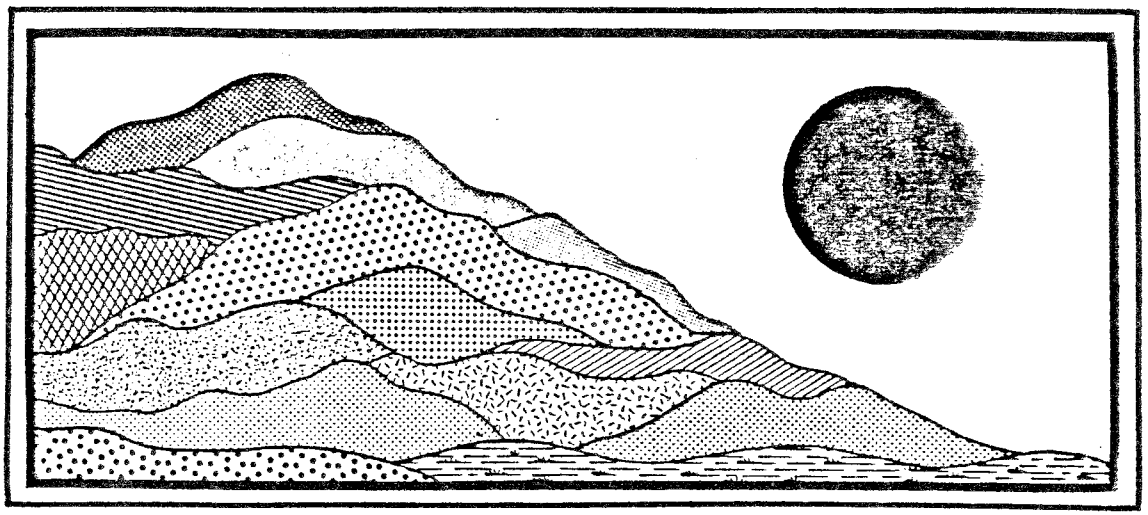
The Grove

Tolland/Coventry, Connecticut

January 1987



ENVIRONMENTAL REVIEW TEAM REPORT

EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.

The Grove

Tolland/Coventry,

Review Date: NOVEMBER 13, 1986

Report Date: JANAUARY 1987

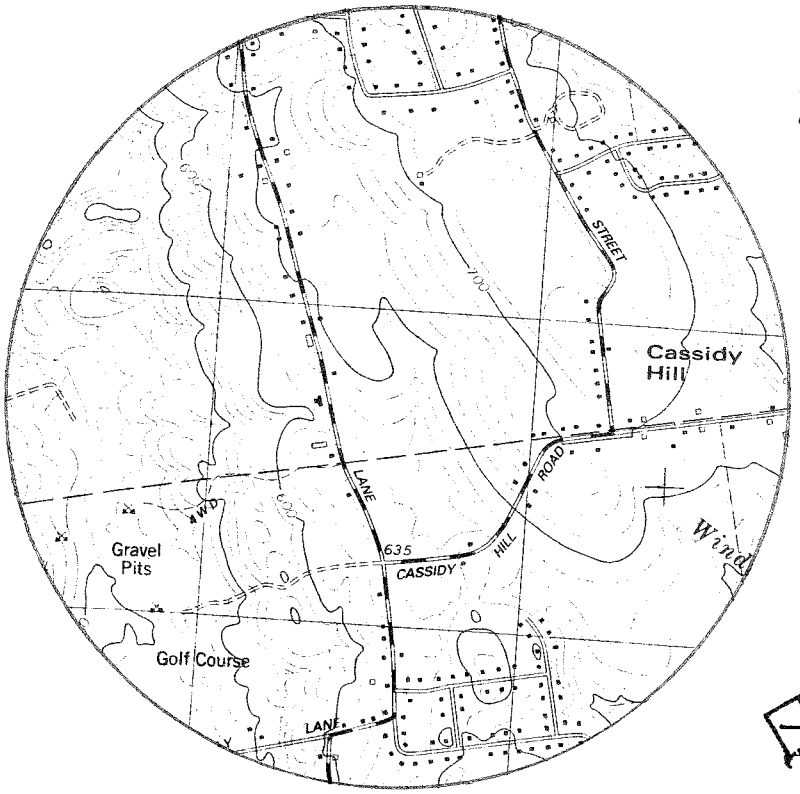
RC&D

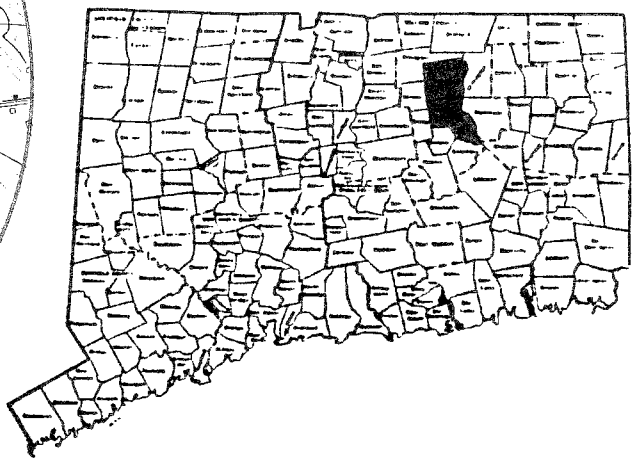
ENVIRONMENTAL REVIEW TEAM
PO BOX 198
BROOKLYN, CONNECTICUT 06234

Site Location

THE GROVE SUBDIVISION

TOLLAND/COVENTRY, CONNECTICUT





EASTERN CONNECTICUT

RESOURCE CONSERVATION

& DEVELOPMENT AREA

ENVIRONMENTAL REVIEW TEAM REPORT

ON

THE GROVE SUBDIVISION

Tolland/Coventry, Connecticut

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

The ERT met and field checked the site on Thursday, November 13, 1986. Team members participating on this review included:

Don Capellaro	--Sanitarian - Connecticut Department of Health
Joe Neafsey	--District Conservationist - U.S.D.A., Soil Conservation Service
Meg Reich	--Director - Windham Regional Planning Agency
Alfred Roberts	--Soil Resource Specialist - U.S.D.A., Soil Conservation Service
Eric Schluntz	--Fisheries Biologist - Connecticut Department of Environmental Protection
Elaine Sych	--ERT Coordinator - Eastern Connecticut R C & D Area
Bill Warzecha	--Geologist - DEP, Natural Resources Center
Mike Wozniak	--Community Development Planner - Capitol Region Council of Governments

Prior to the review day, each Team member received a summary of the proposed project, a list of the Town's concerns, a location map, a topographic map, a soils map and a preliminary site plan. During the field review the Team members were given site plans. The Team met with, and were accompanied by the Town Planners of Coventry and Tolland, another Tolland planning official, the landowner and his engineer. Following the review, reports from each Team member were submitted to the ERT Coordinator for compilation and editing into this final report.

This report represents the Team's findings. It is not meant to compete with private consultants by providing site designs or detailed solutions to development problems. The Team does not recommend what final action should

be taken on a proposed project -- all final decisions and conclusions rest with the Town and landowner. 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. The results of this Team action are oriented toward the development of better environmental quality and the long-term economics of land use.

The Eastern Connecticut R C & D Executive Committee hopes you will find this report of value and assistance in making your decisions on this proposed subdivision.

If you require any additional information, please contact:

Elaine A. Sysch
ERT Coordinator
Eastern Connecticut RC&D Area
P. O. Box 198
Brooklyn, CT 06234
(203) 774-1253

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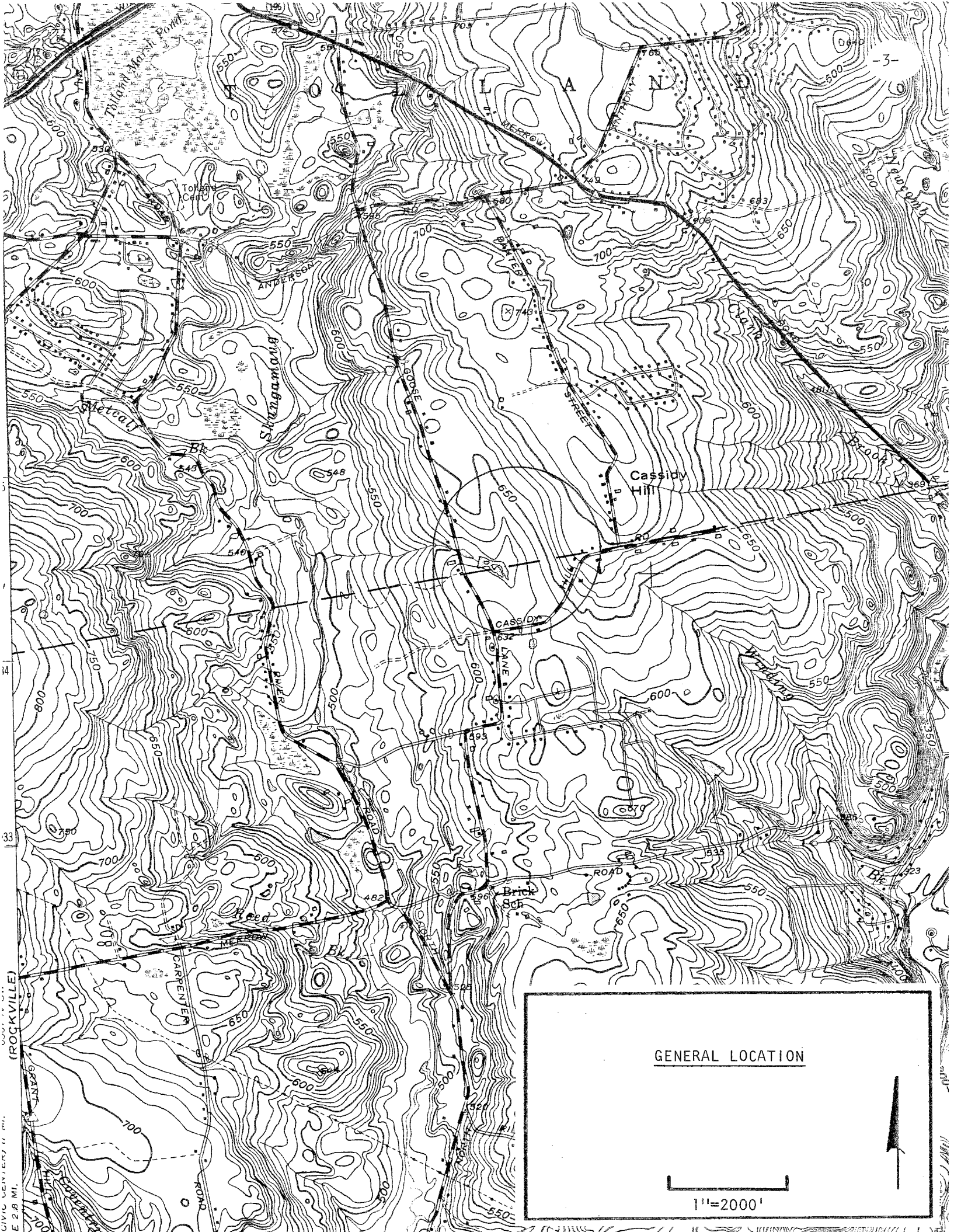
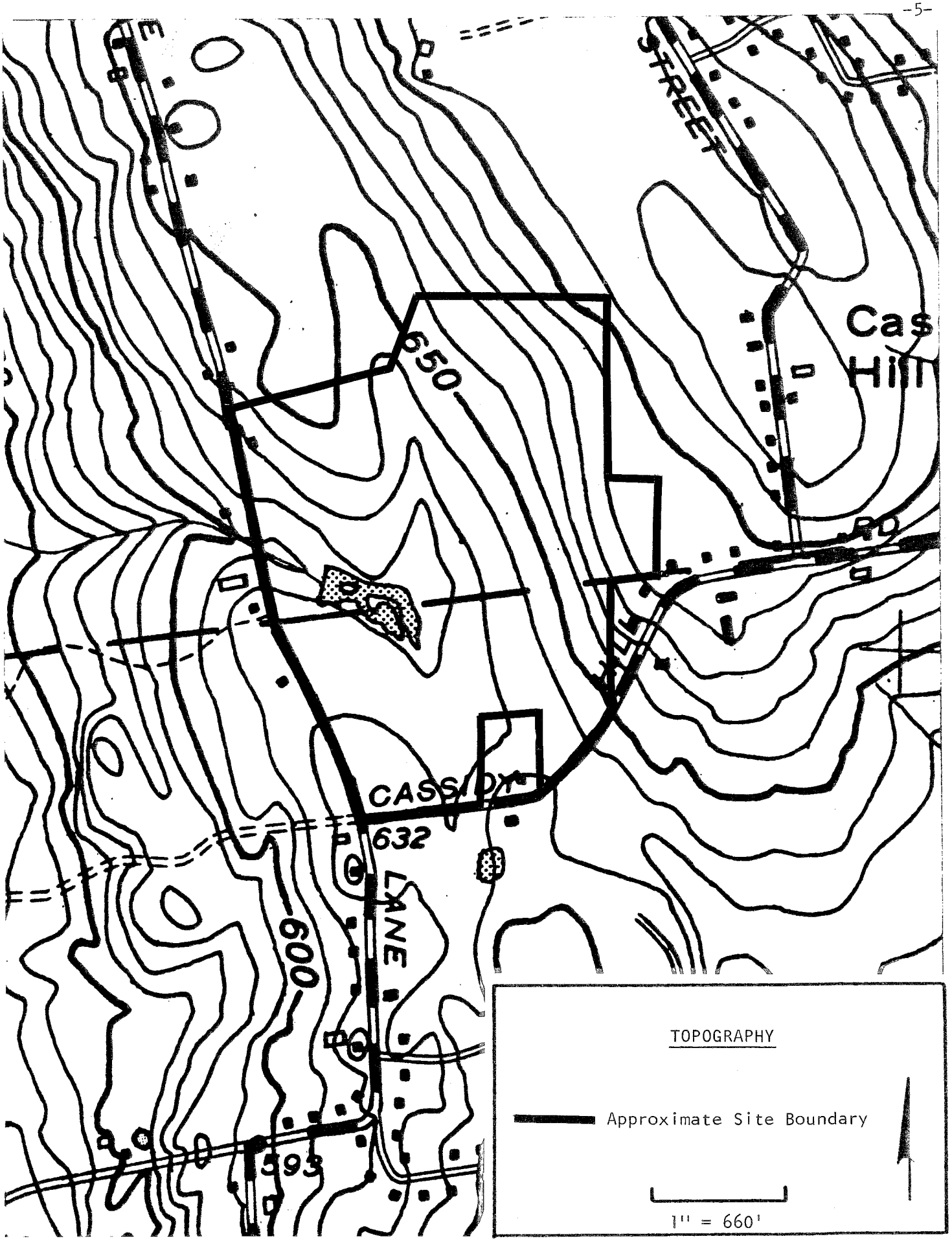

