

**SECTION II**  
**INVENTORY AND ANALYSIS**

## II. Inventory and Analysis

### A. Orientation

#### 1. Community Profile and Overview of Waterfront Area

The Village of Tivoli is located in northwest Dutchess County in the Town of Red Hook on the eastern bank of the Hudson River. Tivoli is approximately 40 miles south of Albany and one hundred miles north of New York City. According to the 1990 Census, 1,035 people reside in the Village.

The Village's waterfront is approximately one mile long. The orientation of the community to the waterfront at the present time is limited because the Conrail railroad tracks lie close to the river, blocking easy access. A gated and lighted signal crossing over the tracks at the end of Broadway allows access to the immediate shore. About a dozen houses overlook the river in this section of the Village. The remainder of the Village is clustered along North Road, Montgomery Street, Broadway (where the preceding two roads meet) and Woods Road where the more recent development has occurred.

Demographic statistics show that 24% of the Village residents are at the poverty level with 116 of these people over 60 years of age. 77.3% of the households qualify the Village for U.S. Housing and Urban Development (HUD) funds (based on HUD standards of a yearly income of \$21,750 per family of four).

#### 2. Historical Development

The one square mile area of the Village is located on land originally acquired by Colonel Peter Schuyler through purchase from area Indians and a patent granted him by Governor Thomas Dongan in the latter part of the seventeenth century. During the next century and early nineteenth century, the present form of the Village took shape. Three river estates, then owned by John Reade, Henry Gilbert Livingston, and John Watts DePeyster were built. These three homes, now Callendar House, the Pynes, and Rose Hill, limited access to the river and restricted commercial and residential development along this section of the Hudson.

Formerly called Red Hook Landing, the name "Tivoli" stems from the attempt by Peter De Labigarre, a Frenchman, to construct a planned community at the river's edge. This scheme failed and De Labigarre's property was purchased by Chancellor Livingston at Public Auction in

1807. Livingston had a home constructed on the present site of the Pynes called "Le Chateau de Tivoli" from which the Village name is derived. For its first one hundred years, Tivoli on the River and Meyersville (later named Madalin) were two separate villages. In June 1872, the two hamlets were merged to officially form the present incorporated Village of Tivoli. The combined populations of the villages reached the highest level in 1900 of 1,350, thereafter declining to 1,080 in 1915, 761 in 1940, and 711 in 1980.

The Hudson River was the focal point of commercial development in the Village. The 18th century sloops docking at the Tivoli Landing, the ferry to Saugerties, commercial fishing operations, and the fact that Tivoli was a steamboat stop provided employment and economic activity which allowed the Village to prosper. Tivoli also grew with the coming of the railroad in 1851 and was a half-way point on the Hudson River Railroad.

After the turn of the century, Tivoli like many other rural areas, was beginning to change. The railroad no longer stopped at smaller communities and the river was not the focal point it once had been. With the automobile as the primary transportation mode after World War II, economic activity in the center of the Village declined. Later Tivoli lost its east-west access with the elimination of the ferry link with Saugerties after the construction of the Kingston-Rhinecliff Bridge. NYS Route 9G caused the north-south traffic to by-pass the Village commercial area, as well.

## **B. Land Use and Development**

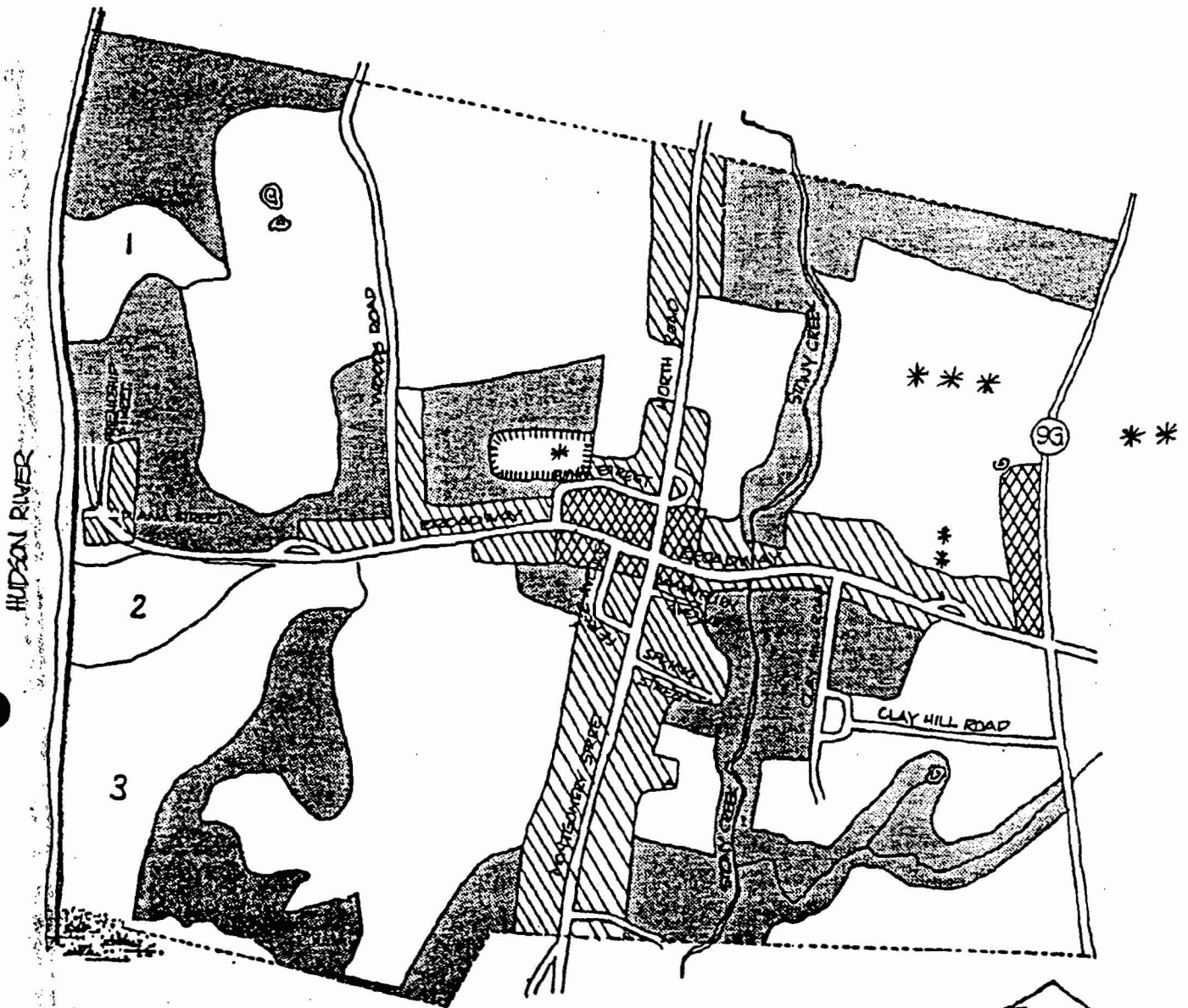
### **1. Existing Land and Water Uses (Map 2)**

#### **a. Residential**






According to the 1990 Census there are 1,035 people residing in the Village of Tivoli. Most people commute to work in the Hudson, Kingston and Poughkeepsie areas. There has also been an increase in apartment rentals because of the close proximity to Bard College, along Tivoli North Bay in the Town of Red Hook. Former commercial space and storefronts are now being utilized as apartments, changing the former commercial center to a residential neighborhood.

The residential building stock in Tivoli is primarily of early to late 19th century vintage of modest size. These buildings, both individually and collectively, maintain their original design

TIVOLI WATERFRONT  
REVITALIZATION PLAN



EXISTING LAND AND WATER USE VILLAGE OF TIVOLI

-  RESIDENTIAL
-  BUSINESS DISTRICT
-  AGRICULTURAL
-  WOODLANDS
-  RECREATIONAL
- \* \* WELL LOCATIONS

FORMAL LANDSCAPING (PRIVATE ESTATES)

- 1. ROSE HILL
- 2. THE PYNES
- 3. CALLENDER HOUSE

EXISTING LAND AND WATER USE  
VILLAGE OF TIVOLI

character and could be considered as a National Historic Register District in the future.

Most of the residences are clustered around the Village Center, radiating out on the major thoroughfares. Another cluster of homes overlook the riverfront located in the Tivoli landing area. Residences are scattered in the wooded and agricultural areas of the Village.

Tivoli has been able to successfully compete in several federal and State funding programs for senior citizen housing because of a high level of elderly and low income residents. The U.S. Farmer's Home Administration in July 1985 gave the Housing Development Fund of St. Paul's Episcopal Church in Tivoli a \$1 million loan for Provost Park, a 24-unit senior citizens housing project on Woods Road. It is an attractive colonial style addition to the Village.

