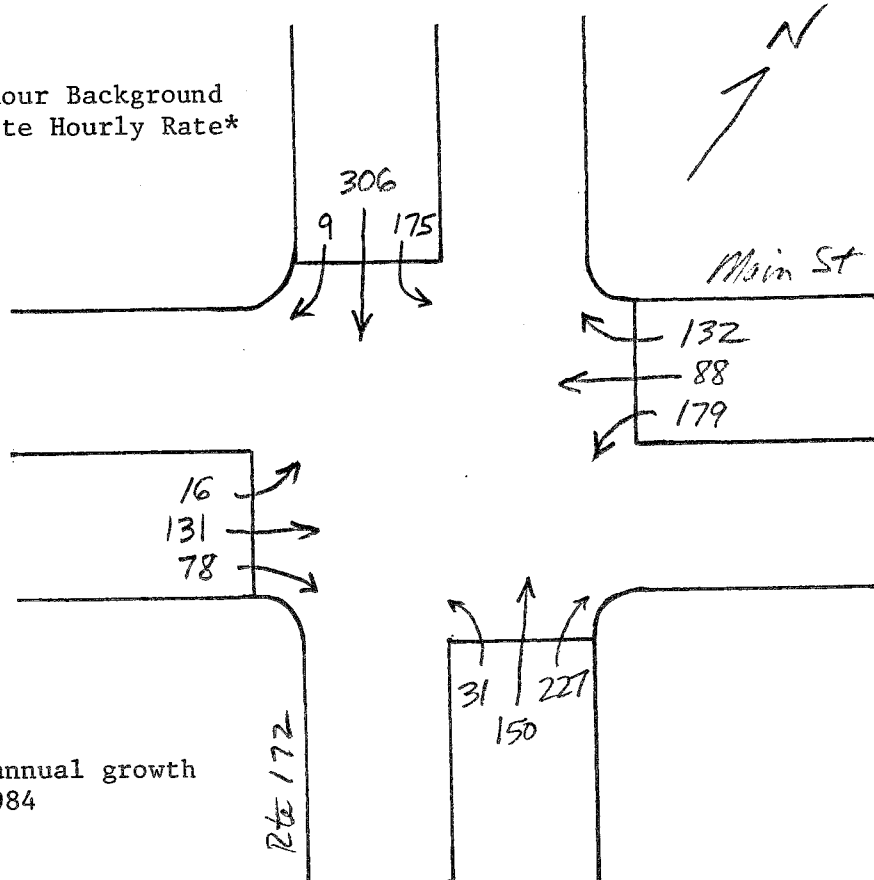


Figure 12.

Estimated 1986 PM Peak Hour Background Traffic - Peak 15 Minute Hourly Rate\*



\* Assumes a 2 percent annual growth in traffic since 1984

TABLE 4

ROUTE 172 - MAIN STREET SOUTH INTERSECTION CAPACITY ANALYSIS  
1986 BACKGROUND TRAFFIC - PM PEAK

NEW HIGHWAY CAPACITY PROCEDURES FOR PLANNING ANALYSIS OF INTERSECTION  
FHWA Updated: 8/16/85 (W. Martin) COGCVN Revised: 5/12/86

Approach	GEOMETRY					
	No. of Lt. Lanes	No. of Lt.&Th. Lanes	No. of Thru Lanes	No. of Rt.&Th. Lanes	No. of Rt. Lanes	No. of Rt, Th, & Lt Lanes
EB	0	1	0	1	0	0
WB	0	1	0	1	0	0
NB	0	1	0	0	1	0
SB	0	1	0	1	0	0

	TRAFFIC VOLUMES: Peak 15-Minute Hourly Rate			
	Left Turn	Thru	Right Turn	Total
EB	56	181	133	370
WB	179	138	132	449
NB	86	150	227	463
SB	175	306	49	530

LANE DISTRIBUTION FOR SHARED LEFT/THRU LANES ON A MULTILANE APPROACH  
WITH PERMISSIVE LEFT TURN LANES (OPTIONAL WORKSHEET)

