TOWN OF PAWLING

COMPREHENSIVE PLAN UPDATE (CPU)

APPENDIX A

Excerpts of Town of Pawling Comprehensive Plan Draft
January 2010

Town of Pawling Comprehensive Plan

DRAFT

January 2010

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Executive Summary

Executive Summary:

The Town of Pawling's Comprehensive Plan is a formally adopted statement of well conceived goals, objectives and policies designed to address the near-term and long-range preservation, enhancement, growth and development of the community. The "vision" established in the Comprehensive Plan is intended to serve as the "blueprint" for Pawling's future.

This Comprehensive Plan offers numerous recommendations for planning and zoning decisions covering the area of the Town which lies beyond the borders of the Village. Municipal planning and zoning decisions within the Village itself are entirely within the control of the Village of Pawling Village Board. Where recommendations are offered which could be of benefit to both localities, it is so noted in he text.

The Town of Pawling's current Comprehensive Plan was adopted in 1991, and relies on background data and planning assumptions that are nearly 20 years old. Updating the Plan to reflect current conditions, community values and regional trends is long overdue.

The primary focus of the Comprehensive Plan is to provide a logically constructed and durable framework for securing a fundamental group of priorities:

- Preserve and protect the Town's distinctive character.
- Encourage desirable and appropriate growth and development.
- Strengthen the local economy.
- Improve the delivery of services.
- Prioritize and coordinate capital improvements.
- Improve the quality of life for local residents.

The Planning Process:

In the spring of 2008, the Town began the process of updating the Comprehensive Plan. The first step in the process was the creation of a Comprehensive Plan Steering Committee (CPSC). The CPSC was composed of a very diverse group of local stakeholders who represent various interests within the community. The CPSC was tasked with overseeing the process, collecting information, reviewing drafts and serving as the point of contact between the community and the Comprehensive Plan effort.

In October of 2008, the Town Board adopted a limited development

Executive Summary

moratorium in order to suspend pending development pressures, and to allow the CPSC adequate time to develop the Comprehensive Plan.

In the fall of 2008, the Town engaged Cleary Consulting to assist and supplement the work of the CPSC. During the information gathering stage, the CPSC shared its knowledge and insight with the Town's consultant about various topics that were addressed in the Inventory and Analysis portion of the Plan. Numerous exercises were conducted to establish policy priorities and to reach consensus on difficult problems facing the Town. Following this stage of the planning process, the community "vision" was established along with numerous goals and objectives for the Town. The CPSC was responsible for reviewing and amending these goals and objectives prior to their inclusion in the Comprehensive Plan. Lastly, the CPSC devised tactics to ensure that the stated goals, objectives and policies are implemented in order to achieve the community's vision.

Community Vision:

Rather than developing a single vision statement for the community as a whole, the CPSC determined that it would be most useful to create individual vision statements for each section of the Comprehensive Plan. To that end, 10 individual vision statements have been developed addressing:

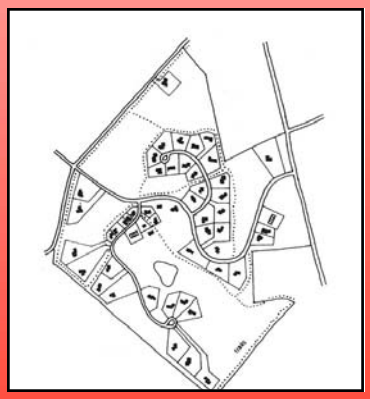
- Land Use
- Zoning
- Housing
- Natural Resources
- Open Space & Agricultural Resources
- Transportation
- Municipal Services & Infrastructure
- Economic Resources
- Recreational Resources
- Historic & Cultural Resources

Comprehensive Plan:

The main body of the Comprehensive Plan has been divided into ten chapters reflecting the topics outlined above, plus an eleventh chapter addressing demographic background data. Each chapter has been organized to include four sections:

- Existing Conditions
- Vision Statement
- Goals

Executive Summary



- Implementation Policies

A summary of each chapter is presented below:

Demographics:

The Town's 2000 population of 5,288 is projected to continue to grow, reaching approximately 6,396 residents by 2025. The Village will also grow as well. While this population is today primarily middle-aged, the trend of residents aging in-place will place increasing burdens on local heath care and associated services. The Town's well educated and generally affluent work force is primarily employed in white collar professions. While the Town's current poverty rate of 1.7% is low, the provision of services to residents of need, including the provision of work force housing, will become increasingly important priorities in the years ahead.

Land Use:

The existing land use pattern in Pawling is dominated by single family residences, accounting for 41.2% of the Town's land area. Alarmingly, 7,444 acres of vacant land combined with 4,208 acres of potentially subdividable land, results in nearly 43.2% of the Town (11,652 acres) remaining potentially available for future development. While a portion of this land is constrained environmentally or burdened by various development restrictions, this situation is by far the most important land use issue facing the Town today. Fortunately, 12.7 percent of the Town (3,430.7 acres) is permanently preserved and protected as public park or conservation lands.

Commercial land uses occupy only 342.5 acres or 1.3% of the Town. Diversifying and strengthening the Town's commercial tax base within these limited geographic boundaries represents a significant challenge.

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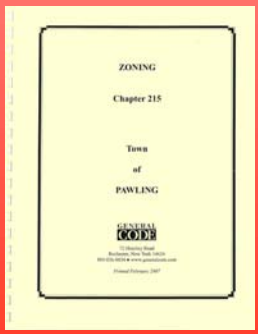
ZONING

Chapter 215

Town

of

PAWLING

CODE

Zoning:

The Town's current Zoning Ordinance was adopted in 1978. Updating the ordinance to meet the challenges of the 21st century is necessary.

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Housing:

86% of the Town's housing stock consists of single family detached homes. The balance are two-family homes or accessory apartments. No multi-family residences exist in Town. This condition does not allow for the provision of a range of housing types and costs options to meet the needs of all residents. Expanding the range of housing options in Pawling is an important priority.

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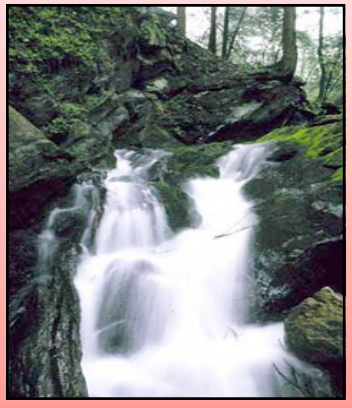

Natural Resources:

Pawling's natural resources in many ways, define the character of the community. From the characteristic ridge/valley land form of the Harlem Valley, to the Great Swamp which dominates the central valley, fragile ground water resources, the 166 miles of brooks, streams and rivers, 17 lakes and ponds draining to 4 separate watersheds, 516 separate wetlands covering 3,559.8 acres, diverse vegetation and abundant wildlife; Pawling's natural resources represent a truly remarkable natural heritage. If left unchecked, development pressures have the potential to devastate these resources thereby severely affecting the quality of life of the community.

Executive Summary

Open Space, Scenic & Agricultural Resources:

Pawling's "sense of place" is defined in part by the large tracts of open space, agricultural lands and remarkable scenic beauty. Current and anticipated development pressures threaten this distinctive character. Currently 3,430.7 acres (12.7%) of the Town's open spaces are permanently preserved and protected. Preserving the Town's working agricultural landscape is also a high priority. Today the Town supports 3,171.2 acres of agricultural land, including 109 parcels located within agricultural districts.

Transportation:

The Town's transportation network strongly influenced the growth and development of the community. While the Metro-North railroad literally bisects the Town, it is the Town's almost exclusive reliance on the automobile that defines the community. Over 88 miles of roadways run throughout Town. Route 22 is the main arterial and commercial spine of the Town. Its physical limitations results in traffic congestion along the corridor which in turn inhibits north/south traffic flow, with obvious consequences. Traffic rates are projected to grow at 3 – 4% per year into the foreseeable future. Developing transportation improvements and creating transit alternatives to personal automobile use is essential.

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Municipal Service & Infrastructure:

The provision of public safety services, fire protection services, health care, social services, education, library, water supply, sewage disposal, utilities and solid waste management are essential governmental responsibilities which must be careful managed in the years ahead.

Economic Resources:

The Town of Pawling's economy is directly and inextricably linked to that of the Village. The Village's downtown central business district provides the traditional economic core for the community, while the Route 22 corridor affords larger scale commercial opportunities. Holmes and Whaley Lake have more limited commercial

Executive Summary

development potential. Together these distinctly different, yet wholly complimentary areas establish the foundation upon which a vibrant and sustainable economy can be constructed, providing job opportunities and a stable and fair tax base.

By far, most of Pawling's workers (1,122) are employed in service businesses. Within this category, the largest group (20.8%) are employed in the "educational, health and social service" category. 333 businesses are currently located within the Town and Village employing 2,924 workers and accounting for $699,503,000 in annual sales. Wholesale trade accounts for the largest segment of sales - $252,436,000. The majority of local retail workers (244 employees) work at eating and drinking establishments. The local traditional manufacturing sector employs only 40 workers in 8 establishments.

Recreation Resources:

Prior to 2003, the Town's recreational resources were relatively modest, consisting primarily of the 73 acre Murrow Park. In March of 2003, the Town acquired the Holiday Hills Conference Center and created Lakeside Park. The acquisition of this property more than quadrupled the Town's park land by adding a 292 acre property containing a 36 acre lake and 24 buildings, right next to Murrow Park. Today, the Town contains 405.5 acres of parkland.

There are no State or County parks in Pawling, however approximately 5.2 miles of the Appalachian Trail runs through the northern portion of the Town. In addition to public recreational facilities, a number of private recreational facilities are located in Pawling, including the Quaker Hill Country Club, Whaley Lake Marina and several private camps.

Executive Summary

Historic & Cultural Resources:

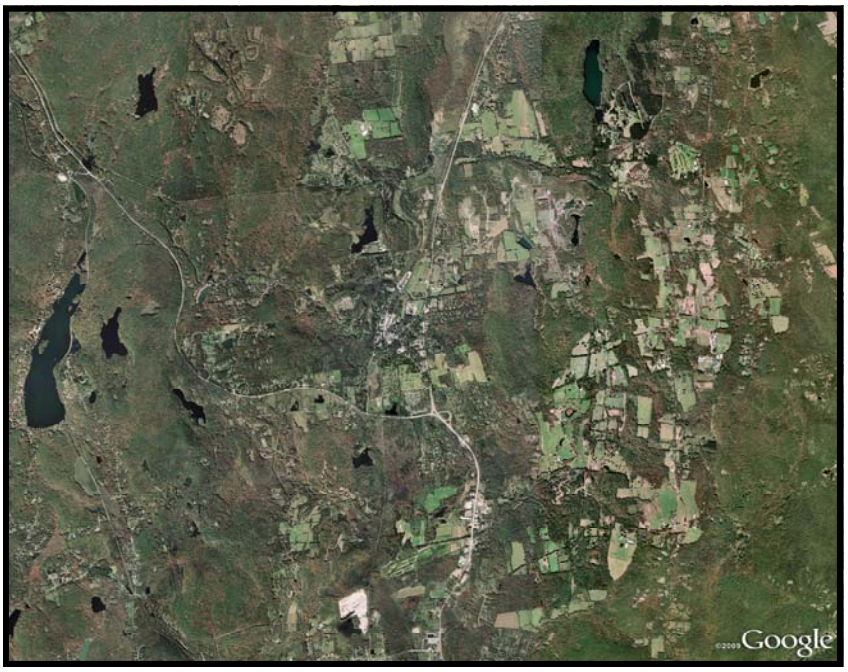
Pawling enjoys a rich and deep historic legacy. Three sites are listed on the Federal Register of Historic Places, including the Akin Free Library, the Oblong Meeting House and the John Kane House.

Chapter 1

Introduction

1. INTRODUCTION

The Town of Pawling's spectacular setting, nestled in the foothills of the Berkshires and snug within the historically rich Harlem Valley, provides a dramatic backdrop for the community. The Town's open spaces, scenic vistas, small town charm and rural ambiance; indeed the desirability of the Town as a place to live, have created increasing pressures — a growing population, added roadway congestion, threatened natural resources, depleting groundwater supplies, changing scenic characteristics, a challenging economic climate, to name a few. If left unchecked and allowed to run their course, these pressures will undoubtedly begin to erode and undermine the very character of the community which so many have come to value.



Pawling From Above

Chapter 1

Introduction

A well-developed comprehensive plan is regarded as a community's blue print for the future.

A What is a Comprehensive Plan?

A comprehensive plan is an official document adopted by the Town as a long-range policy guide for the physical development of the community. The New York State legislature has found that "*Among the most important powers and duties granted by the legislature to a town government is the authority and responsibility to undertake town comprehensive planning and to regulate land use for the purpose of protecting the public health, safety and general welfare of its citizens.*" §272a of New York State Town Law sets forth the general parameters of the comprehensive plan.

As a tool of planning, comprehensive plans provide guidance to municipal leaders, government agencies, organizations, businesses, residents as well as those seeking to undertake some action within the Town, and help to ensure that the community's needs are met, both now and in the future. Comprehensive plans are implemented through a variety of tools including land use policies, regulatory measures, zoning changes, and local laws. New York State Town Law further strengthens the role of the comprehensive plan by mandating that any new or amended land use regulations and all public capital improvements within the community must take into consideration the adopted comprehensive plan.

Over time, conformance to the initiatives established in the comprehensive plan results in a community that closely resembles the "vision" identified through the comprehensive planning process. As a result, a well-developed comprehensive plan is regarded as a community's blueprint for the future.

B. The Need for a Comprehensive Plan

The Town of Pawling must respond to changing conditions in order to continue to be physically, socially and economically sustainable. Prudently crafting a strategic vision that appropriately responds to these conditions while simultaneously accurately reflecting the desires of the Town's population is key to the stewardship of the community.

Pawling's current Comprehensive Plan was adopted in 1991. This document relies on background data and planning assumptions that are nearly 20 years old. It is outdated, and must be updated to reflect the current conditions, community values and regional trends.

C. The Planning Process

In the spring of 2008, the Town began the process of updating the Comprehensive Plan. The first step in the process was the creation of a Comprehensive Plan Steering Committee (CPSC) . The CPSC was composed of a very diverse group of local stakeholders who represent various interests within the community. The CPSC was tasked with overseeing the process, collecting information, reviewing drafts and serving as the point of contact between the community and the Comprehensive Plan effort.

The Comprehensive Plan process began in earnest in the summer of 2008, with the establishment of the Comprehensive Plan Steering Committee (CPSC).

In October of 2008, the Town Board adopted a limited development moratorium in order to suspend pending development pressures, and to allow the CPSC adequate time to develop the Comprehensive Plan.

In the fall of 2008, the Town engaged Cleary Consulting to assist and supplement the work of the CPSC. During the information gathering stage, the CPSC shared its knowledge and insight with the Town's consultant about various topics that were addressed in the Inventory and Analysis portion of the Plan. Numerous exercises were conducted to establish policy priorities and to reach consensus on difficult problems facing the Town. Following this stage of the planning process, the community "vision" was established along with numerous goals and objectives for the Town. The CPSC was responsible for reviewing and amending these goals and objectives prior to their inclusion in the Comprehensive Plan. Lastly, the CPSC devised tactics to ensure that the stated goals, objectives and policies are implemented in order to achieve the community's vision.

D. Implementing the Comprehensive Plan

The adoption of the Comprehensive Plan represents only the first step in achieving the community's vision. Reciting

statements of goals and policies will not, in and of itself, result in the changes that are necessary to properly carry forward the Town of Pawling into the future. The Town must implement the concepts set forth in the Comprehensive Plan through the adoption of land use regulations, zoning amendments, local laws and through the investment of public resources to achieve the desired outcome.

It is recommended that once the Comprehensive Plan is adopted, the Town Board should designate a Comprehensive Plan Implementation Committee to regularly review the Plan's goals, and recommend actions to pursue.

Implementation tasks should reflect the priorities and timeframes established within this document. However, it is recognized that priorities may change due to the availability of funding sources and other similar variables.

Chapter 2 Community Vision

Visioning is the process by which a community decides the future it wants by planning how to achieve it under realistic expectations.

COMMUNITY VISION

Visioning is the process by which a community decides the future it wants by planning how to achieve it under realistic expectations. During this process, stakeholders were invited to analyze the community's strengths & weaknesses, goals & opportunities and to define community-wide goals and objectives. The strength of the visioning process is that it is a "bottom-up" initiative, shaped and defined by the stakeholders.

The main objectives of the visioning process are:

- To foster creativity by providing the opportunity to think collaboratively in innovative ways.
- To serve as an incentive to mobilize assets and resources in the community.
- To generate enthusiasm and to kindle excitement about the direction in which the community is heading.
- To provide focus, purpose and direction for the on-going planning process and future investments.
- To create a context for consideration and adoption of long range goals and related policies.

Visioning is considered successful when it:

- Recognizes the uniqueness of the community.
- Takes into account the dynamics and history of the surrounding region.
- Conveys a wide and diverse public participation of community residents in the analysis and definition of strategies.
- Reflects the desires of the participants.
- Does not have predetermined outcomes or "recipes."
- Fosters community responsibility.
- Encourages local leadership.

By these measures, Pawling's visioning process proved to be very successful.

A Town of Pawling Vision Statement

Rather than developing a single vision statement for the community, the CPSC determined that it would be most useful to define individual vision statements for each section analyzed in the Comprehensive Plan. To that end, 11 individual vision statements have been developed:

Land Use

Pawling's existing pattern of land use reflects the physical characteristics of the landscape, its limitations and opportunities. In order for the Town to responsibly and sustainably advance into the future, comprehensively planned land uses must compliment each other functionally, aesthetically, socially and economically. Protecting the quality of life of the Town of Pawling is dependent upon maintaining the rural residential character of the Town while fostering appropriately scaled and well designed development along the Route 22 corridor and recognizing the interdependence between the Town and the Village. This vision is dependent upon the implementation of strict zoning and land use controls that are necessary to protect and preserve the community's natural resources, groundwater quality and open spaces.

Zoning

Provide a rationale and equitable series of regulatory controls to preserve and protect the character of Pawling, while simultaneously properly guiding future growth and development in a manner that protects the health, safety and welfare of the community.

Housing

The Town has developed as a predominantly residential community in part due to the areas rural charm and distinct and beautiful landscape. Preserving these residential areas and the surrounding landscape is key to maintaining the quality of life of the community. However, diversifying the housing stock is also necessary to maintain the vibrancy of the community. New housing development should only be permitted if it is done responsibly and sustainably without damaging the Town's vital natural resources, viewsheds and ground water quality, and is supported by adequate services.

Natural Resources

The Town of Pawling is today, a direct reflection of the Harlem Valley's extraordinary natural resources. The prudent and responsible maintenance and stewardship of these natural resources will assure that future generations will enjoy clean air, pure drinking water, abundant wildlife and a landscape that is appropriately developed in a harmonious and sustainable way.

Open Space & Scenic Resources

Pawling's unique scenic quality and "sense of place" is derived from the interrelationship between areas of undeveloped open space,

pastoral farmlands and rural residential districts. This distinctive character, enhanced by significant natural and historic resources, is the quality that maintains Pawling's vitality as a place to live, work and visit.

Transportation

Create more choices for travel to and through Town, and create a transportation system that works in tandem with the existing land use pattern to preserve the network of rural roads while simultaneously facilitating rapid and unencumbered travel along the Town's major roadways.

Municipal Services & Infrastructure

Pawling's community facilities protect the public safety and enhance the quality of life in the community. Careful attention to their adequacy, funding and improvement is required to meet the current and future needs of the Town. Every opportunity should be explored to do this, while also limiting increases in costs.

Water, sewer, solid waste, electric, natural gas and telecommunications facilities are relied upon by residents and businesses for day-to-day activity and contribute to Town's economic well-being. Utilities should continue to be improved to meet Pawling's growing needs. At the same time, the Town should strive to limit any potential negative impacts from new infrastructure on the Town's natural environment, historic or scenic resources.

Economic Resources

The Town should emphasize those types of economic development activities that capitalize upon but do not erode the Town's outstanding quality of life. Year-round, as well as week-end/second home resident and visitor sectors all combine to diversity the economic base of the community. Pawling should continue to pursue a diverse economic base by promoting office and industrial development, agriculture, tourism, retail development and entrepreneurial and small-business activity in the Village's Central Business District, as well as in appropriate locations in the Town. This will result in a robust tax base that will support the municipal services required for local residents. Economic development pursuits must be balanced with the conservation policies expressed in the other sections of this plan, particularly with regard to historic, open space and natural resources.

Recreation Resources

The Town shall foster an interconnected network of public and private recreational facilities and resources that helps to build a livable community that includes diverse opportunities for improving health and wellness. Pawling supports active lifestyles by providing safe, accessible parks, facilities, and programs that encourage physical activity, mental challenges, and social engagement. The Town recognizes the potential of parks, trails, recreation services, and open space to improve the community's attractiveness as a place to live and work.

Historic & Cultural Resources

Preserving the Town's heritage, while simultaneously addressing current and future needs, represents one of the most significant challenges facing the Town today. Maintaining the town's historic and cultural identity in all decisions must be accomplished.

In order to achieve the vision for Pawling, there are a number of overarching principles that require consideration during the implementation of the Comprehensive Plan. These include:

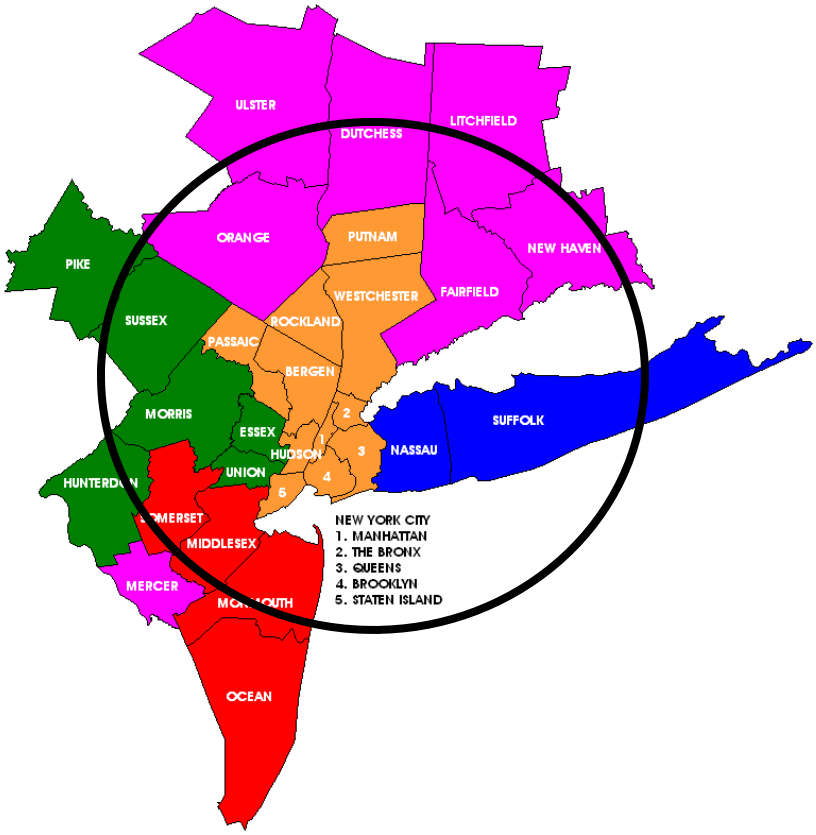
- **Innovation**—being open to new techniques and technologies for the provision of municipal goods and services.
- **Environmental Sustainability**—Ensuring that decisions made by the Town are sensitive to the quality of the environment. Implementation of the recommendations in this plan should assure that Pawling's natural resources are preserved for future generations.
- **Respect for Historic Legacy**—Pawling has a rich history that should be remembered, preserved and celebrated.
- **Economic Sustainability**—Foster a broad economic base that will support the community.
- **Cooperation and Partnership**—Efforts should be made wherever possible to form and maintain relationships with surrounding communities, regulatory agencies and regional organizations and continue an atmosphere of communication and cooperation.
- **Diversity**—Pawling is host to residents and visitors, seasonal and year-round inhabitants. This diversity strengthens the Town and should be recognized in its planning.

DEMOGRAPHIC PROFILE

A. Existing Conditions:

The Town of Pawling lies within the shadow of one of the most affluent, mobile and populous metropolitan areas in the world. Changing employment patterns, increases in telecommuting and working from home, improvements in transportation alternatives, and the cost of housing have all combined to increase the attractiveness of suburban and rural areas that were once thought to be too distant from the employment centers of the metropolitan area. A suburban ring located 45—75 miles from Manhattan, including Dutchess, Orange, Ulster and Suffolk Counties in New York, Sussex, Morris and Hunterdon Counties in New Jersey and Litchfield and New Haven Counties in Connecticut have been the focus of much of the regions recent growth.

The Town of Pawling lies within the shadow of one of the most affluent, mobile and populous metropolitan areas in the world.



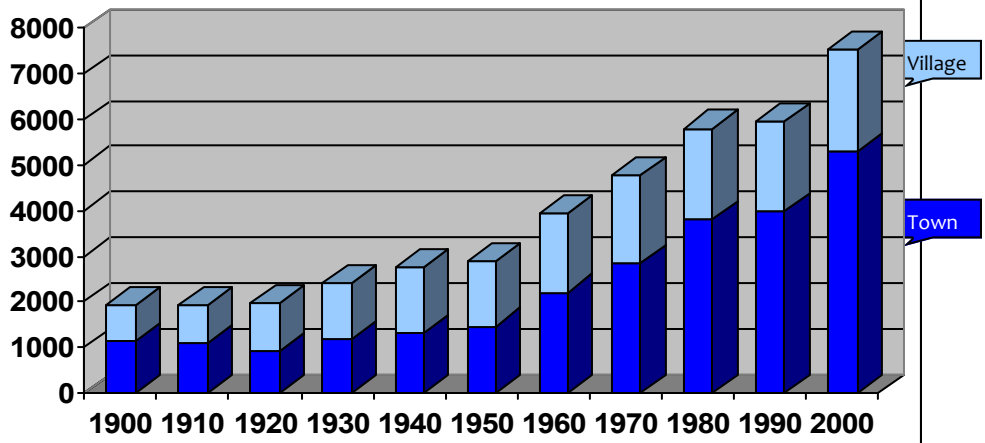
By 1900, the Town of Pawling's population had reached 1,140, and the Village's population was 781. Thereafter, the town's population declined slightly over the next twenty years dipping to a low point of 923 residents by 1920. During the same period, the Village's

population grew by 251 residents. During the 1920's the Town's population rebounded and grew over 22%, while the Village population kept pace growing by 15%. During the war years, the Town experienced modest growth in the 10% range, while the Village's population declined by 16 residents. The 1950's saw the largest surge of growth, nearly 34% for the Town and 18% for the Village. Thereafter, the Town experienced steady growth of 20% - 25% during the 1960's and 1970's. The Village grew slower during this period, between 5%—10%. The 1980's saw very little growth in the Town, with only 174 new residents added during that decade. The Village's population actually declined during this time by 22 residents. However, by the 1990's, population growth was once again proceeding rapidly with the addition of over 1,300 new Town residents (about 25%), and 259 Village residents.

The Town's population has grown steadily since the 1920's reaching 5,288 at the 2000 decennial census.

Table 3-1

Population Growth 1900—2000



Source: US Census Bureau

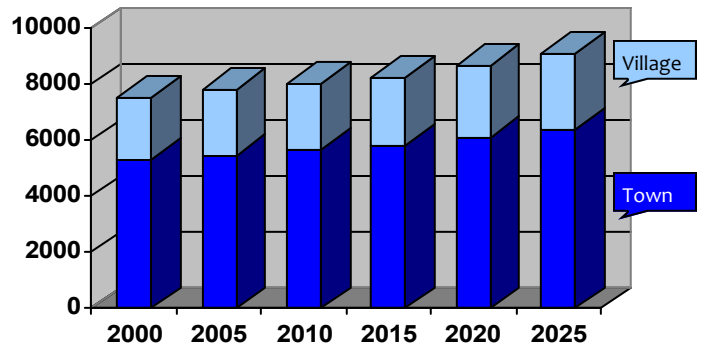
TABLE 3-2 POPULATION CHANGE BY DECADE									
Year	**Town Population**	**Number Increase**	**Percent Increase**	Village Population	Number Increase	**Percent Increase**	Total Population	Number Increase	Percent In-crease
1900	1,140	--	--	781	--	--	1,921	--	--
1910	1,079	- 61	- 5.6	848	67	7.9	1,927	6	0.3
1920	923	- 156	- 17.0	1,032	184	17.8	1,955	28	37.2
1930	1,187	264	22.2	1,204	172	14.2	2,391	436	18.2
1940	1,306	119	9.1	1,446	242	16.7	2,752	361	13.1
1950	1,461	155	10.6	1,430	- 16	- 1.1	2,891	139	4.8
1960	2,204	743	33.7	1,734	304	17.5	3,938	1,047	26.5
1970	2,850	646	22.6	1,914	180	9.4	4,764	826	17.3
1980	3,799	949	25.0	1,996	82	4.1	5,795	1,031	17.8
1990	3,973	174	4.4	1,974	- 22	- 1.1	5,947	152	2.5
2000	5,288	1,315	24.8	2,233	259	11.6	7,521	1,574	20.9

Source: US Census Bureau

The Town's population is projected to peak at approximately 6,396 residents by 2025.

The last decennial census in 2000 established the Town's population as 5,288. This represents a population of 125 residents per square mile, and is 5.26% of the total Dutchess County population. The Village population in 2000 was 2,233, or 1,139 residents per square mile. Population growth in the Town and Village is projected to continue. Table 3-3 displays the estimated population growth of the Town and Village to the year 2025, where steady growth will result in a population of 6,395 Town residents. And 2,701 Village residents.

Table 3-3
Population Forecasts 2005—2025



Source: Poughkeepsie-Dutchess County Transportation Council/NYMTC

These growth trends are similar to the County –wide trend which projects that the total County population will reach 338,809 by 2025.

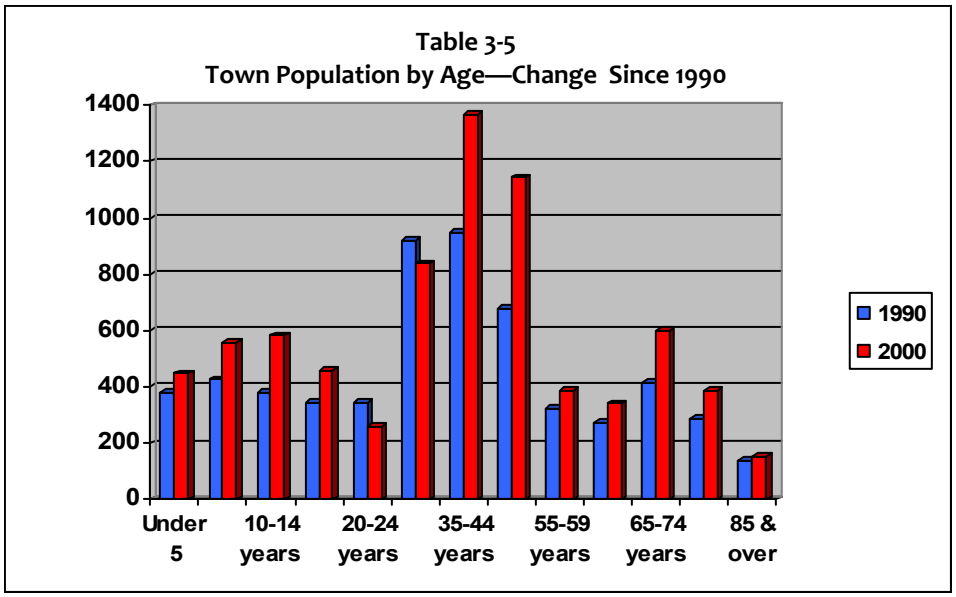
Pawling's population is distinctly middle-aged. 18.2% of the population is between the ages of 35-44 and 15.2% is between 45-54.

As displayed in Table 3-4 and 3-5, 51.1% of the Town's population is female, while 48.9% is male. The largest age cohort is the 35-44 group accounting for 18.2% of the population, followed by the 45-54 cohort (15.2%). Adding the third most populous age cohort (the 25-34 group accounting for 11.1%), it becomes clear that Pawling's population is distinctly middle-aged. The 3 most populous age cohorts account for 44.5% of the entire population. The very young and the very old account for small percentages of the Town's population. The fastest growing age group since 1990 is the 45-54 cohort which grew 40.7%. The 65-74 cohort grew by 30.9% and the 35-44 cohort also grew by 30.5%. The largest decrease in population occurred in the 20-24 cohort which lost 34.5% since 1990, followed by the 25-34 cohort which declined by 9.8%. This suggests that housing and employment opportunities for young adults are limited in the Town.

TABLE 3-4
2000 TOWN OF PAWLING POPULATION – BY AGE – CHANGE SINCE 1990

Age	2000 Number	Percent	1990 Number	Percent Change
Total Population	5,288	100	3,973	25.0
Male	2,624	48.9	1,974	24.7
Female	2,664	51.1	1,979	25.7
Under 5	448	6.0	382	14.7
5 to 9 years	558	7.4	427	28.8
10 to 14 years	583	7.8	379	34.9
15 to 19 years	458	6.1	344	24.9
20 to 24 years	258	3.4	347	- 34.5
25 to 34 years	838	11.1	920	- 9.8
35 to 44 years	1,368	18.2	951	30.5
45 to 54 years	1,144	15.2	678	40.7
55 to 59 years	385	5.1	321	16.6
60 to 64 years	341	4.5	275	19.3
65 to 74 years	601	8.0	415	30.9
75 to 84 years	387	5.1	290	25.0
85 years and over	152	2.0	141	7.2
Median Age	39.7			

Source: US Census Bureau



Source: US Census Bureau

According to the 2000 Census, 62.1% of the Town's adult population is married, 22.1% were never married, 8.4% are divorced, 6.0 are widowed and 1.3% are separated from their spouse. 16.2% of the Town's grandparents are the responsible caregiver for their grandchildren. 13.8% of the Town's workforce lives with a disability and 61.9% of that disabled population is employed.