Another major residential subdivision development is Tivoli Acres I and II, a 50 acre site on Woods Road. Seventy-one houses have been approved. The same developer has approval for a total of 96 condominiums clustered in six buildings just north of the original subdivision. These developments will add approximately 400 residents to the current population. Both projects are serviced by municipal sewer and water.

b. Commercial

The commercial bustle of Tivoli in the 19th and early 20th centuries has been replaced by a quiet residential community today. The recently built fire house, the Post Office, Village offices and American Legion Hall are all found on Broadway. The business area along Route 9G has a gas station, and a delicatessen and is zoned Residential Business to encourage additional business uses there.

To encourage the revival of the business area, the Village solicited funds from the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program to fund curb and sidewalk restoration. As with many other communities along the Hudson River, Tivoli experienced a decline in population during the 1960's, but is experiencing a regrowth today. Although some storefronts were converted to apartments in the past, new owners of buildings in the commercial

district are rehabilitating buildings for commercial purposes. The predominantly 19th century architectural style is being preserved in this restoration movement. The old factory complex has been refurbished for commercial use on the ground floor and residential on the upper level. The former Methodist Church and parsonage have also been adapted for commercial uses. Tivoli retains its quiet residential character, and this historic Village would qualify, with its diverse collection of commercial, institutional, industrial and residential buildings, for nomination on the National Register for Historic Places.

There is at present no heavy industrial land use in Tivoli, nor is any section of the Village presently or proposed to be zoned for such use. The Village only allows light industrial uses by special permit in certain zones.

2. Deteriorated and Underutilized Areas

The obvious underutilized area in the Village of Tivoli is its business district. Many old storefronts were converted to other uses such as apartments or remain vacant, but stores are reappearing as the Village's population grows. If business demand grows, it is conceivable that the apartments may be reconverted to stores.

The old firehouse on Broadway will be restored and adapted as a new Village building. Offices of the Village Clerk, Planning Board and other agencies will be located there, as well as the Village library. An architectural survey and floorplan have been completed. Funds in the range of \$1 million dollars must now be raised before construction can begin. A matching grant in the amount of \$300,000 has been received from the NYS Office of Parks, Recreation and Historic Preservation.

In order to encourage more consumer traffic on Broadway, the Village has rebuilt Woods Road and will, through signage, attempt to attract visitors to Clermont State Park to make Tivoli a part of their trip. An area in the Village that has deteriorated through the years is the old landing area at the end of Broadway on the Hudson River. The bulkhead is in need of repair. The entire strip between the railroad tracks and the river is essentially vacant and used occasionally for fishing or sightseeing. There is no central sewerage in the area. Conrail often uses the area for storage and dumping of construction materials, such as railroad ties, without a permit from the Village, and locates temporary workers' housing there.

The Village is not interested in developing the limited area west of the tracks for a park because of its proximity to the high speed railroad tracks. The site has been identified by DEC in their access study as a potential site for a boat launch. A small scale facility could be located there. Such a facility would further the goals of public access and is also recommended in the recent study "Between the Railroad and the River" (Hudson River Access Forum, Sept., 1989). Consideration must be given to site distances within the navigational channel for ocean going vessels. Rocky shoals lie adjacent to the waterfront, as well.

3. Zoning

A community's zoning is its guide for future development. The Existing Zoning Map (Map # 3) illustrates the development pattern that the Village encourages. Tivoli allows residences on a minimum of 15,000 square feet lots (R15) along all existing roads except for the south side of Broadway from Woods Road west to the river. A restrictive Land Conservation zone incorporates a 1000 foot strip next to the Hudson River and a 100 foot wide strip adjacent to Stony Creek. This conservation zone promotes agricultural, recreational, and open space uses and prohibits residential uses. The R2A and R3A zoning districts allow for residences with a minimum lot size of 2 and 3 acres, but encourages agricultural land use. These districts are located generally where few municipal utilities are available (See Map 8). In November 1988 a RIA district was added to the Village Zoning Ordinance. This district is located along North Road and over to Woods Road along the Village's north boundary. A General Business district (GB) has been established along Broadway where this street intersects with North Road and Montgomery Street. This district allows for commercial activity which will not generally interfere with the adjacent residential areas. The Highway Business district was changed in 1988 to a Residential Business district (RB), which is less restrictive than the GB district. This zoning change was made to encourage uses that will not constitute a visual intrusion along scenic Route 9G, as the Mid-Hudson Scenic District Management Plan recommended (See Map7).

4. Water-Related Uses

Water-dependent uses are those uses which rely on a location in close proximity to the waterfront. Water-dependent uses in Tivoli are few because the railroad tracks make public access difficult and land area directly fronting the river is limited. Current water-dependent uses include recreational fishing, wildlife viewing and enjoying the scenic views of the Kingston-Rhinecliff Bridge, the river and the opposite shore.

A water-enhanced use is " a use that has no critical dependence on a waterfront location, but the profitability of the use and/or the enjoyment level of the users would be increased if the use were adjacent to, or had visual access to the waterfront."

As the New York State Department of Environmental Conservation provides additional buffer along North Tivoli Bay, the opportunity to provide both water-related and water-enhanced recreation will increase.

## C. Natural Resources and Environmental Quality

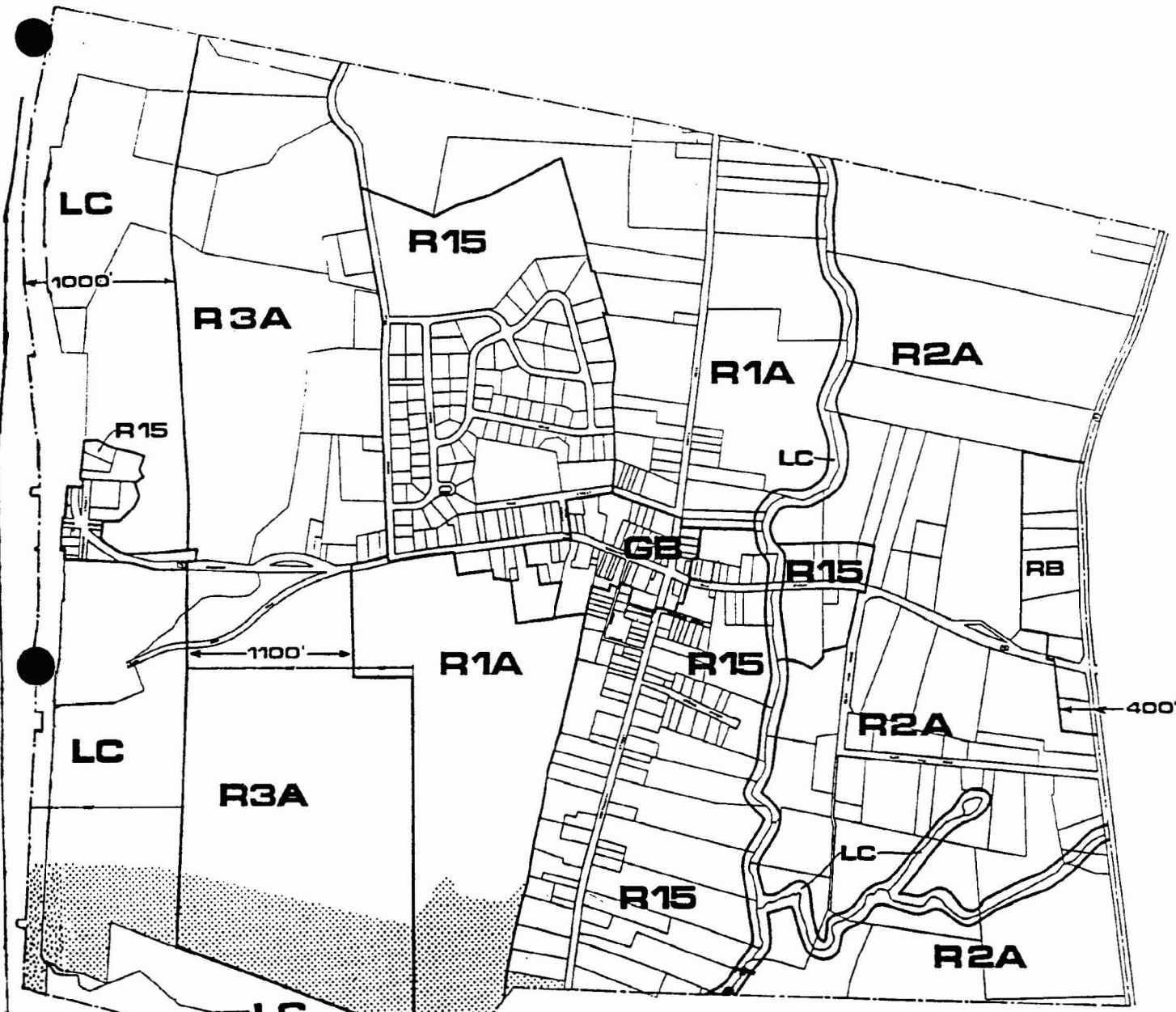
### 1. Topography and Soils

The Hudson River and Stony Creek are the dominant natural features in Tivoli. The Village of Tivoli is located approximately 150 feet above the Hudson River. Abutting the river are 100 foot high bluffs on which the houses close to the river are built (Map 9). The floodplain is just wide enough for the railroad right-of-way, which includes a narrow strip adjacent to the river, and a dirt road from the landing north on the east side of the railroad. Stony Creek, which begins in the Towns of Red Hook and Clermont, flows south through a number of ravines to Tivoli Bay in the southeast corner of the Village. The bluffs and ravines along the creek comprise approximately 15% of the Village land mass and have slopes greater than 15%, restricting development in these areas. The soils are a mixture of loams, silt and clay, and are highly erodible.

