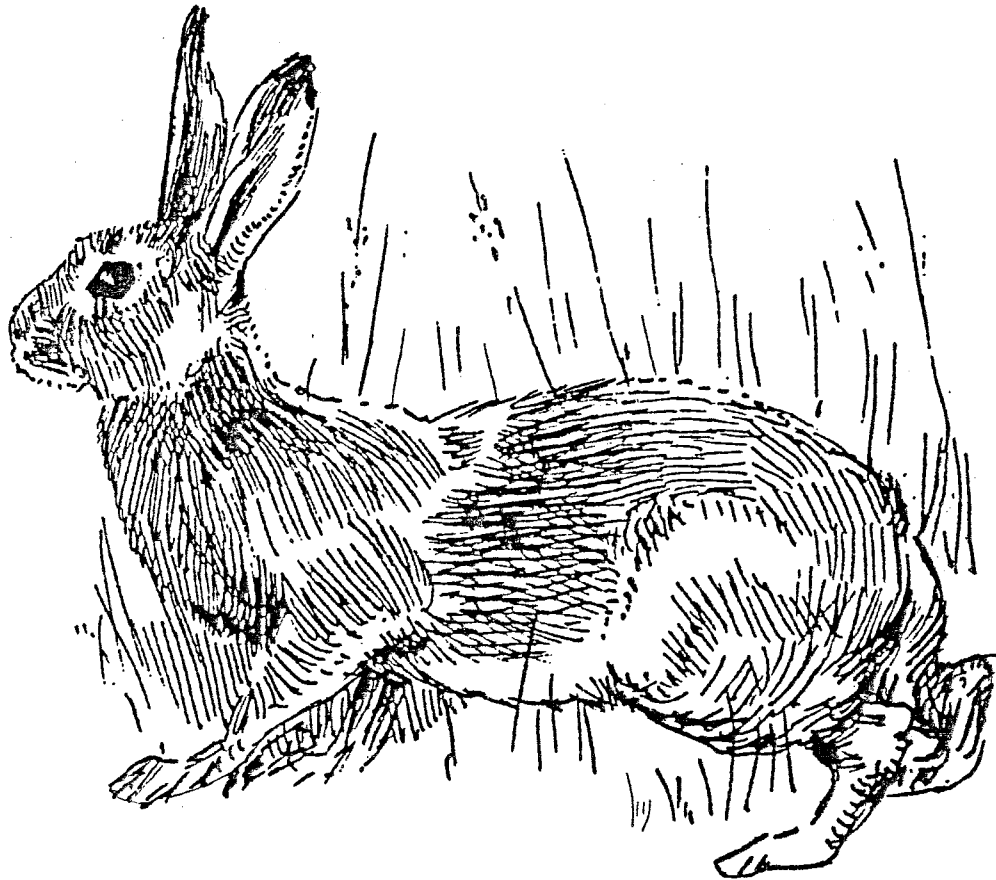


**KING'S MARK  
ENVIRONMENTAL REVIEW TEAM**



**REPORT FOR  
CASTLE LANE SUBDIVISION  
ANSONIA, CONNECTICUT**

CASTLE LANE SUBDIVISION

ANSONIA, CONNECTICUT

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

Ansonia 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 Inland Wetlands Commission and the City. 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.

JULY 1988

## ACKNOWLEDGMENTS

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

- \* William Warzecha, Hydrogeologist  
Department of Environmental Protection - Natural Resource Center
- \* Patricia Leavenworth, District Conservationist  
USDA - Soil Conservation Service
- \* Daniel Mayer, Inland Wetland Specialist  
Department of Environmental Protection - Water Resources Unit
- \* Robert Frey, Regional Planner  
Valley Regional Planning Agency
- \* Kevin O'Mara, Traffic Planner
- \* Valley Regional Planning Agency

I would also like to thank Susan Anderson, Secretary for the King's Mark Environmental Review Team for assisting in the completion of this report.

Finally, special thanks to William Urban, Chair, Ansonia Inland Wetlands Commission, James Connery, investor/partner, and Ray Roberts, engineer for DeCarlo & Doll, for their cooperation and assistance during this environmental review.

## EXECUTIVE SUMMARY

### Introduction

The Ansonia Inland Wetlands Commission has requested that an environmental review be conducted on Castle Lane, a site proposed for a subdivision development. The site is located in the northcentral portion of town, near the Town of Seymour. Access is provided via Castle Lane and Granite Terrace in Ansonia.

The 13.8-acre site is characterized by second growth, mixed hardwood forests, steep slopes and rock outcrops. The soils are very rocky. Off site, at the base of the slope, is a town park where Colony Pond and its associated wetlands are located. A dirt path containing the right-of-way for the sewer line crosses the property. The site is currently used by hikers and trail bikes.

The proposed subdivision would encompass 24 house lots. Extensive cuts and fills will be needed. A single road is proposed to serve the subdivision and will connect Castle Lane with Granite Terrace. The subdivision would rely upon municipal sewers and water.

The City was primarily concerned with the potential impact that the proposed development would have on: (1) downslope wetland corridors; (2) effects of erosion and sedimentation; (3) stormwater drainage; and (4) site design compatibility. Therefore the City asked the ERT to inventory on-site resources and determine their suitability for the proposed development.

The review process consisted of four phases: (1) inventory of the site's natural resources; (2) assessment of these resources; (3) identification of resource problem areas; and (4) presentation of planning and land use guidelines. Based on the review process, specific resources, areas of concern and development limitations and opportunities were identified. The major findings of the ERT are presented below:

### Setting and Land Use

Land use surrounding the site includes Abe Stone Park, residential development and undeveloped woodland. An extension of the Ansonia municipal sewer runs through the property. The site is cleared of vegetation along the sewer line and large boulders are stockpiled along the edges. The site is located within an RA zone which has a 12,500 square feet minimum lot size. The site flanks a rock-cored hill. Rock outcrops occur along the western limits. Bedrock controlled slopes range from moderate to steep.

### Geology

The bedrock on the site has been identified as Prospect Gneiss. Gneisses are metamorphic rocks with strong layering. The rock core of the hill, east of the site, has been intruded by a light colored gneiss. The depth to bedrock is unknown but should be shallow throughout. The surficial geologic materials are called till. The texture of the till is mostly loose and sandy. Many large boulders are found on the property. The till was deposited by glacial ice. It is 10 feet thick or less in most places.

## Geologic Development Concerns

The site is to be served by municipal water and sewer facilities. Therefore, the major hydrogeologic concerns associated with development of on site facilities should be allayed. The applicant should obtain letters from the water authority and sewage treatment plant that say that these facilities can handle the expected flows.

Shallow bedrock on the site may require blasting. Blasting should be done with the state-of-the-art technology due to the high density residential land use. The major concerns would be flyrock, ground vibrations, air-blast, dust and gases. A pre-blast survey is highly recommended and a thorough blasting record should accompany the survey. Some methods that can be used to reduce the potential environmental impacts of the blasting include blasting to an open face, multiple small charge blasting and use of a millisecond delay between detonations. This will depend on the blasting requirements of the site. Some of the driveways may need blasting to lessen the slopes. The blasting will raise the cost of building these lots.

Due to the steep slopes and the location on the north side of a hill, driveways may experience winter icing conditions. Careful planning should address this concern. On the steeper lots, it may be wise to have a geotechnical engineer study whether or not the unconsolidated materials can support house foundations. The steep slopes will restrict the use of heavy equipment in some areas.

Large surface boulders will result in the disturbance of greater areas of the site. Because of this and the steep slopes, the chance for erosion and siltation problems is great. A detailed soil erosion and sediment control plan is needed and should be enforced by the City.

The City expressed a concern about potential indoor radon levels. According to the maps, the site is in an area where approximately 27% of the homes will have a basement air radon level greater than the EPA recommended level.

## Hydrology

Drainage from the northern section of the site flows into Colony Pond. The remainder of the site drains to the outlet stream for Colony Pond. The central and southern sections drain to a 12" culvert in Gardners Lane and Colony Street. This flows to a man-made ditch west of Abe Stone Park and joins the outlet stream for Colony Pond. Based on the current plans, additional drainage from the northern parts east of the access road, will be intercepted by street drainage and be routed under Gardners Lane.