Pawling is very ethnically homogeneous with 96% of the population identified as "white."

As depicted on Table 3-6 & 7 the ethnicity of the Town is very homogeneous. 96% of the Town's population is identified as white.

TABLE 3-6
2000 TOWN POPULATION - ETHNICITY

Race	Number	Percent
Total Population	***5,288***	***100***
White	5,075	96.0
Black or African American	60	1.1
American Indian and Alaska Native	5	0.1
Asian	58	1.1
Native Hawaiian and Other Pacific Islander	3	--
Some other race	34	0.6
Two or more races	56	1.1
Hispanic or Latino	210	4.0

The Town's population is well educated, and over 71% is in the labor force

3-7
2000 Town Population Ethnicity

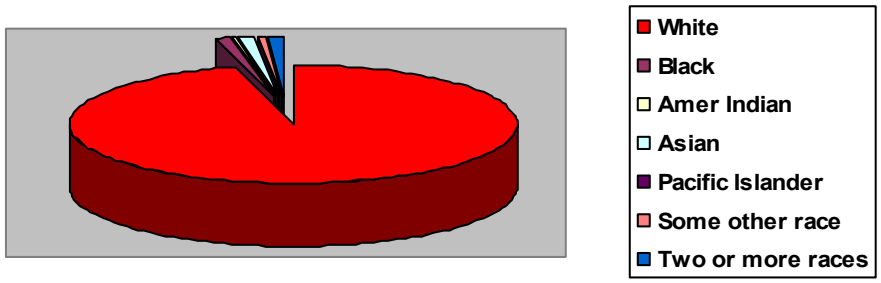


Table 3-8 reveals that the Town's population is well educated, with over 92% having graduated from High School or higher.

TABLE 3-8
2000 EDUCATIONAL ATTAINMENT

Education	Number	Percent
Total population 25 years and over	***3,667***	***100***
Less than 9th grade	121	3.3
9th to 12th grade, no diploma	476	13.0
High school graduate (includes equivalency)	1,101	30.0
Some college, no degree	920	25.0
Associate degree	235	6.4
Bachelor's degree	637	17.4
Graduate or professional degree	490	13.4
Percent high school graduate or higher		92.2
Percent bachelors degree or higher		30.8

Source: US Census Bureau

Education is a key factor in determining employment status. Over 71% of the Town's population (age 16 and older) is in the labor force, and 96% are employed while 4.0% are unemployed. This figure reflects the

results of the 2000 census, and does not reflect the effects of the current economic recession.

As presented in Table 3-9,the majority of the Town's work force is employed in white collar professions; 37% in "management, professional and related occupations" and 26.7% in "sales and office occupations." Most workers (20.8%) are specifically employed in the "educational, health and social services" field.

Pawling is the third most affluent community in Dutchess County.

TABLE 3-9 2000 TOWN EMPLOYMENT STATUS		
Employment	**Number**	**Percent**
Total population 16 years and over	***4,138***	***100***
In labor force	2,778	67.1
Civilian labor force	2,778	67.1
Employed	2,677	96.0
Unemployed	101	4.0
Not in labor force	1,360	32.8

Source: US Census Bureau

TABLE 3-10 2000 TOWN EMPLOYMENT CHARACTERISTICS		
Occupation		
	Number	**Percent**
Management & professional	990	37.0
Service occupations	356	13.3
Sales and office occupations	715	26.7
Farming, fishing and forestry occupations	37	1.4
Construction, extraction & maintenance	353	13.1
Production, transportation and materials moving occupations	226	8.4
Industry		
	Number	**Percent**
Agriculture, forestry, fishing & hunting	65	2.6
Construction	297	12.0
Manufacturing	224	9.0
Wholesale trade	82	3.3
Retail Trade	286	11.5
Transportation & warehousing & utilities info.	155	6.2
Finance, insurance, real estate	138	5.7
Professional, scientific, management, administrative & waste management services	358	14.4
Educational, health & social services	518	20.8
Arts, entertainment, recreation, accommodation & food services	96	3.8
Other services (except public admin.)	133	5.3
Public Administrator	130	5.2

In 2000, the Town of Pawling was the third most affluent community in Dutchess County behind Beekman and Unionvale, with a median household income of $61,380. Table 3-11 provides a summary of household incomes.

TABLE 3-11
2000 TOWN HOUSEHOLD INCOME

Income	Amount	Percent
Households	***1,936***	***100***
Less than $10,000	37	1.9
$10,000 to $14,999	47	2.4
$15,000 to $24,999	72	3.7
$25,000 to $34,999	122	6.3
$35,000 to $49,999	255	18.3
$50,000 to $74,999	506	26.1
$75,000 to $99,999	263	13.6
$100,000 to $149,999	351	18.1
$15,000 to $199,999	82	4.2
$200,000 or more	101	5.2

Source: US Census Bureau

Fully 80% of the Town's residents have moved into their current residences since 1980.

The poverty level in the Town is relatively low. In 2000, 33 families or 1.7% of the population lived below the poverty level.

The Town's 5,288 residents comprise 1,904 total households. 1,454 or 76.3% are family households (families). These households occupy 2,156 total housing units, of which 1,904 or 88.3% were occupied. 252 or 11.7% were vacant. 180 housing units or 8.3% were identified as "seasonal, recreational or occasional use" units. The average family size in the Town is 3.16 individuals.

Roughly 85% of the Town's housing units are owner-occupied, the remaining 15% are renter-occupied. The majority of the Town's housing stock is relatively new, with over 1/2 of the housing units having been constructed since 1950. 26.7% of the units predate 1939. Fully 80% of the Town's residents moved into their current residences since 1980.

TABLE 3-12 2000 HOUSEHOLD CHARACTERISTICS		
	Number	***Percent***
Number of Households	1,904	100
Family Households	1,454	76.3
Non-Family Households	450	23.6
Owner Occupied Housing Units	1,617	85.0
Renter Occupied Housing Units	287	15.0

Source: US Census Bureau

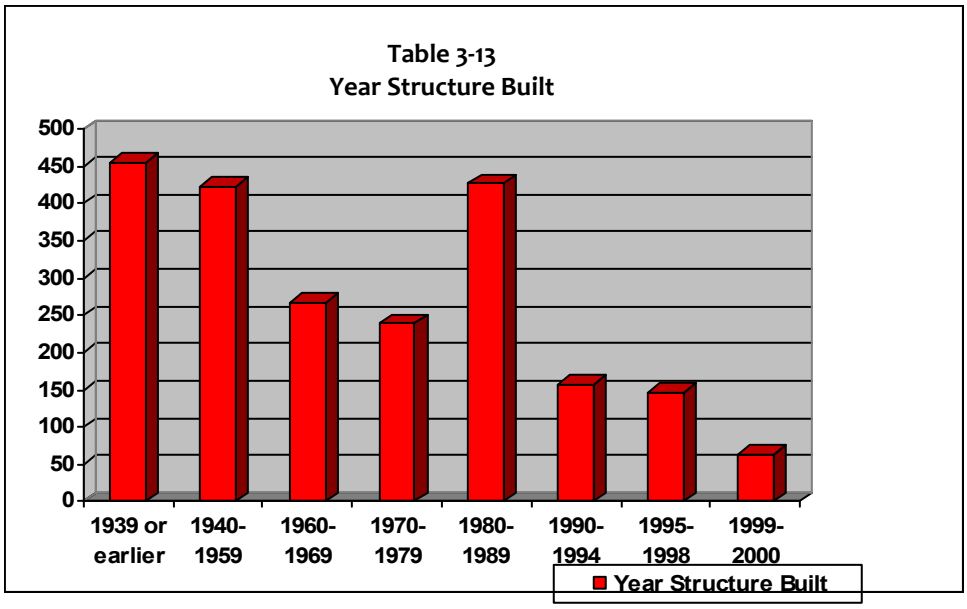
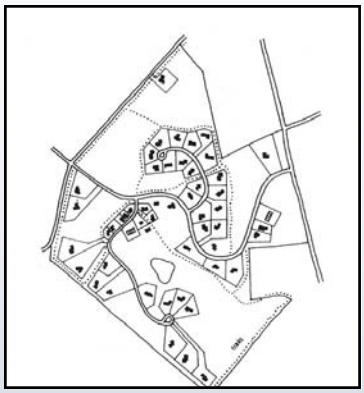


TABLE 3-14 2000 HOUSING CHARACTERISTICS		
Year Structure Built		
Year	***Number***	***Percent***
1999 to March 2000	63	2.9
1995 to 1998	147	6.7
1990 to 1994	157	7.2
1980 to 1989	427	19.6
1970 to 1979	239	11.0
1960 to 1969	268	12.2
1940 to 1959	423	19.4
1939 or earlier	456	21.0
Year Householder Moved into Unit		
Year	***Number***	***Percent***
1999 to March 2000	293	15.4
1995 to 1998	484	25.4
1990 to 1994	338	17.8
1980 to 1989	441	23.2
1970 to 1979	200	10.5
1969 or earlier	146	7.7

Source: US Census Bureau

Chapter 4

Land Use



The most dominant land use type in the Town of Pawling is residential. 2,826 parcels encompassing 11,118.7 acres or 41.2% of the Town's land area is dedicated to residential use.

LAND USE

A. Existing Conditions:

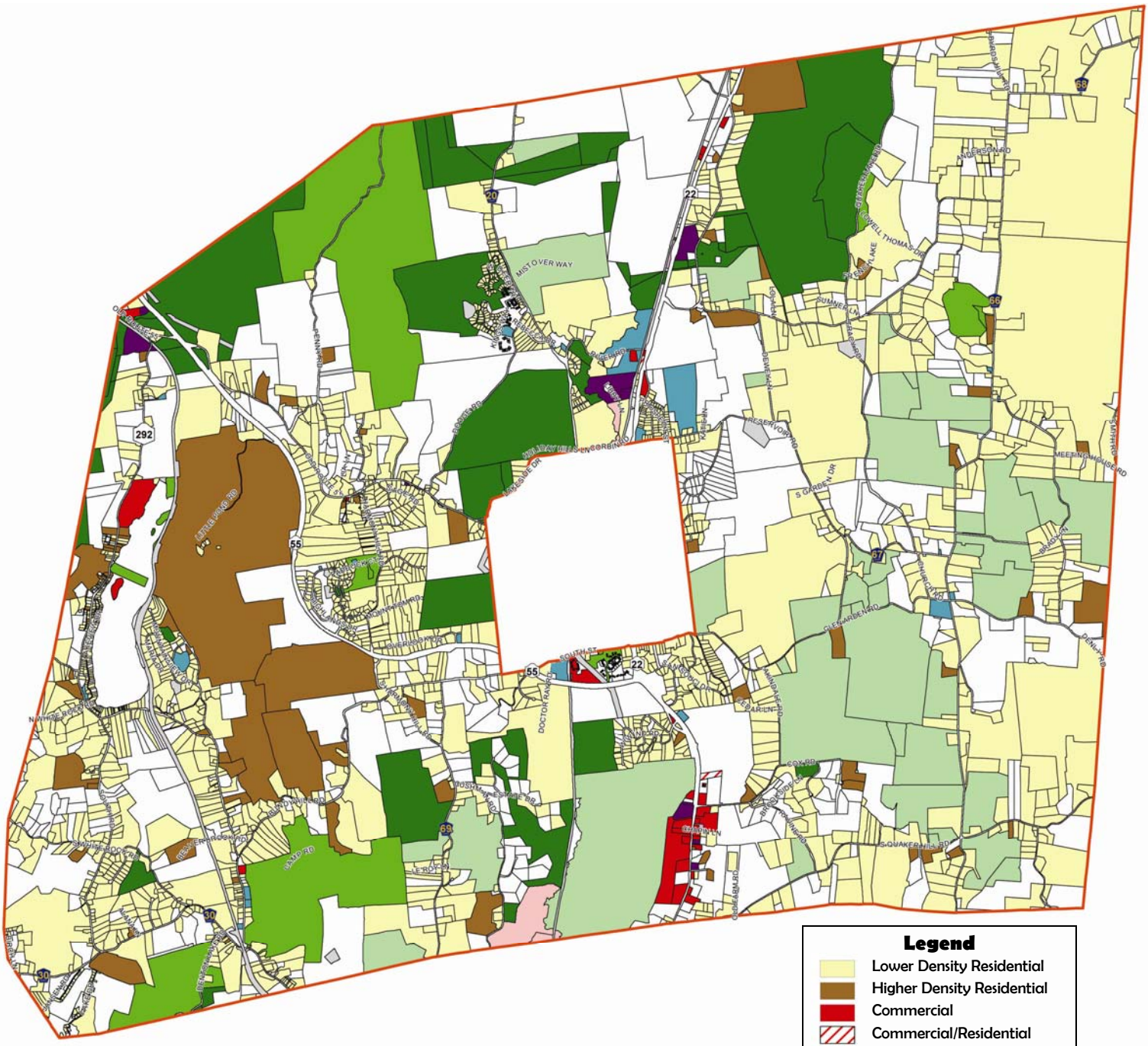
Land use planning is at its very essence the efficient and ethical organization and orderly regulation of land within a given geographic area, to secure the health and well being of its residents. Today, the Town of Pawling's land use pattern reflects the historical evolution of how land was used from the agrarian pastoral origins of the Town, to a modern day rural residential community. This land use pattern reflects a complex series of factors ranging from the physical characteristics of the land itself, to market forces, regional trends and literally thousands of individual and group decisions. The consequence of this is the existing land use pattern depicted on Figure 4-1 that covers Pawling's 42.14 square miles (26,969.6 acres).

Based on data collected from the Town Assessor's records, by far the most dominant land use type in the Town of Pawling is residential. 2,826 parcels encompassing 11,118.7 acres or 41.2% of the Town's land area is dedicated to residential use. These residential uses vary widely from a single mobile home on an acre of land to 22 large estates covering over 1,400 acres. But it is single family residential homes that overwhelmingly dominate the residential land use category. Over 95% of the residential parcels support single family residences. An important issue lies buried within this statistic. While indeed 95% of the parcels devoted to residential use support single family residences (accounting for approximately 9,323 acres), nearly half that acreage (45% or 4,208 acres) can be further subdivided to support additional residential development. Residential land uses are depicted on the Existing Land Use Map (Figure 4-1) in the yellow and brown shades.

The next largest land use category is undeveloped vacant land. 7,444 acres or 27.6% of the Town land area is currently vacant. This vacant land is scattered throughout the Town, with a predominance of larger vacant parcels located to the north.

Importantly, the 7,444 acres of vacant land plus the 4,208 acres of additional sub-dividable residential land combines for a total of 11,652 acres or 43.2% of the Town's land area, which is potentially available for future development.

A direct link to the Town's agricultural heritage is reflected in the 3rd largest land use category—agricultural land. 3,171.2 acres or



Legend

- Lower Density Residential
- Higher Density Residential
- Commercial
- Commercial/Residential
- Offices
- Industrial
- Extractive Industry
- Public & Quasi-Public
- Agricultural
- Parks & Public Conservation
- Recreational
- Transportation, Utilities
- Vacant
- Parcel Boundaries

Base Mapping:
Dutchess County Department of Planning & Development

CLEARY CONSULTING

TOWN OF PAWLING 1788

Existing Land Use

N W E S

0' 4,000'

Figure #

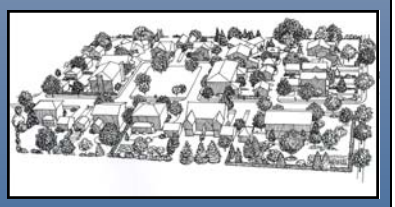
4-1

11,652 acres or 43.2% of the Town's land area is potentially available for additional future development.

11.7% is classified as agriculture. 36% of this agricultural land is devoted to traditional farming, such as the production of field crops, dairy products, cattle, calves and hogs. 19% of the productive agricultural land is currently lying fallow. The majority, over 1,400 acres or 44%, is used to support horse farms. As can be seen on the Existing Land Use Map, most of the Town's agricultural land is located in the southeastern corner of the community.

Underpinning the Town's open space character are 3,430.7 acres (12.7%) of public park, wild forested and conservation lands. Located primarily in the northern half of the Town, these lands are

publicly owned and dedicated to public use such as Lakeside Park or the Appalachian Trail or are privately protected and preserved through the protection and stewardship of private organizations such as The Oblong Land Conservancy and The Nature Conservancy.



Private recreation lands make up the next largest land use category, comprising 830 acres or 3.1% of the Town's land area. The predominant use within this category in terms of acreage are private camps, such as those operated by The Girl Scouts and the Presbyterian and Mormon Churches, which occupy 70% of the acreage of this land use category. Also included are facilities such as the Quaker Hill Country Club, the Whaley Lake Marina as well as

the recreational areas operated by various homeowners associations.

Commercial uses occupy only 342.5 acres or 1.3% of the Town. Interestingly, the most extensive commercial operation in Town in terms of land area is a residential use - multi-family apartments—which amounts to nearly 100 acres, followed by camps, cottages and bungalows at 78 acres. Subtracting these "residential" commercial uses, the remaining traditional commercial uses such as restaurants, retail stores, office building, etc. account for only 164 acres or 0.6% of the Town's land area.

Only 164 acres or 0.6% of the Town supports traditional commercial uses.

Public service facilities also occupy 1.3% of the Town's land area. These uses include communication and utility facilities, landfill, water supply lands, etc. 66% of this category is devoted to the Metro-North Railroad right-of-way.

Community service facilities occupy 183 acres or 0.7% of he land area. These uses include the Akin Free Library, the Middle and High Schools, places of worship, post office, government buildings, etc. The Middle and High School campus is the largest land owner within this category at 112 acres (61%).

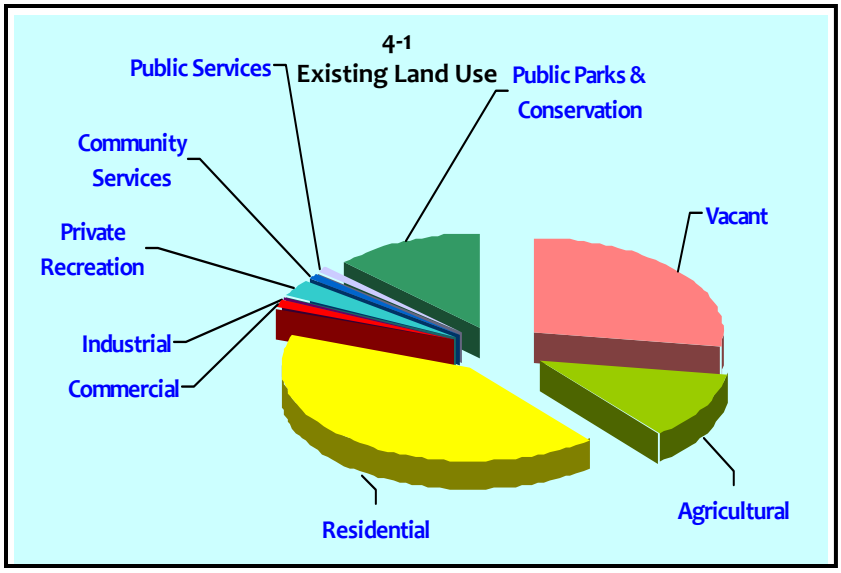
The final and smallest land use category in terms of number of parcels as well as acreage is industrial. Only 9 parcels of land covering 104.4 acres or 0.4% of the Town's land area is devoted to industrial uses. Of these, mining and quarrying is the predominant use, occupying 80% of the industrial land area.

Several trends can be gleaned from an analysis of these existing land use characteristics. The first and most obvious is the absolute domination of residential land uses. Commercial activities play a very small role in the community's land use picture.

What also becomes plainly evident is the fact that a very large portion of the Town—43% - is potentially developable. The long term disposition of these lands is perhaps one of the most important issues facing the Town in the years to come.

The rural, bucolic character of the Town is defined by protected and preserved properties and agricultural lands. Efforts to stabilize and bolster both of these land use categories is necessary to reinforce and preserve this highly valued characteristic of the Town.

Table 4-1 and Chart 4-1 provide a breakdown of existing land uses.



The Town's land use pattern consists of 3,883 parcels supporting various uses, covering 26,969.6 acres of land.

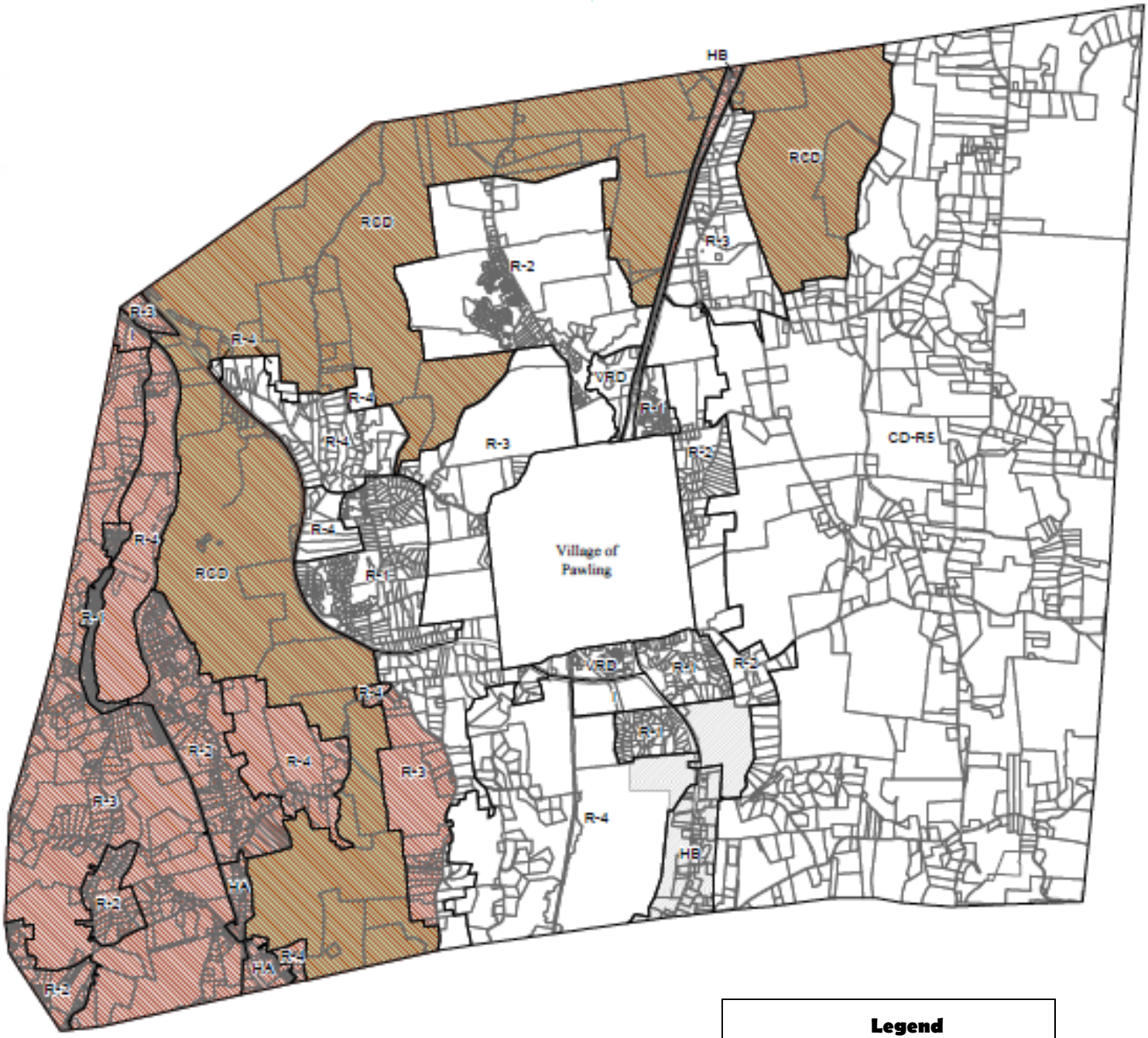
Table 4-2
Existing Land Use

Land Use	Number of Parcels	Acreage
Vacant		
Developable Vacant Land	808	7,371.5
Abandoned Agricultural Land	1	72.5
Sub-Total	*809*	*7,444.0*
Agricultural Land		
Vacant (Productive, Fallow)	3	615.4
Dairy Products	3	464.1
Cattle, Calves, Hogs	8	478.6
Horse Farms	23	1,401.4
Field Crops	3	201.7
Sub-Total	*40*	*3,171.2*
Residential		
Single Family	2,500	5,094.4
Two-Family	39	132.2
Three-Family	5	8.1
Estate	22	1,424.5
Rural Residence w/ Acreage	116	2,783.4
Seasonal Residence	57	19.7
Mobile Home	1	1
Multi-Purpose, Multi-Structure	86	1,655.4
Sub-Total	*2,826*	*11,118.7*
Commercial		
Camps, Cottages & Bungalows	4	78.2
Apartments	6	99.9
Restaurant	4	4.7
Snack Bars, Drive-Ins, Ice Cream	2	45.7
Auto Dealers, Sales & Service	3	9.8
Service & Gas Station	2	0.8
Auto Body, Tire Shop	3	7.8
Automatic Car Wash	1	1.3
Lumberyard, Saw Mill	2	7.4
Trucking Terminal	2	30.4
Warehouse & Distribution Facility	5	25.3
Neighborhood Shopping Center	1	5.6
Large Retail Outlet	1	12.8
Large Retail Food Store	1	4.0
Dealership (other than auto)	1	2.0
Office Building	2	2.6
Bank/Single Occupant	2	4.2
Sub-Total	*42*	*342.5*
Industrial		
Manufacturing & Processing	2	18.5
Mining & Quarrying	3	83.2
Wells	4	2.7
Sub-Total	*9*	*104.4*
Private Recreation & Entertainment		
Auditoriums, Exhibition Halls	1	2.6
Indoor Sport Facility	1	0
Outdoor Sport Facility	8	90.0
Golf Country Club	3	113.6
Marina	2	23.2
Camp	13	585.3
Playground	2	9.7
Picnic Ground	2	5.6
Sub-Total	*30*	*830.0*
Community Services		
Library	1	1.0
School	2	112.0
Religious	2	11.4
Health Facilities	4	9.5
Highway Garage	1	12.9
Post Office	1	1.7
Police & Fire Department	4	14.9
Cultural Facility	2	1.0
Private Rights-of-Way	22	15.4
Cemeteries	6	3.5
Sub-Total	*45*	*183.3*
Public Services		
Flood Control	2	18.5
Water Supply	7	39.8
Communication	5	4.0
Railroad	4	226.8
Landfill & Dump	1	31.9
Sewage Treatment Plant	2	1.0
Utility	11	22.8
Sub-Total	*32*	*344.8*
Public Parks, Wild & Forested Lands & Conservation Lands		
Town Owned Public Park	3	365.5
Federally Owned Public Park	30	655.5
State Owned Public Park	2	22.1
Private Conservation Lands	14	1,571.0
Private Hunting & Fishing Club	1	816.6
Sub-Total	*50*	*3,430.7*
Total	*3,883*	*26,969.6*

The land use pattern in the western portion of the Town has been the subject of detailed study and analysis for the better part of the past decade. More specifically an area of some 7,000 acres stretching from the Town's southern border, all the way up and across the northern boundary of the Town known as the "Greenbelt" has been the focus of this analysis. The area includes The Little Whaley Lake CEA, Harmony Lake, Denton Lake, Nuclear Lake, parts of the Great Swamp CEA, parts of the Hurds Corner CEA, the Appalachian Trail, New York City watershed lands, and the Hudson Highlands. Perhaps most importantly, the area sits atop the Upland Aquifer Area and a portion of the Priority Valley Bottom Aquifer (Figure 4-2).

In 2007, in a effort to accurately quantify the potential impact of additional development on this unique and environmentally sensitive area, the Dutchess County Department of Planning conducted a "Build-Out-Analysis" based on a detailed assessment of GIS data as well as the findings of the Groundwater Resource Assessment prepared by The Chazen Company in 2000. The developable portion (minus preserved lands, water bodies, etc.) of the Greenbelt study area encompasses approximately 6,913 acres, and currently supports 829 housing units.

It was concluded that the maximum number of additional housing units that could be developed in the Greenbelt area without overburdening the existing groundwater supplies would be 1,605 units (776 new or additional housing units). Alarmingly, the build-out-analysis revealed that under existing zoning 2,077 housing units could be developed or 1,301 units above the sustainable limit. These findings indicate that the zoning controls in place for this area need to be revised to reflect a more sustainable long term land use pattern.



Legend

Greenbelt Study Area

Base Mapping:
Dutchess County Department of Planning & Development

CLEARY CONSULTING

TOWN OF PAWLING 1788

Greenbelt Area Resource Conservation Study Area

N W E S

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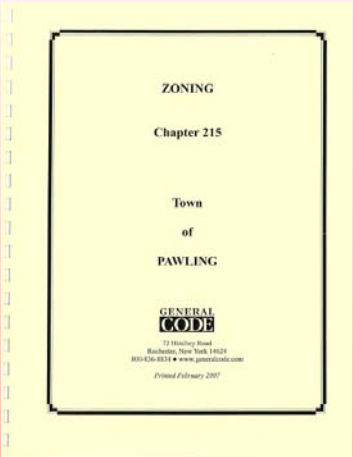
Figure #

4-2

C. Land Use Vision Statement:

Pawling's existing pattern of land use reflects the physical characteristics of the landscape, its limitations and opportunities. In order for the Town to responsibly and sustainably advance into the future, comprehensively planned land uses must compliment each other functionally, aesthetically, socially and economically. Protecting the quality of life of the Town of Pawling is dependent upon maintaining the rural residential character of the Town while fostering appropriately scaled and well designed development along the Route 22 corridor and recognizing the interdependence between the Town and the Village. This vision is dependent upon the implementation of strict zoning and land use controls that are necessary to protect and preserve the community's natural resources, groundwater quality and open spaces.

Zoning


ZONING

Chapter 215

Town

of

PAWLING

GENERAL CODE

ZONING

A. Existing Conditions:

The Town of Pawling adopted its first zoning ordinance over 60 years ago. The current ordinance was adopted on May 9, 1978. The Zoning Ordinance sets forth the Town's zoning regulations. As established in Article I, the purpose of the Zoning Ordinance is:

- To guide the future growth and development of the Town in accordance with a comprehensive plan of land use and population density that represents the most beneficial and convenient relationships among the residential, commercial, industrial and public areas within the Town, considering the suitability of each area for such uses, as indicated by existing conditions, trends in population and mode of living, and having regard of the use of land, building development and economic activity, considering such conditions and trends both within and adjacent to the Town.
- To protect and promote the public health, safety, convenience, morals and general welfare of the community.
- To provide adequate light, air and privacy, to secure safety from fire, flood and other danger and to prevent overcrowding of the land and undue congestion of population.
- To protect and conserve the character, the environment and the social and economic stability and value of all parts of the Town and to encourage the orderly and beneficial development of all parts of the Town.
- To promote the most beneficial circulation of traffic throughout the Town, having particular regard to the avoidance of congestion of streets and provision of safe and convenient traffic movements to and among the various uses of land and buildings throughout the Town.
- To provide a guide for public policy and action in the efficient provision of public facilities and services and for private enterprise in building development, investment and other economic activity relating to uses of land and buildings throughout the Town.
- To ensure that development takes place in an amount commensurate with availability and present and future capacity of public facilities and services.

The Town of Pawling contains 6 residential, 3 non-residential and 1 mixed-use zoning district

- To provide adequately for transportation, water, sewerage, schools, parks, conservation and recreation areas and other pubic requirements.
- To protect streams and ponds from pollution and to avoid hazardous conditions and excessive damage from stormwater runoff and flooding, to safeguard the water table and to encourage the wise use and sound management of the natural resources throughout the Town in order to preserve the integrity, stability, beauty and good character of the community and the value of land.
- To provide a variety of housing types and environments in order to afford the maximum opportunity for people to find a housing and living style suitable to their needs and desires.
- To ensure future preservation of open space and recreational lands as an integral part of future development and to conserve the natural resources of the Town.
- To preserve the natural beauty of the topography of the Town and to ensure appropriate development with regard to these natural features.

These purposes set forth a broad mandate that assures that the existing character of the community will be preserved and that future development is undertaken in a manner that is consistent with the Town's values and vision.

The Town has been divided into ten zoning districts; five residential districts, four non-residential districts and one mixed-use district:

Residential Districts:

CD Conservation Density District
R-4 Agricultural-Conservation Density District
R-3 Very Low Density District
R-2 Low Conservation Density District
R-1 Low Density Residential
VRD Variable Residential Density

Non-Residential Districts:

HA Hamlet
HB Highway Business
I Industry

Mixed-Use District:

PDD Planned Development District

These districts govern the use of land throughout all of the Town's 42.14 square miles.

Generally, the non-residential districts are located along the central spine of the Town, paralleling Route 22. Two exceptions to this pattern exist. The first is the Holmes Hamlet, located in the southwest portion of the Town which is zoned HA. The second is an Industrially zoned parcel of land located in the northwest corner of the community.