T O L L A N D
Tolland Marsh Pond
Tolland Cem
MERROW
ANTHONY
ANDERSON
BAXTER
GOOSE
STREET
Shangamang
Metcalf
Bk
Cassidy Hill
Brook
Cram
CASSIDY
LANE
RIVER
ROAD
Wandering
Brick Sch
Reed
Bk
CARPENTER
GRANT
Copeland
(ROCKVILLE)
GENERAL LOCATION
1"=2000'

I. INTRODUCTION

The Eastern Connecticut Environmental Review Team was asked to perform an environmental review and assessment for a subdivision to be located in the Towns of Tolland and Coventry.

The parcel, which consists of approximately 70 acres, is located on the northeast side of Cassidy Hill Road and Goose Lane. The land consists of open fields and wooded terrain and tends to be relatively flat in the southwest portion, which is predominantly in Coventry. The terrain rises towards the east and northwest sides. A watercourse and associated wetlands cuts through near the central part of the northern portion (Tolland), flowing south and enters a pond area at the dividing town line(s). Flow from the pond leaves at the west end in Tolland and near Goose Lane. The lower southern end in Coventry also has an area with several water/drainage courses.

Fuss and O'Neil, consultants for the developers, have proposed a development of thirty-five (35) with sixteen (16) in Coventry and nineteen (19) in Tolland. It is understood that both communities have one (1) acre zoning. The exception is that Coventry requires any wetlands on a lot not be included in the determination of the one (1) acre. Also, Coventry apparently has a much greater set back requirement from wetlands. According to the engineering firm, lots would be larger than the minimum required.

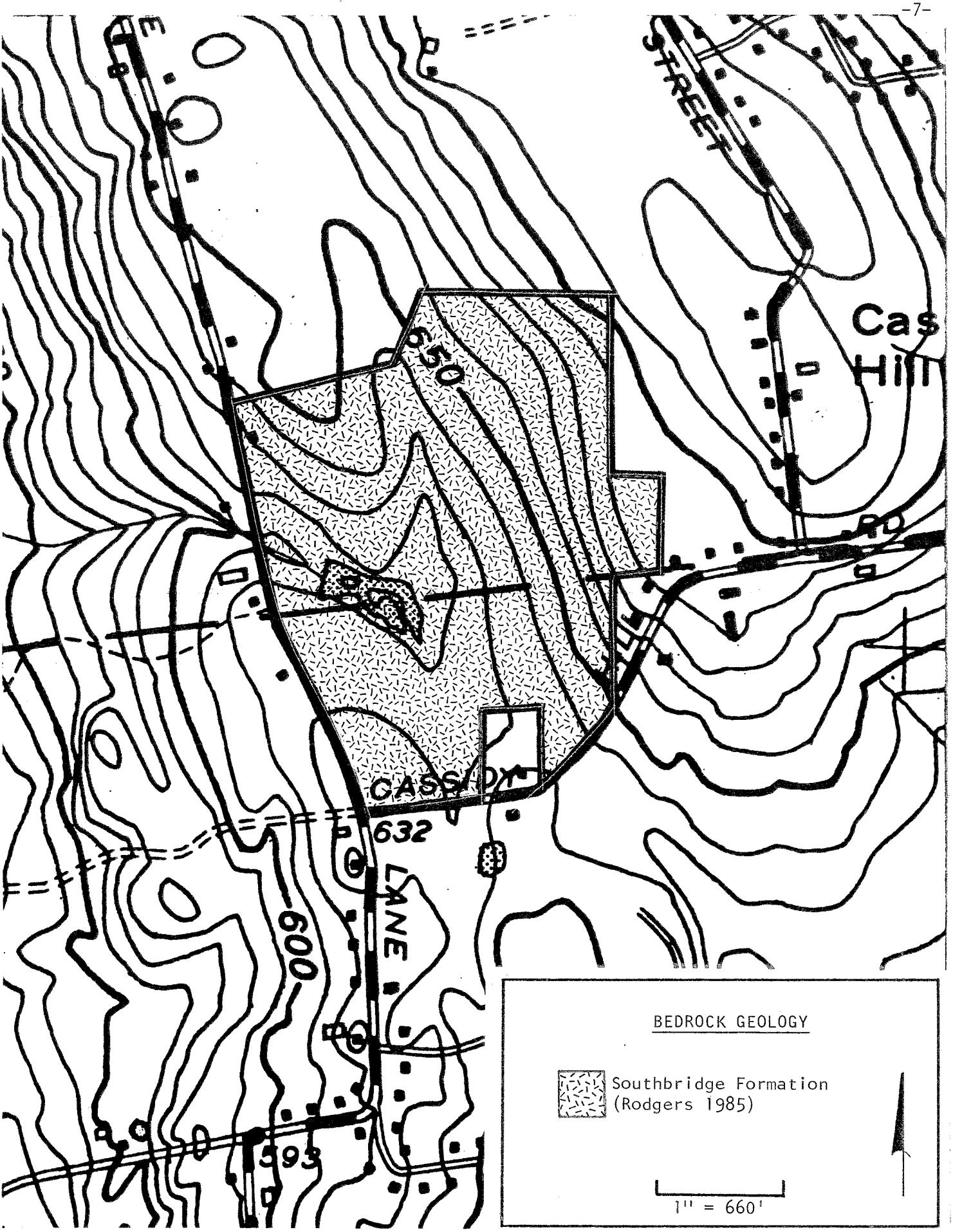

STREET
Cas
Hill
650
RD
CASSIDY
632
LANE
600
593
TOPOGRAPHY
Approximate Site Boundary
1" = 660'

II. TOPOGRAPHY

The proposed thirty-five (35) lot subdivision is located on Goose Lane and Cassidy Hill Road in the Towns of Tolland and Coventry. Nineteen (19) lots are proposed in Tolland and sixteen (16) in Coventry. The site covers an area of about seventy (70) acres. Except for some open fields in the northern corner, the site consists of woodlands.

A ± three-quarter (3/4) acre pond, to which most of the surface runoff on the site drains to, is located in the west central parts. The land surface slopes gently to moderately to the pond. The outlet stream for the pond is a tributary to Skungamaug River.

Elevations within the site range from a high of ± 710 feet to 610 feet above mean sea level.


STREET
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CASSIDY
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LANE
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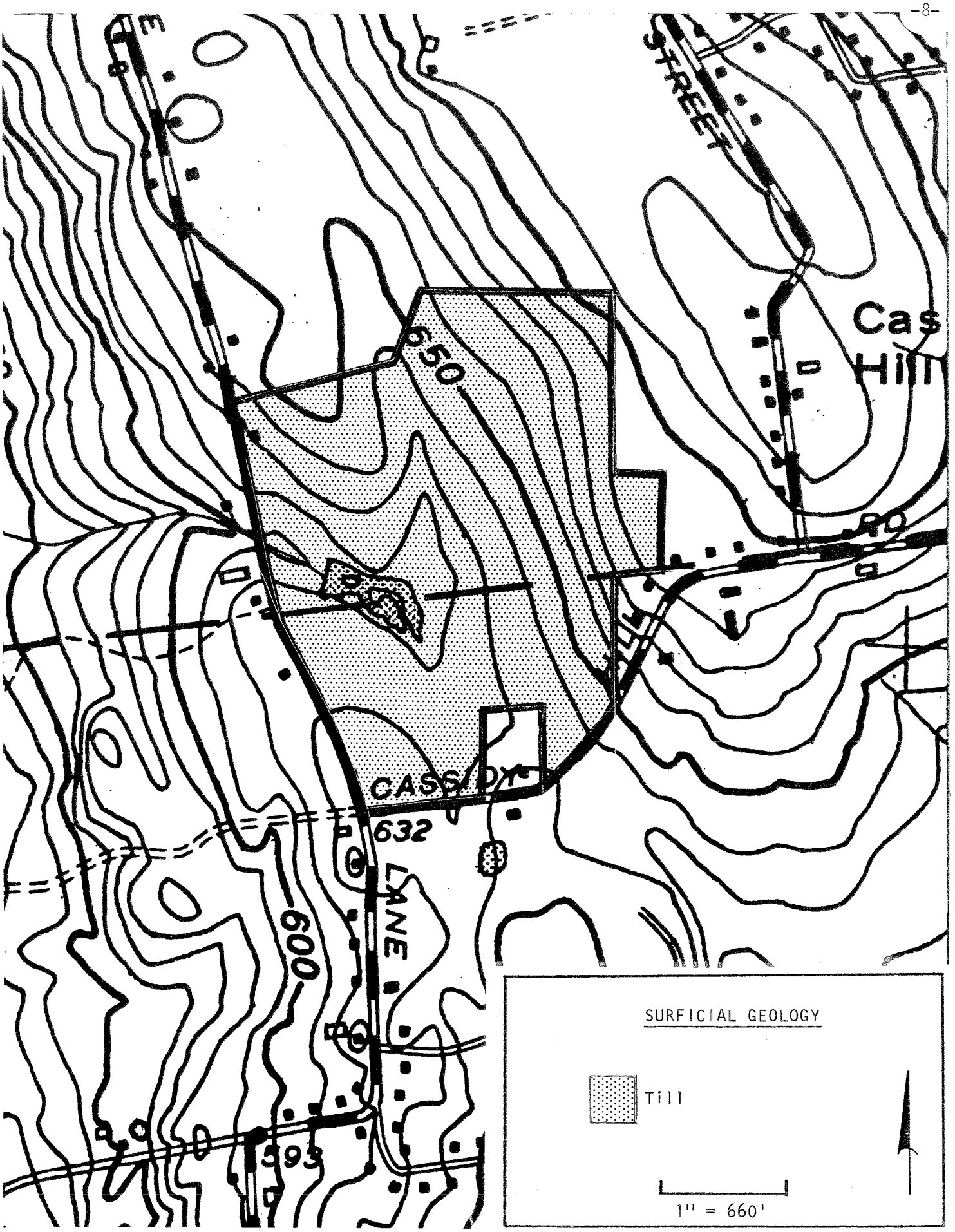
593
BEDROCK GEOLOGY
Southbridge Formation
(Rodgers 1985)
1" = 660'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SURFICIAL GEOLOGY
Till
1" = 660'

III. GEOLOGY

No geological maps (surficial or bedrock) have been published to date for the Coventry Quadrangle in which the site lies. However, preliminary bedrock and surficial geologic maps are available for review purposes at the Department of Environmental Protection's Natural Resources Center in Hartford. Publications reviewed also include the preliminary State Surficial Materials Map (J. Stone, et al), the preliminary bedrock geologic map for the Coventry Quadrangle (R. Fahey and M. Pease) and the Bedrock Geologic Map of Connecticut by John Rodgers.

A. Bedrock

Outcroppings of ledge-rock are not visible on the site. On-site test hole information distributed to Team members has demonstrated that the depth to bedrock exceeds eight (8) feet or more on most of the site. It should be pointed out that the preliminary State Surficial Materials Map suggests that the depth to bedrock in the northeast corner of the site may be fifteen (15) feet or thicker.

Rodgers describes the rock core of the site as the Southbridge Formation. It consists of dark to light, rusty, fine to medium grained granofels and schist. Granofels and schists are textural terms given to rocks formed by great heat and pressure within the earth's crust, e.g., metamorphic rocks.

Because the bedrock surface is fairly deep throughout most of the site, it should not pose any major difficulties in terms of the proposed development. However, since the water supply for each lot in the proposed subdivision will need to be derived from the underlying metamorphic rock, it will have some input on water quality and quantity (See Water Supply section).