Development of the site can lead to increases in runoff from the site. The amount of increase will depend on the final density of the development the amount of impervious surface created and the amount of vegetation removed. Two major concerns are the potential for flooding and streambank erosion. According to the City officials, there are flooding problems along the stream. Because of the steep slopes, on-site detention does not appear feasible. The applicant proposes to upgrade the storm drain in Gardners Lane and Colony Street. The final plans need to be approved by the Town Engineer to ensure that flooding conditions are not worsened. Streambank erosion is a concern due

to steep slopes and large areas of disturbance. In order to reduce the chances for erosion problems, an erosion and sediment control plan should be devised, closely followed and checked by the City. Conscientious construction practices should also be employed.

### Soil Resources

The soils on the site are formed from glacial till materials. Large boulders occur over most of the surface and most of the area has shallow to bedrock soils. Specific soil concerns include soils which make cut and fill operations costly, fill material which may be unsuitable for house construction, lack of a suitable on-site supply of topsoil and steep slopes which create a high erosion hazard.

### Erosion and Sediment Control Plan

The development could be a severe erosion hazard due to extensive clearing and grading and steep slopes. It will be difficult to reestablish vegetation and topsoil will have to be brought in. The large amount of rock in the fill material will make proper grading difficult and possibly create areas of concentrated water flow. Runoff from roofs and driveways must be safely handled to prevent erosion on the fill slope. Additional rows of sediment barriers will be needed. The planned 2:1 cut or fill slopes will not be usable yard space and will be difficult for the homeowner to maintain. Slopes of 3:1 to 5:1 are more desirable. A detailed erosion and sediment control plan is needed. If the development is approved, the City should conduct regular inspections to ensure that the plan is properly implemented.

### Wetland Considerations

The proposed development is within acceptable limits of wetland impacts. The plans show no activity within wetland boundaries or in close proximity. The major concerns are the steep slopes and the location of the site uphill from a wetland. The risk for erosion and sedimentation is high. A comprehensive erosion and sediment control plan should be developed and monitored. This will be crucial in lessening the impacts to the wetlands. The improvements made in the stormwater system should be made to fit the City's storm water management plan.

### Threatened and Endangered Plant and Animal Species

According to the DEP - Natural Diversity Database there are no Federally listed Endangered Species or Connecticut "Species of Special Concern" that occur within the study area.

### Planning Considerations

Surrounding land use is single-family residences. The proposed development is compatible with this use. Protection of the downslope area is the primary concern. The Ansonia Plan of Development recommends single-family residences in the area. The site is located in the A zone of Ansonia. Plans appear to conform to the subdivision regulations. One section may be open to interpretation. The section states that building lots "be capable of typical

building use without unusual or excessive cuts, fills, ledge removal or retaining wall construction." Proper construction and use of materials for the retaining walls should provide compliance with the section. Alternative plans could include cluster development or parks/open space. Cluster development would provide open space where none is provided. Using the land for park/open space would require that the City of Ansonia buy the property.

#### Traffic Considerations

Castle Lane Subdivision has routine traffic concerns. Positive guidance signs were recommended in the past for the intersection of Castle Lane and Old Ansonia Road. These have not been installed. The Seymour Police Chief has volunteered to check the implementation.

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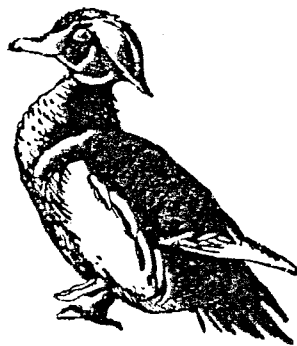
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# INTRODUCTION



The review process consisted of four phases:

- (1) Inventory of the site's natural resources (collection of data).
- (2) Assessment of these resources (analysis of data).
- (3) Identification of resource problem areas.
- (4) Presentation of planning and land use guidelines.

The data collection phase involved both literature and field research. The ERT field review took place on June 16, 1988. Field review and inspection of the proposed development 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. Mapped data or technical reports were also perused and specific information concerning the site was collected. Being on site also allowed Team members to check and confirm mapped information and identify other resources.

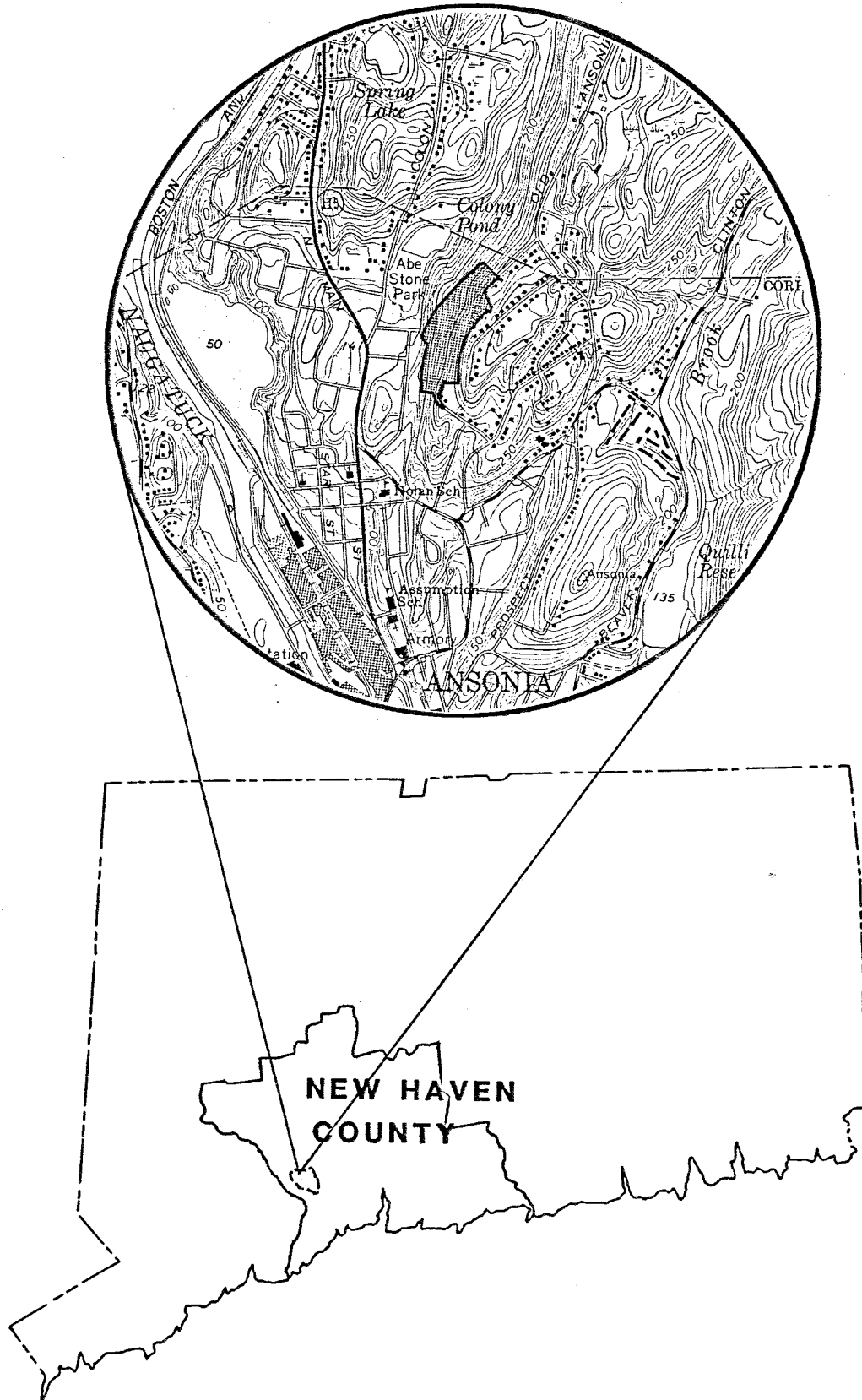
Once the Team members had assimilated an adequate data base, it was then necessary to analyze and interpret their findings. The results of this analyses enabled the Team members to arrive at an informed assessment of the site's natural resource development opportunities and limitations. Individual Team members then prepared and submitted their reports to the ERT Coordinator for compilation into the final ERT report.