Over 98% of the Town is residentially zoned.

The vast majority of the Town (98%) is residentially zoned. The lowest residential densities are situated to the east of the central valley where the Conservation Density District's five acre minimum lot sizes covers roughly 1/3 of the Town. The zoning in the western side of the Town is dominated by the R-1, R-2, R-3 and R-4 districts.

All of the residential districts share the same permitted uses, which include one and two-family dwellings and agricultural type operations. Special uses include those that typically support residential areas, including religious institutions, clubs, educational institutions, hospitals, libraries, museums and nursing homes. Typical customary accessory uses are also permitted.

The Town's three non-residential districts provide for a balanced land use pattern that recognizes and supports the unique, predominantly residential character of the community, the reality of the Route 22 commercial corridor and the importance of Pawling Village's central business district.

The HA—hamlet District, which exists only in the Holmes Hamlet, allows for some limited commercial activity; including such uses as medical clinics, antique stores, art galleries, restaurants and convenience stores.

The HB—Highway Business District parallels Route 22 from the Town of Patterson municipal boundary north approximately 1 mile, and again from the northern boundary of the Village along Route 22 to the Town of Dover boundary. This district allows for a wide array of more intensive highway oriented commercial activities such as service stations, car washes, auto body shops, car dealerships; support uses such as lumberyards and warehouses; and large scale retail operations such as home furnishing and furniture stores. Permitted Special Uses include amusement and recreation facilities, freight terminals, fuel storage depots and shop-

ping centers. All of these uses require direct access to a major arterial roadway (Route 22) and would not be suitable within the Village's central business district.

The I—Industrial District allows for the most intensive uses to take place including industrial and manufacturing uses.

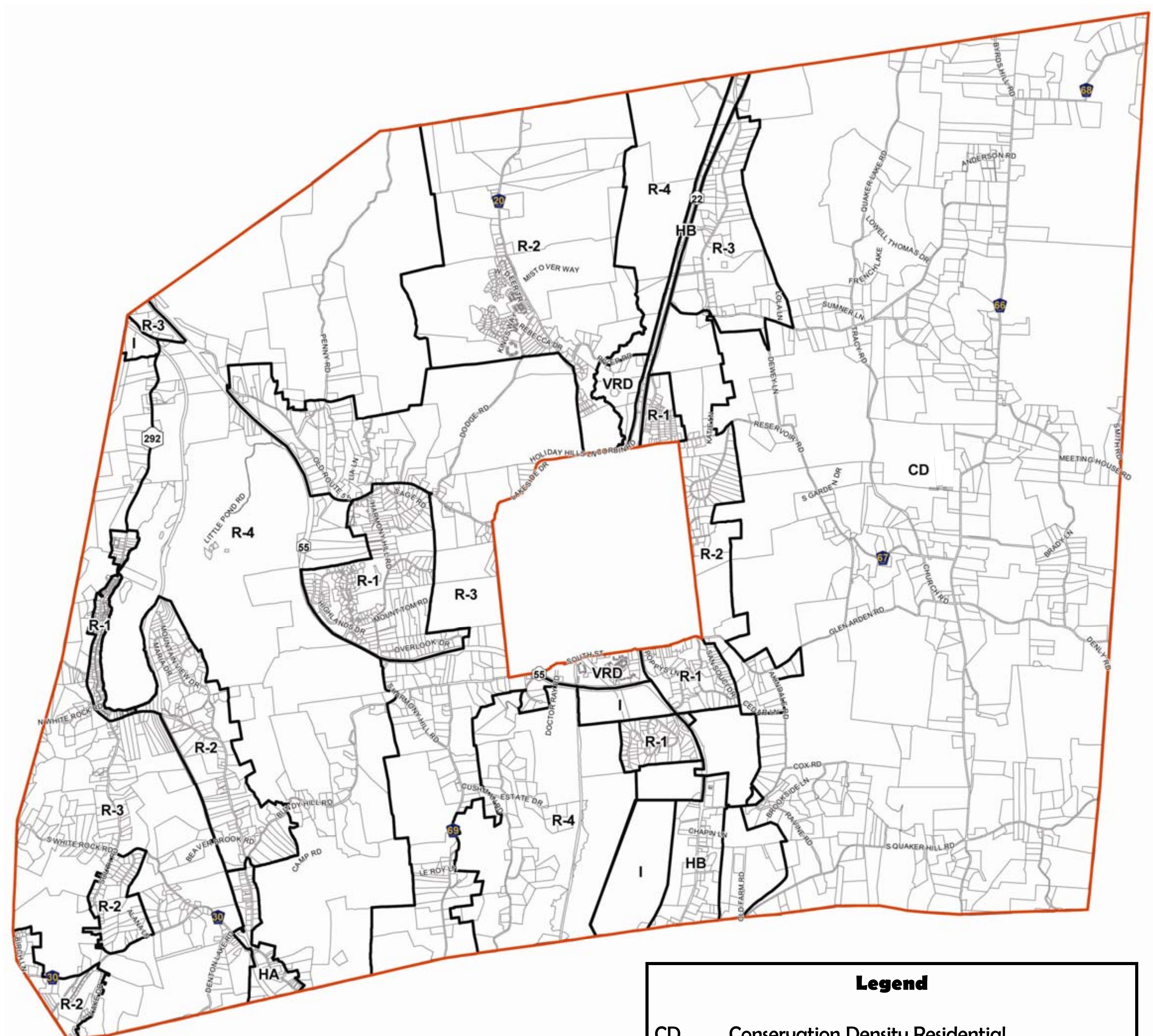
Figure 5-1 displays the existing zoning within the Town and Table 5-1 provides a summary of the bulk regulations which govern the various zoning districts.

Table 5-1
Existing Zoning Bulk Regulations

District	Area Acres	Frontage	Max. Bldg Coverage	Min. Area per DU	Max Height	Front Yard	Side Yard	Side Yard Both	Rear Yard
CD	5	350'	10%	900 sqft	35'	100'	40'	100'	100'
R-4	4	350'	10%	900 sqft	35'	100'	40'	100'	100'
R-3	3	275'	10%	900 sqft	35'	75'	30'	75'	75'
R-2	2	200'	10%	900 sqft	35'	60'	25'	60'	60'
R-1	1	125'	10%	900 sqft	35'	50'	20'	50'	50'
VRD	1	125'	10%	900 sqft	35'	50'	20'	50'	50'
HA	1/2	100'	20%	900 sqft	35'	30'	30'	60'	25'
HB	1	200'	35%	900 sqft	35'	100'	25'	50'	30'
I	1	200'	30%	—	35'	100'	50'	100'	100'

B. Zoning Vision Statement:

Provide a rationale and equitable series of regulatory controls to preserve and protect the character of Pawling, while simultaneously properly guiding future growth and development in a manner that protects the health, safety and welfare of the community.



Legend

CD	Conservation Density Residential
R-4	Agriculture-Conservation Density Residential
R-3	Very Low Density Residential
R-2	Low Conservation Density Residential
R-1	Low Density Residential
VRD	Variable Residential Density
HA	Hamlet
HB	Highway Business
I	Industry
PDD	Planned Development District

Base Mapping:
Dutchess County Department of Planning & Development

CLEARY CONSULTING

TOWN OF PAWLING 1788

Zoning

N W E S

0' 4,000'

Figure #

5-1

HOUSING

A. Existing Conditions:

The desirability of the Town of Pawling as a place to live year round—and increasingly seasonally - is evidenced by the growth in the Town's population. During the 1990's, the Town's population jumped by approximately 25% to 5,288. Since that time, the population has continued to grow. Table 6-1 presents the number of Building Permits issued in the Town between 2000 and 2007.

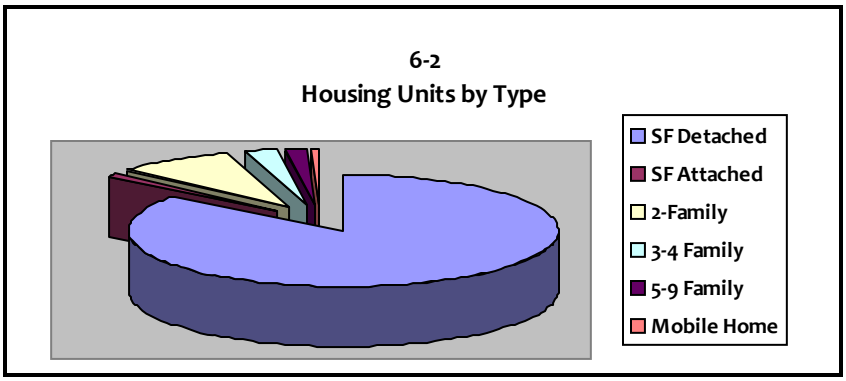
TABLE 6-1
BUILDING PERMITS ISSUED 2000—2007

Year	2000	2001	2002	2003	2004	2005	2006	2007
# Permits	82	88	52	51	23	24	10	12

86% of the Town's housing stock is composed of detached single family homes on large lots.

According to the Poughkeepsie-Dutchess County Transportation Council, it is projected that steady growth will continue through the first quarter of the century, resulting in an estimated population of 6,395 in Pawling by 2025. The increased demand for new housing opportunities represents a distinct challenge.

The U.S. Census Bureau provides the most detailed data concerning Pawling's housing stock. According to the 2000 decennial Census, the overwhelming majority of the Town's housing stock (86%) is composed of detached single family homes on large lots. Single family attached homes, and 2-9 family dwellings make up the remainder of the housing stock. No larger scale multi-family housing (10 units or more) exists in the Town.



The 2000 Census reported that the median home value in Pawling was $173,200, with homes ranging in value from less than $50,000 to as high as $999,999, with 71 homes in the $500,000—$999,999 range.

A survey of home sales by the Town of Pawling Affordable Housing Commission revealed that from January 1, 2005 to May 31, 2007, 263 home sales were recorded with a median sales price of $369,000, an appreciable increase from the 2000 Census figure. Table 6-3 provides the sales price distribution.

Table 6-3
Recorded Home Sales
January 1, 2005—May 31, 2007

Sales Price	# of Sales
Under $200,000	13
$200,000—$250,000	13
$250,000—$300,000	28
$300,000—$400,000	98
$400,000—$500,000	54
$500,000—$1,000,000	49
Over $1,000,000	8

The 2000 Census revealed that 23.1% of rental households spent more than 30% of their gross income on housing.

The U.S. Department of Housing and Urban Development has established a definition of housing affordability as a household's ability to pay no more than 30% of its annual income on housing. Families who pay more than 30% are considered cost burdened, which results in financial difficulties affecting other necessities such as food, clothing, transportation and medical care.

In 2000, rents for the 181 renter occupied units in Town ranged from less than $300 to over $1,500 per month. The median monthly rent was $713. As indicated on Table 6-4, 23.1% of rental households are paying more than 30% of their gross income on housing costs, and are therefore cost burdened. This represents a relatively low percentage.

Table 6-4 Monthly Rent as a Percentage of Household Income		
Monthly Percentage	Number	Percent
Less than 15%	74	40.8
15% - 19%	38	20.9
20% - 24%	16	8.8
25% - 29%	11	6.1
30% - 34%	8	4.4
More than 35%	34	18.7

Similarly, using selected monthly owner costs as a percentage of household income, a higher percentage (30%) of owner occupied housing units are cost burdened as depicted on Table 6-5.

Table 6-5 Monthly Mortgage Costs as a Percentage of Household Income		
Monthly Percentage	Number	Percent
Less than 15%	371	26.0
15% - 19%	194	13.6
20% - 24%	239	16.8
25% - 29%	191	13.4
30% - 34%	77	5.4
More than 35%	350	24.6

The Town's existing housing stock of predominantly single family detached homes on large lots is not conducive to providing a variety of housing types and cost options to meet the needs of all of it's residents

The Town's existing housing stock of predominantly single family detached homes on large lots is not conducive to providing a variety of housing types and cost options to meet the needs of all of its residents; including single parent households, the elderly, young people just entering the workforce, empty nesters and families with fixed or limited incomes.

The provision of a range of housing opportunities and costs is critically important to sustaining the local economy and fostering economic growth. This variety of housing choices is necessary for

families and individuals with different needs and income levels, from the very affluent to young professionals, teachers, health care workers, volunteer firemen, municipal workers and minimum wage earners. It is important to recognize that market forces alone will not necessarily create housing diversity. The Town must address this challenge proactively.

In 2007, the Town Board authorized a survey to determine the impact of housing costs and availability on the community. This survey, which was conducted by the Town of Pawling Affordable Housing Commission, questioned Fire Department personnel, the Chamber of Commerce and 1,161 employees of Pawling's largest employers.

75% of all employees found that the lack of moderate priced housing in Pawling is a problem for hiring or retaining employees.

Several of the most significant findings include:

- Volunteer Fire Department personnel are struggling with the increased cost of living and tax demands, and as a result members are moving out of Pawling to more affordable areas, choose not to move into Pawling when relocating to the area, or resign from the Fire Department in order to spend more time on their jobs. The Department is facing increasing challenges to recruit and retain members.

- Of the Town's largest businesses:
  - 75% of all employees found that the lack of moderate priced housing in Pawling is a problem for hiring or retaining employees.

  - 74% of all employees believed that a Town sponsored moderate priced housing program would help to attract and retain employees.

  - 74% of all employees found that the cost of commuting is a defining problem.

- The Chamber of Commerce believed that the lack of affordable housing is a problem and a Town sponsored moderate priced housing program would be beneficial, but also indicated that they do not have problems hiring workers.

A number of housing assistance programs are available to serve residents of the Town. The Dutchess County Department of Planning, Housing and Community Development, Social Services and

Department of Aging can provide housing assistance from the following programs:

- **Section 8 Housing**—Several forms of subsidized housing offered from the County, for income eligible individuals and families.

- **Senior Citizen Owner-Occupied Property Rehabilitation Program** - Provides for renovations to owner-occupied housing by providing assistance to low and moderate income senior citizen households to complete renovations for code violations.

- **HOME Investment Partnership Program**—Provides assistance to private and non-profit developers of affordable housing.

- **Adult Title XX Services**—Department of Social Services locates housing for individuals who are temporarily living in motels or shelters, or to individuals facing eviction.

- **Community Development Block Grant (CDBG) Program**—Provides funding to municipalities to assist with housing, infrastructure, public facilities, accessibility and economic development.

- **First Time Homebuyer Program**—Helps income eligible residents purchase a home by providing assistance with down payments and closing costs.

- **Home Energy Assistance Program**—Provides assistance to low income households in meeting their energy expenses.

- **Reverse Mortgage Program**—for individuals at least 62 years old who own a home outright, or have a very small mortgage.

B. Housing Vision Statement

The Town has developed as a predominantly residential community in part due to the area's rural charm and distinct and beautiful landscape. Preserving these residential areas and the surrounding landscape is key to maintaining the quality of life of the community. However, diversifying the housing stock is also necessary to maintain the vibrancy of the community. New housing development should only be permitted if it is done responsibly and sustainably without damaging the Town's vital natural resources, viewsheds and ground water quality, and is supported by adequate services.

Chapter 7

Natural Resources

NATURAL RESOURCES

A. Existing Conditions:

Pawling's natural resources are integral to the character and long term sustainability of the community. Diverse and regionally important, these resources define not only the character of Pawling, but the threats and challenges facing the Town in the years ahead. Understanding these resources, the nature of the threats they face, and the jurisdictional complexities of their use and protection, is vital to the prudent and responsible long term stewardship of these features.

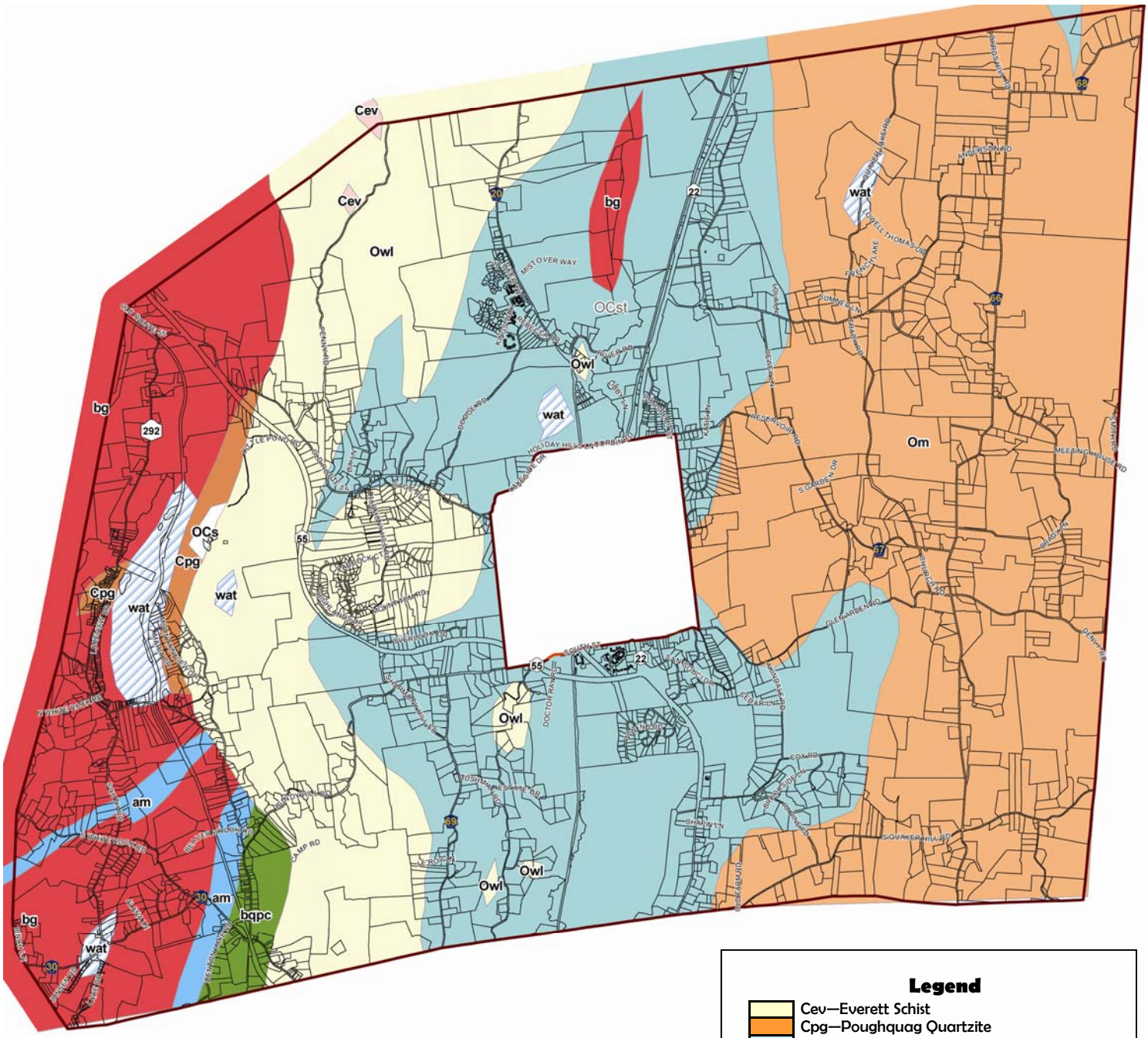
The Town of Pawling lies within the geologic formation known as the "Hudson Highlands"

1. Geology:

Pawling lies within the Hudson Highlands, an area defined by the Appalachian Mountains and the Piedmont covering some 2 million acres from northwestern Connecticut, across the lower Hudson Valley, northern New Jersey and on into eastern Pennsylvania. High ridges and deep, narrow valleys distinguish the Highlands.

Figure 7-1
Hudson Highland Region

The Town's characteristic uplands and central valley are defined by three distinctive underlying bedrock formations. Unconsolidated material ("overburden") overlies all of the Town's bedrock formations. Figures 7-2—Bedrock Geology and 7-3—



Base Mapping:
Dutchess County Department of Planning & Development

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Bedrock Geology

N W E S

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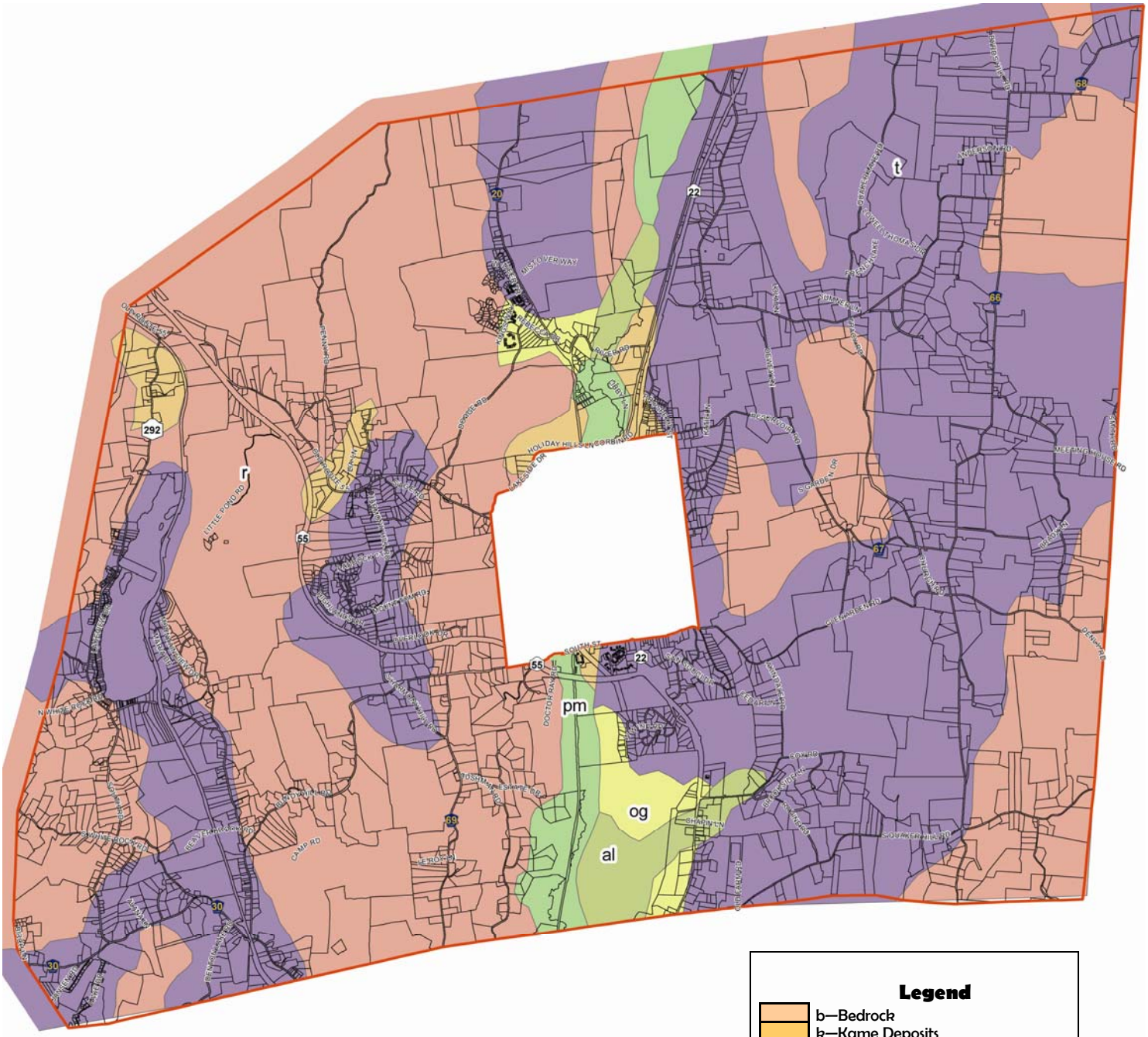
Figure #

7-2



Base Mapping:
Dutchess County Department of Planning & Development

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Surficial Geology

N W E S

0′ 4,000′

Figure #

7-3

Surficial Geology, illustrate these geologic conditions. This material was deposited primarily during the Wisconsin Glaciation, which ended approximately 15,000 years ago. This material consists mostly of glacial till, and is, in some instances, intermixed with sandy gravel or silty clay, which has been found to be up to 80' deep near Hurds Corner. The depth of the overburden varies greatly across the Town, and is in some areas nearly non-existent, such as where bedrock is exposed at the surface.

Carbonate bedrock formations (members of the geologic Stockbridge Group) underlie the Town's centrally located valley bottom area. Topographic elevations in this area are between 450' to 700' above sea level (asl). The Village of Pawling lies entirely within this formation. Surrounding the carbonite bedrock of the Stockbridge Group are the non-calcareous metasedimentary slates and schist of the Manhattan and Austin Glen Formations. These formations are resistant to erosion and support the steep valley walls that adjoin the central valley area. These formations can be plainly observed on ridges and in road cuts. The Austin Glen Formation rises up on the west side of the central valley over 1,100 feet asl. The Manhattan Formation rises on the east side of the central valley in the Quaker Hill area, over 1,300 feet asl. The schist of Quaker Hill includes a variety of garnet, hornblende and mica. These rocks erode to form a light and highly eroadable soil known as Charlton Loam.

The Town's central valley is underlain by carbonite bedrock formations. The western highlands sit upon the Austin Glen Formation, while the eastern highlands sit atop the Manhattan Formation. These geologic features create the characteristic ridge & valley nature of the area.

The area along the Town's border with Beekman and East Fishkill exhibits distinctly different geology. This region includes granitic and undifferentiated gneiss with some areas of quartzite. Surface areas erode rapidly to reveal an irregular surface, dotted with many small, poorly drained depressions. An associated quartzite formation is found near Whaley Lake. Quartzite is composed primarily of cemented quartz grains, which make it highly resistant to erosion. A major fault line runs through this area toward the Putnam County Line.

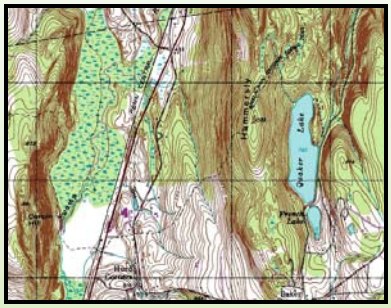
Glacial melt-off deposited extensive sediment loads in the central valley area. In areas where water velocity was rapid, only heavier sands and gravel sediment were deposited. These heavy deposits are found today by the former ice margins (known as kame deposits) near Woodinville, near the Village, along Brady Brook and south of Corbin Hill. In areas where glacial melt water slowed, lighter silt and clay were deposited. Extensive portions

of the central valley bottom, particularly The Great Swamp, are covered by these fine grain sediments.

From the white metamorphized gneiss in Holmes, to the blocky limestone in Whaley Lake, to ancient Precambrian gneiss in Hurds Corner, to the crystalline rocks of Quaker Hill, the diversity of the Town's geology is remarkable.

2. Topography

Topography describes the shape and relief of the land. Pawling is distinctly defined by the ridge/valley land form of the Harlem Valley Corridor. The central valley, which is dominated by the low lying lands of The Great Swamp, lies at an elevation of approximately 450'. To the west, the central valley is bounded by a ridge which rises up several hundred feet in elevation to an intermediate plateau, before climbing back up to an elevation of approximately 1,100'. Mt. Tom, West Mountain and Pawling Mountain distinguish the crest of this ridge. Behind the ridge further to the west, the topography drops off to elevations around 800' near the hamlet of Holmes, around Denton Lake and Lake Dutchess in the south , around Whaley Lake and Little Whaley Lake in the west central portion of the Town, to Nuclear Lake in the north.



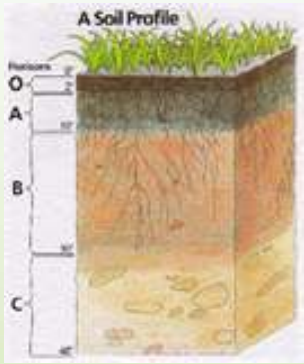
Observatory Hill is the highest point in Town at elevation 1,332'.

On the east side of the central valley, the ridge climbs up over features such as Purgatory Hill, Quaker Hill and Seeley Hill to a high point of 1,332' at Observatory Hill. Beyond the crest of the ridge, the topography drops away toward the east. The prospect from the eastern ridge provides dramatic vistas and unparalleled views to the west toward the Hudson River, as well as back to

the east and into Connecticut. Figure 7-4 displays the Town's topography. Figure 7-5 depicts areas of steep slopes.

3. Soils

Understanding the Town's soil characteristics is essential to the successful long range comprehensive planning of the community. Soil characteristics affect how land is ultimately used. Some soils are seasonally wet or subject to periodic flooding, others are shallow to bedrock. Some soils are too unstable to be used as a foundation for buildings or roads, while clayey soils are poorly suited for septic systems. A higher water table makes soils unsuitable to support basements or underground facilities.



Pawling's soils can generally be divided into two broad categories. The eastern and western uplands are dominated by the Charlton-Chatfield-Hollis and Stockbridge-Georgia-Massena soil map units. These soils are characteristically composed of silty loam and are deep to very deep and well drained. They are formed in loamy glacial till deposits.

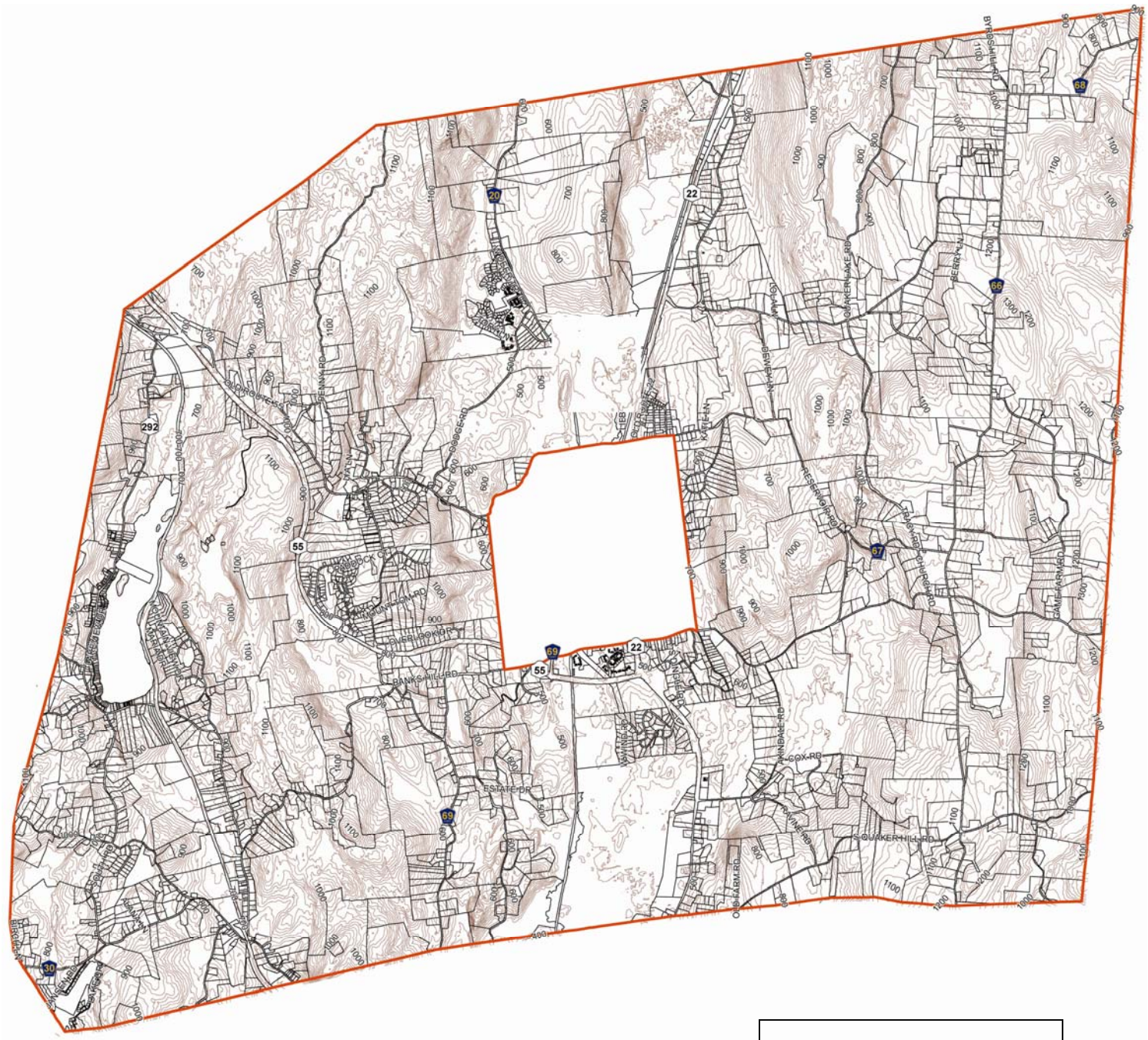
The second category includes the central valley. This area includes large areas of Palms Muck and Carlisle Muck soils, which are very deep and very poorly drained, found in the swampy areas of the Great Swamp and other similar areas. These soils are formed in highly decomposed organic material. Figure 7-6 displays the soil mapping units as distributed throughout the four primary watersheds.

4. Surface Water

The Town of Pawling lies within four separate watersheds (Figure 7-7). Drainage from the Swamp River and the northern portions of the Town flow towards the Ten Mile River watershed. The East of Hudson Branch of the Croton River drains the southern portion of the Town into the Croton River watershed which provides water to New York City. Approximately 5 square miles in the western portion of the Town drain westward into the Fishkill Creek watershed. Approximately 4 square miles along the Town's eastern border drains into the Housatonic River watershed.

