

*Master Plan Reexamination Report
And Master Plan Amendment*

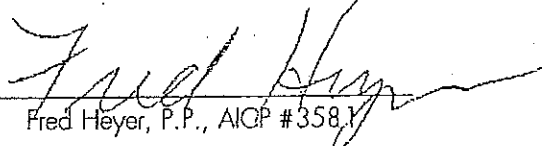
Hope Township
Warren County, New Jersey

September 2006

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The original of this report was signed and
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Fred Heyer, P.P., AICP #3581

INTRODUCTION

This document constitutes a Master Plan Reexamination Report pursuant to N.J.S.A. 40:55D-89 and a Master Plan revision pursuant to N.J.S.A. 40:55D-28. The principal purpose of this document is to address some of the changes in the underlying assumptions, policies and objectives with respect to residential development that have occurred since the Township's last Master Plan Reexamination Report. Additionally, this report identifies a potential area in need of rehabilitation for the Silver Lake District and outlines the criteria and process by which such a designation may occur. This report does not propose the creation of any new zone districts, changes in principal uses, or changes in zone district boundaries.

CONTENTS OF A MASTER PLAN REEXAMINATION REPORT

The MLUL requires that reexamination reports address the following five criteria set forth in N.J.S.A. 40:55D-89:

- a. The major problems and objectives relating to land development in the municipality at the time of the adoption of the last reexamination report.
- b. The extent to which such problems and objectives have been reduced or have increased subsequent to such date.
- c. The extent to which there have been significant changes in the assumptions, policies, and objectives forming the basis for the master plan or development regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, collection, disposition, and recycling of designated recyclable materials, and changes in State, county and municipal policies and objectives.
- d. The specific changes recommended for the master plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.
- e. The recommendations of the planning board concerning the incorporation of redevelopment plans adopted pursuant to the "Local Redevelopment and Housing Law," P.L. 1992, c.79 (C.40A:12A-1 et al.) into the land use plan element of the municipal master plan, and recommended changes, if any, in the local development regulations necessary to effectuate the redevelopment plans of the municipality.

A. MAJOR PROBLEMS AND OBJECTIVES

The problems and objectives at the time of the adoption of the last Master Plan Reexamination Report.

At the time of Hope's last Master Plan Reexamination Report in 2004, the principal objective of the Township was to retain its high quality rural environment and agricultural character. Hope has historically been the subject of limited development pressure and as such has seen very modest construction over the last 10 years. In order to implement the Town's goals and objectives, Hope adopted LDAR and LDAR-H zone districts several years ago. These are low density agricultural residential districts and low density agricultural residential-historic districts. The original intent was to come up with a low density flexible approach to subdivision design to protect the Township's rural character. The Township's zoning has generally addressed this concern however, some of the ordinance's specific provisions allow for development which is at odds with the Township's vision.

B. THE EXTENT TO WHICH PROBLEMS AND OBJECTIVES HAVE BEEN REDUCED OR HAVE BEEN INCREASED.

Hope is actively pursuing its goal of rural preservation, a Farmland Preservation Element is nearly complete. This Reexamination Report offers a mechanism for the Township to revise its land development ordinances to address some of the shortcomings in the current standards.

C. THE EXTENT TO WHICH THERE HAVE BEEN SIGNIFICANT CHANGES IN THE ASSUMPTIONS POLICIES AND OBJECTIVES.

It was assumed Hope's development pressures would be somewhat limited, this assumption can no longer be relied upon in order to implement Hope's rural vision. As regional development pressures increase, land in Hope previously overlooked by developers is now becoming considerably attractive. Hope is likely to see several small major subdivisions over the next several years.

One of the underlying assumptions that formed the basis for the Township's current zoning standards was that there was a built in incentive to use the Township's private drive standards with a limit of 4 dwelling units per common driveway. Since the adoption of the State's Residential Site Improvement Standards, the standards for RSIS rural lanes have allowed an unanticipated amount of development on a single street. The Township previously assumed that the number of homes accessing a common driveway would effectively limit the amount of development while providing for flexibility in access.

With respect to constrained land, the ordinance presently does not have an expressed definition of constrained land area and there is no specific requirement for an amount of contiguous unconstrained land on a residential lot. As a result, some undesirable, environmentally insensitive development may be permitted as of right.

D. SPECIFIC CHANGES RECOMMENDED FOR THE MASTER PLAN OR DEVELOPMENT REGULATIONS.

The Township is presently preparing a Master Plan revision to revisit a number of significant land use issues in the Township including open space and farmland preservation, revisions to the land use policies at the Route 80 Interchange, and potential areas in need of redevelopment/rehabilitation.

At the present time, there are no proposed changes in principal uses, zone district boundaries, or residential densities. There is however, a compelling need to revise some of the development standards, particularly bulk requirements and design standards.

In order to address the perceived shortfalls in the Township's current development regulations, the following revisions are recommended as they apply to Hope's LDAR and LDAR-H zone.

Definition Revisions

Revise ordinance #20-3 Definitions to add the following terms:

- Building Envelope – that portion of a lot within the required setbacks.
- Buildable Area – that portion of a lot within the building envelope which is free from critical areas.
- Critical Areas – critical areas include wetlands, wetlands transition areas, floodplains, open water areas, and lands with slopes of 20% or greater.

Revisions to Bulk and Density Requirements

Revise ordinance #20-6.2 Bulk requirements and other conditions to read:

- a. A maximum gross tract density shall not exceed one unit or building lot per 5 acres, rounding shall not apply. Unless an irrevocable deed restriction against all future development is in place, "remainder lots" shall count as building lots.
- b. Minimum lot area: 2 acres
 - All residential building lots shall include at least one contiguous acre which does not include critical areas as defined above.
 - The non critical portion of the lot shall be of sufficient size to completely encapsulate a circle with 150 foot diameter.
- c. Minimum building envelope width and a depth: 150 feet.
- d. Minimum setback to internal streets (excluding common driveways as permitted otherwise in this chapter): 100 feet
- e. Minimum side yards: 50 feet
- f. Minimum rear yards: 75 feet

E. DESIGN STANDARDS

Revise Ordinance #20-6.6 Design Standards to read:

- a. Lot frontage – where a lot abuts an off site public street, the minimum road frontage shall be 250 feet. Lots legally in existence prior to the adoption of this provision with at least 50 feet of frontage may continue to be developed without the need for variance relief provided that all other bulk standards of this chapter are met.
- b. Lots utilizing common driveways for access shall not be required to have frontage on public streets.
- c. Paragraph 3 – Building envelopes shall not include critical areas or minimum yard requirements. Building envelopes shall not include areas with slopes in excess of 20%. With the exception of driveway improvements, no structure shall be located within 75 feet of a 20% slope.
- d. (2) revise to read 20%
- e. All potable wells and septic systems shall be located within the building envelope.

Retaining Walls

Maximum retaining wall height: 5 feet.

No retaining wall shall be located closer than 25 feet to any other retaining wall.

F. RECOMMENDATIONS OF THE PLANNING BOARD CONCERNING INCORPORATION OF REDEVELOPMENT PLANS.

It is recommended that a feasibility study be conducted for the area generally known as the "Silver Lake" for the possible designation of the Silver Lake neighborhood as an area in need of rehabilitation pursuant to the Local Redevelopment and Housing Law. The Township Committee may designate an area as an area in need of rehabilitation if it meets one of the two criteria below:

1. If a significant portion of the structures in the area are deteriorated or substandard; there is a continuing pattern of vacancy, abandonment, or underutilization of properties in the area; and a "persistent arrearage" of property tax payments or;
2. More than half of the housing stock in the delineated area is at least 50 years old or a majority of the water and sewer infrastructure in the delineated area is at least 50 years old and is in need of repair or substantial maintenance.

The designation of an area as being in need of rehabilitation allows the municipality considerable discretion in generating a proactive rehabilitation plan. Essentially, the Township would retain all the powers generally

associated with the use of the redevelopment statute with the exception of eminent domain and long term tax abatement.

The benefits of such a designation include eligibility for a number of priority funding programs and the ability to offer tax abatements for the added value of home improvements by owners of structures in the designated area.

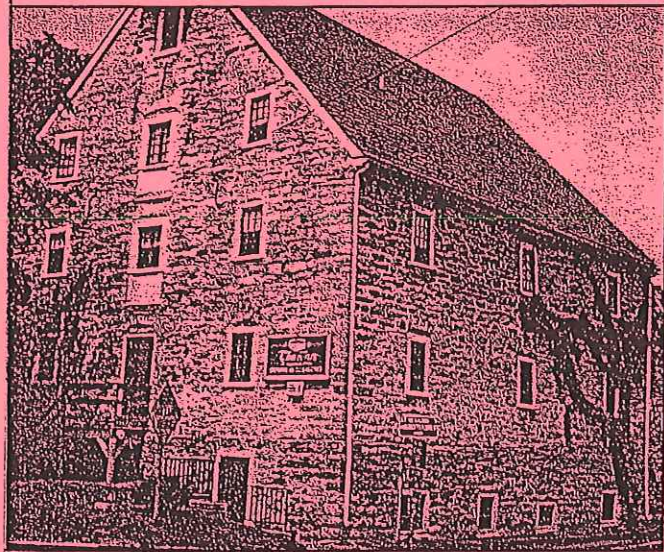
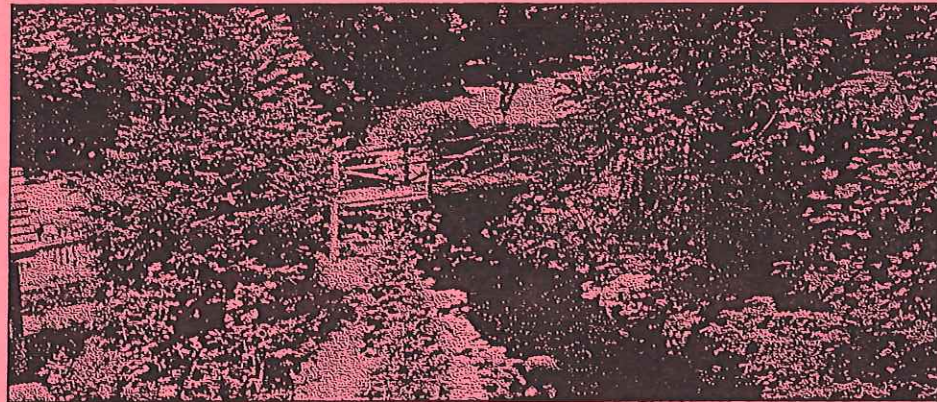
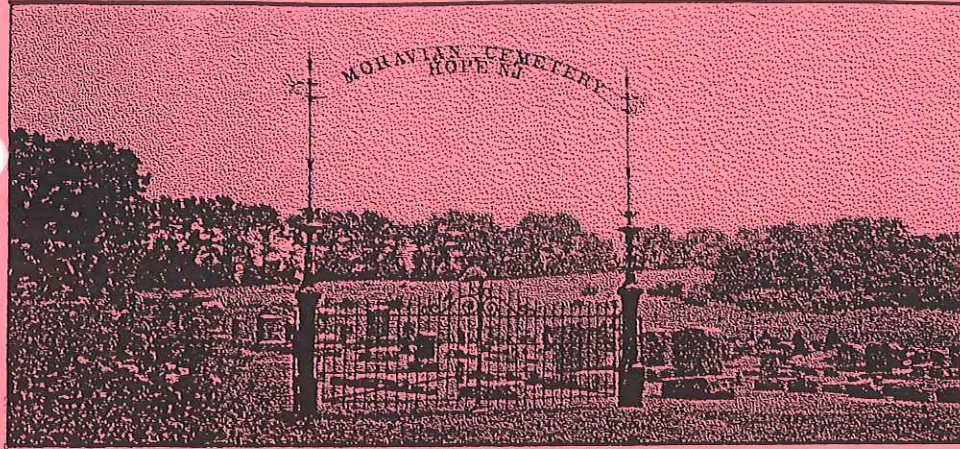
Compliance With the Criteria

The Silver Lake area was reviewed and it is apparent that more than 50% of the housing stock is in excess of 50 years old. This is based in part on a review of USGS topographic maps, which shows the vast majority of the structures in place prior to 1956.