The primary goal of this ERT is to inventory and assess existing natural resources occurring on the site as well as providing planning and traffic/access information. Specific objectives include:

- (1) assessment of the geological characteristics of the site, including geological development limitations and opportunities for roads and houses;
- (2) assessment of the hydrological characteristics of the site, including wetland hydrology and stormwater drainage;
















Figure 1

# LOCATION OF STUDY SITE

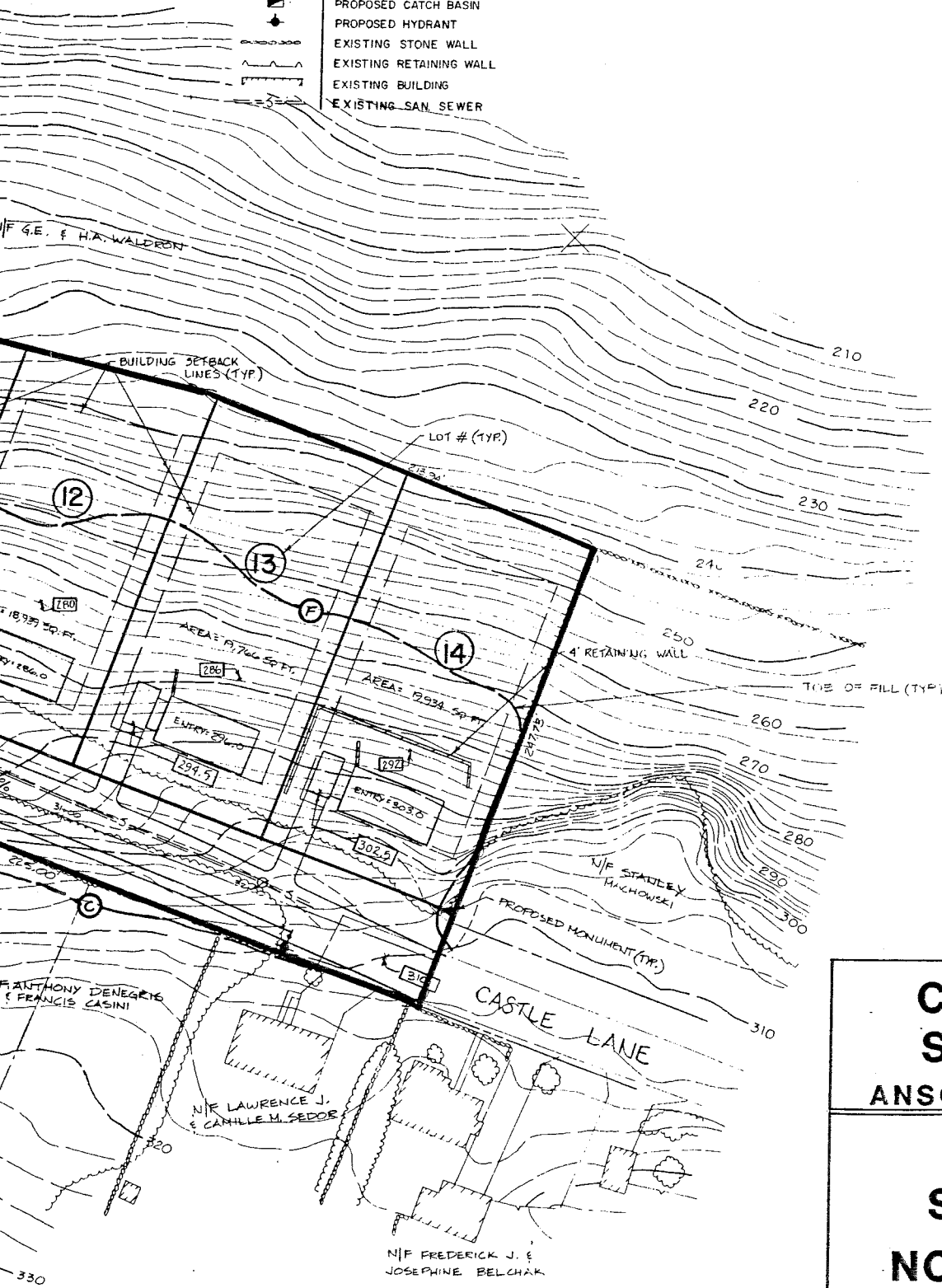


**Figure 2**

**SITE DEVELOPMENT LEGEND**

-  TOE OF FILL
-  TOP OF CUT
-  LOT NUMBER
-  GARAGE FLOOR ELEVATION/  
SPOT ELEVATION
-  METAL BEAM GUIDE RAIL
-  PROPOSED RETAINING WALL
-  PROPOSED WATER MAIN
-  PROPOSED SAN. SEWER
-  PROPOSED STORM SEWER
-  PROPOSED CATCH BASIN
-  PROPOSED HYDRANT
-  EXISTING STONE WALL
-  EXISTING RETAINING WALL
-  EXISTING BUILDING
-  EXISTING SAN. SEWER

0 40 80 120  
SCALE IN FEET



**CASTLE LANE  
SUBDIVISION  
ANSONIA, CONNECTICUT**

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**PROPOSED  
SUBDIVISION  
NORTH SECTION**

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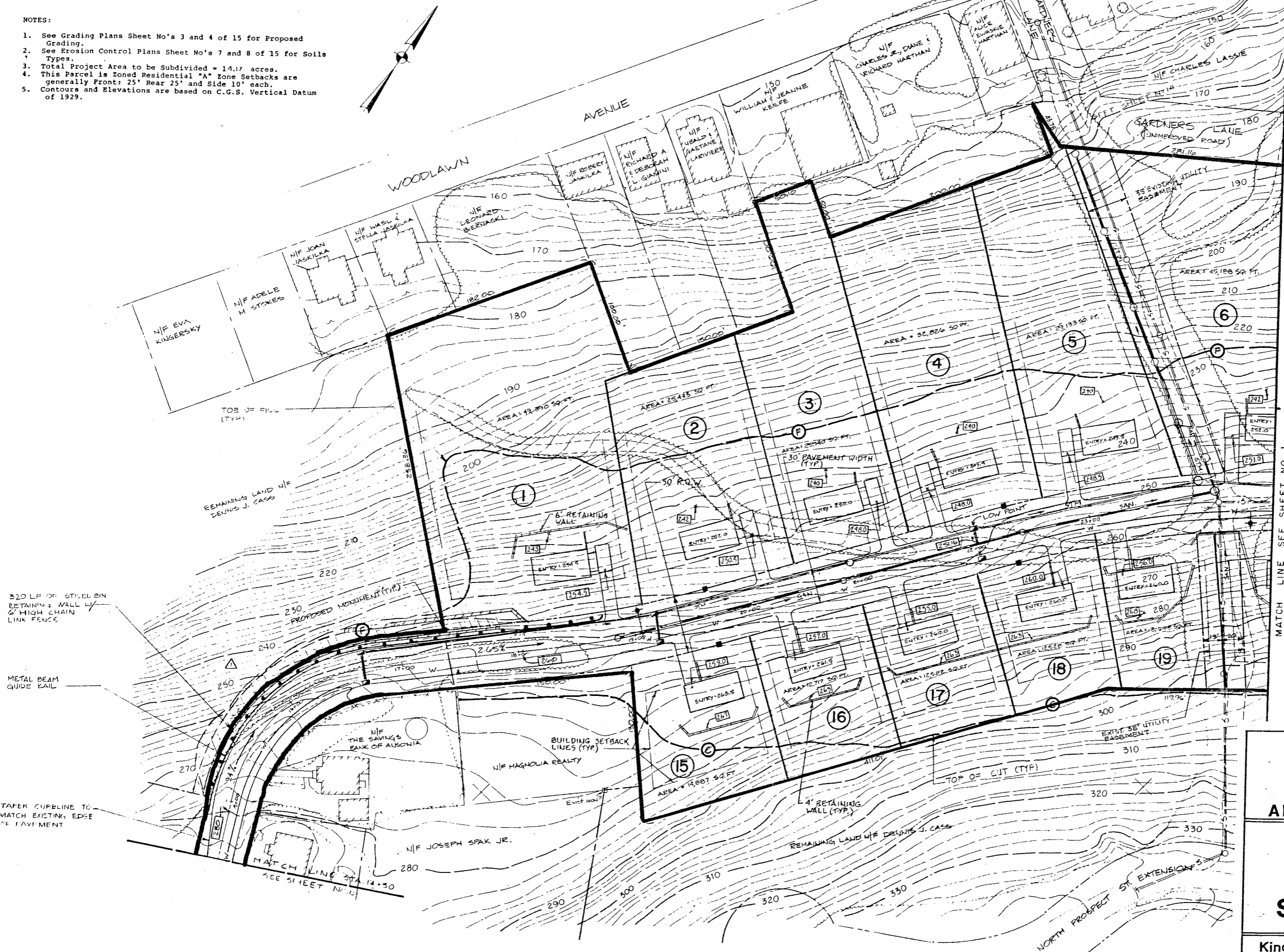
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NOTES:

1. See Grading Plans Sheet No's 3 and 4 of 15 for Proposed Grading.
2. See Erosion Control Plans Sheet No's 7 and 8 of 15 for Soils Types.
3. Total Project Area to be Subdivided = 14.17 acres.
4. This Parcel is Zoned Residential "A" Zone Setbacks are generally Front: 25' Rear 25' and Side 10' each.
5. Contours and Elevations are based on C.G.S. Vertical Datum of 1929.

