

Environmental Review Team Report

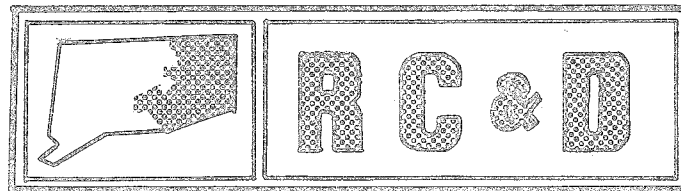
Oyster River Condominiums Old Saybrook, Connecticut



EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.

Environmental Review Team
Report
on
Oyster River Condominiums
Old Saybrook, Connecticut

March 1981



eastern connecticut resource conservation & development area

environmental review team
139 boswell avenue
norwich, connecticut 06360



Location of Study Site

OYSTER RIVER CONDOMINIUMS
OLD SAYBROOK, CONNECTICUT



EASTERN CONNECTICUT
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

ENVIRONMENTAL REVIEW TEAM REPORT
ON
OYSTER RIVER CONDOMINIUMS
OLD SAYBROOK, CONNECTICUT

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

The soils of the site were mapped by a soil scientist of the United States Department of Agriculture (USDA), Soil Conservation Service (SCS). Reproductions of the soil survey map as well as a topographic map of the site were distributed to all ERT participants prior to their field review of the site.

The ERT that field-checked the site consisted of the following personnel: Barry Cavanna, District Conservationist, SCS; Mike Zizka, Geologist, Connecticut Department of Environmental Protection (DEP); Ron Rozsa, Ecologist, Coastal Area Management (DEP); Don Capellaro, Sanitarian, State Department of Health; Ed Meehan, Planner, Connecticut River Estuary Regional Planning Agency; and Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Area.

The team met and field-checked the site on Tuesday, January 20, 1981. Reports from each Team member were sent to the ERT Coordinator for review and summarization for the final report.

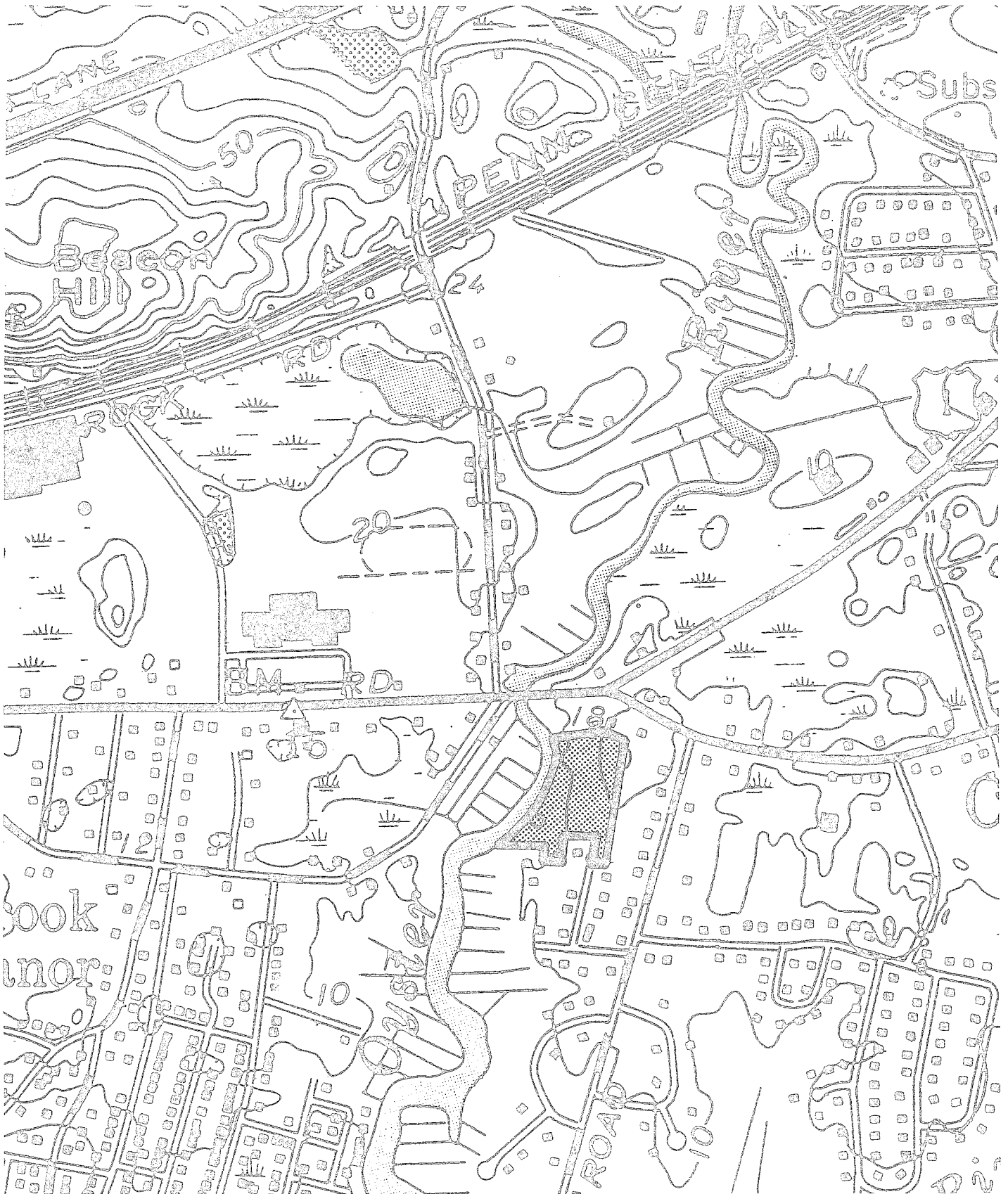
This report is not meant to compete with private consultants by supplying site designs or detailed solutions to development problems. This report identifies the existing resource base and evaluates its significance to the proposed development and also suggests considerations that should be of concern to the developer and the Town of Old Saybrook. The results of this Team action are oriented toward the development of a better environmental quality and the long-term economics of the land use.