Designating the Area

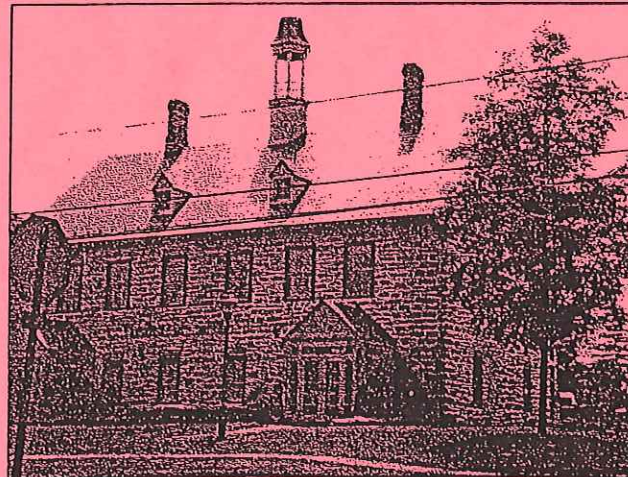
The procedure for designating an area in need of rehabilitation is a much simpler process than an area in need of redevelopment. No formal investigation or public hearing is required and the governing body must only adopt a resolution designating the area in need of rehabilitation. No special public notice is required except that which would normally be used to advertise a meeting of the Township Committee.

Prior to the adoption of the resolution designating the area as being in need of rehabilitation, the Township is required to submit a resolution to the Planning Board for its review. The Planning Board has 45 days to submit its recommendations to the Governing Body including any revisions. The Governing Body is not bound by the Planning Board's recommendations.



Hope Township Master Plan - 1996

Warren County, New Jersey



Prepared by
Moskowitz, Heyer & Gruel, PA
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MASTER PLAN

Township of Hope, Warren County, New Jersey

October 1996

Prepared by

Moskowitz, Heyer & Gruel, PA

Community Planning Consultants

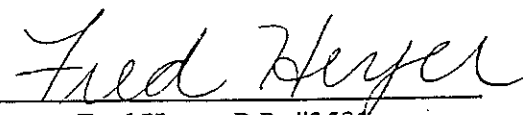
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HOPE TOWNSHIP MASTER PLAN

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INTRODUCTION

INTRODUCTION

Hope Township is an 18.68 square mile community located in north-central Warren County. The Township is bordered by Blairstown and Frelinghuysen to the north, Knowlton to the west, Liberty to the east and White Township to the south (see Map 1). Hope is a rural community consisting primarily of vacant, wooded and agricultural lands along with low density single-family residence scattered throughout the Township. The Village of Hope, founded in 1769 by the Moravians, is the largest population center of the Township and contains many structures which have been restored to their original appearance.

The ridge along the Jenny Jump Range serves as Hope's eastern border with the valley of Beaver Brook occupying the central area of the Township and scattered high knolls to the west. Route 80 serves as the principal east/west corridor through Hope and forms a full interchange with Route 521, which along with Route 519 serves as the major north/south arterial roadway.

The Master Plan is the Planning Board's most important tool in guiding the development of the physical environment. Hope Township last prepared a comprehensive Master Plan in 1983. Subsequently, the Township continued its planning efforts and in 1990 adopted a Master Plan Reexamination Report and Housing Plan Element and Fair Share Plan. In 1992 an Environmental Resource Inventory was prepared, followed by a Wastewater Management Plan in 1994.

In the years since the last Master Plan Reexamination, there have been a number of significant changes which affect the underlying goals, objectives and assumptions of Hope's Master Plan. The Council on Affordable House (COAH) has assigned new municipal numbers, the State has adopted a State Development and Redevelopment Plan, comprehensive wetland regulations are now in place and scattered development activity has occurred throughout the Township.

The myriad of physical, demographic, economic and regulatory changes requires an updating of the Plan. This new Plan will provide a framework for growth and development of Hope into the 21st Century.

The Hope Township Master Plan has been prepared in accordance with the requirements of the Municipal Land Use Law (N.J.S.A. 40:55D-28). It includes a Land Use Plan, Housing Plan, Conservation Plan/Environmental Resource Inventory, Wastewater Management Plan, a Historic Preservation Plan, Circulation Plan, Recycling Plan and Community Facilities Plan

The Land Use Plan provides the basis for a revised zoning map and land use ordinance. The other components of the Master Plan are used to determine the funding priorities for capital improvements, community facilities, transportation and utility systems. The Conservation Plan determines which land should be protected or conserved. Finally, the Master Plan should be used as a guide to making decisions on individual development applications.

The Master Plan is an issue-oriented document based upon input solicited from the general public and Hope Township's various boards, commissions and agencies.

I. GOALS AND OBJECTIVES

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INTRODUCTION

The Municipal Land Use Law requires that all municipal master plans contain a statement of goals, objectives, principles, assumptions, policies and standards upon which a comprehensive master plan is to be based. The individual master plan elements provide the means for implementing the established goals. The goals guide the development of a Township in terms of physical development as well as preservation, open space and protection of the environment.

The Master Plan goals represent an evaluation and refinement of the goals of past master plans and new goals have been suggested in response to current concerns. These goals have been established through discussion at public meetings of the Planning Board and joint meetings of the Planning Board and Township Committee. The Master Plan goals are general and are intended to provide an overall framework for development and preservation of the Township.

SUMMARY OF GOALS AND IMPLEMENTATION POLICIES

Goal 1: To Preserve The Rural Character Of Hope Township

Implementation Policies

1. To provide for higher density development (development on lots of two acres or less) in the existing population centers of Hope and Mt. Hermon.
2. To develop clearly defined community development boundaries around these existing population centers.
3. To provide for abrupt changes in densities across community development boundaries. (For example, one unit per acre within the Village or hamlet and one unit per five acres outside.)

4. To locate community facilities in or immediately adjacent to population centers to provide for the efficiency in the delivery of services.
5. To promote the preservation of agriculture in the Township through the adoption of a "Right To Farm" ordinance.

Goal 2: To Protect The Rural Character Of Areas Outside Of Centers

Implementation Policies

1. To require development outside of centers to be very low density.
2. To require substantial front yard setbacks where development will abut the existing road network.
3. To require the retention of substantial wooded buffered areas between building envelopes and street lines.
4. To avoid creating frontage lots where possible.
5. To locate development in wooded edges where properties are substantially visible from the public right-of-way.

Goal 3: To Provide For The Preservation And Conservation Of The Township's Natural Resources

Implementation Policies

1. To identify and map critical environmental resources such as wetlands, flood plains, rare and endangered species, habitats, aquifer recharge areas, surface water systems, limestone areas and watersheds tributary to potable water supplies.
2. To provide for flood plain and aquifer recharge area overlay zoning.

3. To prepare and implement a plan for the preservation of stream corridors, greenways and greenbelts.
4. To encourage the acquisition and expansion of public areas in a manner which would encourage the massing of contiguous areas of open space.
5. To map and monitor septic and well failures to establish an early warning system for contamination and diminished groundwater supply.
6. To create more specific environmental impact statement requirements to address site specific concerns.
7. To provide greenways that link larger, contiguous open spaces.
8. To create greenways which provide for a variety of uses. For example, some of the greenways may be active and include hiking, biking and horseback riding where others would be purely passive facilities serving as wildlife habitat and wetland and flood plain protection areas.

Goal 4: To Protect The Historic Character Of Hope Village And Mt. Hermon

Implementation Policies

1. To encourage the continued faithful restoration of existing historic structures.
2. To develop objective guidelines for the review of development applications in historic districts and contiguous lands surrounding the historic district.
3. To provide for the parking needs of the Village while minimizing its visual intrusion.
4. To develop a unified set of improvement standards for public improvements in the Village, including street lighting, sidewalks and signs.

5. To provide for the visually sensitive development of lands adjacent to the Village that are within the historic district boundary.

Goal 5: To Provide For The Adequate Delivery Of Services And Community Facilities For The Residents Of The Township

Implementation Policies

1. To prepare a capital improvements program to evaluate and prioritize municipal expenditures.
2. To analyze and project the existing and future needs for fire protection within the Township.
3. To participate with the Board of Education in the establishment of the optimum method of delivering quality education facilities within the Township.
4. To strive to meet the Township's recycling goals.

Goal 6: To Provide For The Economic Development Of The Township While Balancing Other Goals

Implementation Policies

1. To recognize that the Planned Office Park zone at the Route 80 interchange represents an area of long-term economic development potential for the Township which is unlikely to occur in the short run.
2. To limit Planned Office Park zoning to areas where it is most appropriate.
3. To capitalize on the Village as an economic development tool and a basis for tourism.
4. To allow for commercial development to occur within the Village while not adversely impacting residents.

Goal 7: To Meet Hope Township's Affordable Housing Obligation

Implementation Policies

1. To continue to proactively satisfy the Township's affordable housing obligation without reliance upon large scale inclusionary residential developments.
2. The Township presently enjoys substantive certification from the Council on Affordable Housing for their last cycle obligation. The Council on Affordable Housing has assigned Hope Township an affordable housing obligation of 21 units through 1999. This is a cumulative obligation which does not appear to include the reductions for the 14 units of rehabilitation the Township recommended in the 1990 Housing Element. Assuming prior cycle reductions, Hope Township has a "new construction" obligation of seven dwelling units through 1999.
3. To provide for low impact mechanisms of satisfying this new construction obligation such as accessory apartments or Regional Contribution Agreements.

Goal 8: To Provide For The Safe And Efficient Movement Of Persons And Goods Throughout The Township

Implementation Policies

1. To establish a functional hierarchy of streets.
2. To establish design standards based upon roadway function.
3. To minimize direct residential access to collector and arterial streets.
4. To reduce road standards where average daily traffic volumes are low (i.e. less than 250 trip ends per day).

5. To minimize environmental disturbance from the creation of new streets and accompanying stormwater management facilities.
6. To develop driveway spacing standards for existing public roadways in order to minimize conflicts of multiple curb cuts in close proximity.
7. To revise the rural driveway standards to preserve the character of these areas. For example, reduced width in pavement requirements are encouraged so long as safe and efficient access can be guaranteed to residents and emergency vehicles.
8. To design residential access streets to lower design speeds both in terms of width and curvature.
9. To prevent high volume collector roads from new developments from intruding into established neighborhoods.
10. To avoid the unnecessary expansion of existing rural roadways where very low density development is anticipated.
11. To use average daily traffic volumes as a standard for cul-de-sac limitation.

II. LAND USE PLAN ELEMENT

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INTRODUCTION

The Land Use Plan illustrated on the following map divides Hope into eight different land use categories:

1. Two low density residential categories
2. The Hope Village mixed use category
3. The Mt. Hermon hamlet
4. The neighborhood commercial category
5. The planned office park category
6. An open space and parks category
7. Public and quasi-public use category

The Land Use Plan is based on an evaluation of many factors which affect land development, including but not limited to, environmental characteristics, the existing land use pattern, transportation access, market demands and the goals and objectives of the master plan. Where appropriate, the land use designations for properties containing significant environmental constraints have been modified to reflect those constraints.