The remainder of Tivoli is relatively flat. The soil consists of lacustrine silty loams and clay which average 35-40 feet deep and prevents water from recharging the more permeable and isolated sand and gravel deposits sandwiched between the clay and bedrock. This produces soils which are not well drained and limits the recharge of the ground water supply.

The soil in Tivoli has supported orchards, pastures, pond development and woodlots. Some of these soils exhibit development limitations in terms of drainage, septic systems, and groundwater withdrawal. Excessive slopes also limit development in some areas. About 25% of the top soil in Tivoli is classified as prime agricultural soil. The majority of these areas are protected by an Agricultural District (See Map 8). The remainder of the prime agricultural lands are contained within the estate areas not already in an Agricultural District or have residential development.













### ZONING MAP

- R3A RESIDENTIAL DISTRICT
  - R2A RESIDENTIAL DISTRICT
  - R1A RESIDENTIAL DISTRICT
  - R15 15,000 SQUARE FOOT RESIDENTIAL DISTRICT
  - GE ORIGINAL BUSINESS
  - RB RESIDENTIAL BUSINESS
  - LC LAND CONSERVATION
-  PERMANENT EASEMENT OWNED BY THE NYS DEC
 
 ALSO INCLUDES LAND WITHIN 500 FEET OF NYSDEC REGULATED WETLAND BS-3

VILLAGE OF  
TIVOLI  
DUTCHESS COUNTY, NEW YORK

-  100 FEET ZONING LINE  
 50 FEET ZONING LINE  
 25 FEET ZONING LINE  
 PROPERTY LINE  
 30 FEET ZONING LINE  
 15 FEET ZONING LINE  
 10 FEET ZONING LINE  
 STREET FRONTAGE

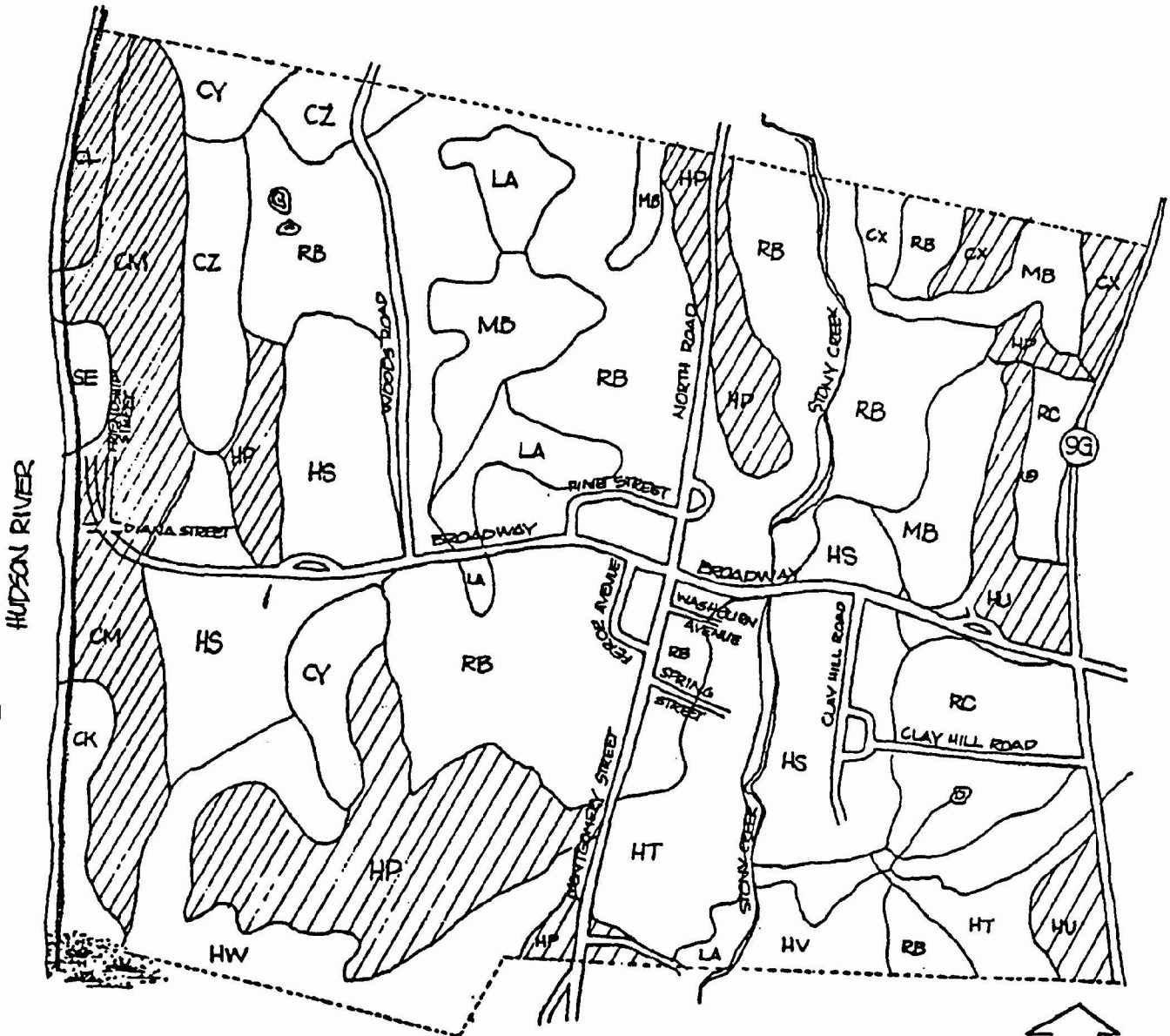
TOWNSHIP		COUNTY	
CD	CD	CD	CD

**CURRENT ZONING**  
VILLAGE OF TIVOLI

3

NEW YORK

TIVOLI WATERFRONT  
REVITALIZATION PLAN



SOILS AND SLOPE\* VILLAGE OF TIVOLI

- CK, CL, CH - COLONIE FINE SANDY LOAM
- CX - COSSAYUNA GRAVELLY LOAM
- CY, CZ - COSSAYUNA STONY SILT LOAM
- HP, HS - HUDSON SILT LOAM
- HT, HU, HV, HW - HUDSON SILT CLAY LOAM
- LA - LIVINGSTON SILT CLAY LOAM
- MB - MADALIN SILT CLAY LOAM
- RB - RHINEBECK SILT LOAM
- RC - RHINEBECK SILT CLAY LOAM
- SE - STEEP (NASSAU SOIL)

 PRIME AGRICULTURAL SOIL

\* FOR SLOPE INFORMATION  
REFER TO CHART #I

VILLAGE SOILS AND SLOPE  
VILLAGE OF TIVOLI

**CHART I  
VILLAGE OF TIVOLI  
SOILS AND SLOPE CHART**

<b>MAP SYMBOL</b>	<b>SOIL NAME and DESCRIPTION</b>	<b>SLOPE</b>
-CK	Colonie fine sandy loam, hilly & steep	15-35%
*CL	Colonie fine sandy loam, level	0-3%
*CM	Colone fine sandy loam, rolling hills	5-15%
*CX	Cossayuna gravelly loam, rolling hills	5-15%
-CY	Cossayuna stony silt loam, hilly	15-30%
-CZ	Cossayuna stony silt loam, rolling hills	5-15%
*HP	Hudson silt loam, gentle slope	2-8%
HS	Hudson silt loam, rolling hills	10-15%
HT	Hudson silt clay loam, rolling hills	10-15%
*HV	Hudson silt clay loam, gentle slope	2-8%
-HV	Hudson silt clay loam, hilly slope	15-30%
-HW	Hudson silt clay loam, steep slope	30+%
LA	Livingston silt clay loam	0-3%
MB	Madalin silt clay loam	0-3%
RB	Rhinebeck silt loam	0-5%
RC	Rhinebeck silt clay loam	2-5%
-SE	Steep ledgy land (Nassau soil material)	30+%

