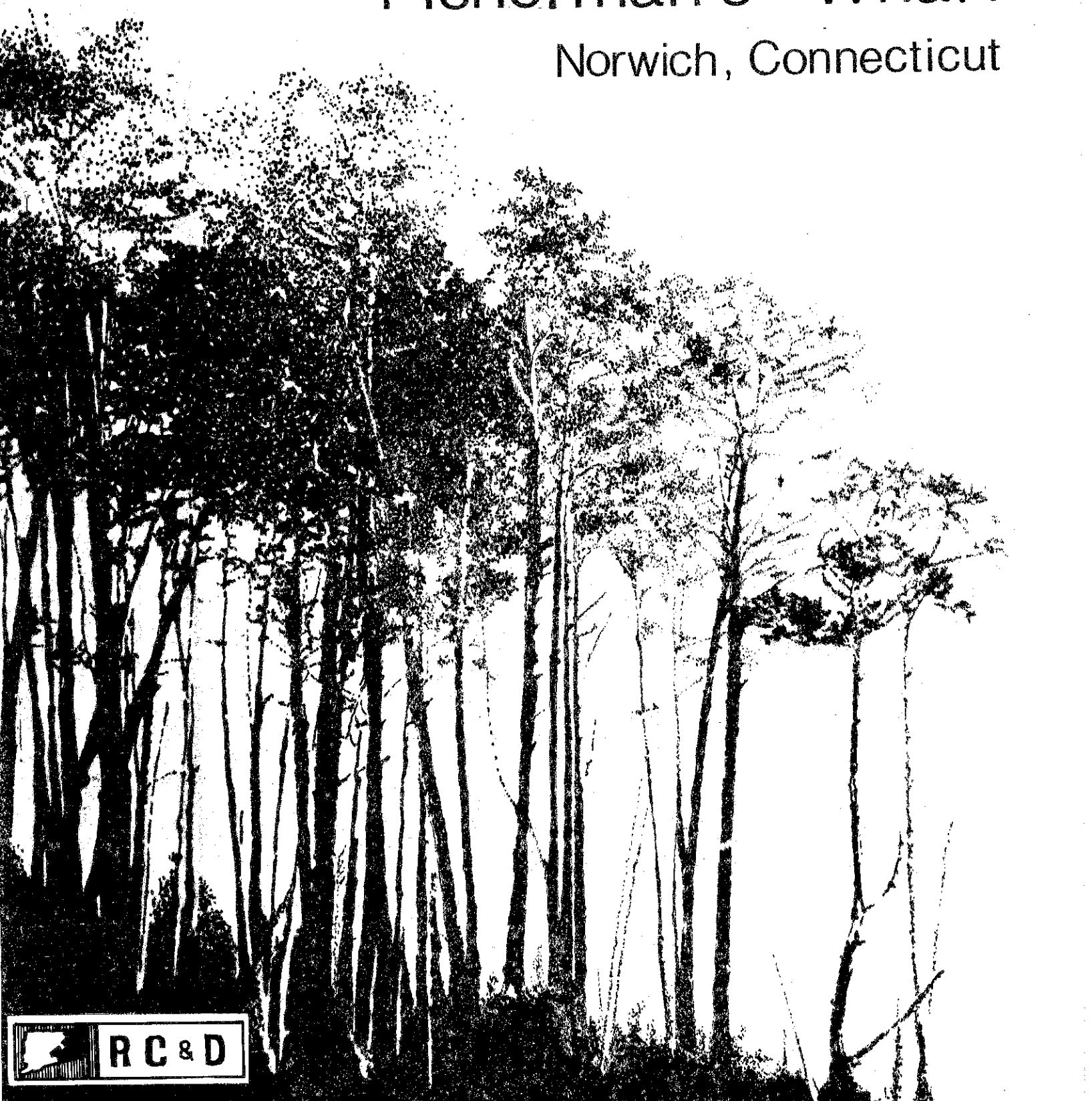


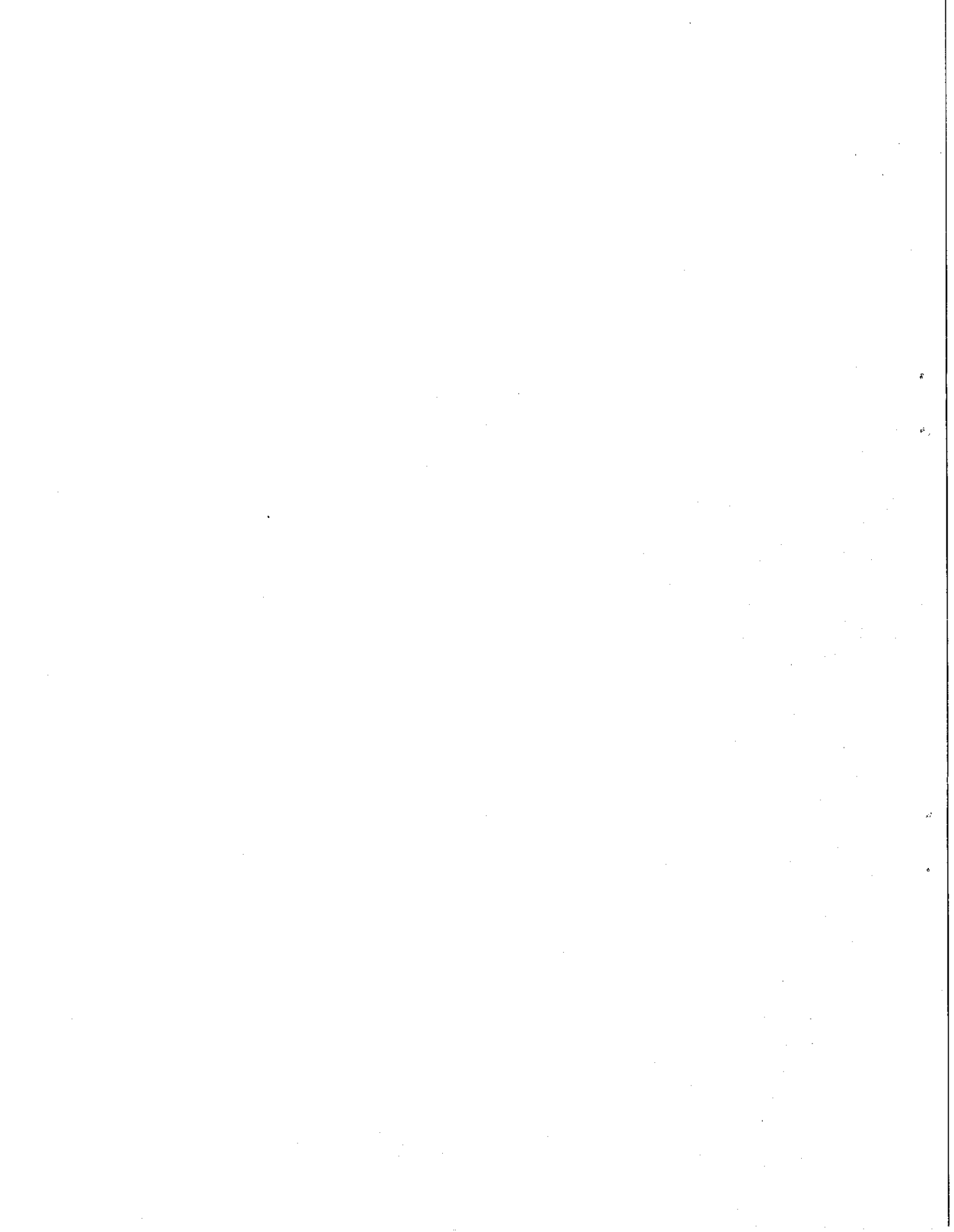
Environmental Review Team Report

Fisherman's Wharf

Norwich, Connecticut



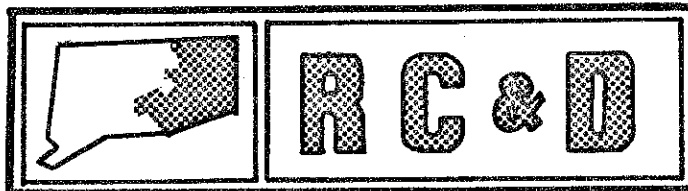
EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.



Environmental Review Team
Report
on

Fisherman's Wharf
Norwich, Connecticut

March 1979

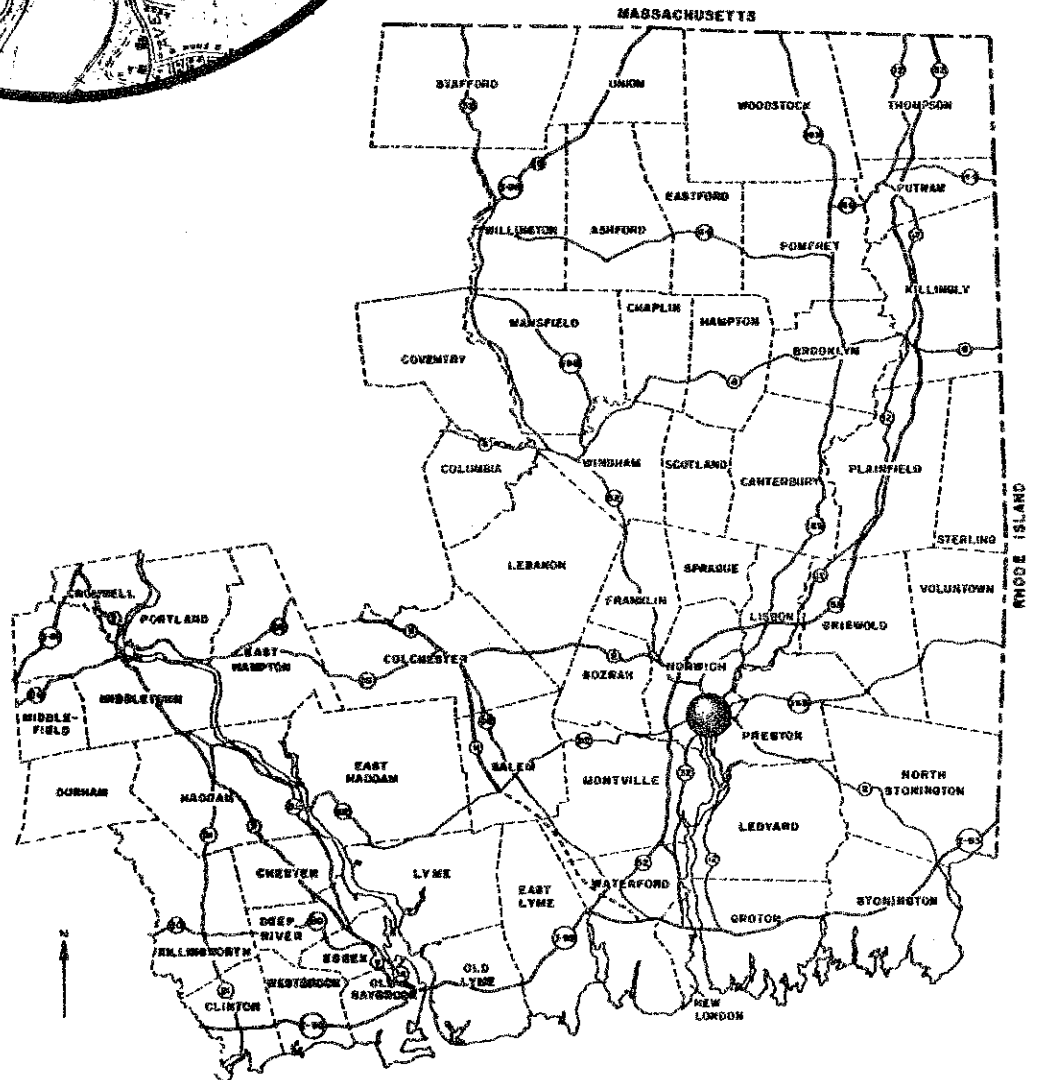
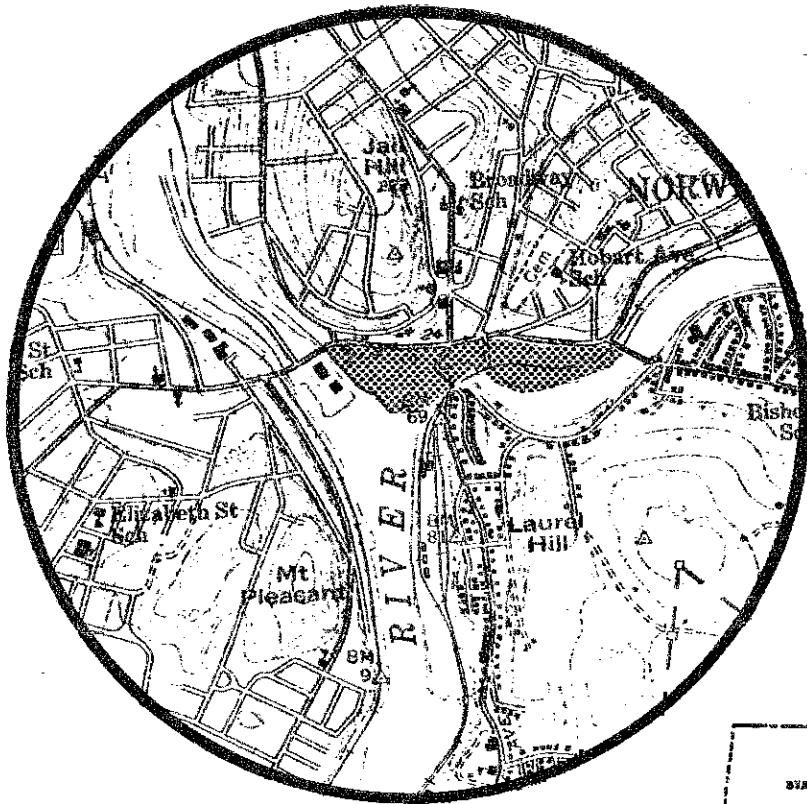