The Land Use Plan follows the intent of the New Jersey State Development and Redevelopment Plan (SDRP) by identifying centers and community development boundaries around the two "centers" in Hope Township. The two centers are Hope Village and the Mt. Hermon hamlet. The balance of the Township, with the exception of the Planned Office Park district, has been

designated for development with very low density residential uses consistent with the rural and environmentally sensitive planning areas within the Township. The community development boundaries delineate the outer limits of the centers and are defined by physical features such as streams, roads, abrupt changes in land use or permanent open space.

It is the intent of this plan to provide for "hard edges" around the established centers to protect the visual integrity of these centers.

The current zoning ordinance establishes 13 separate zone districts throughout the Township. There is significant overlap in the zone districts, particularly in the single-family zones. It is the intent of this plan to simplify the overall zoning scheme while providing flexibility in the development of individual parcels to meet the master plan objectives.

RESIDENTIAL DISTRICTS

There are presently seven single-family residential zone districts identified as R-1 through R-7. The minimum lot size in the zones range from 80,000 to 130,000 square feet with provisions for increasing the minimum lot area in areas where the aquifer overlay district is in place. There is not sufficient difference in environmental character or location to warrant this wide array of zone districts. Additionally, the zones permit and encourage the development of rigid cookie-cutter lots.

This Land Use Plan recommends two low density residential zone districts. The LD, Low Density Agricultural Residential designation and the LD-H, Low Density Agricultural Residential Historic designation. Both these areas are recommended for development with residential uses at a maximum gross density of one unit per five acres. The recommended design standards for the LD and LD-H zones are to encourage maximum flexibility. The use of common driveways and minimal road standards are anticipated. Curbing, lighting, sidewalks and stormwater management facilities should be limited to areas where site specific safety constraints require their use.

The difference between the LD and LD-H designations is the LD-H areas are those properties within the historic district boundary but outside of the community development boundary of Hope Village. These are properties whose development is critical to the visual integrity of the Village and includes land within major and minor viewsheds. The LD-H designation includes a recommendation for ordinance standards for minimizing the visual impact of the development of these properties. Techniques could include substantial front yard setbacks, wooded front yard buffers or placing homes at the edges of farm fields. A minimum lot area of 80,000 square feet per home site is recommended for both the LD and LD-H areas.

HOPE VILLAGE MIXED USE DESIGNATION

The HMH district presently allows a variety of uses including single-family homes, business, professional offices, retail uses and accessory apartments. Conditionally permitted uses include restaurants, taverns, hotels and group homes as well as the conversion of existing buildings for professional office use. It is recommended that the bulk and dimensional requirements of the zone be examined and revised to more closely reflect existing conditions. As presently written, the controls cause widespread nonconformity within the zone. Consideration should be given to additional flexibility in the design of common improvements such as parking and septic systems to encourage the continued restoration of the Village. Care must be taken to develop design standards which would prevent the appearance of "overcommercialization" of the Village.

MT. HERMON HAMLET

Mt. Hermon is a classic hamlet per the State Development and Redevelopment Plan located at the intersection of Mt. Hermon and Locust Lake Roads. There is a predominance of existing historic structures. The bulk standards should be revised to reflect the existing pattern of lotting and design standards should be established to protect the area against incompatible development.

NEIGHBORHOOD COMMERCIAL

The neighborhood commercial category includes a relatively small land area on the west side of Route 521, north of the village, south of Route 80. The purpose to the designation is to provide for additional limited retail sales and service uses in an area which would not adversely impact the village.

PLANNED OFFICE PARK

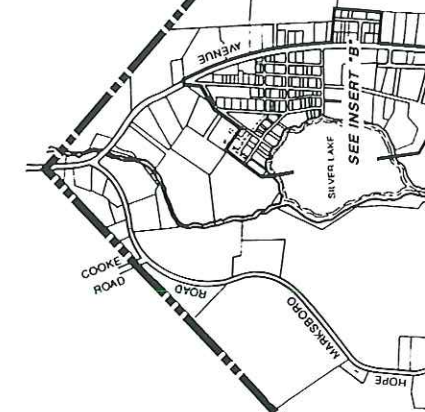
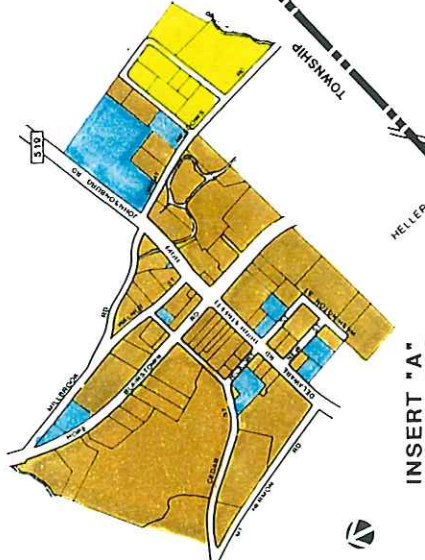
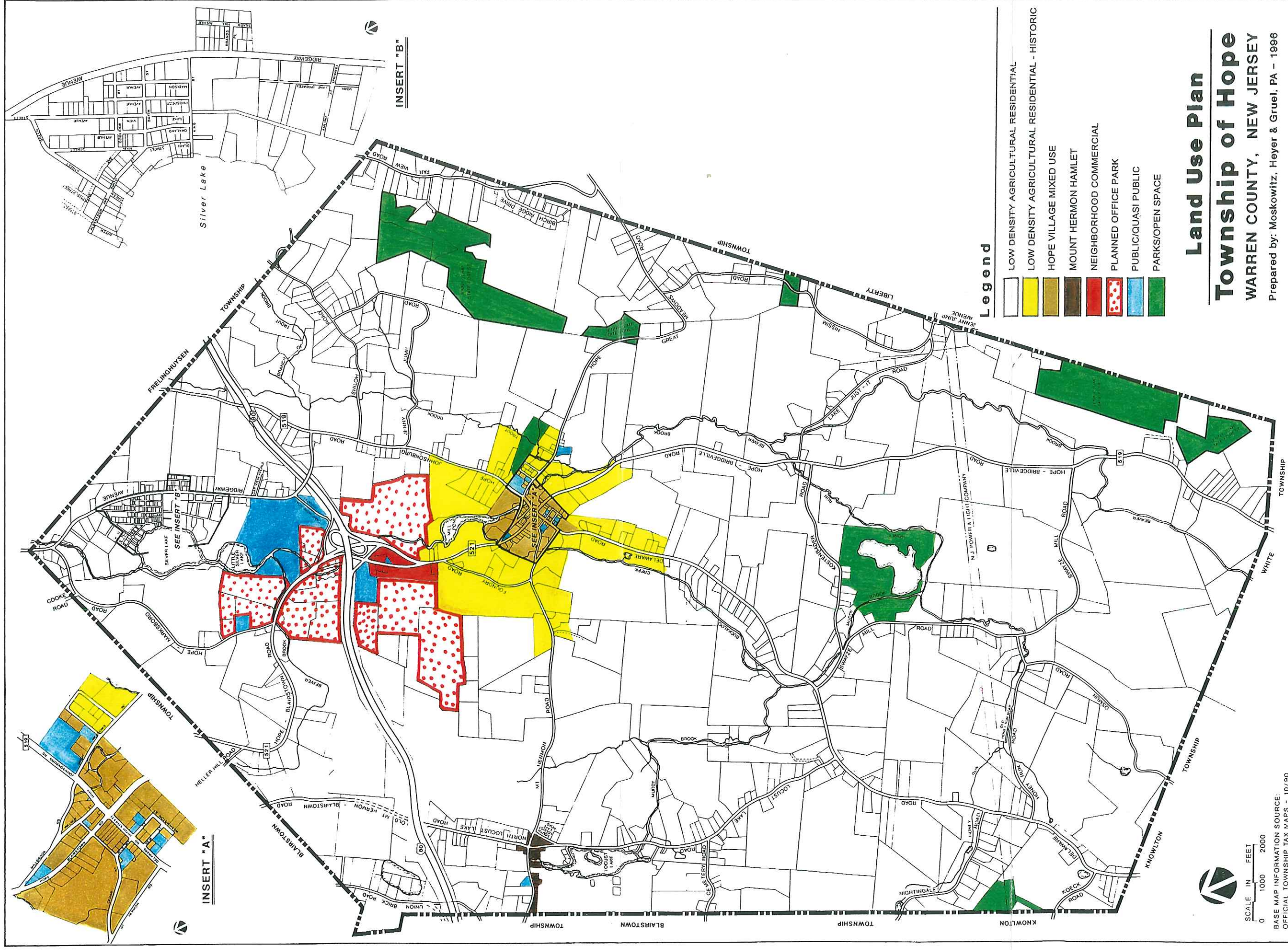
The planned office park designation is to be expanded somewhat over prior plans. During the public hearing process, a request for rezoning was received and considered. Two additional tracts located in the southwest quadrant of the Route 80/521 interchange were added to the POP district. The properties include a significant "plateau" which could be readily developed with large scale nonresidential uses. Both parcels are presently located within an area designated for service in the wastewater management plan. No POP development is proposed within the historic district boundaries, however access to Foundry Road is anticipated. The development anticipated is high quality moderate to large scale office development which should provide for the Township's long term economic development.

OPEN SPACE AND PARKS

The open space and parks category identifies lands dedicated to active and passive recreation use including lands owned by the State such as Jenny Jump Forest as well as the municipally owned Swayze Mill site. No new active recreation sites such as golf courses have been recommended.

PUBLIC AND QUASI-PUBLIC

The public and quasi-public category includes municipal buildings, schools, churches, fire houses, camps and similar uses.



Legend

- LOW DENSITY AGRICULTURAL RESIDENTIAL
- LOW DENSITY AGRICULTURAL RESIDENTIAL - HISTORIC
- HOPE VILLAGE MIXED USE
- MOUNT HERMON HAMLET
- NEIGHBORHOOD COMMERCIAL
- PLANNED OFFICE PARK
- PUBLIC/QUASI PUBLIC
- PARKS/OPEN SPACE

Land Use Plan
Township of Hope
WARREN COUNTY, NEW JERSEY
 Prepared by: Moskowitz, Hoyer & Gruel, PA - 1996



SCALE IN FEET
 0 1000 2000
 BASE MAP INFORMATION SOURCE:
 OFFICIAL TOWNSHIP TAX MAPS - 10/90

III. HOUSING PLAN ELEMENT

III. HOUSING PLAN ELEMENT

INTRODUCTION

The Council on Affordable Housing has defined a housing plan element as that portion of a municipality's Master Plan consisting of reports, statements, proposals, maps, programs and text designed to meet the municipality's fair share of its region's present and prospective housing needs, particularly with regard to low and moderate income housing. The rules require that as part of a housing plan, the following information must be provided:

1. A demographic analysis must be formed.
2. A housing plan element must include a determination of the municipality's present and prospective share for low and moderate income housing and its capacity to accommodate its present and prospective housing needs, including its fair share plan for low and moderate income housing.
3. A housing plan must also consider lands which are most appropriate for the construction of low and moderate income housing and of the existing structures most appropriate for the conversion to or rehabilitation for low and moderate income housing, including a consideration of lands of developers who have expressed a commitment to provide low and moderate income housing.
4. A map of all sites designated by the municipality for the production of low and moderate income housing and a listing of each site that includes its own acreage, lot and block.
5. The location and capacities of existing and proposed water and sewer lines and facilities relevant to designated sites.
6. Copies of necessary applications for sewer service and water quality management plans pursuant to sections 201 and 208 of the Federal Clean Water Act.

7. A copy of the most recently adopted municipal master plan, and where required, the immediately preceding adopted master plan.
8. For each designated site, a copy of the New Jersey Freshwater Wetlands Maps where available.
9. A copy of appropriate USGS topographical quadrangles for the designated site and any other documentation pertaining to the review of the municipal housing plan element as may be required by the Council.