Soils with slope in excess of 15%

\*Prime agricultural soils

## 2. Fish and Wildlife Resources

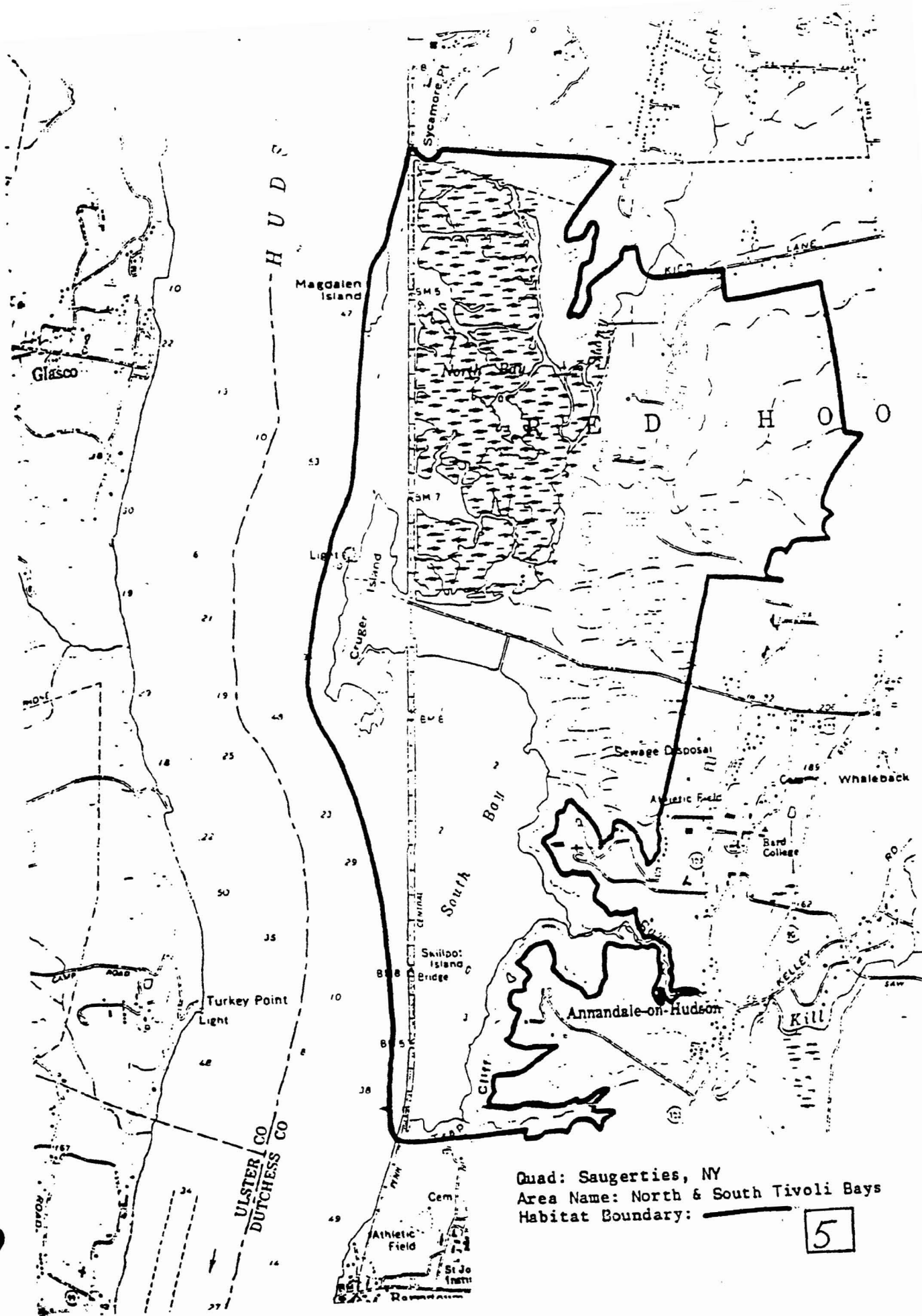
Stony Creek, the Hudson River and North Tivoli Bay are considered the important natural areas in the Tivoli area. Stony Creek is vital to the Village because it is used to supplement the Village water supply. Additionally, Stony Creek supplies fresh water to the Tivoli Bay area - a habitat that is ecologically unique and important to many varieties of fish and wildlife. Tivoli has established a land conservation zone along Stony Creek and its tributaries for protection. The Hudson River, influenced by tidal fluctuations, is a unique and complex resource.

### a. Significant Habitats (Map 5)

North Tivoli Bay, as part of the North and South Tivoli Bay Significant Coastal Fish and Wildlife Habitat, the closest Significant Fish and Wildlife Habitat, is located south of the Village with a portion contained within Tivoli's municipal boundary. Encompassing approximately 1,200 acres on the eastern shore of the Hudson River, the habitat area includes tidal freshwater marsh, fresh-tidal swamp, bays, shallows, two streams, and uplands of hardwood and mixed forest and shallow fields. This habitat is ecologically unique as the largest freshwater tidal influenced bay and wetland complex surrounded by undeveloped land on the Hudson River. It is also one of four components of the Federally - designated Hudson River Estuarine Sanctuary.

Tivoli Bays are important to a variety of fish species in the Hudson River as feeding, spawning and nursery areas. Several commercially important fish species use the bays and the mouths of Stony Creek and the Saw Kill for spawning and feeding, including striped bass, alewife and blueback herring. Common freshwater species using the bays include largemouth bass, smallmouth bass, white perch and various minnows. Species that appear to be regionally rare that have been found in the bays include American brook lamprey, central mudminnow, northern hogsucker and bridle shiner. The shortnose sturgeon (endangered) may feed in the tidal channels and river shallows, but this has not been confirmed. An extremely large population of snapping turtles exists in North Tivoli Bay.

Tivoli Bay supports breeding populations of least bittern (species of special concern) American bittern, Virginia rail, marsh wren (formerly long-billed marsh wren), and in some years, sora,



common moorhen (formerly common gallinule), and occasionally king rail.

Many species of waterfowl use the area during the spring and fall migration periods for resting and feeding, including both dabbling ducks in the marshes, and diving ducks in the river shallows. The osprey (threatened species) was reportedly nesting in the area in the late 1950's, and is regularly seen here during migration. The Museum of the Hudson Highlands has constructed two experimental nest platforms for osprey in this area. The bald eagle (endangered) is an occasional visitor. Spotted turtle (species of special concern) wood turtle (species of special concern) and map turtle are also found in the area.

Several rare plant species occur in the Tivoli Bays wetland complex. These include the heartleaf plaintain (proposed for Federal endangered status), golden club, ovate spikerush, Parker's pipewort, Eaton's bur-marigold, estuary beggar-ticks, swamp lousewort and a rare species of panic grass.

Waterfowl hunting and muskrat trapping have been traditional outdoor recreational activities at Tivoli Bays for years. Fishing for striped bass and large and smallmouth bass in the bay area is enjoyed by the local populace. Birdwatchers from throughout the Hudson Valley region visit this area. These activities in combination with nature study produce an estimated 6,600 days of wildlife related recreational use each year. In addition, scientific research conducted on estuarine ecology at Tivoli Bays is of statewide significance.

Under New York State Department of Environmental Conservation (DEC) management, it is anticipated that proposed access improvements and trail development will increase appropriate recreational use in the area. Ongoing ecological research at Tivoli Bays (Bard College Field Station and Experimental Ecological Reserve) has attracted scientists and students from throughout the State and its designation as part of the Hudson River Estuarine Sanctuary will focus additional research and education activities in the Hudson Valley on this area.

The Hudson River is quite deep on the east side of the river, and the shipping channel is close to the Tivoli shore. This deep section of the river is a wintering habitat for the shortnose sturgeon, an endangered species. North of Tivoli is the

Germantown - Clermont Flats Significant Coastal Fish and Wildlife Habitat located on the eastern half of the Hudson River, extending from the Village of Saugerties north to the hamlet of North Germantown. The Esopus Estuary Coastal Fish and Wildlife Habitat is just east of the Village of Saugerties. Although these habitats are not directly adjacent to the Village of Tivoli, they are nonetheless important since all of the habitats in the area are dependent to some extent on the health of other similar adjacent systems.