The Eastern Connecticut RC&D Area Committee hopes you will find this report of value and assistance in making your decisions on this particular site.

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

Topography

0 660
scale



INTRODUCTION

The Eastern Connecticut Environmental Review Team was asked to prepare an environmental assessment and comment on Coastal Management concerns for a proposed 20-unit condominium complex. The five acre site is located on the east bank of the Oyster River approximately 100 feet south of Route 1 in Old Saybrook. The property is presently in the private ownership of Sidney Oakleaf and Helen Wilcox. Development plans prepared by Radcliffe Engineering are being proposed for the site by the Van Epps Construction Company, Inc.

Preliminary plans show twenty condominium units, each of two bedrooms, located in a series of four buildings. Twenty garages and twenty off-street parking spaces are also planned for the site. A concrete walkway will connect all of these areas. The units will be served by public water and on-site septic systems. Storm water runoff will be collected in catch basins and piped to the Oyster River. A private residential street will surround the condominiums and provide access through Sunset Road.

The site has a fairly flat topography which slopes steeply near the river. It is presently wooded with several large trees (oak, hickory) and other scrub vegetation (wild cherry, bayberry and grasses). A small tidal basin is located on the southwestern edge of the site. The Oyster River forms the western site boundary.

The Team is concerned with the effect of the proposed development on the natural resource base of this site. Although many severe limitations to development can be overcome with proper engineering techniques, these measures can become costly, making a project financially unfeasible for a developer. Severe limitations to development on this site relate to the rapid permeability of soils, potential sedimentation of the river and occasional fluctuations in sea level. The proposal, however, seems to have taken these limitations into account.

The project will cause increases in stormwater runoff, however, the project site is so small compared to the total watershed area of the river that any stormwater increase produced on the site would cause no noticeable increase in the flow of the river. The project may also be subject to occasional fluctuations in sea level, however, all first floor building elevations are planned to be at or above the 11 foot flood hazard elevation on this site.

The principal hydrologic concern relates to the volume of septic effluent, estimated at 3600 gallons, to be discharged daily. In this case, there would be a high risk of groundwater contamination, but public water supplies will be used to service units on this site, thereby eliminating most concern. The developer may wish to consider moving the septic system leaching fields which service units B-6 through B-9. A position away from the slope would provide better protection from stormwater flooding of the leaching field.

Sediment and erosion control plans should be developed for the project and implemented during construction to prevent siltation of the Oyster River.