B. Surficial Geology

Till is the glacial sediment that covers the entire site. It consists of rocks particles of varied shapes and sizes. These particles are deposited directly from glacier ice without being reworked by meltwater streams emanating from the glacier ice. In the first few feet, the till is often relatively sandy and friable, with moderate permeability. Stoniness is also characteristic of this zone. At depths between three (3) to five (5) feet and greater, the till commonly becomes silty, quite compact, and only slightly permeable. Since groundwater tends to travel slowly through this compact zone, an elevated perched groundwater table often results, especially through the wet season.

Overlying till throughout the site, primarily along watercourses and intermittent drainage channels, are wetland soils. In some places the wetland areas are quite broad. The wetland boundaries of the site have been superimposed onto the subdivision map. Because these areas are poorly to very poor drained, and because they are seasonally to permanently wet, they hold little potential for development.

IV. GEOLOGIC DEVELOPMENT CONCERNS

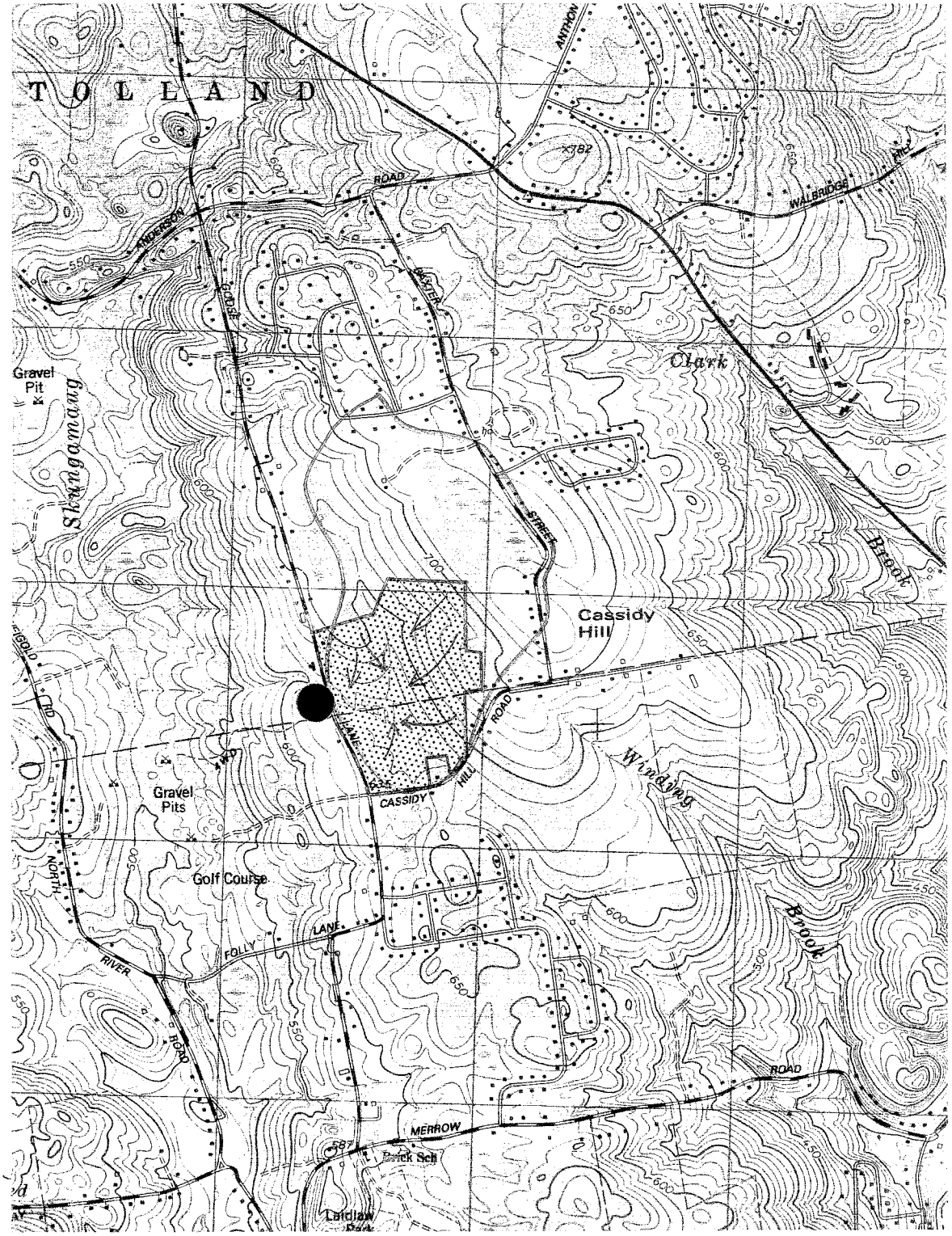
In terms of the proposed subdivision development, the main geological limitations found on the site include: 1) the compact nature of the till soil (based on deep test hole data) which commonly results in a seasonally high groundwater levels and which have slow percolation rates and 2) the presence of regulated inland-wetland soils.

These geologic limitations will weigh heaviest on the ability to provide adequate subsurface sewage disposal systems serving homes constructed in the subdivision, since public sewers are not available. In many cases, proper planning and engineering can overcome these limitations, but only at added expense. It should be pointed out that even with an engineered septic system, there may be a lot or lots with such severe subsurface conditions that development on them should be precluded. This usually becomes more of a problem on smaller lots, one (1) acre or less. Lot 23 is an example of such a case. Even though larger lot sizes may give an engineer more flexability for locating septic system areas, certain geologic limitations may also predominate throughout large lots resulting in problematic situations in terms of on-site sewage disposal.

Once septic systems are engineered and approved by the proper authorities (i.e., state and local health departments), it is imperative that the systems be installed properly according to design specifications and also be properly maintained, e.g., pumped regularly (3-5 years) by the homeowner. (See Sewage Disposal section).

Based on the subdivision plan, it appears interior roads will cross some of the wetland areas within the parcel. Wetland crossings are generally feasible, provided they are properly designed, e.g., culverts are properly sized and installed, permeable road base fill material is used. The roads should be constructed at least 1.5 feet and preferably two (2) feet above the surface elevation of the wetlands. This will allow for better drainage of the roads and decrease the frost heaving potential of the road. It is recommended that any road construction through wetland areas be done during the dry time of the year with adequate provisions for effective erosion and sediment control. Detailed plans for any proposed road crossings through wetlands should first be submitted to the proper Town authorities and commissions for their review, comment and final approval prior to beginning any construction.

Because of the wet soil conditions (at least, seasonally) throughout the site, it is strongly recommended that building footing drains be installed around foundations. This will hopefully prevent wet basements. Building footing and curtain drains will need to be outletted at points which will not present problems in terms of septic systems and on-site wells. Ideally, they should be outletted into the road drainage system.



WATERSHED BOUNDARY

Approximate study site

Point of outflow

Watershed boundary for the outlet stream of the pond located in the west central parts at its intersection with Goose Lane.

Direction of surface flow

1" = 2000'

V. HYDROLOGY

The proposed subdivision lies entirely within the watershed of the unnamed outlet stream for the pond located in the west-central parts of the site. The outlet stream is a tributary to the Skungamaug River. At its intersection with Goose Lane, the stream course drains an area of about 235 acres. As shown by the Watershed Boundary Map, the watershed boundary tends to follow along the tops of local hills. It is to be expected that the true physical boundary may deviate to some extent from the boundary mapped. Once such area was observed at the lower end of Cassidy Hill Road. It appears that during periods of heavy rainfall, runoff may flow southward under Cassidy Hill Road, causing a slight deviation of the watershed depicted. Nevertheless, most variations will be minor and the watershed as depicted may be used as a reliable indicator for the general area of concern.

Surface runoff, and probably to a large extent subsurface drainage, flows towards the pond in the west-central portion of the site.

As can be seen by the Watershed Boundary Map, the watershed consists mainly of forested land, which has been only lightly developed. Single-family homes along the west side of Cassidy Hill Road and Baxter Street in the watershed are the only developed areas.

The subdivision of the property as planned, followed by the construction of new homes, driveways and cul-de-sacs can be expected to lead to increases in the amount of runoff shed from the site. The wetland areas within the site will serve as natural runoff detention areas. This will help to lessen the effect of post-development runoff from the site. (Another good reason not to fill or disturb wetland areas). Also, the pond located in the west-central part of the site is located in a good hydrologic position to accept storm water runoff. The applicant's engineer noted on the field day that the pond was being considered as a possible detention area. It should be pointed out that based on a cursory inspection by the Team's hydrologist, the outlet pipe for the pond appears clogged with debris. As a result, surface water from the pond is flowing via the emergency spillway on the south side. It is also causing water to back up in the wetland northeast of the pond. This matter should be investigated as soon as possible. As a matter of policy, the applicant's engineer should supply the Town with a storm water management plan which includes hydrologic calculations. Close examination of downstream culverts, especially at Goose Lane is warranted.

Besides flooding problems, increased runoff can lead to additional water related problems such as streambank erosion and gullying. In view of the gentle slopes present in the watershed, it does not appear that erosion problems should be a major problem, especially if a comprehensive erosion and sediment control plan is developed covering each stage of the proposed subdivision. It should be pointed out that on July 1, 1985 the Connecticut Soil Erosion and Sediment Control Act (P.A. Number 83-388) became fully effective.

As a result, a detailed erosion sediment control will be required for the project and should be properly enforced by the Town. Disturbed areas should be kept to a minimum under such a plan. The erosion and sediment control measures called for under the plan should be shown on the final subdivision plan. Also, provisions will need to be made to remove sediment/road sand so that it does not accumulate in the pond (if it is used as a detention basin). An accumulation of sediment/road sand in the pond may take away valuable storage capacity for storm water. (See Erosion and Sediment Control section).

The Town of Coventry has a regulation which require a 150 feet setback of septic systems from watercourses. It is recommended that all streamcourses be flagged in the field and delineated on the subdivision plan. This should be done in conjunction with appropriate Town officals and preferably conducted during the wet time of year.

VI. WATER SUPPLY

Since there are no public water supply lines accessible to the parcel, it seems likely the proposed subdivision would be served by individual on-site wells. It appears that wells will need to tap the underlying bedrock aquifer. Wells drilled in bedrock, generally supply small but reliable yields of groundwater. However, since the yield of a given well depends upon the number and size of water bearing fractures that it intersects, and since the distribution of fractures in bedrock is irregular, there is no practical way, outside of expensive geophysical testing, of predicting the yield of a well drilled in a specific location. Because fractures in the rock generally occur within the first 100 to 150 feet of the surface, it has been shown that the probability of increasing the yield of a well decreases with depth below this level.

Each well should ideally be located on a relatively high portion of lot, properly separated from the sewage disposal system or any other potential pollutant (e.g., fuel oil storage tank, etc.) and in a direction opposite the expected direction of groundwater movement. They should all be cased with steel pipe into the underlying bedrock. In order to provide adequate protection of the quality of the bedrock water, all wells will need to be properly installed in accordance with all applicable State Public Health Code and Connecticut Well Drilling Board regulations. In addition, the Town Sanitarian for each Town will need to inspect and approve well locations.

In areas where a number of wells are drilled relatively close together, there is a chance of well interference (that is, the yield of one (1) well detracting from the yield of another). As a result, it is advisable to space wells conservatively, if possible, to minimize the risk of mutual interference. It seems likely that this could be a problem on lots which are small (one (1) acre or less).

In the Shetucket River basin, wells tapping crystalline bedrock (i.e., gneisses, schists, etc.) were surveyed from Connecticut Water Resources Bulleting No. 11. Of these, approximately ninety percent (90%) yielded three (3) gallons per minute or more. A well yield of three (3) gallons is generally satisfactory for most domestic uses.

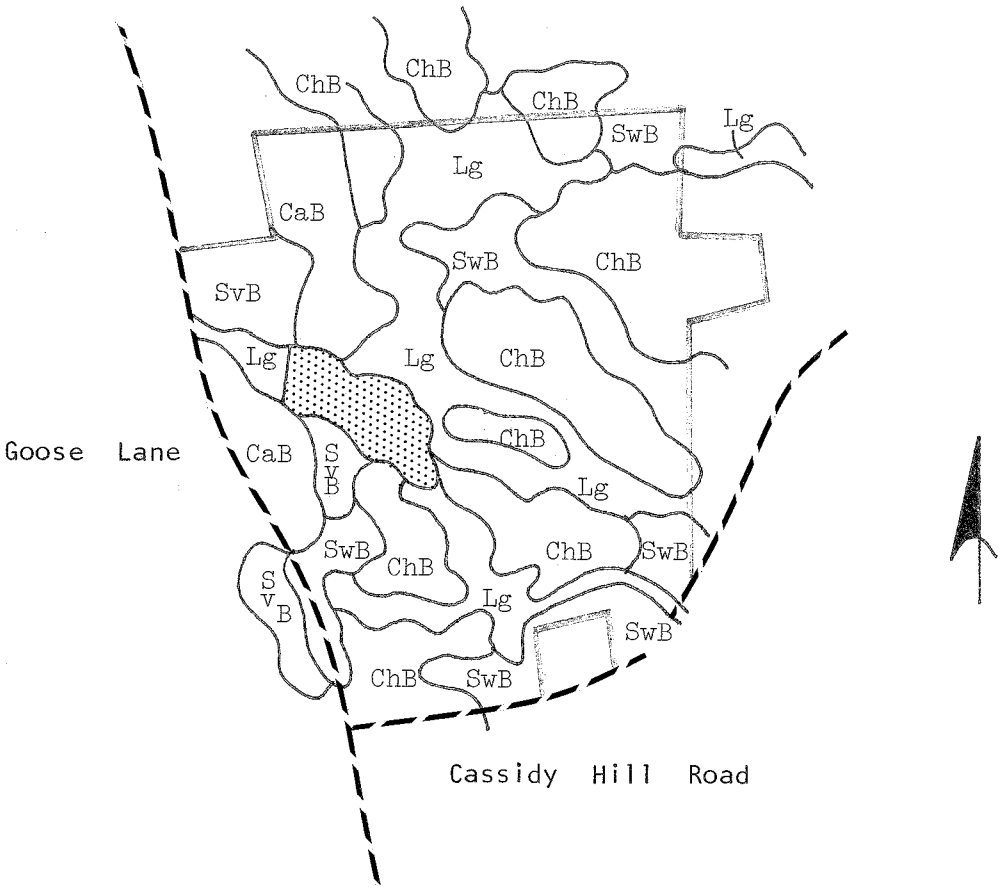
The natural quality of groundwater should be satisfactory. Some zones in the bedrock beneath the site may have elevated amounts of iron and/or manganese minerals which would lower the overall quality. Iron-sulfide, which can give the water a "rotten egg-odor" may also be encountered in some zones within the bedrock beneath the site. If elevated iron and/or manganese levels are present in the water, it may be necessary to provide suitable treatment filters.