3. Wetlands

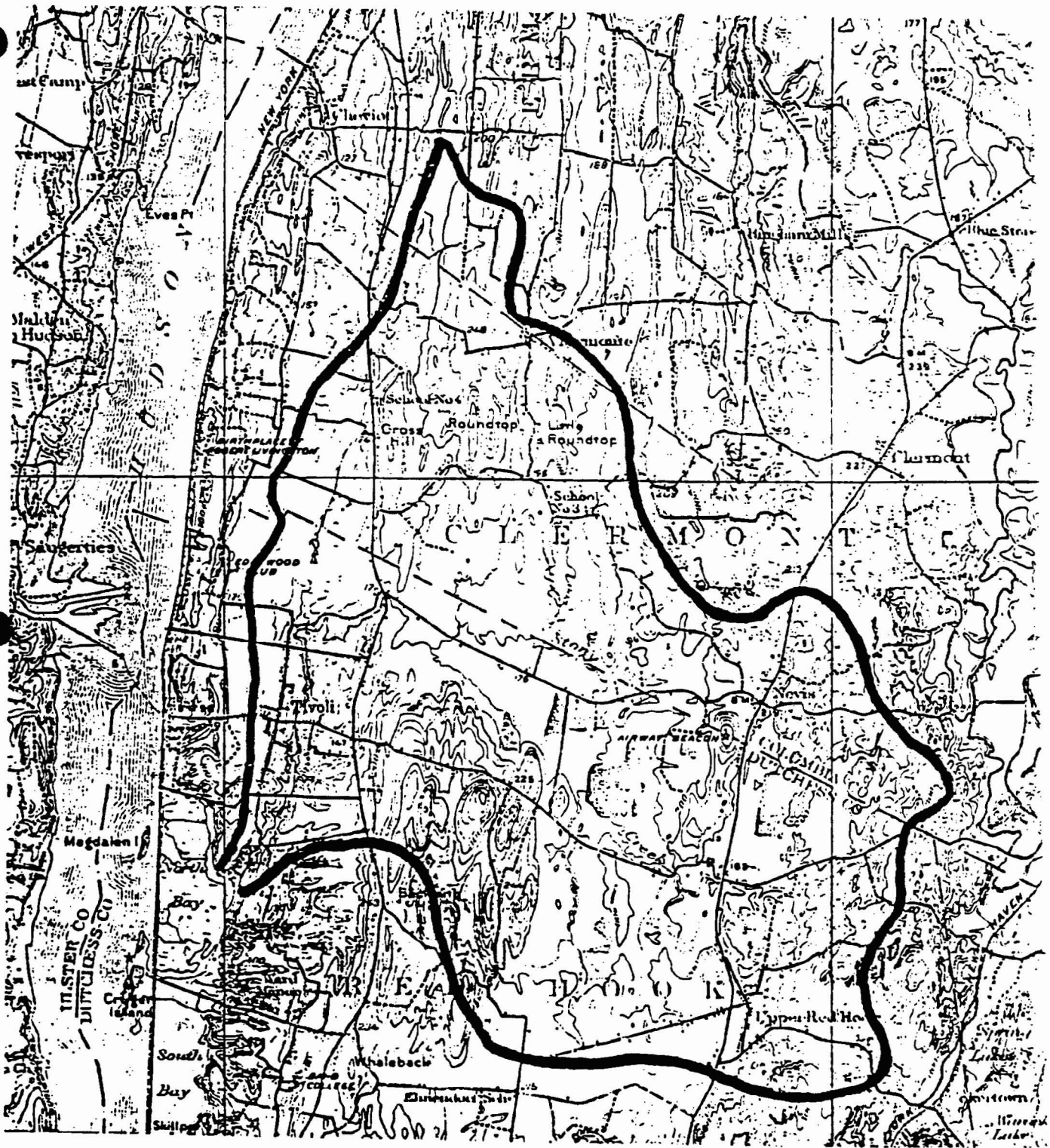
There are no upland wetlands in the Village. East of the Village in the Town of Red Hook are two large DEC designated wetlands, # SG-2 and # SG-4, which are in the recharge area of the wells used for the Village drinking water supply.

4. Water Quality

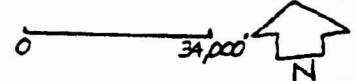
The Village of Tivoli is concerned about three areas of water quality - groundwater, Stony Creek and the Hudson River. The Village has historically depended on groundwater resources for public water consumption. The quality, as well as the quantity, of the groundwater has been an ongoing municipal problem. The chemical quality of the groundwater in the Tivoli area is generally fair, although excessive iron, sulphur, turbidity, and hardness have been reported in several areas. Favorable zones have been located where sulphur and iron problems are at a minimum. The hardness of water in Tivoli is a natural phenomenon that cannot be avoided, only treated. The need for water treatment is supported by water analyses which show a similarity in hardness between surface waters and the existing well water supplies. It is likely that the Village will have to continue to deal with the hardness of the municipal water supply.

This lack of sufficient groundwater resources to meet present needs has led the Village to look at Stony Creek and the Hudson River as potential surface water resources. A \$500,000 filtration plant capable of delivering 72,000 gallons per day has been built on Stony Creek. The Stony Creek, also known as the White Clay Kill outside of the Village in the Town of Red Hook, drains a watershed of 22.2 square miles in the towns of Red Hook and Clermont (see Map #6). It also is the primary source of upland drainage into North Tivoli Bay.

TIVOLI WATERFRONT  
REVITALIZATION PLAN



STONY CREEK WATERSHED BOUNDARY



WATERSHED OF STONY CREEK (22.2 SQ. MILES)

VILLAGE OF TIVOLI  
ROBBE P. STIMSON • CONSULTANT

6  
NEW YORK



The water quality classification for Stony Creek is "D". DEC Region 3 Fisheries Unit is presently proposing that the stream segment upstream 3.9 miles from the mouth to Tributary 6 be upgraded from D to C(T). DEC also asserts that the (T) standard, which indicates that the waterbody is suitable for trout, should be included in any future proposal to change the classification of this stream.

In 1987, the chief of the Groundwater Quality Management Section of the DEC reconfirmed the Department's intention to upgrade a portion of Stony Creek to Class "A" upstream from Tivoli's water supply intake point. This was in response to Tivoli's application for reclassification of Stony Creek to "AA" submitted in July 1986. The State Health Department supports the recommendation to upgrade the classification of Stony Creek to "A".

The Hudson River, as it flows past Tivoli, is classified "A" suitable for all uses including a public water supply. As a supplement to the Village water supply, however, the cost of pumping water from the Hudson up 300' to the height of the water tower is prohibitive. Stony Creek should be protected for its water supply and drainage attributes. However, Stony Creek is a limited resource, and is not a year-round constant source of water. It is likely that future significant growth can only be satisfied by additional water supply from other sources, such as an intake from the Hudson River.

Recognizing that other communities along the Hudson River may look seriously toward the River for additional water supply needs, the Village of Tivoli would support the concept of (and participation with) a regional planning entity that would research the feasibilities of, and cumulative impacts associated with, possible regionalization of water supply needs from the Hudson River.

#### **D. Agriculture**

With the completion of the Erie Canal in 1825, the transportation of upstate grain crops down the Hudson River to New York City increased. Tivoli benefitted greatly from this river traffic, which had the effect of changing the major agricultural activity of the area from grain production to orcharding and eventually to dairying. The railroad link from New York City to Tivoli in 1851 increased employment and industrial development, allowing dairy products to be transported quickly. The Hudson Valley continued into the early 20th century to be the major milk supplier for New York City and the surrounding region.

While agricultural use of land in Tivoli is not extensive at this time, a good potential for agricultural development exists because of the suitability of the soil. Agricultural land in the Village is separated into three parcels (see Map # 8). The agricultural land within the Village is greater than 25% land of Statewide Significance but less than 25% prime farmland. A portion of Dutchess County Agricultural District Number 20 is within the Village of Tivoli's Waterfront Revitalization Area.

**E. Historic Resources**

On March 7, 1979, the Secretary of the Interior approved for inclusion in the National Register of Historic Places sixteen miles of riverfront estates extending from the Columbia County line south through the Village of Tivoli and the Towns of Red Hook and Rhinebeck and ending in the hamlet of Staatsburg in the Town of Hyde Park. Dominated by thirty-six historic country estates, the Sixteen Mile District is one of the largest in the nation to have received such recognition. This National Register District was further enhanced in May 1979 when a contiguous area, which extends two miles north from Clermont State Historic Park, was approved for inclusion on the National Register. This National Register District, composed of eight individual estates, is known as the Clermont Estates National Register District.

The three estates in Tivoli: Rosehill, Callendar House, and the Pynes contain most of the actual acreage of Tivoli's section of the Sixteen Mile National Register District (see Map #7). In addition to the main houses, these estates have numerous outbuildings which include boathouses, tenant houses, barn complexes, gate houses, ice houses and stables. A substantial amount of property is used for various agricultural activities. Designed landscapes lead to and surround the mansions. The Sixteen Mile National Register District also includes all the buildings around the old Hudson River Landing on Friendship Street and lower Dock Road and St. Paul's Church on Woods Road.

Because of its relative geographic isolation, the entire Village of Tivoli has changed little through the years. The lack of modernization, of industrial development, of suburban subdivisions (until recently), and shopping centers has created a small but comfortable rural community. Tivoli's commercial buildings, its old churches, the modest wood frame houses, institutional buildings and old factory building together exemplify a 19th century Hudson River community that has remained intact except for the great elm trees that once lined the community's streets.

Approximately one third of the Village's land area is listed on the National Register of Historic Places. The rest of Tivoli contains historic structures that merit inclusion on the National Register for Historic Places. Hudson River

Heritage (HRH) has surveyed these structures to determine their eligibility for listing. A nomination should be made to the National and State Registers using the HRH data. The Old Firehouse already has been listed as a historic structure on the State and National Registers. The Village is part of the Dutchess County Historic Trail.

The NYS Office of Parks, Recreation, and Historic Preservation has identified the Tivoli area as sensitive for the presence of archeological sites, representing settlement patterns important to our understanding of the State's prehistory and history. Any ground-modifying construction should be preceded by archeological investigation through consultation with the State Historic Preservation Officer when necessary.

**F. Scenic Resources**

1. The Mid-Hudson Historic Shorelands Scenic District

The Village of Tivoli is part of the Mid-Hudson Historic Shorelands Scenic District, as designated under Article 49 of the Environmental Conservation Law, and the first to be established in New York State. The District extends from Germantown Landing Road in the north to West Market Street in Hyde Park. It encompasses parts of the Towns of Germantown, Clermont, Red Hook, Rhinebeck, and Hyde Park, and all of the Village of Tivoli, the only municipality to be incorporated entirely within the Scenic District. The eastern boundary generally follows Routes 9 and 9G, and the east shore of the Hudson River constitutes its western boundary.