Since this Housing Plan Element does not include a proposal for inclusionary sites, items 3, 4, 5, 6, 8 and 9 have not been included in this report.

The demographic analysis required by COAH is included in the demographics section of this Master Plan.

A DETERMINATION OF HOPE'S PRESENT AND PROSPECTIVE SHARE FOR LOW AND MODERATE INCOME HOUSING

Hope Township is part of the Northwest Housing Region (Region 2) which includes Warren, Morris, Essex and Union Counties. The Council on Affordable Housing has assigned the Township a total pre-credited need of 21 units through 1999. Hope's obligation includes both an indigenous or local component and a fair share of the region's obligation.

The numbers published by COAH do not include the reduction for the prior cycle obligation for which Hope has received substantive certification. The prior cycle plan included provisions for satisfying the Township's 14 unit indigenous need.

Of the 21 unit total, the local or indigenous need represents 14 units (16 units of total indigenous need minus 2 units of spontaneous rehabilitation equals 14 units). The Township's new

construction obligation is equal to seven units (21 units total pre-credited need minus 14 units indigenous equals 7 units).

Pursuant to 5:93-5.13, Hope has a requirement to provide rental housing. The rental obligation is equal to two units (.25 times the calculated need of 21 units minus the rehabilitation component 14 units equals .25 times 7 units equals 1.75 units or 2 units).

Pursuant to subchapter 6 of the COAH rules 5:93-6.1, municipalities may transfer up to 50 percent of their housing obligation. Therefore the Township may opt to transfer out up to 7 units of its affordable housing obligation.

The COAH rules 5:93-5.12 allow municipalities to restrict housing for senior citizens based upon a formula. Hope may reserve up to 25 percent of its affordable housing for senior citizens or five units.

Fair Share Plan

In order to accommodate its affordable housing obligation, Hope Township is proposing a fair share plan which does not require inclusionary zoning for large scale residential development with a setback. The Township will utilize the following mechanism:

1. Continued rehabilitation of substandard units.
2. The creation of accessory apartments as an option.
3. The possible use of a Regional Contribution Agreement.

Rehabilitation Of Substandard Units

Hope has received substantive certification for its prior cycle 14 unit indigenous need which provides a program for rehabilitation of existing substandard units.

Accessory Apartments

The second component of the fair share plan is the creation of accessory apartments. Hope Township proposes to use accessory apartments as a mechanism for satisfying its affordable housing obligation. The COAH rules allow up to ten such units to be created. The accessory apartments can be used to satisfy the Township's two unit rental obligation. If non-age restricted are created, a total of two units would count as four credits with 30 year affordability controls. Three additional accessory apartments could be created which would bring the total credit to seven units, which is the Township's entire new construction obligation.

If the accessory apartment option is not successful in producing the desired affordable housing, the Township reserves its right to transfer up to seven units via a regional contribution agreement.

Regional Contribution Agreement

The Fair Housing Act allows municipalities to transfer up to one-half of their fair share obligations to another municipality via a regional contribution agreement. The COAH rules require that at least \$20,000 be transferred from the sending municipality to a receiving municipality for each unit transferred. Assuming the Township fully utilizes its regional contribution agreement limit, up to seven units could be sent to a receiving municipality. Given the presumptive minimum cost of \$20,000 per unit, the regional contribution agreement would require at least \$140,000 in funding. Hope should seek out and negotiate a receiving municipality within its housing region. A number of municipalities already have project plans which can be funded in part by Hope. The money necessary to support the regional contribution agreement would be through municipal bonding, if necessary.

SUMMARY OF HOUSING PROGRAM

1. The Township proposes to satisfy its entire housing obligation without the use of inclusionary zoning.

2. The Township proposes to satisfy its seven unit new construction obligation via the use of an accessory apartment ordinance.
3. To satisfy the seven unit obligation would require the construction of five accessory apartments, two units at two credits per unit equals four units, plus three units at one credit per unit equals seven units.
4. Depending upon the success of the accessory apartment program, the Township reserves the right to transfer up to seven units via a regional contribution agreement. The total cost of the RCA program would be approximately \$140,000. The source of the funds would be municipal bonding

POPULATION CHARACTERISTICS

Population Trends

Hope Township has seen a slow but steady increase in population from 1940 through the present. The most significant growth rate in New Jersey and nationally occurred in the post World War II era (1950-1970). Overall, New Jersey population increased by 60 percent between 1950 and 1990. In comparison, Warren County experienced a growth rate of approximately 68.5 percent while Hope Township experienced a growth rate of 152.4 percent. Hope never experienced a great influx of population brought on by industry, primarily due to a lack of railroads, transportation facilities, and other necessary infrastructure.

As shown in Table 1, from 1950 to 1970, Hope Township experienced a 67.4 percent increase in population, adding over 459 new residents to the Township. Between 1970 and 1990, the population increased by 579 people, an increase of almost 51 percent. The population growth in Hope Township has been relatively steady over the past 40 years, with a peak occurring in the 1960's and tapering off in the 1980's. Between 1980 and 1986, Hope's population increased by 13.8 percent and ranked eighth in Warren County and 288th in the Region in terms of population growth.¹ The Tri-State Region includes southwestern Connecticut, southeastern New York, and northern and central New Jersey.²

¹ The Tri-State Region includes 785 municipalities.

² James W. Hughes and George Sternlieb. Rutgers Regional Report, Volume 1: Jobs, Income, Population and Housing Baselines, New Brunswick: Rutgers, The State University of New Jersey.

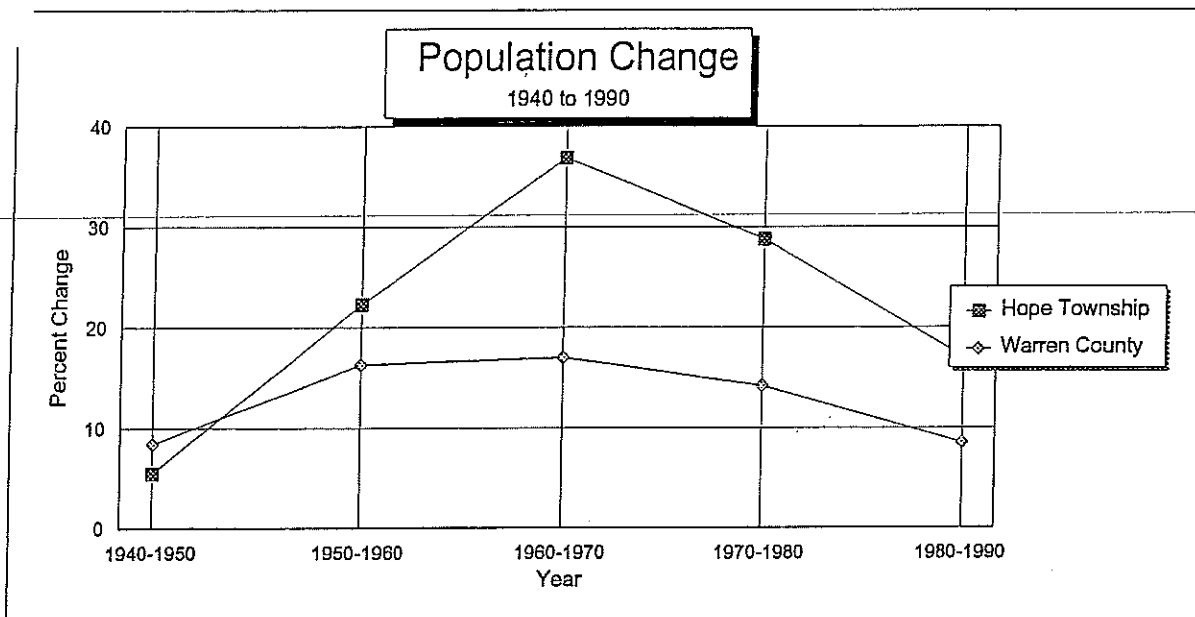
Table 1
POPULATION CHANGE
Hope Township and Warren County

Hope Township

Year	Population	Net Change	Percent
1940	646	---	---
1940-1950	681	35	5.42%
1950-1960	833	152	22.32%
1960-1970	1,140	307	36.85%
1970-1980	1,468	328	28.77%
1980-1990	1,719	251	17.10%

Warren County

Year	Population	Net Change	Percent
1940	50,181	---	---
1950	54,374	4,193	8.36%
1960	63,220	8,846	16.27%
1970	73,960	10,740	16.99%
1980	84,429	10,469	14.15%
1990	91,607	7,178	8.50%



Population Age Distribution

The most significant population increases occurred in the following cohorts: people under 5, people between the ages of 35 and 44, and people between the ages of 45 and 54. This is shown in Table 2. The dramatic increase in the number of young children (under 5) and adults between 35 to 44 in the past decade is a product of the "baby boom echo" trend. This trend is created as the children of the "baby boom" era (1945-1964) are starting their own families.³ All other age groups registered relatively minor increases. The 5 to 14 and 15 to 24 age groups, respectively, registered a decline in population. The proportion of persons 25 to 34 is relatively constant, while the proportion of senior citizens is rising slightly. As shown in Table 3, the majority of residents in Hope Township (19.3%) lie in the age 35 to 44 cohort, while the majority of Warren County residents (17.4%) lie in the 25 to 34 cohort.

Race And Gender

As shown in Table 4, the Township is almost evenly split between males and females. In 1990, males constituted 49.8 percent of the Township population, while females constituted 50.2 percent of the population. In the County, males constituted 48.3 percent of the population, while females constituted 51.7 percent of the population. As far as race is concerned, whites made up the overwhelming majority. They accounted for 99.2 percent of the population in the Township, and 97.2 percent of the population in the County. Minorities made up approximately 0.8 percent of the population in the Township and approximately 2.8 percent of the County population. No one minority group accounted for the majority of the minority population in Warren County; the greatest increase in the minority population occurred in the "Other Races."

³ New York Times, "Watching Yuppies Become Grumpies," February 28, 1995.