VII. SEWAGE DISPOSAL

The soils, in general, on the property tend to have high groundwater which seasonally should be rather pronounced in at least some of the lower and flatter areas. The main reason for the water condition is apparently due to an underlying firm to compact soil layer which is not very permeable and restricts vertical drainage. This results in water being perched during the wet season. While conditions may be marginally acceptable for subsurface sewage disposal purposes, improvements such as curtain drains and elevating critical portions of lots with suitable fill material, can often alleviate restrictive factors. A prime consideration is to locate areas that might accommodate sewage leaching systems, and subject these areas to adequate testing for evaluation purposes. As hardpan type soils vary in composition and compactness, they also have variations in percolation rates, although they are basically in the slow range and may even be so slow as to be considered impervious. In such cases, it is important to know if the overlying soil has sufficient depth and is permeable enough in order to provide for dispersement and treatment of the sewage effluent. In general, the overlying and surrounding layers(s) of soil should be at least two (2) feet in depth. The leach systems essentially should be kept shallow, large and spread out with the contours in order to facilitate lateral dispersal. Of course, where the land has little or no slope (gradient), dispersal is further restricted and sewage effluent may surface in marginal or poor situations.

In general, it appears that most lots would require detailed engineered design systems for review and approval purposes.

As far as site development, based on visual observations and soils mapping data, it seems rather doubtful the proposed density of lots, particularly for the Coventry area, should remain at the given figure.



NOT TO SCALE

SOILS

CaB - Canton and Charlton fine sandy loams, 3 to 8 percent slopes

ChB - Canton and Charlton fine sandy loams, 3 to 8 percent slopes, very stony

Lg - Ridgebury, Leicester and Whitman fine sandy loams, extremely stony

SvB - Sutton fine sandy loam, 3 to 8 percent slopes

SwB - Sutton fine sandy loam, 3 to 8 percent slopes, very stony

VIII. SOILS

A. Soils on the Site

The attached revised soil map will show the approximate areas of different soils over this parcel. There are significant changes from the original soils information in the published soil survey report.

The landscape at this site is mostly gently sloping to sloping. Slopes up to ten percent (10%) were measured in some areas of Lots 17 through 23. Other lots have slopes ranging from three (3) to eight percent (8%).

The soils on this landscape are well drained. They formed in glacial till deposits derived from gneiss, schist, and granite. The wetland areas are well defined and follow mostly along stream channels. Wetland soils were flagged in the field and can be located from boundaries placed on the plot plan. Areas of additional wetlands on the Tolland side were noted on Plan Sheet #13. There are a number of lots where buildable space is at a minimum once you incorporate setbacks. Therefore, it is recommended that the Wetlands Enforcement Officers of both Towns follow through with site inspections after plan approval to insure wetland setback requirements are adhered to by the developers.

The main soil limitations on this site are depth to water table and rapid permeability in the soil substratum. The Sutton soils have a water table within two (2) feet of the surface and the Canton soils have a sandy substratum below the depth of two (2) feet.

B. Soil Descriptions

Listed below are soil map symbols used in the published soil report with their current interpretive name.

*CaB --	Canton and Charlton fine sandy loams, 3 to 8 percent slopes.
ChB --	Canton and Charlton fine sandy loams, 3 to 8 percent slopes, very stony.
#Lg --	Ridgebury, Leicester, and Whitman fine sandy loams, extremely stony.
*SvB --	Sutton fine sandy loam, 3 to 8 percent slopes.
SwB --	Sutton fine sandy loam, 2 to 8 percent slopes, very stony.

CaB -- Canton and Charlton soils, 3 to 8 percent slopes -- This map unit consists of gently sloping, deep well drained soils on ridges, hills, and side slopes of glacial till uplands. The areas are mostly rectangular or irregular in shape. Slopes are generally smooth and convex and 200 to 400 feet long. About forty-five percent (45%) of this unit is Canton soils, forty percent (40%)

---

*Prime farmland soil

#Designated inland wetland soil

is Charlton soils, and fifteen percent (15%) is other soils. Some areas of this unit consist almost entirely of Canton soils, some almost entirely Charlton soils, and some of both. The soils were mapped together because they have no significant differences in use and management.

Typically, the Canton soils have a surface layer of very dark grayish brown fine sandy loam two (2) inches thick. The subsoil is yellowish brown fine sandy loam, gravelly fine sandy loam, and gravelly sandy loam twenty-one (21) inches thick. The substratum is pale brown gravelly loamy sand to a depth of sixty (60) inches or more.

Typically, the Charlton soils have a surface layer of dark yellowish brown fine sandy loam five (5) inches thick. The subsoil is yellowish brown fine sandy loam and sandy loam twenty (20) inches thick. The substratum is light yellowish brown and light brownish gray sandy loam to a depth of sixty (60) inches or more.

Included with these soils in mapping are small areas of somewhat excessively drained Gloucester and Hollis soils, well drained Paxton soils, and moderately well drained Sutton soils. Also included are a few large, nearly level areas and a few areas that have a compact substratum at a depth of forty (40) to fifty (50) inches.

The water table in these Canton and Charlton soils is commonly at a depth of more than six (6) feet. The permeability of the Canton soils is moderately rapid in the surface layer and subsoil and rapid in the substratum. The permeability of the Charlton soils is moderate or moderately rapid. Both soils have medium to rapid runoff, have moderate available water capacity.

Instability of some excavations in the Canton soils is the main limitation of these soils for community development.

ChB -- Canton and Charlton soils, 3 to 8 percent slopes, very stony -- This mapping unit consists of gently sloping well drained soils on ridges, hills, and side slopes of glacial till uplands. The areas are mostly rectangular or irregular in shape. Slopes are generally smooth and convex and less than 200 feet long. About forty-five percent (45%) of this unit is Canton soils, forty percent (40%) is Charlton soils, and fifteen percent (15%) is other soils. In some areas, this unit will consist almost entirely of Canton soils or almost entirely of Charlton soils. The soils were mapped together because they have no significant differences in use and management. Stones cover one (1) to eight percent (8%) of the soil surface.

Typically, the Canton soils have a surface layer of very dark grayish brown fine sandy loam two (2) inches thick. The subsoil is yellowish brown fine sandy loam, gravelly fine sandy loam, and gravelly sandy loam twenty-one (21) inches thick. The substratum is pale brown gravelly loamy sand to a depth of sixty (60) inches or more.

Typically, the Charlton soils have a surface layer of dark yellowish brown fine sandy loam five (5) inches thick. The subsoil is yellowish brown fine sandy loam and sandy loam twenty (20) inches thick. The substratum is light yellowish brown and light brownish gray sandy loam to a depth of sixty (60) inches or more.

Included with these soils in mapping are small areas of somewhat excessively drained Gloucester and Hollis soils; well drained Paxton soils; and moderately well drained Sutton soils. Also included are a few areas that have a compact substratum at a depth of forty (40) to fifty (50) inches.

The water table in these soils is commonly at a depth of more than six (6) feet. The permeability of the Canton soils is moderately rapid in the surface layer and subsoil and rapid in the substratum. The permeability of the Charlton soils is moderate or moderately rapid. Both soils have medium to rapid runoff, and have moderate available water capacity.

Instability of some excavations in the Canton soils is the main limitation for community development.

Lg -- Ridgebury, Leicester, and Whitman soils, extremely stony -- This mapping unit consists of nearly level, poorly drained, and very poorly drained soils in depressions and drainageways of glacial till uplands. The areas are mostly long and narrow or irregular in shape. Slopes range from zero (0) to three (3) percent and are mainly 100 to 300 feet long. Stones cover eight (8) to twenty-five percent (25%) of the surface. About forty percent (40%) of this unit is Ridgebury soils, twenty-five percent (25%) is Leicester soils, fifteen percent (15%) is Whitman soils, and ten percent (10%) is other soils. Some areas of this unit will consist of one (1) of these soils, and other areas will consist of two (2) or three (3). The soils of this unit were mapped together because they have no significant differences in use and management.

The Ridgebury soils have a seasonal high water table at a depth of about ten (10) inches from fall through spring. The permeability of the soils is moderate to moderately rapid in the surface layer and the subsoil and slow to very slow in the substratum. Runoff is slow. The Ridgebury soils have a moderate available water capacity.

The Leicester soils have a seasonal high water table at a depth of about ten (10) inches from fall through spring. The permeability of the soils is moderate or moderately rapid throughout. Runoff is slow. The Leicester soils have a moderate available water capacity.

The Whitman soils have a seasonal high water table at or near the surface from fall through spring. The permeability of the soils is moderate or moderately rapid in the surface layer and subsoil and slow to very slow in the substratum. Runoff is slow. The Whitman soils have a moderate available water capacity.

The high water table and slow to very slow permeability are major limitations of the soils of these areas for community development. Steep slopes of excavations in these soils slump when saturated. The stones on the surface restrict landscaping, and lawns are soggy most of the year.

SvB -- Sutton fine sandy loam, 3 to 8 percent slopes -- This gently sloping, moderately well drained soil is on upland glacial till plains, hills, and ridges. Areas are dominantly irregular in shape.

Typically, this Sutton soil has a very dark grayish brown, fine sandy loam surface layer nine (9) inches thick. The subsoil is yellowish brown, dark yellowish brown, and dark brown, mottled fine sandy loam and sandy loam twenty-four (24) inches thick. The substratum is olive brown, mottled sandy loam to a depth of sixty (60) inches or more.

Included with this soil in mapping are small areas of well drained Canton and Charlton soils; moderately well drained Woodbridge soils; and poorly drained Leicester soils. Included areas make up about ten percent (10%) of this map unit.

The Sutton soil has a seasonal high water table at a depth of about eighteen (18) inches. Permeability is moderate or moderately rapid. The available water capacity is moderate. Runoff is medium. Sutton soil warms up and dries out slowly in the spring.

The major limiting factor for community development is the seasonal high water table. On-site septic systems need special design and installation to prevent effluent from seeping to the surface. Foundation drains help to prevent wet basements. Lawns are wet and soggy in the fall and spring. Quickly establishing a plant cover and using mulch, temporary diversions and sediment basins help to control erosion during construction.

SwB -- Sutton fine sandy loam, 2 to 8 percent slopes, very stony -- This nearly level to gently sloping moderately well drained soil is on upland glacial till plains, hills, and ridges. Stones and boulders cover one (1) to eight percent (8%) of the surface. Areas are dominantly irregular in shape.

Typically, this Sutton soil has a very dark grayish brown, fine sandy loam surface layer four (4) inches thick. The subsoil is yellowish brown, dark yellowish brown, and dark brown, mottled fine sandy loam and sandy loam twenty-nine (29) inches thick. The substratum is olive brown, mottled sandy loam to a depth of sixty (60) inches or more.

Included with this soil in mapping are small areas of well drained Canton and Charlton soils; moderately well drained Woodbridge soils; and poorly drained Leicester soils. Included areas make up about ten percent (10%) of this map unit.

The Sutton soil has a seasonal high water table at a depth of about eighteen (18) inches. Permeability is moderate or moderately rapid. The available water capacity is moderate. Runoff is slow or medium. Sutton soil warms up and dries out slowly in the spring.

The major limiting factor for community development is the seasonal high water table. On-site septic systems need special design and installation to prevent effluent from seeping to the surface. Foundation drains help to prevent wet basements. Lawns are wet and soggy in the fall and spring. Quickly establishing a plant cover and using mulch, temporary diversions, and sediment basins to help control erosion during construction.

C. Wetlands on the Site

It was found that the wetlands on the site were substantially correct as flagged in the field. There is the possibility that a small parcel of wetlands exists to the east of stations 262 and 263. A watercourse may exist on Lot 12 between stations 304 and 285. These areas should be re-examined. The north edge of the pond on Lots 10 and 11 is also the wetland boundary and should be shown. The pond dike and outlet structure should be included within the wetland boundaries for all practical purposes as this structure is an integral part of the pond-wetland system. Watercourses within the wetlands should also be shown on the plan map. It appears that the ditch on Lots 36, 26 and 27 will be filled. If this is the proposal then a note to this effect should appear on the plan map. To avoid confusion it is suggested that the boundaries enlarged from the Soil Survey of Tolland County be removed from the 1" = 100' plan map. The information from the consultant soil scientist's high intensity survey and deep test pit report presents a much more accurate representation of actual field conditions on this site. If Soil Survey information is required, a copy of the survey map at a scale of 1" = 1,320' should be included separately.