Vo Opposing Volume (vph)	PCElt	Vit	LT		Total Volume (TH+RT)	Total	No. of Lanes On Approach	Equiv. Volume Per Lane	Thru Vehicles in LT+TH Lane	Vol. In LT+TH Lane	Vol. In Ea. Of The Remaining Lanes
			EQUIV PCE's	Total							
EB	270	2	56	112	314	426	2	213	101	157	213
WB	314	2	179	358	270	628	2	314	0	179	270
NB	355	2	86	172	150	322	1	322	0	0	322
SB	150	1.1	175	193	355	548	2	274	81	256	274

CALCULATIONS OF STATUS

EB LT=	56	NB LT=	86
WB TH&RT=	270	SB TH&RT=	274
SUM=	326	SUM=	360
WB LT=	179	SB LT=	175
EB TH&RT=	213	NB TH&RT=	322
SUM=	392	SUM=	497

MAXIMUM SUM OF CRITICAL VOLUMES= 889

Prepared:  
15-May-86

Capacity Level: under capacity  
Right Turn Check: OK

TABLE 5

ROUTE 172 - MAIN STREET SOUTH INTERSECTION CAPACITY ANALYSIS  
 1986 BACKGROUND TRAFFIC PLUS SITE-GENERATED TRAFFIC - PM PEAK

NEW HIGHWAY CAPACITY PROCEDURES FOR PLANNING ANALYSIS OF INTERSECTION  
 FHWA Updated: 8/16/85 (W. Martin) COGCNV Revised: 5/12/86

Approach	GEOMETRY					
	No. of Lt. Lanes	No. of Lt.&Th. Lanes	No. of Thru Lanes	No. of Rt.&Th. Lanes	No. of Rt. Lanes	No. of Rt,Th,&Lt Lanes
EB	0	1	0	1	0	0
WB	0	1	0	1	0	0
NB	0	1	0	0	1	0
SB	0	1	0	1	0	0

TRAFFIC VOLUMES: Peak 15-Minute Hourly Rate

	Left		Right		Total
	Turn	Thru	Turn	Thru	
EB	16	131	78	225	225
WB	179	88	132	399	399
NB	31	150	227	408	408
SB	175	306	9	490	490

LANE DISTRIBUTION FOR SHARED LEFT/THRU LANES ON A MULTILANE APPROACH  
 WITH PERMISSIVE LEFT TURN LANES (OPTIONAL WORKSHEET)

	Vo Opposing Volume (vph)	PCElt	Vlt	LT	Total	No. of Lanes On Approach	Equiv. Volume Per Lane	Thru Vehicles in LT+TH Lane	Vol. In LT+TH Lane	Vol. In Ea. Of The Remaining Lanes
				EQUIV PCE's	Volume (TH+RT)					
EB	220	2	16	32	209	2	121	89	105	121
WB	209	2	179	358	220	2	289	0	179	220
NB	315	2	31	62	150	1	212	0	0	212
SB	150	1.1	175	193	315	2	254	61	236	254

CALCULATIONS OF STATUS

EB LT=	16	NB LT=	31
WB TH&RT=	220	SB TH&RT=	254
SUM=	236	SUM=	285
WB LT=	179	SB LT=	175
EB TH&RT=	121	NB TH&RT=	212
SUM=	300	SUM=	387

MAXIMUM SUM OF CRITICAL VOLUMES= 687

Prepared:  
15-May-86

Capacity Level: under capacity  
 Right Turn Check: OK

This analysis does not include future IBM traffic. The 85 peak hour trips projected by IBM's traffic consultant to use this intersection during the afternoon peak hour, however, could easily be accommodated by the intersection.

### Comprehensive Plan of Development

The Southbury Planning Commission is culminating over two years work on a comprehensive update of their plan of development. A proposed plan dated January 15, 1986 has already been through a well attended town wide information meeting. While not officially adopted, and subject to additional changes in the months ahead, the ERT has chosen to respond to the proposed travel center project in relation to that draft plan.

Review of Plan Map #3A Land Use and Circulation Plan, indicates the subject area as O-ED Office/Economic Development. The commuter lot and area in back of Sacred Heart Church are designated R-0 Retail/Office Services (Figure 13). The proposed travel center uses more closely ally themselves to an R-0 function rather than O-ED. It would appear, therefore, that it may be the eventual intent of the land use commissions to redesignate the travel center parcel and area from a business (B) zoning classification to economic development (possibly an "M" zone).