Table 2
POPULATION BY AGE, 1980 AND 1990
Hope Township

Age Category	1980		1990		Change, 1980-90	
	Number of Persons	Percent	Number of Persons	Percent	Number	Percent
Under 5	113	7.7%	154	9.0%	41	36.3%
5-14	254	17.3%	241	14.0%	-13	-5.1%
15-24	214	14.6%	194	11.3%	-20	-9.3%
25-34	262	17.8%	271	15.8%	9	3.4%
35-44	199	13.6%	331	19.3%	132	66.3%
45-54	142	9.7%	220	12.8%	78	54.9%
55-64	124	8.4%	139	8.1%	15	12.1%
65 & over	160	10.9%	169	9.8%	9	5.6%
Totals:	1,468	100.0%	1,719	100.0%	251	

Source: U.S. Bureau of the Census, 1980 & 1990

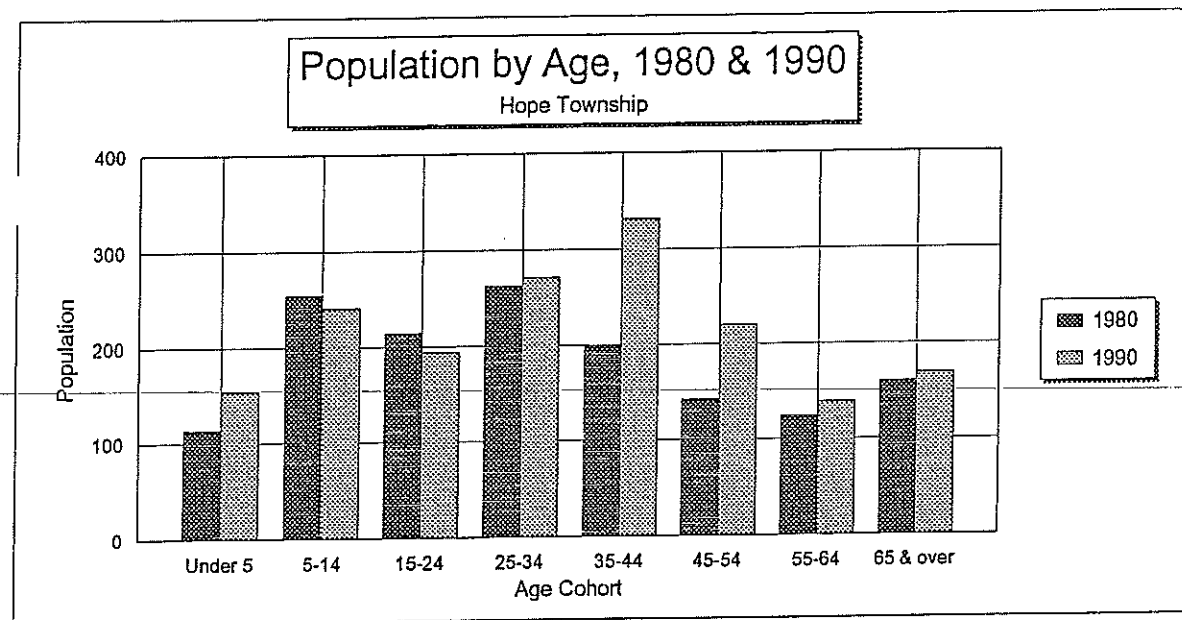
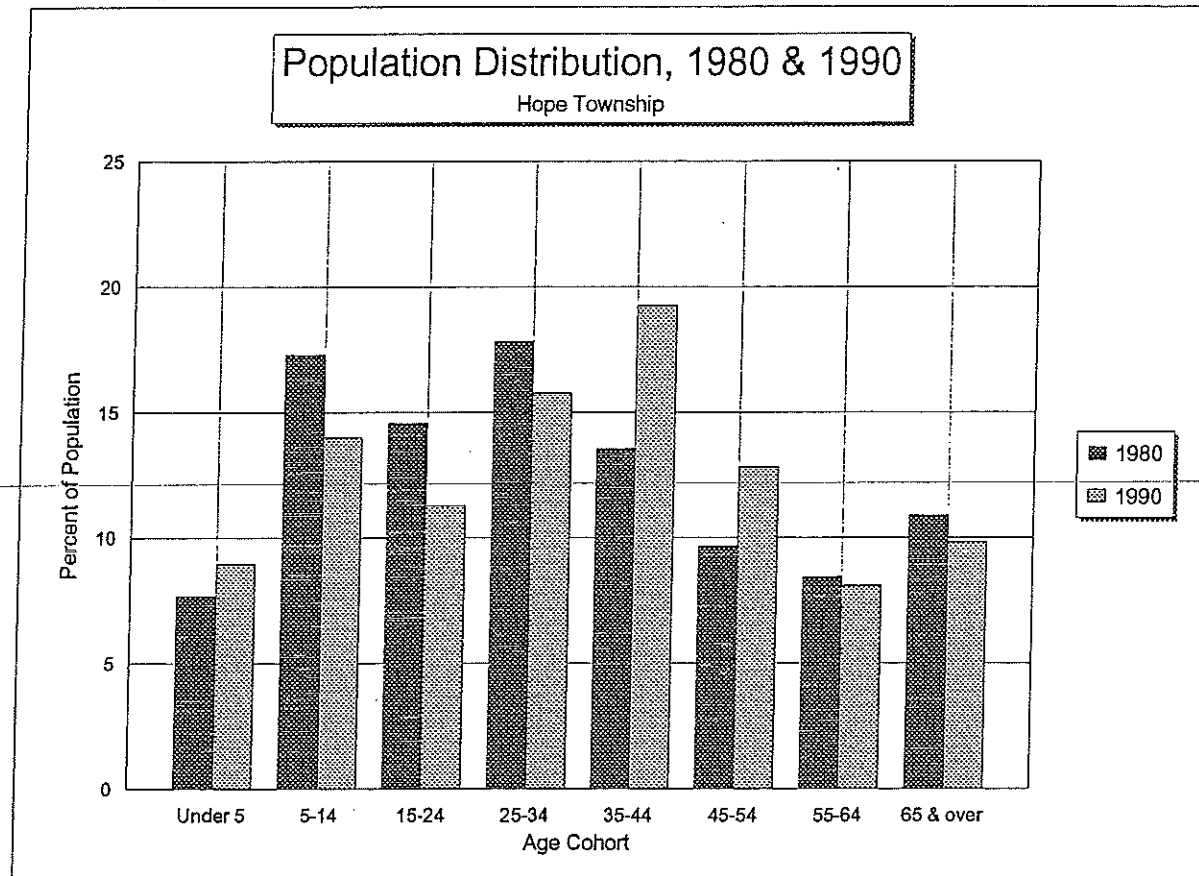


Table 3
POPULATION DISTRIBUTION, 1980 & 1990
Hope Township and Warren County

Age Category	1980		1990	
	Percent of Population Hope Township	Percent of Population County	Percent of Population Hope Township	Percent of Population County
Under 5	7.7%	6.6%	9.0%	7.6%
5-14	17.3%	16.0%	14.0%	13.4%
15-24	14.6%	16.6%	11.3%	11.6%
25-34	17.8%	15.8%	15.8%	17.4%
35-44	13.6%	12.0%	19.3%	16.1%
45-54	9.7%	10.6%	12.8%	10.8%
55-64	8.4%	10.3%	8.1%	6.1%
65 & over	10.9%	12.1%	9.8%	13.3%
Totals:	100.0%	100.0%	100.0%	100.0%



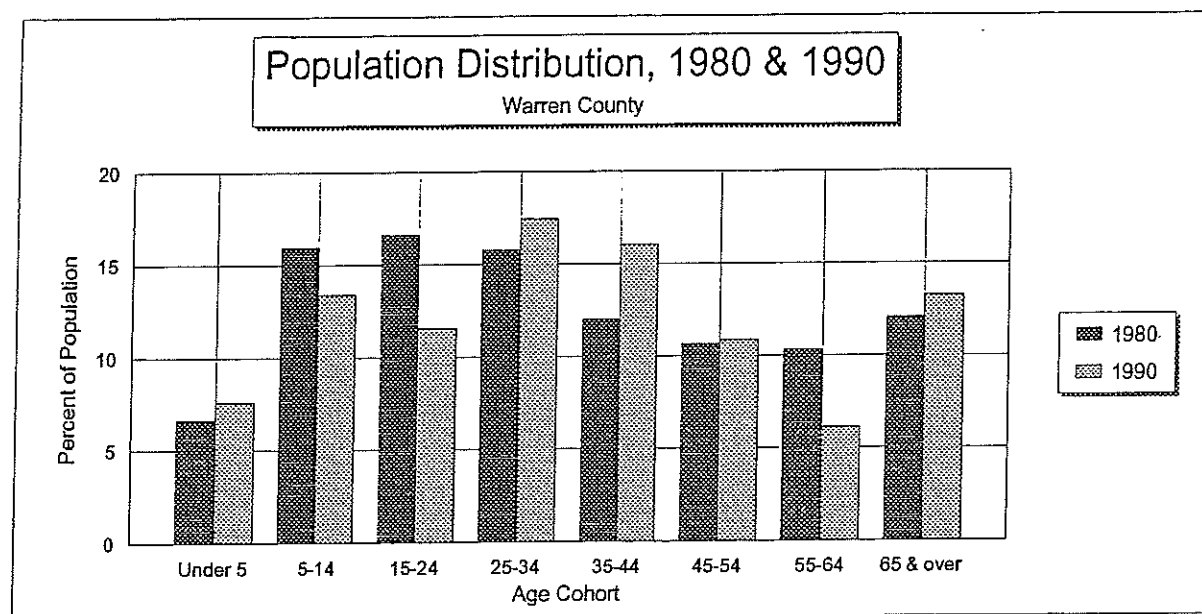


Table 4
GENDER AND RACE, 1980 - 1990
Hope Township and Warren County

	Hope Township		Warren County		Percent Change 1980 - 1990	
	1980	1990	1980	1990	Township	County
GENDER						
Male	701	857	40,561	44,212	22.3%	9.0%
Female	767	862	43,868	47,395	12.4%	8.0%
RACE						
White	1451	1,706	82,788	89,028	17.6%	7.5%
Black	7	3	933	1,302	-57.1%	39.5%
Am. Indian, Esk., Aleut	0	0	59	114	---	93.2%
Asian&Pac. Island.	0	6	369	747	---	102.4%
Other	3	4	280	416	33.3%	48.6%
TOTAL	1461	1719	84429	91607	17.7%	8.5%

Source: U.S. Bureau of the Census, 1980 & 1990

HOUSING CHARACTERISTICS

Household Size

As shown in Table 5, the majority of the households in Hope Township and Warren County consist of two persons. The Census defines a household as one or more persons, whether related or not, living together in a dwelling unit. The average household size in Hope Township is decreasing, following State and national trends. As indicated in Table 5, the median 1980 household size in the Township was 2.97, compared to a median household size for the County of 2.83. In 1990, the median household sizes decreased to 2.86 and 2.66 for the Township and County, respectively.

Various trends during the 1970's and 1980's contributed to the reduction in household size. These included the tendency to marry at later ages, increases in divorce rates, increases in the number of elderly living alone, and the desire by single working persons to have their own housing units. Collectively, these trends have resulted in reductions of household size and increased numbers of new households.

Household Type

The majority of the households in Hope Township are married couple families, as indicated in Table 6. The data indicate that approximately 58.1 percent of the Township's households are composed of married couple families. Approximately 19.9 percent of the Township's households contained one or more persons aged 65 and over. Approximately 45.7 percent of the households consist of one or more persons 60 years or over, and approximately 12.6 percent of the households consist of one person.