D. Erosion and Sediment Control

The Erosion and Sediment Control Plan that was submitted is not adequate. The final plans should contain a detailed, specific plan to control erosion and off-site sedimentation. The plan as a minimum must contain a narrative and a map. The plan should also include a checklist for documentation of measure implementation. The Connecticut Guidelines for Soil Erosion and Sediment Control (1985) should be used to develop the plan. The District would appreciate the opportunity to review final plans for adequacy prior to final approval.

E. Open Space, Wetlands, Wildlife Habitat, Other

The dike, outlet structure and emergency spillway should be included in the drainage right-of-way for maintenance purposes.

It appears that the emergency spillway flows frequently. This may be due to an undersized or obstructed pipe. Development of the watershed above the pond will aggrevate this condition. The dike and outlet structure should be inspected, and if necessary brought up to current standards by the developer as a condition of approval.

The dike, pond and adjacent wetlands should be owned by a single individual or group (preferably the town(s) or a land trust or a homeowners association). If a single lot owner has the maintenance responsibility for the pond structure and fails to make improvements or if multiple owners fail to agree on sharing repair costs, the result may be draining of the pond which will negatively affect other lot owners as well as the integrity of the wetland system.

The wildlife habitat value of this pond-marsh-swamp system is excellent. This system includes portions of proposed Lots 8, 9, 10, 11, 25, 26, and 27. The Towns of Coventry and Tolland should consider utilizing the open space

requirements of their respective regulations to preserve and maintain this valuable area as a unit under single ownership. Preservation of this wetland should be a high priority. The use of local land trusts, conservation easements with deed restrictions, or joint municipal ownership can be utilized. This may require some realignment of lot lines or combining lots.

Homesite locations on Lots 5, 6, 8, 9, 11, 12, 13, 14, 15, 20, 24, 26, 27, 32, and 35 place potential houses within fifty (50) feet of wetland boundaries. Five (5) lots (15, 20, 26, 27 and 32) have homes proposed closer than fifty feet (50'). Future lot owners may choose to alter the wetlands on their property which collectively can result in extensive alteration of wetlands on the parcel. The Wetland Commission should anticipate these activities and evaluate the collective impacts when considering this proposal. It is not known if any data exists on the extent to which lot owners alter wetlands on subdivided land. The DEP Wetlands Unit may have some information on this. In Tolland County several cases of extensive alterations of wetlands within subdivisions have been observed by the District.

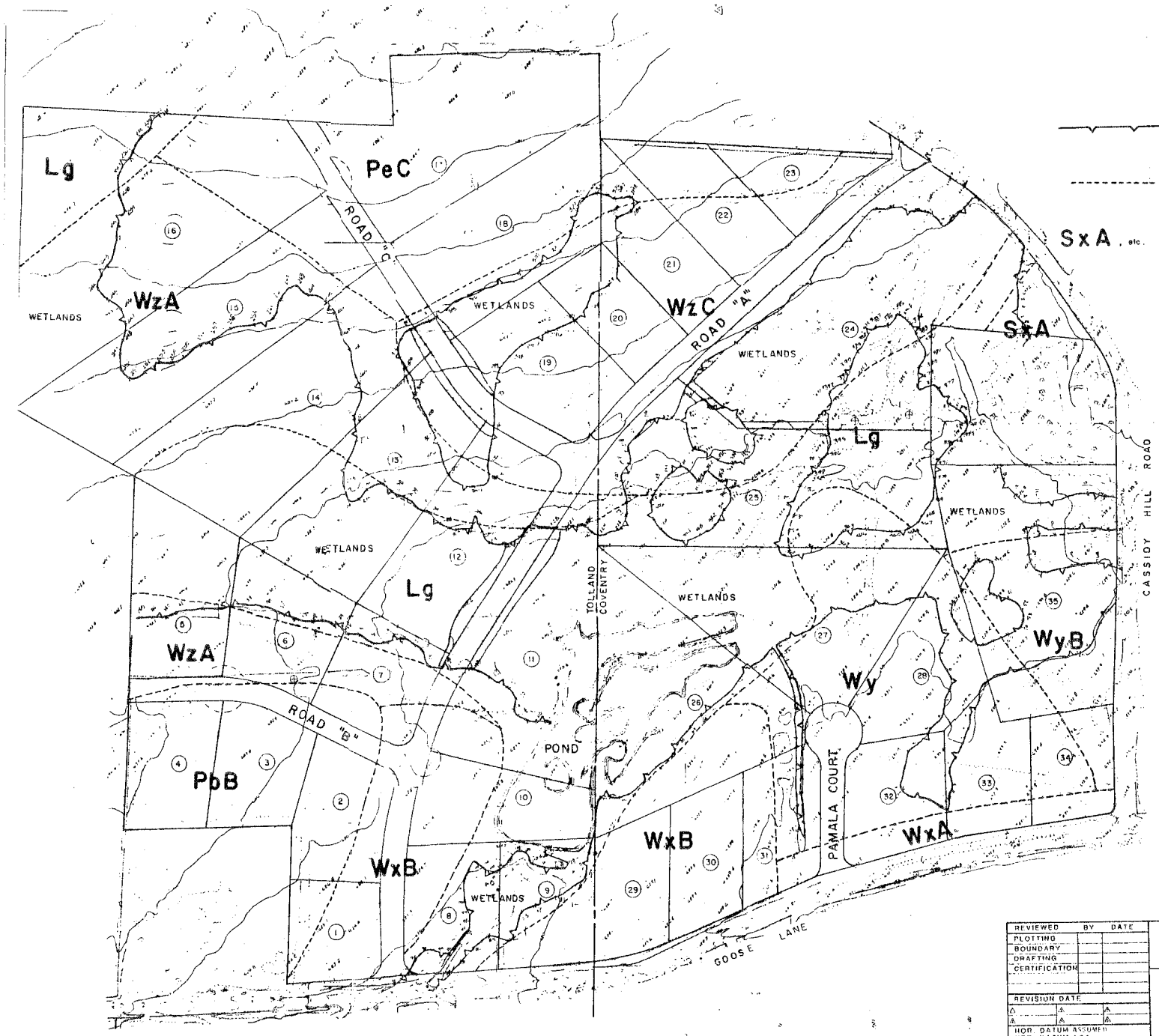
IX. FISH RESOURCES

The seventy (70) acre proposed development site contains a small approximately two (2) acre pond with two (2) small tributary streams and an outlet stream. The outlet stream flows a half mile before emptying into the Skungamaug River. The pond appears in good condition, but is in need of maintenance. The outlet pipe is partially blocked and trees are growing on the dam.

The pond likely supports largemouth bass, sunfish and shiner populations. The streams feeding the pond are too small to support fish. The outlet stream likely supports brook trout and white suckers, at least on a seasonal basis.

The pond is best suited for a largemouth bass and bluegill sunfish fishery. Several measures should be taken to protect and maintain the pond:

1. Clear debris from outlet pipe
2. Remove trees rooted in the dam
3. Prevent erosion and sediment into pond tributary streams
4. Do not fertilize near pond or streams



LEGEND

WETLANDS SHOWN AS FIELD LOCATED BY "SOIL SCIENCE SERVICES", COLEMAN ROAD, CHESHIRE, CT. SEE SHEET NO 14 FOR LETTER.

APPROXIMATE SOIL CLASSIFICATION BOUNDARY SCALED FROM "SOIL SURVEY, TOLLAND COUNTY, CT" DEC. 1966.

SOIL TYPE DESIGNATION

TOLLAND WETLANDS DATA

TOTAL AREA = 16.4± AC.

TOTAL AREA REQUESTED TO BE FILLED = 1.2± AC.

COVENTRY WETLANDS DATA

TOTAL AREA = 13.5± AC

TOTAL AREA REQUESTED TO BE FILLED = 0.3± AC.

ALL LOTS CONTAIN 40,000 S.F. MIN AREA EXCLUSIVE OF WEDLANDS AND FLOODING

REVIEWED	BY	DATE
PLOTTING		
BOUNDARY		
DRAFTING		
CERTIFICATION		
REVISION DATE		
HOR. DATUM ASSUMED VER. DATUM USGS		

FUSS & O'NEILL
CONSULTING ENGINEERS
MANCHESTER, CONNECTICUT

TOPOGRAPHIC PLAN
PROPOSED SUBDIVISION
"THE GROVE"
APPLICANT: C & A DEVELOPMENT
GOOSE LANE TOLLAND/COVENTRY, CON

SCALE: HOR. 1 IN = 100 FT. VER. | DATE | FILE NO. | PROJECT | SHEET NO 13 OF

X. PLANNING REVIEW

A. Compliance With Plans

1. State Plan of Conservation and Development

The State of Connecticut's Conservation and Development Policies Plan 1982-1985, recommends the area in which this subdivision lies for "Rural" land use, as shown in the plan's Locational Guide Map.

Policies which pertain to this area include avoiding development forms and intensities which exceed on-site carrying capacity for water supply and sewage disposal on a permanent basis, which are inconsistent with open rural character or conservation values of adjacent areas or which are more appropriately located in Rural Community Centers.

2. Regional Plan

The portion of the proposed subdivision in Coventry Falls within an area recommended for low density rural land uses in the Windham Region's "Regional Growth and Preservation Guide Plan".

The WRPA has forwarded comments on the subdivision which determined that the residential use proposed in the subdivision plan would be in compliance with the regional plan of development, but the lack of open space and density of development proposed would not be in compliance with the plan. The regional plan recommends two (2) acre lots as a minimum, to ensure indefinite functioning of on-site septic disposal and water supply; one (1) acre lots, however, are generally proposed in this subdivision, inconsistent with the regional plan. Open space or recreation areas are recommended to be incorporated into the plan, especially around the existing pond.

Refer to WRPA Referral Number 86-31-TD for further technical comments regarding the proposal.

3. Coventry Plan of Development

Coventry's Plan of Development, December 15, 1978, recommends the area included in this subdivision, within Coventry, for "Rural Density Residential" land uses with some open space along the wetland area seemingly included in proposed lot Numbers 24, 25, and 27, to the pond.

The town's plan adopts the following goals and objectives for new residental development: to be based on physical resource capabilities of the land; to minimize drainage, waste disposal, water supply, flooding and traffic hazards; to encourage a range of housing types, innovative design, especially cluster developments, and the development of internal roads and common driveways. (Page 7)

The Coventry Planning and Zoning Commission determines compliance with its plan.

The key issue regarding the suitability of the site for the proposed project is the presence of a high percentage of wetlands. The developer has identified approximately thirty (30) acres of wetlands which represents over forty percent (40%) of the site. From a planning perspective, this high percentage of wetlands play a major role in dictating subdivision design components such as site access and lot layout.

4. Transportation Plans

A great deal of the traffic generated by The Grove Subdivision will enter and exit Goose Lane at the Route 195 intersection.

The state's 1985 Master Transportation Plan calls for a major improvement at this intersection for which funding is currently in place; this intersection is currently being improved in conjunction with another development taking place. The Town of Coventry has also recognized the need to improve traffic flow at the Goose Lane/Merrow Road intersection by proposing in the regional transportation plan, a new road connecting Broadway with Goose Lane.

B. Site Assessment

The proposed subdivision streets basically do not impinge upon wetlands with the exception of two (2) crossing points. Road "A" (connects Goose Lane and Cassidy Hill Road) and Cul-de-sac Road "C" both would require the filling of a small amount of wetlands if constructed as proposed. On the day of the ERT site visit, there was considerable surface water present at the point Road "A" would cross the wetland area to the northeast of the pond. It appeared that the water level of the pond was quite high following a day of heavy rain. The drainage outlet of the pond, a pipe at the western end, was clogged with debris. The high water level at the wetland crossing point of Road "A" on the day of the site visit can likely be attributed to overflow from the pond due to the clogged outlet.

A recommendation regarding this problem is that provision be made to maintain the pond outlet in working order both during and after construction. Maintaining a normal water level in the pond should ameliorate flooding problems at the point Road "A" will cross the wetland. However, a substantial amount of fill will be required to insure that the road's base is well drained. Also, adequate drainage underneath the road should be accommodated via a culvert to prevent flooding to the north.

Since the pond is currently the site's major storm water retention basin and because it will likely have to handle additional runoff due to the development; a closer look should be taken at the pond outlet to determine if it should be upgraded to allow better control of the flow of water or increased capacity if necessary.

Conditions present during the site visit suggested that there should not be much problem associated with Road "C" across the wetland area.

The following is a list of issues which should be addressed in the subdivision plan:

Open Space

Lots 9, 10, 11, 26 and 27 share ownership of the pond on the site in the proposed plan. Shared ownership of a waterbody and the island (shown as owned by lots 10, 11, and 26) within it should be avoided.

From a use and design perspective, the pond and island would best be kept in open space for common use and enjoyment of all the residents of The Grove Subdivision. The pond is an important asset to the site both in terms of its scenic beauty and in respect to its functions as a storm water retention basin. Besides providing a buffer to avoid flooding of private lots, open space around the pond would also create a passive recreational amenity for other residents of the subdivision.