Another document referenced in the proposed plan is Amendment #3C "Southbury Center Area." Revised to October 8, 1975, that document apparently will remain an integral element of the revised plan of development. That document defines the Main Street section (parallel to I-84 ranging between and slightly beyond Exits 14 and 15) into



Planning Areas A through G. The subject property is within Area A (Figure 14).

"Area A lying southwest from Connecticut Route 172 and transversed by Main Street South is designated for future industrial park and similar development, with Main Street South frontage available for commercial development. Area A is visible from long portions of I-84, is part of the rural scene along Route 172 leading to South Britain and faces Sacred Heart Church and River Glen Convalescent Care Center in Area B."

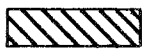
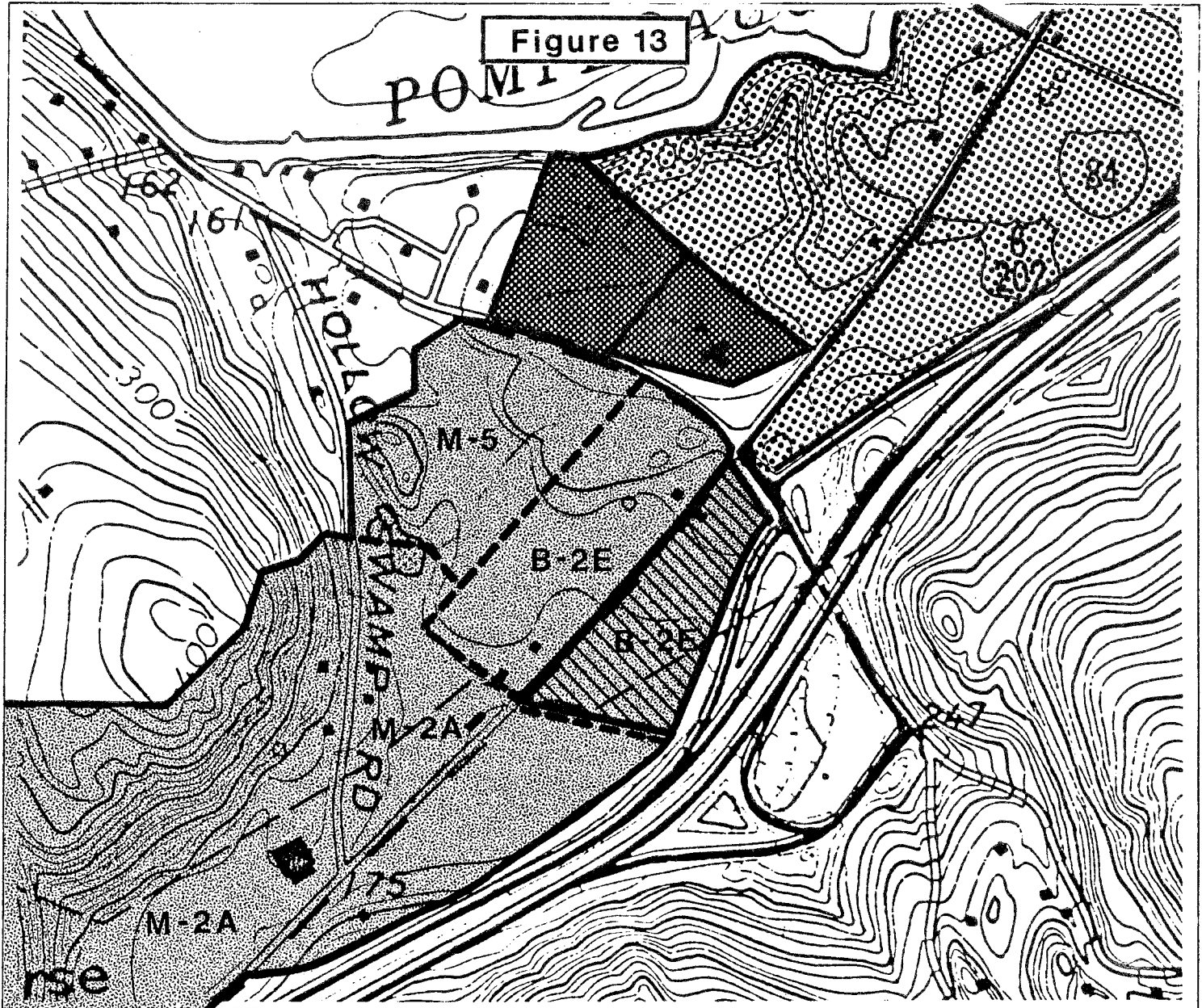
Planning Area A is further divided into A-1 through A-6 parcels. (see Figure 14). In the The Guide for Development, Planning Area A is appended for information purposes. It is clear that the land use commissions of Southbury are very sensitive to the Exit 14 "gateway" and recognize the "front door" character of this location upon the crossing of the Housatonic River.