Approximately 166 miles of brooks, streams and rivers flow through Pawling.

As depicted in Figure 7.8, approximately 166 miles of brooks, streams and rivers run throughout Pawling. The largest of these is the Swamp River which flows through the central valley to the north, and the East of Hudson Branch of the Croton River which



Legend

20' Contours

Base Mapping:
Dutchess County Department of Planning & Development

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TOWN OF PAWLING 1788

Topography

N W E S

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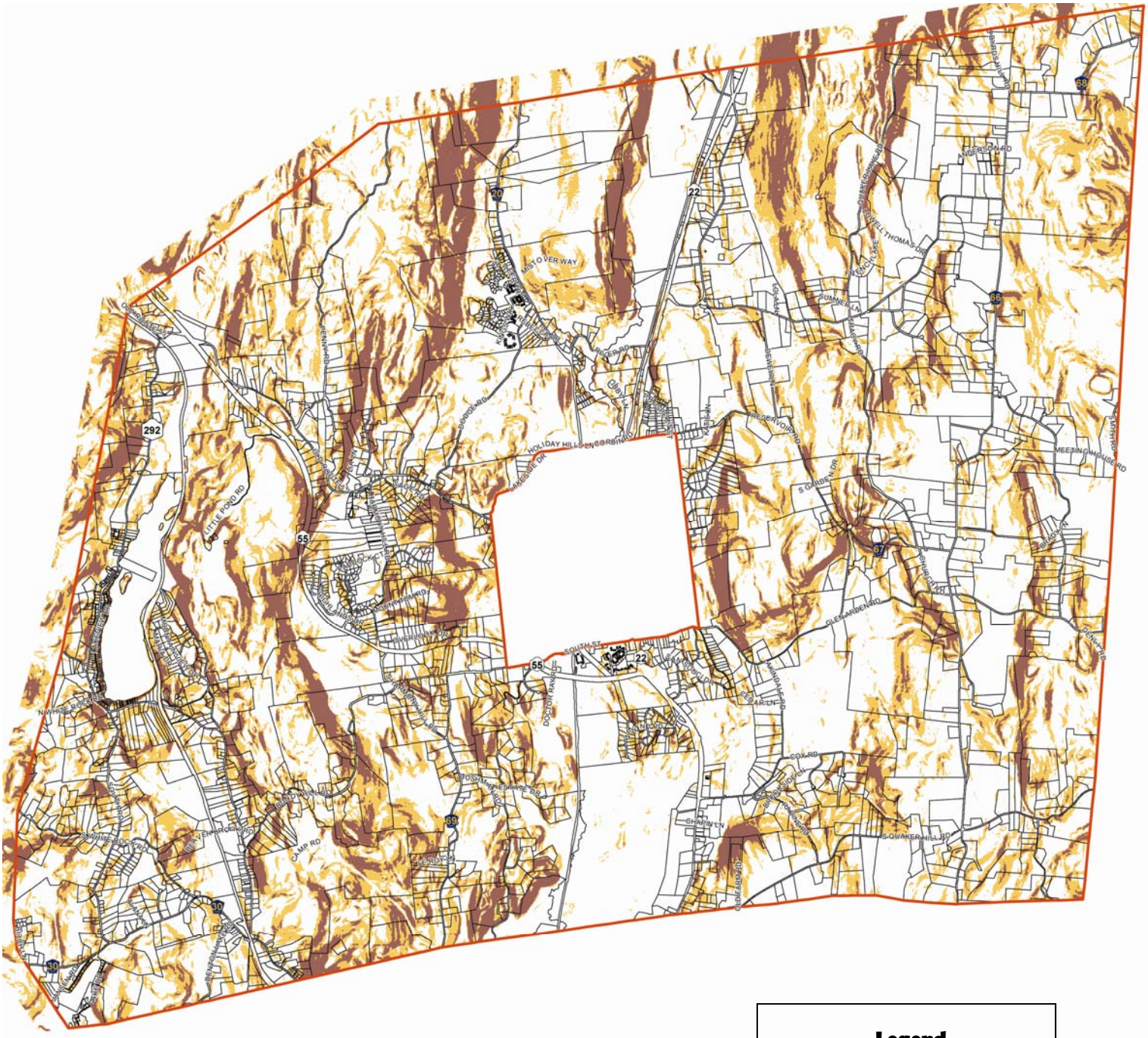
Figure #

7-4



Legend

15% 25% Slopes

>25% Slopes

Base Mapping:
Dutchess County Department of Planning & Development

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TOWN OF PAWLING 1788

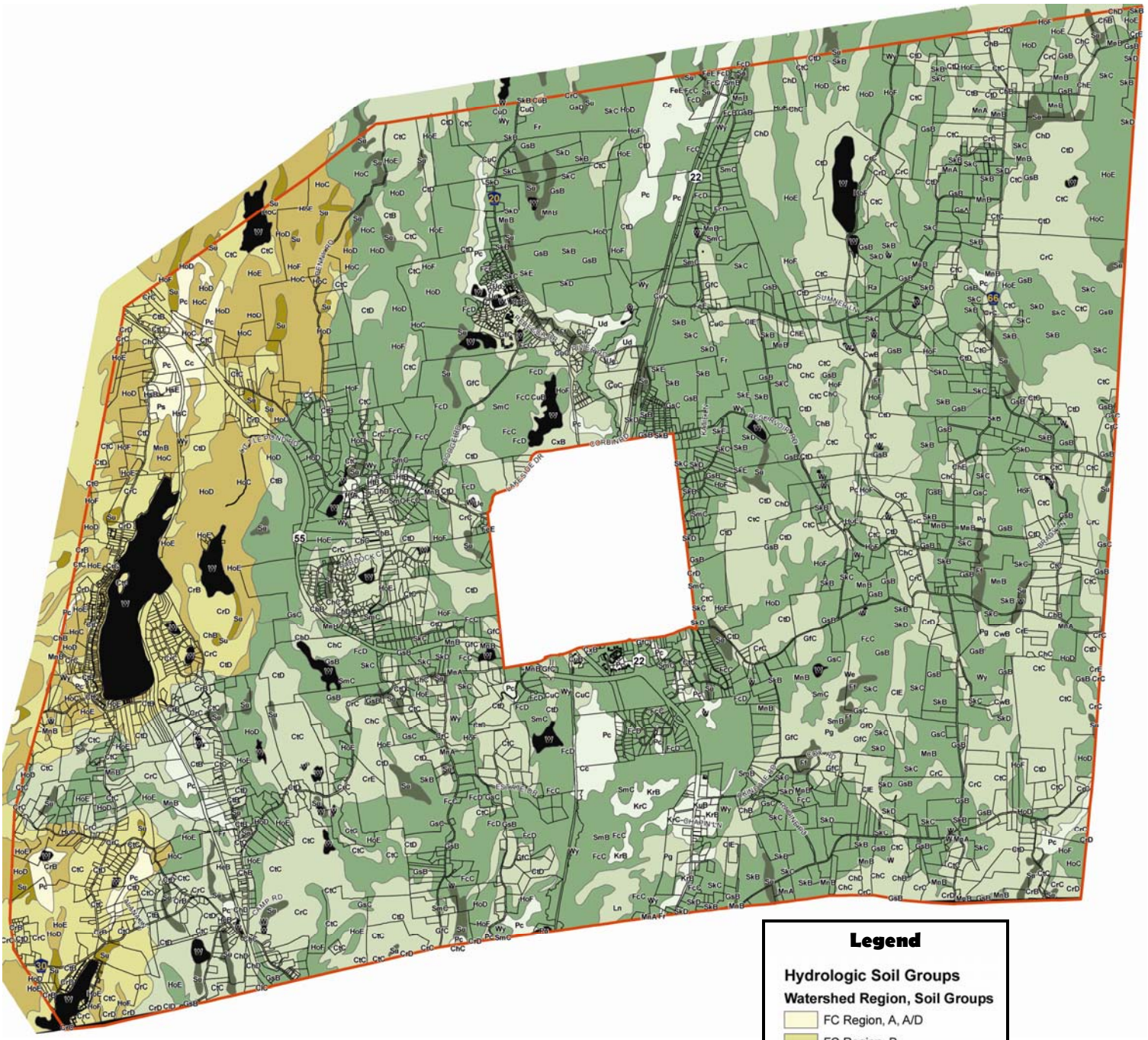
Steep Slopes

N W E S

0′ 4,000′

Figure #

7-5



Legend

Hydrologic Soil Groups

Watershed Region, Soil Groups

- FC Region, A, A/D
- FC Region, B
- FC Region, C, C/D
- FC Region, D
- FC Region, Waterbodies
- TR Region, A, A/D
- TR Region, B
- TR Region, C, C/D
- TR Region, D
- TR Region,Waterbodies
- Parcel Boundaries

Base Mapping:
Dutchess County Department of Planning & Development

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TOWN OF PAWLING 1788

Soils

N W E S

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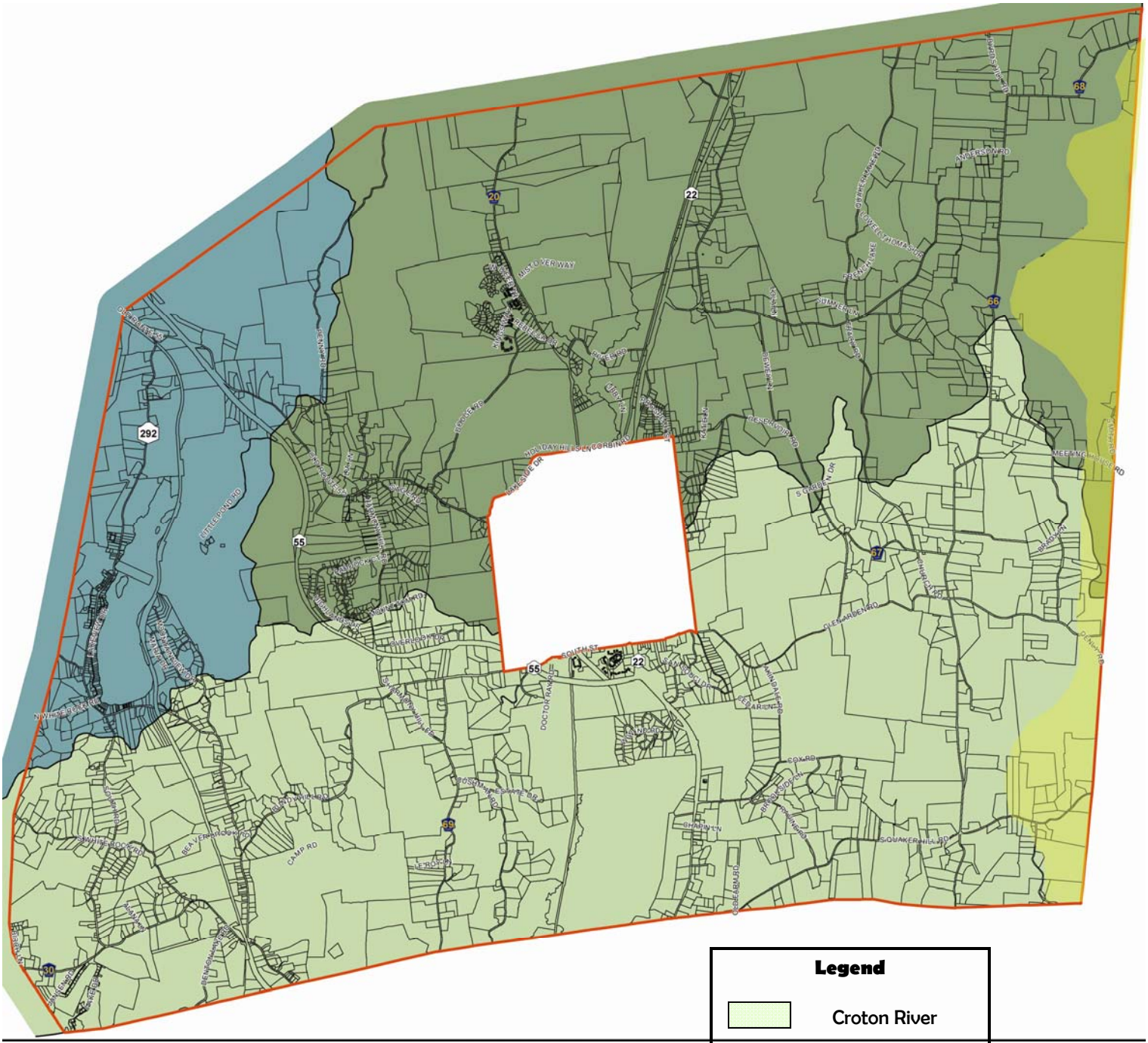
Figure #

7-6



Base Mapping:
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TOWN OF PAWLING 1788

Watersheds

N
W E
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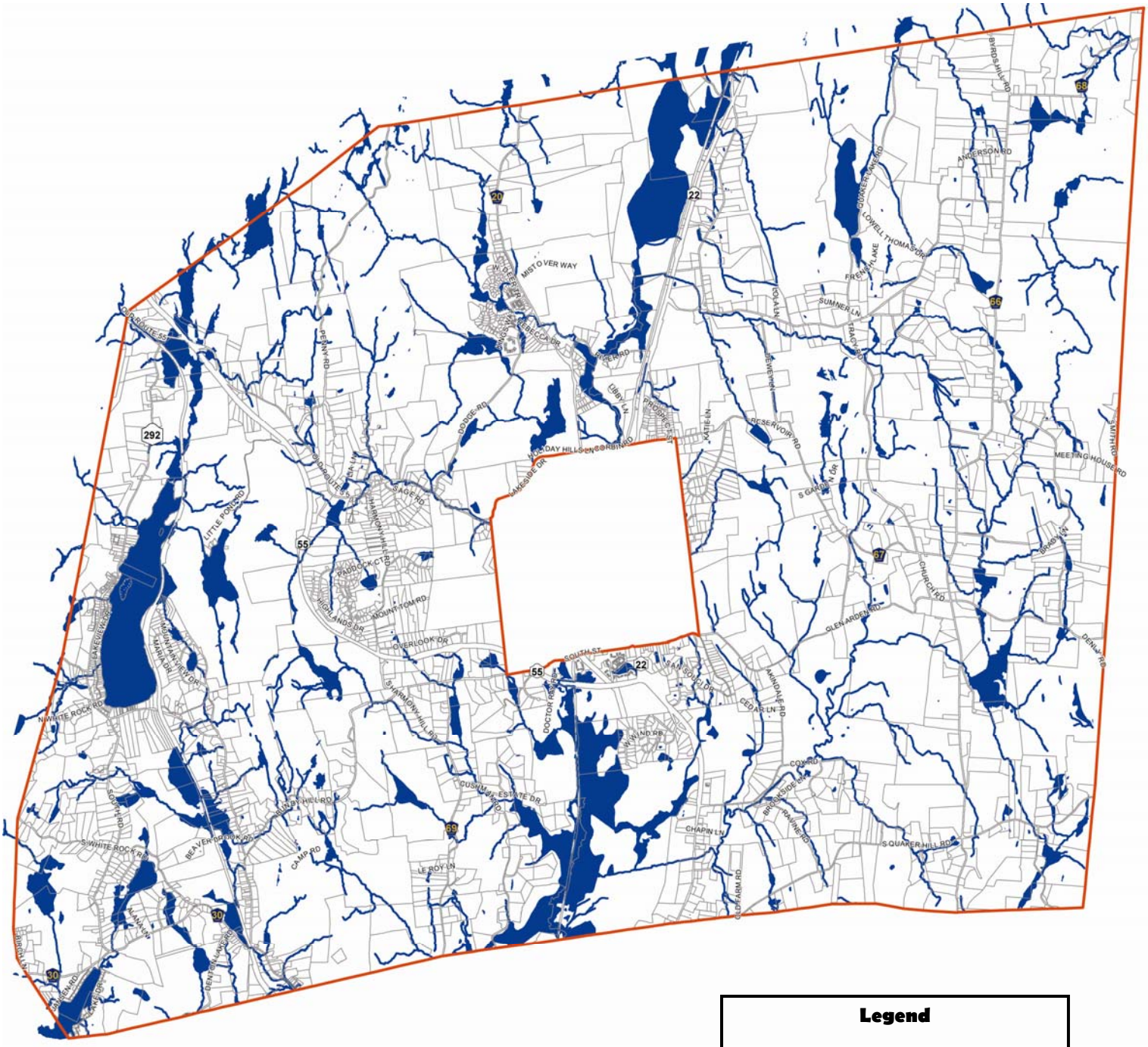
Figure #

7-7



Legend

Lakes & Ponds

Rivers, Streams & Brooks

Base Mapping:
Dutchess County Department of Planning & Development

CLEARY CONSULTING

TOWN OF PAWLING 1788

Surface Water Features

N W E S

0′ 4,000′

Figure #

7-8

flows through the southern portion of the central valley, toward Putnam County.

Within New York State, all fresh waters are classified by the New York State Department of Environmental Conservation as either "AA", "A", "B", "C" or "D". Classes AA through B are regulated by the NYSDEC. The highest classifications are assigned to AA and A are assigned to protect waters used for drinking and cooking. Class B waters are protected for uses that include swimming and other recreational uses. Class C and D waters are not regulated and include uses such as fishing. Waters classified as A, B or C can also have an added standard of (T) or (TS). (T) indicates that the waters have the potential to support trout populations, and (TS) indicates trout spawning.

With a surface area of over 278 acres, Whaley Lake is the largest lake in Pawling.

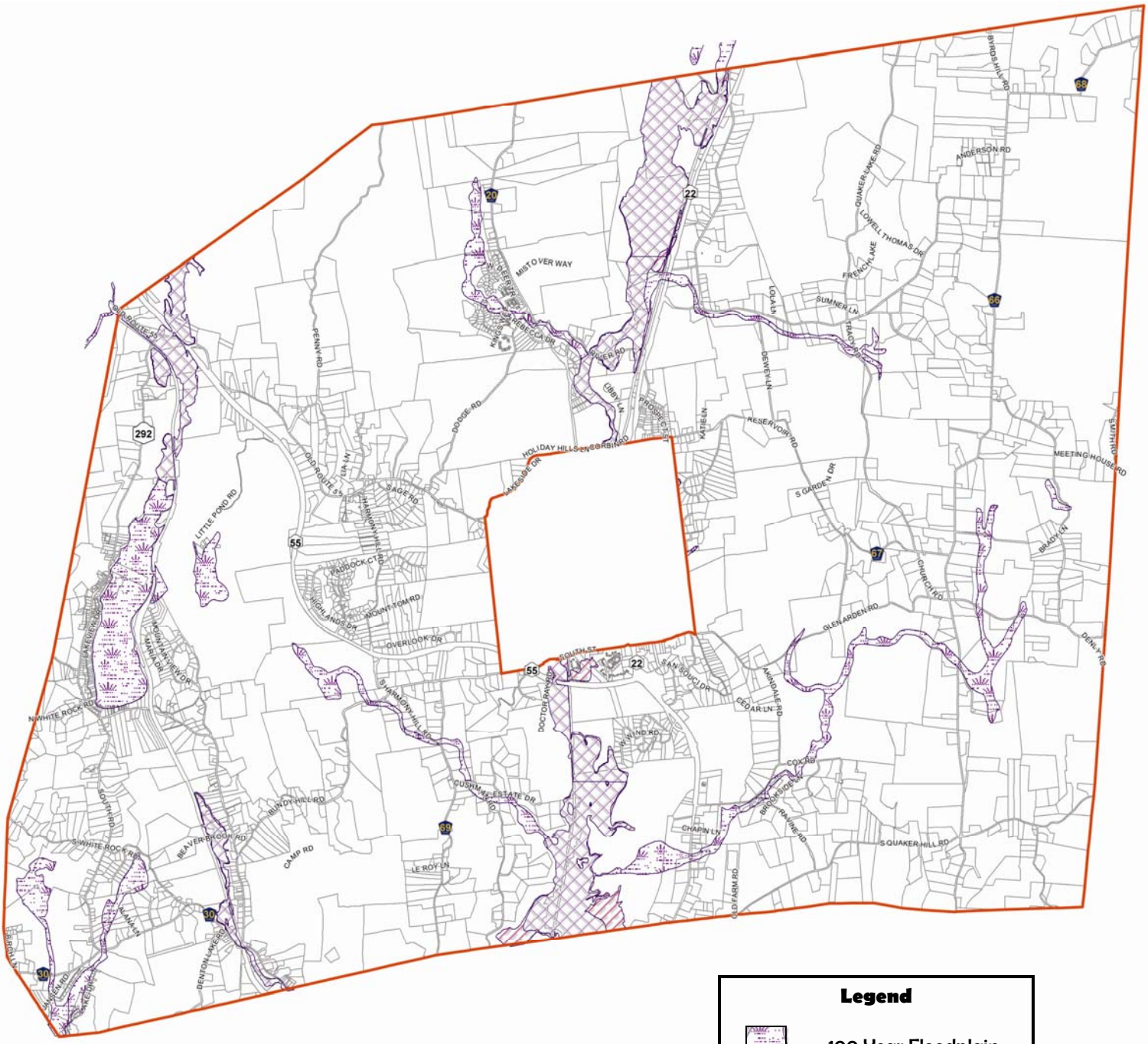
The major surface watercourses in Pawling are:

- Swamp River—C(T)
- East of Hudson Branch Croton River—C(T)
- Brady Brook—C(T)
- Quaker Brook—C(TS)
- Hiller Brook—A
- Whaley Lake Stream—C

The Swamp River is stocked annually with over 500 Brown Trout to augment a modest wild Brown Trout population. In addition there are also small numbers of wild Brook Trout Present

These watercourses feed numerous ponds and lakes that are found throughout the Town. At approximately 278 acres in surface area, Whaley Lake is the largest, followed by Quaker Lake at approximately 60 acres in size and Little Whaley Lake at 45 acres in size. The largest ponds and lakes in Town are:

- Whaley Lake
- Quaker Lake
- Little Whaley Lake
- Ray Lake
- Tracy Pond
- Green Mountain Lake
- Ballard Pond
- Harmony Lake
- Parce Pond
- Pawling Reservoir
- Brady Pond
- French Lake
- Denton Lake
- Lake Dutchess
- Sunset Lake
- Willow Lake
- Nuclear Lake



Legend

- 100 Year Floodplain
- 100 Year Floodplain/ Flood Hazard Area
- 500 Year Floodplain

Base Mapping:
Dutchess County Department of Planning & Development

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Floodplains

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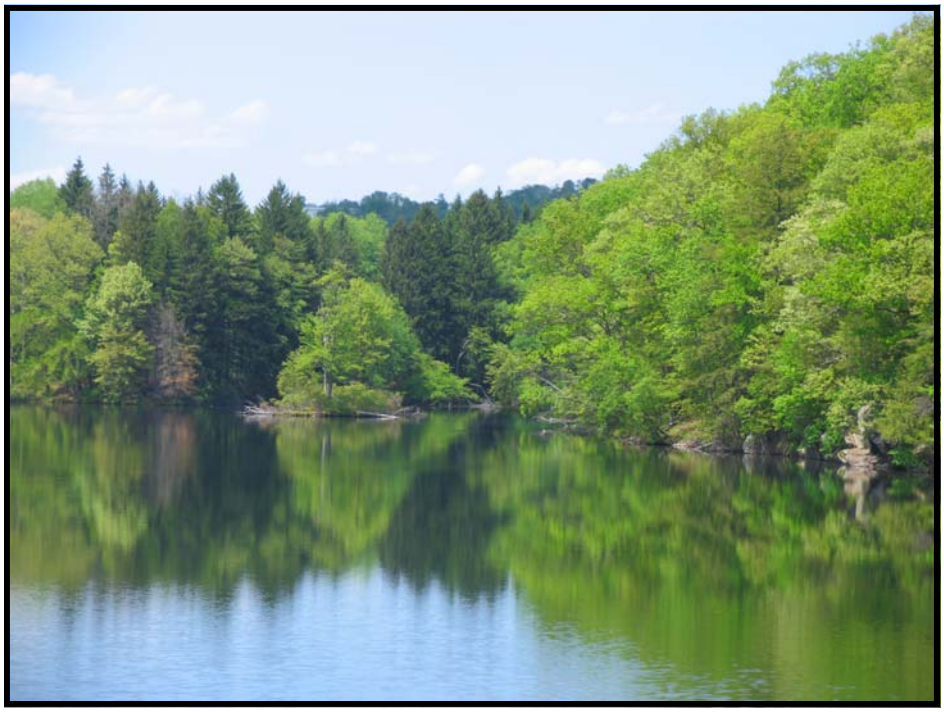
Figure #

7-9

Figure 7-9 displays the designated floodplains as defined by the Federal Emergency Management Agency (FEMA). These areas

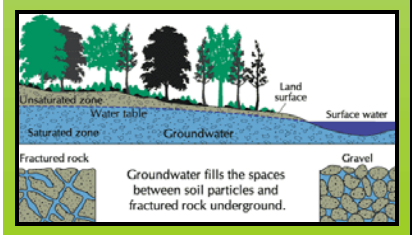


are prone to periodic flooding, and development within these areas must comply with the provisions of the Towns Flood Damage Protection Law (§107) and the requirements of the FEMA Flood Insurance Program.

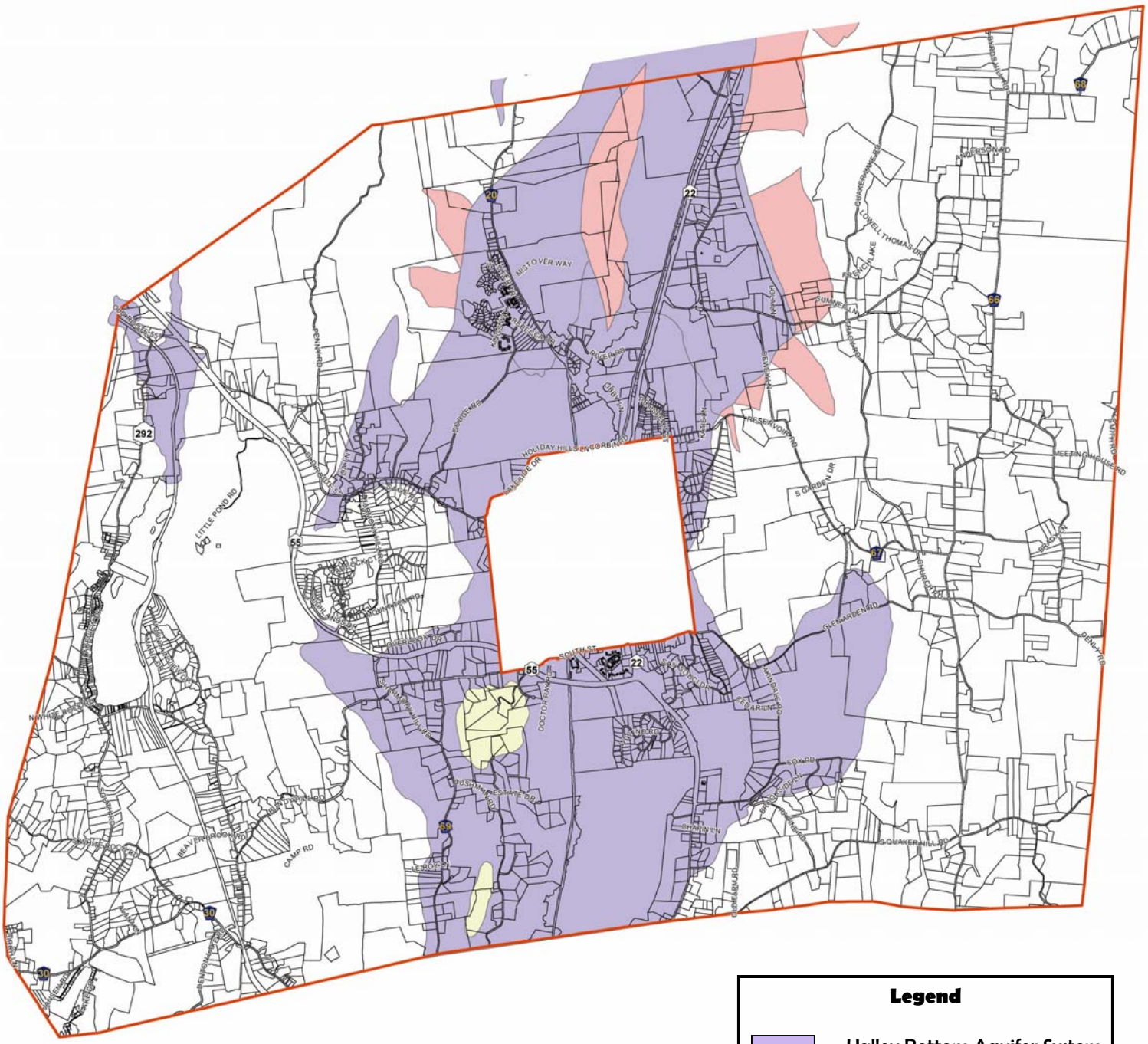
Groundwater resources are one of the most important and threatened natural resources in Town. The water supply for virtually all residents and business is derived from groundwater.

5. Ground Water

The water supply for virtually all of the residents and business in the Town of Pawling is derived almost exclusively from groundwater resources. Water is withdrawn from individual private wells throughout most of the Town, and from centralized community water system wells in several developed areas including The Highlands, Cedar Valley, Squire Green, Deerfield Ponds, the Willow Lake community and the Whaley Lake community, which has recently been turned over to Dutchess County Water & Wastewater Authority.



Two general aquifers are found beneath the Town. The first is located beneath the central valley lowland. This aquifer, known as the Valley Bottom Aquifer System (VBAS) contains discontinuous sand and gravel deposits overlying a carbonate bedrock aquifer formation. Groundwater moves readily through both the



Legend

Valley Bottom Aquifer System

Upland Aquifer Area

Base Mapping:
Dutchess County Department of Planning & Development

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Aquifers

N W E S

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Figure #

7-10

sediment and bedrock formations in this area. A majority of the Town and all of the Village lies within the VBAS.

The upland areas of the Town, which parallel the valley bottom area, are composed of more massive rock formations that store and transmit less groundwater than does the VBAS. These areas are referred to as the Upland Aquifer area. Soils in this area are typically thin and underlain by sleety metamorphic rock, quartzite or gneiss. This upland aquifer includes the steep hillsides that descend toward the relatively level central valley bottom. Even though it provides less groundwater than the VBAS, the Upland Aquifer is important because groundwater migrating from this area to the lower elevations of the VBAS supplements seasonal deficiencies in the VBAS, particularly during the late summer months.

Groundwater in both the VBAS and the Upland Aquifer is recharged by precipitation. The valley bottom area supports substantial storage volumes, while less storage is available in the upland areas. During seasonally dry periods when rainfall rates are low, aquifer reserves diminish as wells are drawn-down and natural drainage conditions draws groundwater toward streams. Reduced base flow in the valley bottom's lowest elevations, where the Swamp River and East Branch River are located, results in seasonally dry rivers and tributaries and associated impacts on the wetlands of the Great Swamp.

Over half of the New York State's wetlands have been lost since the colonial period.

6. Wetlands

According to estimates developed by the US Fish & Wildlife Service, at the time of the first European settlement of America in the 1600's, approximately 221 million acres of wetlands were present in the lower 48 states. Since that time, wetlands were drained and filled in at alarming rates to accommodate modern land use patterns and practices, leaving approximately 103 million acres today. Some 60,000 acres of wetlands continue to be lost each year. Over half of New York States wetlands have been lost.

There are 516 separate wetlands in Pawling, covering approximately 3,559.8 acres.

Wetlands are a crucial part of Pawling's natural environment. Wetlands protect surface and groundwater and naturally filter drinking water, provide flood and stormwater control, provide pollution treatment and nutrient cycling, control erosion and provide fish and wildlife habitat.

516 separate wetlands are located in Pawling covering approximately 3,559.8 acres, including roughly one-third of The Great Swamp, which is one of the largest wetlands in New York. While recognized as vitally important to the ecological well being of the Town, wetlands remain threatened.

Pawling's wetlands are regulated at the local, state and federal levels. Chapter 111 of the Town Code regulates Freshwater Wet-

lands and Watercourses. The New York State Freshwater Wetland Act of 1975, which is administered by the New York State Department of Environmental Conservation, regulates wetlands in excess of 12.4 acres (5 hectares) in area. There are 29 of these NYSDEC wetlands in Town covering 2,767 acres. The US Army Corps of Engineers regulates wetlands at the federal level, regardless of size, pursuant to Section 404 of the Clean Water Act. As depicted on Figure 7-11, many of the Town's wetlands, not otherwise mapped by the NYSDEC, have been identified by the US Fish & Wildlife Service's National Wetland Inventory (NWI). 487 wetlands have been identified in Pawling by the NWI, covering 792.5 acres. The NWI's mapping was compiled from aerial photography, and does not necessarily indicate the exact boundary or the location of all wetlands in Town. Therefore, all actions in Pawling that may impact suspected wetlands areas must formally delineate and map the exact wetland boundary.

