

# PEQUANNOCK TOWNSHIP MASTER PLAN

TOWNSHIP OF PEQUANNOCK  
PLANNING BOARD

1994

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Glenn C. Kienz, Planning Board Attorney

Yvonne C. Manfra, P.P., A.I.C.P., Planning Consultant  
Anne Bowman, P. P., Planning Director  
Katherine Sheehan, Planning Department Secretary

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## INTRODUCTION

A Master Plan is a document which provides a guide to the use of land within a municipality. It examines the community's existing conditions and establishes goals and objectives as well as sets forth plans relating to land use, housing and other aspects or elements of the community.

The Pequannock Township Planning Board began the process of revising its Master Plan in 1990. After reexamining the 1984 Master Plan, it determined that changing conditions warranted a comprehensive review. This Master Plan, now known as the 1994 Master Plan, is part of a long standing tradition of planning studies and reports and constitutes a sequel to numerous earlier works, dating as far back as 1950. To place this Master Plan in the context of its 53 year old history, the following is a brief summary of the planning process that has taken place in Pequannock Township.

Planning began in 1940 when the Township Council adopted its first zoning ordinance and simultaneously established its first Board of Adjustment. The first ordinance created four residential zones, a business zone and an industrial zone. The Township Council established the Planning Board in 1949. The Planning Board, with assistance from the New York consulting firm of McHugh and McCrosky, drafted and adopted the first Master Plan in 1950, one year later. This commitment to planning continued with the adoption of the first subdivision ordinance in 1954, a second Master Plan in 1960, and a third Master Plan in 1974.

Between master plans and the comprehensive planning processes that these documents required, the Planning Board made other, more specific studies, often with the assistance of consultants or a staff planner. The following list is representative of the extent of the Township's planning efforts between 1950 and 1990. A copy of each document is on file at the Township Planning Office.

## A LIST OF MASTER PLANS AND PLANNING STUDIES

1950	Master Plan - McHugh and McCrosky
1953	Drainage Plan - Harry N. Lendall
1960	Master Plan - Community Planning Associates of West Trenton
1960+	A Survey of the Need for Apartments - John H. Geiger and Associates
1960+	The Impact of Industrial Growth in Pequannock - Williamson Management Service
1972	Housing Policy Study - Richard May
1972	Survey of Housing Needs - John Zeisel
1973	Housing Studies 1971 - 1973 - Planners Incorporated
1974	Historic Homes, Pequannock Township - Ronald Ravikoff
1974	Subdivision Impact Study - Ronald Ravikoff
1974	Master Plan - Ronald Ravikoff
1975	An Archaeological Survey (Phase 1) of the Proposed Community Sewer System in Pequannock - Dr. Nan A. Rothchild and Edward S. Rusch
1981	Townhouse Analysis - Robert Michaels
1984	Master Plan - Planning Board
1989	Housing Element - Anthony P. Barile, Jr.
1990	Master Plan Reexamination Report - Planning Board
1994	Master Plan Reexamination Report - Planning Board

In 1990, the Planning Board undertook a reexamination of its 1984 Master Plan and reported its findings. The report identified the problems and objectives relating to land development as of 1990 and examined the extent to which problems had been reduced, objectives had been met, and what other changes had occurred that would impact the planning process.

Since these changes and changes that have occurred since 1990 impact the planning process, they are summarized here. The full text of the 1990 Master Plan Reexamination Report is also available at the Planning Office.

The Planning Board noted in the 1990 Report the following changes:

- twenty-three homes within the floodway were purchased and torn down;
- definitive floodplain mapping was completed by the Federal Emergency Management Agency;
- wetlands are now protected by the State's Fresh Water Wetlands Act and regulations;
- conversion of the hospital building resulted in the creation of eight affordable housing units;

- thirty sub-standard housing units were rehabilitated since 1980;
- sewer service was expanded by the construction of the PRBRSA sewer line;
- water system was benefitted by the addition of a water tank and the looping of water lines;
- Senior House was completed;
- traffic circles on Route 23 were eliminated and traffic lights added or upgraded at ten locations within the Township;
- Airport Safety and Hazardous Zoning regulations were revised; and
- two parks, Lyon and Lyman Avenue, were added to the Township's open space inventory.

The 1990 document also identified several studies and reports that had been completed and that were pertinent to the planning process. These included: "Report on Stage II Water System Improvements," Lee T. Purcell Associates, January 1986; "Flood Insurance Study," Federal Emergency Management Agency, July 1986; "Flood Protection Feasibility-Main Stem Passaic River Main Report," U.S. Army Corps of Engineers, December 1987; and the "Evaluation of Sewering Alternatives for the Laurel Homes Sewerage Treatment Plant," Alfred Crew Consulting Engineers, Inc., November, 1988. Since the 1990 document, another report on sewers has been completed, entitled, "Planing Documents for the New Jersey Department of Environmental Protection Municipal Wastewater Assistance Element, Easterly Pequannock Township Sanitary Sewers Phases II, III, and IV" and was prepared by Alfred Crew Consulting Engineers, Inc.

Numerous additions and changes in legislation and regulations have occurred since the Reexamination Report was completed. On the federal level, the government passed the Clean Air Act and the Americans With Disabilities Act as well as published the data obtained in the 1990 Census. Pequannock Township also became a participant in the nationwide program initiated by the Federal Emergency Management Agency called the Community Rating System (CRS).

The State through the State Planning Office completed its State Development and Redevelopment Plan, The New Jersey Department of Transportation promulgated the State Highway Access Management Code, and the Council on Affordable Housing (COAH) revised its Substantive and Procedural Rules. The Department of Environmental Protection and Energy revised its standards for individual on site sewage disposal facilities.

Pequannock Township, in accordance with the State Storm Water Management Act, revised its Storm Water Management Ordinance and amended the Zoning Ordinance to comply with the requirements of the State Air Safety and Hazardous Zoning Act.

There were also changes with respect to physical development. Construction of the missing sections of West Parkway is ongoing as is the development of the PRD District, The Glens, and a new Township water well. The construction of a new fire house is completed and the School Board has completed its building and compliance programs. The Township is considering construction of a new Library and the remodeling of the Municipal Building.

In 1988, the Township conducted a community-wide survey containing forty-nine questions regarding various planning issues. 1,360 respondents provided officials with a better understanding of public opinion on growth and development as well as on the expansion of municipal facilities and infrastructure. Excerpts of the survey results summary are included here.

If you currently have a septic system, would you like to have sewers if they were available to you?

Yes..	968	71%
No...	312	23%
No answer	80	6%

(A second question related to the sewerage issue provided an even more detailed response)

Please check the most appropriate response:

"I absolutely prefer sewers over septic"	335	25%
"I would like to be serviced by sewers"	137	10%
"My decision would be based entirely on cost"	463	34%
"I would not prefer sewers to septic"	240	18%
"No opinion"	19	1%
"No answer"	166	12%

Do you feel that the lighting on your street is adequate?

Yes..	1028	76%
No...	305	22%
No answer	27	2%

Please rate the overall level of service provided by the Parks and Recreation Department.

Excellent	479	35%
Good	647	48%
Fair	87	6%
Poor	25	2%
No answer	122	9%

Should the township consider future capital projects that would improve park facilities to include expanded sports facilities?

Yes..	478	35%
No...	679	50%
No answer	203	15%

What is the condition of the sidewalks in your area?

Excellent	59	4%
Good	194	14%
Fair	178	13%
Poor	137	10%
Not applicable	727	54%
No answer	65	5%

Your feelings towards additional development or redevelopment along Route 23.

Strongly favor	247	18%
Favor	478	35%
Oppose	181	13%
Strongly oppose	216	16%
No opinion	142	11%
No answer	96	7%

What type of development would you prefer?

Office buildings	701	52%
Mini-malls	305	22%
Recreation facilities	311	23%
Other:		
Light industry		
Food industry		
Parks		
Theater		
Restaurant		
Total	40	3%

What restrictions do you feel should be put on this development?

Height restrictions	10%
Flood concerns	5%
Adequate parking	4%
Traffic concerns	4%
Appearance/ architecture	3%
Noise	1%
Landscaping	1%

Do you feel the township should encourage new rateables as a way of reducing the tax impact on residents?

Yes..	964	71%
No...	230	17%
No answer	166	1%"

Another source of direct public input occurred in the form of a series of public workshops. The workshops were set up so that public comment could be directed to four separate areas of interest, given names as follows: "Special Places," "Route 23," "The Turnpike," and "My Backyard." Each of the workshops provided an opportunity for members of the community to discuss development issues with members of the staff, the Master Plan consultant Yvonne Manfra, P.P., A.I.C.P., and members of the Planning Board.

The purpose of the workshop entitled , "Special Places," was to identify the parts or aspects of the Township that residents value most. This grew into a planning concept in that preservation of these places became an objective or goal. This concept of preservation created the framework for the section that provides background material for the Master Plan and has been entitled, " A Sense of Place."

The workshops identified and discussed other areas of concern as follows: aesthetics, landscaping and property maintenance in the commercial districts; stricter regulation of light and noise in commercial areas adjacent to residential uses; insuring that future development has a "colonial look;" and traffic, signage, parking and buffering for parking in the C-1 business districts. Some participants favored allowing expansion of the commercial districts along the Turnpike and others did not. Similarly, some favored allowing apartments in single family homes or elder cottages for elderly family members while others preferred maintaining the character of established single-family neighborhoods.

In introducing the Master Plan, it is important to outline the legal requirements established by the enabling legislation and the Municipal Land Use Law and the authority that this document has. The Municipal Land Use Law requires that a municipality must adopt a Master Plan if it chooses to adopt or amend a Zoning Ordinance. It also specifies what elements of the Plan are required and allows that others are optional.

Over the last several years, the list of required items has grown and a Master Plan must now include, (1), a statement of goals, objectives, principles, assumptions, policies, and standards upon which the constituent proposals

for the physical, economic and social development of the municipality are based; (2), a land use element; (3), a housing element; and (4), a policy statement indicating the relationship of the proposed development of the municipality with the plans of contiguous municipalities, the County and with the State Development and Redevelopment Plan.

Once adopted, the Master Plan "guides the use of lands within the municipality in a manner which protects public health and safety and promotes the general welfare" and, specifically, it provides a basis for the consideration of additions and amendments to the Zoning Ordinance by the governing body.

This Master Plan was adopted on November 28, 1994 after public hearings were held on October 24, 1994 and November 28, 1994. Public comments were recorded and in several instances incorporated.

## II

### A SENSE OF PLACE

This part of the Master Plan is provided as background for the planning policies that are enumerated herein. It is an effort to identify the numerous parts or aspects of Pequannock Township and its regional setting, separate from existing land uses which are discussed below, that form the basis for the planning process. In particular, identifying those treasured parts of the physical environment that contribute to a Sense of Place and which should be preserved and maintained. The identification of these special qualities will include a description of special places, views from major corridors, neighborhoods, historical background and the constraints imposed by the natural features.

#### Special Places

Pequannock Township has frequently been described as "colonial," "rural" and "picturesque", although the architecture of dwellings and commercial buildings stem from many different design periods. Unlike other parts of Morris County, the rural landscape has been replaced long ago, yet these descriptive terms connote a quality that is widely perceived and truly valued.

In a series of Master Plan preparation workshops and discussions with members of the community, who serve on Committees and Commissions, the Planning Board sought to identify those features of the Township that contribute to this special quality. The list that follows is not meant to be all inclusive. It does, however, suggest special places or focal points that are mentioned frequently in this context. Some of these special places are the wide tree lined streets running north and south, the narrow winding roadways in the north and west, the "townsquare" quality associated with the juxtaposition of Town Hall and the steepled church, the neighborhoods of similarly sized dwellings and yards but with individual landscaping schemes, the historic homes, the older buildings in compact commercial areas, the parks, and the backdrop of mountains created by an abrupt change in slopes.

## Views from Major Corridors

As many residents and visitors frequently experience the views of and around the Township from its roadways, the major corridors are also significant contributors to the Sense of Place. The oldest through road, the Newark Pompton Turnpike, runs north-south and provides access to residential and commercial areas as well as numerous public and quasi-public buildings, including the municipal building, schools, churches and two post offices. With the exception of several older non-conforming uses, residences, residences associated with professional uses, schools and public buildings separate the commercial areas, resulting in two distinct business districts, Pequannock and Pompton Plains. The areas outside the commercial zones, despite the variety of uses, sustain a residential character. This residential character is fostered by the number of residences, deep front yards, occasional low front yard fences, narrow sidewalks, and older street trees.

The Boulevard, which also runs north-south, does not access major commercial areas as the Turnpike does, and, with the exception of several non-conforming commercial sites, is lined with residential uses. The Boulevard is the widest roadway within the Township and its residential character is created by a variety of architectural styles, some historic homes, landscaped yards, large street trees, and narrow sidewalks for pedestrians.

The third major corridor which contributes to the sense of place is State Highway Route 23 which connects Sussex County through the eastern part of Morris County to Passaic County and serves as an "entrance" to the Township. This roadway is for the most part lined with commercial structures and their attendant parking areas, lighting, and signage. However, there are several places along the roadway where there are green spaces and views of the mountains. Both Spring Brook and Meyer's Brook pass under Route 23 and the green along these banks provide a respite from what is otherwise pavement. Mountain views in the vicinity of McDonald's Beach and the intersection of Route 23 with the Turnpike are most noteworthy, the latter having been disturbed by the construction of Route 287. Additionally, because of wetland areas and the proximity of the Pompton River some wooded areas remain on the northbound side of the highway.

Due to the intense commercial development, this corridor does not contribute to the aesthetics typically associated with the Township's special qualities or a Sense of Place. However, with commercial areas further north and south on Route 23, it is a focal point for shoppers from the larger region and, for passing motorists, it is a view of the Township.

## Neighborhoods

As with all communities, the beginning of a Sense of Place originates in the neighborhoods. These neighborhoods are, for the most part, major subdivisions stemming from the corridors outlined above. These neighborhoods grew mostly in the 1950's and the 1960' as part of the post war development boom. Two of these subdivisions, Greenview and the Village, have retained their original names and identities while most others have melted into the larger whole by proximity and continuous in-fill development.

## Historical Background

Both the Township's history and historical features contribute to the Sense of Place. Some of the history is "seen" through those remaining parts of the built environment and the artifacts of the past found locally.

The first known inhabitants of this area were the Lenni Lenape peoples who resided and traveled throughout New Jersey and who were a part of the larger Minsi Nation headquartered in Delaware. Many artifacts of the Lenni Lenape residency have been found throughout the Township with findings being more concentrated in the vicinity of East or Big Ditch.

Recorded history began when the European settler's came to inhabit the area and purchased land from the Leni Lenape peoples. These purchases, made in 1695 and 1697 by Arent Schuyler, Anthony Brocholst and five other New Amsterdam (New York City) investors, became known as the Pompton Patent. The Pompton Patent then encompassed approximately 7,000 acres on both sides of the Pequannock River.

This was the first purchase of land for a settlement in Pequannock Township, which was commenced at Pompton and Pompton Plains about the year 1700. A few families, however may have settled on the east side of the Pequannock River as early as 1697 or 1698.

Rich farmland in this part of the region, which was known as the Plains, drew Dutch descendants from New Amsterdam (New York), Acquakannok (Passaic), and Hackensack here.

This fertile valley where three rivers converge provided all that the new settlers needed to maintain a self-sufficient life style, centered solely on farming for their livelihood. They farmed all types of vegetables, grew flax for cloth and raised livestock, including dairy cows. To help in the processing of many farm products, mills were built including gristmills, carding mills, saw mills, tan bark mills and distilleries, during the first quarter of the 18th century.

Industry was introduced to the Pompton Valley after the discovery of large iron deposits in the area and furnaces built. The first was the Pompton Furnace, built on the original Schuyler Brockholst patent around the year 1726. By the time the American Revolution reached this area of New Jersey, Pequannock Township was in a good position to supply the revolutionary forces.

In 1740, a year after the formation of Morris County, the General Sessions of Peace met in Morristown. This was the first court set up by the Colonial New Jersey Legislature and it divided the newly formed county into three townships, of which Pequannock was the largest. The measurements of incorporation recorded a township 16 miles long by 11 miles wide, containing 74,000 acres. Prior to 1800, little contact took place between the various isolated villages that stretched up and down the few passable roads of Pequannock Township.

Also in 1740, the Morris County Colonial Justices-of-the-Peace appointed the town's first government officials. Subsequently in 1741, all public officials were elected by the male freeholders (free owners of land) who attended the annual township meeting. Early government concerns focused on the care of the poor, surveying of land, building and maintaining roads, and runaway livestock. Animal bounties and the ever present issue of tax collection were also concerns of the first town officials.

As the population grew, transportation into and out of the Plains improved. The first surveyed road into the Pompton Valley was the 1754 King's Highway which followed a north/south route. By 1790, the King's Highway became the "public road through the Plains." It entered the township from the present Route 23 bridge, proceeded westward to Jefferson Street, and turned north to join Stoney Brook Road, now known as Mountain Avenue which went to Stoney Brook.

Sunset Road, originally called Bog & Vly Road, was built through to Boonton in 1744. This road was home to some of the oldest homesteads in the Township. In 1789, Jackson Avenue was constructed and named after a popular tavern located at the corner of the new road and what is now called Black Oak Ridge Road in Wayne. In 1874 the Boulevard was constructed as a parallel road to the Turnpike.

The three rivers and the early road system of Pequannock Township and neighboring towns served as a vital transportation network during the Revolution. They connected the north, from Newburgh and West Point, with Philadelphia and Delaware. To control these revolutionary "avenues", a small fortification was built at Federal Hill in Riverdale. The Township's hills and mountains served as a signal station for Washington's army during this time of heavy troop movement.

During the Revolutionary War, a Liberty Pole was erected on King's Highway (now the Newark Pompton Turnpike) opposite the Dutch Reformed Church as a symbol of support for the Revolutionary forces.

In 1806 the New Jersey State Legislature chartered the Newark-Pompton Turnpike Company. It improved and charged tolls on this former "public road through the Plains" until the 1840's. In 1911, the State took over the Turnpike and numbered the newly macadamized road State Highway #8. In 1922, it was renumbered N.J. Highway 23 and paved with concrete from the bridge into Pequannock to Richard's corner in Riverdale. It reverted back to a local county road when a new, since improved, Route 23 was constructed to the east of the Turnpike in 1935.

In 1811, the State Legislature chartered the Bog & Vly Company to construct a system of drainage ditches to improve farming in the Plains. These ditches are now referred to as the East Ditch and Big Ditch. Soil from the ditches was used to lay the roadbed for the current Jacksonville Road.

Beginning in 1831 the Morris Canal's feeder canal became another route into the Plains. The Township's portion of Aquatic Park contains a remnant of a reservoir, that once fed water to the canal and remains of the northernmost lock. Commerce and industry boomed during this time as a result. Farmers could now market the products they produced by transporting them to the cities. The new Canal coupled with the growth of the iron and steel industries along the Pequannock River led to many jobs and resulted in population growth throughout the area.

In 1844 Pequannock Township began to shrink in size with the secession of Rockaway Township. In 1867 Boonton and Montville seceded, followed by the boroughs of Lincoln Park, Kinnelon, Butler and Riverdale. By the 1920's, the current community of 7.04 square miles, that consists of Pequannock and Pompton Plains, was all that remained.

In the early 1870's, the New York and Greenwood Lake Railway came to Pequannock Township. Two stations were built: one in Pompton Plains along Jackson Avenue and the other in Pequannock where the railroad tracks cross the Newark-Pompton Turnpike. Eventually, telegraphs were installed at both stations giving Pequannock an instantaneous connection with the outside world beyond the still largely rural farming settlement.

The first school house was built prior to 1800 in what is now Pompton Plains. It stood approximately where the Grace Chapel of the First Reformed Church now stands on the Newark-Pompton Turnpike. A second school was erected about a half mile north of the first school. Another new school was

built on property located across the street from the original school house in 1824. This frame building served the community until 1872, when it was moved from the property so that a new brick school could be built. The frame building was moved further north on the Turnpike; it still stands in a remodeled form at 602 Newark-Pompton Turnpike. It outlived its successor, the 1884 Pompton Plains school, which after two additions in 1923 and 1928 was torn down in 1985 to make way for the new Pompton Plains Post Office.

The now closed Pequannock School which stands on Oak Avenue was erected in 1923. It was enlarged in 1928 and again in 1963. The Pequannock Valley Middle School was erected in 1950 on the site of the circa 1790 Mandeville Inn. Additions were later made to this school. Other schools now include North Boulevard Elementary School, built in 1954, Pequannock Township High School, in 1959, Hillview in 1963, and Stephen J. Gerace Elementary School in 1969.

Religion has played an important part in the town's history and development. The First Dutch Reformed Church was organized in 1736 and much of the Township's early history was recorded by this church. The first church building was constructed in 1760 and was located opposite the Thomas Mandeville house, at 679 Newark-Pompton Turnpike, Pompton Plains. It was used for approximately eleven years when, in 1771, a new church was erected at its present site.

The history of the town library began in 1913 when a group of concerned citizens, calling themselves the Neighborhood Club, began the Pompton Plains Library in an unused real estate office just north of Poplar Avenue where Friendly's Restaurant is currently located. In 1925 it moved to the First Reformed Church's Grace Chapel building. Later in 1931 a Pequannock Branch was started and since closed. The library is presently housed in a part of the Town Hall.

In 1817 a citizen's group organized to protect property, and in 1896 the first police force came into being. By 1936 the police department purchased its first police car and a porch light signal from Chief Albert DeBow's home was replaced by a one-way radio hook-up with the Bergen County police. In 1955, 24-hour desk service was instituted. Volunteer Fire companies were formed in 1915 and 1923 in Pompton Plains and Pequannock, respectively.

Much of this history is related in books such as:

The History of Pequannock Township by George Parr,  
Historic Pequannock by Emil Salvini,  
Pequannock Township by Carl Edwards, and  
Doorways To The Past - Pequannock Township Planning  
Department.

Many older homes and places of historic significance still remain and are available for viewing and study. The Historic District Commission provided the following list of historic homes, buildings and places.