The commissions will be faced with several far reaching impact decisions in terms of the travel center as presented but basically the question is, "Is the proposal in keeping with the intent of the plans just described?" The ERT believes it is not.

#### Site Plan Scheme 2

Given the stated and observed aesthetic sensitivity of the subject parcel and the existence of the well-sited and landscaped Catholic Church on the opposite corner, it is extremely important to produce quality development at the proposed travel center. Quality in terms of design, building materials, color, enclosure of roof mechanical appurtences, and extensive landscaping. On this last point, the applicant should be encouraged to innovatively landscape

Figure 13



STUDY AREA



O/ED (Office/Economic Development)



R/O (Retail/Office Services)



INSTITUTIONS

**B- 2E** BUSINESS ZONE

**M-2A, M-5** ECONOMIC DEVELOPMENT ZONE

**TRAVEL CENTER**  
**SOUTHBURY, CONNECTICUT**

**LAND UTILIZATION**

King's Mark Environmental Review Team

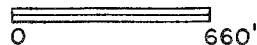
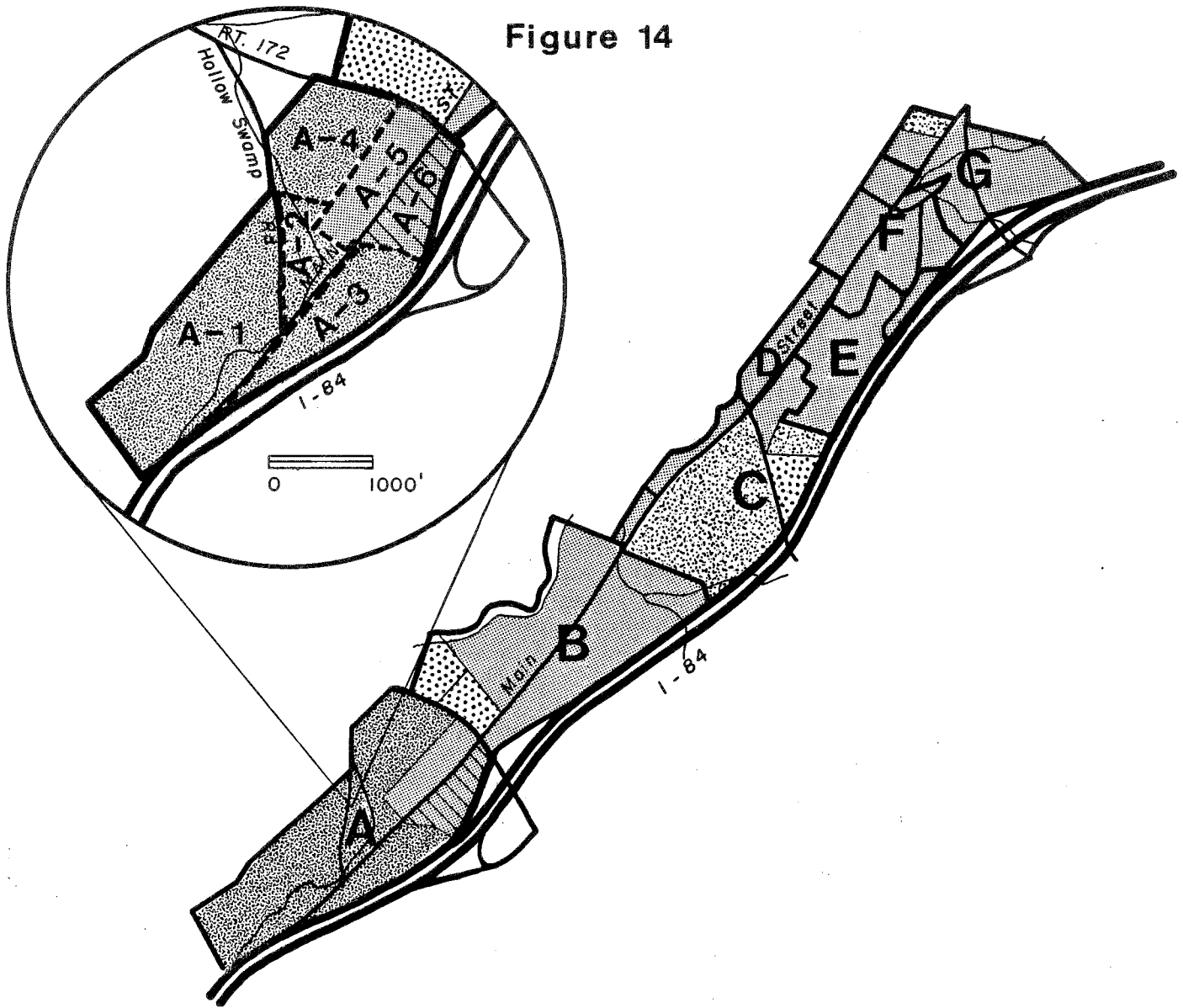