7. Vegetation & Wildlife

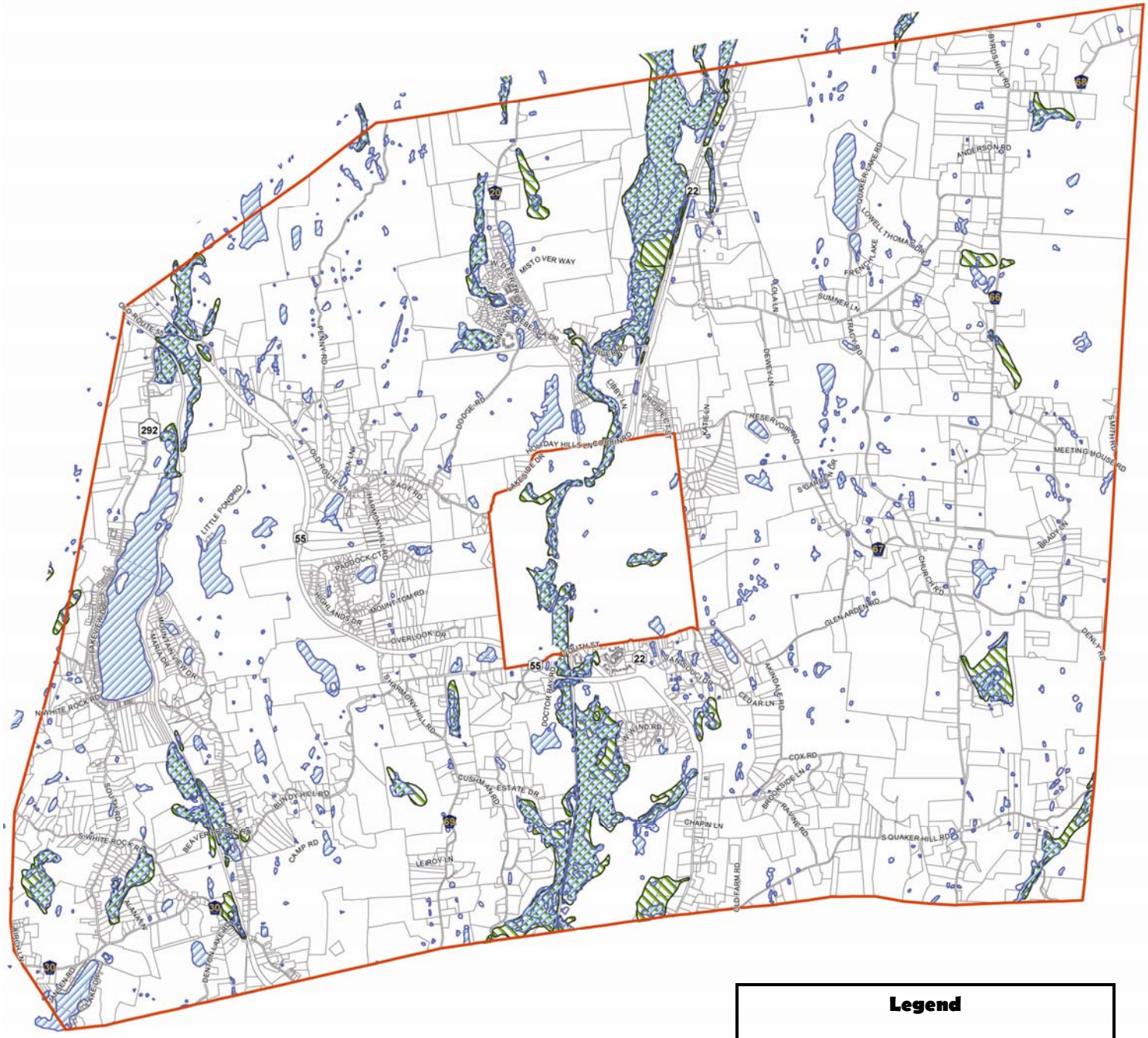
The diversity of the habitat types found within the Harlem Valley is remarkable. From the Great Swamp to the summit of Pawling Mountain, Pawling hosts species as diverse as the falcate orange-tipped butterfly to the black bear, and the shrubby cinquefoil to the American chestnut.

The major habitats found in the Town include:

- ***Fens:***
  Shallow wetlands, not heavily wooded, usually alkaline in nature. A continuous flow of constant temperature groundwater from springs or seeps irrigates the area, forming spongy mats with tussocky vegetation. Sedges are the dominant vegetation.

- ***Cattail Marsh:***
  Large wetland areas, dominated by cattails. Water is generally deeper. These areas tend to support excellent muskrat habitat. Cattail marshes are found in the Great Swamp.

- ***Blanding's Turtle Wetlands:***
  Blanding's Turtles are identified as *threatened* in NYS. These wetlands are deep, outwash bordered, open shrub-herb wetlands, with a minimum size of one-quarter to one-half acre.



Legend

NYSDEC Wetlands

NWI Wetlands

Base Mapping:
Dutchess County Department of Planning & Development

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TOWN OF PAWLING 1788

Wetlands

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Figure #

7-11

- ***Acidic Bogs & Swamps:***
  Somewhat like vernal pools, but with abundant bog moss and acidic tolerant vegetation (highbush blueberry, bog-rosemary, red maple, hemlock), these wetlands usually have cold standing water with little through-flow and are likely to be in a shielded hollow, where cool air accumulates. The surrounding area is generally wooded.

- ***Calcareous Swamp:***
  A predominantly deciduous swamp on calcium rich soils or rock substrates, often containing shrubs and herbaceous species. They are similar to fens, but include species such as red maple. The Great Swamp is an example of a Calcareous Swamp.

- ***Vernal Pools:***
  Small "ephemeral" pools located at the edge of forests. A thick layer of leafpack is present on the bottom, and it supports shallow water from late fall to mid-summer. Vernal pools provide important amphibian breeding habitat.

- ***Ponds & Lakes:***
  Many of Pawling's ponds and lakes have been modified from natural ponds or wetlands. Some are entirely artificial; others are natural lakes (Quaker Lake).

- ***Low Gradient Streams with Extensive Floodplains:***
  These are meandering streams with well defined floodplains located in the central valley floor, often bordered by wetland vegetation. The Swamp River and lower Brady Brook are examples of low gradient streams.

- ***High Gradient Streams & Ravines:***
  Along the escarpment of Quaker Hill, fast moving streams cut deep ravines, such as the Brady Brook and Hiller Brook tributaries. The cool, shaded, wet walls and crevices of these ravines attract species common in more northern climates, such as hemlock.

- ***Sand (Gravel) Plains:***
  Sand plains are well drained and droughty with acidic soils, present generally in harsh ecological conditions. Found in the Dover soil type, primarily in the central valley, but also may be present in areas of Quaker Hill and Pawling Mountain.

- ***Old Growth Forests:***
  Most stands of old growth forest in Dutchess County were harvested many years ago. However, in rocky, rugged areas, in ravines, steep slopes and other remote areas where timber harvesting was difficult, older trees may be present. Many rare plant and animal species may be found in these areas.

- ***Coniferous Forest:***
  These forests include natural stands of red cedar, white cedar and hemlock as well as introduced species such as pines and spruces. These areas provide valuable shelter for nesting and winter roosting of various birds.

- ***Upland Deciduous Forest:***
  Mature, or more likely, recovered second-growth forests on upper or middle slopes and low ridges with deep soils. The oaks are the common canopy tree in these forests.

- ***Marble Hills:***
  The rocky summits and escarpments that flank the central valley. Soils are generally sandy or gravelly.

- ***Mountainous Areas:***
  The Pawling hills, Pawling Mountain, Quaker Hill, etc., offer a variety of habitats including small acidic and limy wetlands, and diverse rocky and steep slopes areas. As a result of differing aspect, elevation, soil moisture, slope, fire history and vegetation, the habitats of the mountains range from cool and moist to warm and dry.

- ***Limestone Caverns:***
  While no large caverns have been identified in Pawling, small ones likely exist. Their constant temperature makes them ideal hibernation sites for species of bats.

- ***Cliff, Ledge, Talus, Slab & Crest:***
  The rocky, rugged escarpments, ridge crests, spurs and knobs of the highlands of the Pawling Mountain area and Quaker Hill, have generally thin, droughty, infertile, unstable soils that are exposed to the extremes of the weather. These habitats include rock faces, ledges, outcroppings and overhangs which support sparse or stunted, drought and fire tolerant vegetation.

- ***Agricultural Lands:***
  Only 40 tracts of agricultural land remains in Pawling today. The loss of fields and meadows results in declines in populations such as the golden-winged warbler, grassland sparrows and the vesper sparrow, which breed in Pawling, as well as more common species such as bobolink, savannah sparrow, hawks and owls.

The specific species found in these habitat areas are numerous. The appendix includes a listing of the species of vegetation (trees, shrubs & vines, and forbs), as well as wildlife (mammals, amphibians & reptiles, and birds), known or believed to be found in Pawling.

According to the NYSDEC Natural Heritage Program, four ecological communities found in the Town are imperiled or vulnerable; including:

- Floodplain Forest
- Red Maple Hardwood Swamp
- Rich Shrub Fen
- Rich Sloping Fen

Additionally, the following rare plant and animal species are known to be present in Pawling:

Mammals:

- New England Cottontail (*Sylvilagus transitionalis*) - Special Concern

Birds:

- Kentucky Warbler (*Oporonis formsus*) - Protected
- Pied-billed Grebe (*Podilymbus podiceps*) - Threatened

Reptiles:

- Bog Turtle (*Glyptemys muhlenbergii*) - Endangered
- Hog-nosed Snake (*Heteroden platirhinos*) - Special Concern

Butterflies & Skippers:

- Northern Metalmark (*Celephelis borealis*) - Unlisted

Vascular Plants:

- Carolina Whitlow-grass (*Draba reptans*) - Threatened
- Swamp Birch (*Betula pumila*) - Threatened
- Yellow Wild Flax (*Linum sulcatum*) - Threatened
- Marsh Horsetail (*Equisetum palustre*) - Threatened
- Fairy Wand (*Chamaelirum luteum*) - Threatened

8. CEA's—Areas of Special Concern

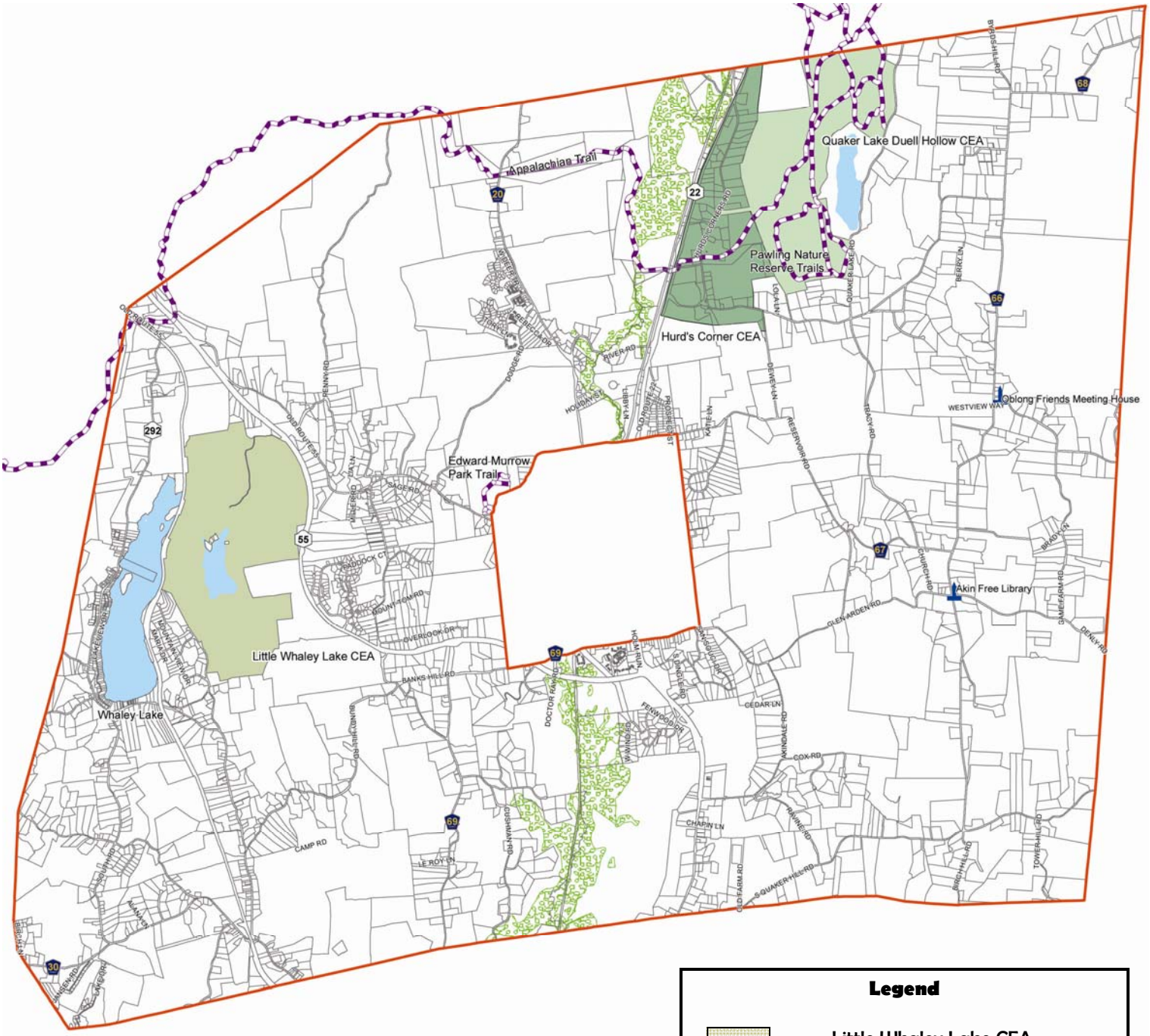
Critical Environmental Areas (CEA's) are formally designated areas which possesses exceptional or unique environmental characteristics. As presented on Figure 7-12, four CEA's are present in the Town of Pawling:

- Quaker Lake/Deuel Hollow
- Hurds Corner
- Little Whaley Lake and Watershed
- Great Swamp of Putnam County

In addition to these formally designated CEA's, the following areas have been identified by a detailed assessment of the Town's natural areas conducted by Hudsonia in 1989, as being of special environmental importance and concern. One or more of these areas may also warrant CEA designation:

- Old Quaker Hill Area
- Greenbelt Area
- Nuclear Lake
- Penn Central Wetland
- South White Rock Road Wetland
- Bear Swamp
- Squire Green Wetland
- Quaker Brook Wetland
- Cedar Valley Calcareous Fen
- Ziff Preserve Calcareous Wetland
- Corbin Hill
- Cat Rocks
- Purgatory Hill
- Tracy Road Area
- Ravine Road Hemlocks
- Burton Property Hemlock Grove
- Hettinger Property Hemlock Grove
- South Quaker Hill Mountain Laurel
- Gorge at Dewey Lane
- Toffey Cliffs
- The Glen
- Hammersley Slope
- Hammersley Spruce Plantations
- Byrd's Hill Farms

7,000 acres of unprotected developable land located within the "greenbelt" area would yield approximately 2,000 additional dwelling units based on existing zoning.



Legend

- Little Whaley Lake CEA
- Hurds Corner CEA
- Quaker Lake/Duell Hollow CEA
- Great Swamp CEA

Base Mapping:
Dutchess County Department of Planning & Development

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Critical Environmental Areas

N W E S

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Figure #

7-12

Unrestricted development within the "greenbelt" area would allow for development that would exceed the sustainable groundwater capacity by 1,300 units.

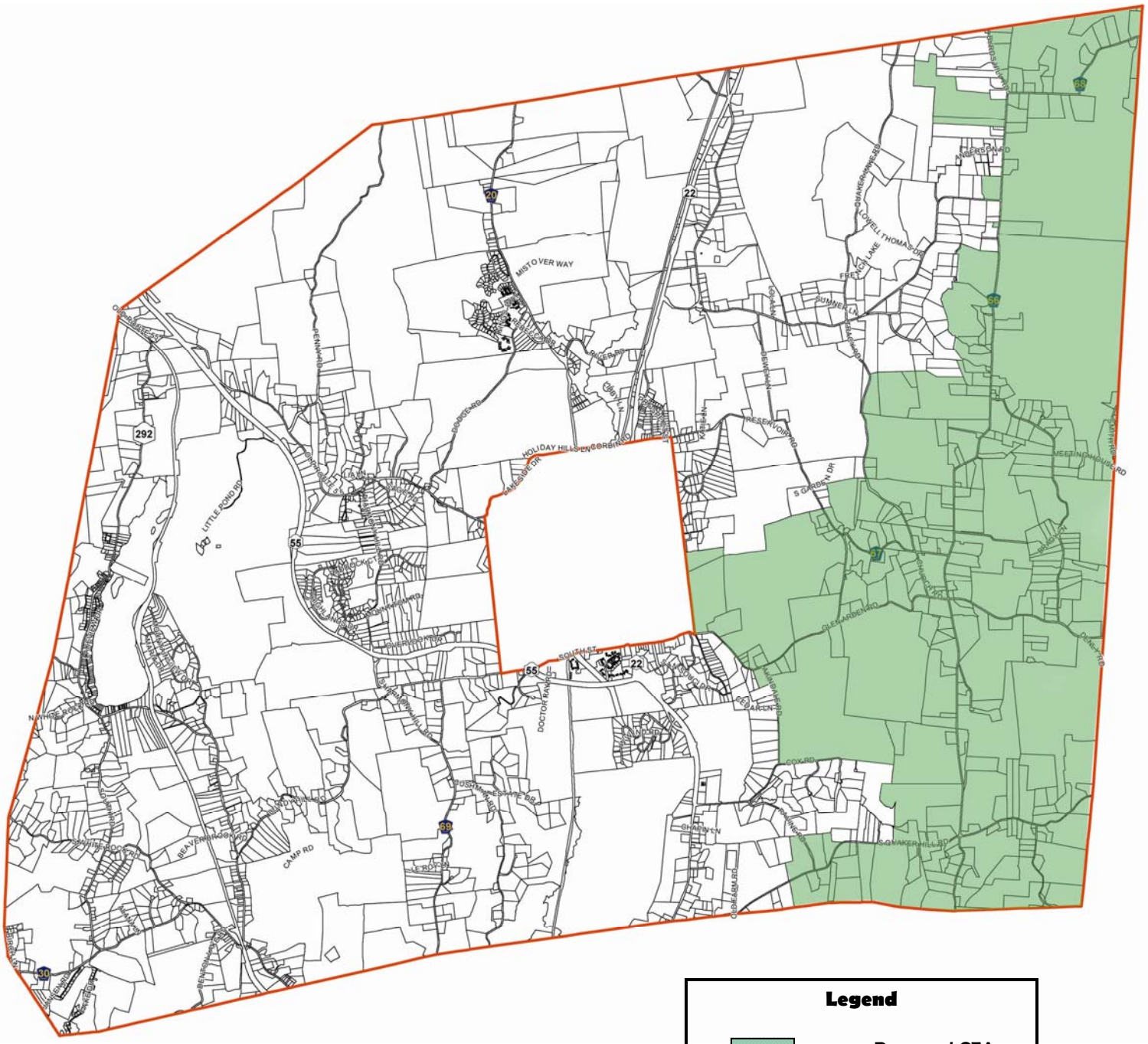
Two large areas of the Town, which include many of the specific areas noted above, contain a range of environmental attributes which collectively warrant careful attention.

In 2006-2007, the Dutchess County Planning Department conducted a detailed study and build-out analysis of an area described as the Town of Pawling "Greenbelt" Area. While a portion of this area is protected today, and it includes parts of four Critical Environmental Areas, some 7,000 areas of unprotected developable land remains. This area is, as a whole, vitally important because it overlays the Upland Aquifer Area. Additional development, as currently permitted under existing zoning regulations, would potentially result in the development of over 2,000 additional dwelling units, which exceeds the density that would be allowable without resulting in adverse impacts to groundwater resources, by some 1,300 units. Limiting densities in this area will assure that septic systems do not impact groundwater resources, the continuous greenway corridor is maintained, the highlands are preserved, as would be the steep slopes that are characteristic of the area, numerous wetlands, streams and water bodies.

The second large area of significant environmental concern is Old Quaker Hill. Defined as an area of approximately 7,000 acres (Figure 7-13), Old Quaker Hill is uniquely picturesque, supports large tracts of un-fragmented forest, agricultural lands and meadows, as well as the characteristic rugged terrain containing ravines, ledges, cliffs, waterfalls as well as numerous wetlands, streams and ponds. The area also supports a wide array of wildlife habitats.

B. Natural Resources Vision Statement:

The Town of Pawling today is, a direct reflection of the Harlem Valley's extraordinary natural resources. The prudent and responsible maintenance and stewardship of these natural resources will assure that future generations will enjoy clean air, pure drinking water, abundant wildlife and a landscape that is appropriately developed in a harmonious and sustainable way.



Legend

Proposed CEA

Base Mapping:
Dutchess County Department of Planning & Development

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TOWN OF PAWLING 1788

Old Quaker Hill Critical Environmental Area

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Figure #

7-13

Chapter 8

Open Space, Scenic & Agricultural Resources

Public and private efforts have combined to preserve 3,430.7 acres of land in Pawling, which represents 12.7% of the Town's land area.

OPEN SPACE, SCENIC & AGRICULTURAL RESOURCES

A. Existing Conditions:

Essential components of Pawling's character—it's "sense of place" - are its large tracts of open space, agricultural lands and remarkable scenic beauty. As small family farms and agricultural uses declined during the early and mid twentieth century, it was the Harlem Valley's scenic quality that, in many ways, attracted new residents to settle in the Town. For the most part, the pace and character of new residential development had been such that the inherent open, rural character of the Town remained intact. However, as the sprawling expansion of the New York Metropolitan area continues it's inexorable push outward, development pressures continue to threaten the scenic, agricultural and open spaces resources that make Pawling so attractive.

Open Space & Scenic Resources:

Fortunately, the threat to the region's scenic and open space resources was recognized years ago, and aggressive efforts to preserve the Town's resources, on multiple levels, has been moving forward ever since. The Federal government, State of New York, City of New York, the Town of Pawling, as well as private conservation organizations such as The Nature Conservancy, The Dutchess Land Conservancy and The Oblong Land Conservancy have combine to preserve over 3,430.7 acres of open space in Town. This represents approximately 12.7% of the total area of the Town.

The Oblong Conservancy has identified a series of interconnected greenways in Pawling, which affords the unique opportunity to preserve continuous corridors of significant natural areas. Preserving these areas is critically important, not simply because they enhance the picturesque landscape of the Town, but more importantly, because they serve to protect the bio-diversity of the region, particularly the Hudson Highlands, which have been recognized by the U.S. Forest Service as a "Landscape of National Significance" and as a "Significant Bio-Diversity Area of the Hudson River Estuary Corridor" by the New York State Department of Environmental Conservation.

The 5 interconnected greenways can be described as follows:

Eastern Quaker Hill Greenway—Starting at the southeast corner of the Town, the greenway covers the unique watershed

of Quaker Brook, and its significant wetland, the second largest wetland tributary of the Great Swamp. Its waters flow into Haviland Hollow Brook and then feeds the Great Swamp. This watershed is remarkably pristine and harbors a surviving population of native brook trout. Both the New York and Connecticut Committees of the Highlands Coalition recognized the Quaker Brook Watershed as a "Critical Treasure" in both states. This greenway is officially recognized in *New York State's Open Space Conservation Plan* , where it is known as the Southern Taconic Ridge. Adjacent to the ridge area is historic Quaker Hill, which includes unique landscape features such as the Four Corners and the Great Hayfield.

Purgatory Hill & Tracy Road Greenway— Covering the very steep slope of Purgatory Hill, this greenway and the important promontory and plateau area above, is traversed by Tracey Road, a historic and scenic dirt road. The greenway crosses North Quaker Hill Road and follows Quaker Lake Road, passing through a narrow ravine. The Pawling Nature Preserve lies on the western side, but the eastern slope is unprotected.

Great Swamp Greenway—This greenway extends the entire length of Pawling. Much of this area is protected, however areas in the south including Rattlesnake Hill, and areas of agricultural and industrial land. This area contains the well studied population of box turtles. The Great Swamp is a "Critical Treasure" in the Highlands, and is listed as a priority in the *New York State Open Space Conservation Plan.*

West Mountain Greenway— This greenway connects Lakeside Park, crosses Dodge Road, runs through the preserved open space in Deerfield Ponds, to the Pawling Mountain Club and on to the Appalachian Trail corridor. One section in the Madison Woods Subdivision requires protection.

Little Whaley Greenway— Included in this greenway are the Little Whaley Lake property, the Boy Scout Camp and old Presbyterian Camp. The old Maybrook Railroad right-of-way runs along the western shore of Whaley Lake, and an opportunity exists to convert this to a rail trail, which would then connect into the existing rail trail in Putnam County. Little Whaley Lake is a "Critical Treasure" in the Highlands, and is recognized in the *New York State Open Space Conservation Plan.*

Table 8-1 presents a summary of open space preserved by The Nature Conservancy and The Oblong Conservancy.

Table 8-1
Privately Preserved Open Space

Name	Location	Acreage	Description
The Nature Conservancy			
Great Swamp	Central Town	~2,,000 in Town of Pawling	The Great Swamp, covering over 6,000 acres, is one of the largest freshwater wetlands in New York State. Situated in eastern Putnam and Dutchess Counties, the Great Swamp and its 63,000-acre watershed stretch 20 miles through the towns of Southeast, Patterson, Pawling and Dover.
Pawling Nature Preserve	Quaker Lake Road	1,060	Includes 1,053-foot-tall Hammersly Ridge, Duell Hollow Brook and gorge. The Appalachian Trail winds through the preserve with views of Great Swamp and Harlem Valley below.
The Oblong Conservancy			
Carpenter	Quaker Hill	17	Interior forest, provides for public access
Chase	Rte 55 & Old Rte 55	6	Designated Scenic Road, adjacent to AT, important wetland
Douglas	Rte 55	176	Includes 16 acre Ray Lake, important habitat
Collier	South Quaker Hill	48	Located on Taconic Ridge, also protects circa 1750 historic house, interior forest, provides controlled access and deer hunting
Davis	Quaker Hill	137	Agricultural land and forest on Taconic Ridge, provides controlled public access
Milbank	Quaker Hill	11	Agricultural land, important viewshed
Necker	Harmony Road	5	Critical location on R.O.W., adjacent to Girl Scout Camp
Nurzia/Getaway	Quaker Hill	23	Non-carbonate crest with rare plants on Taconic Ridge, with public access potential
Peckhan Industries	Great Swamp	157	Open space from conservation subdivision. Bog turtle, high priority in Great Swamp Conservation Plan
Spagnolo	Quaker Hill	4	Near historic structure
Deerfield Ponds	West Dover Rd	208	Open space from cluster subdivision. Viewshed and wetlands, potential to connect to Lakeside Park
YMCA	Dodge Rd	6	
Zaengle	River Rd	10	Upland, Swamp River, Weir Brook, potential public fishing location

In addition to the work of private conservation organizations, the Planning Board has through its site plan and subdivision review process, permanently preserved acreage through a host of methods, including proper site design and layout, imposing restrictions and establishing enforceable limits of disturbance. The 3,430.7 acres of preserved acreage is impressive, however, 87.3% of the Town's land area remains unprotected. And while it is clearly recognized that large amounts of additional land areas are strictly regulated due to their environmental characteristics - wetlands for example - mounting development pressures and the desirability of a home in Pawling, will continue to place pressures on the Town's open space resources.

In order to proactively and fairly preserve the Town's open space and scenic resources, it is important to understand the factors that contribute to their special character.

Natural Features:

The rich variety of the Town's natural features establishes a unique character and provide visual interest. These features, which are described in greater detail in Chapter 7, include:

- Hudson Highlands
- Harlem Valley
- Varied topography
- Lakes & ponds
- Rivers, streams & watercourses
- Forests and woodlands
- Meadows
- Wetlands
- Great Swamp

Agricultural Landscape:

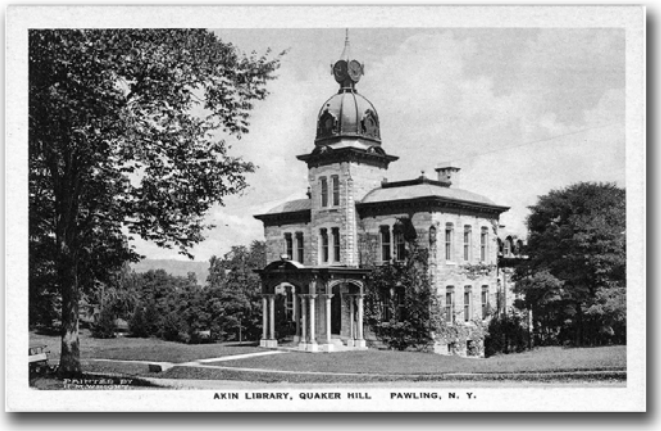
The agricultural landscape is characterized by cultivated fields, orchards, pastures, horse farms and rural roads. These agricultural views are integral to Pawling's identity as a rural community, and play an important role in attracting visitors and tourists who support the local economy.

Scenic Roads and Corridors:

By far, most people experience Pawling's scenic beauty, rural landscape and open space character from the Town's roads, whether traveling by train, bus, car, by bike or on foot. These roads and corridors provide viewsheds and vistas across scenic areas and open spaces, but also their own characteristics, such tree or stone wall lined roads and/or rapidly disappearing non-

paved surfaces, provide distinctive visual elements within the Town's landscape.

Historic Structures & Sites:
Architecturally significant older homes, barns, commercial buildings and churches; found individually or clustered, contribute greatly to the scenic quality of the Town, particularly along scenic corridors. Features such as stone walls and cemeteries add to the rich rural texture of the community.



Open space can be characterized as natural scenic beauty whose existing openness, natural condition or present state of use, if retained, would enhance the present or potential monetary or perceptual value of abutting or surrounding lands, or would maintain or enhance the preservation of scenic resources. Utilizing this definition, Pawling's open space areas include:

- Public lands.
- Lands owned by private organizations for conservation and open space preservation, such as The Oblong Conservancy.
- Land held for public water supply protection.
- Open space set-aside in cluster subdivisions.
- Land protected by easements that restrict the use and development of the property in perpetuity to passive recreation or a natural preserved condition.
- Portions of school properties used for recreational facilities or left in a natural condition.
- Private recreational facilities and camps.
- Publicly and privately held land with significant scenic qualities and assets, including areas adjoining scenic roads, farms and the Highlands ridgelines.
- Public and private lands containing environmental constraints or

features, such as wetlands, steep slopes, waterbodies or important habitats.
- Historic areas
- Agricultural lands

Agricultural Resources:

Maintaining Pawling's agricultural landscape, which directly influences the open space and scenic quality of the Town, also represents a serious challenge. 3,171.2 acres of agricultural land are present in Town today. High land values, escalating real estate taxes, rising fuel costs and agricultural operating expenses and an increasing number of non-farm neighbors who do not appreciate the industrial nature of modern farming (dust, noise, hours of operation), are pressuring farmers to abandon the land and sell their farms to the highest bidder—most often speculative real estate developers. This is a real and tangible treat to the Town's character.

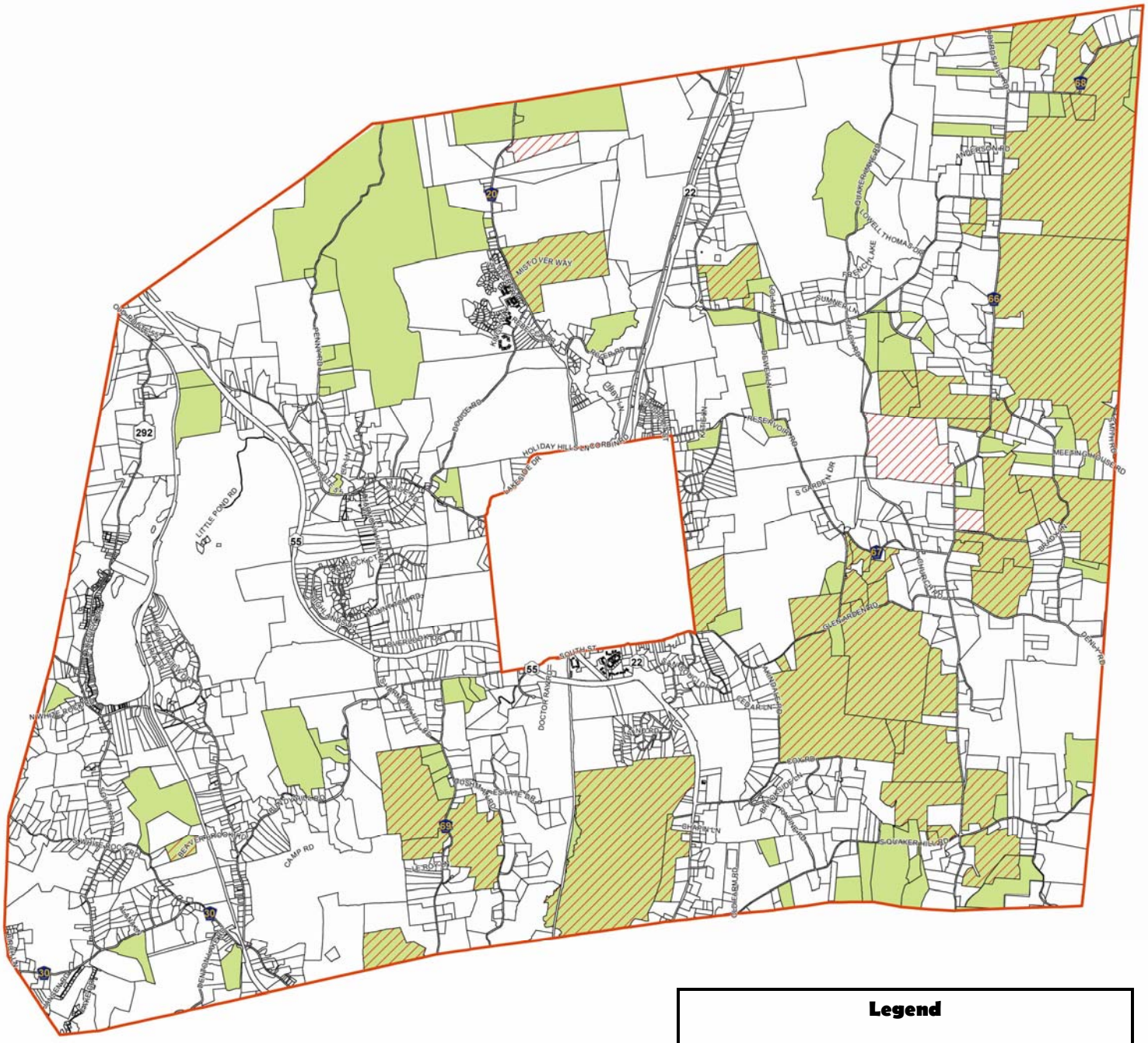
A number of programs are in place to support the Town's agricultural community. Perhaps the most important is the New York State Agricultural Protection Act of 1992 and Article 25-AA of the Agricultural and Markets Law which authorizes the creation of local agricultural districts for the purpose of encouraging the continued use of farmland for agricultural purposes. Property within agricultural districts are afforded incentives to prevent or curtail the conversion of farmland to non-agricultural uses. 109 parcels of land are located within agricultural districts in the Town of Pawling (Figure 8-1).