eastern connecticut resource conservation & development area

environmental review team
139 boswell avenue
norwich, connecticut 06360

Location of Study Site

FISHERMAN'S WHARF
NORWICH, CONNECTICUT



EASTERN CONNECTICUT
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

ENVIRONMENTAL REVIEW TEAM REPORT
ON
FISHERMAN'S WHARF
NORWICH, CONNECTICUT

This report is an outgrowth of a request from the Norwich Community Development Corporation to the New London 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 was reviewed by the Eastern Connecticut Environmental Review Team (ERT).

The soils of the site were mapped by a soil scientist from the United States Department of Agriculture, Soil Conservation Service (SCS). Reproductions of the soil survey map, a table of soils limitations for certain land uses and a topographic map showing property boundaries were distributed to all Team members prior to their review of the site.

The ERT that field-checked the site consisted of the following personnel: Gary Parker, District Conservationist, Soil Conservation Service (SCS); Michael Zizka, Geologist, Connecticut Department of Environmental Protection (DEP); Gerhard Amt, Regional Planner, Southeastern Connecticut Regional Planning Agency; Andy Petracco, Recreation Specialist, DEP; Joseph Piza, Fisheries Biologist, DEP; and Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Area.

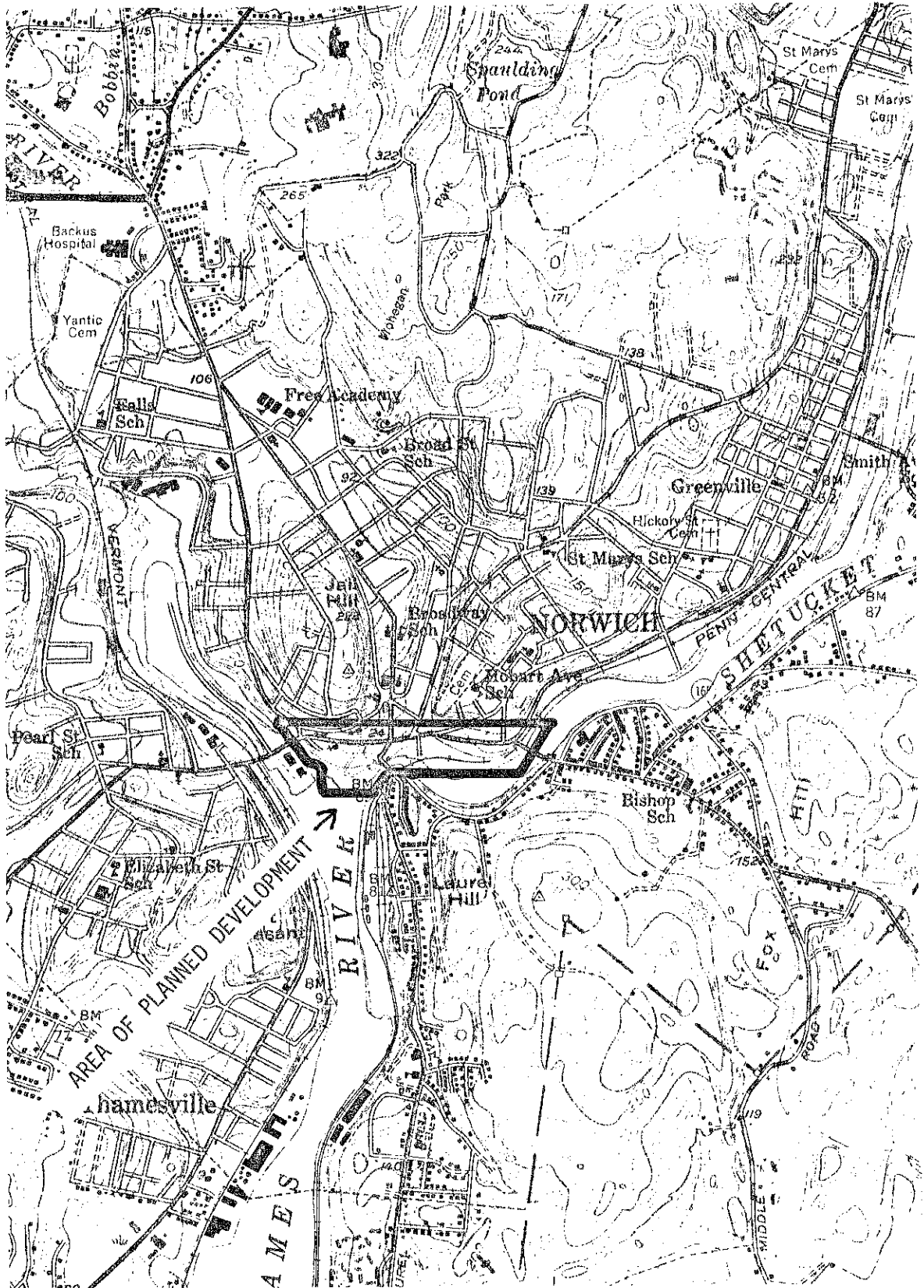
The Team met and field checked the site on Thursday, November 2, 1978. Reports from each contributing Team member were sent to the ERT Coordinator for review and summarization for the final report.