Martin Berry House: Route 23 ca. 1720  
Slingerland Homestead: 143 Boulevard ca. 1850  
Nicholas Slingerland House: Lincoln Park Road c. 1800-1850  
VanGelder/VanSaun House: 770 Turnpike 18th Century  
Paulus DeBow House: 134 Mountain Ave., ca. 1796  
Paul DeBow House: 150 Mountain Ave. ca. 1850-1875  
Henry DeBow House: 170 Mountain ave. ca. 1890  
Giles Mandeville Home: (The Manse) 515 Turnpike ca.1788  
Thomas Mandeville Home: 679 Turnpike ca. 1830  
H. Mandeville Homes: 81-85 Lincoln Park Road ca. 1800-1850  
A. Mandeville Home: 8 Cameron Ave. pre 1853  
H. Van Ness House: 414 Turnpike ca. 1825  
J. Van Ness House: 103 Sunset  
G.M.Van Ness House: 320 Sunset Road pre 1853  
S. Van Ness House: (also Dr. Chilton's home) 749 Turnpike ca. 1853  
J. Sindle House: 37 Lincoln Park Road ca. 1855-1865  
Charles Roome House: Sunset Road ca. 1820-1830  
Samuel Roome House: 80 Sunset Road ca. 1774  
Hopper House: 23 Post Road ca. 1820  
Worthington House: (Also known as Schmidt/Edwards) 420 Turnpike ca. 1887  
J. Beech House: 260 Sunset Road  
The Osborn House: 12 Jacksonville Road post 1916  
Paul Revere Hall: 684 Turnpike ca. 1896  
Pompton Plains 19th Century Schoolhouse: 602 Turnpike ca. 1850  
Jones' Hardware: 600 Turnpike (prv. Gilland/Berry) early 19th century  
Terhune House: 36 W. Franklin Ave. ca. 1810-1830  
First Reformed Church: 525 Turnpike ca. 1771  
Grace Chapel: Turnpike ca. 1869  
A "Sears Roebuck House": (prev. Day's Tea Room) Turnpike ca. 1935  
First FHA House in U.S.A.: 30 Hopper Ave.  
Pompton Plains Railroad Station: Evans Place late 1870's  
First Manse of the First Reformed Church of Pompton Plains: 740 Newark-Pompton Turnpike ca. 1839: addition in 1892  
Indian Rock Shelter in Mountainside Park  
Old Saw Mill Road in Mountainside Park  
Morris Canal Dam in Aquatic Park  
East Ditch and Big Ditch  
Newark Pipeline Valve Houses

Alex Hearle silo  
The Newark Pompton Turnpike  
The Boulevard

Only one of the structures listed above, the Martin Berry house, has been formally designated an historic site by being listed on the National Register of Historic Places. However, numerous buildings and properties make a significant contribution to the colonial appearance of the Township. The number of large front yards, mature trees, and fences along the right-of-way all foster the qualities "rural", "colonial" and "picturesque" which have been described above.

As more research is completed a greater number of sites may receive formal historic designation, either locally or nationally.

### Natural Features

For a community that is largely developed, the remaining natural areas and open spaces provide a contrast to roadways, residential, commercial and industrial development. These areas are useful, not only for their aesthetic contribution of vistas and green spaces, but also in that they provide flood control, improved air and water quality, aquifer recharge potential, preservation of natural vegetation, climate control, habitat for wildlife, and recreation areas for Township residents. Figure 1 of the Appendix lists wildlife and endangered species that have been identified within the Township's open spaces.

The sandy soils which underly the eastern part of the Township were mined extensively in the early part of the century. The "pits", which resulted from these operations, created many of the lakes within the Township that now contribute significantly to the open space component. The oldest soil mining operation began around 1920 at what is now PV Park and it ended in 1968 when the pit had reached about 30 feet in depth. There were other sand and gravel operations at McDonald's Beach, the Houdaille tract along West Parkway, and at the Pio Costa tract.

The Township's individual open areas are both large and small and are valued for any one or combination of the reasons described above. There are small green spaces such as Senior Garden on the railroad right-of-way, the "point" at the bend of the Turnpike, the island in the center of Wilrue Parkway, and the rows of flowering cherry trees in front of Town Hall, all of which contribute to the aesthetics of the surroundings. An open space map has been included in the appendix as Map # 1.

Some of the Township's neighborhoods that abut industrial properties have a buffer area between the two

kinds of uses. These buffer areas offer protection of the residential qualities and add green space.

The Township has several large natural areas that because of their linear extent lend themselves to recreational activity. These are the railroad right-of-way, the East Ditch, and the Pequannock and Pompton River corridors.

There are existing paths in some of these linear areas which, along with existing trails in the Greitzer Tract and in Mountainside Park form the backbone of a trail or path system connecting parks and scenic areas throughout the Township. This system as outlined previously in 1976 and now, again, overlays the open space map (Map # 1).

The railroad right-of-way is accessible for walking and biking. It connects P.V. Park and Woodland Lake with both the Pequannock and Pompton Plains centers, with Washington Park, and, via the Newark water line, with Riverside and Lyman Parks. It is an important component of any future path system unless or until it is used for mass transit purposes. The right-of-way also connects the Pio Costa tract at the south end of the Township with Aquatic Park at the north end. The right-of-way is on the County bikeways plan of 1979.

The East Ditch is a drainage ditch, created by the Bog and Vly Company many years ago to improve the surrounding farmland. It was enlarged in 1949 by the Army Corps of Engineers to create additional flood storage capacity. The green areas along the banks have been maintained to prevent erosion, to allow natural drainage and to store water during floods. The Township, in order to keep the ditch free of debris, seeks stream cleaning easements from property owners who are adjacent to the Ditch. An existing path runs along this Ditch and has been incorporated into the proposed trail and path system.

As spring rains subside, portions of the Pequannock and Pompton Rivers offer the potential of canoe trips. This natural area is best seen from a canoe. There is an access point from Township property on Harrison Road and take-out points near the bridges at Jackson and Pequannock Avenues, as well as, a boat ramp in Riverside Park.

Finally Pequannock has several larger open areas that contribute to the Township's open space inventory. However, these are both publicly and privately owned and some portions of the privately owned sites will likely be developed. The publicly owned areas include both municipal and county parks, which encompass over 400 acres and include parks of all sizes.

Mountainside Park is the largest park that is maintained as open space. It is a natural wooded area along the southernmost rim of the Highlands. It contains one of the Township's peaks called Turkey Mountain (there is another Turkey Mountain in Kinnelon) or Pequannock Knob which provides a view of the valley. This park also includes a pristine mountain stream, recently named Rockledge Brook. There are several trails that run through Mountainside Park and connect to other trails leading to Valley Spring Lake in Riverdale and north to other Waughaw Mountain highpoints in Kinnelon and Montville. These trails have been maintained, historically, by local Boy Scout troops and other service organizations.

Aquatic Park is the second largest park. It is unimproved and maintained for its open space and historic value. Along with adjacent county lands, leased by the Township (a 25 year lease ending in 1997) and open areas in Pompton Lakes, the area contains a variety of wildlife habitats supported by the Pequannock and Pompton Rivers and the natural vegetation along the banks.

Woodland Lake, at Alexander Avenue and Route 23, is the third largest park, comprising forty acres. Due to its proximity to densely populated areas, it is utilized and maintained more for its passive recreation value than as undisturbed open space. It affords residents opportunities for boating, fishing and walking along the water's edge.

The Pio Costa tract along the southern boundary of the Township and the Greitzer tract in the Township's northwest corner are two large vacant, privately owned parcels that, because of environmental constraints and the potential for clustered development, may contribute some open space even after development.

The Pio Costa tract is valued as a nesting area for migrating birds, many of which are endangered, and as habitat for birds nesting locally. The area is known as "the pits" and has been utilized for many years by the New Jersey Audubon Society for "counting" birds. These bird counts provide a measure of the changes in migrating patterns, in habitat, and in the health of different species as well as the environment generally.

The tract contains a large lake with the potential of surrounding wetlands. The water body is connected to a lake and parkland in Lincoln Park and hydraulically, to the Pompton River, giving it significant potential flood storage capacity. This potential has been identified in the Army Corps of Engineers plan for flood control.

The Greitzer tract is north of and adjacent to Mountainside Park. It contains the Township's second and largest Waughaw Mountain Peak with an elevation of 734 feet above sea level. Both the Saw Mill Stream and the northern reaches of Rockledge Brook collect the water from the steep slopes of this mountain. The "yellow trail", which is a regional trail between Riverdale and Montville traverses the area, in part along Rockledge Brook. There is also a trail along the Algonquin Gas Pipeline and along Saw Mill Road (the old road between Pequannock and Kinnelon) that parallels the stream of the same name. The area around Saw Mill stream is particularly noteworthy. Much of the land along these banks is pristine and worthy of preservation.

The development known as the Glens is a similar project where development of the Planned Residential District (PRD) resulted in an open space component. The residential units were clustered between extensive areas of wetlands which include part of East Ditch and the confluence of Saw Mill Stream and Rockledge Brook.

The wetlands and their transition areas will be maintained as open space in accordance with the State's Freshwater Wetlands Regulations as well as a conservation easement created in conjunction with the development. Although these open areas are privately owned by the Glens Condominium Association they contribute to open spaces within the Township. An old path which continues along the east side of the Ditch through the Glens ties into trails in Mountainside Park. This path has the potential of being part of the Township wide trail system if public access is granted by the owner, a prospect which is presently under consideration by the Association.

#### **The Flood Plain and River Corridors**

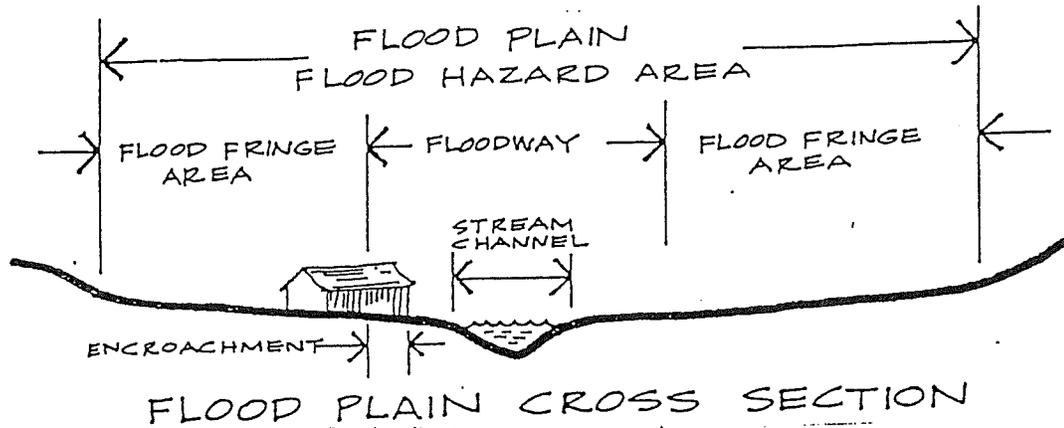
The level plains of the Township are located at the center of a large 935 square mile drainage area known as the Passaic River Basin. Three large rivers, which are tributary to the Passaic River, converge at the northeast corner of and form the eastern boundary of the Township.

Flooding occurs in the eastern portion of the Township when the volume of water exceeds the river channel and it overflows its banks. Similarly, in the western portion when the streams reach capacity, the drainage ditches, which are unable to carry all of the water away, flood the surrounding low areas.

In July of 1986, the Federal government redelineated the areas of the Township that are subject to flooding on the basis of calculated flow rates, the topography of the land

and statistical occurrences of rainfall. The 100 year storm and the 500 year storm were used.

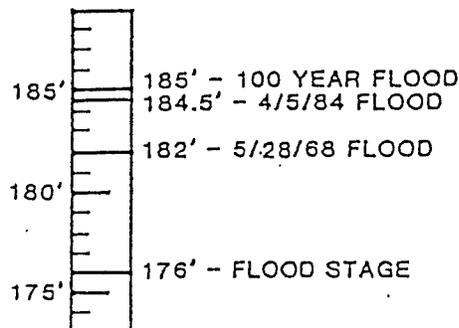
The areas closest to the rivers and streams are delineated as floodways. These areas actually become part of the river during a flood and are subject to the most frequent inundations experienced in the Township. These areas are shown on the FEMA map as the AE zone with hatching.



The areas where flooding occurs, given the one-hundred year storm, are delineated as floodplains and are shown on the FEMA map as the AE zone. A map of these areas is included in the Appendix, Map #2. Flood elevations for these areas are known. For example, the flood elevation for the Turnpike between Pequannock Avenue and Irving Street is 182 feet above sea level. The flood plain comprises an estimated two square miles or almost one-third of the Township and contains approximately 1000 homes.

Recording of flood occurrences began as early as 1900 and the largest flood experienced by the Township, the 1903 flood, was documented. Other major floods occurred in 1902, 1936, 1945, 1951, 1955, 1968, 1972, and 1984. The chart below indicates the highest flood elevations at Jackson Avenue for each of these storms.

JACKSON AVENUE  
VICINITY  
POMPTON RIVER



## Wetlands

In 1987, the State Legislature passed the Freshwater Wetlands Protection Act and thereby prohibited any disturbance in and around freshwater wetlands areas unless authorized by permit, issued by the Department of Environmental Protection and Energy (DEPE). Through rules and regulations, N.J.A.C. 7:7A, promulgated subsequently, Wetlands are defined and classified so that wetlands that have a greater resource value are subject to stricter regulations.

N.J.A.C. 7:7A defines a freshwater wetland as an area that "is inundated or saturated by surface water or underground water at a frequency or duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation; provided, however, that the Department, in designating a wetland, shall use the three parameter approach (that is, hydrology, soils and vegetation) enumerated in the 1989 "Federal Manual for Identifying and Delineating Jurisdictional Wetlands", and any subsequent amendments thereto incorporated herein by reference."

The DEPE has mapped the State's wetlands through the use of aerial photography and the sections of these maps that include Pequannock Township are available at the Planning Office and reproduced on a smaller scale and included as Map #3 in the Appendix. These maps provide a means of identifying generalized locations of wetlands and, specifically where a potential for the occurrence of wetlands exists. However, the Planning Board and the individual property owner must rely on site specific information obtained through field investigation for a viable delineation of wetland areas.

The most extensive wetland areas within the Township include the large lakes, portions of the open space set aside as a result of the development of the Glens, and areas along the Rivers, including the Pio Costa tract. Protecting these areas will promote open areas for public enjoyment, wildlife habitats, storm water management and water pollution control.

## Steep Slopes

Although the largest portion of the Township is very flat, having elevations that vary between 180 and 200 feet above sea level, a dramatic change in elevation occurs in the northwestern corner of the Township that marks the beginning of the Highlands. In these areas, which begin in the vicinity of the western portion of Mountain Avenue and the eastern edge of Mountainside Park, elevations begin at about

200 feet and climb as high as 734 feet at the top of Pequannock's Turkey Mountain or Pequannock Knob, as shown on the U.S. Geologic Survey. Between the western portion of Mountain Avenue and the Township's northwestern borders, there are extensive areas where the slopes exceed 20 and 25 percent. These areas are very susceptible to soil erosion with any disturbance of the ground or vegetative cover. (See Map #4 in the Appendix.)

The abrupt change in elevation provides views of the mountains from several locations within the Township. Examples are at Jacksonville Road, Chilton Hospital and Route 23 when traveling north. The pristine quality of the mountain views were lost to some degree, particularly from the Route 23 perspective, with the cut in the Mountain required for the construction of Route 287. This loss has raised the issue of maintaining the remaining undisturbed or unimproved views of the mountains.

These steep slopes also constitute a significant drainage area for Township wells. Water from the mountain traveling to lower elevations either above ground or through the soils has the potential of reaching the aquifer recharge areas below.

#### **The Aquifer Recharge Areas**

In 1980 a consultant, Malcolm Pirnie, Inc. conducted an investigation to determine the nature and extent of the area, since the kinds of soils and the underlying hydrology provides water to or recharge of the aquifer that supplies the Township wells.

The study described the aquifer, that supplies the Township wells, as a semi-confined or "leaky aquifer" that is below the water table (a higher aquifer) with a confining unit of fine silts and clay. A semi-confined aquifer generally receives recharge water from a large surface area that is not necessarily overlying it. It also has a small component of vertical flow, hence the term "leaky". If the aquifer becomes depleted, through pumping, the recharge from the overlying aquifer and surrounding surface water increases as does the potential for contamination associated with these water sources.

This study delineated the extent of the recharge area which is shown on Map #5 in the Appendix. A 1200 acre "area of influence" is depicted where there is potential for recharge from the overlying aquifer. A larger 3400 acre delineation has been made indicating the full extent of the recharge area that is assumed for a semi-confined aquifer.

Very recently, Morris County updated the Water Supply element of its Master Plan and this document describes the

aquifer underlying much of the Township as a "buried valley aquifer" and indicates that much of it has been delineated. This document, along with A Guidebook to the Geologic History of Pequannock Township and its Environs by John E. Baker are very helpful in illustrating the conditions that have created the aquifer and the potential for impacts to the water supply. Both documents are available at the Planning Office.

## Regional Setting

### Patterns

Pequannock Township is situated at the northeastern boundary of Morris County where throughout the 1950's and 1960's it was on the fringe of the older more densely populated areas in Passaic, Bergen, and Essex Counties. Development patterns stemmed from Paterson and Newark via the Turnpike and Route 23 and more closely matched what happened in Passaic County than the remainder of Morris, particularly with respect to when growth occurred.

Both the Township and Morris County grew in the post-war era of the fifties, but Pequannock, with a smaller land mass, continued this growth through the sixties while development in the rest of Morris County slowed. Correspondingly, in the 1970's with the construction of Routes 80, 280, and 287 and the relocation of many businesses and corporate headquarters to large readily developable parcels along these highways, the remainder of Morris County came under considerable development pressures that did not affect the Township.

The relocation of employment centers and major shopping centers to highways throughout suburban New Jersey has changed the Township's orientation to the surrounding region. Township residents now travel to work and to shopping, into New York and other major cities, as well as to centers along Routes 46, 80, 10, and 287. Within the Township, Chilton Memorial Hospital draws employees from the larger region, and shoppers, from areas north and south of the Township, are drawn to stores along Route 23. The completion of Route 287 which runs through the northwestern portion of the Township will provide a direct connection between areas to the north and to the southwest of the State.

The greater ease of travel along Route 287 may attract traffic travelling in this northeast/southwest direction from Interstate 80 and the New Jersey Parkway. The location of an interchange at Route 23, just north of the Township, should increase traffic along Route 23 in the Township. It is also expected that regional traffic now making use of local roads, namely the Newark Pompton Turnpike and the Boulevard, will be directed to Route 287 and traffic along portions of the local roadways should decrease.

The 1984 Master Plan anticipated that the completion of Route 287 would result in increased development pressure particularly along Route 23. However, the extensive building that occurred in the late 1980's and the depressed real estate market have diminished this prospect for the present. Yet, as the highway will facilitate access to the region from the northeast and the west, some growth pressures should be anticipated. In the Township, many of the commercial areas along Route 23, that may be subject to development pressures are also constrained by a flood plain location and a lack of sewers.

#### Facilities and Places of Interest

Chilton Memorial Hospital which is located within Pequannock Township is a fully accredited 270 bed community hospital with a range of modern services and facilities. These include cardiac diagnostic testing and therapeutic programs, same day surgery facilities, obstetrical services, sports medicine, gerontology programs and a community based psychiatry department for inpatient care. Chilton has a medical staff of 220 who serve over 43,500 patients annually. These patients come from Morris, Passaic, Bergen and Sussex Counties. The hospital has constructed a new comprehensive cancer treatment facility which will provide diagnostic, therapeutic, support and educational services for oncology patients and their families. All of the above described services are supplemented by an affiliation with Morristown Memorial Hospital.

A number of recent studies have recognized the environmental significance of a large region stretching from the Hudson River to the Delaware River known as the Highlands. These studies include the Federal New York-New Jersey Highlands Regional Study and the bi-state Skylands Greenway Task Force Report, both of which recommend the management of future growth for the conservation of open space and the protection of natural resources in this region. Pequannock Township is located at the southeastern edge of the Highlands. This is most dramatically demonstrated by the severe change in elevations which occurs when progressing to the northwest corner of the Township. The change marks the edge of the region. Should the County, State and Federal planning and conservation efforts now under way come to fruition, the Township has the potential of benefitting from the proximity of natural areas and access to open space.

Finally, there are many colleges and universities in the surrounding region including William Paterson College, Montclair State College, Fairleigh Dickinson University, Drew University, Ramapo College, Seton Hall University, Morris County Community College and Saint Elizabeth's College.

Museums and theaters are proximately located in Wayne, Montville, Morristown and Newark. Pequannock Township boasts its own group of musicians, the Gilbert and Sullivan Society.

### III

#### GOALS, OBJECTIVES, AND POLICIES

The focus of the Master Plan and the planning process that underlies the Plan is to specify the goals, objectives and policies relating to the physical, economic and social development of the municipality as required by the Municipal Land Use Law. The goals, objectives and policies that are identified in this section are derived from the background material and assumptions described as Sense of Place and in the separate Plan elements that make up the remainder of the Master Plan.

##### Sense of Place Goals

- A. Preservation of the sense of a small town, neighborhood and community.
- B. Preservation of the Pequannock Township's residential character, which is derived from its variety of residential neighborhoods and tree lined streets, in both grid and curvilinear patterns, and from landscaped yards with occasional fences.
- C. Protection and conservation of the natural environment and the natural component of the developed environment so as to contribute to species diversification, wildlife protection and habitat, flood water retention and the preservation of scenic areas.
- D. Protection of lands that are sensitive to disruption and pollution, including the Pompton and Pequannock River corridors, floodplains, wetlands, aquifer recharge areas, steep slopes and forested areas.
- E. Promotion, through identification and public recognition, and preservation of historic homes, buildings, structures and sites.

##### Sense of Place Objectives and Policies

- 1. Preserve the tree-lined streets throughout the Township.
- 2. Insure the preservation of the existing residential character along the Township's roadways, particularly the Newark Pompton Turnpike, the Boulevard, and West Parkway.

3. Protect the views of the mountains by locating development in areas on or around the mountains so as not to disrupt these views.
4. Promote a Path and Trail System that will utilize existing trails and, with new linkages, will connect the Township's parks and open spaces.
5. Preserve all lakes and wetlands.
6. Limit development along rivers, streams and ditches and around lakes so as to create buffers, and where possible, greenways and paths. Coordinate the conservation of these areas with adjacent communities utilizing conservation easements and other land protection mechanisms.
7. Preserve and protect the area of confluence of the Pequannock and Wanaque Rivers which include numerous islands and coordinate these efforts with adjacent communities.
8. Encourage programs and projects to clean up refuse placed in the rivers and along the banks and discourage such disposal of refuse.
9. Protect areas of steep slopes and scenic stream corridors of the Waughaw Mountains.
10. Promote clean air.
11. Support programs, policies and site designs that provide and promote noise abatement.
12. Promote and maintain the vegetative buffers that provide screening and the separation of different land uses.
13. Insure that any development on steep slopes, slopes that exceed fifteen percent, occurs without erosion and unnecessary loss of vegetation.
14. Establish procedures for Historic District Commission's review of development applications involving designated historic properties.

#### **Land Use Goals**

- A. Preservation of Pequannock Township's residential neighborhoods.
- B. Minimization of the impact of non-residential uses on the residential neighborhoods.

- C. Protection of residential neighborhoods from adverse impacts of non-residential uses permitted as "Home Occupations."
- D. Protection from adverse impacts of non-residential uses, allowed as conditional uses, by placement and adequate buffering so as to prevent or mitigate potential adverse impacts.
- E. Private provision of family day care facilities for up to five children in residential districts where a private residence is registered pursuant to the "Family Day Care Provider Registration Act."
- F. Promotion of the viability of the business community and aesthetic improvements in the commercial districts.
- G. Promotion of a variety of uses and site planning alternatives that encourage pedestrian traffic in the downtown (C-1) business district and meet the needs of residents for neighborhood shopping.
- H. Promotion of design standards that insure the maximum utilization of landscaping, buffering, uniform signage and lighting so as to enhance commercial district aesthetics and land values.
- I. Protection of the floodplain and aquifer recharge areas from the potential of environmental pollution while allowing a limited range of industrial uses in specific zones within the Township.