Table 5
1990 HOUSEHOLD CHARACTERISTICS
Hope Township and Warren County

Household Size	Hope Township		County	
	Number	Percent	Number	Percent
1 person	101	16.8	7,551	22.2
2 person	189	31.4	10,870	32.0
3 person	113	18.8	6,243	18.4
4 person	127	21.1	5,739	16.9
5 person	49	8.1	2,556	7.5
6 or more persons	23	3.8	1,038	3.1
Totals:	602	100.0	33,997	100.0
Average Persons Per Household:				
1980:	2.97		2.83	
1990:	2.86		2.66	

Source: U.S. Bureau of the Census, 1980 & 1990

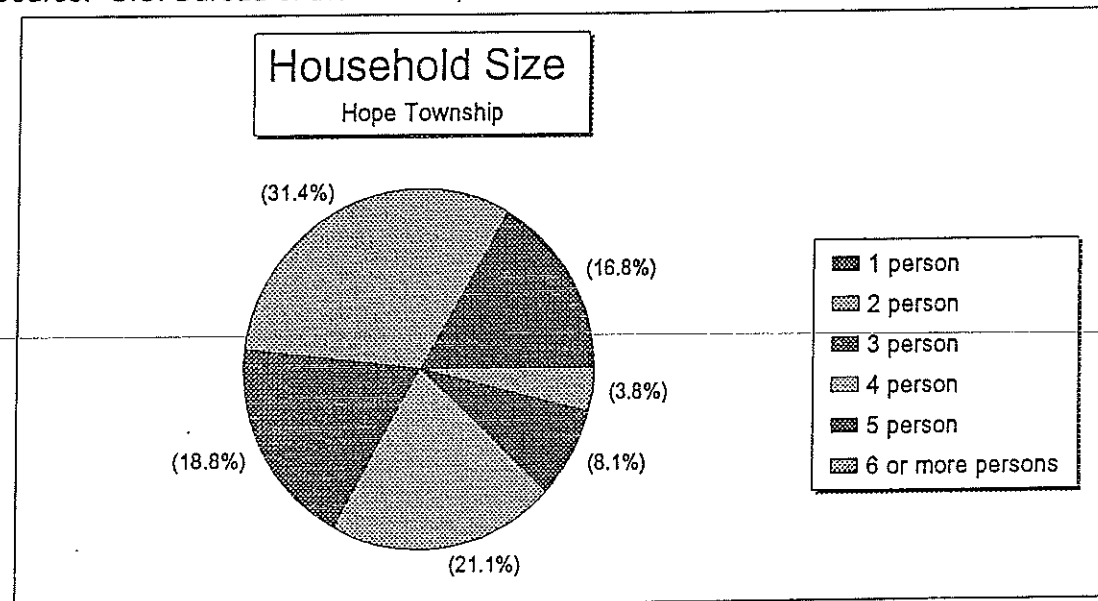


Table 6
 TYPES OF HOUSEHOLDS
 Hope Township

<u>Type of Household</u>	<u>1980</u>		<u>1990</u>	
	<u>Number in Subgroup</u>	<u>Total</u>	<u>Number in Subgroup</u>	<u>Total</u>
One Person:		76		101
Male Householder	30		39	
Female Householder	46		62	
Two or More Persons:		418		501
Married Couple Family	350		430	
Other Family	52			
Male Householder, No Wife	12		20	
Female Householder, No Husband	40		30	
Non-Family*		16		21
Male Householder	12		16	
Female Householder	4		5	
One or More Persons 60 Years or Over:		155		160
One or More Persons 65 Years or Over:		120		128

*Not a member of a family; roomers, boarders, resident employees, foster children, etc., are included in this category.

Source: U.S. Bureau of the Census, 1980 and 1990

Household Income

The 1989 median household income in Hope Township was \$56,865, higher than the median household income of Warren County and the State. This is shown in Table 7. This represents a 39 percent increase in 1979 (inflation adjusted) dollars. This is greater than the increase in household income experienced by Warren County (22%) and the State as a whole (16%).

Hope Township ranks second in the County in median family income and 322nd in the Region.⁴ Table 8 illustrates the household income distribution trends in Hope Township and Warren County. Approximately 31.3 percent of the households in Hope Township have an income between \$50,000 and \$74,999. In comparison, approximately 23.4 percent of the households in Warren County have an income between \$50,000 and \$74,999. Over 11 percent of the households in Hope Township had incomes over \$100,000, compared with less than five percent of the households in the County.

In terms of per capita income, Hope Township ranks third in the County, and 411th in the Region.⁵ In 1979, Hope Township had a per capita income of \$7,715. In 1985, this had increased to \$11,675, a change of 51.3 percent.⁶ In 1989, Hope Township had a per capita income of \$19,807. This is much higher than the \$16,716 for the County as a whole, and \$18,714 for the State.⁷

⁴ James W. Hughes and Joseph Seneca, Ranking the Municipalities, New Brunswick: Center for Urban Policy Research, 1994, 97.

⁵ *Ibid.*, 167.

⁶ James W. Hughes and George Sternlieb, Rutgers Regional Report-Volume 1: Job, Income, Population and Housing Baselines, New Brunswick: Rutgers, 250.

⁷ James W. Hughes and Joseph Seneca, Ranking the Municipalities, New Brunswick: Center for Urban Policy Research, 1994, 133.

Table 7
 HOUSEHOLD INCOME, 1979 and 1989
 Hope Township, Warren County & New Jersey

	1979 Median Household Income <i>(1979 dollars)</i>	1989 Median Household Income <i>(1989 dollars)</i>	1989 Median Household Income <i>(Constant dollars)</i>	Percent Change <i>(Constant dollars)</i>
New Jersey	\$19,800	\$40,927	\$22,919	0.16
Warren County	\$21,061	\$45,912	\$25,711	0.22
Hope Township	\$22,863	\$56,865	\$31,844	0.39

Source: N.J. Department of Labor
 U.S. Department of Labor, Bureau of Labor Statistics (Consumer Price Index)
 U.S. Bureau of the Census, 1990

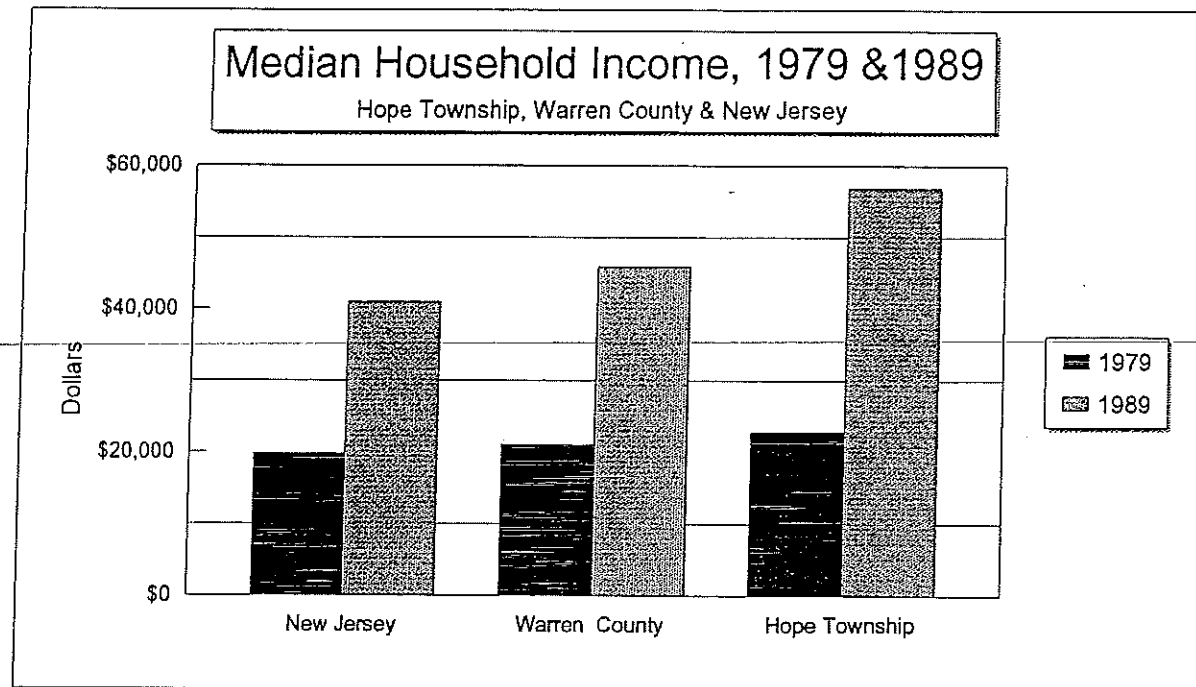
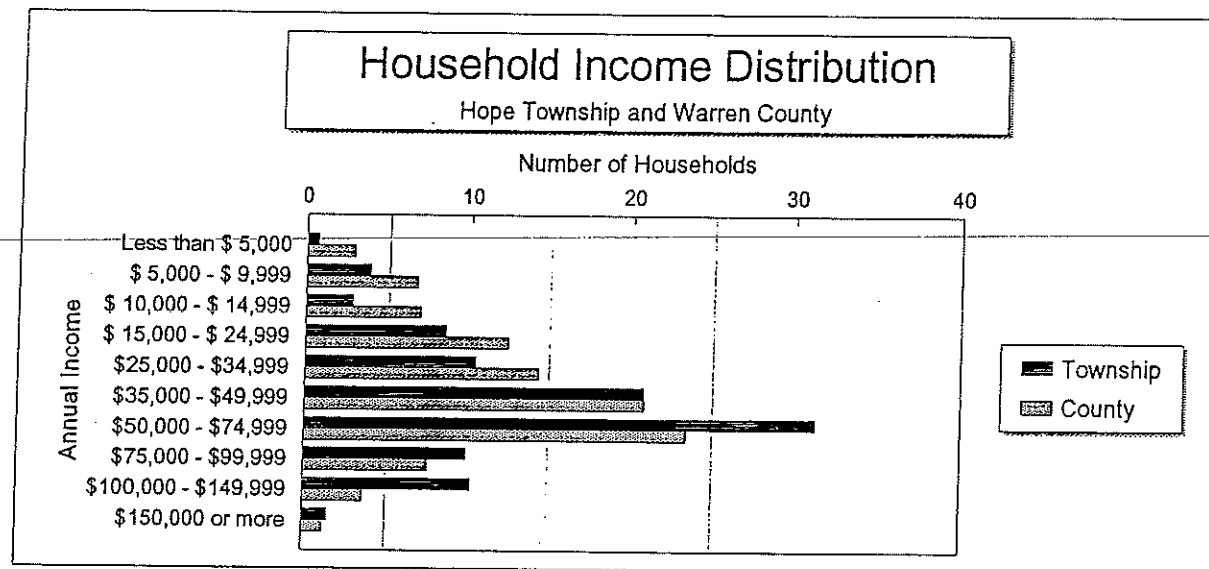


Table 8
1989 HOUSEHOLD INCOME DISTRIBUTION
Hope Township and Warren County

Income	Hope Township		County	
	Number of Households	Percent	Number of Households	Percent
Less than \$ 5,000	4	0.7	991	2.9
\$ 5,000 - \$ 9,999	23	3.9	2280	6.7
\$ 10,000 - \$ 14,999	17	2.8	2360	7.0
\$ 15,000 - \$ 24,999	51	8.5	4199	12.4
\$25,000 - \$34,999	62	10.4	4859	14.3
\$35,000 - \$49,999	124	20.8	7045	20.8
\$50,000 - \$74,999	187	31.3	7928	23.4
\$75,000 - \$99,999	59	9.9	2560	7.6
\$100,000 - \$149,999	61	10.2	1225	3.6
\$150,000 or more	9	1.5	429	1.3
Totals:	597	100.0	33,876	100.0

Source: U.S. Bureau of the Census, 1990



Type And Size Characteristics

As shown in Table 9, the majority of the housing stock in Hope Township is single-family detached housing. In 1990, there were 629 single-family detached homes, which represent 94.4 percent of the units. Much of the housing in Hope Township is either very old (31.2% of the units were constructed before 1940), or very new, with 24.9% of the units constructed between 1980 and 1990. Almost 40 percent of the structures in Hope have five or six rooms. Almost 90 percent of the units have between five and eight rooms. This reflects the large number of moderately-sized single-family dwellings in the Township.

Tenure Of Households

Hope Township has seen some changes in its household composition. As shown in Table 10, ten percent of the householders moved into their unit between 1989 and 1990. More than 30 percent of the householders moved in between 1985 and 1988. More than 45 percent of the householders moved into their unit before 1980. This underscores the impact of new housing development in the 1980's as well as the turnover of existing housing stock to new families.

Housing Values And Contract Rent

Housing costs in Hope Township are generally in the moderate range. The majority of homes in the Township are valued between \$100,000 and \$300,000. As shown in Table 11, approximately 53.7 percent of the homes in Hope are valued between \$100,000 and \$200,000, while 26.2 percent of the homes are valued between \$200,000 and \$300,000. This compares to 61.3 percent of the homes in Warren County valued between \$100,000 and \$200,000, and 14.9 percent valued between \$200,000 and \$300,000. Thus, housing in Hope Township is somewhat more expensive in relation to the rest of the County. The 1990 median value for housing is \$176,300, which is higher than the County's median value of \$143,900. Hope ranks fifth out of 23 municipalities in the County in median housing value, and 452nd in the Region.⁸

⁸ Hughes and Seneca, Ranking the Municipalities, New Brunswick: Center for Urban Policy Research, 1994.