Figure 3



- GENERAL NOTES
1. Locations of existing utilities and services have been taken from utility maps or determined by other means. No utility building service lines are shown on the Contract Drawings. The Contractor is solely responsible for determining actual field locations and elevations of all utilities and services. Upon request, the permit utility company will work with the Contractor to verify actual field locations. All utility lines damaged by the Contractor shall be brought to the attention of the respective utility company immediately.
  2. Protection of utilities within the work limit will be the responsibility of the Contractor, all work will be coordinated with the appropriate utility companies. Actual locations to be determined by the Contractor.
  3. All existing inverts shall be field verified by the Contractor, prior to beginning construction. The Contractor shall maintain storm drainage flows during construction.
  4. During the entire course of the work, the Contractor shall protect the existing inlets and drainage systems with hay bale filters and dikes, silt fence to prevent sediment and other debris from entering the existing drainage systems and the new inlets and systems upon its completion.
  5. All driveways and roads disturbed by construction inside or outside the project area shall be returned to their original condition or better and shall be graded to meet proposed construction.

**CASTLE LANE  
SUBDIVISION  
ANSONIA, CONNECTICUT**

**PROPOSED  
SUBDIVISION  
SOUTH SECTION**

King's Mark Environmental Review Team



Information from Site Development Plan,  
DeCarlo & Doll

- (3) determination of the suitability of existing soils to support the proposed development;
- (4) discussion of soil erosion and sedimentation concerns;
- (5) assessment of the impact of the development on the wetlands; and
- (6) assessment of planning and land use issues, including traffic and access.

***NATURAL RESOURCE  
CHARACTERISTICS***

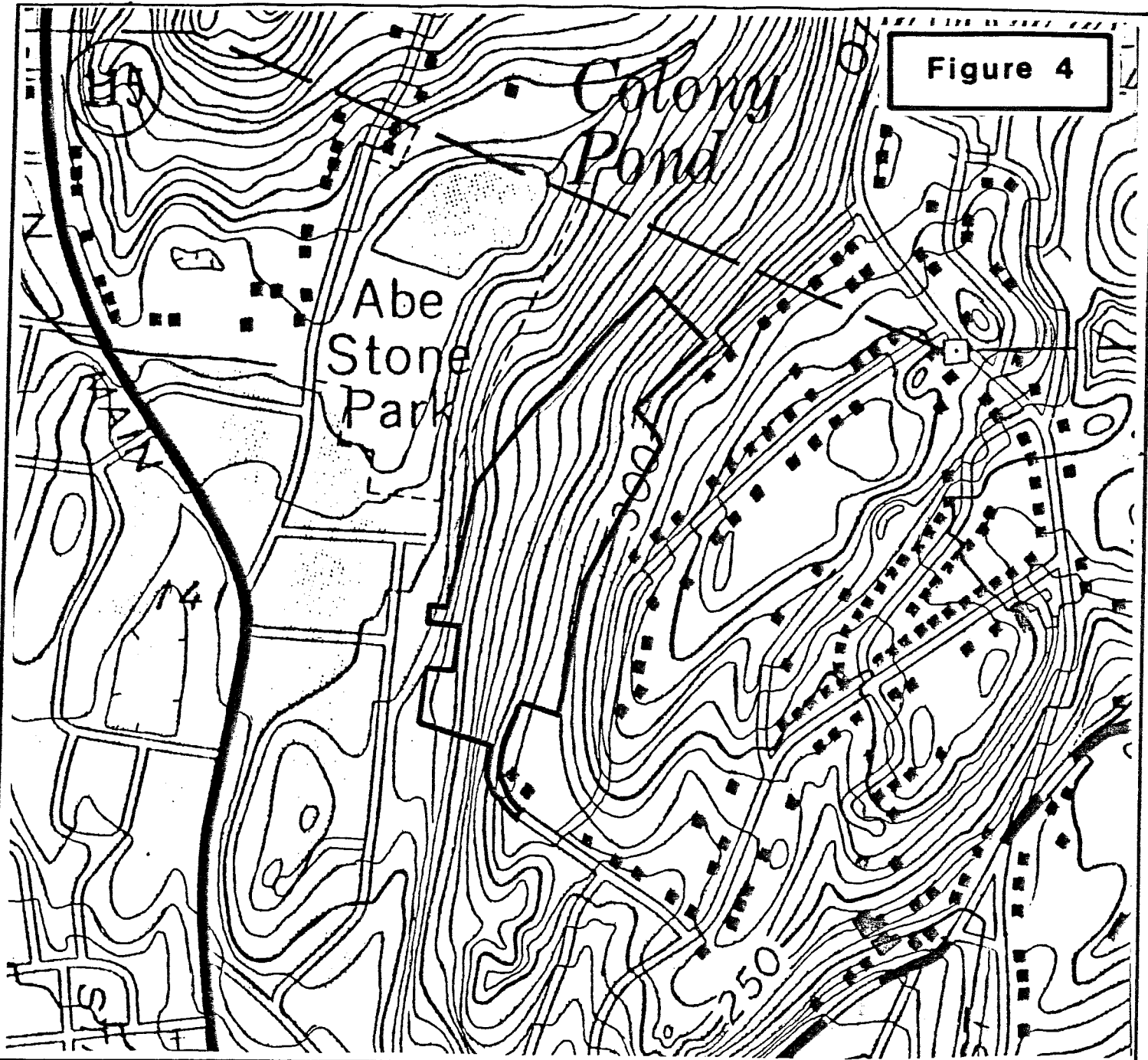
range from 150 feet above mean sea level along the western border to 310 feet above mean sea level along the eastern border (see Figure 4). Numerous large surface boulders are common throughout the site.

### GEOLOGY

The subdivision site is located entirely within the Ansonia topographic quadrangle. A surficial geologic map (QR-23 by R.F. Flint) and a bedrock geologic map (GQ-426 by C.E. Fritts) for the quadrangle have been published by the Connecticut Geological and Natural History Survey and U.S. Geological Survey, respectively. Fritts (map GQ-426) identifies the bedrock in the vicinity of the site as primarily Prospect Gneiss (see Figure 5). For the most part, it consists of a gray to dark-gray medium grained, lineated (striped or striated) gneiss. Gneisses are coarse grained metamorphic rock, geologically altered by heat and pressure, with generally strong layering. Regionally, the site is located within an area of folded rocks. The layering or foliation place in the rock dips to the east. The rock core of the hill (east of the site) has been intruded by a light-colored granitic gneiss. The exact depth to bedrock is unknown, but in general soils mapping indicates that it would be relatively shallow throughout.

The surficial geologic materials, called till, consist of a light gray mixture of sediments ranging in size from clay size particles to large boulders, but predominantly sand and silt (see Figure 6). Based on soil mapping information, the texture of most of the till on the site is generally sandy and loose. As mentioned earlier, numerous large surface boulders have been strewn on the property by the glacier. The till sediments were deposited by glacial ice as it moved across the bedrock surface from north to south-southeast. It is 10 feet thick (or less) in most places.