#### **Land Use Objectives and Policies**

- 1. Permit a limited range of professional uses in the residential zones along the Newark Pompton Turnpike between the C-1 commercial districts so that the residential character is preserved and parking and signage is accommodated on site with minimum impact to the neighborhoods.
- 2. Discourage flag lots and limit their creation to those locations where, due to curvilinear street patterns, the flag lot will not disrupt the neighborhood pattern and there is adequate area to allow for privacy and access by emergency vehicles.
- 3. Designate transition areas between commercial and residential districts where enhanced buffering is required.

4. Control and manage the development of Route 23 so as to reduce the diverted traffic from Route 23 and minimize the impact on the internal roadways servicing the residential and downtown business districts.
5. Specify kinds of retail uses permitted in the C-1 Business Districts for the purpose of encouraging neighborhood shopping.
6. Allow residential uses above commercial uses where there is adequate parking and buffering of the commercial activity.
7. Establish guidelines and standards for solid waste disposal facilities.
8. Establish guidelines for signage and outdoor displays that will assist the retail business community and contribute to commercial zone and corridor aesthetics.
9. Develop standards for lighting that provide for safety and enhance commercial district aesthetics and, within the C-1 district, encourage pedestrian use.
10. Promote the location of parking areas under structures, or in rear and side yards.
11. Continue to limit the kinds of uses permitted in the industrial zone along West Parkway to those that pose no danger of contamination to the aquifer recharge area.
12. Encourage the enforcement of zoning regulations, floodplain management and property maintenance standards in industrial zones so as to further protect environmentally sensitive areas.
13. Insure that all new industrial development is adequately buffered from residential uses and districts and that new uses within the industrial zones are associated with adequate and appropriate safeguards to insure the protection of the environment and the surrounding area.

#### **Housing Goals**

- A. Encouragement of the creation of a variety of housing types to meet the needs of Township residents and the region.

#### **Housing Objectives and Policies**

1. Implement the Final Judgment with regard to requirements for housing as to the Township and provide a realistic opportunity for the provision of the Township's fair share of housing that is affordable to low and moderate income families.

2. Continue to seek opportunities to assist low and moderate income families in rehabilitating existing deteriorated structures and flood proofing floodplain dwellings.

#### **Recreation and Community Facilities Goals**

- A. Promotion of the health, safety and welfare of Township residents through the work and activities of the Health and Police Department, the Office of Fire Safety, the Fire companies, and the Ambulance Squad.
- B. Provide adequate and conveniently located municipal, educational, recreational and cultural facilities to meet the needs of Township residents.
- C. Maintenance of the high standards and expansion of the associated with recreational facilities and programs for Township residents.
- D. Expansion of the public library facilities for Township residents.

#### **Recreation and Community Facilities Policies and Objectives**

1. Support the implementation of the recommendations of the Department of Parks and Recreation regarding additions and improvements to park facilities.
2. Seek the implementation of a path and trail system through a variety of land protection mechanisms and public access programs.
3. Seek the creation of a parking area that would provide access to the northern portion of Mountainside Park.

#### **Utility, Recycling and Floodplain Management Goals**

- A. Implementation and expansion of sewer services to other commercial, industrial and residential uses within the Township.
- B. Protection and service of the wells and transmission facilities of the potable water supply system within the Township so as to insure that the system remains adequate to meet the current and future needs of the community with the intent that the Township becomes the sole supplier of potable water to its residents and businesses.
- C. Compliance with the recycling requirements of the State of New Jersey.
- D. Minimization of increased storm water run-off, non-point source pollution from storm water run-off, and stream

erosion, as well as maintenance and encouragement of water recharge and natural storage and the biological integrity of stream channels through the use of good storm water management practices.

- E. Promotion of personal safety from flood hazards and the protection of property from damage through flooding.

#### **Utility, Recycling and Flood Plain Management Objectives and Policies**

1. Protect and safeguard the aquifer recharge areas and wells through appropriate zoning and enforcement.
2. Continue to monitor stormwater management practices and facilities so as to protect the ground water quality and reduce the incidence of artificially induced flood damage to downstream property owners. Maintain the adequacy of existing and proposed culverts, bridges, dams, and other water structures.
3. Continue to implement floodplain management policies, regulations, and programs aimed at promoting safety and preventing flood damage.
4. Continue to seek implementation of the Army Corps of Engineer's Dual Inlet Tunnel Project.
5. Continue to seek financial support for the purchase of residential properties within the floodway of the Pequannock and Pompton Rivers and to conserve these properties, once improvements are demolished, for passive recreational uses.
6. Continue to provide information to the public regarding flood plain hazards, flood emergencies and planning and procedures, and site specific flood plain determinations.
7. Preserve the Pio Costa tract's floodwater retention capability.
8. Insure that commercial buildings in flood areas have an advance warning system for employees and patrons.
9. Continue the policy of requiring utilities to be placed underground with all new construction and seek funding opportunities to place existing above ground utilities underground.

#### **Circulation Goals**

- A. Efficient and safe passage of vehicles, pedestrians and cyclists throughout the Township.

- B. Implementation of innovative traffic mitigation strategies and programs in response to the Clean Air Act Amendment of 1990.
- C. Development of additional pedestrian and bicycle paths within the Township linking residential areas with businesses, schools and recreational facilities.

#### **Circulation Policies and Objectives**

1. Recommend that additional park and ride lots be established within the Township. One potential site for a new facility is the vacant land at the south-west corner of West Parkway as it intersects with Route 23.
2. Coordinate traffic management plans with suburban transit initiatives developed by Morris County and the Morris County Transportation Management Association ("Mc Rides").
3. Investigate the use of Transportation Enhancement funds, available under the Intermodal Transportation Efficiency Act, to provide pedestrian and bicycle paths.
4. Provide, if needed, a connection between the northern portion of West Parkway and the Boulevard, after review of changes in traffic patterns due to the completion of Route 287 and other residential development.
5. Revise the Township's cartway width and parking space requirements in lieu of revised standards promulgated by the American Association of Highway and Traffic Officials and the Center for Urban Policy Research's Subdivision and Site Plan Handbook.
6. Support the Army Corps of Engineers Passaic River Dual Inlet Tunnel project to eliminate potential flooding along sections of Route 23.
7. Recommend improvements of intersection configuration and roadway design at high accident locations on Route 23 at Jackson Avenue and Alexander Avenue, and along Lincoln Park Road at the sharp bend.
8. Support the reactivation of passenger rail service on the New York, Susquehanna and Western Railway.

## IV

### LAND USE ELEMENT

It is the purpose of the land use section of a master plan to provide a logical basis for current and future land use decisions, regulating the development and redevelopment of land within the boundaries of a community. This section of the Pequannock Township Master Plan, therefore, describes the existing development patterns and provides direction for future development, redevelopment and growth.

As many of the land uses present in a community will remain, they establish the context for the development and redevelopment of the community. These current conditions are summarized by indicating the portion of the total land mass that is dedicated to each category of land use. Pequannock Township consists of 4,618 acres of land and nearly 41% of the land or approximately 1,861 acres is used for residential purposes. Vacant land makes up the next highest percentage of the land use spectrum, representing approximately 20 % of the land area of the Township. Commercial and industrial land use account for approximately 7% and 4%, respectively. The chart in the Appendix as Figure 2 describes the different land use components for the Township. A Land Use Map (Map #6) is also included in the Appendix. The Planning Department has analyzed tax information for 1993 in calculating these totals. It should be noted that these are not static figures. Vacant land, in particular, will decrease as current developments, both approved and under construction, are completed.

#### The Residential Land Use Component

In that 41% of the land area is occupied by residential uses, it is important to look closely at the residential zoning and the factors that may impact that zoning. As many of these factors stem from demographic changes, additional discussion of these numbers and trends are included in the Housing Element.

First, it is noted, here, that there has been only a small increase, about 15%, in the number of housing units constructed in the past twenty years. This compares to a 42% growth that occurred throughout Morris County between 1970 and 1990. Second, although lot size varies considerably within the Township, the overall density of dwelling units per acre is 0.95 (1.05 acres for each dwelling unit). This figure is nearly double the County average of 0.51 and illustrates that the Township is more densely developed than many of its neighbors. Finally, the Township is largely a community of single family dwellings although the multifamily component has increased in the last decade and continues to increase as a result of construction of the Planned

Residential Development District. Multifamily units accounted for 3.9% of the housing stock in 1970 and 10% in 1990.

#### A. Single Family Zones

The residential zone plan has developed historically and reflects historic patterns. It provides for a range of densities and lot sizes throughout the Township. There are six residential single family zone districts which require lot sizes from 9,375 square feet to 87,120 square feet. The following chart summarizes this plan.

##### Low Density

R-87, R-45, and R-22 zones

- . Lot sizes are 87,120 square feet, 45,000 square feet respectively.
- . These zones are located in the western portion of the Township and are impacted by steeper slopes, the floodplain associated with East Ditch, and the Airport Hazard Zone.

##### Medium Density

R-15, and R-11

- . Lot sizes are 15,000 square feet and 11,250 square feet respectively.
- . These zones are located in central and northern portion of the Township that is generally not constrained by slopes, wetlands or the floodplain of either the East Ditch or the Pompton River.

##### Higher Density

R-9

- . Lot size is 9,375 square feet.
- . This zone is located in the southern and eastern portions of the Township and is impacted by the floodplain of the Pompton River.

#### The Cluster Provision

In 1973, the Township added a provision to the subdivision ordinance that is relevant to the R-87, R-45, R-22, R-15 and R-11 zone districts. This provision allows that the number of dwelling units allowed per the specified bulk requirements of the zone can be clustered on smaller parcels to create common open space. Greenview, a development in the southern portion and west of West Parkway, was designed as a cluster development. Greenview Park, which is available to

the community at large, is the resulting open space. Similarly, Rockledge Park was created as a result of clustering under four separate development applications.

#### In-Fill Development

In the single family residential zones, the Township has primarily witnessed in-fill development. Subdivision applications generally involve the division of oversized lots, with and without existing residential structures, into smaller lots permitting additional single family units adjacent to older homes. The issues raised in these types of applications typically involve the conformity of lot sizes to the zone, and the relationship of proposed setbacks to existing dwellings and open spaces.

#### B. Multifamily Zones

The multifamily component has increased significantly since the 1970's, when changes in household size and rising housing costs created a need for smaller units. The earlier multifamily housing projects occurred outside multifamily zone districts, typically by use variance. Crestwood Park and Olde Orchard Village are examples.

In 1984, resolving the "Mt. Laurel" litigation entitled Morris County Fair Housing Council, et. als, vs. Boonton Township et. als, Judge Skillman approved a negotiated settlement which required the rezoning of the Township's PRD-1 and PRD-2 zones to Planned Residential Development (PRD) and Planned Unit Development (PUD) districts respectively. The new zones provided for higher density and a mix of housing types including townhouses and condominium units as to allow for a 20% set aside for low and moderate income units. The PRD can be built at a gross density of 4 units per acre, and the PUD, which is also associated with a commercial zone, has a gross permitted density of 6 units per acre.

Environmental constraints on both sites will most likely limit the actual overall density of the completed projects. The PRD zone district development known as "The Glens", which is currently under construction, will result in 583 multifamily units. In this case the overall density of 3.05 units per acre is less than the permitted density due to the restrictions of wetlands. Both wetlands and steep slopes will impact the PUD zone development, as well.

With the buildout of these projects, the average density Township wide, will increase significantly. The Glens alone will increase the average from 0.95 units per acre to 1.08 units per acre.

The newer (PRD and PUD) multifamily construction will also result in a shift in the location of the higher concentrations of residential units. Before 1950, the highest residential densities centered around the Newark Pompton Turnpike and the Pequannock Business district and the earliest multifamily development reinforced this pattern. The Glens, on the other hand, brings higher densities to the northwest portion, formerly the least densely populated area. Likewise, if the PUD district is developed as zoned, density in the northwest corner of the Township will also increase significantly .

The change in the location of the bulk of the population will cause new problems due to the location of existing municipal facilities. The increase in the density in the western portion of the Township may warrant a connection between West Parkway and the other north-south roadways. The additional increase in density in the northwest corner that is anticipated in conjunction with the PUD development will pose an even greater problem connecting people with facilities and services due to steep slopes, Route 287 and traffic congestion on Route 23.

#### C. Other Permitted Uses Within Residential Area

##### Chilton Memorial Hospital

Chilton Memorial Hospital, when it moved part of its operation from the Newark Pompton Turnpike to West Parkway in 1972, consisted of a five story structure and adjoining parking areas. Since that time, the Hospital has closed the Turnpike facility, acquired several residences, added a Child Care Center and has now constructed a Cancer Care facility on West Parkway. These additions, which include additions of land and changes in operations, have resulted in a "campus" atmosphere with a significant impact on the surrounding area.

The original location along the Newark-Pompton Turnpike had direct access from Route 23 which led to the use of many residences for doctor's offices. The relocation of the Hospital to West Parkway which will also have direct access to Route 23 upon the completion of West Parkway, may create pressure for non residential development here. The residential uses and character of West Parkway, however, should be preserved.

As the Hospital undergoes development and adopts new technologies, adequate safeguards to protect the neighboring residences and residential areas must be maintained. Noise, traffic, and other undesirable activity associated with the Hospital must be minimized and adequately buffered so as not to impact the surrounding area. It is important to preserve the residential nature of the surrounding area.

## Agricultural Uses

Agricultural uses including greenhouses, have strong historic roots in the Township. The draining of ditches in the early 1800's left fertile farmland which has been significantly diminished by expanding residential development. There are currently 253 acres remaining under farmland assessment. Greenhouses, which can intensify production and increase the growing season, are a significant part of the remaining agricultural component.

Agriculture has historically been associated with dwellings and residential zones, and farms often provided produce to residences directly. This has changed significantly in the Township as many of the local farms are large wholesale operations that distribute merchandise far afield.

The growth of this industry has also increased its impact on the surrounding neighborhood due to the size of the buildings, increased truck traffic, noisier operations and increased retail activity. While this use is compatible with the proximity to the airport and the airport zoning, there is a potential for negative impacts on surrounding residential uses in the area. Any new development associated with this use should be situated in order that these negative impacts can be minimized and should occur only with adequate buffering.

## Lincoln Park Airport

The Lincoln Park Airport which is located at the southwestern border of the Township impacts the neighboring residential area with the noise and flight hazards associated with air traffic. The "Clear Zone", which is an extension of the airport runway, and the Airport Hazard Zone, which is an additional area below typical flight patterns, are within the Township and dictate alternate zoning regulations which decrease allowed density. This decrease in density is required so as to minimize the number of people who are exposed to risk. Due to the risk, noise, and zoning impacts associated with the airport, any expansion or realignment of the Airport should be vigorously opposed.

## Home Occupation

The Township permits certain home occupations as an accessory use provided the residential quality of the neighborhood is not adversely impacted. As technology changes and equipment and machines historically associated with business and industry occur more frequently in homes, there is a renewed interest in cottage industries and working at home. Although the flexibility of allowing home occupations may be desirable to those who would pursue them, they

stimulate a mix of uses with potentially negative impacts. To avoid the negative impacts, the conduct of home occupations must be reasonably controlled.

#### D. Protecting The Major Residential Corridors

The Newark Pompton Turnpike (Revised 9/18/95)- The Township has always protected this corridor from the pressures of incremental commercial encroachment stemming from the existing commercial zones and in light of the public input received during the Master Plan development process, the policy of maintaining the residential sections of the Turnpike should continue. Specifically, there should be preservation of all residential areas and structures, particularly where there are homes on large lots, of historic interest and colonial design. However, it is recognized that a number of the residential lots, given their size and location, may be suitable for professional office use.

Given both the interest in maintaining the residential character and in greater flexibility, some professional uses in conjunction with a single residential use could be allowed along the Turnpike as conditional uses in the area between Sunset Road and Cameron Avenue, provided that it can be demonstrated that a lot is large enough to accommodate professional office uses in structures that have residential character and are in harmony with the residential and historic character of the surrounding area. This new policy would be a departure from the current zoning only in that it is intended to allow greater flexibility in developing a lot size requirement and in establishing whether or not the professional resides at the same location as where the professional use is practiced. Additionally, any change in the zone regulations should insure that there will be adequate on site parking which is screened, that front yards will be maintained, and that signage and lighting will be limited in size and scope. (End 9/18/95 Land Use revisions)

The Boulevard - The Boulevard is also sensitive to change as is the Newark Pompton Turnpike for similar reasons and, again, public input has been taken into consideration. The encroachments include a physicians complex, which was approved nearly forty years ago, North Boulevard School, Hillview School, Steven Gerace School and several pre-existing non-conforming uses. Given the limited scope of commercial, office and public uses on this roadway, any additional non-residential use is not warranted and would significantly impact the integrity of the residential neighborhoods in this area. The preservation of the residential uses only along this roadway should be strongly encouraged.

West Parkway - This roadway, when completed, will be the fourth north-south corridor within the Township.

Although the uses surrounding this corridor are largely residential, the roadway begins at its northern end in an Industrial zone, provides frontage and access for Chilton Memorial Hospital at approximately its midpoint, and borders the High School property. The residential neighborhoods along with the green space afforded by the Glens should be maintained without additional non-residential encroachments.

Flag Lots - Due to the fact that the development patterns in most of the Township are established and, for large portions of the Township are established as a grid, flag lots should not be permitted except in situations or locations where there is sufficient area to allow for privacy, emergency vehicle access, minimum 50 foot roadway width, and all other requirements of the Subdivision Ordinance are met. To implement this policy, provisions of the Zoning Ordinance and Subdivision Ordinance should be changed to establish an area requirement for flag lots which is one and one-half times the area requirement for the zone district.

### **The Commercial Land Use Component**

The Township has two very different kinds of commercial areas. These areas are typically described as neighborhood commercial and highway commercial. The recommendations for these areas are different, recognizing the different markets and locations in which each exists.

#### **A. Neighborhood Commercial Area**

This classification generally encompasses two areas located along the Newark Pompton Turnpike within the Township. The areas are referred to as the Pompton Plains commercial area and the Pequannock commercial area. These areas are intended to provide an opportunity for residents of the community to fulfill some of their necessary shopping needs without venturing onto the highway. The following describes some of the assets and limitations of these two commercial districts.

These areas consist of over 120 retail businesses that include quick stop retail food service, hardware stores, beauty salons, real estate offices, travel agencies and specialty shops. The tightly clustered older structures connected by sidewalks provide some "downtown" ambiance.

Public meetings at the beginning of the Master Plan development process and subsequent discussions with retailers and leaders from the business community have aided in the identification of some of the issues and problems associated with maintaining a retail business district. These same public meetings established that it is also in the interest of members of the larger community that these areas be

improved to a higher aesthetic standard while maintaining the colonial appeal.

Parking in both neighborhood commercial areas occurs along the street, in the front yard, and in rear lots utilized jointly by several businesses. These facilities

have been described as "limited" but "adequate" however, this description might be revised given increases in business activity.

The recent installation of sewers to parts of the Pequannock business area will impact this area significantly while, conversely, the lack of sewers will limit the expansion of stores in the Pompton Plains business area. The sewers allow for a greater intensity of use, and increases in impervious coverage. At present, in both the Pompton Plains and the Pequannock business districts there are residences above the stores. With the extension of sewers in the Pequannock business district, there is greater potential for this to occur.

Sidewalks, street lighting, and overhead utility wires have been installed and maintained without any aesthetic guidelines or attention to uniformity. In some areas sidewalks are in disrepair. Commercial signs, although not uniform with respect to style, are, for the most part, uniform in size and limited in number.

The mix of uses within the business area, residential above commercial, and the proximity of businesses to the residential zone district create the potential for negative or nuisance impacts on the residential uses. In these older more intensely used areas, space is limited and the requirements for impervious coverage determine the amount of landscaping, screening and buffering that can be provided to offset the impacts associated with proximity.

Because of the recent economic downturn, there is both added and renewed concern about the viability of the neighborhood business districts. In response to this, the Planning Board recommended and the Township Council approved a zoning change that expanded the uses permitted in the C-1 district to include restaurants as a conditional use. Revision of the sign ordinance to include the use of individual pennants and banners as temporary promotional signs is also being considered. With expanded dialogue within the business community there is a basis for greater cooperation in bringing uses to these areas which will create and encourage pedestrian traffic, improvements to infrastructure and additional buffering and landscaping.

Consideration was given to a proposal to create a designated "business improvement district" and a design review committee that would develop standards, comment on architectural features and provide a site plan review process. Although this process might encourage greater uniformity in design, the additional regulation could pose a hardship to the business community. Additionally, with the creation of a new Chamber of Commerce, it is hoped that much of the impetus for improvements to the business district will come from the business community.

#### **B. The "Highway Commercial" Business Area**

This area can generally be described as the area of the Township which fronts on State Highway Route 23. This commercial area offers a mix of stores including a large shopping center anchored by national chain stores, smaller "strip" centers and individual or free standing retail structures that as a group offer a wide variety of goods and services.

The highway commercial area consists of three different zones, the C-3 zone on the northbound side of the highway and the C-2 and C-4 zones on the southbound side. The uses permitted in the C-3 zone are generally more intense and regional in scope. The southbound side, with the exception of the former McDonald's Beach site or C-4 zone, is constrained by its narrowness and the minimal area available for a transition between highway frontage and residential neighborhoods.

Most of the highway commercial area is either in the floodplain of the Pompton River or impacted by it. This flood hazard location limits development and the use of the individual properties in several ways. There are State and local regulations concerning fill in the flood plain, elevations for new construction, installation of below ground tanks, individual waste water systems, and outside storage of materials. There is also increased general concern for the safety of individuals and protection of the environment from hazardous materials during floods.

The location of the Pompton River floodway in the easternmost portion of the C-3 zone carries an even greater impact. This area must be kept free of structures - no new construction is permitted, and should be part of a natural green space or area to protect the River, its banks, and its water quality.

With the exception of an individual sewer treatment plant at the Plains Plaza Shopping Center and a connection to the Wayne system under the river for the hotel on the northbound side of the highway, this area is presently not serviced by sewers. However, the Township has included the

highway business zone in its overall plan for the extension of sewer service. Without the need to rely on individual on-site disposal systems, the area will support increased development, increased kinds of uses, and a diminished potential for environmental contamination.

The present layout of Route 23 in conjunction with the local roadways has the potential of promoting the use of internal roadways as auxiliary jug handles in the event of traffic increases on Route 23. This potential creates undesirable congestion on internal roadways and limits pedestrian movements in the downtown area as well as the negative impacts on surrounding residential districts. Mechanisms should be sought to keep the traffic on Route 23 and off local internal roadways or, in the alternative, minimize the increase in traffic.

Despite the constraints described above, it is anticipated that the completion of Route 287 will bring growth pressures to the area and improvements to the district. Additionally, recently enacted State Highway Access Code provisions will direct that the growth occur on larger parcels affording greater opportunities for improved site design.