Sunset Road will provide the major access to these condominiums. This potential increase in traffic may necessitate widening and resurfacing of this

residential street.

Coastal Area Management concerns are detailed in a separate section of this report.

ENVIRONMENTAL ASSESSMENT

GEOLOGY

The proposed condominium site is located in an area encompassed by the Essex topographic quadrangle. The Connecticut Geological and Natural History Survey has published a bedrock geologic map (Quadrangle Report No. 15, by L. Lundgren) and a surficial geologic map (Quadrangle Report No. 31, by R.F. Flint) of the Essex quadrangle. According to QR-31, the site is part of a glacial end moraine, a body of sediment that was built up along a relatively stationary ice margin. The end moraine consists partly of stratified drift (sorted, layered sediments deposited by meltwater flowing from the ice) and partly of till (nonsorted sediments deposited directly from the ice). On the property itself, the moraine appears to be largely composed of sandy and gravelly stratified drift. In a narrow strip directly adjoining the Oyster River, tidal marsh sediments of silt, sand, clay, and organic materials overlie the coarser materials of the end moraine. Bedrock was not seen on the property. Test holes drilled in the vicinity of the site suggest that the surficial materials are at least 20 feet thick. Bedrock should therefore not influence this project in any way.

HYDROLOGY

The proposed condominium site borders and drains entirely into Oyster River. The river has a watershed of approximately 6.0 square miles. Development of the site as planned will lead to increases in the amounts of runoff generated during periods of rainfall, but the site is so small in relation to the Oyster River watershed that no noticeable flow increases will occur in the river.

Since Oyster River is estuarine, the property may occasionally be affected by fluctuations in sea level. The estimated sea level for a 100-year-frequency coastal flood is 11 feet. The developers' original proposal called for placing garages with break-away walls underneath the condominium units at the slope near the western edge of the property. However, as a result of communications with federal and local officials, the developers have revised the plans to provide a minimum elevation of 11 feet for all structures. The revised plan entails substantially more filling at the western slope, but it would provide a greater margin of safety against property damage and pollution of the river (e.g. from materials that were stored in the garages). The filling itself should not have any detrimental hydrologic impact.

The principal hydrologic concern with regard to the proposal is the volume of septic effluent that would be discharged. Assuming an average of three persons per residential unit and an average daily water use of 60 gallons per person, it may be estimated that 3600 gallons of wastewater will be discharged through the septic systems each day. This would be approximately equivalent to the anticipated discharge from a conventional subdivision with one-third-acre lots (assuming an average of four persons per residence). The surficial geologic materials on the site are generally coarse-grained and transmit groundwater rapidly. These materials are not as effective in renovating septic effluent as finer-grained soils, although they may be technically much more efficient than fine-grained soils in transmitting effluent. For this reason, the risk of groundwater deterioration may be relatively high on this site. On the other hand, the condominiums will not need to draw on the groundwater since public water supply lines are available. In general, then, it appears likely that, as long as the septic systems meet state and local health criteria, no practical detriment to groundwater supplies will be realized. One suggestion that the developers may wish to consider, however, is to reverse the locations of the primary and reserve leaching areas that would serve units B-6 through B-9. This would allow the leaching galleries to be placed at a higher elevation, which would further minimize the risk of problems from occasional high groundwater levels. It would also set the galleries back from the slope under which they would be placed in the present plan. A position away from the slope may provide better physical protection for the galleries.

SOILS

A detailed soils map of this site is included in the Appendix to this report, accompanied by a chart which indicates soil limitations for various urban uses. As the soil map is an enlargement from the original 1,320'/inch scale to 660'/inch, the soil boundary lines should not be viewed as absolute boundaries, but as guidelines to the distribution of soil types on the site. The soil limitation chart indicates the probable limitations for each of the soils for on-site sewerage, buildings with basements, building without basements, streets and parking, and landscaping. However, limitations, even though severe, do not preclude the use of the land for development. If economics permit large expenditures for land development and the intended objective is consistent with the objectives of local and regional development, many soils and sites with difficult problems can be used. The soils map, with the publication "Soil Survey, Middlesex County, Connecticut," can aid in the identification and interpretation of soils and their uses on this site. Know Your Land: Natural Soil Groups for Connecticut can also give insight to the development potentials of the soils and their relationship to the surficial geology of the site.