The Village of Tivoli is cognizant that the State's proposed designation of Tivoli as a Scenic Area of Statewide Significance is based upon the Village's orientation to the Hudson and views of the Catskill Mountains, as well as the importance of the estates as designated landscapes and open space. Views are obtained from the river landing area and at the rise of Broadway as one descends to the river landing. The western panorama also contributes significantly to the character of the estates as they are oriented towards the river and the Catskills. As DEC provides additional buffer along Tivoli North Bay, opportunity for public visual access to this habitat and the Hudson River will increase.

The Village of Tivoli and the Scenic District as a whole have been inventoried and analyzed in the Mid-Hudson Historic Shorelands Scenic District Management Plan. The management plan concludes that the Mid-Hudson Historic Shorelands Scenic District is a unique and highly significant land area that encompasses natural and human resources related

to the concept of scenic beauty, and to the history and environmental distinction of the Hudson River Valley and New York State. These scenic resources interrelate in a unified character and are experienced without regard for jurisdictional boundaries. The area's attractive visual and historic character can be threatened by serious adverse development, and contemporary development trends indicate increasing pressures for changes in land use. The district's antique and pastoral environment make it highly vulnerable to adverse visual impact. Present land-use and planning mechanisms vary across numerous jurisdictional divisions and as presently constituted, may not be fully adequate to control the visual impact of proposed changes. A synopsis of the findings documented in the Mid-Hudson Historic Shorelands Scenic District Management Plan are as follows:

- The District is a unified historic, ecological and scenic land resource with clearly defined physical boundaries.
- The District's scenic quality is decisively influenced by view and vistas oriented across the Hudson River to the western prospect in Ulster and Greene Counties.
- The Hudson River, together with its tidal bays, islands and immediate land frontage is the District's prominent physical feature. Stream/ravine formations which cross the District to outflows at the river are also important natural land resources.
- Historic, nationally significant landscape gardens (designed ornamental grounds) constitute extensive acreage on nearly forty contiguous riverfront estates located in the District.
- The District is distinguished by its pastoral landscape character which is considered a scenic resource closely tied to the area's historic and cultural roots.
- Public parkland is extensive in the district and presents the area's scenic resources in all their variety.
- The area is a vast repository of several hundred historically significant structures ranging from elaborate estate mansions to the humble dwellings of the area's first settlers.
- Additional examples continue to be identified and documented.

- Individual river hamlets located in the District represent settlement patterns that retain the general character of their historic development.
- Within the Hudson River Valley Scenic Roads Program, proposed by the Department of Environmental Conservation, nearly all the public roads in the District have been deemed eligible for scenic road designation under Article 49 of the Environmental Conservation Law. The area's rural, local roads are especially evocative of the District's heritage as many had their origins as country lanes over 200 years ago. Transportation planning should address their unique character.
- The District encompasses seven separate local jurisdictions. The "scenic zone" includes six additional municipalities. Each jurisdiction is responsible for land-use controls in its sector of the District or zone. Planning and land-use policies vary across jurisdictional lines.
- District-wide, locally initiated programs include the Hudson River Shorelands Task Force, which has provided a unified focus in the area since 1976. Representing the municipalities in this District, this kind of multi-jurisdictional, locally supported organization is seen as being a critical tool in the District's future stewardship.
- Current land-use trends and demographic analysis suggest increasing development pressures in the District and its "scenic zone". Contemporary housing, industrial works and roadside commercial uses are increasingly proposed for the area. In these cases, the visual quality of modern development has the potential of causing serious adverse impact to the area's identified scenic quality.
- Tourism and recreational use are important public functions in the District and are significant to the area's quality of life. Centered on the Hudson River, the area's parkland and public access sites, tourism and recreation utilizes the area's resources in an appropriate way. This use could be enhanced in the future resulting in economic and preservation dividends.

The management outcome of the Scenic District Management Plan is determined by the cooperation of the seven municipalities to promote and manage the scenic district. Tivoli is represented on the Shorelands Task Force.

2. Scenic Roads

In recognition of the unique scenic qualities of the Hudson River Valley, the State Legislature of New York passed the Scenic Roads Law (Chapter 836) in 1981. The purpose of the Law is to provide for a study of the scenic qualities of certain road corridors in the Hudson Valley and to recommend a method for preserving and enhancing those qualities.

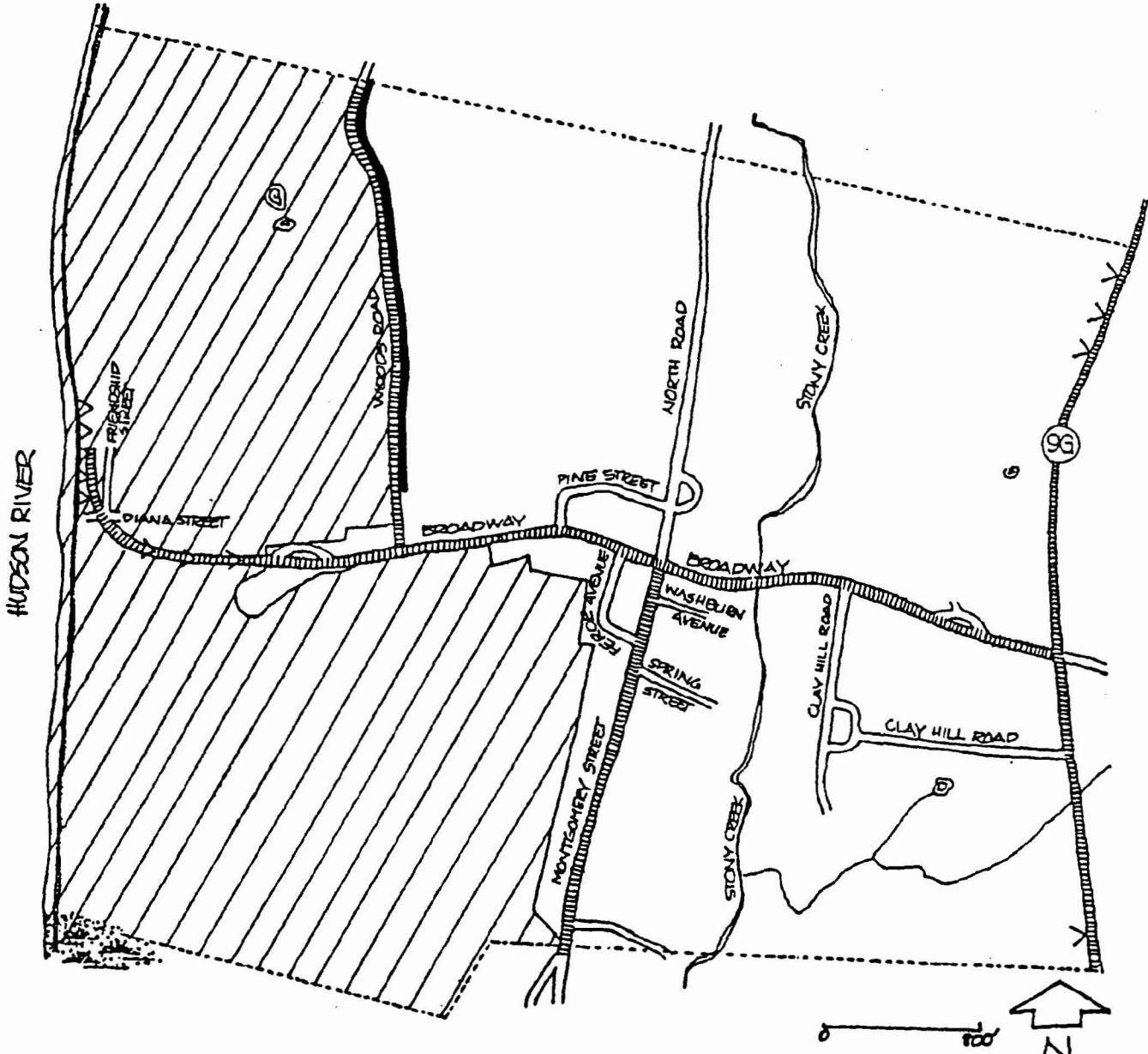
The resulting report, "The Hudson Valley Scenic Roads Program" represents a coordinated effort involving State, County, and local governments, as well as the private sector. Goals of the program are:

- to strengthen the regional identity of the Hudson Valley by identifying the Valley's unique scenic qualities and their regional unity and significance;
- to protect, preserve, and enhance the natural and man-made scenic beauty of the Hudson Valley;
- to promote a greater awareness of the aesthetic qualities of the Valley through an educational program of the Valley's scenic, ecological, cultural, and historical resources;
- to provide economic benefits to the Valley through increased tourism and through the preservation and enhancement of the landscape resulting in increased property values;
- to provide a sound implementation strategy according to the values of each participating community which allows for State and local cooperation; and
- to establish a viable model for the scenic road program which can be applied throughout New York State.