Most of the properties are entirely paved and shoppers access the businesses from the highway directly and park in front of the store or center. Highway takings for road widening, have cut into the space available for landscaping and buffers for the parking areas. With a few exceptions, landscaping is poorly maintained.

Both free standing and attached signs are permitted, although limited in number and size. Current regulations require that all new attached signs at a particular location be uniform, but there is no design standard for the district. The free standing signs, because they are apart from other structures, tend to appear as clutter and pose unique design problems.

Site lighting is essential for the safe movement of vehicles and pedestrians, yet it should not interfere with the motoring public nor, in the C-2 zone, with the residential neighborhoods.

Public participation in meetings held early in the Master Plan process identified an interest in aesthetic improvements in this area. Therefore, new development here should attain a higher level of aesthetics with improved parking lot layouts, shared access, minimal parking in the front yard, landscaping, buffering, and decreases in impervious coverage. Certain design standards should be specifically incorporated into the zoning ordinance and that alternative and improved site plan layouts be achieved

through zoning incentive mechanisms and the site plan review process.

### C. The Industrial Land Use component

Most of the current industrial zone districts were so designated because of the industrial use or sand and gravel mining operation that existed on the particular site or in the region prior to the zoning regulation that created the zone.

At present there are three categories of industrial zones, I-I, I-II and I-III, which occur in five locations. These relatively small areas of industrial uses, which grew historically along roadways, railroads and the rivers were, more often than not, near residential areas that also grew in close proximity. There are also several existing industrial uses that occurred outside industrial zones. Most notably are those that occurred along Route 23, southbound near the railroad right-of-way and northbound at East Garden Place. These are currently in commercial zones, C-2 and C-3, respectively.

The different categories of industrial zones make some distinctions between the kinds of uses that are permitted. The I-I zone is the most permissive with respect to the scope of uses allowed. The following matrix indicates which uses are permitted:

	I-I	I-II	I-III
Offices	X	X	X
Veterinary Hospitals	X		
Research Laboratories	X		X
Product Development Laboratories	X		
Warehousing	X	X	
Metal and Wood Fabrication	X		
Wholesale Distribution	X	X	X
Assembly of parts manufactured elsewhere	X		X
Packaging of parts manufactured or assembled elsewhere	X	X	X
Data Processing		X	

More than other uses, industrial uses have the potential for environmental contamination. This is particularly true where the industrial uses are located on or near environmentally sensitive lands. Due to the historic origin of the industrial uses and zoning, many of the Township's industrial sites have environmental constraints. This is especially true along West Parkway where the I-II zone is close to Township wells and parts of the aquifer recharge areas associated with these wells. Because of these constraints,

specific restrictions on uses and requirements for review of each use, as occupancy changes, are necessary to protect the wells.

Some industrial zones are also located in the flood hazard area. This is the case for the I-I zone along Alexander Avenue and I-I and I-II zones along the railroad right-of-way and south of the Turnpike. In these areas material storage is restricted to minimize the potential of pollution from flooding.

Industrial uses also have the potential for an increased level in the volume of heavy truck traffic and for irregular hours of loading and unloading operations. In locations where there are residences near by, these residences may be impacted by noise and higher levels of air pollution.

To minimize these impacts and the potential for environmental hazards generally, the policy restricting the kinds of uses permitted in the industrial zones should be continued and any industrial development be required to provide adequate buffering and safeguards to protect the surrounding areas.

In the area along East Garden Place, where there is no frontage on Route 23, the zoning should be changed to allow a greater mix of uses provided that all activity in this area is enclosed within a building and there is an adequate buffer along the river corridor. Any industrial uses permitted should be limited to those which would pose no threat to the surrounding environmentally sensitive areas.

HOUSING ELEMENT AND FAIR SHARE PLAN  
(Revised 9/18/95)

In accordance with the Municipal Land Use Law, N.J.S.A. 40:55 D-1 et. seq., Pequannock Township has undertaken an analysis of its existing housing stock and prospective housing demand to better insure that both the present and prospective housing needs of the Township and the fair share obligation to provide affordable housing will be met.

This analysis is a part of a long standing planning tradition and represents a new edition to numerous precursory housing documents. This Housing Element and Fair Share Plan will update the 1984 Master Plan and The Housing Element adopted in 1989 with new data from the 1990 census. It will document the evolution and progress of the Township's program to provide low and moderate income housing in accordance with the Court Judgment and Settlement Agreement (Morris County Fair Housing Council et. als, vs Boonton Township, et als.) and should address the Council on Affordable Housing requirements for a Fair Share Plan established by N.J.A.C. 5:91 and 5:93. This element will provide a current analysis of the Township's fair share obligation based upon the Council on Affordable Housing's recent rule changes.

**An Overview - Demographic, Housing and Employment Data**

The Municipal Land Use Law and the Council on Affordable Housing's Substantive Rules require that the housing element and Fair Share Plan include an analysis of existing housing stock and projections of housing supply and future demand based on demographic trends, employment characteristics, and a study of vacant land. This data and analyses follow: \*

1. Population characteristics

a. Total Population

<u>Year</u>	<u>Total Population</u>
1970	14,350
1980	13,776
1990	12,884

Population totals have been declining over the past two decades due, in large part, to decreases in household size and a housing stock that has remained relatively stable during the last two decades.

\* Unless otherwise noted, the source of the data included herein is the 1990 Census of Population and Housing Summary Tape File 3, prepared by the New Jersey State Data Center, New Jersey Department of Labor, May 1992.

b. Age of Population (1990)

<u>Age Cohort</u>	<u>Total</u>	<u>% of Population</u>
Under 5	788	6.1
5 - 24	2713	26.9
25 - 44	3918	30.0
45 - 64	3122	24.9
65 and over	1560	12.1

c. Changes in Age Cohorts

<u>Age Cohort</u>	<u># Change 1970/80</u>	<u>% Change</u>	<u># Change 1980/90</u>	<u>% Change</u>
Under 5	-484	-41.1	93	13.4
5 - 24	-675	-11.9	-1543	-31.0
25 - 44	-137	-3.6	223	6.1
45 - 64	406	13.9	128	3.8
65 and over	316	38.6	424	37.4

The most significant changes have occurred in the adult population aged 65 and older and in the cohort comprised of school age children and young adults. There has been a small increase in the number of preschool children which is matched by an increase in the number of preschool children statewide.

<u>Age Cohort</u>	<u># Change 1989/90</u>	<u>% Change</u>
Children under 5 years of age statewide	532,637	18

2. Income

a. Median Household Income

In the Township the median household income was \$54,935 in 1989. The number of households in separate categories of income is indicated below:

<u>Income in</u>	<u>Dollars</u>	<u>Number of Households</u>
0 -	4,999	34
5,000 -	9,999	141
10,000 -	12,499	69
12,500 -	14,999	59
15,000 -	17,499	74
17,500 -	19,999	91
20,000 -	22,499	116
22,500 -	24,999	63
25,000 -	27,499	143
27,500 -	29,999	97
30,000 -	32,499	116
32,500 -	34,999	111
35,000 -	37,499	154
37,500 -	39,999	122
40,000 -	42,499	110
42,500 -	44,999	99
45,000 -	47,499	96
47,500 -	49,999	141
50,000 -	54,999	303
55,000 -	59,999	162
60,000 -	74,999	725
75,000 -	99,999	716
100,000 -	124,999	304
125,000 -	149,999	92
150,000	or more	133

b. Low and Moderate Income Households

The chart below indicates the number of households within the Township in which the household income is less than 50% and 80% of the Morris County median income of \$56,273.

<u>Income Less Than</u>	<u>No. of Households</u>	<u>% of all Households</u>
\$27,500 (50%)	790	18.5
44,999 (80%)	1599	37.4

c. Poverty Status

In 1989, 175 persons or 1.366% of all persons, for whom poverty status was determined, were below poverty level in the Township. This included individuals of all ages, families with children, and persons 65 years and older.

3. Employment

a. Employment and Unemployment Data  
(Source is New Jersey Department of Labor)

<u>Year</u>	<u>Total Labor Force</u>	<u>Employed Labor Force</u>	<u>Total Unemployed</u>	<u>Unemployment Rate</u>
1992	6,892	6,428	464	6.7%
1991	7,594	7,099	495	6.5%
1990	7,668	7,324	344	4.5%
1989	7,720	7,457	263	3.4%

State and County figures for the same period are as follows:

County of Morris

1992	231,000	216,200	14,700	6.4%
1991	223,000	211,600	11,400	5.1%
1990	225,900	218,000	7,900	3.5%
1989	228,400	222,300	6,100	2.7%

State of New Jersey

1992	4,100,000	3,666,000	135,000	8.4%
1991	4,018,000	3,752,000	266,000	6.6%
1990	4,048,000	3,846,000	202,000	4.9%
1989	3,989,000	3,826,000	163,000	4.1%

b. Kinds of Employment by Industry

Persons in the Township 16 years and over were employed in the following industries:

<u>Industry</u>	<u>Number of Persons</u>
Agriculture, forestry, & fisheries	56
Mining	0
Construction	453
Manufacturing:	
Nondurable goods	633
Durable goods	585
Transportation	349
Communications & other public utilities	247
Wholesale trade	422
Retail trade	1,115
Finance, insurance & real estate	745
Services:	
Business & Repair services	468
Personal services	135
Entertainment & recreation	76
Professional & related services:	
Health services	596
Educational services	400
Other professional & related services	563
Public administration	135

c. Kinds of Employment by Occupation

<u>Occupation</u>	<u>Number of Persons</u>
Managerial & professional specialty Occupations:	
Executive, administrative, & managerial	1,259
Professional specialty	1,077
Technical, sales & administrative support:	
Technicians & related support	217
Sales	1,049
Administrative support, including clerical	1,448
Service occupations:	
Private household	8
Protective service	86
Service, except protective and household	482
Farming, forestry, & fishing occupations	33
Precision production, craft, & repair occupations	747
Operators, fabricators, & laborers:	
Machine operators, assemblers & inspectors	193
Transportation & material moving occupations	223
Handlers, equipment cleaners, helpers, & laborers	156

d. Persons who did not work in 1989.

Of all persons 16 years and older, 24.5% were not employed in 1989. 69% of those who were not employed were female.

4. Housing

a. Number of housing units:

<u>Year</u>	<u>Units</u>
1970	3828
1980	4226
1990	4385

b. Change in Number of Housing Units

<u>Decade</u>	<u>Percent Change</u>
1940 - 1950	74.6%
1950 - 1960	77.0%
1960 - 1970	30.6%
1970 - 1980	10.4%
1980 - 1990	3.8%

Most of the growth in the Township housing stock occurred between 1950 and 1970. The number of housing units has remained stable in the last decade as indicated above. This is in contrast to the remainder of Morris County where the percent change in the number of housing units between 1980 and 1990 was 12.9%. However, since the census the Township has experienced an influx of approximately 600 new units.

c. Age of Housing Stock

The pattern of growth is also reflected in the age of the housing stock. 59.5% of the housing stock was built before 1959 and is more than 30 years old.

<u>Year Constructed</u>	<u>Number of Units</u>
Prior to 1939	586
1940 - 1949	615
1950 - 1959	1,426
1960 - 1969	988
1970 - 1979	331
1980 - 1990	439

d. Residential Improvement  
(Authorized by Building Permits)

The following chart was prepared by the Building Department and estimates the dollar value of residential improvement based on building permit applications.

Construction Estimated Costs Data - from 1/1/85 thru 12/31/92

<u>Year</u>	<u>New Homes</u>	<u>Home Improvements</u>
1985	\$1,484,550	\$1,460,900
1986	3,247,000	3,744,939
1987	351,000	2,502,498
1988	1,265,100	5,065,488
1989	305,000	4,342,273
1990	495,000	5,655,724
1991	369,005	3,627,651
1992	75,000	2,208,845

e. Diversity of Housing Stock and Tenancy

The Township's 4,385 housing units are diverse with respect to size and type. As the data below will demonstrate, the Township is largely a residential community of single family dwellings, however within this category there is a significant diversity in housing size and cost. In the Township's single family zones, lot sizes that range from 9,375 square feet to 87,120 square feet, along with the differences in the age of the structure and floodplain vs. non-floodplain location contribute to this diversity.

The multifamily component of the Township housing stock also contributes to this diversity. Units of this type add opportunities for rental housing and condominium ownership. The data indicates that this component has increased significantly over the past twenty years. An apartment complex at Kent Place, Hearle Village (a senior citizens rental residence), Olde Orchard Village, Lincoln Park Road Townhouses, apartments above retail uses in the business district and the recent construction of "the Glens", are the reasons for this growth.

(1) Housing tenancy - Of the total number of occupied housing units in the Township (4,281), 499 are rental units and 3728 are owner occupied.

<u>Total Occupied Units</u>	<u>% Rented</u>	<u>% Owner Occupied</u>
4281	11.7	88.3

Since 1970, the number of rental units has increased in relation to the number of owner occupied units.

<u>Year</u>	<u>% Rented</u>	<u>% Owner Occupied</u>
1970	7.3	91.4
1980	10.5	89.5
1990	11.7	88.3

(2) Persons per housing unit - The number of persons per dwelling unit has decreased over the last two decades. This reflects changes in family size, family structure and a maturing population:

<u>Year</u>	<u>Person Per Unit</u>	
	<u>Rental Unit</u>	<u>Owner Occupied Unit</u>
1970	3.05	3.87
1980	2.16	3.47
1990	2.1	3.1

(3) Units per structure - The number of units per structure is tabulated by the U.S. Census Bureau for numerous categories as illustrated below. The total number of single family units whether attached or detached is 3,915. This is compared to a total of 470 units which are in structures of two units or more.

<u>Units in Structure</u>	<u>Total Units</u>	<u>%</u>
1, detached	3,870	88.3%
1, attached	45	1.0%
2	100	2.3%
3 or 4	83	1.9%
5 to 9	74	1.7%
10 to 19	63	1.4%
20 to 49	30	0.7%
50 or more	72	1.6%
Mobile Home or Trailer	0	0.0%
Other	48	1.1%

Earlier Census Data indicates that the number of multifamily units has been increasing in relation to single family units.

<u>Year</u>	<u>% Single Family</u>	<u>% Multifamily</u>
1970	96.1	3.9
1980	91.2	8.4

That relationship, with a multifamily unit being any unit within a structure of 2 or more units, was 89.3% and 10.7% in 1990.

<u>Year</u>	<u>% Single Family</u>	<u>% Multifamily</u>
1990	89.7	10.7

(4) Housing Value and Costs - The median value of owner occupied housing units in 1990 was \$218,750 and 1722 units were valued at \$200,000 or less. the number of housing units in several categories of value is illustrated below:

<u>Value</u>	<u>Units</u>	<u>%</u>
Less than \$ 15,000	0	0.0%
\$ 15,000 - 19,999	40	1.1%
20,000 - 24,999	0	0.0%
25,000 - 29,999	6	0.2%
30,000 - 34,999	0	0.0%
35,000 - 39,999	0	0.0%
40,000 - 44,999	0	0.0%
45,000 - 49,999	0	0.0%
50,000 - 59,999	7	0.2%
60,000 - 74,999	13	0.4%
75,000 - 99,999	72	2.0%
100,000 - 124,999	85	2.4%
125,000 - 149,999	265	7.5%
150,000 - 174,999	595	16.8%
175,000 - 199,999	639	18.1%
200,000 - 249,999	995	28.2%
250,000 - 299,999	488	13.8%
300,000 - 399,999	240	6.8%
400,000 - 499,999	60	1.7%
500,000 or more	29	0.8%

The median value has more than doubled since 1980 and the ratio between household income and median value has increased.

<u>Ratio</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>
Median Household Income	\$14,041	\$27,000	\$ 54,935
Median Value	28,000	75,200	218,750
Ratio	1:2	1:278	1:3.98

The median of specified owner costs for owner occupied housing units with a mortgage is \$1,191 and without a mortgage is \$401. The median gross rent is \$734. The numbers of housing units associated with specific costs are indicated below.

(a) With a mortgage	<u>No. of Households</u>
Less than \$ 100	0
\$ 200 - \$ 299	20
300 - 399	11
400 - 499	15
500 - 599	109
600 - 699	177
700 - 799	222
800 - 899	203
900 - 999	128
1000 - 1229	517
1250 - 1499	395
1500 - 1999	415
2000 or more	348
Total	2560

(b) Not mortgaged:	
Less than \$100	0
\$ 100 - \$ 149	20
150 - 199	0
200 - 249	8
250 - 299	29
300 - 349	69
350 - 399	118
400 or more	730
Total	974

<u>Gross Rent</u>	<u>No. of Rental Units</u>
With cash rent:	
\$ 0 - \$ 99	0
100 - 149	29
150 - 199	10
200 - 249	9
250 - 299	19
300 - 349	32
350 - 399	12
400 - 449	25
450 - 499	9
500 - 549	9
550 - 599	7
600 - 649	10
650 - 699	28
700 - 749	50
750 - 999	114
1000 or more	103
No cash rent	33

5. Employment - The number of jobs

The New Jersey Department of Labor data tabulates the number of establishments in the Township where people are employed and the number of jobs. These figures show that although there is growth in the number of establishments employing people, the total number of jobs has declined since 1989.

	<u>Number of Jobs</u>	<u>Number of Establishments</u>
1985	3,924	329
1986	4,259	339
1987	4,306	351
1988	4,322	357
1989	4,448	358
1990	4,091	363
1991	4,043	384
1992	4,264	408
1993	4,502	439

6. Vacant Land

Tax assessment data for 1993 indicates that the vacant land in the Township totals 925 acres, 202 of which are owned by the municipality. The privately owned portion includes the Greitzer tract which comprises 268 acres and is currently zoned for Planned Unit Development, the Pio Costa tract of 150 acres zoned for industrial use and 114 acres that is the remainder of the Cyanamid tract which is set aside as open space within "the Glens". Other large parcels include the Covello property along the Pequannock River and the DCA property that was formerly McDonald's Beach on Route 23.

Most of the vacant land within the Township is impacted by wetlands or a flood hazard area location. The Pio Costa tract has been designated as a flood water retention area in the U.S. Army Corps of Engineer's study entitled, "Flood Protection Feasibility Main Stem Passaic River Main Report". Similarly many of the vacant parcels that are municipally owned were purchased or acquired in conjunction with flood damage prevention programs.

## Affordable Housing

Pequannock Township was one of the eleven Morris County municipalities that were named in affordable housing litigation initiated in 1978, Morris County Fair Housing Council, et. als., vs. Boonton Township, et. als. which ended with the Court approving a negotiated settlement on December 10, 1984. Subsequent to this Agreement, the Township has embarked on a program to provide affordable housing that includes, in addition to the implementation of the PRD and PUD zoning, the creation of a Fair Housing Committee to oversee the delivery of the affordable units to low and moderate income persons, and the pursuit of projects designed to assist low and moderate income households in rehabilitating deteriorated single-family structures.

As of this writing, these efforts have resulted in the following totals.

1. 100 units, new construction for senior citizens. These are rental units at Hearle Village with Section 8 subsidies.
2. 8 units, residential conversion. These are 4 low and 4 moderate income units set aside in the conversion of the former Chilton Hospital building, "Crestwood Park".
3. 3 rental units  
These units are set aside with the development of apartments above commercial buildings at Evans Place and Jackson Avenues. Two are priced for low income households and one is priced for a moderate income household.
4. 63 rehabs  
These are owner-occupied properties in the Township that have been rehabilitated with Morris County Community Development funds. Forty of these projects were closed prior to April 1, 1990. Twenty-three were closed after this date.
5. 25 rehabs  
Twenty-five homes were rehabilitated with Balanced Housing funds. All of these projects were initiated after April 1, 1990 and four of them received Community Development Funds as well.
6. 120 units of new construction  
These units will be set aside and made available to low and moderate income households in conjunction with the

development of the PRD zone.

With this number of units completed, and given the amount of time that has passed since the date of the Settlement agreement, the Township is currently seeking Substantive Certification from the Council on Affordable Housing. This process will involve a demonstration that the Township has met its fair share obligation as set forth in COAH's Procedural and Substantative Rules, N.J.A.C. 5:01-14, 5:92-1.1 and 5:93.

The Fair Share determination made by COAH is a result of a calculation that sums indigenous need, reallocated present need, prospective need, prior-cycle prospective need and demolitions. The formula then reduces this number for filtering, residential conversions and spontaneous rehabilitation. In this formula, indigenous need is a measure of deficient or deteriorated housing units occupied by low and moderate income persons within the municipality. Reallocated present need is a share of the excess of deteriorated units within the region that is redistributed to municipalities with a less than average amount of deteriorated housing. Prospective need is a projection of low and moderate housing needs based on development and growth which is reasonably likely to occur within the municipality. Prior cycle prospective need is a portion of the 1987-1993 prospective need determination that is recalculated based on more accurate procedures and that which is reduced or adjusted by secondary sources of supply and demand.

For the Township, the number that relates to these separate parts of the needs portion of the formula as established by COAH, are as follows:

Indigenous need	38
Reallocated present need	71
Prospective need	14
Prior cycle prospective need	60
Demolitions	1
	<hr/>
Total Need	184

Prior cycle prospective need is the part of the formula that is reduced by filtering, conversions and rehabilitations. The total of these secondary sources of supply, as determined by COAH for Pequannock is 17 and total need minus these secondary sources and supply is 167.

Total Need	184
Secondary Sources	<u>-17</u>
Adjusted Need	167

The Council On Affordable Housing allows that this need be met in a number of ways and ascribes a different level of credits for the various kinds of affordable housing solutions. The number of units that have been provided in Pequannock Township, both new construction and rehabs will result in credits if projects are qualified and certified. Pequannock Township anticipates that completed projects here will amount to 329 credits as follows :

132 credits for senior citizen rental units at Hearle Village

8 credits stemming from a residential conversion with condominium ownership

6 credits for three rental units set aside in conjunction with the development of two single structure multifamily projects.

40 credits for residential rehabs completed prior to 1990 with Morris County Community Development Funds.

44 credits for residential rehabs completed in 1990-1993 also with Balanced Housing and Morris County Community Development funds.

120 credits for new construction in conjunction with the development of the PRD zone district. These are condominium units.

6 credits for 6 beds at a group home

This will result, if all of these projects are certified, in a total of 356 credits which will satisfy Pequannock Township's obligation to provide affordable housing through 1999. With this amount of affordable housing currently in place, the PUD zoning of the Greitzer Tract, which was put in place in conjunction with the Court settlement, is no longer needed for the purpose of adding affordable units. Without this need, the Township seeks to revise this zoning and to create zoning that would more appropriately address the access limitations and any environmental constraints that are found at this location and will engage in a dialogue with the new owners of this property as soon as it is appropriate to do so.

## Summary

Summarizing the census data illustrates some of the factors that characterize the population and the housing stock within the Township, and more particularly, the opportunity to find housing that suits for a varied range of needs and interests.