A homeowner's association could be formed to manage and maintain the recreation area which could be owned by all the property owners in common.

C. Lot Layout

1. Tolland

The lot layout of "The Grove" is characterized by smaller lots (approximately one (1) acre) on drier portions of the site and larger lots (2-3+ acres) over portions of the site which have a high percentage of wetlands. A major concern is that several of the proposed lots are located primarily within wetlands and provide very little "buildable" area. "Buildable" refers to land suitable for constructing foundations for homes or on-site septic systems.

The Developer notes on the site plan, that all lots in Coventry contain at least 40,000 square feet of area exclusive of wetlands and flood prone areas as required by Coventry Regulations. However, several of the proposed lots in Tolland appear to provide considerably less than 40,000 square feet of "buildable" area. Should these lots be developed and then experience a septic system failure, they would offer very little additional area suitable for construction of a new septic system. This issue could probably be better addressed by the Tolland Sanitarian.

It is suggested that the Tolland Town Planner and Town Sanitarian take a close look at proposed lots 5, 6, 8, 9, 12, 13 and 14. A slight reduction in the number of proposed lots or slight alteration of the proposed location of Roads "B" and "C" could increase the amount of "buildable" area for several of these lots in question.

Although the proposed lot layout may meet Tolland Subdivision requirements, it clearly would be in the best interest of the town to promote a configuration which maximizes the amount of "buildable" land per lot. This would allow greater opportunity to site homes in the most aesthetically and energy efficient location within the given lot.

2. Coventry

A few of the proposed lots do not seem to meet minimum zoning requirements. Lot 10 contains 1.30 acres but about half of that area appears to be the pond. The land area, therefore, amounts to only about two-thirds (2/3) of an acre, less than Tolland's one (1) acre minimum required.

Lot 23 contains only 0.83 acres, less than Coventry's 40,000 square feet requirement.

Lot 20 contains 0.68 acres in Coventry and 0.33 acres in Tolland. While the total lot contains 1.01 acres in total, it does not meet the minimum zoning requirement of one (1) acre in either town. Legal counsel should be consulted, but a variance from each town's Zoning Board Of Appeals may be necessary.

A deed restriction should be considered on Lot 20 to require that the entire house or any additions built to it should fall entirely within one (1) town or the other. This provision could prevent a problem, prevalent in more urban communities, where one (1) child's bedroom is located in one community while a sibling's is located in the other and each attends school in the community in which they reside (sleep)!!!

--Do the proposed lots and their house and septic locations including or abutting wetlands, meet the minimum setback requirements from wetlands?

--Do the lots with frontage on the proposed cul-de-sacs contain adequate road frontage?

--An erosion and sedimentation control plan must be submitted detailing control methods for the development of this parcel.

--Proposed road names of Deer, Pheasant and Fox Run and Pam Street should be reviewed by fire and police for duplication or approximation in both Tolland, Coventry and adjoining towns.

--Confusion in responding to emergency response calls could result. Deer Run, in particular, has already been over used in the region. A 50+ lot subdivision and road in Willington are already named Deer Run.

--Adequate right-of-way should be made available on Goose Lane. In doing so, will lots fronting on this road be reduced in size to fall below the minimum zoning requirement?

D. Solar Considerations

Section 8-25(b) of the Connecticut General Statutes requires according to a recent Attorney General opinion, that subdivision regulations "must include the requirement that solar energy techniques have been considered by the person submitting a plan...". Coventry's subdivision regulations requires this in section 1.10.

Evidence of passive solar design and/or house siting location considerations should be presented on the subdivision plans by the developer.

E. Population Impact

This proposed subdivision of thirty-five (35) house lots can be expected, if developed with single family homes to house thirty-five (35) families.

Lots 1 through 19 are located in Tolland and lots 20 through 35 are located in Coventry, resulting in nineteen (19) new families for Tolland and sixteen (16) new families in Coventry.

According to the 1980 U. S. Census Coventry's average family size was 3.34 persons per family and Tolland's was 3.57.

If "The Grove's" new houses are occupied by "average families", Coventry will have fifty-four (54) new residents and Tolland sixty-eight (68) new residents.

Coventry's 1980 population was 8,895 and Tolland's was 9,694. Population estimates as of July 1, 1985 by the Connecticut Department of Health Services indicates Coventry has 9,180 residents and Tolland 10,370.

An average of 1.4 school aged children* can be anticipated per three (3) to four (4) bedroom single family home or about twenty-seven (27) new students for Tolland's school system and about twenty-three (23) for Coventry.

F. Traffic Impacts

The proposed subdivision can be expected to generate about ten (10) vehicle trips per week day per single family dwelling. (Trip Generation, ITE, 1983), or a total of 350 vehicle trips per day for the development.

Ultimately, the number of trips will depend upon the size and price of homes constructed, the age and economic class of residents, the number of vehicles they own, the price of gasoline, where or if the residents work, among many other factors.

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*New Jersey County and Municipal Governmental Study Commission, Housing Suburbs, Fiscal and Social Impact of Multi-family Development

A traffic counter, supplied by the Transportation Institute at the University of Connecticut, was placed by WRPA staff on Goose Lane along the subdivision frontage at CL&P utility pole number 30279 to sample existing traffic volume on the road. Data gathered from this counter is attached.

While only one (1) full day's worth of counts and two (2) additional partial days were taken due to inclement weather conditions prior to the due date of this report, the limited data available does provide some insights into the traffic patterns which currently exist on Goose Lane.

The peak morning traffic volume period occurs between 6:30 and 7:30 a.m., typical of work and school trips; the late afternoon peak hour appears between 4:45 and 6:30 p.m., also relfecting commuters bound for home from work. Approximately ten percent (10%) of the vehicle trips on the road occur at each of these peak hours.

The 350 new vehicle trips added to local roads by "The Grove" will likewise be distributed throughout the day.

Transportation Institute
15 MINUTE, 2 CHANNEL VEHICLE COUNT
CORRECTION FACTOR: 1.00

REFERENCE: 1
LOCATION: Goose Lane Coventry, CT
WEATHER: Mixed
OPERATOR: WRPA

FILENAME: COV1124D
MONDAY 11 / 24 / 86

HOUR BEGINS	North 0	15	30	45	HOUR TOTAL	South 0	15	30	45	HOUR TOTAL	COMBINED TOTAL
AM											
12	*	*	*	*	*	*	*	*	*	*	*
1	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	7	7	*	*	*	0	0	7
10	3	3	5	5	16	1	2	3	2	8	24
11	7	4	4	5	20	2	3	2	3	10	30
PM											
12	9	7	1	5	22	1	4	0	1	6	28
1	7	9	6	4	26	1	2	3	3	9	35
2	9	4	7	4	24	1	1	0	3	5	29
3	5	4	8	4	21	5	3	6	4	18	39
4	2	5	4	7	18	11	4	6	8	29	47
5	6	5	10	2	23	6	8	6	9	29	52
6	6	4	6	6	22	3	5	6	5	19	41
7	2	2	1	2	7	5	2	6	3	16	23
8	4	2	2	6	14	3	3	1	3	10	24
9	1	2	3	2	8	2	2	3	0	7	15
10	2	1	1	0	4	1	1	0	0	2	6
11	0	0	0	0	0	1	1	1	1	4	4
TOTALS					232					172	404

AM PEAK HOUR IS 10:30 TO 11:30

VOLUME	North:	21	South:	10	COMBINED: 31
DIRECTIONAL SPLIT		68%		32%	
PEAK HOUR FACTOR		0.75		0.83	0.86

PM PEAK HOUR IS 4:45 TO 5:45

VOLUME	North:	28	South:	28	COMBINED: 56
DIRECTIONAL SPLIT		50%		50%	
PEAK HOUR FACTOR		0.70		0.88	0.88

Transportation Institute
15 MINUTE, 2 CHANNEL VEHICLE COUNT
CORRECTION FACTOR: 1.00

REFERENCE: 1
LOCATION: Goose Lane Coventry, CT
WEATHER: Mixed
OPERATOR: WRPA

FILENAME: COV1124D
TUESDAY 11 / 25 / 86

HOUR BEGINS	North 0	15	30	45	HOUR TOTAL	South 0	15	30	45	HOUR TOTAL	COMBINED TOTAL
AM											
12	1	2	0	0	3	2	1	2	0	5	8
1	0	1	0	0	1	0	1	0	0	1	2
2	0	0	0	0	0	0	0	0	0	0	0
3	1	0	0	0	1	0	0	1	0	1	2
4	0	1	0	1	2	0	0	0	0	0	2
5	0	2	0	6	8	0	0	0	1	1	9
6	12	14	19	14	59	0	0	2	1	3	62
7	13	14	8	7	42	0	5	2	1	8	50
8	8	5	6	10	29	2	3	0	5	10	39
9	6	4	3	4	17	0	2	1	2	5	22
10	4	5	4	2	15	4	3	0	1	8	23
11	5	6	2	4	17	7	2	3	1	13	30
PM											
12	5	6	5	4	20	4	2	3	2	11	31
1	8	7	7	5	27	5	3	5	2	15	42
2	7	5	7	7	26	5	2	4	5	16	42
3	7	5	3	6	21	4	1	4	11	20	41
4	3	8	4	12	27	4	7	11	8	30	57
5	5	5	12	4	26	7	6	6	5	24	50
6	10	6	6	2	24	11	11	8	6	36	60
7	7	5	4	2	18	1	5	6	5	17	35
8	6	7	5	6	24	2	3	3	4	12	36
9	7	2	3	3	15	3	4	3	3	13	28
10	10	2	1	1	14	0	1	2	1	4	18
11	1	0	1	0	2	0	0	1	1	2	4
TOTALS					438					255	693

AM PEAK HOUR IS 6:30 TO 7:30

VOLUME	North:	60	South:	8	COMBINED: 68
DIRECTIONAL SPLIT		88%		12%	
PEAK HOUR FACTOR		0.79		0.40	0.81

PM PEAK HOUR IS 5:30 TO 6:30

VOLUME	North:	32	South:	33	COMBINED: 65
DIRECTIONAL SPLIT		49%		51%	
PEAK HOUR FACTOR		0.67		0.75	0.77

Transportation Institute
15 MINUTE, 2 CHANNEL VEHICLE COUNT
CORRECTION FACTOR: 1.00

REFERENCE: 1
LOCATION: Goose Lane Coventry, CT
WEATHER: Mixed
OPERATOR: WRPA

FILENAME: COV1124D
WEDNESDAY 11 / 26 / 86

HOUR BEGINS	North 0	15	30	45	HOUR TOTAL	South 0	15	30	45	HOUR TOTAL	COMBINED TOTAL
AM											
12	1	0	1	2	4	0	2	0	1	3	7
1	0	0	0	0	0	2	0	0	0	2	2
2	1	0	0	0	1	0	2	0	0	2	3
3	0	0	1	0	1	0	0	0	0	0	1
4	0	1	0	1	2	0	0	1	0	1	3
5	1	0	2	7	10	0	0	0	0	0	10
6	10	11	13	18	52	0	0	2	1	3	55
7	15	15	4	4	38	0	1	1	1	3	41
8	7	9	5	5	26	2	2	7	1	12	38
9	1	2	3	5	11	2	1	1	4	8	19
10	2	5	5	3	15	1	0	0	1	2	17
11	3	1	1	3	8	1	4	4	2	11	19
PM											
12	2	2	6	6	16	6	1	1	2	10	26
1	13	3	6	5	27	4	6	4	3	17	44
2	3	2	2	10	17	3	5	2	2	12	29
3	0	*	*	*	0	0	*	*	*	0	0
4	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*	*
10	*	*	*	*	*	*	*	*	*	*	*
11	*	*	*	*	*	*	*	*	*	*	*
TOTALS					228					86	314