Figure 4



**CASTLE LANE  
SUBDIVISION  
ANSONIA, CONNECTICUT**

**TOPOGRAPHY**

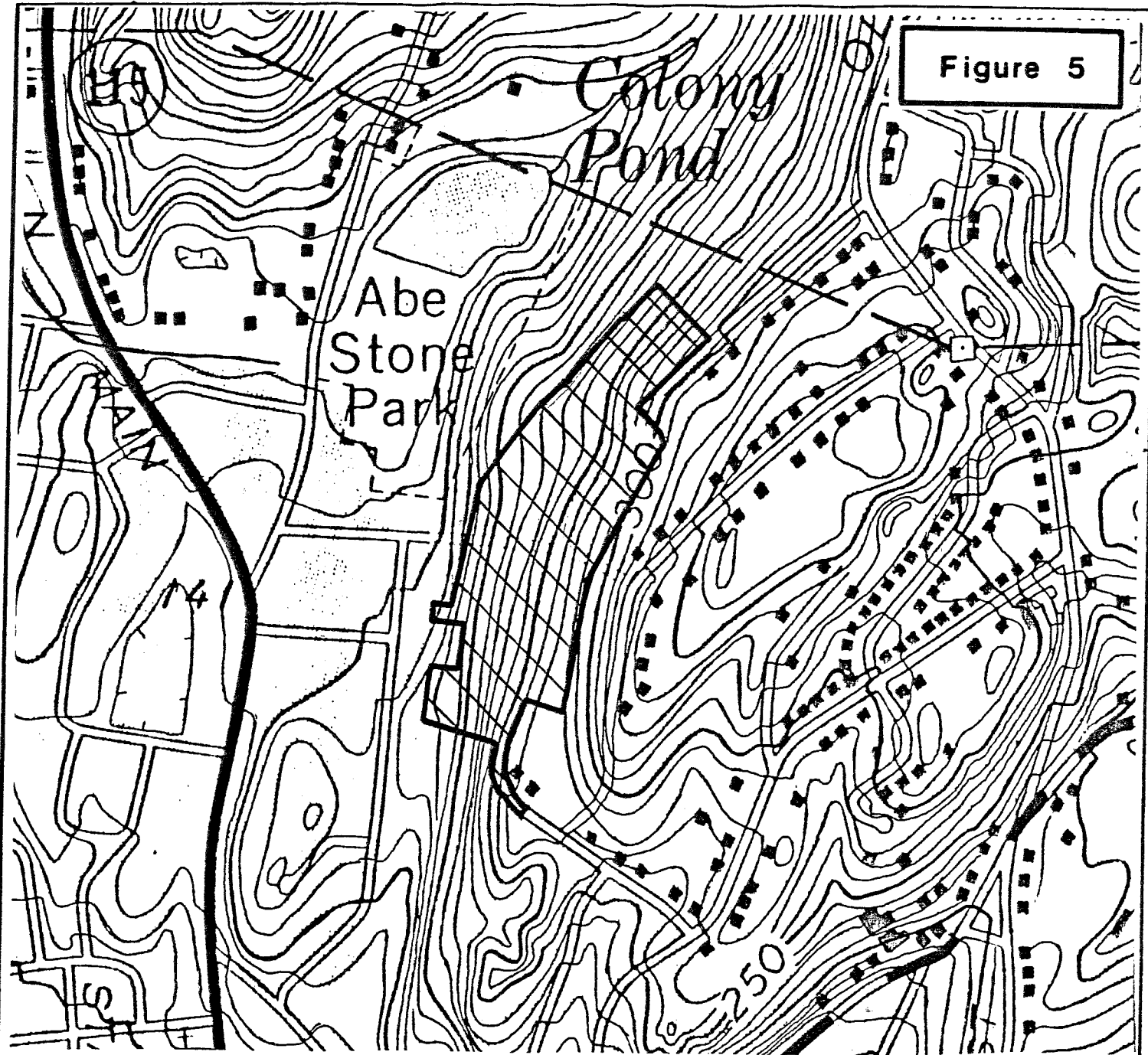
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Information from USGS Topographic sheets,  
Ansonia Quadrangle

Figure 5



Prospect Gneiss

**CASTLE LANE  
SUBDIVISION**  
ANSONIA, CONNECTICUT

**BEDROCK  
GEOLOGY**

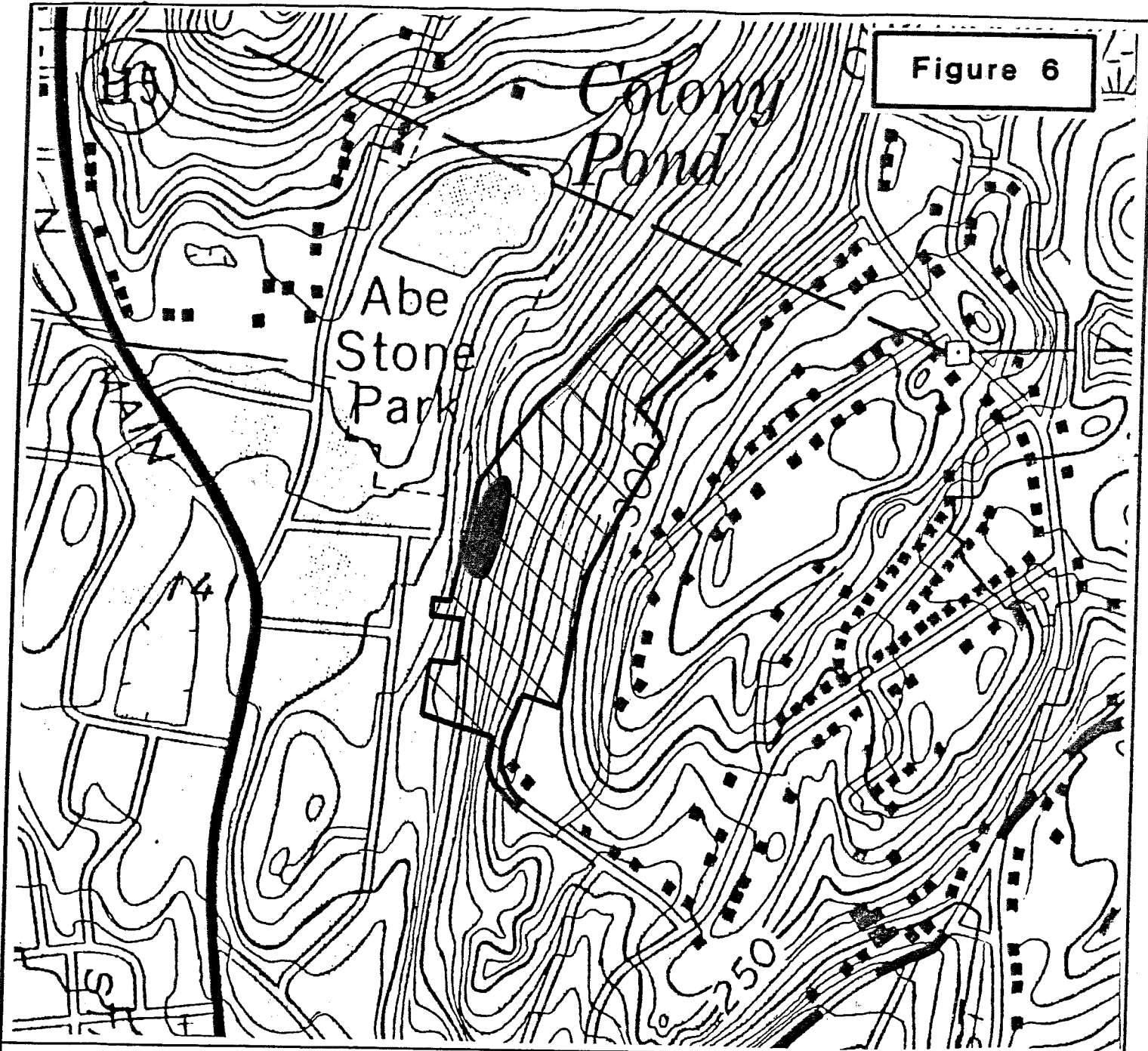
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Information from USGS Topographic sheets,  
Ansonia Quadrangle

Figure 6



Till



Rock Outcrop

**CASTLE LANE  
SUBDIVISION**

**ANSONIA, CONNECTICUT**

**SURFICIAL  
GEOLOGY**

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Information from USGS Topographic sheets,  
Ansonia Quadrangle

## GEOLOGIC DEVELOPMENT CONCERNS

Based on available soil mapping data, geologic maps and observations made during the fieldwalk, the Team geologist's main hydrogeologic concerns with respect to the proposed subdivision include the following:

- 1) The presence of shallow bedrock, which may require blasting in places;
- 2) The presence of moderate to very steep slopes; and
- 3) The presence of numerous large surface boulders.