The intent of this State-mandated study is to develop recommendations for the designation and implementation of a Scenic Roads System in the Valley. To accomplish this task, the study included the following steps:

- criteria and a method for evaluating the scenic qualities of road corridors;
- recommendations for official scenic road designation;
- a program for the protection and preservation of scenic road corridors;

TIVOLI WATERFRONT  
REVITALIZATION PLAN



HISTORIC AND SCENIC RESOURCES

-  TIVOLI SECTION OF THE 16 MILE NATIONAL REGISTER DISTRICT
-  SCENIC VISTAS (PUBLIC ACCESS)
-  SCENIC HIGHWAYS (OF LOCAL SIGNIFICANCE)
  - VILLAGE ROADS
  - MONTGOMERY STREET
  - WOODS ROAD
  - COUNTY ROADS
  - BROADWAY (79)
  - STATE ROADS
  - ROUTE 99
-  SCENIC HIGHWAYS (DESIGNATED UNDER ARTICLE 41 OF THE NYS ENVIRONMENTAL CONSERVATION LAW)

- specific methods of enhancing scenic road corridors;
- costs and available funding sources for implementation of the program; and
- an action plan for implementation at the various levels of government.

Four roads in and adjacent to the Village of Tivoli were included in this State of New York study. N.Y. State Route 9G, county-owned Broadway and the Village-owned Woods Road and Montgomery Street (see Map #7) in Tivoli were found to be eligible for nomination as scenic roads. Woods Road has been designated, a 1.37 mile section from St. Paul's Church north to the Columbia County line, by the Department of Environmental Conservation under Article 49 of the Environmental Conservation Law.

Both Woods Road and Montgomery Street are part of a scenic road network which connects the Village of Tivoli to Tivoli Bay Estuarine Sanctuary to the south and Clermont State Park to the north. The corridor of Woods Road is predominantly woodlands. New York State Route 9G was nominated as a scenic road due to the frequent western vistas of the Hudson River and the Catskill Mountains from the Town of Red Hook north to the Catskill Bridge. Broadway, which traverses the Village from 9G to the Hudson River, was selected based on the quaint Village commercial district and the road's views of and access to the Hudson River. The Village-owned Montgomery Street has no distant views or vistas, but is densely lined with 19th century houses.

The Hudson Valley Scenic Roads Program Report encourages local governments to adopt a scenic review process and include local law preservation and enhancement policies in proposed comprehensive land use plans. Two handbooks published by the Heritage Task Force for the Hudson River Valley Inc. are designed to provide guidelines for local government in developing programs and local laws to protect scenic resources. These publications are entitled Scenic Roads Handbook and Scenic District Handbook, and are available from the Heritage Task Force at the DEC Region 3 offices in New Paltz. The review process would establish guidelines for preservation and enhancement policies to assist those affected governments in their land use programs. A very useful sign ordinance has been proposed through the scenic roads program and has been included by the Village of Tivoli in their local zoning.

#### **G. Public Access & Recreation**

Broadway provides the only direct point of public access to the Hudson River in the Village of Tivoli. It bisects the Village from 9G to the river. An at-grade



crossing of the railroad tracks is gated and lighted, but the frequent passage of high speed trains still presents a potentially dangerous situation. It is unlikely that there will be any additional access points in the future given the steep topography of most of the waterfront and minimal land area west of the railroad tracks.

A deteriorating bulkhead and collapsed dock are all that remains of a former railroad siding and ferry dock. A deteriorated gravel surface boat launch owned by CONRAIL is used informally by the general public. Parking is limited. The site is identified in the Hudson River Access Forum report as having significant potential. CONRAIL uses the adjacent area as a construction staging area. Due to the railroad crossing and a seriously eroded river bulkhead, the Village cannot encourage extensive riverfront use. The 1966 Comprehensive Plan for Red Hook and Tivoli projected an increased recreational need for Tivoli of an additional 4½ acres by 1990.

The Village's primary recreational area is Memorial Park, which includes a playground and ballfield on Pine Street off Broadway. This area comprises approximately four and a half acres. Funds have been raised in the Village to develop the ballfield and the adjacent pavilion and playground. The construction of tennis courts and an ice skating rink are included in long-range development plans.

The activities for Tivoli Community Day are located here and consist of a parade, booths in the pavilion, contests and a Saturday night dance. The Village also sponsors a summer camp program for all community children, ages 6-12. This program should be enhanced by educational programs about Tivoli Bay and Hudson River resources. Managers of the Estuarine Sanctuary should be approached concerning development of such a program.

## H. Development Considerations

### 1. Flooding and Erosion

Areas subject to a 100-year flood lie along Stony Creek, the railroad right-of-way, and an unnamed tributary emptying into North Tivoli Bay (Map 8).

Stony Creek has been documented as flooding as much as 100 feet on each side of the creek bed. The bulkhead in the landing area on the Hudson has been eroded by tidal fluctuations and ice. The wakes from the vessels in the navigation channel have also contributed to the erosion problem and increase the hazard during flood periods.

## 2. Public Services and Facilities

### a. Water

Tivoli's present water system combines a new dammed surface water supply and filtration plant on Stony Creek (south of Broadway) and its older groundwater/well supply (Map 2). Tivoli's water use is primarily domestic, and current needs are being met. Demand will increase, however, through both residential and commercial growth.

The original water system was installed in 1938-40 as a Works Progress Administration (WPA) project. A 1953 study showed a per capita water use of approximately 35 gallons per day (GPD). A 1984 study indicated water consumption was 50 gallons per capita per day. Anticipated summer use is now 90,000 gallons per day. The well system is still in use, but at a substantially lower capacity than its original rating. The well, drilled in 1957 in the Village ballfield adjacent to the 150,000 gallon elevated water tank, was to serve the Tivoli Acres subdivision. By 1982 this well had become the mainstay of the Village's water supply, but its dry weather yield dropped below 20 GPM. At this time the Village Board contracted with BCI Geonetics Inc. for the purposes of conducting a test boring program and a comprehensive study of the area and to identify an additional water supply.

This study was supplemented in 1984 by a study by Robert J. Ganley, a consulting engineer, who analyzed the Tivoli water supply problem and provided the following conclusions:

- . The Village and the area surrounding Tivoli are in a poor ground water area.
- . The water producing strata below this area is thin and often contains wet blue clay that either clogs the formation or can, with overdumping or improper development, intrude into the voids surrounding the well and completely clog them.
- . Although the Village has used ground water from numerous small wells for its water supply for over forty years, it has had numerous water shortages and water quality problems.

Stony Creek, which flows through the Village, could be developed as a surface water supply that would result in a reliable system when combined with the groundwater supply.

A decision was made to develop Stony Creek into a new surface water supply, and a dam and filtration plant were constructed south of Broadway. The new system began operation in 1990. The Stony Creek water filtration plant is only intended to be used as a backup or supplement to the current groundwater system should the need arise. Stony Creek is a limited resource, and is not a year-round constant source of water. It is likely that future significant growth can only be satisfied by additional water supply sources such as an intake from the Hudson River.

It is important to preserve the quality of water in Stony Creek. The Lamunyan Construction and Demolition landfill site and the Village of Tivoli landfill are in the Stony Creek watershed, as is the proposed landfill for incinerator ash from the Dutchess County Resource Recovery Facility. The Village will continue their efforts to help ensure that these facilities do not contaminate Stony Creek as a water supply.

b. Sewage Disposal

The Village of Tivoli is served by a central sewage disposal system which was originally built in 1938-40. In 1972 this primary treatment facility was replaced with a state-of-the-art tertiary aeration system with a design capacity of 50,000 GPD, based on the average daily demand of 30,000 GPD. This system could be expanded to double its present capacity, but expansion would be costly, would require extensive modification, and must meet strict DEC standards. The Village has a sewer fund established and has submitted an application to HUD for a construction grant to expand the plant. Although sanitary sewers are separated from the storm water drainage, storm water infiltration still causes combined sewer overflows. As more housing units are constructed and flow increases, the combined sewer overflows will occur more frequently. The Village has undertaken a program of removing tree roots from the sewer lines, but the problem of sump pumps emptying into sewer lines remains to be addressed.

c. Roads and Transportation

The Village's eastern boundary is formed by N.Y.S. Route 9G which bypasses the general business district and is the major road to Poughkeepsie and Hudson. The business district's major connector road with Route 9G is Broadway or County Route 78. Broadway, the only non-village road in Tivoli, runs east-west 1.4 miles through the heart of the Village to the old ferry landing on the Hudson.

Chart II which describes the Village roads follows on the next page.

Montgomery Street-North Road is the major north-south route through the Village. Connecting roads lead to Route 9G. Woods Road, serves the northwestern portion of the Village and connects to County Route 35 and Clermont State Park, Columbia County.

By and large, only local traffic frequents the roads of Tivoli and specifically, the general business district of the Village. New signage directing travelers off of Rt. 9G could be encouraged. Also, visitors to Clermont State Park can now be directed into the Village via Woods Road since the road has been improved. If traffic on Woods Road should increase to an extent that requires widening the road, impacts on the scenic corridor from widening would have to be mitigated.