The soil series most typical of this site is Hinckley gravelly sandy loam. This excessively drained and gently sloping to sloping or undulating soil is found on stream terraces, kames, and eskers. The areas are irregular in shape and mostly range from 5 to 100 acres. Slopes are smooth or complex and are mostly less than 200 feet long.

Typically, the surface layer is dark grayish brown gravelly sandy loam 8 inches thick. The subsoil is 19 inches thick. In the upper 12 inches, it is brown gravelly loamy sand, and in the lower 7 inches, it is yellowish brown gravelly sand. The substratum is brown and light brownish gray very gravelly

sand to a depth of 60 inches or more.

Included with this soil in mapping are small, intermingled areas of excessively drained Windsor soils, somewhat excessively drained Merrimac soils, moderately well drained Sudbury soils, and poorly drained Walpole soils. Included areas make up 5 to 15 percent of this map unit. Permeability is rapid in the surface layer and subsoil and very rapid in the substratum. The available water capacity is low. Runoff is slow to medium. This soil dries out and warms up early in spring. This soil has good potential for community development. The soil is limited mainly by slope and droughtiness. Steep side slopes of excavations are unstable, and on-site sewage disposal systems need careful design and installation due to rapid percolation rates. Lawns have many pebbles on the surface. Lawn grasses, shallow-rooted trees, and shrubs require watering in summer. Quickly establishing plant cover is recommended management practice during construction.

It is strongly recommended that a detailed sediment and erosion control plan be developed. As a minimum, this would include:

1. Location of areas to be stripped of vegetation, and other exposed or unprotected areas.
2. A schedule of operations to include starting and completion dates for major development phases, such as land clearing and grading.
3. Seeding, sodding, or revegetation plans and specifications for all unprotected or unvegetated areas.
4. Location and design of structural sediment control measures, such as diversions, waterways, grade stabilization structures, debris basins, etc.
5. Timing of planned sediment control measures.
6. General information relating to the implementation and maintenance of the sediment control measures.

Sediment and erosion control measures should be in place prior to construction commencement on the site and well maintained during the construction process.

WATER SUPPLY

Water for the proposed project would be obtained from the public supply of the Connecticut Water Company which presently services the general area south of the Boston Post Road. Therefore, water supply would be safe and adequate and should present no particular problem.

WASTE DISPOSAL

As the Town of Old Saybrook does not have a municipal sewerage system, waste disposal would be achieved by means of on-site disposal. The town, along with others in the area, is participating in a study plan for a sewer avoidance program. As such, most of the town would continue to rely on individual septic systems or possibly small community type systems.

Based on a review of deep test pit information and soil mapping data, the site is primarily composed of well drained gravelly sandy soil. The main concern with the type of soil on site is its very porous nature, which may not afford good filtration and renovation of the sewage effluent. Also of concern is the elevation of the lower land which would not provide for flood protection under unusually heavy rain or storm conditions.

The Public Health Code requires the bottom area of any leaching system to be maintained at least 1.5 feet above the maximum groundwater level. Therefore, it is necessary to determine what the elevation for the maximum groundwater level will be in an area adjacent to tidal waters. In addition to knowing the normal high tide, consideration should also be given for higher tides which can be expected to occur at least on an annual basis. This information would allow the leaching system(s) to be kept sufficiently elevated. This does not imply that a leaching system may not become temporarily flooded under certain unusual conditions, such as a hurricane or severe coastal storm that occur every so often. The floor elevations for the actual living units are presently based on and reflect the maximum flood water level. This would be elevation 11. The ground surface elevation should also be sufficient to provide protection for the sewage systems from surface flooding or erosion damage.

In terms of filtration and renovation of sewage effluent where soil conditions are especially permeable allowing for very rapid seepage, it is recommended that more than the minimum required depth of soil be present between the bottom area of a leaching system and the maximum groundwater level or bedrock. In addition, the horizontal separating distance from a leaching area to a stream, open body of water (excluding a public water supply reservoir), or a drain line (unless located updrift from the leaching system) should be increased to a minimum of 50 feet.

In general, it should be feasible to construct the proposed sewage disposal systems on this site. Engineering design should reflect the particular site and soil conditions, projecting that all necessary requirements will be met to assure environmentally sound facilities.

