

SECTION IV

PROPOSED LAND AND WATER USES

AND

PROPOSED PROJECTS

IV. PROPOSED LAND AND WATER USES AND PROPOSED PROJECTS

The waterfront area in the Town of North Greenbush is an isolated enclave in contrast to the urbanized waterfronts in communities to the north and south. The land use plan and supporting projects included in this LWRP are intended to expand use of, and access to, this area while protecting its unique characteristics.

A. LAND USE PLAN (SEE MAP NO. 7)

The Land Use Plan designates six categories of land use, as described below. These are based on a combination of existing use, physical constraints and development objectives. The categories were not directly comparable to zoning districts but, in several instances, required revisions in the text and/or map of the Town's zoning laws. These land use objectives are reflected in the applicable policies of Section III.

1. Escarpment Conservation

This classification applies to the steep, relatively unstable slopes which separate the river flats from the upland plateau. The only appropriate uses are preservation of natural features and non-intensive recreation uses such as hiking, nature walks, etc. Development of an access road from the plateau to the waterfront through this area is also appropriate, if developed in accord with the policies dealing with erosion control and preservation of natural features and subject to the use of design techniques based on the unique characteristics of this area. Further discussion of this road is included in item B. below.

2. Public Utility

This description applies to the area occupied by the Rensselaer County sewage treatment plant, the Conrail tracks and the Niagara Mohawk Power Corporation transmission lines. In addition to these principal uses, other uses such as hiking trails, boat launches and passive recreation facilities which are compatible with the principal uses are appropriate.

3. Planned Waterfront Development

All land between the railroad and the water's edge, south of the Town Park land, with approximately 4,000 feet of waterfront and a depth ranging between 600 and 1,000 feet, is included in this classification. Although this area has limitations in terms of both access and environmental features, it offers a unique opportunity

to develop access to the waterfront and to integrate upland and water-related uses.

A variety of water-dependent and water enhanced uses are permitted in this area, subject to development standards and a review process which ensures that environmental resources are protected, under a new zoning district established for only this area. Since this entire area is owned by one entity, the RPI Technical Park, it is intended that the development plan for the entire area include a mixture of the permitted uses (see below) to create a total integrated environment based on use of, and proximity to, the river.

Permitted uses will consist of a combination of the following:

- a. Marinas, boat launches, docking and similar uses.
- b. Conferences centers, offices, restaurants and supporting facilities.
- c. Cultural, educational, or scientific uses which utilize the coastal resources.
- d. Uses which require water transportation.
- e. Residential uses which by site design, supporting facilities or other means utilize the particular advantages of a waterfront site.

Standards and procedures to be followed for development of the permitted uses will be included in the provisions of a new Planned Waterfront Development District (see Exhibit V-A).

4. Light Industrial

The lands at the end of Glenmore Road would receive this designation. This area, which includes the New York State Armory and WRPI radio tower, is the only substantial portion of the proposed waterfront area on the upland plateau. Light industrial, research and office uses are appropriate here. Such a designation would require a rezoning from "AR" Agricultural Residential to "G" Industry.

5. Park/Recreation

Although recreational uses are appropriate throughout the waterfront area, only the land dedicated to the Town of North Greenbush by RPI, just south of the Niagara Mohawk

transmission line, is specifically designated for such use. The site should be devoted to active and passive water- dependent and related uses and serve as the primary public access to the river. To the extent possible, the use of this area should be planned to complement uses in the adjacent Planned Waterfront Development District.

B. PROPOSED PUBLIC AND PRIVATE PROJECTS

The following projects are proposed to implement certain aspects of policies set forth in Section III. These projects do not include private development activities such as conference centers, offices, etc. which will be included in the land use plan and governed by the proposed zoning controls and the criteria established in the LWRP policies.