The availability of municipal sewer and water lines helps to allay the principal hydrogeologic concerns that generally accompany most types of development where on-site wells and septic are used. The applicant should be required to secure letters of confirmation from the Ansonia-Derby Water Company and Ansonia Sewer Authority that the development can be served without over taxing either utility. In addition, it should be determined whether or not the sewer line in the street and sewage treatment plant can handle the expected flows from the subdivision.

Bedrock is at or near ground surface throughout much of the site. This suggests the need for blasting, particularly with respect to the placement of utility lines, roads/driveways and house foundations.

Any blasting that takes place on the site should be done only under the strict supervision of persons familiar with the latest blasting techniques. Only then will the environmental effects of blasting be kept to a minimum. For the most part, these concerns include flyrock, ground vibrations, airblast, dust and gases. Of special concern with respect to the above, is the high density of residential homes in the area. It is strongly suggested that the blaster be required to conduct a pre-blast survey in the area. A thorough blasting record should accompany the survey. There are several methods that

can be employed which will help reduce the potential environmental effects mentioned above. These include: 1) blasting to an open face; 2) multiple small-charge blastings; and 3) use of millisecond delay, between detonations. This will, of course, depend on the blasting requirements of the site.

The presence of moderate slopes is a potential problem with regard to the driveways serving the proposed homes. Deep cuts, which can help to minimize driveway slopes, may encounter bedrock in places. Blasting in these instances will undoubtedly raise the cost of construction on those affected lots.

Due to steep slopes and the site's location on the northeast side of the hill, the amount of sunlight received during the winter months may be small. Therefore ice accumulations on driveways may be a major problem. These ice conditions may be dangerous for the subdivision residents and possibly for other drivers. Careful planning and driveway design should address this potential concern. It appears that road grades for the access road which parallels the site's contours will be able to meet the City's 10% grade requirement. Finally, on the steeper lots, it might be wise to acquire the services of a geotechnical engineer to study whether or not slopes and unconsolidated materials can support house foundations without failure. The very steeply sloping areas will restrict the use of some heavy equipment during the construction period and landscaping.

The presence of numerous, large surface boulders on the site will probably result in the disturbance of much greater areas. Because of the excessive slopes and the need to disturb larger areas, the chance for erosion/siltation problems becomes apparent. The Connecticut Soil Erosion and Sediment Control Act (Public Act, 83-388), which became fully effective July 1, 1985, requires a detailed erosion sediment control plan for the project. The erosion and

sediment control plan should be properly enforced by the City. Disturbed areas should be kept to a minimum under such a plan. All erosion and sediment measures called for should be shown on the subdivision plan.

City officials questioned on the review day whether or not there is a potential for elevated indoor air radon levels in the proposed homes. Based on Map GP-359\* (P. Popenoe, 1966), the proposed subdivision site is in the vicinity of an area where airborne gamma radioactivity levels range between 650-750 counts per second. According to statistical analysis recently performed by the Connecticut Geological and Natural History Survey, a gamma radioactivity level of 650-750 counts per second, as depicted by Map GP-359, would indicate that on a statewide level approximately 27% of the homes will have basement air radon levels greater than the Environmental Protection Agency's (E.P.A. recommended level of 4 Pci/l (picocuries per liter). For further information regarding this matter, it is suggested that persons contact Margaret Thomas, DEP-Natural Resources, (203) 566-3540/7127 or Lynn Rothney, Department of Health Services, (203) 566-8167.

#### HYDROLOGY

Under present conditions, the northern parts of the site drain west/northwest to Colony Pond via seasonal drainageways. The remainder of the site drains westward to the outlet stream for Colony Pond (see Figure 7). Surface runoff in the watershed which is generally east of Woodlawn Avenue and which includes the southern and central parts of the subject site, is presently intercepted by storm drainage and routed via a 12" storm drain in Gardners Lane

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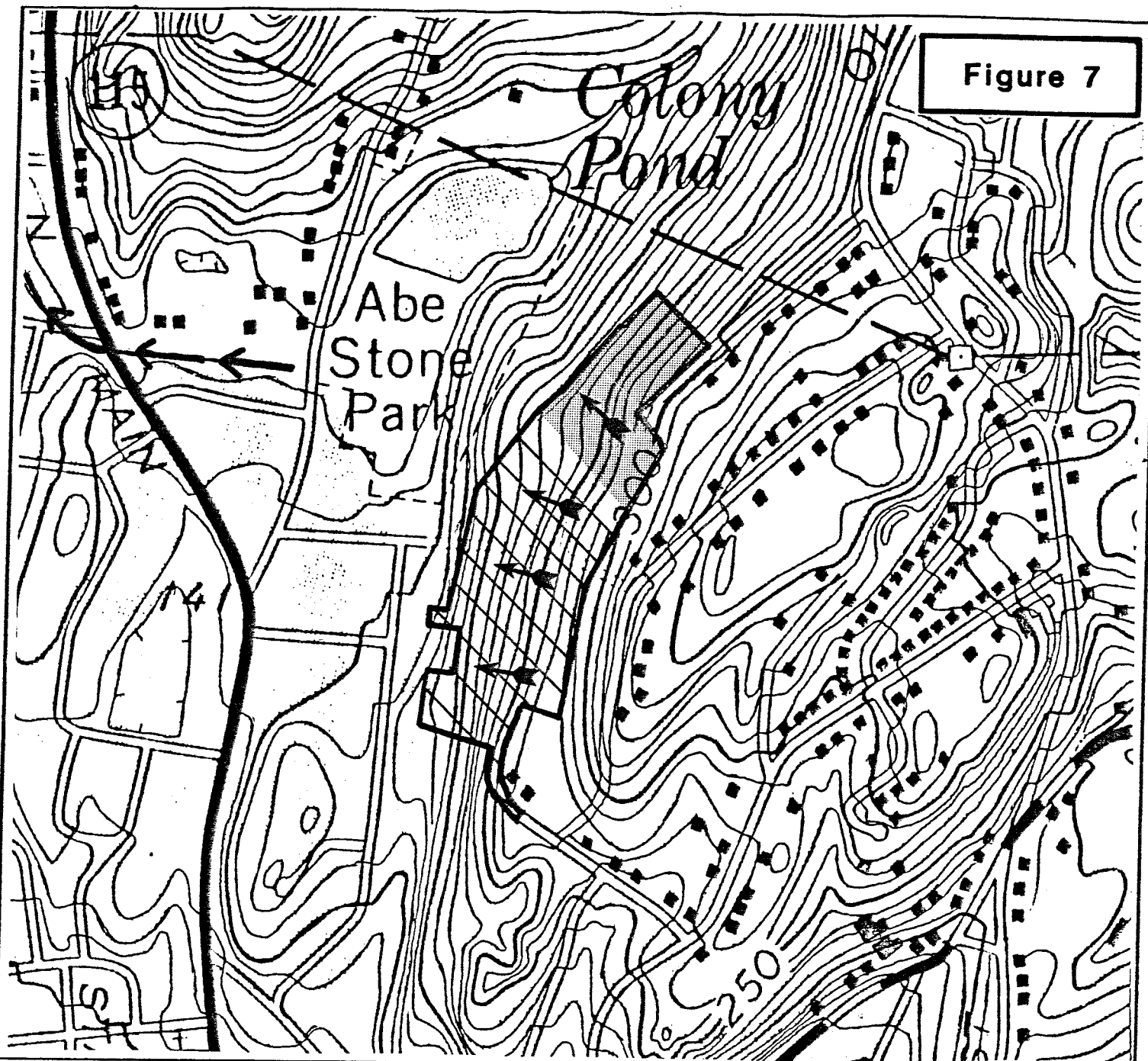
\*Aeroradioactivity and Generalized Maps of Parts of New York, Connecticut, Rhode Island and Massachusetts by Peter Popenoe, 1966, U.S. Geological Survey.

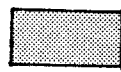



and Colony Street. The water is outletted to a man-made ditch, which is west of Abe Stone Park and which terminates at North Main Street. From North Main Street to the Naugatuck River, the watercourse consists of an open, natural channel paralleled by wetlands/floodplain. Based on present plans, it appears that following development, runoff from the northern parts (east of the access road) would be intercepted by road drainage and routed to the storm drains in Gardners Lane.