PLANNING CONCERNS

The town and applicant are aware of the flood hazard limitations of this parcel and the site development improvements indicate that the 100 year 11' minimum floor elevation will be met. The applicant has submitted a traffic study for the proposed condominiums.

Access into this site will be over Sunset Road, a narrow deadend town right-of-way which terminates at the parcel's southeast corner. Improvements to Sunset Road surface should be made to accommodate the additional vehicles which will use this deadend street to reach the proposed twenty condominium units. CONNDOT Trip Generation Study (Supplement A), March 1975, reported that analysis of condominium land uses indicated that in a rural area, where no

public transit was available, each owner-occupied unit generated 5.7 average trips (in and out) per weekday - Monday through Friday. Using CONNDOT's 5.7 average weekday trip rates as a probable indication of the vehicles generated by this development shows that Sunset Road and Bayside Road would be expected to carry an additional 114 cars per weekday. Bayside Road intersects with Hammock Road (State Route 154). Heavy equipment using Sunset Road during site development and the expected increase in passenger vehicles will necessitate the resurfacing and minor widening of this short street.

At the pre-review meeting for the proposed Oyster River condominium project, the applicant's engineer explained the need to raise a portion of the site by filling to meet the FEMA's (Federal Emergency Management Agency) and of Old Saybrook's minimum first floor elevation of 11' NGVD (National Geodetic Vertical Datum).

The western edge of this site is located within the 100 year flood hazard area as identified on Old Saybrook Flood Insurance Rate Map. The applicant's plans show that ten of the proposed units would be below 10' level at existing contours. Site development plans indicate that the applicant is aware of the flood hazard situation and filling and contouring will be undertaken to bring the ground floor elevations of these 10 units to the 11' NGVD. Plans have been submitted to the Town's Flood Insurance consulting engineer and referred to Federal Insurance Administration.

The comment was made that this filling must be approved by FEMA prior to the zoning commission's decision.

The Team Planner has learned from FEMA and Connecticut DEP that FEMA is not required to review and approve filling in flood hazard Area A zones prior to local site plan approval. The proper approval authority rests with the Town Flood Insurance official and Town's Flood Insurance Engineer who must review the plans and certify that the filling will not reduce the floodway and increase the flood hazard to adjacent properties.

The town's second responsibility under the Flood Insurance Program is to notify the FEMA in its annual report Part C of the man-made changes that have altered the flood hazard area.

** For reference see: National Flood Insurance Rules and Regulations
Part 1909.22 (a) (9) iii
Part 1909.22 (b) (3)

Adequate public services are present to properly support the proposed condominium units. As noted, improvements to the surface of Sunset Road will be necessary. The proposed development of this site for residential condominium use is compatible with the existing neighborhood land use pattern, Old Saybrook's Town Plan and Zoning Regulations.

Coastal Management

COASTAL MANAGEMENT CONCERNS

Van Epps Construction, Inc., has submitted an application including a coastal site plan for a special permit to construct twenty condominium units on a site located fully within the coastal boundary. The planning commission must determine and the developer must demonstrate that (1) the proposal is consistent with all applicable coastal policies, (2) that adverse impacts on coastal resources and future water-dependent uses are acceptable, and (3) all reasonable measures to mitigate adverse impacts have been incorporated into the project. In reviewing the coastal site plan submitted by the applicant, there exist a number of technical deficiencies and inaccuracies that should be resolved before a decision is made regarding this proposal. These aspects are discussed below.

Coastal Resources

Three coastal resources are identified on the coastal resource map submitted by the applicant: shorelands, tidal wetlands and coastal (flood) hazard area. Technically, the map must display the following resources as well. (1) Coastal waters (estuarine embayments) - Oyster River, (2) shellfish concentration areas which occur adjacent to the site (downstream), and (3) tidal wetlands which occur on the opposite shore of the Oyster River. These constitute resources that may be affected by the project though not necessarily on the site.

Coastal Policies

The site plan only identifies generic categories of coastal policies rather than the specific policies which apply to this project. Specific policies* which must be identified in the plan are: General Resource IA(A-C), Tidal Wetlands IF(A,D), Coastal (flood) Hazard Area IH(A), Shorelands IK(A), General Development IIA(A,B), Water-Dependent Uses IIB(A,B) and Coastal Structures and Filling IID(A). Boating policies technically do not apply since the project proposes only construction of condominiums at this time. However, boating policy IIF(A) may apply in that the condominium development may preclude boating support facilities (refer to the discussion under water-dependent uses). Assuming that the concerns discussed under adverse impacts and water-dependent uses are addressed and resolved, the project would appear to be consistent with the policies.