In terms of public transportation, the Dutchess County Loop System provides bus service from Tivoli south to Poughkeepsie on a daily commuter schedule.

Summary of Key Findings and Issues

1. The prime characteristic of Tivoli is its historic and residential quality. This Village character should be maintained.
2. Tivoli has a number of unique assets which should be preserved, including:
  - The Village's many historic resources should be protected and restored.
  - The Village's scenic resources and important viewsheds should be protected and enhanced.

- Tivoli, as part of the Mid-Hudson Historic Shorelands Scenic District, and the Department of State's proposed Estate District Scenic Area of Statewide Significance has qualities which subject it to development pressure. Scenic quality protection should be a part of any review of new development proposals.
  - The Village's agricultural resources should be protected and preserved for agricultural use to the maximum extent possible.
  - The Village's habitat resources should be protected. Uses for public recreation and education which are consistent with protection of the resource should be encouraged.
  - A public education program concerning all these resources should be developed. This LWRP supports the recommendation of the Greenway Council to consider establishment of an education center at Tivoli Bays.
  - The combination of these unique resources will attract visitors to Tivoli. A signage system should be developed within the Village to direct tourists to points of interest in the Village, to Tivoli Bay State Nature and Historical Preserve, and Clermont State Park.
3. Development should be restricted in those areas with highly erodible soils, floodplains, wetlands, watershed areas, steep slopes, lack of central water and sewer facilities, and other environmental constraints.
  4. The existing Village water and sewer systems have known capacity limitations due to environmental and hydrological constraints. Therefore, any significant expansion of uses dependent on these services must address the issues raised by these limitations.
  5. New commercial uses in the general Business District will complement the "village atmosphere" of Tivoli, and should be encouraged.
  6. All of Tivoli's waterfront areas, including the riverfront landing and the riverfront bluffs, are an extremely sensitive and fragile resource. Thus, while the area has exceptional scenic values and the landing is the only opportunity for public access to the river,

it is imperative that the fragile resources be protected. Any intensive development (for example, industrial, commercial, high density residential, and public utilities) is generally not suitable for Tivoli's waterfront areas, due to physical limitations and the absence of central sewer service.

7. While State Coastal Policies encourage water-dependent and water-enhanced uses, any such uses in Tivoli must be limited by the fragile nature of the coastal resources. Accordingly, water-related uses in Tivoli should focus on passive recreational uses, especially those relating to walkways or trails along the river and in the vicinity of North Tivoli Bay.
8. The riverfront landing area provides the Village's only opportunity for increasing public access to the Hudson. Uses such as a DEC boat launch should be explored, provided that they are consistent with preservation of the area's scenic quality and environmental limitations.
9. Public access to the Hudson River needs to be increased through appropriate use of DEC-owned lands around Tivoli North Bay for water-related and water-enhanced uses.
10. The Village of Tivoli lacks the funds and resources necessary to implement the goals set forth in this plan. It will be imperative that the Village work with other agencies and levels of government to accomplish these goals.

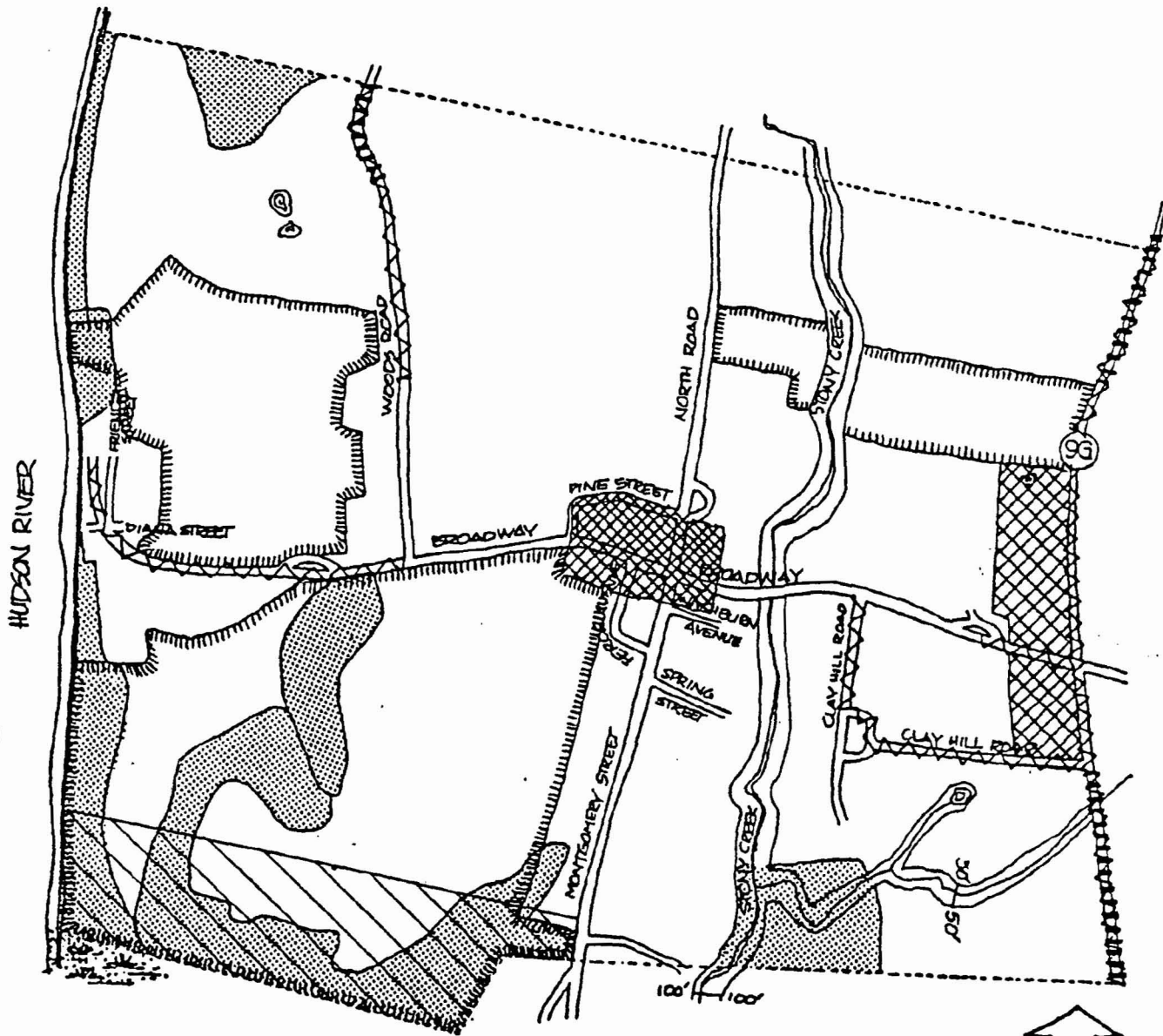
CHART #II

VILLAGE OF TIVOLI ROAD SYSTEM



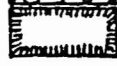
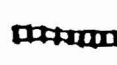


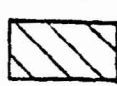
<u>Name</u>	<u>Length</u>	<u>Lanes</u>	<u>Pavement</u>	<u>Jurisdiction</u>	<u>Condition</u>
*Broadway	1.4	2	high grade bituminous	County	poor
Clay Hill Rd.	.5	2	crushed stone & bituminous	Village	fair
Diane St.	0.5	2	crushed stone & bituminous	Village	fair
Feroe St.	.16	1	high grade & bituminous	Village	good
Friendship	.13	2	dirt & bit bituminous	Village	fair-good
Dock Rd.	.5	2	bituminous	Village	fair
*Montgomery St.	.54	2	high grade bituminous	Village	good
North Rd.	.6	2	low grade bituminous	Village	fair
Old Rt. 402	.08	2	dirt	Village	poor
Pine St.	.19	2	high grade bituminous	Village	good
Spring St.	.15	2	high grade bituminous	Village	good
Washburn	.06	2	high grade bituminous	Village	good
*Woods Rd.	.55	2	high grade bituminous	Village	good
TOTAL:	Village Road Miles		3.01 miles		
	County Road Miles		1.4 miles		

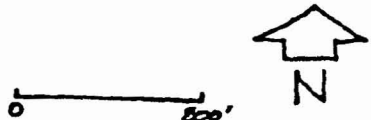
\*New York State designated scenic roads.

TIVOLI WATERFRONT REVITALIZATION PLAN



DEVELOPMENT CONSIDERATIONS

-  SLOPE OF 15% OR GREATER
-  BUSINESS DISTRICTS
-  AGRICULTURAL LAND
-  NO PUBLIC WATER
-  NO SEWER
-  FLOOD HAZARD AREA (50' EACH SIDE)
-  AREA TO BE ACQUIRED BY NEW YORK STATE THRU FEE SIMPLE TITLE AND/OR CONSERVATION EASEMENT



DEVELOPMENT CONSIDERATIONS

VILLAGE OF TIVOLI

NEW YORK



TIVOLI WATERFRONT  
REVITALIZATION PLAN

HUDSON RIVER



VILLAGE OF TIVOLI TOPOGRAPHY