This report is not meant to compete with private consultants. As requested by the Town, this report, which identifies the existing resource base of Fisherman's Wharf, shall constitute the environmental assessment portion of the Development Corporation's open space application for Federal Department of the Interior, Heritage Conservation and Recreation Service funds to assist in the development of this property.

The Eastern Connecticut RC&D Area Committee hopes that this report will be of value and assistance in making any decisions regarding 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.

Location of Study Site



DESCRIPTION OF THE PROPOSAL

The Eastern Connecticut Environmental Review Team was asked to prepare an environmental assessment for a waterfront recreation/revitalization proposal to be known as "Fisherman's Wharf". The project is being proposed by the Norwich Community Development Corporation and is intended to reclaim the downtown waterfront area for community use. (See accompanying illustration.) The proposed plan includes the construction of a 1250-foot boardwalk from the present Marina location to the area near the Laurel Hill Bridge. No permanent structures are planned on the boardwalk. An 80- to 100-foot pier is proposed to extend from the boardwalk into the Thames River for fishing purposes. The plan also calls for the use of the existing abandoned rail right-of-way, which connects the eastern and western sides of the river, as a "riverwalk or promenade". At present these proposed facilities are subject to change.

A difficulty in evaluating this proposal is that it does not relate to the surrounding Central Business District. The impacts on vehicular and pedestrian circulation in the area are important, but these are impossible to evaluate fully without a more specific proposal.

The basic philosophy of the proposal appears desirable: taking advantage of the unique waterfront vistas and properties by acquiring them for purposes of public enjoyment or convenience. The walkway along the railroad right-of-way, the boardwalk, the fishing pier, and all of the other parts of the concept would appear on the surface to be good ideas, but there doesn't seem to be any basis for determining that these are the uses that would benefit the city and its residents the most.

The specific activities that take place in this critical area along the water's edge should compliment an overall improvement scheme in the Central Business District and the harbor area. They should also meet identified recreation needs, to the extent possible. This project has been conceived and is being promoted by the city's development agency without prior contact with other interested and responsible agencies. Before implementation action is taken, these other agencies should also evaluate the project.

DESCRIPTION OF THE ENVIRONMENT

PRESENT/PAST LAND USES

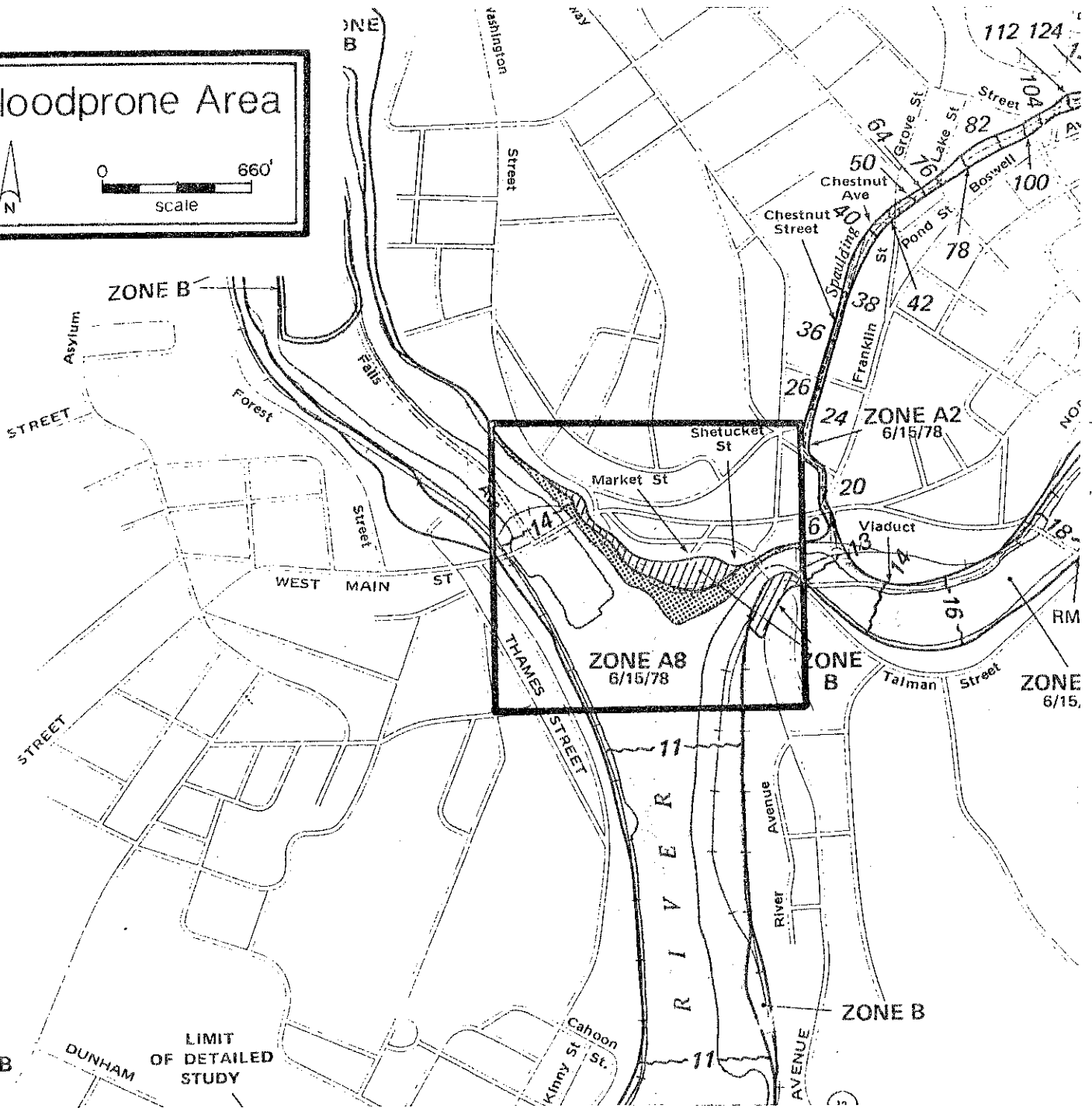
The site once provided facilities related to shipping and cargo storage. In recent years the land has been used primarily for vehicle parking. A small area has been converted to a waterfront parklet, with a grassed area, a short walkway and a large dock. It is a popular fishing spot and occasional fairs and festivals are held here.