1. Riverfront Access Road

A road providing vehicular access to the riverfront is essential to the Town's policies and objectives for utilizing its waterfront resources. Such a road would allow development of water-dependent and enhanced uses by the RPI Tech Park, in accord with the Planned Waterfront Development District, and would provide access to the Town-owned waterfront lands.

Due to the sensitive nature of the steep hillside between the river flats and the escarpment above, as discussed in Section II, the location and design of an access road must recognize and mitigate potential impacts of its construction. In order to analyze the nature of the problem and identify a feasible location and necessary design criteria, a study was undertaken by a soils engineer familiar with the site. This study is attached as Appendix A.

The study evaluated the existing surface and sub-surface soils conditions, geology, and groundwater conditions. Three alternate alignments (see Map No. 8) for an access road were analyzed, based on these factors, to determine how each would impact the marginally stable side slopes.

The analysis revealed that an alignment along the bottom of the ravine just south of the power lines (Route B) would substantially reduce problems of stability as opposed to alignments traversing the sides of the ravine (A or C). By filling in the bottom of the ravine, a roadway of adequate width could be created with a relatively moderate grade of 6-7%. This alignment has the further advantages of providing erosion protection at the

bottom of the ravine and allowing more efficient use of the land on top of the plateau.

Design considerations are simplified by the alignment at the bottom of the ravine. Since there would be little need for cut, extensive areas of raw soil would not be exposed and subject to erosion. Areas of fill would not require retention, since they would be placed at the bottom of the existing ravine. Conventional methods of erosion sedimentation control can be used to prevent adverse impacts.

The feasibility study demonstrates that the proposed access road can be designed and constructed in a manner that will not adversely impact the fragile hillside.

2. Development of Town Park

The waterfront site dedicated to the Town by RPI should be developed as a multi-use riverfront park. Boating and fishing would be the principal active recreation emphasized here; opportunities for picnics, concerts and other forms of passive recreation would also abound. From this focal point, other areas of the waterfront, including hiking, biking, exercise and cross-country skiing trails, and nature study areas would be accessible.