As it is detailed above, the Township's population is aging. There has been a 37.4% increase in the number of persons 65 years and older in the last decade. The number of persons in each household has decreased. The housing stock is also "maturing" in that more than 59.9% of the units are more than 30 years old. Growth in the housing stock has been low compared to other parts of the County, however, 583 units have been added with the construction of "the Glens" and growth, therefore, has increased since the 1990 Census was completed. Without demolitions, the 583 new units in the Township will increase the housing stock by 13.3%

The relationship between the number of single family units in relation to number of multifamily units is also changing. The number of multifamily units has increased minimally in the last decade, however, this relationship is also significantly impacted by the completion of "the Glens." With the addition of this project, there is greater opportunity for smaller households that seek condominium ownership to locate and/or remain within the Township.

The cost of housing in the Township compares favorably with the remainder of Morris County. Although there are opportunities to purchase dwellings at the top of the range for the County with respect to housing value, there are also opportunities to purchase homes in a lower price range. In fact, the average cost of a dwelling unit (with a mortgage) in the Township is less than the average cost for Morris County and is lower than the average costs calculated for 77% of Morris County municipalities. Average value is less than the average value for more than half of Morris County communities, however, it is higher than the average value for the county as a whole.

Given the age and diversity of the housing stock and the number of persons who are below 80% of median income, projects to assist low and moderate income families in rehabilitating their structures, and which contribute to the maintenance of the older housing stock should continue. Similarly, the existing zoning that underlies the diversity in housing opportunity with respect to both housing type and price should be maintained.

Pages 61, 62, 63 Blank  
(due to revision 9/18/95)

## VI

### UTILITIES ELEMENT

This element of the Master Plan will describe the public and private utilities that are available, planned and/or recommended for the Township as identified through existing plans, suggested modifications, and public information meetings. This section also includes a recycling plan and a flood plain management plan.

#### Sanitary Sewers

Pequannock Township is a founding member of the Pequannock, Lincoln Park and Fairfield Sewerage Authority, the Two Bridges Sewer Authority, which is located in the Two Bridges section of Lincoln Park. The Authority, locally known as TBSA has treatment facilities in Lincoln Park and Fairfield, with a combined treatment capacity of 10.0 million gallons per day (mgd). The Township has contracted for 1.8 mgd. However, current usage is between 0.5 and 0.6 mgd with approximately 1090 connections within the Township directed to the TBSA plant. The number of connections has increased significantly during 1991 and 1992 with the completion of the Phase I sanitary sewer expansion. The new system enabled the decommissioning and removal of the Laurel Homes Sewerage Treatment Plant which served 29 residential customers and included additional residential and commercial properties along the sewer main route, connecting with the TBSA interceptor sewer. Additionally, there will be further significant increases in usage because of the increasing number of homes being developed, primarily in the Glens, development, all of which will be connected to the sewer system.

With the decommissioning of the Laurel Homes Sewerage Treatment Plant, the only treatment plant in operation within the Township is the Plains Plaza Shopping Center. This treatment plant, which is privately owned, serves only the shopping center and has a design capacity of 20,000 gallons per day.

Currently, much of the community relies on septic systems for treatment of household sanitary waste and discussion is taking place regarding expanding the areas of the community which should be serviced by sanitary sewer service. The impetus for this discussion can be traced to two issues: (1) the limitations of serving commercial and

industrial facilities with septic systems and (2) the regulatory changes which are contained in the New Jersey Administrative Code, Title 7, commonly referred to as Chapter 199. Chapter 199 regulations were revised in the late 1980's to improve water quality and now place significant constraints on the use of septic systems for anything other than normal household sanitary waste. Use of septic systems for treatment of non-household (e.g. beauty salons) sanitary waste requires a permit known as a New Jersey Pollution Discharge Elimination System (NJPDES) permit which must be secured from the New Jersey Department of Environmental Protection and Energy. These regulations have significantly impacted the cost of repairing existing septic systems and because of the communities' interests in improvements along Route 23, have renewed an interest in sanitary sewer expansion. The Township Council has identified a four phase sanitary sewer expansion program which is shown on map #6 of the Appendix. This program proposes sewer service expansion to the areas of the Township most in need (as defined by the number of failing septic systems) of alternative sanitary sewer treatment and to areas along Route 23 where private-public expansion would allow for an increase in the rateable base of the community.

Phase I of the program has been completed. Phase II, however, was terminated recently for lack of public support because of the direct costs to residences. These phases which are shown on the attached map will be reconsidered as the need arises or a funding option becomes available.

### Water Supply System

The Township operates its own potable water supply system. The system is supplied from two high volume municipal wells and two connections to the two City of Newark Water Supply Aqueducts. Both of the wells are located in the northern section of the Township, one being located off of the Boulevard and one off of Ridge Road. This potable water supply serves more than 96% of the housing units in the Township as well as 360 commercial, 8 industrial and 9 municipal users. Additionally, the Township system is tied to the Lincoln Park system through connections at Comly and Jacksonville Roads and has an emergency connection with the Borough of Riverdale. Lincoln Park currently purchases a limited amount of water from the Township on a bulk basis.

The Township has undertaken a number of improvements which were recommended in the 1984 Master Plan. The most significant improvement was the construction of a one million gallon water storage tank and booster station located off of Robert Place in Greenview Park. The storage tank provides an additional supply for peak and emergency periods as required by the State of New Jersey.

An additional booster pump station has been constructed on Jacksonville Road and serves a high pressure zone of the Township located principally on the upper portions of Sunset Road. Loop mains were also created to equalize pressure and distribution. Additional loops may be needed depending on development patterns in the future.

Another improvement anticipated in the northern section of the Township is the addition of a third well which will be constructed by the developer of the Glens. This additional well is needed to allow the Township to supply potable water to this new development and allow the Township to provide for future demand without increasing its dependence on the City of Newark Water Supply Aqueducts. This new well was advisable from a cost, quality and availability perspective. An additional well is likely to be required with the development of the Planned Unit Development or PUD district. The City of Newark Water Supply Aqueduct interconnection is viewed by the Township as a backup to the Township's potable water supply system. Adding new wells will reduce the dependency on the Newark supply for periods of peak demand.

Recent testing of the water supply and public concern has pointed to the fact that the "hardness" level in the water supply has increased in the last several years. Although the hardness level is less than the maximum amount allowed by State and Federal Safe Drinking Water standards, the Township is tracking this factor and will consider, if appropriate, adding the mechanisms necessary to reduce the impact the hardness levels have on water quality.

#### Private Utilities

Gas, electric, cable television and telephone service is provided by Public Service Electric and Gas, Jersey Central Power and Light, TCI of Northern New Jersey, and Bell Atlantic - New Jersey respectively. The maintenance and extension of these services is not dependent upon municipal finances. In the case of subdivisions and site plans, the utilities are extended at the expense of the developer and/or the utility company.

The Township's Land Development Ordinances require that all new utility extensions be constructed underground. When major capital improvements are planned (by public and private concerns), consideration should be given to relocating existing overhead utilities underground. However, there is no requirement for existing overhead utilities to be placed underground.

## Stormwater Management Plan

The Township adopted an extensively revised Stormwater Management Ordinance in January 1992. The adoption of this ordinance addressed the first phase of the guidelines established by the New Jersey Storm Water Management Act (1988). The Stormwater Management Ordinance regulates the manner in which stormwater runoff due to new development is to be addressed and provides for a means of review and inspection by the Township to ensure ongoing performance of the facilities which may be either private or public.

In addition to the stormwater runoff provisions, the Township has entered into an agreement with the Morris County Soil Conservation District to ensure adequate soil erosion and sediment control throughout the Township. Both of these programs are designed to protect the health and welfare of downstream property owners whenever new development occurs within the Township.

## Recycling Plan

The State of New Jersey, its twenty-one counties and 567 municipalities have been working to meet the solid waste disposal requirements of the state's residents and businesses for nearly two decades, due to the fact that the amount and availability of landfill space within the State has declined. The State recognized the need to minimize the quantity of material entering the solid waste stream and enacted the New Jersey Statewide Mandatory Source separation and Recycling Act in 1987. Some of the Act's municipal requirements are:

1. Designate a recycling coordinator;
2. Provide for a collection system of recyclable materials;
3. Adopt a municipal recycling ordinance;
4. Revise the municipal Master Plan to include provisions for the collection, disposition, and recycling of recyclable materials; and
5. Revise the land use ordinance to require site plan and subdivisions to conform with the recycling ordinance.

The legislation further requires that the Master Plan address the recycling needs in proposed developments of fifty or more units of single family homes or 25 or more units of multi-family housing. In addition, the Master plan must specifically address the recycling needs for any commercial or industrial development proposal involving the use of 1000 or more square feet of land area.

The Township is already complying with the requirements of the New Jersey Statewide Mandatory source Separation and Recycling Act as detailed below.

1. The Township Health Officer was designated the Township recycling coordinator.
2. The Township has adopted a recycling ordinance (November, 1990), detailing who must comply with the requirements of the source separation legislation and the manner in which the materials will be collected.
3. This Master Plan addresses the requirement that the municipal Master Plan include the provisions for collections, disposition and recycling of recyclable materials.
4. The site plan and subdivision ordinances will be modified to fully comply with the Township's recycling ordinance, as required.

The Township has the first municipal Solid Waste Utility established in the State of New Jersey. The Solid Waste Utility collects the fees associated with household solid waste disposal. The Solid Waste Utility is responsible for the collection, disposal and marking of all residential garbage, bulk waste and recyclables. All single family residential property owners must participate in this Solid Waste Utility.

#### Garbage Disposal

The provisions contained within the contract for solid waste disposal between the Solid Waste Utility and the solid waste contractor requires that household garbage be collected twice per week. Residents may dispose of up to two thirty gallon or three twenty gallon containers, for each collection day. Bulk waste such as large household items (appliances, air conditioners, furniture etc.) may be disposed of on normal garbage collection days throughout the year.

#### Recyclable Material Disposal

The Township requires all residents to recycle newspapers, glass, cans and plastic bottles. Recyclables are collected curbside on a bi-weekly basis within each of the four districts of the community. The specifics of the type of material collected for recycling from residents is presented below:

## Materials Recycled at Curbside

### Glass - Clear/Brown/Green

- . must be free of food material and plastic caps.
- . is commingled with cans and plastic.

### Cans - Tin/Bi-metal/Aluminum

- . must be free of food material.
- . are commingled with glass and plastics.

### Plastics - Polyester Terephthalate (PET)/High Density Polyethylene (HDPE)

- . clear beverage containers with colored bottom cup, translucent milk or water jugs and colored bleach/detergent containers with caps removed.
- . commingled with glass and cans.

### Newspapers

- . newsprint including inserts and supplements.
- . newspapers must be bundled with twine.

In addition to the above listed materials, leaves are collected curbside by the Public Works department in the fall of each year. The leaves and grass clippings deposited by residents at the collection center are composted at a municipally owned and operated compost facility located off of Route 23.

During the spring, summer and fall, residents have the option of taking tires, for a fee, and leaves and brush by permit to the Public Works garage for disposal. Additionally, magazines are collected at the leaf depository for recycling on a non-mandatory basis during the normal leaf depository hours of operation.

The Township has also specifically identified materials which are not acceptable as recyclable material. These materials are listed in the table presented below.

Materials that are not accepted  
for Residential Curbside Recycling

aluminum	nails
appliances	nuts and bolts
auto glass	oil cans
broken glass	pails
brown bags	paint thinner cans
cardboard	paper cups
car parts	pie pans
ceramics	plastic bags
coat hangers	plastic film
crushed glass	plate glass
diapers	plumbing fixtures
fish tanks	pots and pans
flat glass	propane cylinders
flower pots	pyrex
garden hoses	stones or rocks
hi-grade paper	tires
leaves	toys
light bulbs	utensils
magazines	woods
mail boxes	yogurt/food containers
mirrors	

Non-Residential Properties Solid Waste and Recyclables

Non-residential uses in the Township are encouraged to recycle the following materials: corrugated cardboard, food wastes, motor oil, asphalt, ferrous scrap, and office paper in addition to glass and metal containers. However, business owners must negotiate for solid waste disposal on an individual basis with hauling firms.

Results of the Recycling Program

THE TOTAL NUMBER OF TONS FOR EACH  
RECYCLED MATERIAL BY YEAR

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
Newspaper		829.53	891.64	907.27
Office Paper	35.96	62.22	64.68	67.27
Corrugated	1279.53	2206.1	3370.89	3147.68
Other paper/junk mail				32.70
Glass containers	310.5	440.69	433.92	480.30
Other glass				.94
Aluminum cans	18.78	28.85	43.16	20.99
Steel cans/ferrous containers			73.74	57.69
Ferrous scrap	4.55	19.49	42.26	8.67
Whitegoods/Lite Iron				99.37
Motor Oil	7.54	8.83	38.85	138.81

Auto Batteries			37.45	52.93
Anti-freeze				.29
Tires	10.72	45.81	51.62	49.63
Plastic containers		165.64	65.15	57.69
Food Waste	39.43	42.19	23.00	
Leaves	4241.38	4746.83	4776.20	5216.37
Brush	604.45	225.62	53.75	383.75
Grass clippings	1722.18	1785.18	1870.37	2016.67
Concrete/asphalt			29.46	440.00
Stump	30	5	16.25	133.00
Petroleum Contaminated				
Soil				648.05
Wood Scraps			27	135.39
Miscellaneous	61.35	165.64		

The above table indicates the quantities of recyclable material collected since 1987. Almost all figures have consistently shown an increase, directly attributable to the cooperation of the residents and businesses in the Township. It is expected that the recycling volumes will continue to show an increase due to the initiation of curbside pickup and the increasing number of housing units being developed, principally in the Glens. In reviewing this table, it should be noted that curbside collection of recyclable materials began in November of 1990 and that it is anticipated that rates of compliance with the recycling regulations will continue to increase in the near term due to the added convenience to the residents.

The Township has met or exceeded the requirements of the New Jersey Statewide Mandatory Source Separation and Recycling Act and will continue to monitor its level of compliance with the intent of meeting the statewide goal of recycling sixty percent (60%) of all solid waste.

#### Floodplain Management Plan

The Township has experienced varying degrees of flooding throughout its history and consequently has been concerned about policies and programs to protect persons and property for many years.

As early as 1955, the Township council established a flood zone and prohibited any construction within 100 feet of a river bank. This rudimentary flood plain management program was later overturned by the Court, however efforts continued. Following the 1968 Memorial Day Flood, the Township issued its own flood zone map which was based on the maximum observed elevations of that flood. The National Flood Insurance Act was also passed in 1968 and the Federal Emergency Management Agency (FEMA) began a lengthy process

of accurately delineating the flood plain in the Township which was completed in 1986. The Township was one of the first municipalities to participate in the Flood Insurance Program.

In 1978, with the courts now giving broader interpretation to the police powers, the Township passed a comprehensive Flood Damage Prevention Ordinance. This ordinance is still enforced by the Township and is the key element in the Township's flood management plan. Its major emphasis is on prohibiting new construction in the floodway and requiring that new construction in the flood plain have the first floor elevated so it is two feet above the base flood elevation. The ordinance also includes a prohibition on basements, requires flood proofing of commercial structures and utilities and establishes construction guidelines to reduce flood damage and eliminate impediments to flood waters.

The Township Storm Water Management Ordinance is also a part of a flood management strategy. This ordinance requires that new development provide facilities to detain the storm water of a 2-year, 10-year, and 100-year storm, considered individually. This eliminates an adverse impact from new construction on adjacent or downstream properties for storms of this magnitude and provides additional flood storage.

These local ordinances are reinforced and supplemented by the State Department of Environmental Protection Stream Encroachment Permit process. In addition to prohibiting structures in the floodway and requiring that new construction in the flood plain be elevated or flood proofed, the State regulates the placement of fill in the flood plain.

The State utilizes a map that varies from the FEMA Flood Insurance Rate Map (FIRM), used by the Township in flood hazard area determinations. Therefore, it is necessary to review both the State and the FEMA map in determining what regulations apply.

In the Central Passaic Basin, which includes most of the flood plain in the Township, a development must demonstrate that it will be accomplished with zero net fill within the basin. For the flood plain of other streams, which applies to streams north of Jacksonville Road in the western portion of the Township, Stream Encroachment regulations allow as much as 20% net fill when development occurs.

Due to the regional nature and severity of the flooding problem associated with the Passaic River Basin, there have also been numerous State and Federal programs and proposals for flood control. One of these, a buy-out program, was implemented in 1985 and 1986 with the Township's

participation. Another program was the institution of the Army Corp of Engineers/National Weather Service/NJDEP IFLOWS early flood warning system.

After the 1984 flood, FEMA and the State Division of Water Resources provided funding for the purchase of residences in the Passaic River Basin Floodway. Within the Township, this program resulted in the purchase and subsequent demolition of 23 of the 61 homes in the floodway. Although funding was terminated and the project was suspended, the Township continues to support the concept and will reinstate the program if additional monies become available.

In 1990, FEMA began a new program called the Community Rating System (CRS). This program provides a discount in flood insurance premiums for communities that participate in the program at a level sufficient to warrant a designated number of credits. The Township has participated since the program's inception resulting in individual home owners paying a reduced amount, 5% less, for their flood insurance.

The CRS program brings together and formalizes many separate flood plain management projects and public information projects in which the Township and, in some cases, the State have been involved. These include: an Early Warning/Flood Emergency system which alerts businesses and residents to flooding potential and makes flood stage information available during floods, an information library which provides information on a number of flood related subjects, a storm water management facility maintenance program, a stream desnagging program, maintenance of elevation certificates for new construction, and public information projects such as a Flood Information Handbook that is distributed to residents.

Finally, the most extensive plan for flood control has emanated from the Army Corps of Engineers. For several years and after numerous studies and proposals the Army Corps of Engineers has put forth a plan called the Dual Inlet Tunnel Plan with both a structural and a non-structural component to address the flood problem for the Basin. The structural component, the tunnel, would divert flood water and provide Township residents with relief from floods up to the 100 year level.

The key feature of the tunnel diversion plan is a fourteen mile, forty-foot diameter tunnel extending from the Pompton River on the opposite side of the Jackson Avenue bridge in Wayne down to the lower Passaic River in the vicinity of Clifton. A second inlet to the tunnel will be located further downstream. The Dual Inlet Tunnel Plan also includes provisions for floodway buy-outs and the preservation of open space. The open area south of the

Turnpike known as the Pio Costa tract would play a key role in the Plan's open space component.

At present, the State of New Jersey has not committed its share of the funding which is necessary for the project to commence. With these uncertainties, the Township is faced with planning for an interim period, the length of which is not known, and for the prospect that the tunnel project will not be completed. The interim or no tunnel scenario will require sustained vigilance over flood plain development and the continuation of the many programs and projects that have worked for the Township and its residents to date. With the tunnel plan in place, the Township will benefit from the increased value and potential use of properties adjoining the floodway, particularly along the eastern side of Rt. 23. Once the tunnel project is assured, it will be necessary to plan for a balance between additional improvements in this area and open space for environmental protection and potential recreational use.

VII

COMMUNITY FACILITIES

Public Schools

Pequannock Township has five public schools with classes from kindergarten through grade 12. North Boulevard, Hillview and Stephen J. Gerace Schools are elementary schools with grades K - 4, Pequannock Valley School is a middle school with grades 5 - 8, and Pequannock Township High School is a secondary school with grades 9 - 12.

Enrollment in all schools did, with the exception of school years 1978-79 and 1986-87, decline over the last three decades. It was 3,766 in 1972-73 and 1,844 in 1990-91. The chart below illustrates this trend. This trend, however, appears to have been reversed recently. Beginning with the school year 1991-1992, enrollment has increased and is projected to be 2246 in 1997-1998.

Pequannock Township Public School Enrollment	
School Year	Total Enrollment
1983 - 1984	2407
1984 - 1985	2237
1985 - 1986	2003
1986 - 1987	2138
1987 - 1988	1960
1988 - 1989	1904
1989 - 1990	1886
1990 - 1991	1844
1991 - 1992	1848
1992 - 1993	1852
1993 - 1994	1909
1994 - 1995	2024
Projected 1995-1996	2086
SOURCE: Pequannock Township Board of Education	

In 1994-95, school enrollment was less than operating capacity in all of the five schools. This is also illustrated in a chart as follows:

Pequannock Township Schools Functional Capacity/Enrollment 1994 - 1995			
School	Grades	1994-1995 Enrollment	Functional Capacity
North Boulevard	K-4	293	325
Hillview	K-4	242	250
S. J. Gerace	K-4	283	360
PV School	5-8	593	714
Pequannock High	9-12	613	1073
TOTAL	all grades	2024	2722
SOURCE: Pequannock Township Board of Education			

The elementary schools (K - 4) had a total excess capacity for 1994-95 of 117 spaces, the middle school (5 -8) has capacity for 121 additional students, while the high school (9 - 12) has capacity for 460 additional students. This information points out that while there is additional capacity in all the schools in the Township, the middle and elementary schools have the least ability to absorb a major change in the number of students. With development of the Glens, a projected increase in enrollment of 116 students has began to impact all grade levels.

<u>Grades</u>	<u>Number of Students</u>
K - 4	54
5 - 8	37
9 - 12	25

These additional students should be accommodated by the existing facilities.

The Long Range Facilities Plan (1990-1995) approved by the Pequannock Township Board of Education in 1990 indicated that, based on anticipated future enrollments, additional

facility improvements above those completed in the last several years should not be necessary. A recent surge in home sales to younger persons with school age children, however, brings about a different picture. The projected enrollment numbers through school year 1997-1998 are indicated below:

<u>School Year</u>	<u>Projected Enrollment</u>
1995 - 1996	2086
1996 - 1997	2166
1997 - 1998	2246

Since the Long Range Facilities Plan was adopted, there is, however, new information available and there are anticipated events that may impact the Plan. The 1990 Census, for example, indicated an increase in the number of pre-school age children; the future development of the PUD district, the Greitzer tract, will add to school enrollment; and the Board of Education will accept, if permitted, Bloomingdale high school students as tuition students in order to increase high school enrollment and continue to offer a broad base curriculum. These potential enrollment increases will diminish the excess capacity anticipated in the 1994 report as indicated above.

In recent years, the Board of Education has upgraded all five school buildings to meet the demands of curriculum and program development. Elementary school improvements include the addition of library space and facilities for art, music and computer instruction. The middle school added improved science and computer laboratories and instructional/classroom areas. The high school was upgraded with improvements to the science laboratories and faculty work areas.

#### **The Pequannock Township Library**

The first library in the Township was founded in 1913 by a group known as the Neighborhood Club of Pompton Plains when the old insurance office at the corner of the Turnpike and Poplar Avenue was converted into a book room with donated books.

This small building moved several times before it became a Public Library and took up residency at the Municipal Building in 1962. It has continued to grow under the direction of a five member Board of Trustees. In fact, providing space for the Library has been a concern since it was founded and remains a critical concern today.

The 6,434 square foot facility on four floors (including the attic) of the north wing of the Municipal Building houses more than 70,000 books, records, cassettes and videos. It also has access, through two network systems (Morris

Automated Information Network and Nucils) to a regional reservoir of information and materials. Due to the recent addition of the Morris Research Education Network, MORENET, the Library now has access to a nationwide database through INTERNET.