AM PEAK HOUR IS 6:30 TO 7:30

	North:	South:	COMBINED:
VOLUME	61	4	65
DIRECTIONAL SPLIT	94%	6%	
PEAK HOUR FACTOR	0.85	0.50	0.86

PM PEAK HOUR IS 12:45 TO 1:45

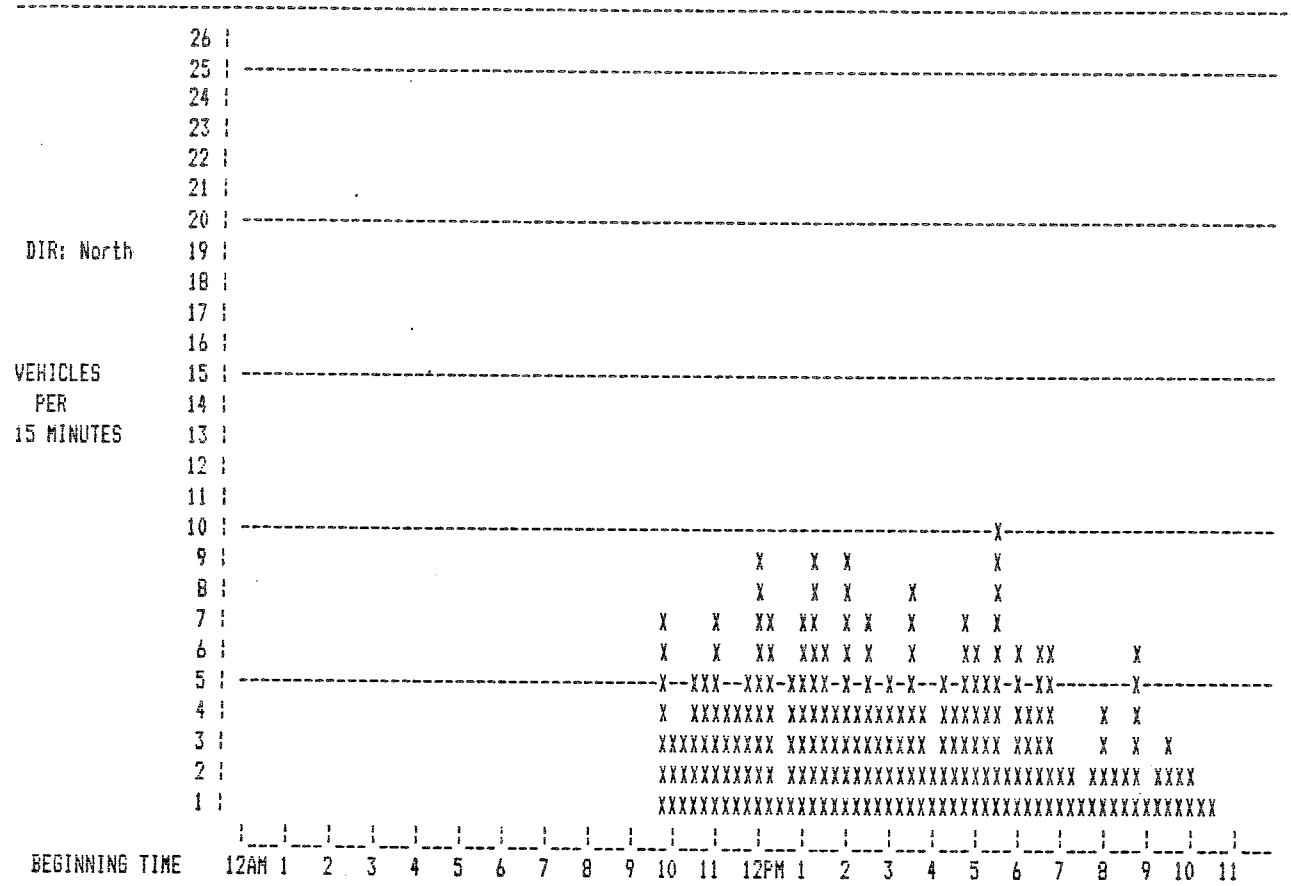
	North:	South:	COMBINED:
VOLUME	28	16	44
DIRECTIONAL SPLIT	64%	36%	
PEAK HOUR FACTOR	0.54	0.67	0.65

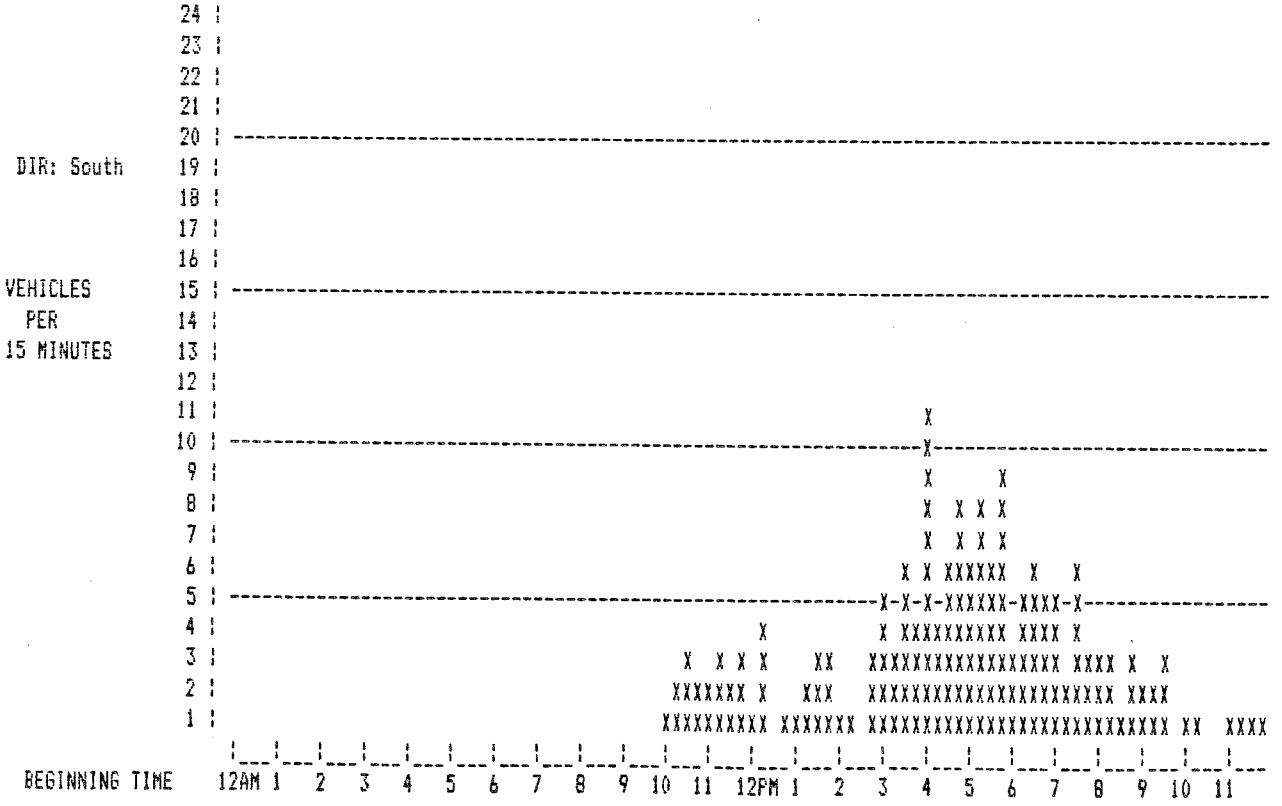
Transportation Institute
2 CHANNEL, 15 MINUTE VOLUME PLOT

REFERENCE: 1
LOCATION: Goose Lane Coventry, CT
WEATHER: Mixed
OPERATOR: WRPA

FILENAME: COV1124D

MONDAY 11 / 24 / 86



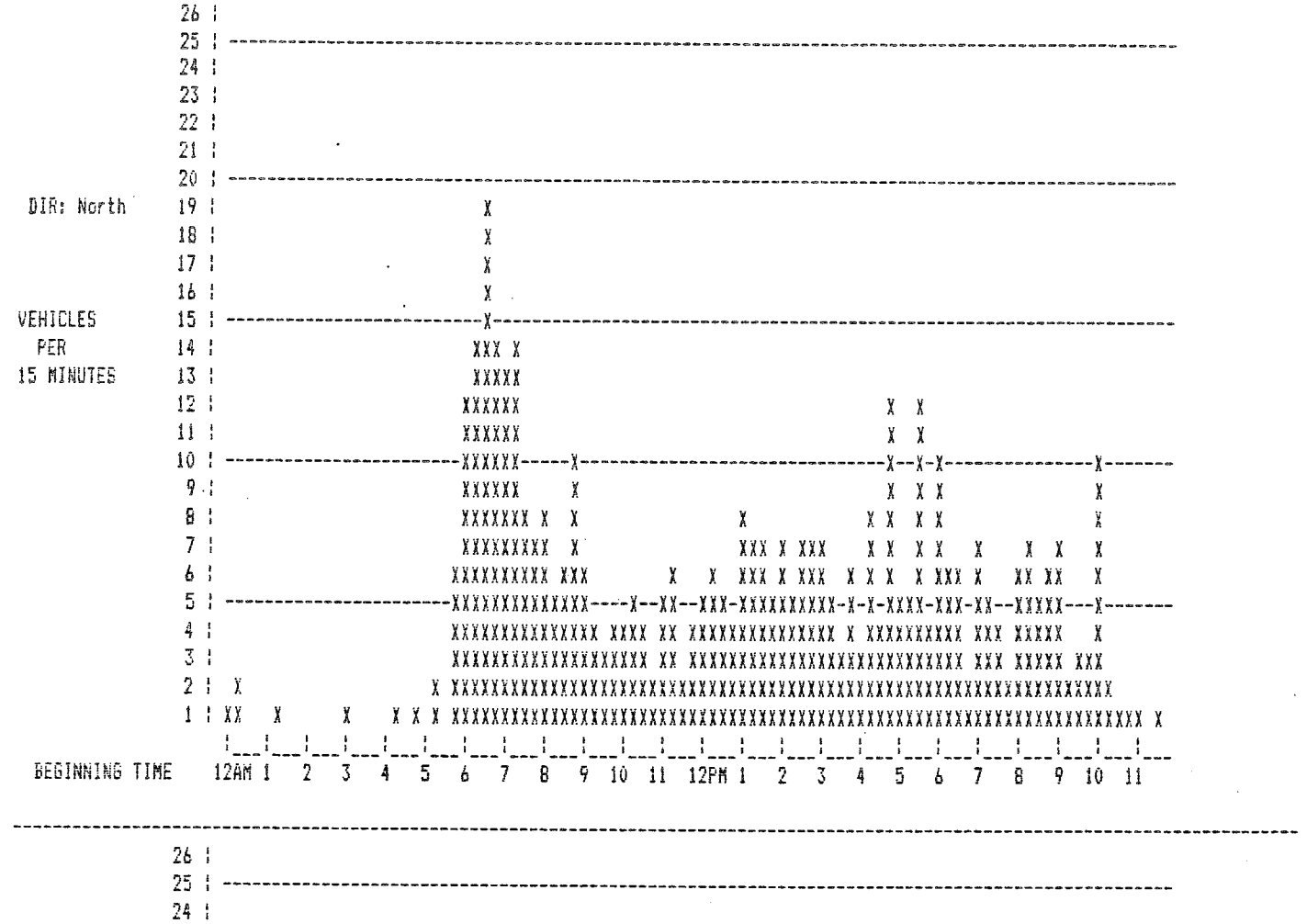


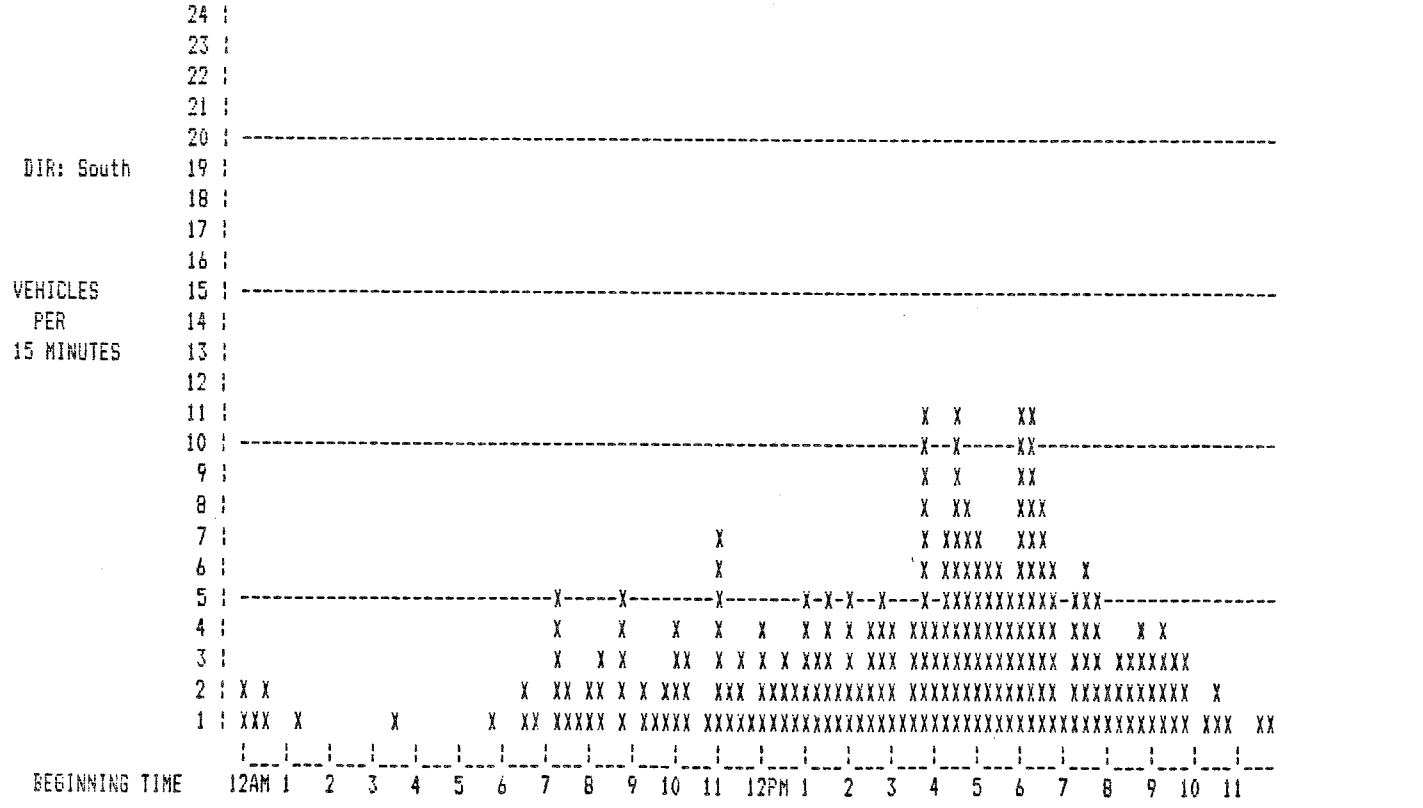
Transportation Institute
2 CHANNEL, 15 MINUTE VOLUME PLOT