Development of the site for residential homes would be expected to lead to increases in runoff. The amount of the increases will greatly depend upon the final density of the development, the amount of impervious surface created and the amount of vegetation removed. Under the present conditions, the Team's geologist calculated that about 2.2 acres of impervious surfaces would be created by the construction of roof tops, driveways and roads. This represents about 16% of the site.

The two major concerns with increased runoff are the potential for flooding and streambank erosion. Team members were informed during the field review that flooding problems exist along the outlet stream for Colony Pond. The applicant's technical staff have addressed in a report made available to Team members, how they plan to handle post-development runoff increase. Because of the steep slopes that prevail throughout the site, the use of on-site detention basins does not appear to be a feasible solution for controlling post-development flows from the site. Instead, the applicant has proposed to upgrade the storm drain in Gardners Lane and Colony Street (to the beginning of the man-made ditch) from a 12" diameter pipe to an 18" to 30" pipe to handle the anticipated post-development runoff increases. The final storm drainage plan and pipe sizing needs to be carefully checked by the City engineer to ensure that existing flooding conditions are not worsened.

Figure 7



-  Land area within site that drains directly to Colony Pond
-  Land area within site that drains directly to the outlet stream for Colony Pond
-  Outlet stream for Colony Pond
-  Direction of surface flow

**CASTLE LANE  
SUBDIVISION  
ANSONIA, CONNECTICUT**

**WATERSHED  
HYDROLOGY**

King's Mark Environmental Review Team

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Information from USGS Topographic sheets,  
Ansonia Quadrangle

## EROSION AND SEDIMENT CONTROL CONSIDERATIONS

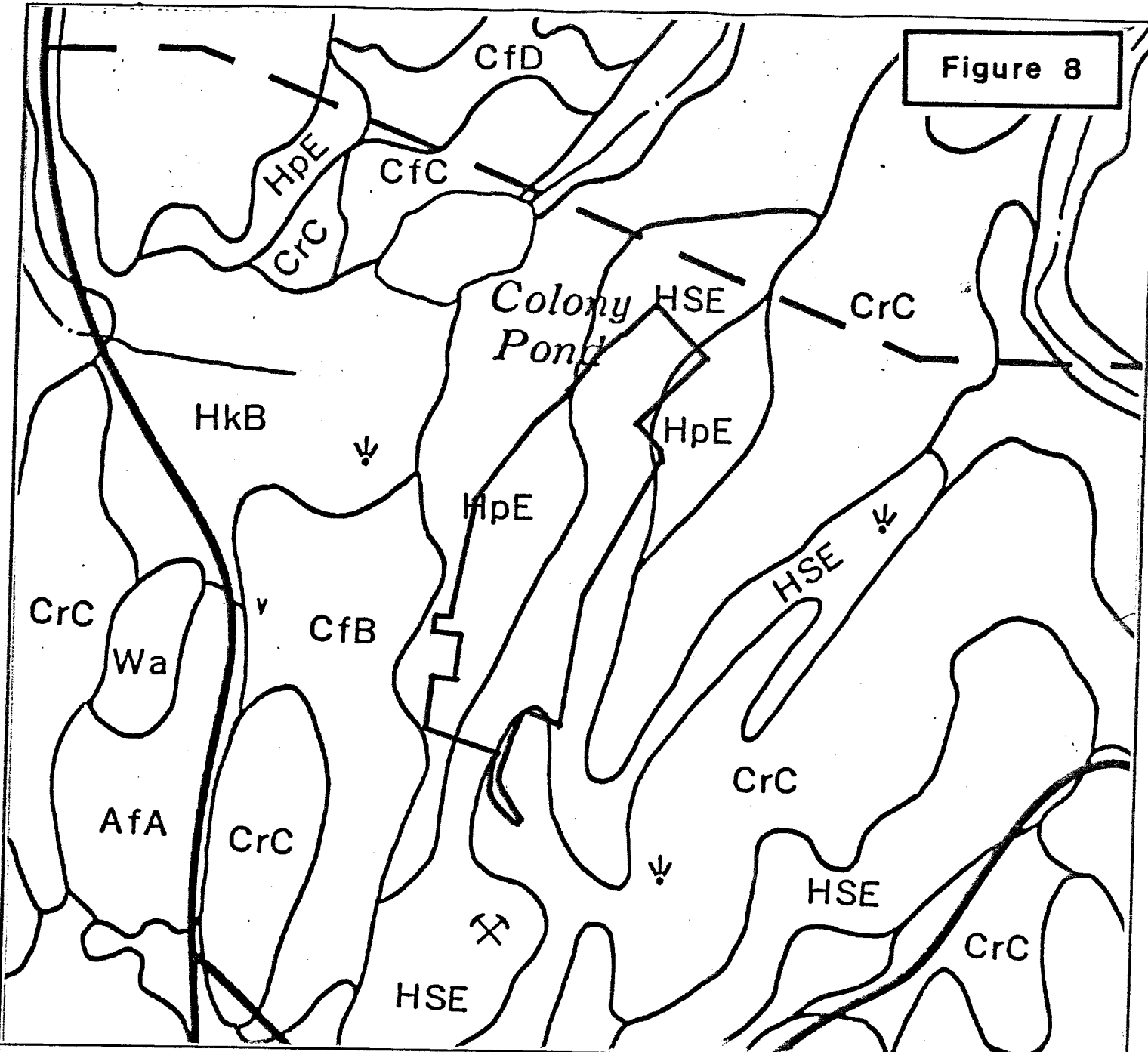
The proposed development has a soil erosion and sediment control plan on sheets 7, 8 and 9 of the April 23, 1987 set of plans prepared by DeCarlo and Doll, Inc. This plan was reviewed using a sediment and erosion control plan worksheet (see Appendix B). The 1985 Connecticut Guidelines for Soil Erosion and Sediment Control was used as a standard reference.

The development could be a severe erosion hazard due to the extensive clearing and grading proposed and the steep slopes with droughty, shallow to bedrock soils. It will be difficult to reestablish vegetation and topsoil will have to be brought in to provide a suitable seedbed. The large amount of rock which would be in the fill material will make proper grading difficult and the creation of concentrated flow areas with high erodibility is likely. Concentrated runoff from roofs and driveways must be safely handled to prevent erosion on the proposed fill slope. Additional rows of sediment barriers are needed considering the size of the disturbed area and slope characteristics. The planned 2:1 cut or fill slopes for most lots will not be usable yard space. These cuts will be difficult for the homeowner to maintain and are more difficult to stabilize initially. Slopes of 3:1 to 5:1 are more desirable.

Other items needed in the sediment and erosion control plan include:

- 1) A narrative section describing the:
  - a) Development,
  - b) Major land uses of adjoining areas,
  - c) Number of acres to be disturbed,
  - d) Application sequence of all Erosion and Sediment Control Measures, and
  - e) Schedule of grading and construction activities;
- 2) Test pit data;
- 3) The disposal procedure for cleared material;
- 4) The location of stockpiled topsoil and subsoil;

Figure 8



**CrC - Charlton-Hollis fine sandy loams,  
3 to 15% slopes**

**HpE - Hollis-Chalton fine sandy loams,  
15 to 35% slopes**

**HSE - Hollis-Rock outcrop complex,  
15 to 35% slopes**

## CASTLE LANE SUBDIVISION

ANSONIA, CONNECTICUT

## SOILS

King's Mark Environmental Review Team

0 500



Information from New Haven County Soil Survey,  
Scale 1" = 1320'

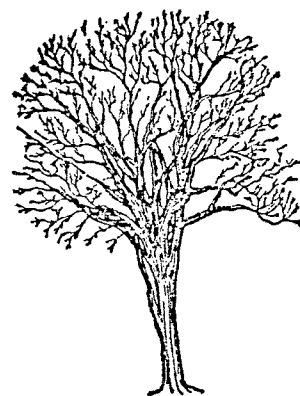
Due to the relatively steep slopes and the nature of the soils found on the site, the potential for erosion and sedimentation pollution into the watershed and nearby wetland is high. A comprehensive sediment and erosion control plan should be developed by the applicant, including monitoring and maintenance responsibilities and schedules. This will be a crucial factor in lessening the potential for impacts into the wetland.

The submitted hydrologic report states that runoff from the development will not increase channel flows or flood levels by a significant degree, if the improvements, which the developer is proposing to perform, are made to the City's storm water management system.