The Library is open 62.5 hours weekly and is served by two full-time certified librarians and three other part-time professionals. This professional staff, along with support staff and volunteers, circulated 148,775 books and provided 235 programs for children and adults in 1992. Because of space problems, some of these programs took place at Senior House.

The overcrowded conditions at the Library are well documented. In 1982, a survey conducted by the League of Women Voters concluded that the present library building is no longer adequate to provide services to meet the range of needs. The library is also too small when considered in relation to state standards. An additional 5000 square feet would be required to meet the minimum standard promulgated by the New Jersey State Library given the number of people that the Library serves.

In 1986, the Township held a referendum on the question of constructing a new library building. The voters, concerned about costs, defeated the proposal and plans to construct a new facility were left in abeyance.

Since 1975, the Slingerland property which is on the Newark Pompton Turnpike, adjacent to the Pequannock Valley School has been thought to be the best location for a new facility. In 1993, the Board of Education offered the vacant Pequannock School at Oak Avenue to the Township for consideration as a possible site for a Library but the offer was rejected after being evaluated. The Township is now considering construction of a new library on the Slingerland property.

#### **Municipal Administration**

The Township's Chief Executive Officer is the Township Manager. The Manager is appointed by the Township Council and is responsible for the supervision of all departments within the township government. These departments include: Administration, Finance, the Township Clerk and Tax Offices, the Police Department, Parks and Recreation, the Health Department, Public Works and Engineering Departments, the Planning and Building Department and the Municipal Court Offices.

In 1990, in response to two reports, one provided by a Facilities Utilization Committee and one by a Long Range Planning Committee, the Township relocated the Planning and

Building Department to the Public Works Garage where 2100 square feet of storage mezzanine was renovated for office space. Public Works, Engineering, Planning and Construction Offices are now located there. All other offices remain at the municipal Building and the Finance, Parks and Recreation and Health Department offices moved to fill the vacated space.

### **Public Works**

All public works facilities, such as roads, storm sewers, sanitary sewerage system, potable water distribution system and related facilities are maintained by the various divisions of the Public Works Department. The Township Engineer serves as the Director of Public Works and reports to the Township Manager.

The Road Division constructs and maintains stormwater collection systems and drainage facilities. Pavement maintenance, street sweeping and snow and ice control operations are performed on the 52 miles of Township Roads. The Road Division also operates a maintenance shop for all Township vehicles and equipment.

The Water Department operates and maintains the water distribution system which provides potable water throughout the Township. The system includes wells, booster stations, storage tank, distribution mains and interconnections with other systems. Routine and emergency maintenance is performed on the systems and includes seasonal programs such as fire hydrant flushing and valve maintenance.

The Sewer Division operates and maintains the sanitary sewerage system which includes the collection system and pumping stations. Routine and emergency maintenance is performed including annual flushing of sanitary sewer mains.

The Recycling Division operates the yard waste depository, composting and curbside collection of leaves and Christmas Trees. The yard waste depository is located behind the Public Works Building and is open to residents from April through mid-December. The curbside leaf collection program, which extends from mid-October through mid-December, provides removal of bagged and raked leaves placed at the curb by the residents. The Christmas tree collection program provides removal of natural trees placed at the curb after the holiday season.

### **Police Protection**

The Police Department consists of 25 uniformed officers, 5 civilian employees 4 of whom serve as dispatchers, 4 special police officers, 11 crossing guards and 3 crossing guard substitutes. The Department is headed by a Chief of

Police and two Lieutenants who are in charge of the Patrol Division and Detective Bureau. Traffic and Safety is a special Bureau within the Patrol Division.

The Police Department is currently functioning at a ratio of 1.95 police officers per 1000 population. This is slightly under the FBI recommended ratio of 2 police officers per 1000 population but is an improvement over the police population ratio that existed in 1984 when the last Master Plan was completed.

The Police Department facility is located in one half of the basement of the municipal building and is severely overcrowded. The Chief of Police has indicated that the space available is insufficient to accommodate additional personnel.

The Police Department dispatches all emergency services, fire, EMS and Police, and, since 1992 this has been facilitated in Morris County by the activation of E-911. The Township is a Public Safety Answering Point (PSAP) which means that the name, address, and phone number of the caller shows up on a console at the Police Desk when a call to 911 is made.

#### Fire Protection

There are two volunteer fire companies which provide for fire protection throughout the Township. Fire Company #1 is located on Jackson Avenue and Fire Company #2 is located on Oak Avenue and Lincoln Park Road. Each Company is headed by its own Chief, however, one chief acts as Department Chief on an alternating basis. As authorized by the Township Council each company engages fifty firemen.

In 1994, Fire Company #1 will be operating out of a new fire house that is currently under construction. The new building will replace an outdated structure which did not meet applicable codes.

The fire companies equipment list, which includes equipment in both companies, is provided below:

3	1000 gallons per minute pumpers
1	1250 gallons per minute pumper
1	85 foot ladder truck (This is at the Company #2 location)
2	rescue trucks
1	mini pumper
1	brush/utility truck
2	boats
2	jaws of life

Each company will replace a 1000 gallons per minute pumper with a 1500 gallons per minute pumper in 1993.

### First Aid

The Pequannock Township First Aid and Rescue Squad was established in 1951. Their headquarters is located behind the municipal building, in a 4000 square foot building that has meeting room space and 4 bays for emergency vehicles.

The First Aid Squad has 40 riding members currently, however obtaining day time coverage is a problem. In 1984, the First Aid Squad would assist in routine transfers but this is no longer feasible due to the lack of daytime coverage.

The First Aid Squad gives First Aid Classes and CPR Classes at their facility. This has become increasingly important because other First Aid Squads in the region have discontinued this practice.

### Recreation Facilities

The Department of Parks and Recreation oversees Township owned parkland and provides a complete range of recreational facilities and services. A nine member Parks and Recreation Board made up of citizens who are appointed by the Township Council assist this department in promoting leisure activities and volunteer their services at recreation events throughout the Township.

The Department sponsors over one hundred programs annually that include trips, classes and special events. These are open to Township residents and, if vacancies exist, to nonresidents at a slightly higher fee.

Township park facilities are listed below:

#### Aquatic Park

Access through Carlson Place

50 acres

Facilities: 1 Fishing area, 1 hiking trail, 1 bridle path

#### Cherry Street

Access through Cherry Street

0.5 acres

Facilities: None

#### Greenview Park

Access through West Parkway

31 Acres

Facilities: 2 playground area, 2 BB/SB fields, 6 tennis

courts, 3 shuffleboard courts, 1 volleyball court, 2 horseshoe pits, 1 outdoor ice rink, 1 soccer field, 15 picnic tables and grills, 1 building and restrooms, 1 sleigh-riding area, 1 fishing area, 2 hiking trails

Hillview Field

Access through Atwood Avenue

9 Acres

Facilities: 4 BB/SB fields which are also utilized as 2 soccer fields

Hidden Cove

Access through Lincoln Park Road

21 Acres

Facilities: 1 fishing area

Mountainside Park

Access through West Parkway

169.6 Acres

Facilities: 1 fishing area, 1 bridle path, hiking trails

PV Park

Access through Marvin Road

27 Acres

Facilities: 1 playground area, 2 shuffleboard courts, 1 basketball court, 1 volleyball court, 2 horseshoe pits, 35 picnic tables and grills, 1 building and restrooms, 1 sand beach, 1 concession stand

Riverside Park

Access through Riverside Drive

2 Acres

Facilities: 1 playground area

Rockledge Park

Access through Sunset Road

17 Acres

Facilities: 1 basketball court

Spring & Meyer

Access through Jackson Avenue

17 Acres

Facilities: None

Town Hall

Access through Newark Pompton Turnpike

7 acres

Facilities: 1 BB/SB field, 3 basketball courts, 1 picnic table and grill, 1 building and restrooms

Washington Park

Access through Washington Street

14 acres

Facilities: 3 BB/SB fields which include on Williamsburg

regulation lighted Ballfield, 1 building and restrooms, 1  
BMX tract, 1 concession stand

Woodland Lake

Access through Alexander Avenue

40 Acres

Facilities: 1 boat launching ramp, 1 fishing area, 1  
hiking trail

Lyon Park

Access through East Franklin Avenue

1/3 acre

Facilities: 1 playground area

Lyman Avenue

Access through Lyman Avenue

7 Acres

Facilities: 1 playground area, 1 basketball court, 2  
picnic tables and grills

In addition to the Township operated facilities, ball fields at the Pequannock Township High School and Pequannock Valley School are utilized in the spring and summer seasons for Department of Parks and Recreation sponsored softball league games.

There is also a Morris County facility, the Sunset Valley Golf Course, which provides an additional recreational opportunity. The Sunset Valley Golf Course is an eighteen hole, regulation course.

In 1986, the Township completed the construction of a 4,000 square foot community center which is known as "Senior House" with funding from four separate Community Development Grants. This facility provides activity and program space for Seniors and, on occasion, space for other community programs and meetings. Drop-In-Senior Club (DISC) meetings are held here and there is office space for Dial-A-Ride Headquarters and Retired Senior Volunteer Program (RSVP). The building is furnished with full kitchen facilities and, outside, with bocci courts, horse shoe pits and a grill and picnic table.

The Department of Parks and Recreation seeks improvements to existing facilities as well as new facilities in the northeast and northwest portions of the Township. Additional soccer fields and softball fields are necessary due to the extensive interest in these sports programs and the addition of a lighted multi-purpose facility would eliminate scheduling conflicts throughout the sport season. A high priority should also be given to upkeep and the ongoing maintenance of the existing park system.

## Fiscal Analysis

This section will provide a financial profile of the Township. An examination of the tax base, employment profile and debt are included here.

Exhibit F-1 illustrates assessed valuations, increases in valuations and tax rates over the last five years.

### Exhibit F-1 COMPARATIVE SCHEDULE of ASSESSED VALUATION

<u>YEAR</u>	<u>NET VALUATION TAXABLE (Assessed Value)</u>	<u>Percent Increase</u>
1993	\$618,884,556	0.2%
1992	617,374,621	0.9%
1991	611,671,298	0.4%
1990	609,264,450	0.8%
1989	604,584,008	1.2%

SOURCE: Annual Financial Statement(s) of the Township of Pequannock in the County of Morris, New Jersey for the years 1992, 1991, 1990 and 1989. 1993 Tax Duplicate of the Township of Pequannock.

The assessed valuation of property within the Township has grown at a very slow rate during the past five years. The greatest growth occurred between 1988 and 1989 when the total assessed value increased by 1.2%. Since then, no increase has been over 0.9 percent.

Exhibit F-2 illustrates tax rates and their makeup during the past 5 years.

### Exhibit F-2 COMPARATIVE SCHEDULE of TAX RATES

<u>YEAR</u>	<u>General Tax Rate per \$100 of Value</u>	<u>Municipal Rate</u>	<u>School Rate</u>	<u>County Rate</u>
1993	\$3.49	\$.63	\$2.37	\$.49 *
1992	3.40	.64	2.29	.47
1991	3.38	.64	2.30	.44
1990	3.31	.68	2.19	.44
1989	3.03	.64	2.01	.38

\* includes \$.005 County Open Space Tax

SOURCE: Annual Financial Statement(s) of the Township of Pequannock in the County of Morris, New Jersey for the years 1992, 1991, 1990 and 1989. Certification Schedule of the 1993 Tax Rate, Township of Pequannock

Exhibit F-3 identifies the makeup of the assessed valuations for 1992 and 1993

**Exhibit F-3  
ASSESSED VALUATIONS for 1992 & 1993**

	1992		1993	
	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>
Residential	\$514,607,100	83.4%	\$514,500,200	83.1%
Commercial	76,738,750	12.4	77,922,800	12.6
Vacant Land	11,734,250	1.9	11,663,656	1.9
Industrial	9,804,300	1.6	10,332,000	1.7
Public Utility	1,545,721	0.2	1,610,206	0.2
Farm	2,944,500	0.5	2,855,700	0.5
	-----		-----	
	\$617,374,621		\$618,884,556	
	=====		=====	

SOURCE: Township of Pequannock Tax Duplicate(s) for 1992, 1993. Calculation by Pequannock Township Finance Department.

More than 83% of the assessed value, or Tax Base, in Pequannock Township is Residential. Residential property tends to require more government services than Commercial or Industrial property. The cost of providing those services is then assessed against the Tax Base which relies most heavily on homeowners.

Commercial property makes up over 12% of the tax base which reflects the two local business districts within the Township and the commercial district along Route 23.

Exhibit F-4 lists the 10 largest taxpayers in the Township of Pequannock and their 1993 assessed valuations.

**Exhibit F-4  
LIST of LARGEST TAXPAYERS**

<u>Name of Property Owner</u>	<u>Description of Property</u>	<u>1993 Assessed Valuation</u>
1) Plains Plaza	Shopping Center	\$5,278,600
2) Arrow Group Industries	Warehouse	5,112,700
3) Pequannock Joint Venture	Warehouse	3,747,200
4) Edwards Holding Corp	Manufacturing	3,197,200
5) Pequannock Motel Assoc	Regency / Motel	2,941,800
6) American Cyanamid	Land	2,648,000
7) Romondt Corp	Reeves Warehouse	1,877,800
8) Bell Atlantic - N.J.	Infrastructure	1,559,482
9) Westpark	Warehouse / Office	1,485,800
10) System 3R USA	Warehouse / Office	1,448,500

SOURCE: 1993 Tax Duplicate

Exhibit F-5 lists the 5 largest employers within the Township.

**Exhibit F-5  
MAJOR EMPLOYERS**

<u>Employer</u>	<u>Employees (1992)</u>
1) Chilton Memorial Hospital	1,300 (Est)
2) Pequannock Twsp Board of Education	263
3) Edwards Engineering	225
4) Bel-Art Products	190
5) Township of Pequannock	90

SOURCE: Preliminary Official Statement of the Township of Pequannock in the County of Morris, New Jersey, \$6,568,000 General Obligation Bond Issue, September 1, 1993.

Exhibit F-6 shows the Statutory Net Debt calculation for the Township of Pequannock as of May 19, 1993.

**Exhibit F-6.1  
STATUTORY NET DEBT as of DECEMBER 31, 1994**

	<u>Gross</u>	<u>Deductions</u> *	<u>Net</u>
School Debt	0	0	0
Water Utility	1,874,400.00	1,874,400.00	0
Sewer Utility	916,910.00	916,910.00	0
Municipal	7,450,277.54	7,175.00	7,443,102.54
	-----	-----	-----
	10,241,587.54	2,798,485.00	7,443,102.54
	=====	=====	=====

\* Deductions are for the purpose of determining the statutory borrowing capacity of the Township. The township is obligated to pay the full amount of Gross Debt.

**Exhibit F-6.2  
AVERAGE EQUALIZED VALUATION**

1990 Equalized Valuation	\$966,828,264
1991 Equalized Valuation	944,957,649

1992 Equalized Valuation	926,004,125
Equalized Valuation Basis - Average	\$945,930,013
Net Debt expressed as a percentage of the Equalized Valuation Basis	.79%

SOURCE: Annual Debt Statement as of December 31, 1993.

The authorized indebtedness of the Township is limited by state statute, subject to certain exceptions. The limit is 3.5 percent of the average equalized assessed valuation of the three preceding years. The Township's current Net Debt Ratio is 0.79 percent.

## VIII

### CIRCULATION PLAN ELEMENT

The transportation system in Pequannock Township consists of a system of roadways, access to regional mass transit, a local para-transit system serving senior and disabled citizens, and a growing system of trails, sidewalks, and walkways. In addition, the neighboring Borough of Lincoln Park hosts a private airport that is open to the public. This part of the Master Plan will describe these components and the factors that are affecting the system and will conclude with a set of recommendations.

#### Roadways

The system of roadways within the Township, which includes two major arterials, a network of county roadways, and local collector and residential access streets, will be impacted by the completion of Route 287. As of this writing however, the measured impact of this change is not known. Early in 1994, the Division of Transportation Management which is part of Morris County's Department of Planning and Development, will be generating the traffic counts and other data needed to assess the impact of Route 287 on local roadways. This data will be applied to a computer model for traffic analysis and will be made available for planning purposes. Until then, it is reasonable to continue utilizing many of the assumptions and the street hierarchy set forth in the previous Master Plan. When the County data is available, it may be necessary to update and amend this plan.

For this current plan, the Office of Traffic and Safety, a Division within the Police Department, has provided comments on high accident locations. There are two: the intersection of Route 23 and Jackson Avenue where there were 20 accidents in 1992 and at Route 23 and Alexander Avenue where there were 13 accidents. Accident statistics with regard to other intersections are as follows:

	<u>No.</u> <u>Acc.</u>	<u>No.</u> <u>Cars</u>	<u>No.</u> <u>Ins.</u>
Route #23 and Boulevard	13	24	09
Jacksonville and W. Parkway	12	24	12
Lincoln Park and W. Franklin	09	28	06
Boulevard and Jacksonville	08	16	02
Turnpike and Oak	06	12	01
Turnpike and Jacksonville	06	12	00
Boulevard and Sunset	05	08	01
Route #23 and Turnpike	05	08	01

**Classification of Roadways (as used in the 1984 Plan)**

Freeway - Provides regional and metropolitan continuity and unity; limited access; no grade crossings; and no traffic stops.

Route I-287 Jurisdiction  
N.J.D.O.T

Major Arterial (Highway) Provides access to and through the municipality; minor access control; channelized intersections; and parking is generally prohibited.

Route 23 Jurisdiction  
N.J.D.O.T

Minor Arterial - Main feeder streets with signals where needed and stop signs on the side streets

	<u>Jurisdiction</u>
Turnpike	Morris County
Boulevard	" "
Jackson Avenue	" "
Jacksonville Road	" "
Lincoln Park Road	" "
West Parkway	Pequannock Township

Collector Streets - Main interior streets with stop signs on side streets.

	<u>Jurisdiction</u>
Alexander Avenue	Pequannock Township
Hopper Avenue	" "
Mountain Avenue	" "
Sunset Road	" "
West End Avenue	" "
West Parkway	" "

Local Streets - Local service streets and nonconductive to through traffic.

The remainder of the roads within the township would fall into this classification.

### Local Roadways

The Township's local street pattern is reflective of the period when the homes were developed. The predominate street pattern in the eastern portion of the Township is a grid which was used frequently in the 1940's and 1950's when these homes were built. As the community continued to grow in the sixties and seventies, in areas west of the Boulevard, a different street layout evolved. This new pattern included the use of cul-de-sac streets and curvilinear design, intended to reduce speeds, limit usage and provide a suburban ambiance.

These local roadways within the Township provide access to the abutting residential lots, overflow parking for automobiles, a stable surface for bicycle use, and in area without sidewalks, a place for pedestrians to walk or run. Because of the multiple uses associated with these roadways it is necessary to plan for, develop, and maintain sidewalks and pathwalks throughout the system. Additionally, employment based traffic and commercial traffic should be directed to major collector streets and arterials designed to accommodate higher traffic levels.

When the 1984 Master Plan was adopted, the Township street network was substantially complete with the exception of a missing portion of West Parkway. The missing portion is to be constructed by Baker Firestone in conjunction with the development of the Planned Residential District, which will have its major access on to this roadway. West Parkway construction is to occur in two phases, one of which is now complete.

The completed West Parkway will provide a north-south connection between Route 23 and Jacksonville Road through the western half of the Township. It will have a 60 foot right-of-way and a cartway width of 34 feet. This roadway was classified in the 1984 Plan as a minor arterial and as a collector and therefore will function to connect traffic, particularly peak hour traffic, to other arterials. Because much of the roadway passes through residential zones, through truck traffic, outside the industrial zone, should be prohibited.

The current construction of West Parkway raises the question of potentially viable connections to other local streets namely, the Boulevard and the Turnpike in the eastern portion of the Township. An east-west roadway would connect

residents to municipal services and local businesses. The 1984 Plan envisioned an extension of the grid pattern with interconnections at Leveridge Lane, Saddle Drive, and Hopper Avenue but not all of these new connections may be needed or are feasible.

Because of its central location, Hopper Avenue will provide the most viable connection between West Parkway and the Boulevard. However, because the paved portion of this roadway is narrow with sidewalks on the north side only, the increase in traffic raises concerns about safety for residents here which must be balanced against concerns for the safety of residents in the western portion of the Township.

With the completion of West Parkway in November of 1994 and when all residences of the Glens are occupied, which should occur in the Spring of 1995, the need for a connecting street and the feasibility of such a connection can be better analyzed. The Office of Fire Safety has made a request for this connection as of this writing, however, no decision on the connection should be made until additional relevant information is obtained.

The necessary information includes, but is not limited to, the following: substantiation for the need for an interconnection based on traffic and safety reports; the availability of the right-of-way; traffic counts and patterns with Route 287 open; impact of the completed PRD development on existing roadways; effects of the presence of wetlands on construction of the interconnection; and what level of improvement will be necessary to accommodate projected increased levels of traffic. The completion of the County's Division of Traffic Management study should provide some of the information required to answer these questions.

Both the American Association of Highway and Traffic Officials and the Center for Urban Policy Research's model ordinance, published in "The Subdivision and Site Plan Handbook", recommend cartway widths that are narrower than those required by Township Ordinances. In light of these recommendations consideration should be given to revising Township standards when traffic counts and other information regarding the impacts of Route 287 are known.

#### **County Roadways**

The Newark Pompton Turnpike, the Boulevard, Jackson Avenue, Jacksonville Road, and Lincoln Park Road are roadways within the Township that are under County jurisdiction. These are, predominantly, two lane roadways with shoulders providing access to abutting lots and on-street parking where permitted.

Morris County classifies these roads as minor arterials in its 1980 classification system and the traffic volume counts conducted by the County are provided in Figure 3. This data indicates that these roads are subject to moderate traffic volumes which have experienced slight increases and, in some cases, reductions in volume during the 1979 to 1992 reporting period.

The 1984 Master Plan which included part of the Environmental Impact Statement filed in conjunction with the completion of Route 287 predicted a reduction in traffic along Jacksonville Road given the diversion of through traffic to the interstate roadway. Until post-construction counts can be made, this assumption continues.

The Circulation Element of the Morris County Master Plan adopted in March of 1992 identified, in the Five Year Plan for Roads and Bridges, the following needs for the Township: the resurfacing of Jacksonville Road between Sunset and the Boulevard (the section between West Parkway and the Boulevard having recently been completed); maintenance of the drainage ditch along Jacksonville Road between Squire Place and West Parkway; and resurfacing of Jackson Avenue between the Newark Pompton Turnpike and Route 23, which has also been completed.

#### State Roadways

The Township has a single state roadway within its borders, Route 23. This roadway has undergone substantial modification since the previous master plan. The roadway has been widened, a center median has been removed and replaced with a Jersey barrier, a traffic circle at Jackson Avenue has been removed, and numerous intersection improvements, including new traffic signals, have been installed. The intersection improvements permit greater turning movement opportunity and enhanced levels of safety at the intersections. These improvements have been in place for nearly six years.