3. Wetlands Enhancement/Greenway Trails/Nature Study Areas

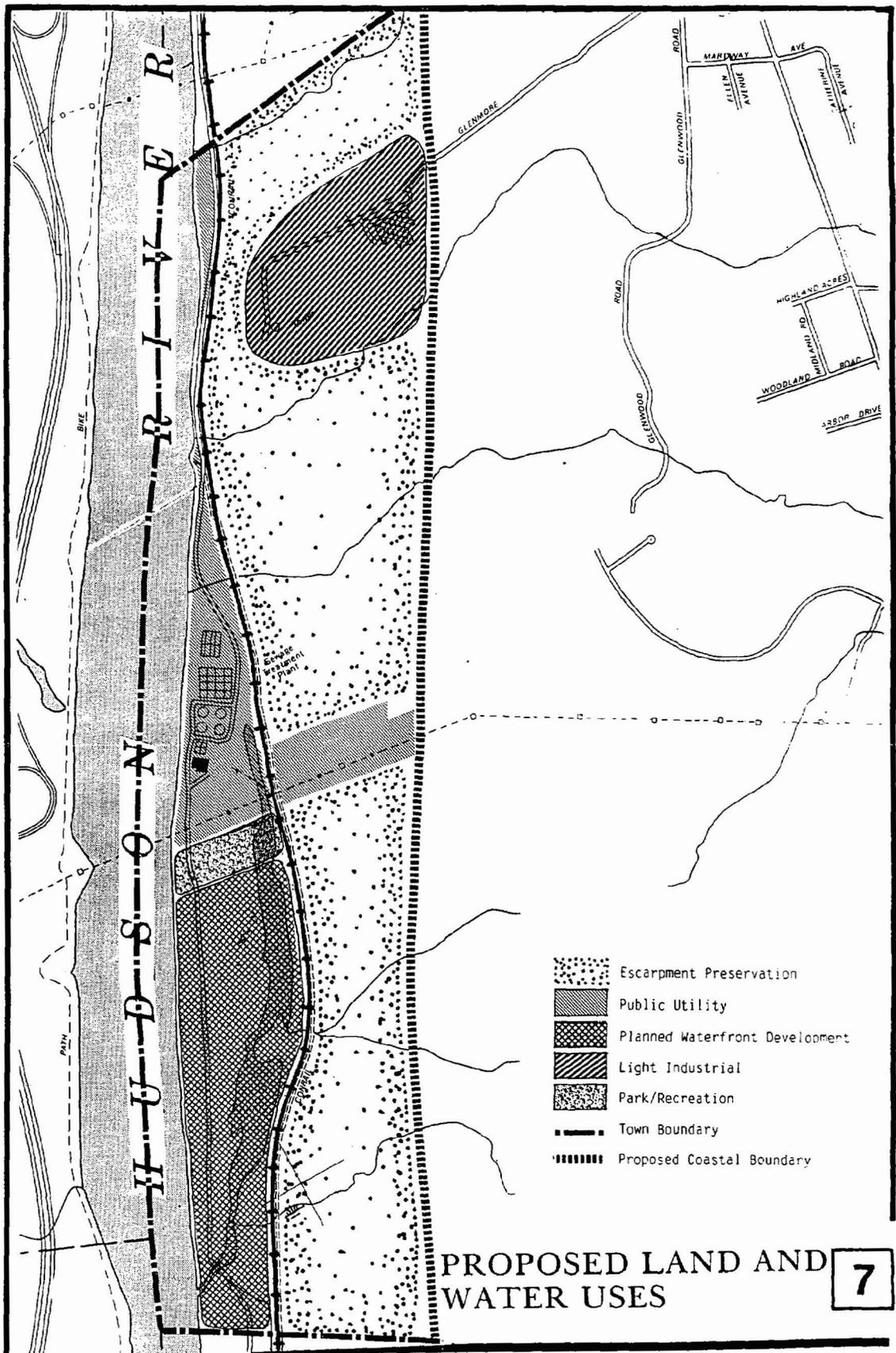
Restoration and enhancement of the wetland habitat for both wildlife and passive recreation is a unique opportunity which can be realized in the waterfront area. Opportunity exists to regrade barren gravel areas on both the Town Park land and RPI property to form shallow waterways and ponds, perhaps 3 to 4 feet in depth, for waterfowl habitat; and to seed and plant surrounding open areas with appropriate grasses, legumes, and shrubs that will provide additional forage and ground cover for small mammals and birds.

A perimeter trail around the wetlands to accommodate joggers, bikers, hikers and skiers to be connected to a trail system along the escarpment as part of a "greenway" system extending to the north and south is also possible. A small-scale interpretative nature study center/observation deck area is also possible. At appropriate points among the cottonwoods which surround the wetland area, as well as along the seawall overlooking the Hudson, clusters of picnic tables and benches could be placed.

4. Dredging and Excavation for Marina Development and Bulkhead Improvement

Dredging and excavation to create an inland marina with a navigable depth of 8 to 10 feet will provide a protected small boat harbor accessible from both the proposed Riverfront Park and the RPI lands. Spoil material generated will be utilized for initial development of the Town Park and nature study sites and as other-wise practical throughout the waterfront area to accommodate the uses intended. Where necessary for stabilization, riprapping of the marina embankment would occur, as well as repair of the bulkhead.

This work will require a permit under Article 15 of the Environmental Conservation Law and probably Article 24. An Army Corps of Engineers permit will also be required. This work which must be carefully planned and scheduled to avoid or mitigate adverse impacts on the adjacent wetlands and riverfront environment.



PROPOSED LAND AND WATER USES

7

**LOCAL WATERFRONT REVITALIZATION PROGRAM
TOWN OF NORTH GREENBUSH**

Shuster Associates

Planning Consultants