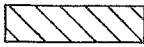


Figure 14



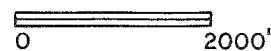
**A** PLANNING AREAS

-  GOVERNMENTAL
-  PRIVATE INSTITUTIONS
-  RETAIL-COMMERCIAL
-  INDUSTRIAL
-  STUDY AREA

**TRAVEL CENTER**  
**SOUTHBURY, CONNECTICUT**

**SOUTHBURY**  
**CENTER AREA**

King's Mark Environmental Review Team

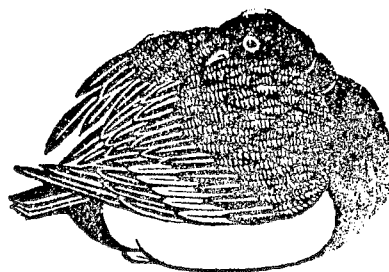


the extensive paved parking/maneuvering areas to mitigate against the visual impact of an parking lot and a truck stop atmosphere. For example, several of the parking bays could be set aside for integrated plantings.

Amendment 3 recommends "special landscape feature; no vehicular crossing except where designated . . . a 100 foot strip parallel to Route 172 near the access ramp to I-84." This will necessitate site design revisions in the area of the old foundation.

Given three proposed access points to the development, the applicant should be encouraged to consider a reduction to two in the interest of maintaining better traffic flow on Main Street South as increased development takes place in the future to the south. The reduction may require a rethinking and relocation of the gas station/car wash (if that use is approved by the Zoning Commission).

As previously stated, the car wash is not a permitted use in the Town of Southbury. Similarly a bus and limousine station (underlined for emphasis) is not a stated permitted use of a structure. The applicant should consider the zoning amendment process and an interpretation of the structure use by proper officials/commissions of the Town. Given approvals of the uses, strict adherence to the existing regulations (i.e., site plan review), the Planning Commission principally should be able to induce quality development of the intersection quadrant.



A P P E N D I X A

MAIN STREET - CENTER AREA

MAIN STREET - CENTER AREA

GUIDE FOR DEVELOPMENT: Planning Area A

Features: Planning Area A is partially visible from I-84. The most prominent areas of view are portions of Sub-Areas A-4 and A-5 which are in the environs of Sacred Heart Church and the River Glen Convalescent Care Center. While there is good access by Main Street and Route #172 to Exit #14 of I-84, Area A lies away from the main flow of traffic in the Southbury Center Area. A major part of Sub-Area A-1 is steep, unusable hillside that is in the horizon line; large portions of Sub-Area A-1, A-2, A-3 and A-6 are low lying and contain wetlands. Area A is the principal area of Southbury provided for industrial, general commercial and similar uses.

Objectives:

1. land and building development that compliments the environs of the Church and the rural scene leading to South Britain;
2. avoidance of traffic flow interruption along Route #172;
3. protection of wetlands and water courses;
4. land usage and building design, including lighting and signs, that do not mar nor intrude upon the scenic views from I-84;
5. development of enterprises, jobs and services advantageous to the Town as a whole but which would be incompatible if located in other parts of the Center and the Town.