Within the Township this roadway experiences approximately 30,000 daily trips in 1991. The Morris County Master Plan Circulation Element indicates, that currently, this volume of traffic is being handled without unnecessary delays on that portion through the Township. However, delays on this roadway are present to the north in Riverdale, Kinnelon and Butler. This plan also identifies Route 23 and Kinnelon Road in Butler as one of the top 10 accident spots within Morris County and proposes that the intersection of Route 23 and Jackson Avenue within the Township be upgraded with an overpass.

Without improvements to the northern section of this roadway and with continued increases in traffic volume,

traffic delays will begin to negatively impact traffic flows through the Township.

In 1992, The New Jersey Department of Transportation, adopted the "New Jersey State Highway Access Management Code" which will affect future development and redevelopment along Route 23. This code, which implements the State Highway Access Management Act, was established to improve traffic flows along state highways. It utilizes the regulation of the number and location of access driveways in relation to the number of trips generated by the use of the site in accomplishing this. Because these regulations will impact both the use of the land and the site plan process, applications to the Planning Board or Zoning Board of Adjustment for development along Route 23 should be approved by the Department of Transportation prior to local review.

It should also be noted regarding Route 23, that this highway is impacted by flooding. Recent and proposed improvements have not addressed the issue which can halt traffic and cause serious delays during periods of flooding. The completion of the Army Corps of Engineers Dual Inlet Tunnel project would address the problem and therefore is recommended.

#### **Interstate Route 287**

Perhaps the most significant change in terms of roadway improvements is the completion of the missing section of Interstate 287. A portion of this new interstate passes through the north western portion of the Township, however there is no direct access in the Township. Access to the highway will be provided at its intersection with Route 202 in Montville and with Route 23 in Riverdale.

#### **Mass Transit**

Transit service in suburban communities is limited in scope due to the low population densities and suburban travel patterns that take commuters to various separate locations. The 1990 Census indicated that within the Township, in the same year, 85.7% of the population 16 years and older drove alone to work in a car, truck or van, 6.8% carpooled and 2.8% used bus or railroad. (112 persons traveled by bus and 82 traveled by railroad.)

New Jersey Transit, the state's public transit provider does operate two bus routes within the Township. The two routes are identified below:

- NJT # 75 - service from Butler to Newark
- NJT #194 - service from Newfoundland to New York City

The NJT #194 provides daily service to New York City, while the NJT #75 provides only weekday local bus service allowing passengers to connect to sites within the service area. The level of service within the Township has remained stable since the 1984 Master Plan. The Township supports the provision of transit service through the provision of a park and ride facility at the Municipal Building on the Newark Pompton Turnpike. An additional park and ride facility may be feasible at West Parkway and Route 23.

Additional bus connections are possible by travelling to the Willowbrook Mall, south on Route 23 in Wayne. Most service from this point is destined east of the Township as indicated below.

NJT # 4	-	service to Singac
NJT #11	-	service to Newark
NJT #68/120	-	service to Hackensack
NJT #193	-	service to New York City

Travelling to the Willowbrook Mall for Transit service affords the user more frequent service than is provided by the routes with direct service to the Township. Local service via the Morris County Metro, is also available at the Willowbrook Mall, with connections in Towaco and Lincoln Park providing a link to Morristown, the County seat.

MCM # 1	-	service from Willowbrook to Morristown
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Rail service, while not located within the confines of the Township boundary, is only a short distance away. The Boonton Branch of the Morris and Essex Line, operated by New Jersey Transit, has stops at Towaco in Montville and Mountain View in Wayne. Both the Towaco and Mountain View stations are supported by Park and Ride facilities. Service on this line directly connects the users to Newark and Hoboken with connecting service to New York City.

#### Para-Transit

The Township in cooperation with the municipalities of Butler, Riverdale, Kinnelon, and Lincoln Park, provide local transportation service for senior citizens and disabled persons. The Five Town Dial-A-Ride service is funded by each of the contributing municipalities on a per capita basis and receives monies from the Morris County Para-transit System thus lowering its direct cost to the municipalities. There is no direct charge to the participants in this operation, however donations are accepted. In 1992, the Township provided thirty percent of the cost to provide this service to senior citizens (age 55 or greater) and disabled persons (age 18 to 55) with no other means of transportation.

This specialized para-transit service provided a total of 27,235 trips in 1991 to 1,040 eligible participants. The 1991 trip analysis indicates that there were 4,443 Township participants, comprising 43% of the user base of the service. This service is a benefit to the residents of these communities and operates with a minimal staff. The Township provides office space for Dial-a-Ride within Senior House, a contribution which is above the amount provided to fund the operation of this service. This program provides greater freedom to participants who would otherwise be unable to gain access to services, employment and cultural activities.

### **Airport Facilities**

The Lincoln Park Airport is located at the southwestern border of the Township within Lincoln Park. This is a privately owned airport that is open for use by the general public. It is restricted to small aircraft and primarily fulfills a recreational function. In 1991 there were 180 aircraft based at this location and in 1990, 180,000 flights departed from this facility. The impact of this facility on the surrounding areas is discussed in the Land Use Element of this plan.

### **Pedestrian and Bicycling Option**

Although there are no designated or marked pedestrian paths or cyclist travel lanes along roadways, the wider cartways, the network of sidewalks and the pathway along the New York, Susquehanna, and Western Railway right-of-way provide a limited opportunity for pedestrian and bicycle travel. The Clean Air Act Amendments of 1990 and an interest within the community of developing a path system has created a renewed interest in planning for pedestrian and cyclist options. A map of the proposed path system is included in the section entitled Sense of Place.

### **The Federal Clean Air Act**

The Clean Air Act Amendments of 1990 and the New Jersey Traffic Congestion and Air Pollution Control Act seeks to improve ambient air quality through transportation control measures and will impact transportation planning generally. In areas where air quality does not meet established standards, and Northern New Jersey does not, transportation control measures are required. Accordingly, the State, County, Township and its major employers must adopt appropriate measures. These include: cleaner generating cars, buses and trucks; improved public transit; programs for high occupancy vehicles; exclusive turn lanes; pedestrian and bicycle facilities; transportation reduction ordinances; and employers of 100 or more employees must implement transportation demand management plans to reduce reliance on the

automobile. Northern New Jersey must reach carbon monoxide attainment by November 1995 and ozone attainment by 2007.

#### **McRides**

McRides is a not-for-profit Transportation Management Association working within the County, with individuals and corporations, to improve air quality and meet the mandate of the Clean Air Act. McRides assists individuals in making connections to public transit, car pools, and van pools through a ride matching computer database and works with corporations in developing traffic mitigation plans and promotional activities based on specific needs.

## IX

### COMPARISON

The New Jersey Municipal Land Use Law requires that all municipal Master Plans consider the relationships between the municipality's plans and the plans of the neighboring municipalities as well as County Plans and the State Development and Redevelopment Plan.

Pequannock Township is surrounded by the Boroughs of Lincoln Park, Kinnelon, Riverdale and Pompton Lakes and the Township of Wayne. The following is a comparison of the zoning, land uses and plans of these surrounding municipalities and a comparison of Morris County Plans and the State Development and Redevelopment plan with this Master Plan for the Township.

#### Comparison of the Municipal Plans of Adjacent Municipalities

##### Borough of Lincoln Park

The southern boundary of Pequannock Township is shared with the Borough of Lincoln Park and much of the boundary area is in the flood plain. Lincoln Park shares both the Pompton River flood plain and the East and West Ditch drainage areas.

There is single family residential zoning and uses in the westernmost portion of the shared boundary in Lincoln Park which compares to similar zoning and uses in the Township. In moving east, however, the zoning changes to Transitional Industrial which surrounds the airport and continues as a 500 foot swath along East Ditch. This compares to residential and industrial zoning in the Township east of East Ditch. The airport clear zone and airport hazard areas extend across Jacksonville Road north into the residential areas of the Township. Within these zones, around the airport and east of East Ditch, there are greenhouse and agricultural uses as well as single family dwellings.

There are residential areas on both sides of the boundary east of East Ditch. In the easternmost corner where the lakes extend between the municipalities, the area is zoned for industrial uses in the Township but is presently vacant. In Lincoln Park it is zoned for Commercial Recreation and used for public recreation although some of this land is also vacant.

The Lincoln Park Master Plan does not recommend any changes to the zoning along the boundary. It is consistent with planning in the Township in that both municipalities consider the presence of the airport and flood hazard area.

#### Borough of Kinnelon

The Borough of Kinnelon is on the western boundary of the Township. This boundary area, on the Kinnelon side, is largely vacant. These are forested lands with lakes, several high peaks and steep slopes. Hiking trails, historic homes, old mine sites as well as scenic vistas are found here. This area has also been identified as the western most reach of the "Fanny Highlands", the focus of a regional open space plan developed by the Morris County Planning Board and Parks and Recreation planning efforts.

The Borough of Kinnelon has zoned the portion of this open area that is at the Township's boundary for large residential lots. The Land Use plan concludes that "minimum 60,000 square feet lots are necessary in Kinnelon because of the considerable amount of sloping land, the high percentage of environmentally critical areas due to a high water table and shallow bedrock."

The Township's planning and zoning is consistent with Kinnelon's Land Use Plan. The northern portion of the shared boundary is zoned for Planned Unit Development and it is anticipated that the development of the zone will be clustered in the Route 23 section of the site and off of the steep slopes. The southern portion of the boundary is zoned residentially for large lots as it is in Kinnelon. Additionally, there is an understanding between the Municipalities to confer and exchange information with regard to any development in this area.

#### Borough of Riverdale

The Township shares a major portion of its northern boundary with Riverdale. This boundary runs from the Pequannock River to Route 23 at Matthews Avenue. There are developed areas along the easternmost part of this line. In Riverdale, the area just north of the boundary and west of the river is zoned and used industrially. This changes to highway business at Route 23 and to residentially zoned areas as the land rises west of the highway. Portions of this residential area are undeveloped, particularly where slopes are steep in the vicinity of Mountainside Park.

Riverdale's Master Plan recommends that the low density residential zoning be maintained. In Riverdale, just north and west of Mountainside Park and north of the Township's Planned Unit Development zone, there is a small area that is part of the Route 23 corridor that is zoned for professional office use. This is consistent with the Planned Unit Development which provides that a portion of the tract adjacent to the Riverdale tract be developed for office or research uses. On the other hand, Riverdale's Master Plan recommends that the zoning in this area be changed to allow for highway business uses.

#### Borough of Pompton Lakes

In the northern corner, the Township shares its boundary with Pompton Lakes which is in Passaic County. This is an area where the Pequannock River joins the Ramapo River forming the Pompton River and they, together, comprise a wide river corridor where waters branch and return around numerous small islands. The river also forms the county boundary between Morris and Passaic. Along this border, in the Township, there is limited residential development at Harrison Road and, to the east, approximately 35 acres of parkland.

It is similar on the Pompton Lakes side. In this area, older residential development has occurred at medium density. For those residential properties that are close to the river, the threat of flooding is coupled with the amenity of a water's edge location. In the vacant areas near the boundary, Pompton Lake's Master Plan provides for some low density residential use. There is also a strip of land, which varies in width, designated for conservation and open space. This open space is known as Aquatic Park and it coincides with the Aquatic Park in the Township.

#### Township of Wayne

Most of the eastern boundary which is delineated by the Pompton River is shared with Wayne Township, which like the Borough of Pompton Lakes is also in Passaic County. This boundary region, is used for the most part commercially in Pequannock whereas it is used commercially, residentially, and industrially in Wayne. The river, in fact, acts as a buffer when uses in the different Townships vary.

State Highway Route 23 and the commercial development associated with it runs along the western side of the river in Pequannock. Where the properties between the highway and the river are deep, and the commercial development is located near the highway, there is a green area or buffer for the river in the rear.

On the Wayne side, in the area near Jackson Avenue the land is used and zoned residentially with the exception of the North Jersey District Water supply property and Sheffield Park which is situated on the river between Pompton Plains Crossroad and Route 23 where it crosses into Wayne. Along the southern part of the boundary there is a mix of residential, commercial and industrial uses and zoning.

## Consistency with the County Plans

### The Land Use Element

The Land Use Element of the Morris County Master Plan was adopted by the Morris County Planning Board in December of 1975 and, given the recent interest and emphasis on "centers" precipitated by the State Planning process, this document even seventeen years later is strikingly timely. For example, the plan sets forth as objectives, "that more intensive use be made of lands" and "that intense uses would be gathered in concentrations, with decreasingly intense uses radiating outward from them. Such use would render municipal services both cheaper and more efficient, would facilitate public transportation collection points, and would create a sense of community identification."

### Circulation Element

The County Circulation Element was adopted in March of 1992 and addresses the impact of the federal Clean Air Act Amendments of 1990 on the travel options of the future. Accordingly, this plan provides a comprehensive view of the transportation network and traffic management strategies.

This part of the County Plan establishes goals and objectives for the transportation system which include: the preservation, improvement and expansion of rail and bus facilities and service; the improvement of transportation services for senior and disabled residents, para-transit and park and ride facilities, and roadway development which would include roadway completion, safety improvements, intersection improvements and the elimination of on street parking in congested areas. The Plan also recommends the reduction in vehicular energy consumption and the continued coordination of land use and transportation planning.

### Open Space Element

The County's Open Space Element which was adopted in 1988 describes four categories of open space, the general purpose park, the special purpose park, conservation areas and linear parks which over time and in different open space plans have received varied degrees of attention. In the 1988 Plan, the County comprehensively establishes principles and goals which balance these separate interests. The Plan

recommends the enhancement of recreational opportunities, the protection of the environment and the maximization of the amount of open space preserved in perpetuity.

This document also makes specific recommendations and includes Pequannock Township. Using an acre per population standard (eight per thousand) the County finds that the Township will not show an open space deficit with respect to municipal parks through the year 2000. On the other hand with respect to open space, the County plan points to the Pio Costa tract in conjunction with the Pequannock and Pompton River corridors as "lands with open space potential." The Pio Costa Tract in the 1988 plan replaces parts of the Greitzer tract which was included in this same category in the 1973 plan.

#### Bikeways Element

Dating back to 1977, the Bikeways Element is one of the oldest of the separate documents that make up the County Master Plan, and, as some of the premises have changed since its adoption, it is not likely that the plan will be implemented on a county-wide basis. There are, however, local bikeways that are being constructed. In fact, monies which are available through the Intermodal Surface Transportation Efficiency Act for transportation related capital projects may be available for this purpose.

In the Township, the County document recommends a bikeway along the right-of-way of the New York Susquehanna and Western Railway. This continues to be relevant for its recreation value and its consistency with current open space planning.

#### Wastewater Management Element

The County Wastewater Management Plan was prepared by Camp Dresser and McKee, Inc. in 1985 and analyzes both the issues associated with reliance on individual waste water systems, in areas throughout the county where this occurs, and the capacity of existing and proposed wastewater facilities to address the need of the region through the year 2000.

In the Township, this report recommended first, that the sewers should be extended to areas where soils are unsuitable for septic systems and, second, that the Township tie into an interceptor that would connect Butler to the Two Bridges Sewer Authority. About this time, the Township did tie into an interceptor between Bloomingdale and the TBSA treatment facility and all subsequent improvements and extensions are tied to this connection.

## Water Supply Element

The Morris County Master Plan Water Supply Element Update focuses on the significance of ground water to the users in Morris County. The Plan explains that 101 million gallons per day is withdrawn from Morris County, half from surface water and half from ground water, but that most of the surface water is utilized outside the County. The ground water is tapped from underlying aquifers and specifically for the Central Passaic Basin from a buried valley aquifer that has been delineated by the New Jersey Geological Survey (NJGS).

Because of the County's reliance on ground water supplies, this County Plan Update recommends groundwater protection strategies in areas where precipitation is likely to reach the aquifer. Additionally, Plan references a State program known as the Wellhead Protection Program that has been established to identify wellhead protection areas (WHPA) where water travelling over land or through the soil is likely to reach the well within twelve years. The NJ Department of Environmental Protection and Energy proposes to delineate WHPA's around all public community supply wells in the coming years but no timetable has been established.

The source of Pequannock Township's water is also predominantly groundwater and it is supplemented by surface water from the Newark system. As Township wells are located in the north west portion of the Township, concern for the protection of the wells has been the focus of policy here. The Township protection measures include strict enforcement of zoning regulation and an installation of an area detention basin designed for water quality enhancement. The added information provided by the delineation of the Wellhead Protection Areas would very likely extend these current protection efforts.

## The State Development and Redevelopment Plan

In 1985, the State Legislature passed the New Jersey State Planning Act which required the development of state wide planning objectives and a planning process called cross-acceptance, comparing policies among different levels of government.

The central theme of the state wide objectives is to guide future growth into compact forms such that communities of place are created and maintained. These objectives include setting priorities for infrastructure development, preserving open space and agricultural lands, protecting the environment, economic development, urban revitalization, creating a viable housing supply, and coordinating transportation planning.

These state wide objectives are applied differently in areas having different characteristics. These separate areas are called Planning Areas and, accordingly, each are provided with an appropriate set of policies.

In 1992, under the leadership of the Morris County Planning Board and as part of the Cross-Acceptance Process, Pequannock Township considered its characteristics and planning objectives in relation to the State Plan and determined that the Township is best described as Planning Areas 1 and 3.

Planning Area 1, as described in the State Plan, is any of a "variety of communities that range from large urban centers to post-war suburbs". Additionally, Planning Area 1 has "mature settlement patterns resulting in a diminished supply of vacant land, infrastructure systems that generally are beyond their reasonable life expectancy, recognition that redevelopment is or will be in the not-to-distant future, the predominant form of growth, and a growing need to regionalize an increasing number of services and systems in light of growing fiscal constraints". With minor exceptions, this Planning Area 1 description describes the easternmost portion of the Township, and, Planning Area 1 policies are also substantially consistent with local policy. In particular, the State Plan goal of protecting existing community characteristics is consistent with local planning policies.

On the other hand, the western portion of the Township, which consists of more vacant land (some of which is being developed currently), is not likely to need the extension of public sewer service throughout the area. Additionally, because much of these undeveloped lands are environmentally sensitive and adjacent to sparsely developed environmentally sensitive areas in Kinnelon, this portion of the Township is more accurately described as Planning Area 3. The State Plan establishes that Planning Area 3 is, in part, "not planned to have, during current planning horizons, urban level infrastructure", is "an effective buffer between more intensely developed urban and suburban areas and the agricultural and environmentally sensitive lands", and is where development will be concentrated at the fringe of the existing community with infrastructure provided primarily by the private sector. These policies, descriptive elements, and intentions are consistent with local plans.

The State Plan cross-acceptance process also provided an opportunity to designate Critical Environmental Sites and the Township identified four areas that warranted this designation. First, steep slopes (slopes greater than 25%) were mapped and included as a critical Environmental Site. Most of Mountainside Park and large portions of the PUD are included in this category. Second, the aquifer recharge

area in the vicinity of the Township wells was designated a critical environmental site. Third, the floodways of the Pequannock and the Pompton Rivers. Finally, the portion of the floodplain that is associated with East and West Ditch.

The State Plan also seeks the delineation of existing and proposed centers within the Planning Areas as a strategy for guiding growth. The Township, in completing this part of the planning process, noted that both commercial districts in Pequannock and Pompton Plains, which are situated along the Turnpike, are existing centers. Despite the fact most community facilities and services are provided Township wide, these areas have an historical basis as centers and keeping them as distinct commercial areas is consistent with local planning efforts.

Similarly, the Township noted that there is potential for a third center in the Planned Unit Development Zone (PUD) which includes a commercial component. The central concept would encourage compact development along with the protection of environmentally sensitive areas that are also in this zone.

## APPENDIX

### MAPS

#1	Open Space
#2	FEMA Map
#3	Wetlands
#4	Steep Slopes
#5	Acquifer Recharge Areas
#6	Land Use Map
#7	Sewer Expansion Program
#8	State Development and Redevelopment Plan

### FIGURES

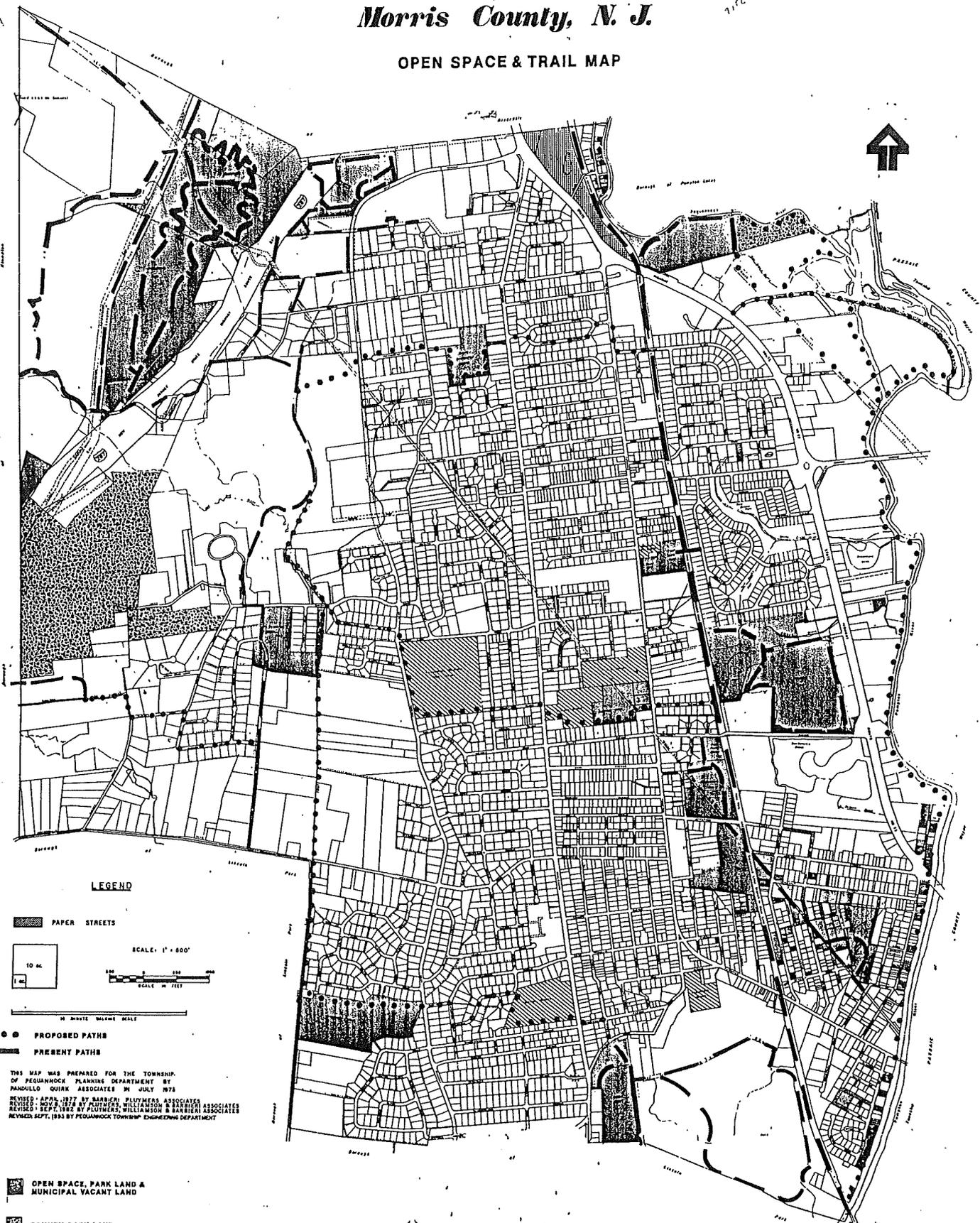
No. 1	Existing Land Use
No. 2	Natural Heritage Database-Endangered Species List
No. 3	Traffic Count Summary for 1995

# Township of Pequannock

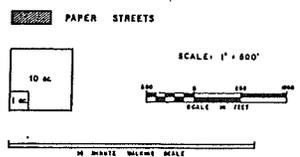
## Morris County, N. J.