3,171.2 acres of agricultural land are present in Town today, including 109 parcels located within agricultural districts.

Agricultural Assessments are another tool available farmers to assist in maintaining land in active agricultural use. The Agricultural Districts Law allows for real property assessments to be based on the value of farmland for agricultural production rather than on its development potential. 46 parcels of land, currently have agricultural exemptions.

The New York State Agricultural Protection of 1992 authorized counties to establish Agricultural and Farmland Protection Boards to oversee farmland and agricultural activities. In response to this initiative, Dutchess County established its Agricultural and Farmland Protection Board in 1995. Utilizing this program, Dutchess County was able to leverage grant monies to fund the development of the Dutchess County Agricultural and Farmland Protection Plan, which sets forth a long range plan for the future of agriculture in the County.

The US Department of Agriculture 2007 Census of Agriculture,



Legend

Agricultural Districts

Parcels Under Active Agricultural Exemption

Base Mapping:
Dutchess County Department of Planning & Development

CLEARY CONSULTING

TOWN OF PAWLING 1788

Agricultural Districts

N W E S

0′ 4,000′

Figure #

8-1

Dutchess County Profile indicates that there were 656 farms in the County in 2007 (a decrease of 11 farms from 2002), covering 102,360 acres (a reduction of 11% since 2002).

B. Open Space & Scenic Resources Vision Statement:

Pawling's unique scenic quality and "sense of place" is derived from the interrelationship between areas of undeveloped open space, pastoral farmlands and rural residential districts. This distinctive character, enhanced by significant natural and historic resources, is the quality that maintains Pawling's vitality as a place to live, work and visit.

TRANSPORTATION

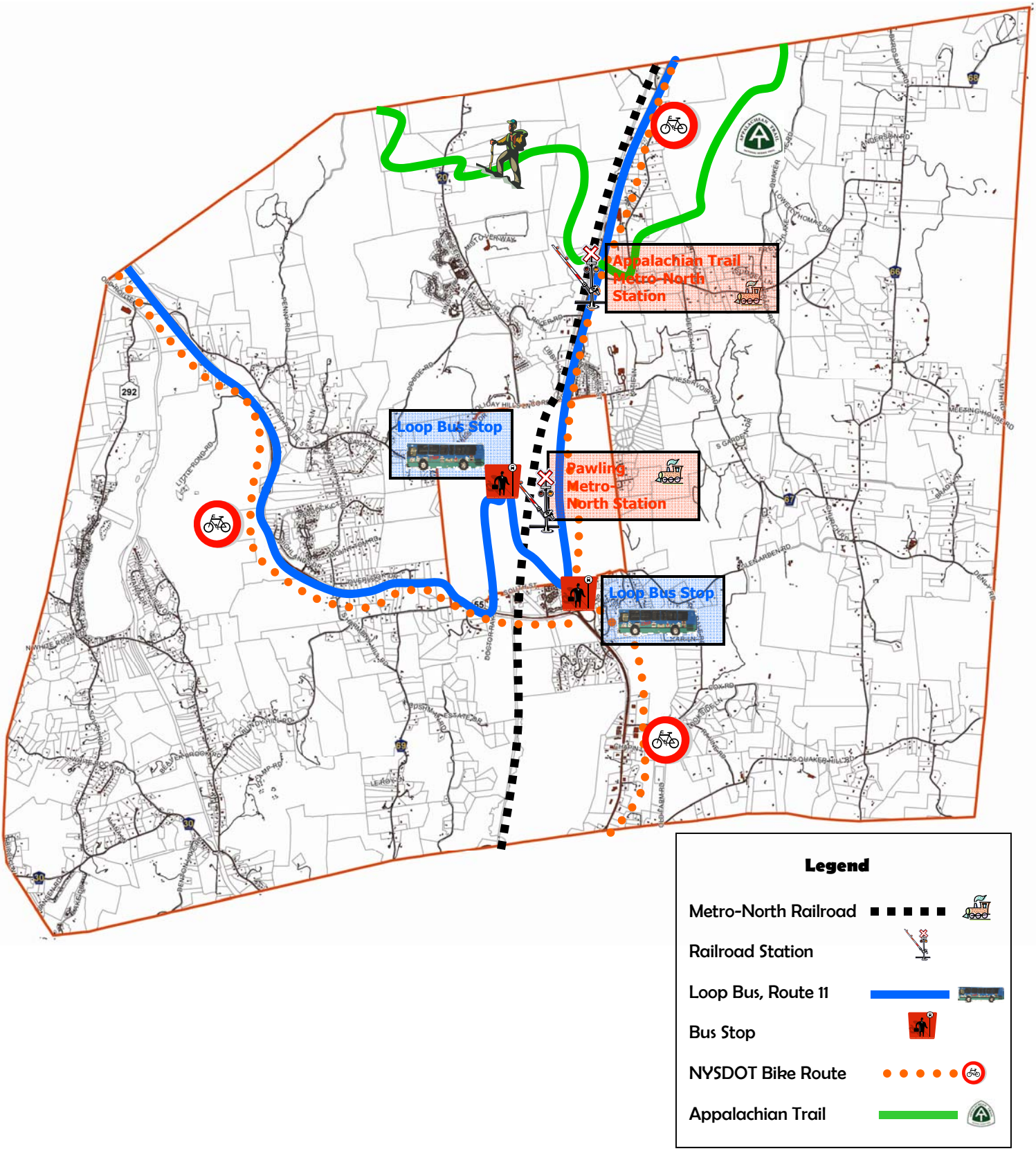
A. Existing Conditions:

The Town of Pawling is in many ways, defined by its transportation resources (Figure 9-1) — by the Metro-North railroad which literally bisects the Town, and by the Town's complete reliance on the automobile. Recent spikes in oil prices re-focused our attention on the necessity to explore alternatives to our traditional auto-centric viewpoint. In Pawling however, developing alternatives will prove challenging, due to the spread out nature of the built environment as well as by the challenging terrain which tends to discourage human powered locomotion - walking and bicycling. The compact core of the Village and the presence of the railroad, do however provide some hope that a more sensitive and sustainable transportation system can evolve in Pawling.

88.6 miles of state, county and local roadways run throughout the Town of Pawling.

1. Roadway Network:

The roadway network within a given community is established as a hierarchy; jurisdictionally and functionally. In Pawling, roadways are regulated and maintained by three levels of government—New York State, Dutchess County and the Town of Pawling.



Base Mapping:
Dutchess County Department of Planning & Development

CLEARY CONSULTING

TOWN OF PAWLING 1788

Transportation Resources

N W E S

0' 4,000'

Figure #

9-1

State Roads:

- Rte 22
- Rte 55
- Rte 292

County Roads:

- Rte 20—West Dover Road
- Rte 30—Holmes Road
- Rte 66—Old Quaker Hill Road/South Mizzentop Road
- Rte 67—Quaker Hill Road
- Rte 68—North Quaker Hill Road
- Rte 69—Harmony Road

All of the remaining roadways fall under the jurisdiction of the Town of Pawling.

Functionally, roadways are classified by the volume of traffic they handle, operating speeds, grades and geometry, access and surrounding land uses. The following describes the three basic road classification categories found in Pawling.

The Town of Pawling's 88.6 miles of roadways consist of arterials, collectors and local roadways.

Arterials—Often broken down into major and minor arterials, arterial roadways are designed to provide the connection between highways and the local roadway system. Arterials carry high traffic volumes (>5,000/hour), are usually multi-lanes, have little or no on-street parking and limited numbers of intersecting driveways. Route 22 (the principal north/south route) and Route 55 (the principal east/west route) are arterial roadways.

Collectors— These roadways provide connections between the higher classification of roadways, the arterials, and the lower classification of road, the residential or local roadways. They provide for through traffic on a more local basis. Their purpose is to collect traffic from

residential streets and to bring the vehicles to the arterials in an organized and conflict free fashion. The intersections between arterials and collectors are often signalized.

Collector roads are expected to carry in the range of 1,000—8,000 vehicles per day, and volume that is not generally conducive to a quiet and safe residential atmosphere. These roadways are generally two lanes wide, with access points for major uses only, with few if any driveways for single family homes.

Local Roadways— Pawling contains 51.6 miles of local roadways. These roadways are not designed to carry large volumes of traffic (generally below 2,000 vehicles/day), and are restricted to slower vehicle speeds. In Pawling, some local roadways are unpaved (approximately 10 miles), and many local roads do not meet current Town roadway standards.

The most heavily travelled in the Town is Route 22. According to traffic count data collected by the New York State Department of Transportation and the Poughkeepsie – Dutchess County Transportation Council, nearly 20,000 vehicles travel on Route 22 between the Putnam County border and Route 55 every day (measured as Annual Average Daily Traffic—AADT). During the afternoon peak hour, between 4:00 PM and 5:00 PM the volume on this stretch of roadway is 1,662 vehicle trips. North of the Village to the Dover line, the AADT drops in half to approximately 10,000.

Table 9-1 presents AADT traffic data.

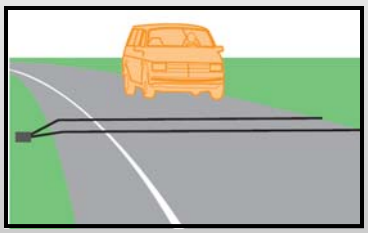


Table 9-1 Roadway Network Traffic Volumes			
#	Roadway Segment	To	AADT
State Roadways			
1	Route 22	Route 55	19,617
2	Route 22	Dover Boundary	10,437
3	Route 55	Beekman Boundary	5,883
4	Route 292	Route 55	1,500
County & Local Roadways			
1	North Quaker Hill Road	Hurds Corners Road	1,056
2	North Quaker Hill Road	Tracy Road	863
3	North Quaker Hill Road	CR 66	639
4	North Quaker Hill Road	Byrds Hill Road	501
5	North Quaker Hill Road	Connecticut State Line	287
6	Old Quaker Hill Road	CR 68/North Quaker Hill Rd	413
7	Old Quaker Hill Road	Meeting House Road	811
8	Old Quaker Hill Road	CR 67	811
9	Old Quaker Hill Road	CR 67/Kirby Hill Road	714
10	Kirby Hill Road	Connecticut State Line	615
11	Quaker Hill Road	CR 66/Old Quaker Hill Road	1,271
12	Quaker Hill Road	Reservoir Road	1,267
13	Quaker Hill Road	Aikendale Road	1,139
14	Harmony Road	Cushman Road	1,128
15	Harmony Road	Banks Hill Road	984
16	Harmony Road	Rte 55	1,115
17	Old Route 55	Dodge Road	1,731

2. Proposed Roadway Network Improvements:

Previous planning studies have identified areas where improvements to the existing roadway network are necessary. The Route 22 Corridor Study: Corridor Management Plan, prepared by the Poughkeepsie-Dutchess County Transportation Council in 2002, recommends the following

improvements:

A. *Roadway Connections:*

- Provide a secondary access, service or feeder road along Route 22, south of Route 55. The purpose of this feeder road is to remove turning traffic from the through route (Route 22) while maintaining access to businesses.

B. *Short Term Capacity Improvements:*

- Akindale Road—Increasing traffic volumes through this intersection are anticipated to degrade the Level-of-Service (LOS). The movements most affected by increased traffic volumes are:
  - ⇒ Northbound shared through and right turn lanes.
  - ⇒ Westbound left turns

  Changing the signal phasing or timing and/or providing additional signal heads for turning movements can improve traffic flow through the intersection and improve delays.

A new feeder road is proposed along Route 22, south of Route 55 to alleviate turning traffic congestion.

C. *Long Term Capacity Improvements:*

- CR 67 (Quaker Hill Road) & East Main Street—Intersection capacity deficiencies resulting in Levels– of-Service D by 2020 are anticipated at this location. Recommended improvements include providing a through/left turn lane and separate right turn lane for the eastbound movement. This lane addition would improve the LOS for the eastbound traffic to C and decrease the amount of delay for the intersection as a whole. Signal head modifications would also be necessary and better alignment of the eastbound and westbound approaches would also greatly improve capacity and safety.

D. *Safety Improvements:*

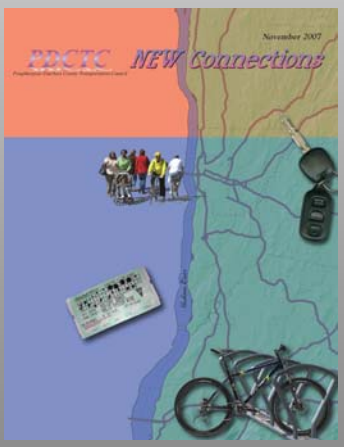
- Akindale Road/Route 22—This intersection is a safety concern primarily because of its size and the

associated traffic volumes. Accidents are common place at this location. Safety concerns can be remedied by providing the capacity improvements noted above, and by ensuring that the driveway alignment on the west side of the intersection is coordinated with Akindale Road.

- CR 67 (Quaker Hill Road) & East Main Street—The safety concern at this intersection results from the vertical profile of Route 22 and the resulting short sight distances. A safety concern also exists because of opposing left-turn movements due to the alignment of East Main Street with Quaker Hill Road. Changing the profile of Route 22 and realigning the intersection would be costly, but should be considered as a long-term capital improvement.

  An economical and short-term solution is to restrict right turns on red. Trees within the highway ROW near the intersection could also be removed to improve sight distances.

The Poughkeepsie-Dutchess County Transportation Council is also responsible for compiling the Transportation Improvement Program (TIP), which is the regional capital improvement plan for transportation facilities, and includes state, county and local projects. The current 2008—2012 TIP specifies 1 project in the Town of Pawling, and 4 projects in the Village.



A. Town of Pawling:

- NYSDOT 893235—Corbin Road/MetroNorth grade crossing improvement. The project will upgrade railroad circuitry at the crossing; install long range auxiliary flashers. Project cost $125,000.

B. Village of Pawling:

- NYSDOT 893234—Main Street/MetroNorth grade crossing improvement. The project will upgrade railroad circuitry at the crossing; install long range auxiliary flashers and install bell at the crossing. Project cost $90,000

- Local 878003—Pawling Village Green and Walkway. Construct a Village Green adjacent to the Pawling MetroNorth railroad station, and build walkway from the Green north along Charles Colman Boulevard. Includes landscaping and lighting, etc.

- Local 876015—Improvements to Reservoir Road from Route 22 to Prospect Street, including resurfacing and drainage.

- Local 876014—Rehabilitation of Grandview Avenue from Lakeside to end including resurfacing and drainage.

3. Projected Growth:

Annual Average Daily Traffic volumes[1] have been assessed for the major state roadways in Pawling for a 10 year period (1997—2007) to determine the traffic volume growth rate. According to the NYSDOT, the average annual growth rate for a state highway would fall in the range of 1.5 to 2.5 percent. A growth rate in excess of 3.0 percent would be considered a high rate of growth.

Growth rates on 3 state highways from 1997 to 2007 are as follows:

- Route 22—3.9%
- Route 55– 3.7%
- Route 292—3.0%

These growth rates reinforce the fact that more people are traveling to and through Pawling, and that trend is projected to continue unabated.

Higher traffic volumes equate to increased delays at intersections. Heavily traveled intersections, such as the Route 22/Akindale Road intersection, which currently operates in the range of LOS C, will degrade to LOS D by 2020. It is anticipated that these delays will also occur at intersections throughout the Town.

Between 1997 and 2007, the growth of traffic on the 3 state highways in Town ranged from 3% to almost 4% annually, which is considered high.

(1) NYSDOT Highway Data Service Bureau

Congested roadways and delays at intersections will cause increases in travel times and commutes. In 1990, the average commute to work was 27.9 minutes. By 2000, that time increased to 38.3 minutes, a 10.4 minute (27.2%) increase. With over 70% of the County's residents working within Dutchess County, roadway congestion and delays represents a significant concern.

4. Accident Summary:

Accident data was collected from the Dutchess County Sheriff's Department for the latest available 3 year period, 2006—2008, which is presented in Table 9-2.

Table 9-2
Accident Summary – 2006 - 2008

Location	Number	Property Damage	Injuries	Day	Night	Type of Accident: Other Vehicle	Animal	Ditch/ Embankment	Tree	Other	Contributing Factors: Driver Inattention	Animals Action	Failure to Yield	Fell Asleep	Unsafe Speed	Alcohol	Other
NYS Route 22	40	27	19	31	9	23	4	4	5	4	14	5	10	2	4	0	5
NYS Route 55	31	23	12	25	6	9	8	9	3	2	8	8	3	0	9	1	2
NYY Route 292	19	14	6	15	4	5	2	5	6	1	3	3	2	0	4	5	2
Old Route 55	9	6	3	6	3	5	2	1	1	0	0	2	2	0	1	2	2
South Road	9	8	1	7	2	4	0	3	2	0	7	0	1	0	1	0	0
W. Dover Road	8	7	1	7	1	0	5	1	2	0	1	7	0	0	1	0	0
Quaker Hill Road	8	4	4	6	2	2	0	5	1	0	1	0	0	0	4	1	2
Holmes Road	6	5	1	2	4	0	1	3	1	1	1	1	0	0	3	1	0
Harmony Road	4	4	0	4	0	0	0	4	0	0	1	1	0	0	2	0	0
Kirby Hill Road	3	3	0	3	0	0	1	1	1	0	1	1	0	0	1	0	0
S. Quaker Hill Rd.	3	2	1	3	0	2	0	0	1	0	0	0	1	0	1	0	0
Aikendale Road	3	2	1	3	0	3	0	0	0	0	2	0	1	0	0	0	0
Bundy Hill Road	2	2	0	2	0	0	0	1	1	0	0	0	0	0	1	1	0
Reservoir Road	2	1	1	2	0	1	0	0	1	0	0	0	0	0	0	0	2
Ravine Road	2	2	0	2	0	1	0	0	1	0	0	1	0	0	1	0	1
Harmony Hill Road	1	1	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0
Old Quaker Hill Rd.	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
N. Quaker Hill Rd.	1	1	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0
River Road	1	1	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0
Fenwood Drive	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0
N. White Rock Rd.	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Overlook Drive	1	1	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0
Cushman Road	1	1	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0
San Souci Drive	1	1	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0
Daley Drive	1	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0
Dodge Road	1	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0
Sanita Road	1	1	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0
Lakeside Drive	1	1	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0
Mohawk Trail	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1

Over the course of the three year period, 155 accidents occurred in Town, resulting in 50 injuries. The most serious accidents took place on the larger state highways, Routes 22, 55 and 292. 40.6% of the accidents involved another vehicle, however the majority of the accidents (59.4%) involved only a single vehicle and a tree, a ditch or embankment, etc. 16% of all accidents involved a deer or other animal. Driver inattention was the most prevalent contributing factor in most accidents, and alcohol was a contributing factor in 7.7% of all accidents.

5. **Roadway Maintenance:**

Three levels of government are responsible for maintaining the 88.6 miles of roadways in the Town of Pawling; the New York State Department of Transportation, the Dutchess County Department of Public Works, and the Town of Pawling Highway Department.

A. *Town of Pawling Highway Department*

The Town's Highway Department is responsible for 51.6 miles of local roadways, 10 of which are gravel. Working under the Highway Superintendent, 10 full-time employees, supported by seasonal workers, are responsible for:

- Maintenance and construction of roads within the Town.
- Tree trimming and brush removal within Town rights-of-way.
- MS4 Regulations (stormwater drainage).
- Dead tree removal on Town property.
- Snow plowing and sanding, including the 20.25 miles of County roads.
- Mowing the sides of roads.
- Spring clean-up including road sweeping.
- Roadside bulk pickup in the Spring.
- Cleaning and replacing catch basins and culverts.
- Issuing driveway permits and subsequent approval of completed driveway according to town specifications.
- Winter maintenance of County roads.

The Highway Department is also responsible for the Transfer Station on River Road.

Table 9-3 Highway Department Equipment Inventory		
Year	Make	Type
Pick-Up Trucks		
1983	Chevrolet	K-20 4x4 3/4 ton
2004	Chevrolet	Trail Blazer
2008	Chevrolet	2500HD
Six-Wheel Vehicles		
1980	Ford	Dump
1981	Ford	F-800D
1988	Ford	F-800D
1994	Int'l Navista	4800 DT-466
1994	Int'l Navista	4800 DT-466
1996	Int'l	4900
1996	Int'l Navista	4800 DT-466
1996	Int'l Navista	4800 DT-466
2000	Ford	Box Truck
2004	Ford F550	Tenco Tilt Dump body w/ sander
2004	Ford F550	Tenco Tilt Dump body w/ sander
Heavy Equipment		
1973	Caterpillar	Loader—950
1986	Ford	Tractor/Backhoe
1990	John Deere	Loader—544E
1993	Champion	Grader—720A
2000	JCB Sitemaster	Backhoe—214
Other Equipment		
1950	Schramm	Compressor
1973	Int'l	Tractor/Mower
1979	Sweepster	Power Sweeper
1980	Layton	Paver
1980	Raygo	Roller
1982	Ford	Tractor
1987	Morbork	Wood Chipper
1991	Case	Tractor

B. Dutchess County Department of Public Works

The Highway Division is responsible for overseeing numerous programs to maintain the county's 395 miles of roads, 140 bridges and 178 drainage structures. This division has a pavement maintenance and rehabilitation program that includes reclaiming, overlays, nova chip, oil and stone and crack sealing. Roadside maintenance includes pipe installation, guide rail installation, shoulder and drainage ditch maintenance, tree and brush clearing and grass cutting.

Six highway facilities conduct snow and ice control, repair and install all warning and regulatory signs on county roads and are responsible for some bridge repairs. The division also provides accounting services for over $15 million in operating funds, Consolidated Highway Improvement Program (CHIPS) monies, and various other State and Local funds

C. New York State Department of Transportation

The Office of Transportation Maintenance is responsible for preserving, repairing and safely operating the State's highway and bridge infrastructure in a manner that optimizes travelers mobility and travel time reliability, enhances environmental conditions, enables efficient economic activity, and maintains ready response capability to events that impact the transportation system.

Specific responsibilities of the Office of Transportation Maintenance include:

- Snow & Ice Control - this includes direct snow and ice control services on approximately 35,230 of the State's 43,010 lane miles of highway, and administering the roughly 7,780 lane miles performed under Municipal Snow and Ice Agreements.

- System Preservation and Repair - this includes preventive and corrective maintenance and general repairs to the State's highways, bridges, ap-

purtenances, roadsides and rest areas performed by State Forces and contractors.

The Office of Transportation Maintenance works closely with Department program areas (such as the Office of Traffic Safety and Mobility) other public agencies, local governments and the private sector to accomplish this mission, consistent with statewide and regional program goals. In performing its mission, the Office emphasizes excellence in transportation maintenance, utilizing cost effective and innovative products, continuously looking for opportunities to improve, and providing the best possible customer service.

6. Public Transportation:

Transportation in the Town of Pawling is dominated by private automobiles. However, public transit opportunities are available, and in the case of the railroad, quiet convenient and centrally located.

A. Railroad:

The Metro-North Commuter Railroad, the second largest commuter railroad in the nation, serves Pawling along it's Harlem Line. Two stations are located within the Town. The Pawling Station is located in the heart of the Village, and is 63.7 miles from Grand Central Terminal. 211 commuter parking spaces are available. The commute to Grand Central takes approximately one and one-half hours.

The second station in Town is the unique Appalachian Trail Station located on Route 22, approximately 1/4 mile north of Hurds Corners. This station is located 65.9 miles from Grand Central Terminal, and provides a limited schedule for those wishing to make a connection with the AT.

B. Bus Service:

Operated by the Dutchess County Division of Mass Transit, the Dutchess County LOOP provides public transit bus service through two modes; fixed route service and demand response services such as Dial-a-Ride and Paratransit. The system operates 28 buses and 20 demand response vehicles.

Loop 11 serves Pawling, and runs between Poughkeepsie and Pawling with stops in Poughkeepsie at Smith & Weed Streets, Mill & Clover Streets, Main & Market Streets, in LaGrange at Route 55 & Route 21, and Route 55 & Route. 22 in Pawling, at the Pawling train station at Wingdale, Dover, Millbrook, DCC, and back to Poughkeepsie (HRPC Ross Pavilion).

In addition to the Loop bus system, residents of the Town can access several private bus lines including the Shortline/Coach USA, JRT Transportation, Leprechaun and Trailways.

C. Taxi Service:

A number of private taxi companies serve Pawling, with the Pawling railroad station providing a regular taxi location.

D. Bicycle Circulation:

No designated bike lanes have been established in Pawling, however the NYSDOT has designated Route 22 and Route 55 as Bicycle Routes, and as such, maintains wide shoulders.

E. Trails & Pedestrian Circulation:

Traditional pedestrian connections along paved sidewalks are uncommon in Town. However, pedestrian routes that parallel roadways and numerous trails are woven throughout the Town. Locations such as the Pawling Nature Reserve include an integrated network of trails over ten miles in length. But of course, the Appalachian Trail (AT) is the most significant trail in Town, as well as the eastern half of the United States. The AT runs more than 2,100 miles from Georgia to Maine, and at 100 feet wide by 30 miles long, is the largest park in Dutchess County.

F. Airport Facilities:

No public airports are located in Pawling, however 5 public airports are located in Dutchess County; Airhaven (Hyde Park), Dutchess County Airport (Wappinger), Sky Acres (Union Vale), Sky park (Red Hook) and Stormville (East Fishkill). These airports serve private general aviation aircraft.

Stewart International Airport, located in Orange County is a regional airport providing regularly scheduled commercial passenger flights. In 2007, the Port Authority of New York and New Jersey took over operations of this airport.

Several private helipads are located on private land in the Town.

B. Transportation Vision Statement:

Create more choices for travel to and through Town, and create a transportation system that works in tandem with the existing land use pattern to preserve the network of rural roads while simultaneously facilitating rapid and un-encumbered travel along the Town's major roadways.

Chapter 10

Municipal Services & Infrastructure

MUNICIPAL SERVICES & INFRASTRUCTURE

A. Existing Conditions:

Municipal Services:

1. Town Government

Formed in 1788, the Town of Pawling has operated under a council-manager form of government since 1878. The Town Supervisor is the chief administrative officer of the town, responsible for carrying out the directives of the Town Board. The Deputy Supervisor monitors the town's fiscal condition and enforces its ordinances and laws. The Town Board is the legislative body consisting of the Town Supervisor who serves as the presiding officer, and four other elected Board members. The Town's 2009 operating budget is approximately $7,000,000.

Town Hall, located at 160 Charles Colman Boulevard is a 9,680 square foot, two-story building which houses the main Town Board meeting room, and all Town Departments; including:

- Assessor
- Building Department
- Constables
- Dog Control
- Justice Court
- Planning
- Zoning
- Supervisor
- Town Board
- Tax Collector
- Town Clerk

The Town of Pawling was formed in 1788

2. Police

Police protection in the Town of Pawling is provided by the Dutchess County Sheriffs Office, headquartered in Poughkeepsie. The Department employs 150 Deputy Sheriffs, and a total staff of over 400, headed by Sheriff Adrian "Butch" Anderson. The Department maintains a support facility on Memorial Avenue. The Department patrols the Town 24 hours a day, 7 days a week.

The Department is composed of 8 divisions:

- Criminal Division
- Crash Investigation Unit
- Detective Division
- Emergency Services Unit
- Law Enforcement Technology
- Uniform Patrol Division
- School Resource Offices & Crime Prevention Unit
- Special Units
    - ATV Patrol
    - Bicycle Patrol
    - K-9 Unit
    - Homeland Security
    - Marine Patrol
    - Motorcycle Patrol
    - Traffic Safety Unit
    - Training Unit
    - Zone XIV Academy

Additionally, the Sheriff Offices Division of Corrections operates the Dutchess County Jail in Poughkeepsie.

The New York State Police, as well as the Metro-North Police also have a presence in Town, and routinely coordinate with the Sheriffs office.

3. Fire

Fire protection in Town is provided by the Pawling Volunteer Fire Department. Approximately 100 volunteer firefighters are assigned to the Department's 3 fire stations. Table 10-1 summarizes the Departments personal and equipment.

TABLE 10-1 Pawling Fire Department Personnel & Equipment		
Facility/Location	**Personnel**	**Apparatus**
Station No. 1 (Main Fire Station) South Street, Village of Pawling	**70 Firefighters**	▪ **Chief Vehicle** ▪ **Northern Dutchess Para-medics Ambulance** ▪ **54-11 Attack Engine** ▪ **54-14 Source Pumper** ▪ **54-31 Tanker** ▪ **54-51 Heavy Rescue** ▪ **54-61 Brush Truck** ▪ **54-67 Fire Police Van**
Station No. 2 (Holmes Fire Station) Route 292, Hamlet of Holmes	35 Firefighters	▪ 54-15 Engine Rescue ▪ 54-32 Tanker
Station No. 3 (Mizzentop Station) Quaker Hill Road	10 Firefighters	▪ 54-13 Attach Engine ▪ 54-63 Brush Truck

4. **Health Care**

No medical facilities are located in the Town of Pawling. The closest facilities are Saint Francis Hospital and Vassar Brothers Medical Center in Poughkeepsie, the Putnam Hospital Center located in Carmel, and Danbury Hospital and New Milford Hospital's in Connecticut.

Ambulance service is provided via a contract with TransCare. One ambulance is provided 24/7. If additional ambulances are required, they are provided from neighboring Beekman or if a backfill unit is available, it will respond from Wappingers Falls.

5. **Community Resource Center**

Established several decades ago in the basement of Town Hall by the community's six churches, the Community Resource Center serves families and individuals in crisis situations. It is currently located in the Carriage House on the historic John Kane property on Route 22. The Center advances the churches social ministry, aids people in need and provides a wide range of free referral services.

6. **Schools**

The Pawling Central School District serves the residents of the Town. The District supports 3 schools that serve 1,428 students

TABLE 10-2 Pawling Central School District			
School/Location	**Grades Served**	**Enrollment**	**Students/ Teacher**
Pawling Elementary School 7 Haight Street	K—4	552	10
Pawling Middle School 30 Wagner Road	5—8	424	10
Pawling High School 80 Wagner Road	9—12	452	13

in grades K through 12 (Table 10-2).

The 2009—2010 budget is $33,770,143, resulting in a full value tax rate of $43.81 per $1,000 of assessed value. The District spends $18,480 per pupil in current expenditures. 63% is spent on instruction, 36% on support services and 2% on other expenditures. The District as a whole has 11 students for every full time equivalent teacher. By comparison, the New York State average is 14 students per teacher.

During the 2009—2010 school year, the Pawling Central School District will spend $18,480 to educate each student.

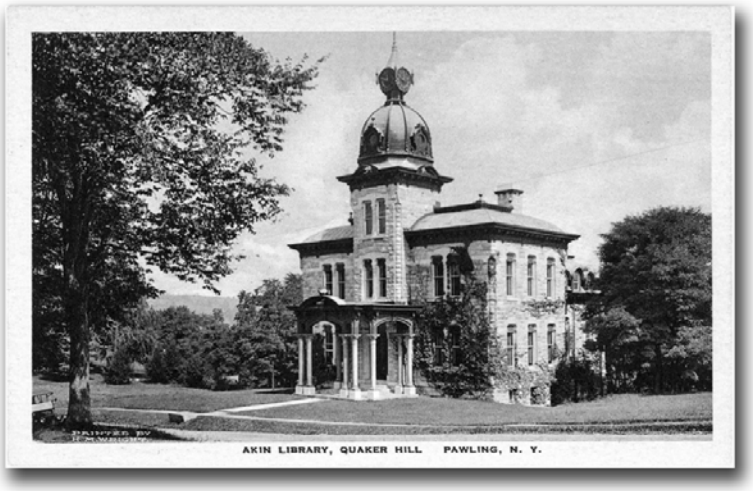
The grade 9—12 drop-out rate was 2% last year, compared to the national rate of 3.9%. 22% of the students have an IEP (Individualized Education Program), which is a plan for students in need of special services. 3% of the District's students are English language Learners (ELL) or students that are in the process of acquiring and learning English language skills.