REFERENCE: 1
LOCATION: Goose Lane Coventry, CT
WEATHER: Mixed
OPERATOR: WRPA

FILENAME: COV1124D

TUESDAY 11 / 25 / 86



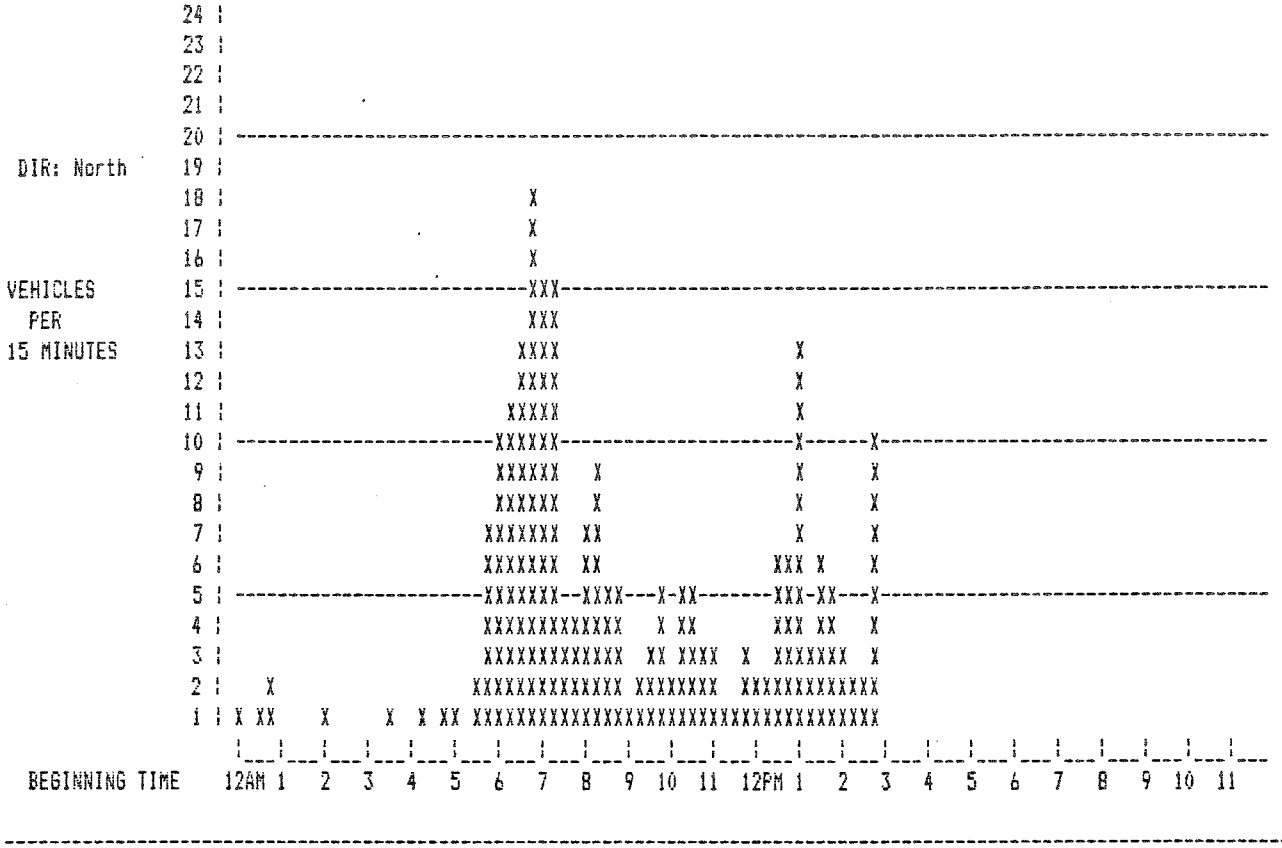


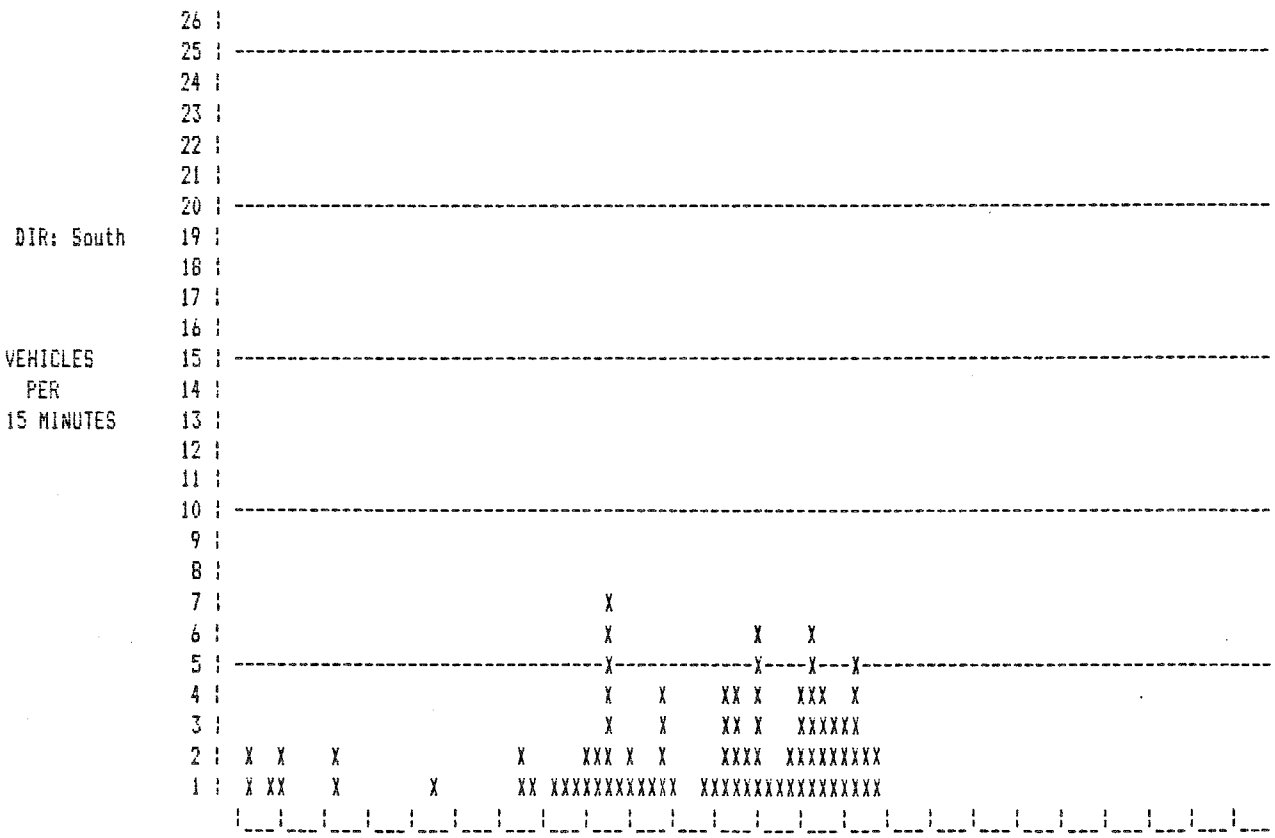
Transportation Institute
2 CHANNEL, 15 MINUTE VOLUME PLOT

REFERENCE: 1
LOCATION: Goose Lane Coventry, CT
WEATHER: Mixed
OPERATOR: WRPA

FILENAME: COV1124D

WEDNESDAY 11 / 26 / 86





Transportation Institute
HOURLY, 2 CHANNEL VEHICLE COUNT
CORRECTION FACTOR: 1.00

REFERENCE: 1
LOCATION : Goose Lane Coventry, CT
WEATHER : Mixed
OPERATOR : WRPA

FILENAME: COV1124D
WEEK OF MONDAY 11 / 24 / 86

HOUR BEGINS	MONDAY 24 N	MONDAY 24 S	TUESDAY 25 N	TUESDAY 25 S	WEDNESDAY 26 N	WEDNESDAY 26 S	THURSDAY 27 N	THURSDAY 27 S	FRIDAY 28 N	FRIDAY 28 S	SATURDAY 29 N	SATURDAY 29 S	SUNDAY 30 N	SUNDAY 30 S	WEEKDAY AVERAGE N	WEEKDAY AVERAGE S
12 AM	*	*	3	5	4	3	*	*	*	*	*	*	*	*	4	4
1	*	*	1	1	0	2	*	*	*	*	*	*	*	*	1	2
2	*	*	0	0	1	2	*	*	*	*	*	*	*	*	1	1
3	*	*	1	1	1	0	*	*	*	*	*	*	*	*	1	1
4	*	*	2	0	2	1	*	*	*	*	*	*	*	*	2	1
5	*	*	8	1	10	0	*	*	*	*	*	*	*	*	9	1
6	*	*	59	3	52	3	*	*	*	*	*	*	*	*	56	3
7	*	*	42	8	38	3	*	*	*	*	*	*	*	*	40	6
8	*	*	29	10	26	12	*	*	*	*	*	*	*	*	28	11
9	*	*	17	5	11	8	*	*	*	*	*	*	*	*	14	7
10	16	8	15	8	15	2	*	*	*	*	*	*	*	*	15	6
11	20	10	17	13	8	11	*	*	*	*	*	*	*	*	15	11
12 PM	22	6	20	11	16	10	*	*	*	*	*	*	*	*	19	9
1	26	9	27	15	27	17	*	*	*	*	*	*	*	*	27	14
2	24	5	26	16	17	12	*	*	*	*	*	*	*	*	22	11
3	21	18	21	20	*	*	*	*	*	*	*	*	*	*	21	19
4	18	29	27	30	*	*	*	*	*	*	*	*	*	*	23	30
5	23	29	26	24	*	*	*	*	*	*	*	*	*	*	25	27
6	22	19	24	36	*	*	*	*	*	*	*	*	*	*	23	28
7	7	16	18	17	*	*	*	*	*	*	*	*	*	*	13	17
8	14	10	24	12	*	*	*	*	*	*	*	*	*	*	19	11
9	8	7	15	13	*	*	*	*	*	*	*	*	*	*	12	10
10	4	2	14	4	*	*	*	*	*	*	*	*	*	*	9	3
11	0	4	2	2	*	*	*	*	*	*	*	*	*	*	1	3
TOTALS	225	172	438	255	228	86	*	*	*	*	*	*	*	*	400	236

COMBINED TOTALS

12	*	8	7	*	*	*	*	8
1	*	2	2	*	*	*	*	3
2	*	0	3	*	*	*	*	2
3	*	2	1	*	*	*	*	2
4	*	2	3	*	*	*	*	3
5	*	9	10	*	*	*	*	10
6	*	62	55	*	*	*	*	59
7	*	50	41	*	*	*	*	46
8	*	39	38	*	*	*	*	39
9	*	22	19	*	*	*	*	21
10	24	23	17	*	*	*	*	21
11	30	30	19	*	*	*	*	26
12	28	31	26	*	*	*	*	28
1	35	42	44	*	*	*	*	41
2	29	42	29	*	*	*	*	33
3	39	41	*	*	*	*	*	40
4	47	57	*	*	*	*	*	53
5	52	50	*	*	*	*	*	52
6	41	60	*	*	*	*	*	51
7	23	35	*	*	*	*	*	30
8	24	36	*	*	*	*	*	30
9	15	28	*	*	*	*	*	22
10	6	18	*	*	*	*	*	12
11	4	4	*	*	*	*	*	4
TOTALS	397	693	314	*	*	*	*	636

About The Team

The Eastern Connecticut Environmental Review Team (ERT) is a group of professionals in environmental fields drawn together from a variety of federal, state, and regional agencies. Specialists on the Team include geologists, biologists, foresters, climatologists, soil scientists, landscape architects, archeologists, recreation specialists, engineers and planners. The ERT operates with state funding under the supervision of the Eastern Connecticut Resource Conservation and Development (RC&D) Area--an 86 town area.

The Team is available as a public service at no cost to Connecticut towns.

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 reviewing a wide range of projects including subdivisions, sanitary landfills, commercial and industrial developments, sand and gravel operations, elderly housing, recreation/open space projects, watershed studies and resource inventories.

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 officials of a municipality or the chairman of town commissions such as planning and zoning, conservation, inland wetlands, parks and recreation or economic development. Requests should be directed to the Chairman of your local Soil and Water Conservation District. This request letter should include a summary of the proposed project, a location map of the project site, written permission from the landowner allowing the Team to enter the property for purposes of review, a statement identifying the specific areas of concern the Team should address, and the time available for completion of the ERT study. When this request is approved by the local Soil and Water Conservation District and the Eastern Connecticut RC&D Executive Council, the Team will undertake the review on a priority basis.

For additional information regarding the Environmental Review Team, please contact Elaine A. Sych (774-1253), Environmental Review Team Coordinator, Eastern Connecticut RC&D Area, P.O. Box 198, Brooklyn, Connecticut 06234.