#### THREATENED AND ENDANGERED PLANT AND ANIMAL SPECIES

According to the DEP - Natural Diversity Database there are no Federally listed Endangered Species or Connecticut "Species of Special Concern" that occur within the study area. The Natural Diversity Data Base contains the most current biologic data concerning endangered or threatened plant or animal species. On-going research continues to locate additional populations of species or locations of habitats of concern as well as updating existing data.

**LAND USE AND PLANNING  
CONSIDERATIONS**



### Site Design Compatibility

The proposed development is in harmony with the character and land use intensity of the surrounding neighborhood. Possible alternative development measures include cluster development and parks/open space. Cluster development would provide for open space, where none is allotted in the current proposal. The site could also be improved as a park or recreation area, but this would require that the City of Ansonia purchase the property.

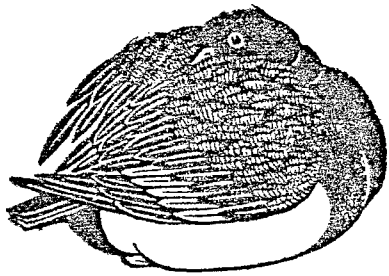
In general, the Castle Lane proposal adequately conforms to surrounding land uses and overall planning guidelines.

### TRAFFIC CONSIDERATIONS

The Castle Lane Subdivision has somewhat routine traffic and access concerns. Entrances and exits will need proper sightlines which may necessitate some brush cutting. These concerns involve streets off of which the new subdivision is to be located, i.e. Old Ansonia Road near the intersection of Castle Lane and the intersection of Rockwood Avenue with Granite Terrace.

As a result of the field investigation, it was noted that positive guidance signs previously recommended near the intersection of Old Ansonia Road and Castle Lane had not been installed. These include a right angle curve sign and a speed limit advisory sign. Accordingly, the Seymour Police Chief was contacted, and the Chief volunteered to check into implementation. The signage had previously been approved by the State Traffic Commission. The City of Ansonia will need to work closely with the Town of Seymour in addressing the traffic concerns on Castle Lane.

## APPENDICES



Appendix A: Soils Limitation Chart

DRAINAGE CLASS AND DEPTH  
TO SEASONAL HIGH WATER  
TABLE

MAJOR LIMITATIONS TO THE DEVELOPMENT OF:  
HOMES WITH BASEMENTS      ROADS AND STREETS

GENERAL SOIL PROPERTIES

MAP UNIT NAME

CrC - Charlton-Hollis fine sandy loams, 3 to 15% slopes	Complex of shallow to very deep soils formed in glacial till derived from schist, gneiss and granite	Well drained to somewhat excessively drained >6 ft.	Depth to bedrock, slope Depth to bedrock, slope
HpE - Hollis-Charlton fine sandy loams, 15 to 35% slopes	Complex of shallow to very deep soils formed in glacial till derived from schist, gneiss and granite	Somewhat excessively drained to well drained >6 ft.	Depth to bedrock, slope Depth to bedrock, slope
HSE - Hollis-Rock outcrop complex, 15 to 35% slopes	Shallow soils formed in glacial till derived from schist, gneiss and granite	Well drained and somewhat excessively drained >6 ft.	Depth to bedrock, slope Depth to bedrock, slope

Appendix B: Erosion and Sediment Control Plan Worksheet

NEW HAVEN COUNTY SOIL AND WATER CONSERVATION DISTRICT  
EROSION AND SEDIMENT CONTROL PLAN WORKSHEET

This is a guide for the development and review of erosion and sediment control plans. Local commissions should be consulted for regulatory requirements concerning erosion and sediment planning.

Checked ( ) items are those that have been provided on the current erosion and sediment control plan. Items identified with a star (\*) should be incorporated into final plans.

Name of development \_\_\_\_\_  
Materials received \_\_\_\_\_

Total Area \_\_\_\_\_ Location \_\_\_\_\_  
Engineer \_\_\_\_\_  
Date Received \_\_\_\_\_ Site Visit \_\_\_\_\_ Reviewed by \_\_\_\_\_  
Submitted by \_\_\_\_\_

NARRATIVE SECTION DESCRIBING:

- \_\_\_\_\_ The development
- \_\_\_\_\_ Major land uses of adjoining areas
- \_\_\_\_\_ The number of total acres and acres to be disturbed in the project
- \_\_\_\_\_ The schedule of grading and construction activities including:
  - Start and completion dates.
- \_\_\_\_\_ Application sequence of all E & S control measures
- \_\_\_\_\_ The design criteria for all proposed E&S control measures
- \_\_\_\_\_ Construction details and installation procedures for all proposed E&S control measures
- \_\_\_\_\_ The operations and maintenance program for all proposed E&S control measures
- \_\_\_\_\_ The name of the person or organization that will be responsible for the installation and maintenance of the E&S control measures
- \_\_\_\_\_ Organization or person responsible for maintenance of permanent measures when project is completed. Measures include: \_\_\_\_\_

=====

A SITE PLAN AT A SUFFICIENT SCALE SHOWING:

Natural Features

- \_\_\_\_\_ Existing topography
- \_\_\_\_\_ Existing vegetation
- \_\_\_\_\_ Soils information, including test pit data if available
- \_\_\_\_\_ Identification of wetlands, watercourses, major drainageways and water bodies on the site
- \_\_\_\_\_ Name of soil scientist who performed wetlands delineations and flag numbers
- \_\_\_\_\_ Rock outcrop areas
- \_\_\_\_\_ Seeps, springs
- \_\_\_\_\_ Major aquifers
- \_\_\_\_\_ Floodplains (100 yr.) and floodways
- \_\_\_\_\_ Channel encroachment line (DEP permit required)
- \_\_\_\_\_ Coastal zone boundary
- \_\_\_\_\_ Public water supply watershed boundaries
- \_\_\_\_\_ Possible Army Corps Sec. 404 or Sec. 10 Permit Areas  
(Contact Corps @ 1-800-343-4789).

Project Features

- \_\_\_\_\_ The location of the proposed development
- \_\_\_\_\_ A plan legend
- \_\_\_\_\_ Adjacent properties
- \_\_\_\_\_ Property lines
- \_\_\_\_\_ Lot lines and setback lines
- \_\_\_\_\_ Lot and/or building numbers
- \_\_\_\_\_ Planned and existing roads
- \_\_\_\_\_ Proposed structures
- \_\_\_\_\_ Location of existing and planned utilities
- \_\_\_\_\_ Location of wells and septic systems
- \_\_\_\_\_ Proposed topography
- \_\_\_\_\_ North arrow

Clearing, Grading, Vegetative Stabilization

- \_\_\_\_\_ The sequence of grading, construction, and sediment and erosion control activities
- \_\_\_\_\_ The location of and construction details for all proposed E&S control measures
- \_\_\_\_\_ Recommended measures include \_\_\_\_\_

- 
- \_\_\_\_\_ Limits of disturbed areas
  - \_\_\_\_\_ Extent of areas to be graded
  - \_\_\_\_\_ Disposal procedure for cleared material
  - \_\_\_\_\_ Location of stockpiled topsoil and subsoil
  - \_\_\_\_\_ Temporary erosion protection for stockpiles
  - \_\_\_\_\_ Areas to be vegetatively stabilized
  - \_\_\_\_\_ Temporary erosion control in disturbed areas
  - \_\_\_\_\_ Method for protection of disturbed areas when time of year or weather prohibit establishment of permanent vegetative cover
  - \_\_\_\_\_ Seedbed preparation (including topsoiling specifications)
  - \_\_\_\_\_ Seeding mixture, rates, and seeding dates
  - \_\_\_\_\_ Fertilizer and lime application rates
  - \_\_\_\_\_ Mulch application rate
  - \_\_\_\_\_ Mulch anchoring measures

Drainage System

- \_\_\_\_\_ Existing and planned drainage pattern
- \_\_\_\_\_ Drainage areas used in design of stormwater management system
- \_\_\_\_\_ Size and location of culverts and storm sewers
- \_\_\_\_\_ Drainage calculations for review by town engineer
- \_\_\_\_\_ Stormwater management measures and construction details
- \_\_\_\_\_ Groundwater control measures (footing drains, curtain drains)
- \_\_\_\_\_ Planned water diversions and dams (DEP permit may be required)

House Site Development

- \_\_\_\_\_ Sediment and erosion control measures for individual lot development

Additional Comments

NOTES

# 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 Nancy Ferlow, 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.