7. **Library**

The Pawling Free library was founded in 1928, when it was located on the second floor of the Pawling Firehouse. Today, Pawling Free Library which is part of the mid Hudson library system occupies two buildings: its main building was renovated in 2002; most recently, the Library acquired the "Yellow House" next door, and currently uses this building for children's programs and meetings

The Akin Free Library on Quaker Hill is a historic eclectic late Victorian stone building located in the hamlet of Quaker Hill. The building is listed in the National Register of Historic Places as a historic place of local significance since 1991.

The Akin Free Library was a gift from the Quaker Albert J. Akin (1803-1903), founder of the Bank of Pawling and the Mizzentop Hotel on Quaker Hill. The building was designed by the architect John A. Wood and constructed in the years 1898 until 1908.



The Akin Free Library, built between 1898 and 1908, was a gift from the Quaker Albert J. Akin , and has been listed on the National Register of Historic Places as a historic place of local significance since 1991.

The library itself is located on the first floor of the building. Among others, its holdings of several thousand books contain books of local interest and by local authors, a children's section, and newspaper collections.

The Historical Society Museum occupies the second floor of the building. Its collections include objects pertaining to the local history such as period and Quaker clothing, tools and artwork, bowling pins from the Mizzentop Hotel, and the service window from the old Quaker Hill Post Office. The lower floor of the building houses the Olive Gunnison Natural History Museum, which displays about 200 mounted birds, rocks and minerals, as well as a shrunken human head.

Infrastructure

1. **Water Supply**

   The water resources relied upon in the Town for domestic water supply and commercial uses consist almost exclusively of groundwater. Water is withdrawn from private wells in much of the Town and from centralized community water system wells in several areas of the community. The Village of Pawling water supply provides water to most of the Village and some

adjoining areas of the Town. The Village's water supply is derived from groundwater wells and a surface water reservoir. The community water systems include:

- Cedar Valley
- Deerfield Ponds
- Harmony Farms (Highlands)
- Whaley Lake
- Castagna Project area
- Willow Lake
- Shorehaven
- Pawling Water District #1 (shared with the Village)

The last three systems are operated publically.

Water consumption is estimated by taking the difference between water extracted and wastewater effectively returned to either groundwater or streams. These "point of use losses" occur during domestic processes (washing, cooking, watering lawns or gardens, washing vehicles, etc), or commercial/industrial processes that result in evaporative transmission to the atmosphere.

In 2000, the Town and Village consumed approximately 400,000 gallons of water daily during the summer months.

Residential water consumption is calculated to peak at approximately 20 gallons per day per capita (gpd/capita) during the summer months, based on the difference between anticipated water delivery flows of 100 gpd/capita and projected wastewater returns of 80 gpd/capita. Additionally, septic field evapotranspiration losses also occur in addition to the "point of use" losses described above. Water evapotranspiration rates from septic system leaching fields may reach 5-% of the total wastewater discharged during the peak summer period[1]. Therefore, as much as 40 gpd/capita of the 80 gpd/capita of the wastewater discharged can be lost to the atmosphere, rather than returning to the groundwater.

The Chazen Company has estimated that in 2000, during the summer months, approximately 400,000 gallons of water were consumed daily in the Town and Village of Pawling. That figure has increased steadily since.

(1) The Chazen Companies, Town and Village of Pawling Groundwater Resource Assessment, August, 2000.

2. **Sanitary Sewers**
Most properties in Town discharge sanitary wastes to on-site subsurface sanitary disposal systems, also known as septic systems. These systems allow for the controlled discharge of wastewater within acceptable limitations and conditions.

If the number of septic systems in an area becomes over concentrated, wastes can then significantly affect groundwater quality.

All septic systems must be designed in conformity with the requirements of the Dutchess County Sanitary Code, and must be approved by the Dutchess County Department of Health.

The Pawling Joint Sewer Commission oversees the municipal sewer system that serves the entire Village and two areas of the Town. This system is connected to the Pawling Wastewater Treatment Plant. The capacity of the Plant is currently 280,000 gallons per day (gpd). The Village and Town have jointly sought funding through the American Recovery & Reinvestment Act to channel economic stimulus dollars to upgrade the plant and associated infrastructure to 500,000 gpd. The ability to expand the Sewage Treatment Plant to accommodate appropriately scaled additional development along the Route 22 corridor is vitally important to the future of the Town.

3. **Electric, Natural Gas, Telecom**
New York Electric & Gas (NYSEG) operates the power grid that is responsible for delivering electricity to homes and businesses in Pawling. In an effort to foster competition and to reduce costs of electrical usage, federal deregulation of the energy sector in the 1990's allowed for energy users to purchase energy from different suppliers. NYSEG offers a "supply choice" program to meet this goal.

NYSEG also provides a natural gas pipeline in the area. The Town has an existing franchise agreement with NYSEG, however, the Village has no such agreement in place, so NYSEG is unable to provide natural gas to the Town with a pipeline extension along Route 22, with a "gap" through the Village.

Telecommunications are provided by Verizon and cable TV service is provided by Comcast.

4. **Solid Waste Management**

Solid waster in the Town is collected by private carters, or a residence can purchase a transfer station sticker and bring solid waste and recyclables to the Transfer Station. Non-recyclable solid wastes are transferred to the Dutchess County Resource Recovery Agency's Waste-to-Energy Power Plant located on Sand Dock Road in Poughkeepsie, where it is incinerated.

Recyclables are handled at the Town of Pawling Transfer Station located at 124 River Road. This facility is open to Town residents on Monday, Thursday, Friday and Saturday from 6:00 am to 4:00 pm. A vehicle permit is required to utilize the Transfer Station.

Items that can be recycled at the facility include:

- Glass, bottles and jars
- Tin and aluminum
- Plastic bottles labeled with a 1 or 2 symbol
- Newspapers
- Corrugated cardboard
- Appliances and scrap metals
- Brush, small logs and yard waste
- Motor oil
- Tires
- Vehicle batteries
- Antifreeze

B. Municipal Services & Infrastructure Vision Statement

Pawling's municipal facilities and infrastructure protect the public safety and enhance the quality of life in the community. Careful attention to their adequacy, funding and improvement is required to meet the current and future needs of the Town. Ever opportunity should be explored to do this, while also limiting increases in costs.

Water, sewer, solid waste, electric, natural gas and telecommunications facilities are relied upon by residents and businesses for day-to-day activity and contribute to Town's economic well-being. Utilities should continue to be improved to meet Pawling's growing needs. At the same time, the Town should strive to limit any potential negative impacts from new infrastructure on the Town's natural environment, historic or scenic resources.

Economic Resources

ECONOMIC RESOURCES

A. Existing Conditions:

The Town of Pawling's economy is directly and inextricably linked to that of the Village. The Village's downtown central business district provides the traditional economic core for the community, while the Route 22 corridor affords larger scale commercial opportunities and Holmes and the Whaley Lake area have large but limited commercial development potential. Together, these distinctly different, yet wholly complimentary areas establish the foundation upon which a vibrant and sustainable economy can be constructed, providing job opportunities and contributes to a stable and fair tax base.

Over 71% of the Town's population (age 16 and older) is in the labor force, and 96% are employed while 4.0% are unemployed. This figure reflects the results of the 2000 census, and does not reflect the effects of the current economic situation.

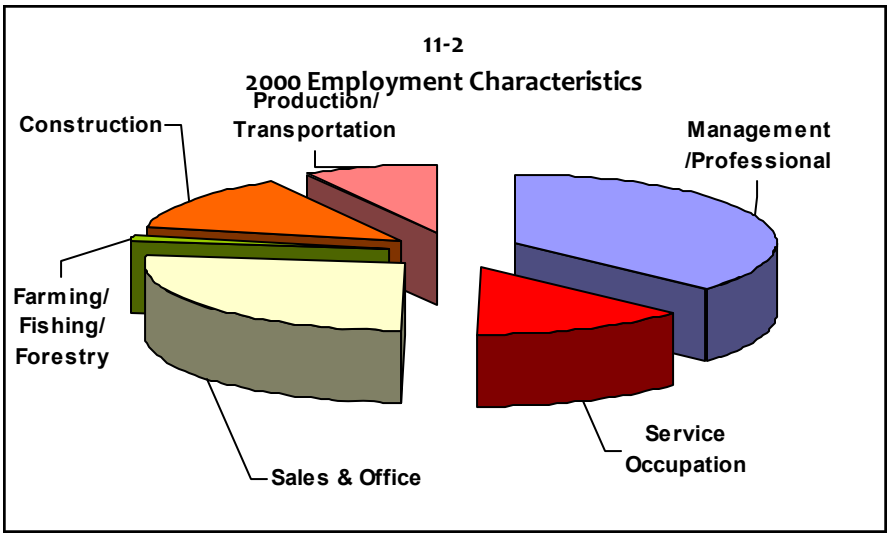
As presented in Table 11-1 and Chart 11-2,the majority of the Town's work force is employed in white collar professions; 37% in "management, professional and related occupations" and 26.7% in "sales and office occupations."

The 2000 census revealed that the Town's unemployment rate was 4.0%

TABLE 11-1
2000 GENERA L EMPLOYMENT CHARACTERISTICS

Occupation		
	Number	***Percent***
Management, professional and related occupations	990	37.0
Service occupations	356	13.3
Sales and office occupations	715	26.7
Farming, fishing and forestry occupations	37	1.4
Construction, extraction and maintenance occupations	353	13.1
Production, transportation and materials moving occupations	226	8.4
Total	***2,677***	***100***

Source: US Census



The 2000 Census further broke down occupations into industry sectors. Table 11-3 displays this data. As can be seen, the largest percentage of the Town's workers (20.8%) are specifically employed in the "educational, health and social services" field, followed by "professional, scientific, management, etc" (14.4%), "construction" (12%), and retail trade (11.5%)

The largest group (20.8%) of the Town's workers are employed in the "educational, health and social services field.

TABLE 11-3
2000 EMPLOYMENT CHARACTERISTICS

	Number	*Percent*
Agriculture, forestry, fishing & hunting	65	2.6
Construction	297	12.0
Manufacturing	224	9.0
Wholesale trade	82	3.3
Retail trade	286	11.5
Transportation and warehousing and utilities information	155	6.2
Finance, insurance, real estate and rental and leasing	138	5.7
Professional, scientific, management, administrative and waste management services	358	14.4
Educational, health and social services	518	20.8
Arts, entertainment, recreation, accommodation ad food services	96	3.8
Other services (except public administration)	133	5.3
Public administrator	130	5.2
Total	**2,482**	***100***

Economic Resources

The data presented in Table 11-3 was collected from the 2000 US Census, and reflects Pawling residents employment characteristics. Many residents do not work in Pawling, so the information in Table 11-3 is not indicative of Pawling's business characteristics. This information is intended to be a general outline, constantly evolving, and will include both Village and Town data.

Table 11-4 presents actual data collected from individual businesses in Pawling by InfoUSA. This data was collected from various sources including telephone directories, Chamber of Commerce lists, public information available from the state, annual reports, newspapers, federal business filings, business registrations, etc.

By far, most of Pawling's workers are employed in service businesses. 1,122 workers are employed in this sector.

Service Businesses— By far, most of Pawling's workers are employed in service businesses. 1,122 workers are employed in this sector. This figure is more than twice that of the next largest sector (Retail). 129 service establishments are located in Pawling, accounting for annual sales of $205,948,000.

The service sector is defined as businesses primarily engaged in activities such as repair and maintenance of equipment and machinery, personal and laundry services, and religious, grant making, civic, professional, and similar organizations. Establishments providing death care services, pet care services, photo-finishing services, temporary parking services, and dating services are also included. These are establishments classified in North American Industry Classification System (NAICS) Sector 81: Other Services (Except Public Administration).

Within the Service Business sector in Pawling, the largest number of workers are employed in Business Services (283 employees), followed by Amusement & Recreation Services (170 employees), Automotive Repair & Services (133 employees), and Legal Services (120 employees). The remaining 12 service business categories employ a total of 422 individuals.

Retail Trade—Employing 548 workers, the retail trade sector is the second largest employment category in Pawling. These workers are employed in 66 establishments accounting for $102,022,000 in annual sales.

The Retail Trade sector (NAICS sector Division G—Group 52—59) includes establishments engaged in selling merchandise

Economic Resources

Pawling's wholesale trade business category accounted for the largest dollar amount of sales in 2009— $252,476,00

Table 11-4 2009 Pawling Town & Village Business Summary			
Type of Business	No.	Employees	Sales
Agriculture, Forestry & Fishing	**16**	**67**	**11,363,000**
Agricultural Production Crops	3	6	290,000
Agri-Production Livestock & Animal Specialties	1	3	492,000
Agricultural Services	12	58	10,581,000
Forestry	0	0	0
Fishing Hunting & Trapping	0	0	0
Mining	**1**	**9**	**909,000**
Construction	**36**	**169**	**32,909,000**
Building Construction General Contractors	12	59	10,201,000
Heavy Construction	1	6	1,932,000
Construction Special Trade Contractors	23	104	20,776,000
Manufacturing	**8**	**40**	**4,734,000**
Transportation, Communications, Electric, Gas, Sanitary	**15**	**44**	**10,772,000**
Wholesale Trade	**16**	**314**	**252,476,000**
Retail	**66**	**548**	**102,022,000**
Building Materials, Hardware, Garden Supply	4	81	13,332,000
General Merchandise	0	0	0
Food Stores	4	18	9,241,000
Automotive Dealers & Gasoline Service Stations	8	37	9,737,000
Apparel & Accessory Stores	3	9	1,290,000
Home Furniture, Furnishings & Equipment	6	63	2,856,000
Eating & Drinking Places	17	244	48,904,000
Miscellaneous Retail	24	96	16,662,000
Insurance & Real Estate	**23**	**286**	**61,341,000**
Services	**129**	**1,122**	**205,948,000**
Hotels, Rooming Houses, Camps, Other Lodging	1	3	453,000
Personal Services	12	57	7,952,000
Business Services	13	283	6,500,000
Automotive Repair, Services, Parking	6	133	76,428,000
Miscellaneous Repair Services	2	24	1,440,000
Motion Picture	0	0	0
Amusement & Recreation Services	11	170	3,452,000
Health Services	22	82	5,490,000
Legal Services	8	120	15,373,000
Educational Services	9	46	4,285,000
Social Services	11	37	4,928,000
Museums, Art Galleries, Botanical & Zoological	2	5	821,000
Membership Organizations	21	106	23,516,000
Engineering, Accounting, Research, Management, And Related Services	10	59	55,310,000
Miscellaneous Services	1	3	0
Public Administration	**15**	**264**	**6,284,000**
Non-Classified Establishments	**8**	**61**	**10,745,000**
Total:	**333**	**2,924**	**699,503,000**

for personal or household consumption and rendering services incidental to the sale of the goods. In general, retail establishments are classified by kind of business according to the principal lines of commodities sold (groceries, hardware, etc.), or the usual trade designation (drug store, cigar store, etc.). Some of the important characteristics of retail trade establishments are: the establishment is usually a place of business and is engaged in activities to attract the general public to buy; the establishment buys or receives merchandise as well as sells; the establishment may process its products, but such processing is incidental or subordinate to selling; the establishment is considered as retail in the trade; and the establishment sells to customers for personal or household use. Not all of these characteristics need be present and some are modified by trade practice

The majority of Pawling's retail workers are employed at eating and drinking places—
244 employees.

By far most of Pawling's retail workers are employed at Eating & Drinking Places (244 employees). The next largest category in terms of employees is Miscellaneous Retail (96 employees) and Building Materials, Hardware, Garden Supply (81 employees). The remaining 5 retail categories combine to employee 127 workers.

Wholesale Trade - While the Wholesale Trade sector accounts for the third largest number of workers (314 employees in 16 establishments) of Pawling's economy, it accounts for the largest amount of annual sales ($252,476,000).

The Wholesale Trade sector (NAICS Division F, Group 50-51) comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. This sector includes: merchant wholesalers who buy and take title to the goods they sell, manufacturers sales branches and offices who sell products manufactured domestically by their own company, and agents and brokers who collect a commission or fee for arranging the sale of merchandise owned by others.

Insurance & Real Estate - 286 employees work in the 23 businesses involved in the insurance and real estate industries in Pawling. These businesses account for $61,341,000 annually.

This sector includes agents and brokers dealing in insurance, and also organizations offering services to insurance companies and to policy holders. Also included in this group are real

estate operators, and owners and lessors of real property, as well as buyers, sellers, developers, agents.

Public Administration - 264 employees work in Public Administration in Pawling. Public administration operations account for $6,284,000 in annual "sales."

This category includes the executive, legislative, judicial, administrative and regulatory activities of Federal, State, local, and international governments. Government-owned and operated business establishments are classified in Major Groups 01-89 according to the activity in which they are engaged. Private establishments primarily engaged in the same activities as government establishments in Public Administration are classified in Major Groups 01-89 according to the activity in which they are engaged.

Construction - The construction industry employees the sixth largest number of workers in Pawling (169 employees in 36 establishments). The construction industry accounts for $32,909,000 in annual sales.

The Construction sector comprises establishments primarily engaged in the construction of buildings and other structures, heavy construction (except buildings), additions, alterations, reconstruction, installation, and maintenance and repairs. Establishments engaged in demolition or wrecking of buildings and other structures, clearing of building sites, and sale of materials from demolished structures are also included. This sector also includes those establishments engaged in blasting, test drilling, landfill, leveling, earthmoving, excavating, land drainage, and other land preparation. The industries within this sector have been defined on the basis of their unique production processes. As with all industries, the production processes are distinguished by their use of specialized human resources and specialized physical capital. Construction activities are generally administered or managed at a relatively fixed place of business, but the actual construction work is performed at one or more different project sites.

104 employees work for the 23 Construction Special Trade Contractors in Pawling, 59 work for the 12 Building Construction General Contractors and 6 work for the 1 heavy Construction firm in Pawling.

Agriculture, Forestry & Fishing -This sector employees 67 workers at 16 establishments, and accounts for $11,363,000 in annual sales.

This division includes establishments primarily engaged in agricultural production, forestry, commercial fishing, hunting and trapping, and related services.

The classification of agricultural production covers establishments (e.g., farms, ranches, dairies, greenhouses, nurseries, orchards, hatcheries) primarily engaged in the production of crops, plants, vines, or trees (excluding forestry operations); and the keeping, grazing, or feeding of livestock for the sale of livestock or livestock products (including serums), for livestock increase, or for value increase. Livestock as used here includes cattle, sheep, goats, hogs, and poultry. Also included are animal specialties, such as horses, rabbits, bees, pets, fur-bearing animals in captivity, and fish in captivity. Agricultural production also includes establishments primarily engaged in the operation of sod farms, cranberry bogs, and poultry hatcheries; in the production of mushrooms, bulbs, flower and vegetable seeds; and in the growing of hydroponic crops.

Pawling's agricultural, forestry and fishing industry employs 67 workers and accounts for $11.363,000 in annual sales.

Farms are the establishment units generally utilized for the purpose of industrial classification of agricultural production. A farm may consist of a single tract of land or a number of separate tracts which may be held under different tenures.

The classification of forestry covers establishments primarily engaged in the operation of timber tracts, tree farms, or forest nurseries; in the gathering of forest products; or in performing forestry services.

The classification of fishing and hunting and trapping covers establishments primarily engaged in commercial fishing (including shellfish and marine products); in operating fish hatcheries and fish and game preserves; and in commercial hunting and trapping.

58 employees work in the Agricultural Services category. 6 work in Agricultural Production, while 3 employees work in Agri-Production Livestock & Animal Specialties. No workers are employed in forestry or fishing in Pawling.

Non-Classified Establishments **-** 61 workers in 8 businesses work in fields not classified by the NAICS. These businesses tend to be very specific niche businesses. These establishments accounted for $10,745,000 in annual sales.

Transportation, Communications, Electric, Gas, Sanitary - This sector employs 44 workers in 15 businesses accounting for $10,772,000 in annual sales.

This division includes establishments providing, to the general public or to other business enterprises, passenger and freight transportation, communications services, or electricity, gas, steam, water or sanitary services, and all establishments of the United States Postal Service. the establishments in this division have activities, workers, and physical facilities distributed over an extensive geographic area. For this division, the establishment is represented by a relatively permanent office, shop, station, terminal, or warehouse, etc. that is either (1) directly responsible for supervising such activities or (2) the base from which personnel operate to carry out these activities.

Manufacturing - This sector employs 40 workers in 8 businesses accounting for $4,734,000 in annual sales.

Pawling's traditional manufacturing sector employs only 40 workers in 8 establishments accounting for $4,734,000 in annual sales

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction. Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing

Mining—The mining sector in Pawling employs 9 workers at one business accounting for $909,000 in annual sales.

The Mining sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.

Table 11-5 presents Pawling's businesses by annual revenue.

Pawling's business sector produces an annual revenue of nearly seven hundred million dollars.

Table 11-5
Pawling Businesses Annual Sales

Type of Business	Annual Sales
Wholesale Trade	$252,476,000
Service	$205,948,000
Retail	$102,022,000
Insurance & Real Estate	$61,341,000
Construction	$32,909,000
Agriculture, Forestry & Fishing	$11,363,000
Transportation, Communications, Electric, Gas, Sanitary	$10,772,000
Non-Classified Establishments	$10,745,000
Public Administration	$6,284,000
Manufacturing	$4,734,000
Mining	$909,000
Total	***$699,503,000***

Source: InfoUSA

In 1998, the Pawling Chamber of Commerce commenced a community-wide self examination process designed to focus attention on Pawling's economic development future. This process took the form of the 2001 Business Recruitment Strategy, produced by Garnet Consulting Services, Inc., and Cosgrove Development Services working under the auspices of a Steering Committee made up of community members.

The Business Recruitment Strategy developed a list of Pawling's strengths and weaknesses as a location for businesses. These are presented in Tale 11-6.

Table II-6 Pawling Business :Location Strengths & Weaknesses	*Strength*	*Weakness*
Access to Markets	▪ Good proximity to White Plains, Danbury, Poughkeepsie, southern Dutchess, upper Fairfield, lower Litchfield County. ▪ Secondary market includes Westchester County, New York City & Albany ▪ Gateway to Dutchess County. ▪ One of Two gateways to Berkshires.	▪ Taconic Parkway creates psychological east-west barrier. ▪ Population and disposable income not adequate to support many kinds of stores. ▪ Lack of critical mass to function as a destination area. ▪ Residents must travel to find most needed items.
Transportation	▪ Good major highways (Routes 22 & 55). ▪ Reasonable access (13 miles) to I-84. ▪ Stewart & Westchester airports within 45 minutes. ▪ Train service to NYC and White Plains. ▪ Good motor freight service available.	▪ Traffic congestion on Route 22 in Brewster. ▪ Limited, slow bus service from Poughkeepsie.
Labor Force	▪ Large laborshed. ▪ Broad range of skills in the region. ▪ Well-educated labor pool. ▪ Large blue collar labor pool. ▪ Commuting professional labor pool. ▪ Large number of underemployed within commuting distance.	▪ Local employers complain about current tight labor market and inability to find enough workers nearby. ▪ Lack of entry level workers.
Utilities	▪ 3 phase electric power. ▪ NYSEG power is somewhat less expensive than ConEd. ▪ Hudson Valley DataNet fiberoptic cables. ▪ Improved municipal water and sewer in some areas contiguous t the Village. ▪ DSL and Cable available in limited areas.	▪ No natural gas service. ▪ High NYSEG energy costs compared with Central Hudson. ▪ High water and sewer costs.
Available Sites & Buildings	▪ Some good quality sites could be developed. ▪ Available land and buildings are reasonably priced.	▪ Very little commercial land available for development. ▪ Nearly 4 million square feet of vacant space in County. ▪ Construction generally requires expensive site preparation and utility construction. ▪ Rte 22 corridor—most sensitive environmental area.

Business Climate	▪ Continued education required for all land use boards .	▪ Perceived no growth attitude of many residents.
State and Local Taxation	▪ Business property taxes are fair.	▪ Communities to the north have lower tax rates. ▪ Increasing tax burden felt by those who have lived here a long time and are oin fixed incomes, but not by others moving here from more costly areas.
Availability of Support Services and Sub-Contractors	▪ Good range within a reasonable distance.	
Capital Availability & Incentives	▪ New York State Empire Zone	
Public Services & Facilities	▪ Police & fire service adequate ▪ Four major hospitals within 30—40 minutes of Pawling. ▪ Dutchess County Water System in Holmes.	
Education	▪ K—12 Public schools. ▪ Good performance in Regents diplomas and Merit Scholarships. ▪ Dutchess County has five major colleges and universities within 40 minutes.	
Quality of Life Factors	▪ Low crime rate. ▪ Beautiful, quaint rural area and natural ambiance. ▪ Strong natural resources (Pawling Nature Preserve, Great Swamp, AT Whaley Lake). ▪ Reasonable access to cultural opportunities (1 hour 15 minutes to NYC). ▪ Strong recreational opportunities. ▪ Large number of community organizations and strong volunteerism. ▪ Town zoning intended to retain rural character.	▪ Limited availability of affordable houses. ▪ Small number of rental units. ▪ Loss of old retail establishments forcing long drives elsewhere.

Community Teamwork	▪ Chamber is seen as providing a critical bridge among various community sectors.	
Community Appearance	▪ Enhanced downtown area. ▪ Redevelopment on Route 22, more attractive.	▪ Gateways needs improvement. ▪ Lack of identity and attractive theme for Route 22.
Community Image	▪ Strong history of area.	

Source: Pawling Business Recruitment Strategy

Research conducted and adapted from the Business Recruitment Strategy 2001 source document revealed several major issues that are shaping Pawling's economy and will have important impacts on future economic development. They are repeated here:

1. The Route 22 corridor will continue to increase in desirability as a commercial location as the area's population grows and traffic on Route 22 increases.

2. Pawling provides opportunities for attracting office operations of a variety of types.

3. Tourism can be significantly increased as a component of Pawling's economy. This is particularly related to a decision to position the Village commercial area as a destination shopping area. There are other opportunities such as eco-tourism related to the Great Swamp, the Appalachian Trail and Whaley Lake, the creation of more and larger events, and the provision of tourist amenities such as overnight lodging .

4. Communications and public relations are necessary to inform the public of recent on-going improvements. An effective Pawling team will make it possible to implement a business recruitment strategy.

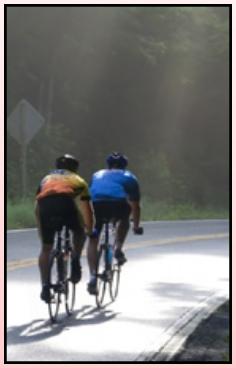
Economic Resources

B. Economic Resources Vision Statement

The Town should emphasize those types of economic development activities that capitalize upon but do not erode the Town's outstanding quality of life. Year-round, as well as week-end/second home resident and visitor sectors all combine to diversify that economic base of the community. Pawling should continue to pursue a diverse economic base by promoting office and industrial development, agriculture, tourism, retail development and entrepreneurial and small-business activity in the Village's Central Business District, as well as in appropriate locations in the Town. This will result in a robust tax base that will support the municipal services required for local residents. Economic development pursuits must be balanced with the conservation policies expressed in the other sections of this plan, particularly with regard to historic, open space and natural resources.

The Rte 22 corridor will continue to increase in desirability as a commercial location as the areas population grows and traffic on Rte 22 increases.

Chapter 12
Recreation Resources



The Town of Pawling supports 405.5 acres of parkland.

RECREATION RESOURCES

A. Existing Conditions:

1. Public Recreation Resources

A. Town of Pawling Park Facilities:

Prior to 2003, the Towns recreational facilities were relatively modest, consisting primarily of the 73 acre Murrow Park. In March of 2003, the Town acquired the Holiday Hills Conference Center, and created Lakeside Park. The acquisition of this property more than quadrupled the Town's park land, by adding a 292 acre property containing a 36 acre lake and 24 buildings, right next to Murrow Park.

Today the Town's parkland inventory consists of the following facilities:

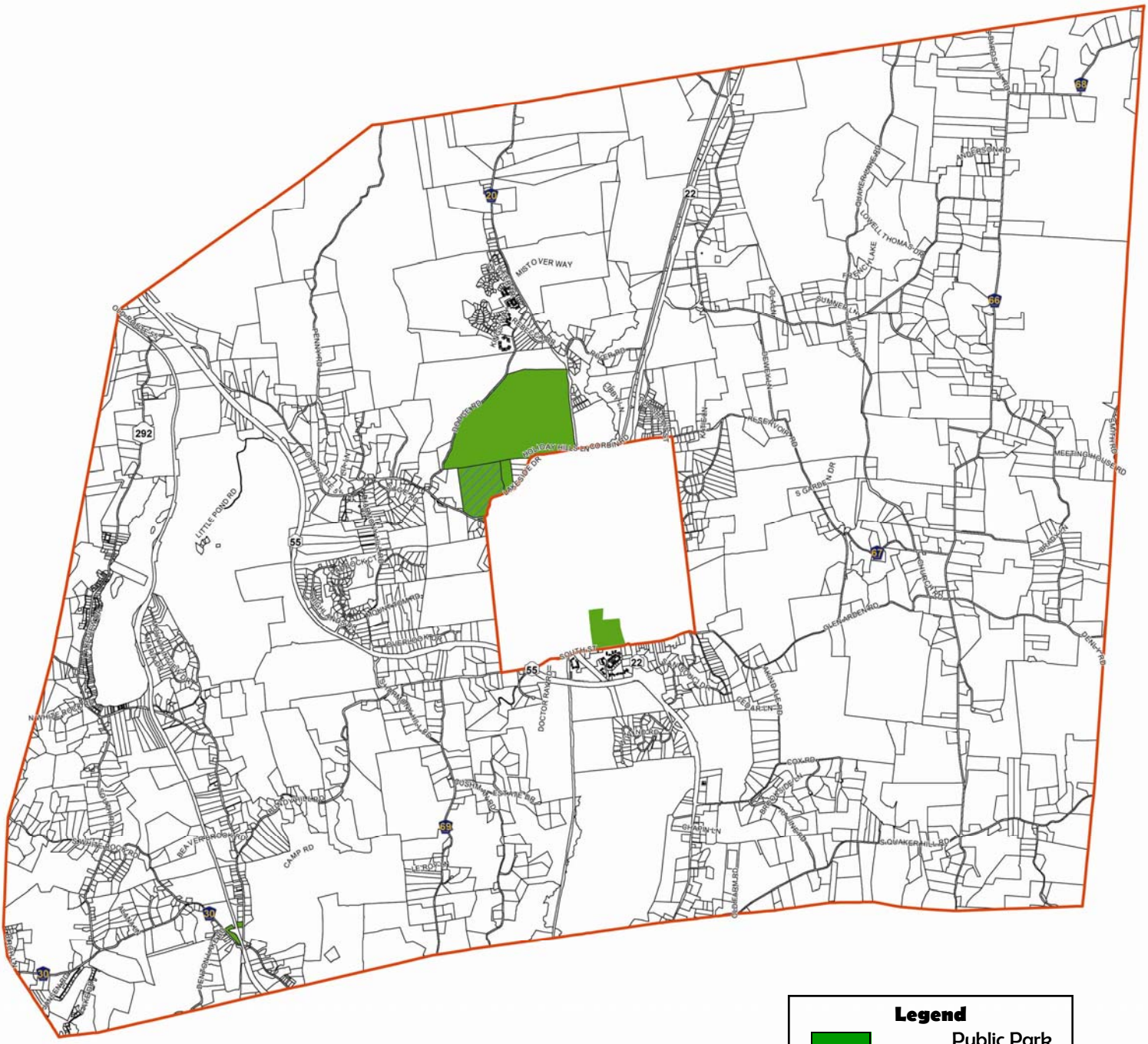
▪ Lakeside Park	292 acres
▪ Murrow Park	73.0 acres
▪ Lakeside Ballfields	10.5 acres
▪ Town Hall	0.6 acres
▪ Recreation Building	1.9 acres
▪ HWLCA Building	2.0 acres
▪ Holmes Pond Park	3.5 acres
▪ Dutcher Golf Course	32.5 acres
Total	***405.5 acres***

B. Town of Pawling Recreation Programs:

The Town of Pawling Recreation Department , which is located in the Lathrop Building at Lakeside Park, operates a number of youth, adult and senior programs throughout the year.

Youth Programs:

- Flag Football
- Multi-Sports Summer Camp
- After School Club for Middle Schoolers
- EXPLORE
- Pawling Green Mountain Lake Cross Country Camp
- Easter Egg Hunt
- Modern & Jazz Dance
- Basketball
- Tumbling Tots
- Snowboarding & Skiing



Base Mapping:
Dutchess County Department of Planning & Development

CLEARY CONSULTING

TOWN OF PAWLING 1788

Public Recreation Facilities

N W E S

0′ 4,000′

Figure #

12-1

- Karate
- Softball Pitching Clinic
- Theater for Kids Workshop

Teen Programs:
- After School Club
- Dodgeball Club
- Running Club
- Westling
- Fit Club
- Open Jam Night

Adult Programs:
- Co-Ed Volleyball
- Over 35 Basketball
- Zumba Class
- Pilates Plus
- Total Fitness
- Body Sculpting
- Defensive Driving

Senior Programs
- Senior Drop in Center
- Nutrition Site
- Senior Injury Prevention Exercise Program

Over 97% of all Americans participate in some form of outdoor recreation activity.

C. *Other Public Recreation Facilities*

Perhaps the most well know recreational facility located in the Town of Pawling is the Appalachian Trail (the AT), Americans first national scenic trail. The AT runs 2,175 miles from Springer Mountain in Georgia, to Mt Katahdin in Maine, running through 14 states along the way. Approximately 5.2 miles of the AT traverses the northern portion of the Town, covering 655 acres of land owned by the US National Park Service.