Adverse Impacts

Potential adverse impacts as specified and defined in the coastal management act are not identified in the site plan. Instead, the applicant concludes that no adverse impact will be generated by the project without providing the necessary evaluation of potential impacts and identifying appropriate mitigation measures. Potential adverse impacts including the following:

Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity.

* Planning Report 30. Coastal Policies and Use Guidelines. 1979 Connecticut Department of Environmental Protection., Coastal Management Program.

Degrading existing circulation patterns of coastal waters through the significant alteration of patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours.

Degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff.

Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones.

Dredging visual quality through significant alteration of the natural features of vistas and view points.

Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or function.

Table 1 is an impact matrix which provides a coarse analysis of potential impacts that may result from specific activities to specific coastal resources. The applicant should demonstrate why certain potential impacts are not significant or adverse and for others demonstrate the measures which will be used to ameliorate potential adverse impacts.

Potential adverse impacts, if any, will originate from (1) uncontrolled sedimentation from upland activities into the tidal wetlands and the Oyster River, (2) degradation of water quality and flooding from stormwater runoff, (3) placement of the rip-rap channel through the wetland incidental to the stormwater discharge system, and (4) degradation of coastal water quality from subsurface leachates originating from the site given the current sanitary design.

As proposed, no activities will occur inside the wetland boundaries except for the placement of and discharge from a stormwater dissipator (rip-rap channel). On the basis of the plans, it appears that the area of wetland to be impacted is minor resulting in the filling of a small area. This activity will require a tidal wetland permit and is not consistent with the coastal policies for tidal wetlands. Though the impact will be minor insofar as the area affected, this can be further mitigated by relocating the stormwater system so as to discharge into the man-made basin.

Haybales will be used for sedimentation control during construction although the plan does not specify the locations of haybales. Haybales should be placed in strategic locations in order to prevent sediments from entering and impacting the tidal wetland and coastal waters. A single row of haybales is often inadequate both for erosion control and to preclude construction equipment from inadvertently entering the wetland. An improvement over this system is a double row of haybales, each row staggered, behind and tied to a line of snow fence especially in sensitive areas.

Sedimentation from upland construction, without the proper sedimentation controls, could reduce coastal water quality, affect the integrity of downstream shellfish and possibly adversely affect anadromous finfish which may or do utilize the river as a migration route. The critical breeding periods are June to October for oysters and April to May for Alewife or Blueback Herring. Impacts to shellfish and finfish can be minimized through preventing sediments from entering the river. Activities which may cause significant sedimentation should

avoid the period of April to October if at all feasible.

COASTAL RESOURCE IMPACT MATRIX

COASTAL RESOURCE ACTIVITY	ON-SITE			ADJACENT		
	Coastal (flood) Hazard Area	Shorelands	Tidal Wetlands	Coastal Waters	Shellfish Concentration Areas	
Sedimentation (site pre- paration) construct, grading, filling, ex- cavation.	I	I	PS	N/A	PS	PS
Placement of Pipes Stormwater & apron	I	N/A	PS	N/A	N/A	N/A
Water Main	I	I	N/A	N/A	N/A	N/A
Sanitary	I	I	N/A	N/A	N/A	N/A
Sanitary Facilities						
Placement (dry walls, septic tanks, galley)	I	I	N/A	N/A	N/A	N/A
Construction						
Garages	I	I	N/A	N/A	N/A	N/A
Sidewalks	I	I	N/A	N/A	N/A	N/A
Condominiums	I	I	N/A	N/A	N/A	N/A
Paved Roads	I	I	N/A	N/A	N/A	N/A
Discharges						
Stormwater	N/A	N/A	PS	N/A	PS	PS
Sanitary	N/A	N/A	N/A	N/A	PS	PS

Impact Intensity Code

- I - Insignificant impact
- PS - Potentially significant impact if the proper design or mitigatory measures are not employed.