SURFACE/SUBSURFACE GEOLOGIC CHARACTERISTICS

Bedrock underlying the site is a medium-grained schist consisting largely of the minerals quartz, oligoclase, andesine, sillimanite, and garnet. Minor minerals

Floodprone Area

N
0 660'
scale



LEGEND

- Sections inundated by 100-year flood (zone A-8).
- Sections inundated by 500-year flood.

Reproduced from Federal Insurance Administration Map, June 15, 1978.

include potassium feldspar, muscovite, and iron oxide minerals. Overlying bedrock is a deposit of stratified drift, consisting primarily of sand and gravel. The thickness of this material ranges from zero to more than 30 feet. The stratified drift is covered in many areas by artificial fill of varying thickness. Recent stream deposits may be found in a few areas, but they have mostly been buried by fill or by the regrading of the surface. No commercially valuable mineral deposits would be affected by any new development of this site.

SOILS

The soils on this site do not belong to any identifiable natural soil group. The land which was surveyed on the date of the field review is of the Udorthents series (ML2), filled land.

WATER RESOURCES

Water supply to this site is currently available from the city water system. The aquifers underlying the site are of little prospective value, both because of the overall thinness of the saturated portion of the stratified drift and because of the tendency of water from the local rivers to infiltrate nearby wells. Connecticut Water Resources Bulletin No. 16 reports that one well drilled into bedrock near the site was abandoned because it was producing brackish water.

Areas subject to flooding are shown in an accompanying illustration.

VEGETATION

The site is presently vegetated with a scrubby weed growth in areas where asphalt does not fully cover the land surface.

WILDLIFE

It is most probable that typical forms of urban wildlife, such as gray squirrel, seasonal songbirds and pigeons, frequent this site.

PROBABLE FUTURE ENVIRONMENT

Since a part of the site is privately owned at present, there is the possibility that an inappropriate structure could locate here, thereby limiting its future use by the public. Development is controlled to some extent by the fact that the area is subject to flooding during occasional storms.

ENVIRONMENTAL IMPACT

EFFECT ON LAND USE

Any development of this site generally in keeping with the character of this proposal should be beneficial to the surrounding area. An area that attracts people should have a positive impact on nearby commercial establishments.

EFFECT ON TRANSPORTATION ROUTES

Pedestrian access to the site is not likely to be complicated by greater use of the site by the public. Traffic lights at intersections approaching the site have special controls for pedestrians which should be adequate in spite of more intensive use. Vehicular circulation in the vicinity of the site would probably be somewhat simplified if the existing parking facilities on the site were reduced or eliminated.

EFFECT ON WATER RESOURCES

Because the area would be served by public sewerage, the project is not likely to have a significant impact on groundwater quality. Moreover, the site is already urbanized, presently consisting, for the most part, of parking facilities. Runoff from the site after completion of the project should therefore not be any more of a pollution problem than it is now.

EFFECT ON WILDLIFE

Urban wildlife which frequent this site should not be appreciably affected by this proposal. Food sources may become more plentiful due to the plantings which may be used on the site and the increased use of the site by humans.

ALTERNATIVES TO THE PROPOSED ACTION

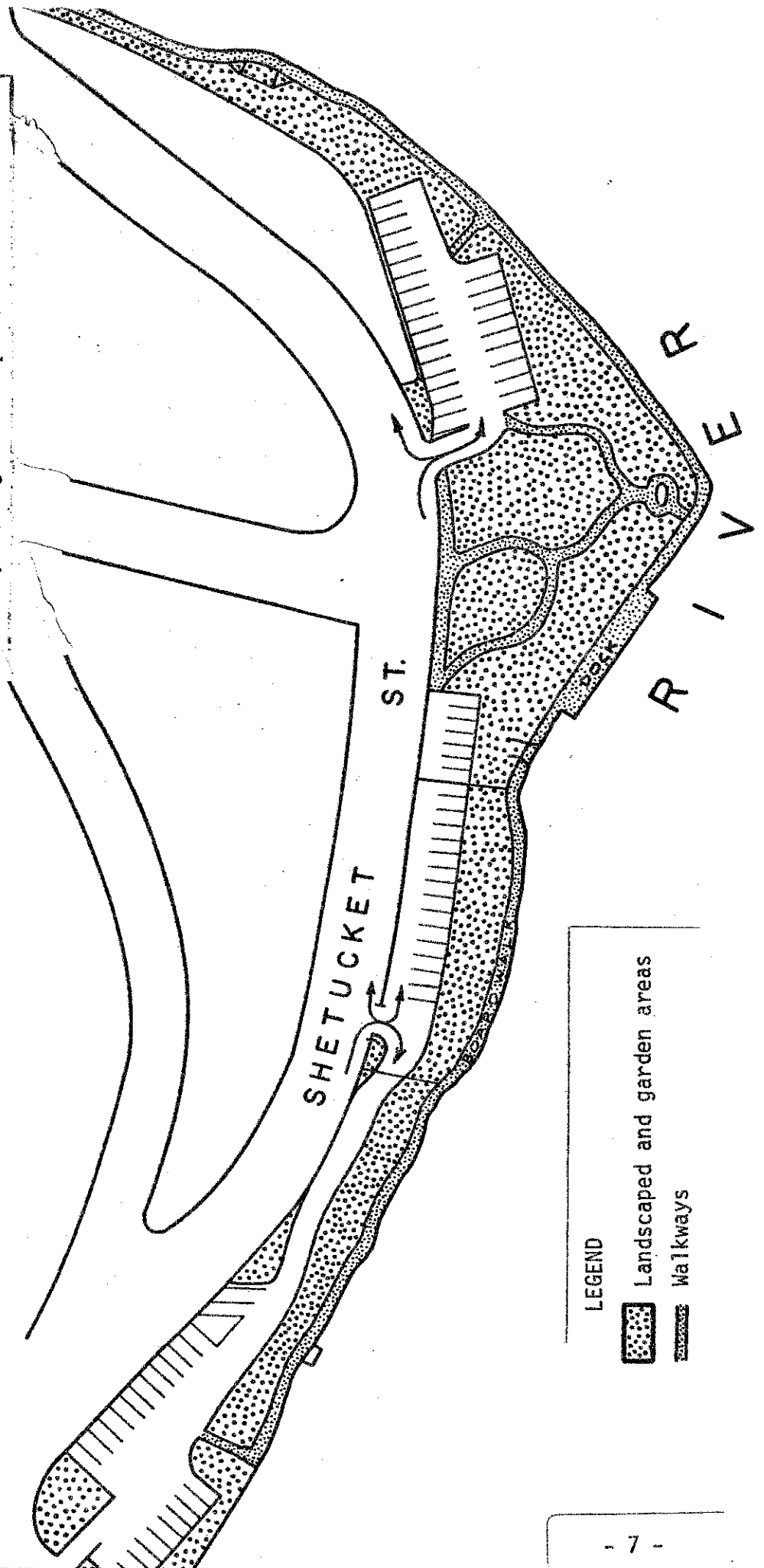
The unique location of the site should make it attractive for a variety of uses. It would probably be a dramatic site for a restaurant, apartments or professional offices. However, putting any such use along the harbor edge would block and destroy the harbor view from other nearby properties and thereby destroy the attractiveness and attracting power of the general area.