71766

### OPEN SPACE & TRAIL MAP



#### LEGEND



- ● ● PROPOSED PATHS
- PRESENT PATHS

THIS MAP WAS PREPARED FOR THE TOWNSHIP OF PEQUANNOCK PLANNING DEPARTMENT BY PANDOLFO QUIRK ASSOCIATES IN JULY 1978

REVISED: APRIL 1977 BY BARBERI, PLUTNER, ASSOCIATES

REVISED: SEP. 1972 BY FOLWISER, WILLIAMSON & BARBERI ASSOCIATES

REVISED: SEPT. 1949 BY PEQUANNOCK TOWNSHIP ENGINEERING DEPARTMENT

- OPEN SPACE, PARK LAND & MUNICIPAL VACANT LAND
- COUNTY PARK LAND
- SCHOOL PROPERTY
- STATE OWNED PROPERTY

# Township of Pequannock

Morris County, N. J.

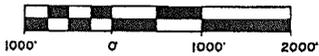
## FLOOD HAZARD AREA MAP



### LEGEND

 PAPER STREET

### GRAPHIC SCALE



SCALE : 1" = 1000'

 **SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100 YEAR FLOOD.**  
ZONE AE; BASE FLOOD ELEVATIONS DETERMINED.

 **FLOODWAY AREAS IN ZONE AE**

 **OTHER FLOOD AREAS**  
ZONE X; AREAS OF 500-YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD.

 **OTHER AREAS**  
ZONE X; AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

# Township of Pequannock

*Morris County, N. J.*

## WETLANDS MAP



### LEGEND

 PAPER STREET

GRAPHIC SCALE



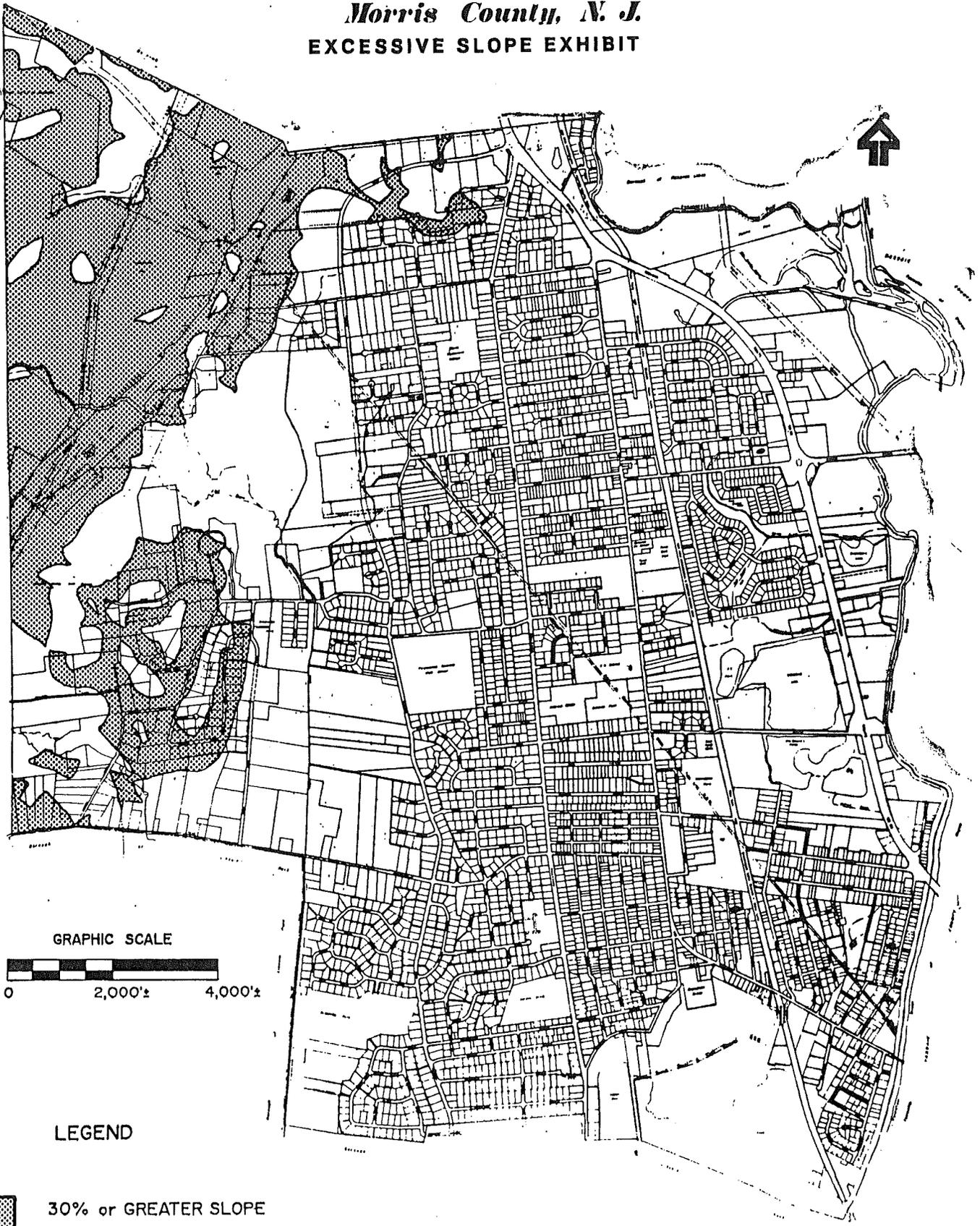
SCALE : 1" = 1000'

NOTE:  
WETLAND LEGEND AVAILABLE ON N.J.D.E.P. WETLAND MAP  
ON FILE IN THE PLANNING DEPARTMENT OFFICE.

# Township of Pequannock

*Morris County, N. J.*

EXCESSIVE SLOPE EXHIBIT



GRAPHIC SCALE



LEGEND



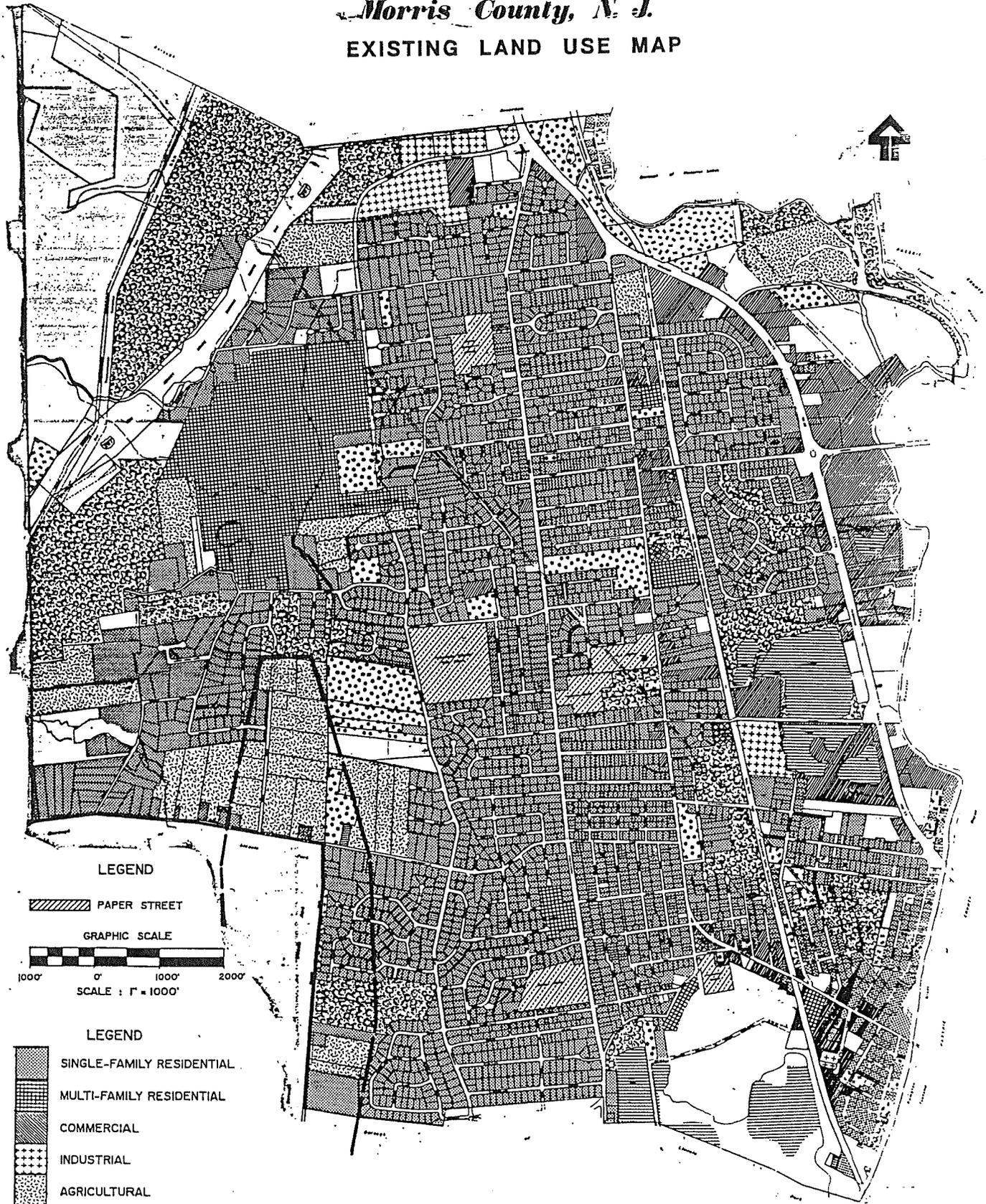
30% or GREATER SLOPE



# Township of Pequannock

Morris County, N. J.

## EXISTING LAND USE MAP



### LEGEND

 PAPER STREET

### GRAPHIC SCALE



### LEGEND

-  SINGLE-FAMILY RESIDENTIAL
-  MULTI-FAMILY RESIDENTIAL
-  COMMERCIAL
-  INDUSTRIAL
-  AGRICULTURAL
-  PARKLAND
-  PUBLIC BUILDINGS & GROUNDS
-  MUNICIPAL VACANT
-  QUASI-PUBLIC FACILITIES

-  AIRPORT HAZARD AREA
-  PUBLIC SCHOOLS
-  VACANT
-  WATER

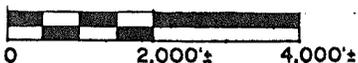
# Township of Pequannock

Morris County, N. J.

## SEWER PLAN (IN PHASES)



GRAPHIC SCALE



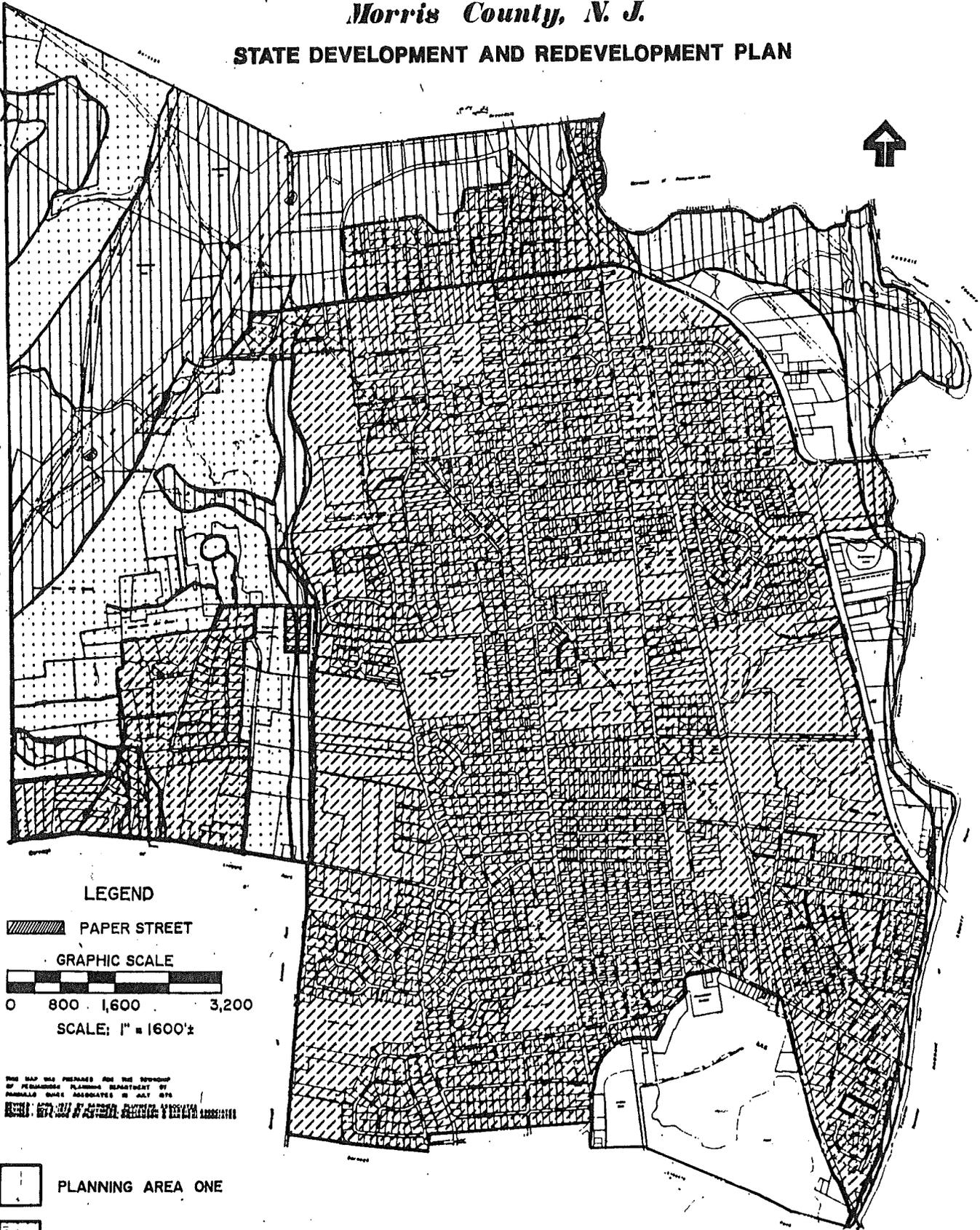
- PROP. SEWAGE PUMP STA.
-  PHASE I  
(UNDER CONSTRUCTION)
-  PHASE II
-  PHASE III
-  PHASE IV
-  EX. LAUREL HOMES SEWAGE TREATMENT PLANT AREA  
(TO BE DECOMMISSIONED - PHASE I)

AREA SERVED BY  
EX. LAUREL HOMES  
SEWAGE TREATMENT  
PLANT.

# Township of Pequannock

*Morris County, N. J.*

## STATE DEVELOPMENT AND REDEVELOPMENT PLAN



### LEGEND

 PAPER STREET

### GRAPHIC SCALE



0 800 1,600 3,200

SCALE: 1" = 1600'

THIS MAP WAS PREPARED FOR THE TOWNSHIP OF PEQUANNOCK PLANNING DEPARTMENT BY MARSHALL QUINN ASSOCIATES IN MAY 1974  
PROJECT: 1972-73 STATE DEVELOPMENT AND REDEVELOPMENT PLAN

 PLANNING AREA ONE

 PLANNING AREA THREE

 POPULATION DENSITY GREATER THAN 1,000 PERSONS PER SQUARE MILE

 CRITICAL ENVIRONMENTAL SITE

FIGURE NO. 1

NATURAL HERITAGE DATABASE  
ENDANGERED SPECIES LIST

- . The gravel pits in the southern part of the Township contain a State-listed endangered plant known as variegated horsetail (*Equesteum variegatum*)
- . The Pompton River gravel bar site contains a State-listed endangered plant known as hemicarpha (*Hemicarpha micrantha*) and, along the Pompton River, an extremely rare invertebrate known as lampmussel (*Lampsilis cariosa*) has been observed.
- . Habitat that supports endangered and threatened species exists in the mountainous area west and northwest of the Township and in the wetland area in the southern part and southwest of the Township (near Lincoln Park Airport). A list of threatened and endangered species supported by the surrounding habitat follows.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
blue-spotted salamander	<i>Ambystoma laterale</i>	endangered vertebrate
wood turtle	<i>Clemmys insculpta</i>	threatened vertebrate
timber rattlesnake	<i>Crotalus horridus</i>	endangered vertebrate
barred owl	<i>Strix varia</i>	threatened vertebrate
yellow lampmussel	<i>Lampsilis cariosa</i>	rare invertebrate
hemicarpha	<i>Hemicarpha micrantha</i>	endangered plant
northern panic grass	<i>panicum boreale</i>	endangered plant

FIGURE NO. 2

EXISTING LAND USE

JANUARY 1993

Land Use	Acreage	% Total Land	% of Developed Land
Residential	1861	41.3	52
Single family	(1817)	(40.3)	(51.0)
Multi-family	( 44)	( 1.0)	( 1.0)
Commercial	292	6.5	8.1
Industrial	184	4.1	5.1
Parkland	267	5.9	7.5
Municipal	(137)	(3.0)	(3.85)
County			
(Morris & Passaic)	(130)	(2.9)	(3.65)
Public Bldgs. & Grounds	9	0.2	0.2
Schools	76	1.7	2.1
Public	(65)	(1.4)	(1.8)
Other	(11)	(0.3)	(0.3)
Quasi-Public	189	4.2	5.3
Churches & Charitables	(91)	(2.0)	(2.5)
Other Exempt	13	0.3	0.4
Utilities	33	0.7	0.9
Agricultural	189	4.2	5.3
Streets & Highways	468	10.4	13.1
<b>TOTAL DEVELOPED</b>	<b>3581</b>		<b>100.0</b>
Municipal Vacant	202	4.5	
Vacant	723	16.0	
<b>TOTAL UNDEVELOPED</b>	<b>925</b>	<b>100.0</b>	

TOTAL AREA 4,506 ACRES

\* All Totals include Water; Water = 173 Acres

Source: Pequannock Township Tax Information

TRAFFIC COUNT SUMMARY FOR 1995  
TOWNSHIP OF PEQUANNOCK

Road Name	Road Num.	Location	Lanes	Average 24 Hour Volume					AM Pk Hr Volume		PM Pk Hr Volume		Peak Hour						
				1987	1988	1989	1990	1991	1992	1993	1994	Date	North	South	North	South	Peak 15 Min	Hour Factor	
ROUTE NJ 23	23	SOUTH OF ALEXANDER AVENUE	2	-	-	-	-	-	-	61,208	26-Sep-84	1,232	3,231	7:00	2,963	1,608	3:45	1,220	93.7
JACKSONVILLE ROAD	504	WEST OF BOULEVARD	2	7,157	-	-	-	10,550	-	-	1-Oct-91	378	564	7:30	628	445	5:15	299	89.5
JACKSONVILLE ROAD	504	@ LINCOLN PARK	2	5,320	9,350	-	-	-	-	-	2-Nov-88	387	747	7:15	625	405	4:45	316	88.1
NEWARK-POMPTON TPK	504	EAST OF HILLVIEW ROAD	2	-	-	-	-	10,927	10,679	-	19-Oct-92	391	604	7:15	735	403	4:45	343	82.9
NEWARK-POMPTON TPK	504	SOUTH OF JACKSONVILLE ROAD	2	14,439	15,394	-	-	-	-	16,712	2-May-94	447	788	7:45	1,046	593	5:00	431	95.1
NEWARK-POMPTON TPK	504	AT PASSAIC COUNTY LINE	2	15,130	-	-	17,934	-	-	-	24-Apr-80	355	1,223	7:15	1,228	500	4:30	447	98.5
BOULEVARD	511A	WEST OF PEQUANNOCK AVE	2	7,493	10,388	-	-	-	-	18,162	9-May-94	1,076	354	7:15	503	1,217	4:45	470	91.5
BOULEVARD	511A	NORTH OF JACKSONVILLE ROAD	2	5,792	-	-	-	6,878	-	12,148	2-May-94	397	530	7:45	647	411	5:00	292	90.6
LINCOLN PARK ROAD	635	EAST OF BOULEVARD	2	2,717	-	-	4,609	-	-	7,396	2-May-94	301	410	7:45	541	261	5:00	208	96.4
NEWARK-POMPTON TPK	660	NORTH OF ALEXANDER AVENUE	2	-	-	-	-	-	-	-	10-Oct-80	190	133	8:00	210	188	4:30	128	77.7
NEWARK-POMPTON TPK	660	NORTH OF HOPPER AVENUE	2	-	-	7,766	-	-	-	14,428	2-May-94	444	674	7:45	764	542	4:30	344	94.9
NEWARK-POMPTON TPK	660	SOUTH OF HOPPER AVENUE	2	8,657	-	-	-	-	-	8,347	2-May-94	263	374	7:45	480	302	4:45	220	88.9
NEWARK-POMPTON TPK	660	SOUTH OF ALEXANDER	2	14,439	-	-	-	-	-	9,304	2-May-94	368	493	7:45	565	371	5:00	282	91.2
JACKSON AVENUE	680	EAST OF NJ 23	2	9,234	-	-	18,321	-	-	15,476	2-May-94	503	652	7:45	988	546	5:00	418	90.6
JACKSON AVENUE	680	WEST OF NJ 23	2	9,020	-	-	16,454	-	-	16,809	2-May-94	603	451	7:45	607	795	4:30	363	96.6
ALEXANDER	MUN	WEST OF RT 23	2	-	-	10,200	-	-	-	10,697	2-May-94	389	255	8:30	387	438	4:45	235	87.6
HOPPER AVENUE	MUN	WEST OF NEWARK-POMPTON TPK	2	-	-	-	-	-	-	3,844	2-May-94	280	-	8:00	342	-	4:30	101	84.7
MOUNTAIN AVENUE	MUN	WEST OF BOULEVARD	2	-	1,988	-	-	1,574	-	-	12-Sep-91	71	40	7:15	27	82	5:30	44	63.1
SUNSET ROAD	MUN	WEST OF FOREST ROAD	2	-	-	-	-	-	-	2,926	2-May-84	155	97	7:30	111	127	4:45	80	78.8
WEST PARKWAY	MUN	SOUTH OF VAN DYCK	2	-	4,061	-	-	-	-	2,191	2-May-84	137	44	7:30	134	62	5:00	57	86.0
										4,121	9-May-94	223	163	7:30	161	191	4:15	136	71.0