The proximity of the site to the river given the proposed density and sanitary design are factors which could contribute to the undesirable contamination of the river in the future from subsurface flows. A more immediate concern is the seemingly tenuous location of the southern gallery system on or near the edge of a slope and less than 100' from the basin. The plan and design has been submitted to the Water Compliance Unit of DEP for certification.

Water Dependency Issues:

Projects proposed for waterfront locations such as this must be evaluated in terms of the water dependent use provisions of the CAM Act. Water dependent uses are defined as "those uses and facilities which require direct access to, and location in, marine or tidal waters and which, therefore, can not be located inland,...and uses which provide general public access to marine or tidal waters." Both water dependent use policies IIB(A&B) require that high priority and preference be given to the siting of water dependent uses along the coast. Further, under the adverse impact requirements of the Act, a commission may reject a non-water dependent use if it finds that the adverse impacts on future water dependent development opportunities are unacceptable. Generally, an adverse impact on future water dependent uses could be unacceptable in situations where (1) the site is well suited for a water dependent use, (2) there is reasonable expectation of demand for a water dependent use for which the site is suited, or (3) a water dependent use is being displaced by the proposed activity.

If the site location is a waterfront one as this project is, the first step in the evaluation is to determine if the site is suited for a water dependent use. The site furnishes direct access to coastal waters which are navigable for small pleasure craft. It is important to note that natural water depths are more or less adequate to provide navigation and access to the site without dredging major portions of the watercourses or tidal wetlands and thereby inducing significant adverse impacts to coastal resources. There exist at least one practical and existing water dependent use of the site namely the provision of a small pleasure craft 'facility.' However, the current configuration of the site could only accommodate an exceedingly small number of boats. To enhance the suitability of the site for boating, additional excavation of the upland would be necessary. Inspection of the Oyster River shoreline would demonstrate that this is the only site where excavation could occur without irreversibly degrading extensive areas of tidal wetlands, although the narrow fringe of tidal wetland on the site would probably be destroyed. This adverse impact to the tidal wetland may be deemed unacceptable despite the benefits derived from such a water dependent activity. In addition, expanded use of the site for boating may be incompatible with the existing zoning for the area and with the surrounding residential land uses. In summary, while use of the site for some type of small boating facility might be technically possible, the site does not appear to be ideally suited for this type of use.

Next, the commission must determine if the proposed project is a water dependent use. Multi-family housing offering private boat slips is not a simple or obvious case. In order to determine if the primary use is water dependent, it is advisable to separate the water based component from the land based component. If the latter can stand along as a viable use and is not itself a water-dependent use, then the entire project is not a water dependent use. In this particular instance, the condominiums would not constitute a water dependent