The site is in an urban setting and a "natural" appearance should be introduced here to provide relief from the angularity of artificial structures. Because of the area's limited size, some parking area should be eliminated in favor of a "green belt" setting which would be more attractive to urban dwellers.



Since the site is compact, possibly a modified Japanese garden or perennial shrub garden concept should be considered. The Japanese gardens masterfully incorporate a feeling of great space in a small area. Although a pure Japanese



Greenways and sitting areas could be provided.



LEGEND

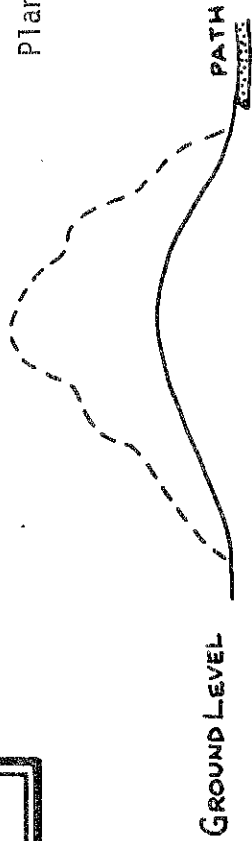
-  Landscaped and garden areas
-  Walkways

Possible Site Design

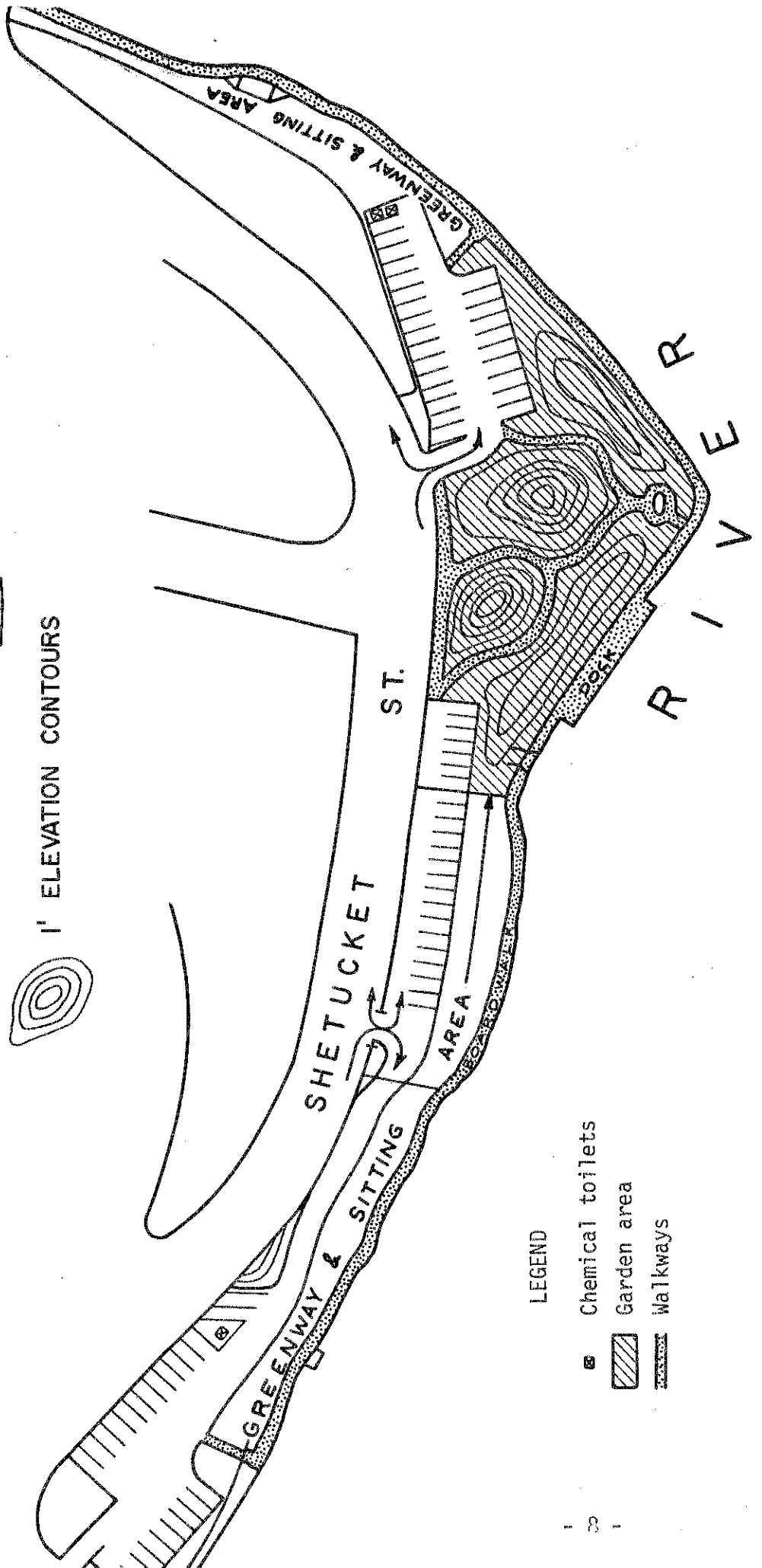
A

0 100
scale

Plant profile - small shrubs near base graduated up to taller shrubs and trees near the top of the mound.



1' ELEVATION CONTOURS



- LEGEND
- Chemical toilets
 - Garden area
 - Walkways

garden design would not be a practicality in this setting, adoption of a Japanese garden philosophy of design adapted to the requirements and limitations of the site may help to keep a final design in balance and harmony. Minimal maintenance should also be one aspect considered in finalizing a workable design.