Table 9
HOUSING UNIT DATA - 1990
Hope Township

<u>Characteristics:</u>	<u>Number</u>	<u>Percent</u>
<i>Year Round Housing Units</i>		
Occupied	602.0	90.4%
Vacant	<u>64.0</u>	9.6%
	666.0	100.0%
<i>Tenure of Occupied Units</i>		
Owner Occupied	524	87.0%
Renter Occupied	<u>78</u>	13.0%
	602	100.0%
<i>Year Structure Built:</i>		
1980 - March 1990	166	24.9%
1970-1979	133	20.0%
1960-1969	52	7.8%
1950-1959	67	10.1%
1940-1949	40	6.0%
Before 1940	<u>208</u>	31.2%
	666	100.0%
<i>Units at Address:</i>		
Single Family Detached	629	94.4%
Single Family Attached	11	1.7%
Two or more Units	17	2.6%
Mobile Home	0	0.0%
Other	<u>9</u>	1.3%
	666	100.0%
<i>Number of Rooms:</i>		
One	1	0.15%
Two	4	0.60%
Three	17	2.55%
Four	49	7.36%
Five	115	17.27%
Six	148	22.22%
Seven	113	16.97%
Eight	112	16.82%
Nine or more	<u>107</u>	16.07%
	666	100.00%

Source: U.S. Bureau of the Census, 1990

Table 10
YEAR HOUSEHOLDER MOVED INTO THE UNIT
Hope Township

	<u>Total</u>	<u>Percent</u>
1989 - 1990	60	10.0
1985 - 1988	185	30.7
1980 - 1984	83	13.8
1970 - 1979	161	26.7
1960 - 1969	61	10.1
1959 and earlier	52	8.6
Totals:	602	90.0

Source: U.S. Bureau of the Census, 1990

Table 11
HOUSING VALUES AND CONTRACT RENT, 1990
Hope Township and Warren County

<u>Value Range</u>	<u>Hope Township</u>		<u>County</u>	
	<u>Number(1)</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Less than \$74,999	16	3.8	1,575	7.8
\$75,000 - \$99,999	31	7.3	2,494	12.3
\$100,000 - 149,999	107	25.3	6,935	34.3
\$150,000 - 199,999	120	28.4	5,450	27.0
\$200,000 - 299,999	111	26.2	3,019	14.9
\$300,000 - 399,999	30	7.1	540	2.7
\$400,000 or more	8	1.9	183	0.9
Total	423	100.0	20,196	100.0
Median value	\$176,300		\$143,900	
<u>Contract Rent</u>				
Less than \$399	15	22.7	2,569	25.8
\$400 - 499	10	15.2	2,602	26.2
\$500 - 599	15	22.7	2,477	24.9
\$600 - 699	7	10.6	975	9.8
\$700 - 999	14	21.2	822	8.3
\$1000 or more	0	0.0	129	1.3
No cash rent	5	7.6	376	3.8
Total	66	100.0	9,950	100.0
Median contract rent	\$552		\$488	

(1) Owner-occupied housing units

Housing Sales

Median sales prices in Hope have increased significantly over the past 25 years. During the 1965-1980 period, the increase in sales prices in the State of New Jersey followed that of the nation as a whole. Between 1980-1988, however, sales prices in New Jersey far exceeded that of the nation by 3-1/2 times. Sales prices were influenced by the increased housing demand caused by an influx of new corporations and a booming economy. During the same period, Hope Township, Warren County and the State median housing sales prices increased almost three-fold.

Median housing sales prices for Hope Township increased from \$10,750 in 1965 to \$176,300 in 1990. This represents almost a 16-fold increase within the 25-year period. As shown in Table 12, the median sales price of \$176,300 is significantly higher than the County median of \$143,900 and the State median of \$162,300.

Housing Conditions

As shown in Table 13, Hope Township generally has a good housing stock, although over 31 percent of it was built before 1940. Some units use a means of sewage disposal other than public sewer or septic tank or cesspool. Nineteen units, approximately 2.9 percent of the total number of dwelling units, do not use city water, or a drilled or dug well for their source of water. Only two units have no telephone, and 26 units use a nonstandard heating fuel, such as coal, coke, wood, or no fuel at all.

Housing Construction

The Township's housing market has not been particularly strong over the past ten years, although it has picked up in the early 1990's after a lag in the late 1980's. As shown in Table 14, all the permits issued from 1984 through 1993 were for single-family dwelling units. This follows the trend seen earlier that most of the units existing in Hope Township were either single-family attached or single-family detached. There has not been much demolition in the Township. Since 1984, only one unit has been demolished.

Table 12
 MEDIAN HOUSING SALES PRICES
 Hope Township, Warren County, New Jersey

Year	Township	County	State
1965	\$10,750	\$10,688	\$17,750
1970	\$15,500	\$15,000	\$23,000
1975	\$26,250	\$32,500	\$39,500
1980	\$57,200	\$50,000	\$57,500
1985	\$84,993	\$76,995	\$84,004
1990(1)	\$176,300	\$143,900	\$162,300

(1) Median Housing Value, U.S. Bureau of the Census, 1990

Source: *Rutgers Regional Report, Vol. II: New Jersey Home Prices*,
 Sternlieb and Hughes, 1990

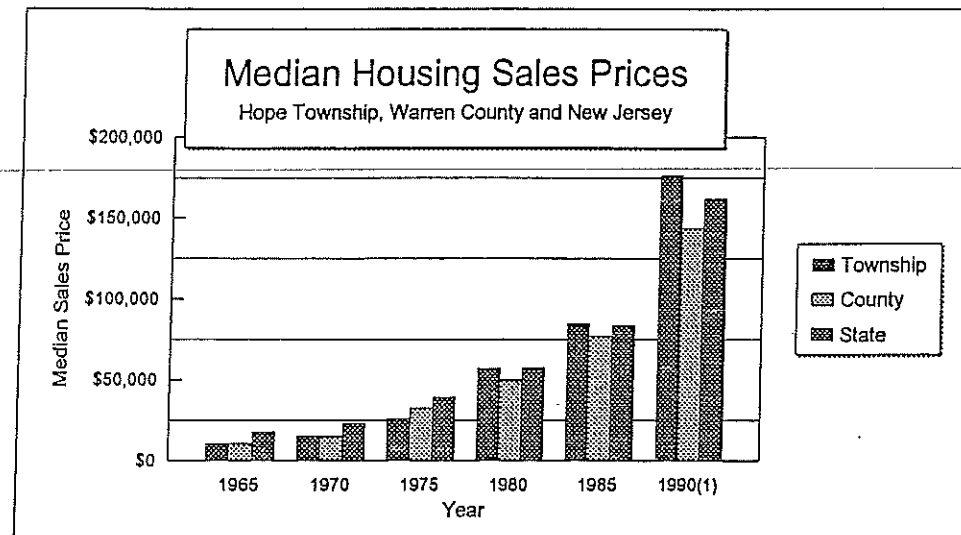


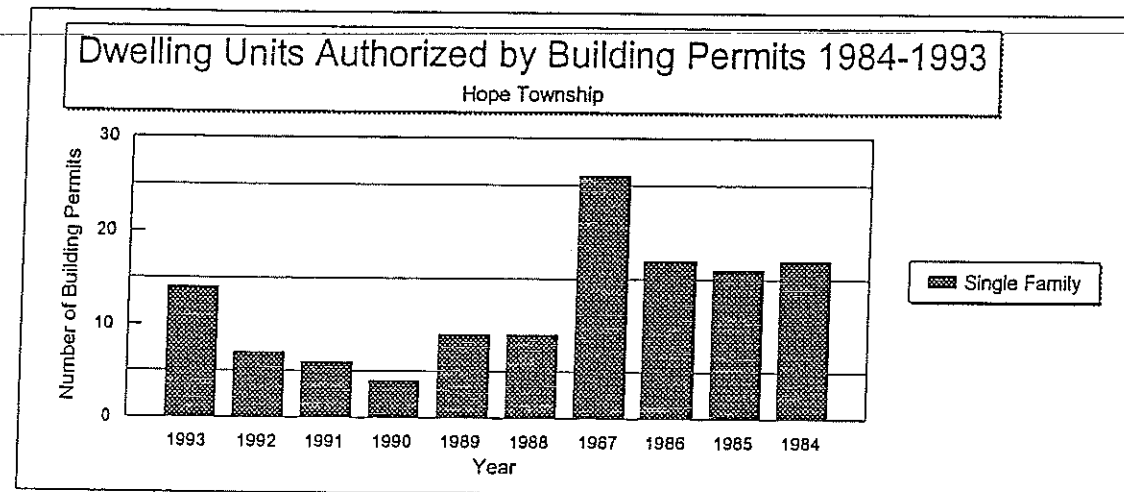
Table 13
 INDICATORS OF HOUSING CONDITIONS, 1990
 Hope Township

	<u>Number</u>	<u>Percent</u>
<u>1. Status of Plumbing Facilities</u>		
<i>Lacking complete plumbing for exclusive use:</i>	2	0.30%
<u>2. Persons per Room</u>		
<i>1.01 or more:</i>		
<u>3. Age of Housing</u>		
<i>Built before 1940:</i>	208	31.2%
<u>4. Water or Sewer Problem</u>		
<i>Lack of public sewer, septic tank or cesspool:</i>	5	0.8%
<i>Lack of city water, drilled well or dug well:</i>	19	2.9%
<u>5. Telephone Availability</u>		
<i>Lack of telephone</i>	2	0.30%
<u>6. Nonstandard Heating Fuel</u>		
<i>Use of coal, coke, wood or no fuel for heating:</i>	26	3.90%

Table 14
 DWELLING UNITS AUTHORIZED BY BUILDING PERMITS, 1984-1993
 Hope Township

Year	Total	Single Family	2 - 4 Family	5+ Family	Demolitions
1993	14	14	0	0	0
1992	7	7	0	0	0
1991	6	6	0	0	0
1990	4	4	0	0	0
1989	9	9	0	0	0
1988	9	9	0	0	0
1987	26	26	0	0	0
1986	17	17	0	0	0
1985	16	16	0	0	0
1984	17	17	0	0	1
Total	125	125	0	0	1

Source: NJ Department of Labor, New Jersey Building Permits, Summary 1993
 NJ Department of Labor, Summary of Residential Building Permits, 1984 - 1992



ECONOMIC CHARACTERISTICS

Hope Township is primarily an agricultural community. By the turn of the century, Hope declined and was populated by many retired farmers. There has not been much development since that time.

As noted earlier, Hope was able to keep the integrity of a small village because of factors which were out of its control; railroads bypassed Hope going through Blairstown to the north and to Phillipsburg to the south. The Morris Canal passed to the south of Hope. Because of the lack of transportation, large industry did not settle in the Township.

In the mid 1900's, Hope Village experienced a stagnation and currently provides fewer professions and services than were available 75 years ago. The number of large working farms has declined greatly from 145 in 1850, but there still remains a large rural farm community in Hope Township surrounding Mount Hermon, Silver Lake and Hope Village.

In the early 1970's, residents recognized the need to protect the historic integrity of the Village. At that time, the Township was listed in the State and National Registers of Historic Places and a Township ordinance created the Hope Historic District. Since the mid-1980's, the primary Moravian buildings have been restored and adapted for use as commercial space which retains the fabric of the original buildings. This has brought a resurgence of vitality to the community.⁹

Local Labor Trends

As shown in Table 15, there are approximately 4.58 residents for every worker in the Township. This is a little bit higher than the County, which has 3.37 residents for every worker. But of all the adjacent municipalities, Frelinghuysen Township has the most residents per worker, with more than 15. This would suggest that Hope Township is not a significantly large bedroom community.