There are no State or County park lands in the Town of Pawling.

2. Private Recreation Resources

In addition to the public recreational facilities described above, a number of private recreational resources are present in Pawling.

The Quaker Hill County Club, which was founded by legendary radio commentator and adventurer Lowell Thomas in 1941, occupies 60 acres on Quaker Hill and includes a 9 hole course designed by famed golf course architect Robert Trent Jones, Sr.

The Whaley Lake Marina, located on Route 292 in Holmes is another private recreational facility, which provides recreational boating services on Whaley Lake, which is the only lake in Dutchess County permitting motor boats and personal water craft.

Several private camps are located in Town, including those owned by the Presbyterian Conference Association (155 acres), the Church of Jesus Christ of Latter Day Saints (9 acres) and the Girl Scouts (421 acres).

According to national standards, the Town requires between 33 and 55. 5 acres of parkland to support its population. 405.5 acres are present, far exceeding the National standard.

3. Comparison With National Recreation Standards

According to The *National Survey on Recreation and the Environment* (the 8th of the United States' on-going National Recreation Surveys, the first of which was done for the Outdoor Recreation Resources Review Commission in 1960), participation in recreational activity continues to steadily increase nation-wide. Over 97% of all Americans participate in some form of outdoor recreation activity. In order of participation level, the most popular form or recreational activity (i.e. with the greatest number of participants) is: walking as exercise, swimming, exercise with equipment, bicycles riding, golf, camping, bowling, hiking, fishing (freshwater), basketball and aerobic exercise. The most popular field sports are soccer, baseball, softball and football. More people are trying a greater variety of activities, and people are living longer, placing increased demands on recreational facilities.

Given these trends, and Pawling's unique and dramatically beautiful natural setting, adequately providing for the recreational needs of the Town's growing population will be a priority in the years to come.

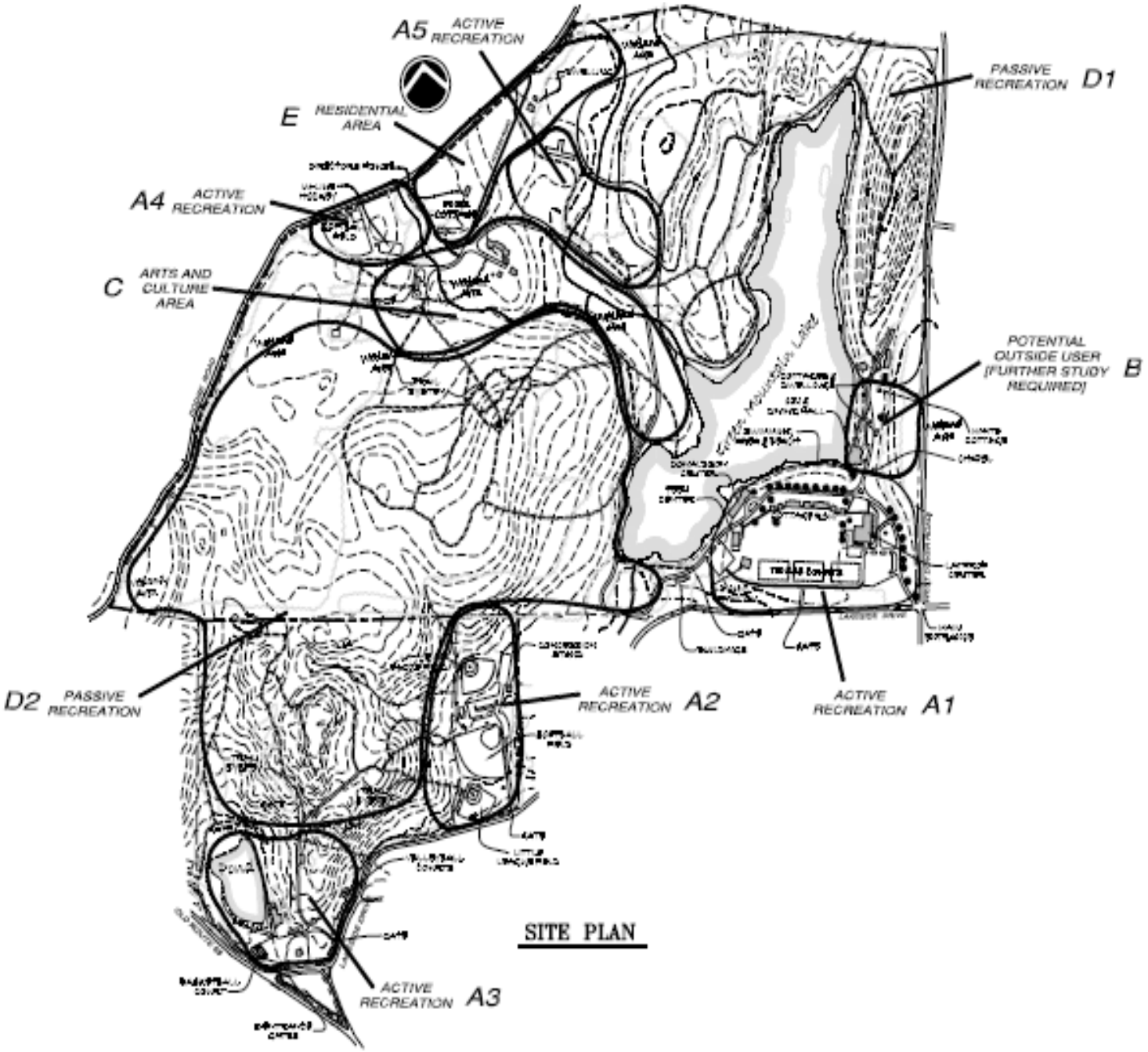
The National Recreation and Parks Association (NRPA) recommends that a municipality provide between 6.25 and 10.5 acres or parks for each 1,000 in population. The Town's 2000 population of 5,288 would require the provision of between 33 acres and 55.5 acres of parkland. The 405.5 acres of Town owned recreational parkland far exceeded the applicable national standard.

While the Town has abundant parkland resources, as more fully described below, adequate revenues to administer and maintain these parklands is a long term concern for the Town.

B. Parkland and Facilities Master Plan

In 2003, the Pawling Town Board created the Parkland Advisory Council to channel public input into the creation of a master plan for the Town's park facilities. The Town retained Zarecki & Associates to prepare the master plan, which became the Parkland and Facilities Master Plan, adopted May, 2009.

The Parkland and Facilities Master Plan included its own vision and goals, as follows:



Base Mapping:
Dutchess County Department of Planning & Development

CLEARY CONSULTING

TOWN OF PAWLING 1788

Parkland Facilities Master Plan

N W E S

0′ 4,000′

Figure #

12-2

Vision:
Parklands and facilities will be developed, maintained and operated to support recreational programs and municipal services so as to maximize the value they provide to the community. Funding for these public assets will be adequately supported to create a sustainable system that provides a long term benefit to the community.

Goals:

- *Provide flexible recreation space to allow for a broad range of active and passive uses.*
- *Provide community assembly spaces that can be used for formal and informal events.*
- *Ensure equitable and safe access to, within, and through parklands by road, path and trail.*
- *Recognize the importance of neighborhoods within the community.*
- *Recognize the importance of partnerships. Participate in partnerships with public agencies, non-profit organizations, volunteers and the public sector to achieve mutual goals.*
- *Coordinate with current initiatives, activities and programs at community schools, libraries and service organizations to avoid duplication and to ensure that a broad range of community needs are met.*
- *Pursue all appropriate activities and opportunities to ensure the fiscal health of public assets.*

The Parkland and Facilities Master Plan set forth a series of specific recommendations, many of which are incorporated herein.

C. Recreation Resources Vision Statement

The Town shall foster an interconnected network of public ad private recreational facilities and resources that helps to build a livable community that includes diverse opportunities for improving health and wellness. Pawling supports active lifestyles by providing safe, accessible parks, facilities and programs that encourage physical activity, mental challenges and social engagement. The Town recognizes the potential of parks, trails, recreation services and open space to improve the community's attractiveness as a place to live and work.

Chapter 13
Historic Resources

HISTORIC & CULTURAL RESOURCES

A. Existing Conditions:

1. Pawling History:

Pawling's historical legacy is rich and deep. And as opposed to some communities where history is reflected in musty buildings and sites, Pawling's historical legacy is reflected in its residents, whose presence placed the Town at the crossroads of history's crosscurrents. Of course, the physical presence of the Town's history is evident as well, from National Register historical sites, to a landscape that remains faithful to the historical character of the community.

Long before the European settlement of the area, the Mahikan Native Americans inhabitant the hills and valleys of Dutchess County. Little evidence of their presence remains in Pawling, with the exception of two burial grounds, and an old hunting trail that ran from the Housatonic River to the Hudson, know known as Route 55.

Henry Beekman was one of the first land owners in Pawling, receiving his land grant in 1697

[1] In 1683 the Province of New York created its first 12 counties. After the counties were established, they were further divided into estates. Henry Beekman, one of the first landowners in the area, received his first land grant in 1697. This parcel included the area known as the "Back Lots," today known as the Towns of Dover and Pawling.

The exact border between Connecticut ad New York was a matter of controversy for nearly 250 years (all land west of Hartford was part of New York) until the treaty of Dover was signed in 1731 deeding the "Horses Neck" to Connecticut and a parcel 1.8 miles wide by 60 miles long to New York. Since true title was now established, these parcels sold quickly. In 1743 these "oblong" parcels were annexed to the adjoining towns.

In 1755, Baptist settlers came to Whaley Pond. Elder Henry Cary was the first minister and served the religious needs of the western section of Pawling. During the War for Independence, he served on the "Committee of safety."

In 1768 the Quakers of the Oblong Friends Meeting abolished slav-

[1] Excerpted from a article written by Town Historian Robert P. Reilly in the Pawling Guidebook.

ery, almost 100 years before Abraham Lincoln's Emancipation Proclamation. They reasoned that, since God is in every person, they could not enslave God. They used a similar logic when they chose not to fight on either side during the American revolution and for women's rights.

George Washington spent three months in Pawling with his headquarters at the John Kane house. In September, 1778, a celebration was held on the anniversary of Burgoyne's defeat at Saratoga. This three day ox roast was attended by many prominent colonial generals and colonels.

On March 7, 1788, the New York State Legislature created the Township of Pawling.

The first railroad to enter Dutchess County was the New York and Harlem, which extended from Croton Falls into Pawling (then called Gorestown) in 1848. Albert Akin raided $100,000 for the project. Within 20 years ridership had increase so much that Pawling became a terminal station.

During the Civil War, many Pawling residents answered the call to arms. John Lorimore Worden was ordered to take control of the completion of John Ericson's new ship, the Monitor. The instant the turret of the Monitor swung around to fire upon the Merrimac, all other ships became obsolete.

The 1880's saw Pawling become a resort destination with the construction of the Mizzentop Hotel in 1881 and the Dutcher House in 1884.

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The 1880's saw Pawling become a resort destination with the construction of the Mizzentop Hotel in 1881 and the Dutcher House in 1884. Albert Akin who previously brought the railroad to Pawling in the 1840's raised $100,000 for the construction of the Mizzentop. John Bowdish Dutcher funded the construction of the building that still bears his name.

Industry discovered Pawling in the beginning of the 20th century. Not surprisingly, the industry formed near the railroad and used local resources—the dairies of the area. Sheffield Farms opened a pasteurization plant, and the Troco Nut Butter company opened, among others.

Well over 100 Pawling residents served during WW I. Considering that the Town's population was just under 2,000, that was a considerable number. Colonel Albert J. Akin became President Wilson's unofficial representative to Italy. The residents of Pawling raised over

$10,000 in Liberty Bonds.

Late in 1942, the Army Air Corps came to Pawling to form a cryptology school on the grounds of the Pawling School for Boys. Green Mountain Lake Farms became the officers quarters. In 1943 the sites became a convalescent hospital for recovering corpsmen.

Pawling's growth exploded in the in the 50's and 60's outstripping the county's growth almost three to one. This growth continues to this day. Pawling was the first town in Dutchess County to form a Planning Board in the 1930's and one of the first villages in the county to adopt a master plan in the early nineties.

Some of Pawling's notable residents include:

- Admiral John L. Worden—Commander of the Monitor
- Lew Wallace—creator of *Ben Hur*
- Thomas E. Dewey—governor of NY and twice ran for president of the US
- Edward R. Murrow—CBS television journalist
- Norman Vincent Peale—author of "The Power of Positive Thinking."
- Lowell Thomas—reporter, broadcaster and author

2. Historic Resources:

Three sites are listed on the State and Federal Register's of Historic Places in Pawling:

- **Akin Free Library (NR#91NK00094)**
  The Akin Free Library sits prominently atop Quaker Hill. Funded by Albert J. Akin, construction on the building began in 1898, and took ten years to complete. The library occupies the first floor, and contains many resource documents, rare volumes, genealogies of early families, as well as contemporary literature, books by local authors, newspaper collections and a children's section.

  The Historical Society maintains a museum on the second floor dedicated to Quaker Hill memorabilia. The lower floor houses the Olive Gunnison Natural History Museum.

- **The Oblong Meeting House (NR#90NR00309)**
  According to tradition, the first settler on Quaker Hill was Nathan Birdsall, a surveyor, who moved with his family in 1728. Birdsall was a Quaker, and it was not long before others of his faith followed. By 1742 the population had grown sufficiently to warrant the construction of a meeting house, which was located just south of the present site. In 1764, the early structure was replaced by the present larger building.

  During the winter of 1778 –1779 the building was commandeered by General Washington's officers for use as a military hospital. Several Revolutionary soldiers are buried across the road near the site of the original meeting house.

  The Oblong Meeting house has remained virtually unchanged for the past two hundred years.

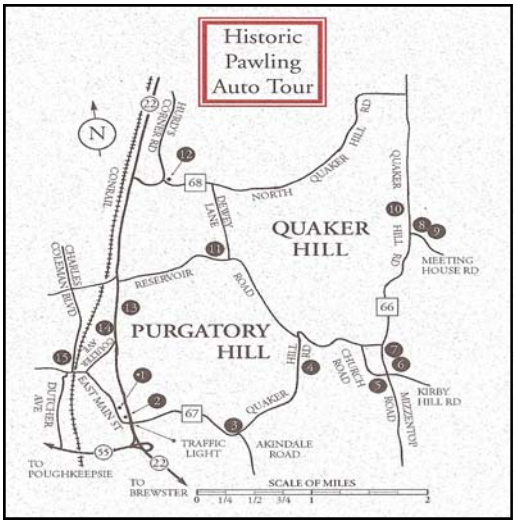
- **The John Kane House (NR#90NR00448)**
  In 1752 John Kane left his native Ireland to make his fortune in the new world. Four year later he married Sybil Kent and moved into the home that still bears his name, living there for 20 years.

  During the revolution, Kane's sympathies first seem to have been with the colonies, but later changed sides and moved into the British lines with two sons. His wife and other children remained at the home, during which time general George Washington used the house for his headquarters from September to November 1778.

  The building was acquired in 1982 by the Historical Society of Quaker Hill and Pawling.

In addition to the three State and Federal Register sites, The Historical Society of Quaker Hill and Pawling have created a Historic Pawling Auto Tour

Figure 13-1



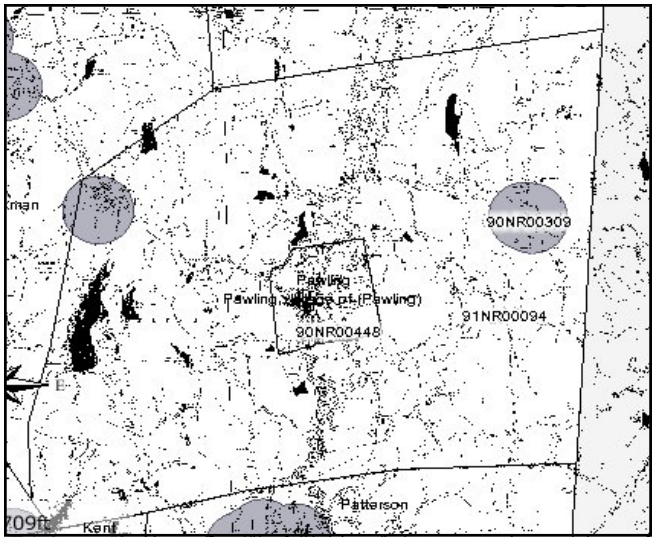
The tour includes the following sites:

1. The John Kane House
2. Revolutionary War Historical Marker
3. Purgatory Hill
4. Oblong Marker and Early Cemetery
5. Mizzentop Hotel Marker
6. Akin Free Library
7. Original Site of Akin Hall
8. Graves of Revolutionary War Soldiers
9. The Oblong Meeting House
10. Quaker Cemetery
11. Home of Governor Thomas E. Dewey
12. Hurd's Corner
13. Trinity-Pawling School
14. Pawling Rural Cemetery
15. The Dutcher House

3. Archeologically Significant Areas

According to the New York State Historic Preservation Office, two archaeologically sensitive areas are located in Pawling (Figure 13-2)

Figure 13-2



Archaeologically sensitive areas are designated when a site of some archaeological significance is discovered, and represent the site itself, and a surrounding buffer zone of approximately one-half to one mile in radius. Significant areas are designated for innumerable reasons related to the preservation of history and culture in a region, but all are similarly valued for the non-renewable nature of the site itself and its associated materials. The New York State Historic Preservation Office holds confidential detailed descriptions and lo-

cations of archaeologically significant sites. Future development in these areas requires a Phase I Archaeological Survey.

B. Historic Resources Vision Statement

Preserving the Town's heritage, while simultaneously addressing current and future needs, represents one of the most significant challenges facing the Town today. Maintaining the Town's historic and cultural identity in all decisions must be accomplished.

IMPLEMENTATION

Pursuant to §272a of New York State Town Law, the Town Board is the agency responsible for the adoption of the Comprehensive Plan. As such, the Town Board must address a number of procedural requirements before the Comprehensive Plan can become the officially adopted blueprint for the future of the community. This chapter provides an abbreviated outline of the steps that must be followed to adopt the draft Comprehensive Plan, and ultimately the implementation of the Plan's stated goals and policies. In total, the Comprehensive Plan includes 301 specific policies, each of which represents a zoning amendment, regulatory change, local law, new standard or procedural change that must be put in place in order to properly implement the Plan.

This process includes the following steps:

1. January 5, 2010, transmittal of the completed draft Comprehensive Plan to the Town Board by the Comprehensive Plan Steering Committee (CPSC).

2. Release of the draft Comprehensive Plan to the public for review. The Plan will be available electronically on the Town's website, and hard copies will be available for public review in Town Hall and the libraries.

3. Pursuant to the requirements of § 272a, a public hearing must be held. It is a recommendation of the CPSC that a series of public hearings be scheduled, in different geographic sections of the Town, in order to solicit the widest possible public comment. As the adoption of the Comprehensive Plan is a Townwide action, all residents will be notified of the hearings via various methods. The dates and locations of the public hearings will be established by the Town Board.

4. The adoption of the Comprehensive Plan is designated as a Type I action pursuant to SEQRA. The Town Board must undertake the required SEQRA environmental review in accordance with 6NYCRR Part 617. This environmental review requires that a number of procedural steps be addressed; including:

   - Establish the Town Board "Lead Agency" and distribution to other "Involved Agencies."

- The CPSC recommends that a Generic Environmental Impact Statement (GEIS) be prepared to evaluate the potential impacts of adopting the Comprehensive Plan.

- A public hearing is required for the Draft GEIS. This public hearing can be held concurrently with the public hearings on the Comprehensive Plan.

- The Final GEIS provides detailed responses to all comments received concerning the DGEIS.

- The Town Board as Lead Agency is responsible for adopting SEQRA "Findings" which would then conclude the SEQRA review process, prior to the adoption of the Comprehensive Plan.

5. The Comprehensive Plan process requires statutory referrals to the Town Planning Board and the Dutchess County Planning Department.

6. Upon conclusion of the SEQRA, public hearing and statutory review process, the Town Board can adopt the Comprehensive Plan, along with any amendments that the Town Board may deem appropriate.

7. Upon adoption, the Comprehensive Plan is filed in the Office of the Town Clerk.

8. Effect of adoption – all public and private projects in the Town must conform to the intent of the Comprehensive Plan.

9. Implementing each of the 301 policies of the Comprehensive Plan is required once the Plan is adopted. The CPSC recommends that an Implementation Committee be formed to guide the implementation process through to fruition. This Committee would oversee and prioritize the work of crafting the new laws and regulations to assure that the laws of the Town of Pawling are brought into conformance with the vision set forth in the Comprehensive Plan.

10. The Comprehensive Plan is not intended as "static" document, to be placed on a shelf and forgotten once adopted. Rather, the Plan is designed to be a "living" document that should be regularly reviewed and updated. It is unrealistic to

believe that the Plan as adopted anticipated every conceivable issue and opportunity that may arise in the years ahead. Therefore, periodic reviews of the Plan are recommended at regular intervals (approximately every two-years – with more extensive reviews and updates at five-year intervals). This will assure that the Plan remains current, and adequately meets the needs of the community.

GLOSSARY

Agricultural District

Article 25-AA of the Agriculture and Markets Law authorizes the creation of local agricultural districts. The purpose of agricultural districting is to encourage the continued use of farmland for agricultural production. The Program is based on a combination of landowner incentives and protections, all of which are designed to forestall the conversion of farmland to non-agricultural uses. Included in these benefits are preferential real property tax treatment (agricultural assessment and special benefit assessment), and protections against overly restrictive local laws, government funded acquisition or construction projects, and private nuisance suits involving agricultural practices.

American's with Disabilities Act

The Americans with Disabilities Act (ADA) was signed into law in 1990. It applies to all private and state-run businesses, employment agencies and unions with more than fifteen employees. The goal of the ADA is to make sure that no qualified person with any kind of disability is turned down for a job or promotion, or refused entry to a public-access area.

Aquifer

An underground layer of water-bearing permeable rock unconsolidated materials (gravel, sand, silt or clay) from which groundwater can be usefully extracted using a water well.

Aquifer Recharge Area

A land area in which water reaches the zone of saturation from surface infiltration, e.g., where rainwater soaks through the earth to reach an aquifer.

Archaeologically Significant Area

A site of some archaeological significance and a surrounding buffer zone of approximately ½ - 1 mile in radius.

Austin Glen Formation & Manhattan Formation

Geologic formations that that create the characteristic ridge and valley nature of the Town.

Cluster Development

Pursuant to the authority of Section 278 of New York State Town Law, a cluster development is a subdivision of land, in which the existing zoning regulations are modified to allow for an alternate method for the layout, configuration and design of lots, buildings and structures, roads, utility lines and other infrastructure, parks, and landscaping in order to preserve the natural and scenic qualities of open land. The density yield of a cluster development is no greater than that allowable under the existing conventional zoning.

Comprehensive Plan

An official document adopted by the Town as a long-range policy guide for the physical development of the community.

Comprehensive Plan Steering Committee

Town of Pawling Comprehensive Plan Steering Committee (CPSC) created by the Town Board in the spring of 2008 to oversee the development of the Comprehensive Plan.

Conservation Easement

An easement specifically written to maintain or protect a natural resource.

Critical Environmental Area

Local agencies may designate specific geographic areas within their boundaries as "Critical Environmental Areas" (CEAs). To be designated as a CEA, an area must have an exceptional or unique character with respect to one or more of the following:

- *A benefit or threat to human health;*
- *A natural setting (e.g., fish and wildlife habitat, forest and vegetation, open space and areas of important aesthetic or scenic quality);*
- *Agricultural, social, cultural, historic, archaeological, recreational, or educational values; or*
- *An inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any change.*

Following designation, the potential impact of any Type I or Unlisted Action on the environmental characteristics of the CEA is a relevant area of environmental concern and must be evaluated in the determination of significance prepared pursuant to Section 617.7 of SEQR.

Density Yield

The maximum number of dwelling units allowable in a given zoning district, minus deductions for environmentally constrained and restricted lands.

Design Guidelines

Design guidelines supplement zoning regulations by establishing consistent design principles for residential and commercial areas that contribute to the creation of a neighborhood with a positive, cohesive sense of place, and can improve the overall character of the neighborhood by making it a more attractive, safe, and inviting place to live.

Development Moratorium

A local law or ordinance that suspends the right of property owners to obtain development approvals while the community takes time to consider, draft and adopt

land use plans or rules to respond to new or changing circumstances not adequately dealt with by its current laws. A moratorium is sometimes used by a community just prior to adopting its comprehensive plan and zoning code.

Dwelling Unit

A building designed or used exclusively as living quarters for one or more families containing a minimum of 900 square feet of habitable floor area above grade; the term shall not be deemed to include an automobile court, motel, boarding or rooming house, mobile home trailer, tourist home or tent.

Family

One or more persons occupying a dwelling unit and living as a single housekeeping unit in a domestic bond.

Federal Emergency Management Agency

FEMA's is the federal agency whose mission is to support citizens and first responders to ensure that the nation works together to build, sustain, and improve the capability to prepare for, protect against, respond to, recover from, and mitigate all hazards. FEMA is responsible for designating floodplains in the Town.

Flag Lot

A lot with less frontage on a street than normally required, in which access to the main portion of the lot is provided via a narrow corridor.

Floodplain

The flat or nearly flat land adjacent to a stream or river that experiences occasional or periodic flooding. It includes the floodway, which consists of the stream channel and adjacent areas that carry flood flows, and the flood fringe, which are areas covered by the flood, but which do not experience a strong current.

Future Land Use Plan

Presents the anticipated future land use vision for the Town.

Glacial Till

The unsorted material deposited directly by glacial ice at the terminal moraine and showing no stratification.

Greenbelt

An approximately 7,000-acre area in the western part of Town including a number of significant environmental resources and sitting atop the Upland Aquifer Area.

Green Building

Green building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life cycle

from siting to design, construction, operation, maintenance, renovation and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort. Green building is also known as a sustainable or high performance building

Groundwater

Groundwater is water located beneath the ground surface in soil pore spaces and in the fractures of lithologic formations. A unit of rock or an unconsolidated deposit is called an aquifer when it can yield a usable quantity of water. The depth at which soil pore spaces or fractures and voids in rock become completely saturated with water is called the water table.

Habitat

An area where there is naturally occurring food and cover for wildlife.

Housing Affordability

A household's ability to pay no more than 30% of its annual income on housing.

Impact

The effect of any direct manmade actions or indirect repercussions of manmade actions on existing physical, social or economic conditions.

Infiltration Basin

An infiltration basin (also known as a recharge basin or in some areas, a sump), is a type of best management practices (BMP) that is used to manage stormwater runoff, prevent flooding and downstream erosion and improve water quality in an adjacent river, stream, lake or bay. It is essentially a shallow artificial pond that is designed to infiltrate stormwater though permeable soils into the groundwater aquifer. Infiltration basins do not discharge to a surface water body under most storm conditions, but are designed with overflow structures (pipes, weirs, etc.) that operate during flood conditions.

Infrastructure

Component of a function, orderly municipal fabric, such as roads, water systems, sewage systems, systems for storm drainage, telecommunications, energy transmission and distribution systems, bridges, transportation facilities, etc., developed to support the functioning of the community.

Integrated Pest Management

Integrated pest management (IPM) is a pest control strategy that uses a variety of complementary strategies including: mechanical devices, physical devices, genetic, biological, cultural management, and chemical management. These methods are done in three stages: prevention, observation, and intervention. It is an ecological approach with a main goal of significantly reducing or eliminating the use of pesticides while at the same

time managing pest populations at an acceptable level.

Inter-Municipal Agreement

A relationship based upon mutual understanding and trust that is entered into between two or more municipalities to facilitate the delivery of services.

Invasive Plants

An invasive plant has the ability to thrive and spread aggressively outside its natural range. A naturally aggressive plant may be especially invasive when it is introduced to a new habitat. An invasive species that colonizes a new area may gain an ecological edge since the insects, diseases, and foraging animals that naturally keep its growth in check in its native range are not present in its new habitat.

Kame Deposits

A kame is a geological feature, an irregularly shaped hill or mound composed of sand, gravel and till that accumulates in a depression on a retreating glacier, and is then deposited on the land surface with further melting of the glacier. Kames are often associated with kettles, and this is referred to as kame and kettle topography.

LOOP

Dutchess County bus service operated through Dutchess County Division of Mass Transit

MS4 Regulations

Under the 1987 Clean Water Act Amendments, the U.S. EPA developed new regulations to address storm water that might impact water quality. These new "Municipal Separate Storm Sewer System" (MS4) regulations were set up in two Phases dependent upon population and are enforced by the U.S. EPA, and more specifically in New York, through the Department of Environmental Conservation. Permits are required for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas and for construction activities disturbing one or more acres. To implement the law, the Department has developed two general permits, one for MS4s in urbanized areas and one for construction activities. The permits are part of the State Pollutant Discharge Elimination System (SPDES). Operators of regulated MS4s and operators of construction activities must obtain permit coverage under either an individual SPDES permit or one of the general permits, prior to commencement of construction.

National Register of Historic Places

The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service, which is

part of the U.S. Department of the Interior.

NYSDEC Natural Heritage Program

The NY Natural Heritage Program is a partnership between the NYS Department of Environmental Conservation (NYSDEC) and The Nature Conservancy. Its mission is to facilitate conservation of rare animals, rare plants, and natural ecosystems, which are commonly referred to as "natural communities." NY Natural Heritage maintains New York's most comprehensive database on the status and location of rare species and natural communities. It presently monitors 174 natural community types, 727 rare plant species, and 432 rare animal species across New York, keeping track of more than 11,900 locations where these species and communities are found. The database also includes detailed information on the relative rareness of each species and community, the quality of their occurrences, and descriptions of sites. The information is used by public agencies, the environmental conservation community, developers, and others to aid in land-use decisions.

Prime Farmland

Prime farmland, as a designation assigned by U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management.

Principal Building

A building in which is conducted the main or principal use of the lot on which said building is situated. Each "principal building" along with its accessory buildings shall be situated on a separate lot.

Public Transit

Passenger transportation service to the public on a regular basis using vehicles that transport more than one person, for compensation, usually but not exclusively over a set route or routes from one fixed point to another.

Right of First Refusal

The right of a party to match the terms of a proposed contract with another party. In this instance, the Town (or a designated agency) would be offered the right to purchase environmentally sensitive or open spaced lands before that are sold on the open market.

Roadway Classification

Different streets serve different transportation functions. Most streets receive a classification based upon the transportation function that they serve. Typically, streets receive one of the following general street classifications:

Local Street *– Provides direct driveway access to adjacent properties within residential neighborhoods. Generally, local streets have low speeds and volumes.*

Minor Collector *– Collects and distributes traffic between local streets and major collectors and/or the arterial system. Minor collectors provide more of a land access function than mobility.*

Major Collector *– Major collectors emphasize mobility over land access, distributing traffic between major traffic generators or minor collectors and the arterial system.*

Minor Arterial *– Minor arterials are designed to emphasize mobility over land access, providing access to principal arterials (highways and freeways). They connect cities with adjacent communities and the highway system.*

SEQRA Type I List

If an action is identified on a Type I list, it means the action (or class of actions) is more likely to have a significant adverse impact on the environment than other actions or classes of actions. Type I actions are listed in the statewide SEQR regulations (617.4), or listed in any involved agency's SEQR procedures.

Smart Growth

Smart growth is an urban planning and transportation theory that concentrates growth in already developed centers to avoid urban sprawl; and advocates compact, transit-oriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices. Smart growth values long-range, regional considerations of sustainability over a short-term focus. Its goals are to achieve a unique sense of community and place; expand the range of transportation, employment, and housing choices; equitably distribute the costs and benefits of development; preserve and enhance natural and cultural resources; and promote public health.

Streetscape

The visual elements of a street, including the road, adjoining buildings, street furniture, trees and open spaces, etc, that combine to form the street's character

Townhouse

Two or more residential dwellings sharing a common or party wall separating the dwelling units.

Traffic Calming

Traffic calming involves changes in street alignment, installation of barriers, and other physical measures to reduce traffic speeds and/or cut-through volumes, in the interest of street safety, livability, and other public purposes.

Transportation Improvement Plan

The TIP is the regional capital improvement plan for transportation facilities.

Transfer of Development Rights

TDR is a market-based mechanism that promotes responsible growth, while conserving important areas such as open space, prime agricultural areas and environmentally sensitive lands. It is designed to steer growth -- not to limit or stop development through individual, voluntary transactions whereby development rights are transferred from areas where preservation is the highest priority (sending sites) to areas that can accommodate additional growth (receiving sites). Landowners in sending areas receive compensation for giving up their right to develop, while developers in receiving areas pay for the right for a bonus in the receiving area. When development rights are removed from a parcel, a conservation easement is placed on the sending site.

Vernal Pool

A vernal pool is a contained basin depression lacking a permanent above ground outlet. In the Northeast, it fills with water with the rising water table of fall and winter or with the meltwater and runoff of winter and spring snow and rain. Many vernal pools in the Northeast are covered with ice in the winter months. They contain water for a few months in the spring and early summer. By late summer, a vernal pool is generally (but not always) dry.

Visioning

The process by which a community decides the future it wants by planning how to achieve it under realistic expectations.

Watercourse

Any flowing body of water including rivers, streams, brooks, etc.

Watershed

The line separating neighboring drainage basins (catchments).

Workforce Housing

Housing that that is affordable to a median income household, specifically including workers that provide vital services within the Town of Pawling, including government employees, emergency service workers, health care workers, teachers, etc.

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