The site itself is long (approximately 1350') and slender in configuration. Reference to the sketch map shows that the proposal offered is to segment the site into zones of use with the boardwalk traversing most of the length of the site and tying the various zones together. Parking areas are located on the northern (Shetucket Street) side of the site. Two vehicle access/egress points are proposed with elimination of the present entrance (near the parking attendants' booth). The railroad tracks should probably be removed prior to constructing the new parking lots.

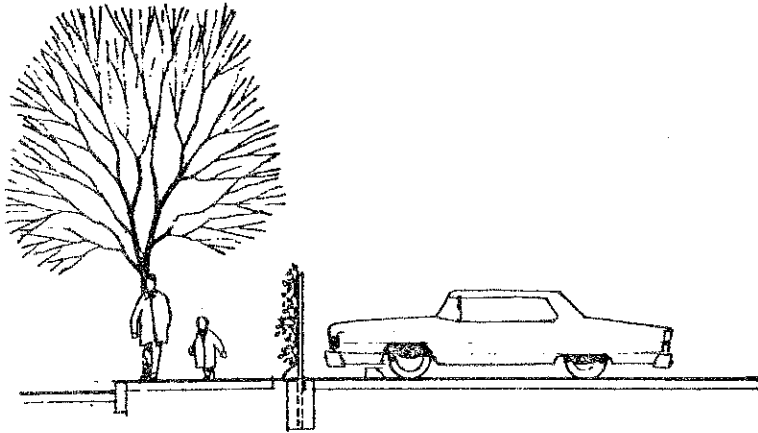
If practical, it would be desirable to intersperse tree islands within the westernmost parking lot. A possible way of doing this would be to sacrifice every fourth parking space as a planter strip for trees and shrubs. This would make snow removal more difficult but the summer shade and aesthetic benefits derived should outweigh this. Trees planted in this fashion would tend to soften the uninterrupted expanse of concrete forming the retaining wall between the parking lot and Shetucket Street. If planter strips are not possible, it would then be desirable to at least plant a strip of ivy along the wall which would help to screen it. Use of any vegetation softens the angularity and monotony of man-made structures and can enhance their appearance.

Garden areas between the paths in the Greenway could be made more interesting and with an enhanced feeling of intimacy by mounding the earth in the garden. Rubble from any excavated portions of the present parking lot could possibly be disposed of on the site by using it to build up the subgrade in mounded portions. Topsoil would necessarily have to be brought in. This technique would further help to screen one section of pathway from another because of the mounding and to a slight extent would increase the surface area available for planting, allowing the use of more plants to aid the screening process. Dwarf to intermediate size deciduous trees would be recommended for use. Broad-leaf evergreen and deciduous shrubs (e.g.: Mountain Laurel, Azalea, Rhododendron, Euonymus, etc.) might be employed to this end. Those wishing to sit could use small patches of lawn or the benches provided in the boardwalk and greenway areas.

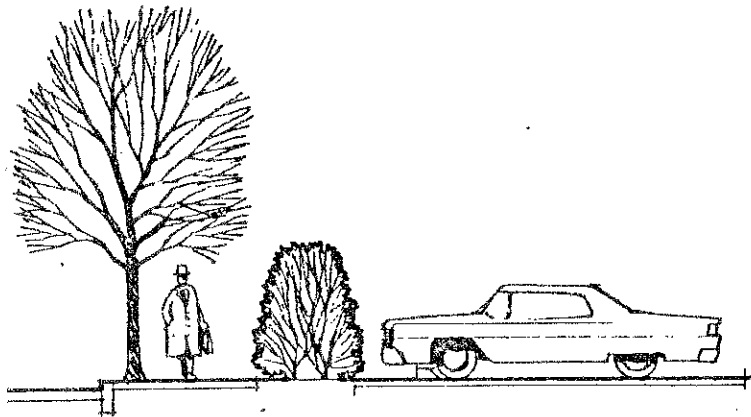
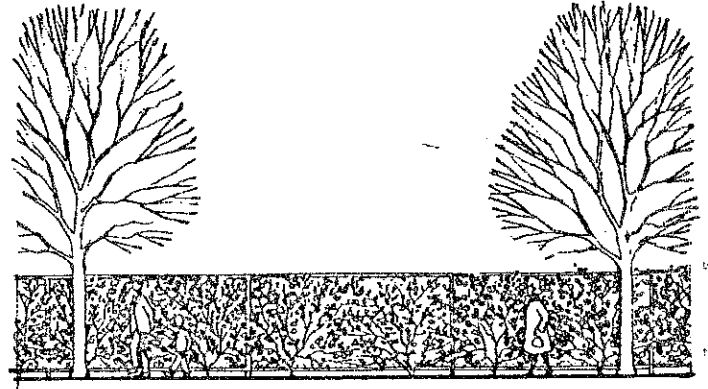
Ground cover, rather than grass, may be considered as filler between shrubs and trees. Shrubby (e.g.: juniper) and viney (e.g.: Vinca or Hedera) ground covers are the two basic types. Ground cover is more expensive initially but has less long term maintenance cost provided it is used in areas not walked upon. Difficult mowing situations (small areas, steep banks, under and between shrubs and trees) are eliminated by using ground covers. One problem with a ground cover is that litter (bottles, cans, papers) can accumulate in it.

The boardwalk should have ramped access points from the pathways to permit wheelchair use. Treated lumber should of course, be used for durability and natural appearance. A painted boardwalk would not be desirable. The nominal width of the boardwalk should probably be about six feet to permit pedestrians to walk by parked wheelchairs. It would also be desirable to have a bench seat mounted on the back of the handrail. A boardwalk would be popular with fishermen, people on lunch break, or those out to relax in the sun and watch the river.