Standards:

	<u>A-1, 2, 3</u>	<u>A-4</u>	<u>A-5, 6</u>
1. Ground Coverage:			
a. by buildings:	15%	15%	20%
b. total of all:	50%	50%	60%
2. Height:	40'	40'	40'
3. Building Setback:			
* a. Main St/172:	100'	100'	100'
b. other street:	50'	50'	50'
c. property line:	25'	25'	25'
d. residential area:	100'	100'	-
4. Outside Storage:			
a. % of lot:	-	-	25%
b. % of building:	10%	10%	-
5. Minimum Lot Size	2 Ac.	5 Ac.	1 Ac.

\* Refer to Special Planning Element #5 for modification of standard.

Uses: (P - Preferred, A - Acceptable, X - Excluded)

	<u>A-1, 2, 3</u>	<u>A-4</u>	<u>A-5, 6</u>
corporate offices	P	P	P
research laboratory	P	P	P
manufacturing	P	P	A
bus./professional offices	A	A	A
retail stores	X	X	A
motel	X	X	A
restaurant (sit-down)	A	A	A
garden center	X	X	A
automotive service	X	X	A
motor vehicle sales	X	X	A
distribution	A	A	X
lumber yard	A	X	X
trucking terminal	A	X	X
construction bus.	A	X	X
warehousing	A	X	X
trade shops	A	X	A

Other uses excluded generally include, but are not limited to, shopping plazas, theaters and fast-food restaurants.

Special Planning Elements:

1. The visual appearance of Planning Area A from I-84 and from the high point on Route #172 is of critical importance. Care is needed in the design of roofs and any mechanical equipment. No lighted signs should be of a size or direction to give announcement or display toward I-84.
2. General outdoor lighting should be low in height and subdued intensity, avoiding reflected glare to the horizon line and competition with the lighted Church as a central feature of the environs.
3. Outside storage areas will need to be screened from view by plant materials, buildings or grading.
4. Sub-Areas A-4 and much of A-5, now operated as a working farm, will best be developed in the manner of a research-industrial park. Any subdivision into separate building lots should have access to lots by means of interior roads which connect to principal routes at designated access points.
5. Buildings and parking areas may extend into the 100' setback area from Main Street and the 100' setback area from Route #172 (the Special Landscape Feature) as long as a) a minimum 50' setback is maintained, b) in Arcas A-1, A-2, A-3 and A-4, ground coverage by buildings does not exceed 15% of the 100' setback area and the total of all coverage by buildings and paving does not exceed 50% of such area and c) in Arcas A-5 and A-6, ground coverage by buildings does not exceed 20% of the 100' setback area and the total of all coverage by buildings and paving does not exceed 60% of such area.

# 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, soil scientists, foresters, climatologists, landscape architects, recreational 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 83 town area serving western Connecticut.

As a public service activity, the Team is available to serve towns and/or developers within the King's Mark RC & D Area - free of charge.

## PURPOSE OF THE ENVIRONMENTAL REVIEW TEAM

The Environmental Review Team is available to assist towns and/or developers in the review of sites proposed for major land use activities. For example, the ERT has been involved in the review of a wide range of significant land use activities including subdivisions, sanitary landfills, commercial and industrial developments, and recreational/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 site, and highlighting opportunities and limitations for the proposed land use.

## REQUESTING AN ENVIRONMENTAL REVIEW

Environmental Reviews may be requested by the chief elected official of a municipality, or the chairman of an administrative agency such as planning and zoning, conservation, or inland wetlands. Environmental Review Request Forms are available at your local Soil and Water Conservation District, and the King's Mark ERT Coordinator. This request form 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 investigate. When this request is approved by the local Soil and Water Conservation District and King's Mark RC & D Executive Committee, the Team will undertake the review. At present, the ERT can undertake two (2) reviews per month.

For additional information regarding the Environmental Review Team, please contact your local Soil and Water Conservation District or Keane Callahan, ERT Coordinator, King's Mark Environmental Review Team, King's Mark Resource Conservation and Development Area, 322 North Main Street, Wallingford, Connecticut 06492. King's Mark ERT phone number is 265-6695.