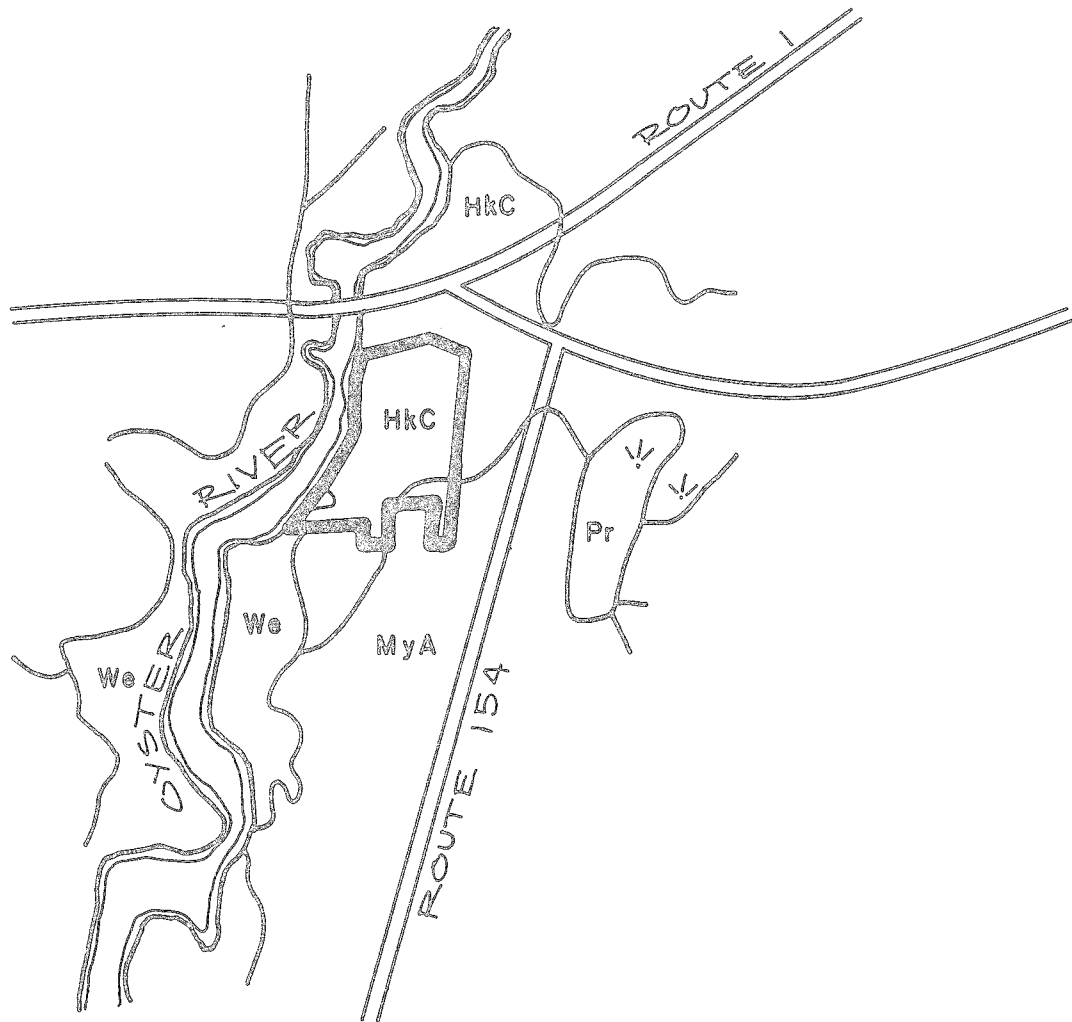
use even if private boat slips were proposed concurrently. However, any non-water dependent use can be transformed into a water dependent use and therefore receive higher siting priority and potentially satisfy adverse impacts requirements by adding the provision of public access. Public access to the waterfront for the purpose of fishing or bird watching, for example, might be considered a reasonable addition to the plans and should be investigated and addressed. Given the constraining natural characteristics of the Oyster River, use of the waterfront for passive public access purposes may be the most appropriate type of water related use for this site.

In summary, assuming that the concerns discussed under the coastal policies and adverse impacts section are addressed and resolved in the coastal site plan application and review, the project would otherwise appear to be consistent with the provisions of the act. As noted, the project does not constitute a water dependent use, and the commission will need to determine the acceptability of the adverse impacts on future water dependent development opportunities. This will require an evaluation of the suitability of the site for water dependent uses and a determination of expressed demand for such uses at this site. Specific consideration should be given to the effect of this project on public access to the Oyster River waterfront and the potential for enhancing access to the river by modifying the project to include an access easement, right-of-way, land donation, or provision of access through some other formal means.

Appendix

Soils

0 660
scale



OYSTER RIVER CONDOMINIUMS
OLD SAYBROOK, CONNECTICUT

PROPORTIONAL EXTENT OF SOILS AND THEIR LIMITATIONS FOR CERTAIN LAND USES

Soil Series	Natural Soil Group	Soil Symbol	Approx. Acres	Percent of Acres	Principal Limiting Factor	Urban Use Limitations*			
						On-Site Sewage	Buildings with Basements	Streets & Parking	Land-Scaping
Hinckley		HkC	5.0	91%	Slope, rapid permeability	2	2	2	3
Merrimac		MyA	.5	9%	Rapid permeability	1	1	1	1

LIMITATIONS: 1 = slight, 2 = moderate, 3 = severe.

SOIL INTERPRETATIONS FOR URBAN USES

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

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

Slight Limitations

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

Moderate Limitations

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

Severe Limitations

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

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.

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, and a statement identifying the specific areas of concern the Team should address. When this request is approved by the local Soil and Water Conservation District and the 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 Jeanne Shelburn (889-2324), Environmental Review Team Coordinator, Eastern Connecticut RC&D Area, 139 Boswell Avenue, Norwich, Connecticut 06360.