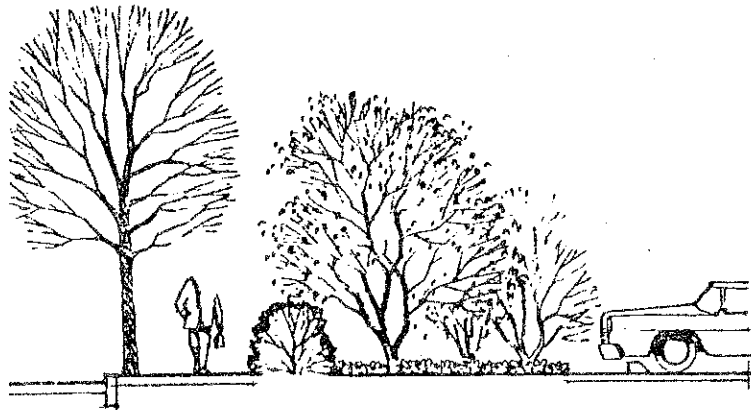
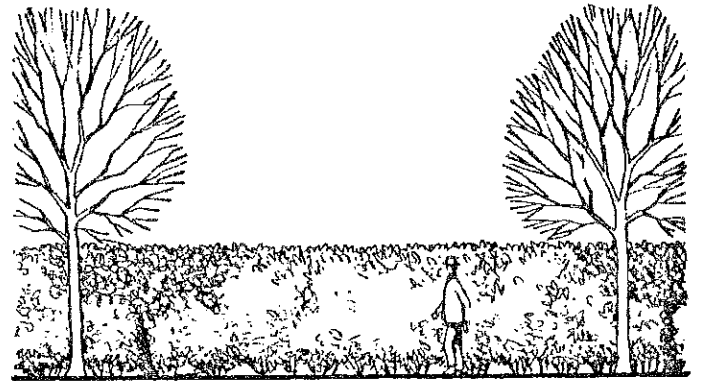
Screening Techniques



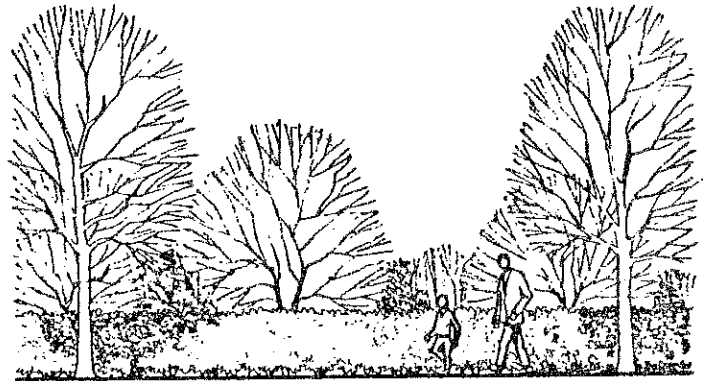
vine on fencing



tall hedge



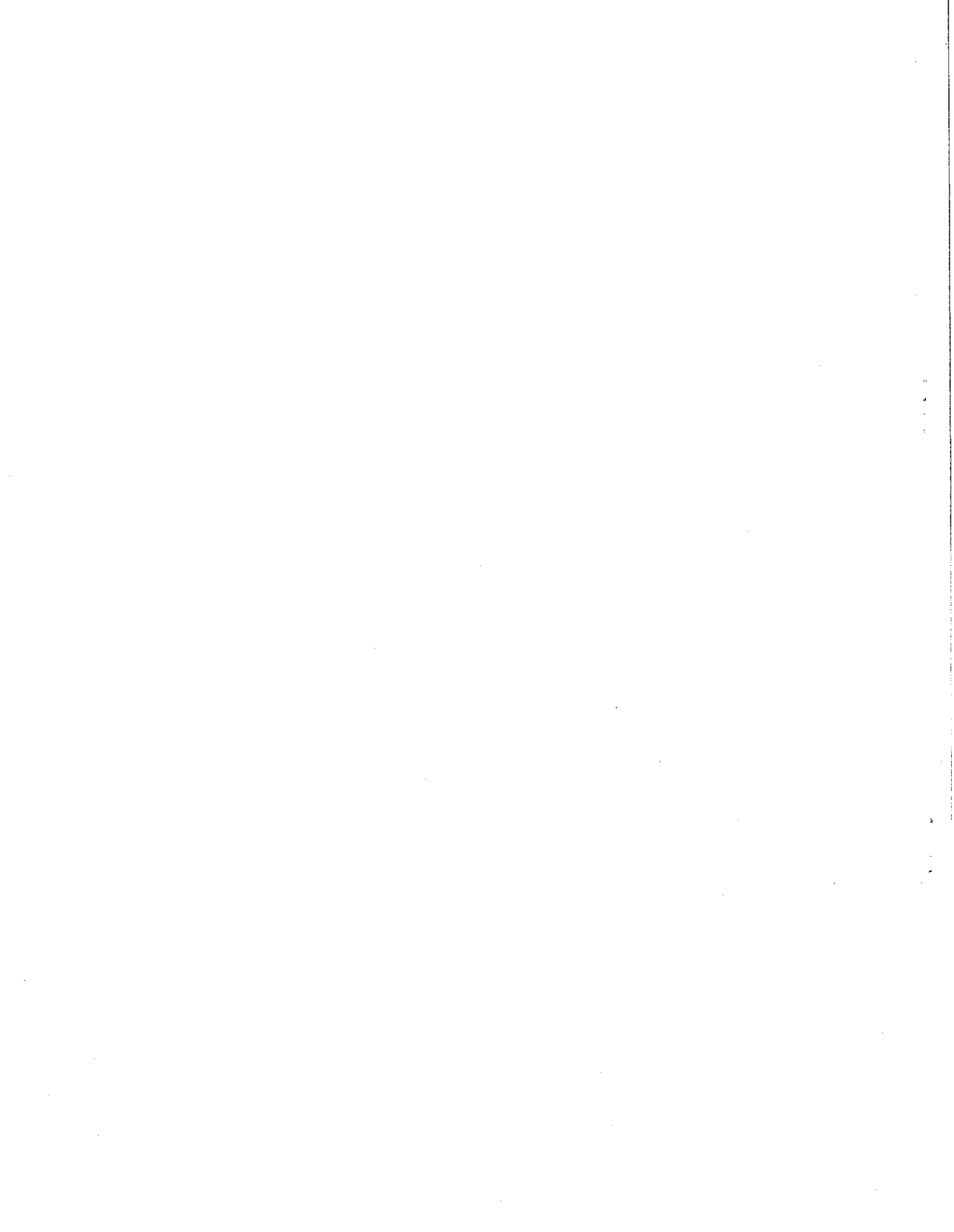
low hedge with small trees



PLANTING

Before adopting any design concept, a determination must be made as to the maximum number of cars for which parking must be provided. In essence, increasing the number of cars to be accommodated will lessen the site quality since the size of the green area will be diminished. Possibly an agreement could be made whereby some parking spaces in the C.B.T. bank building parking lot could be available for weekend use. Time limits would have to be imposed on these spaces to enable park users to park their cars here rather than have spaces tied up by people working nearby.

In selecting between various options, minimizing the long term maintenance of the site should probably be the main criteria in determining which choices are made.



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.