⁹ H.O.P.E. (Help Our Preservation Effort), Hope Township Historic Sites Survey, July 7, 1995.

Looking at Table 16, it appears that the majority of the jobs (18 percent) lie in the precision production, craft and repair sector. A significant amount (15.5 percent) are also in the Administrative Support occupations, such as clerical. The majority of the occupations in Warren County (16.9 percent) are in Administrative Support. More than 27 percent are in Executive and Managerial or Professional Specialty occupations. Overall, most of the various occupation fields have at least some representation in Hope Township.

Table 15
POPULATION TO JOB RATIO
Hope Township and Adjacent Municipalities

Area	1990	1992	Population to Jobs
	Population	Covered Employment*	
Hope Township	1,719	375	4.58 to 1
Warren County	91,607	27,181	3.37 to 1
Blairstown Township	5,331	954	5.59 to 1
Frelinghuysen Township	1,779	114	15.61 to 1
Knowlton Township	2,543	649	3.92 to 1

Source: *N.J. Department of Labor, Covered Employment Trends, 1992

Table 16
COMPARATIVE EMPLOYMENT DATA, 1990
Hope Township and Warren County

Occupation	Hope Township		Warren County	
	Number	Percent	Number	Percent
Executive & managerial	138	14.8	5,359	11.7
Professional specialty	117	12.6	5,573	12.1
Technicians & related support	28	3.0	2,028	4.4
Sales	91	9.8	5,209	11.4
Administrative support	144	15.5	7,748	16.9
Private household	7	0.8	96	0.2
Protective service	15	1.6	1,058	2.3
Service	82	8.8	4,492	9.8
Farming, forestry & fishing	25	2.7	972	2.1
Precision production, craft & repair	168	18.0	6,434	14.0
Machine operators & assemblers	51	5.5	2,992	6.5
Transportation	43	4.6	2,105	4.6
Handlers, helpers & laborers	22	2.4	1,803	3.9
Totals:	931	100.0	45,869	100.0

Source: U.S. Bureau of the Census, 1990

**IV. CONSERVATION PLAN/
ENVIRONMENTAL RESOURCE
INVENTORY**

IV. CONSERVATION PLAN/ENVIRONMENTAL RESOURCE INVENTORY

INTRODUCTION

Hope's quality of life and unique character are substantially influenced by its natural environment. The stream corridors, wooded slopes and open field areas within the Township provide important habitat for wildlife, preserve scenic views and help to define the built environment. Conservation of natural resources minimizes adverse impacts upon public health, safety and welfare resulting from inappropriate land development. The extensive environmentally sensitive features of Hope's lands provide limitations to what can and should be built.

The regional location of Hope is shown on Map 1.

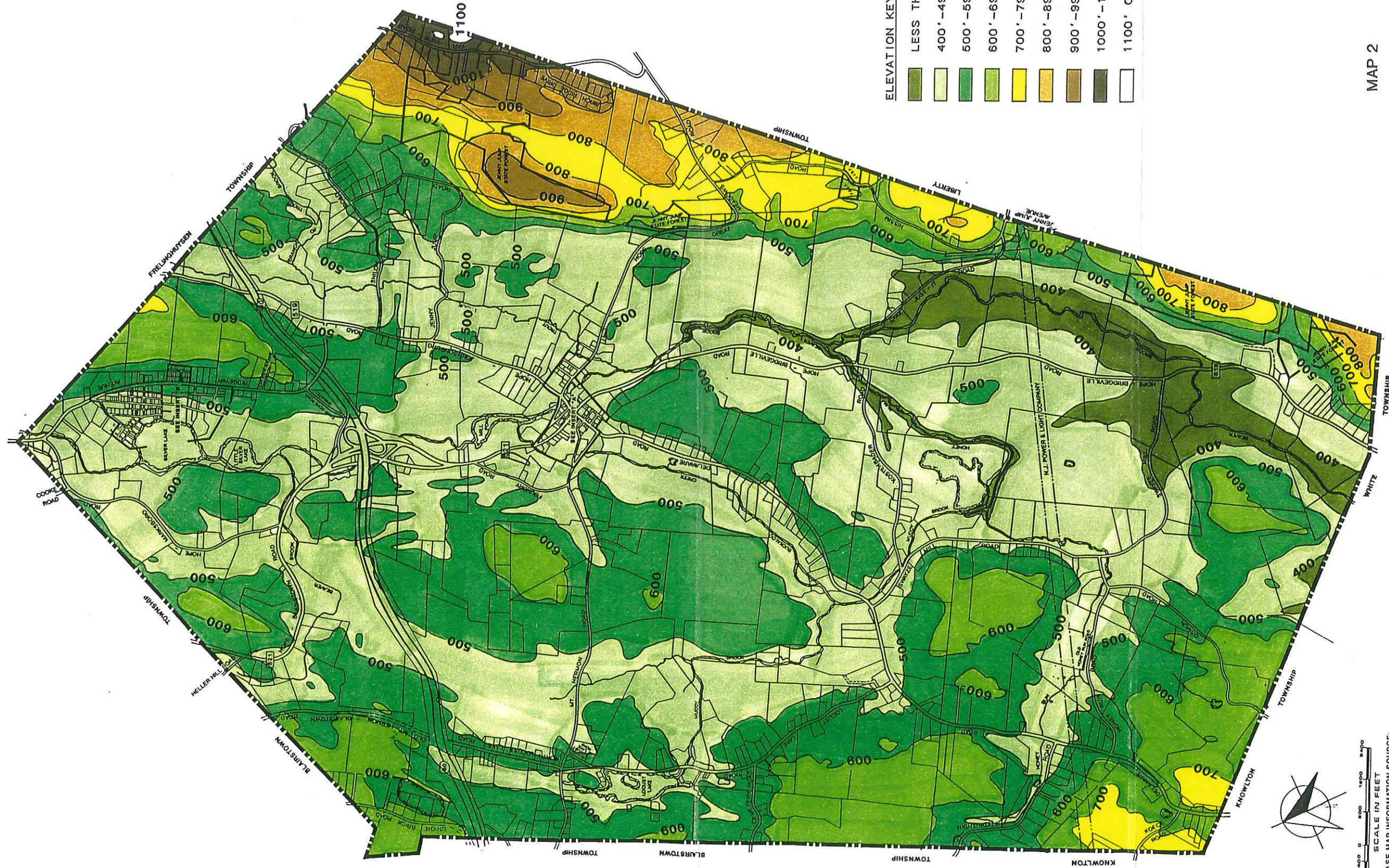
TOPOGRAPHY

Elevations in the Township range from a low of 360 feet, located along Beaver Brook in the southeastern portion of the Township near White to a high of approximately 1,100 feet located in the eastern portion of the Township along Far View Road. Except for the ridgeline along the eastern section of the Township, the remaining area can be characterized as gently sloping hills and valleys. General topographic elevations are indicated on Map 2.

STEEP SLOPES

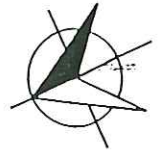
The areas of slopes in excess of 15 percent have been identified on the steep slopes map. The major areas of steep slopes are found in the eastern portion of the Township and form the ridgeline upon which Jenny Jump State Forest is located. These slopes are based on the U.S.G.S. standard twenty foot contour elevations. The results are generalized steep slopes. Steep slopes are shown on Map 3.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



ELEVATION KEY:


[Lightest Green]	LESS THAN 400'
[Light Green]	400' - 499'
[Medium Green]	500' - 599'
[Darker Green]	600' - 699'
[Yellow-Green]	700' - 799'
[Yellow]	800' - 899'
[Orange]	900' - 999'
[Dark Brown]	1000' - 1099'
[Darkest Brown]	1100' OR MORE



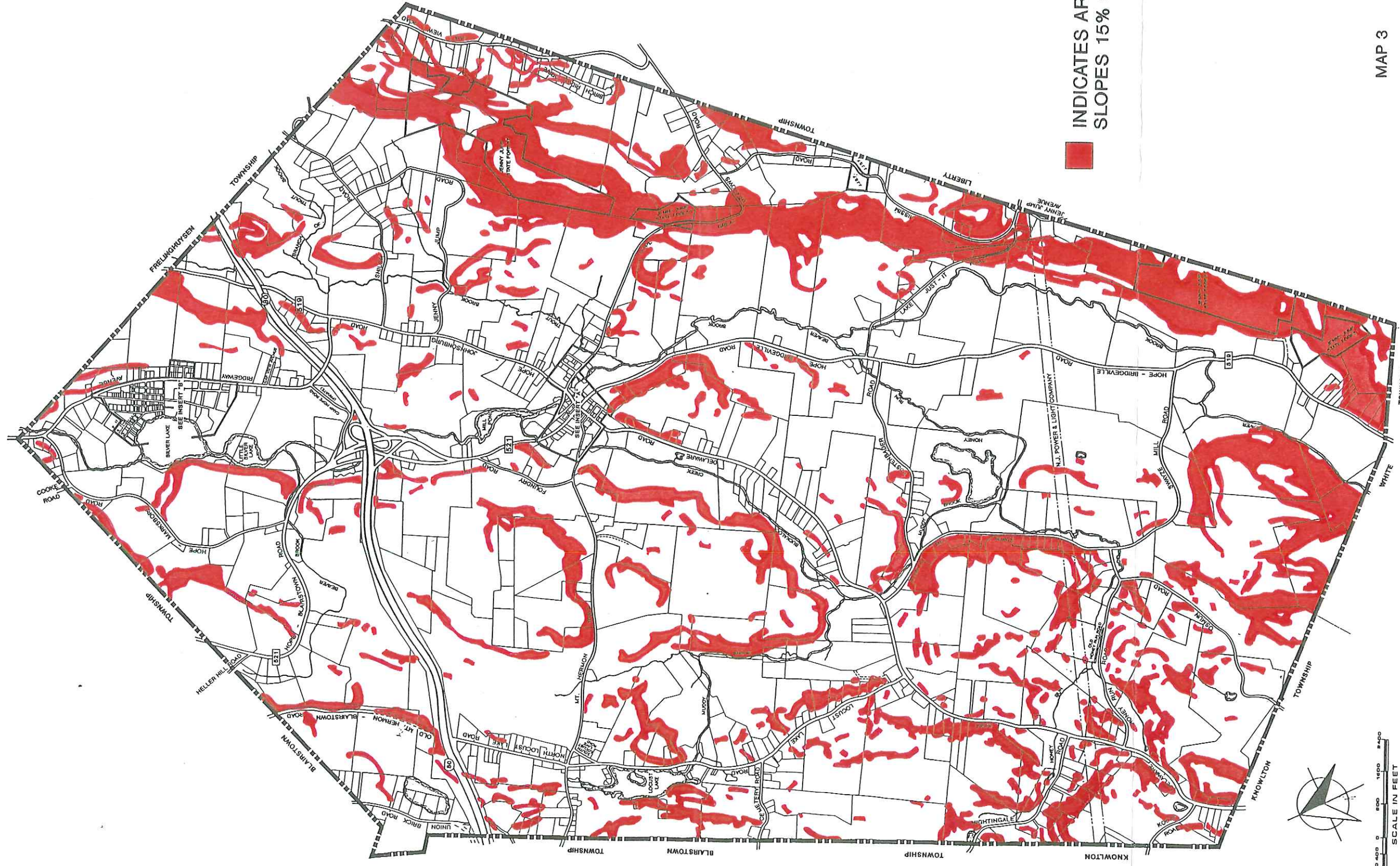
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 BASE MAP INFORMATION SOURCE:
 OFFICIAL TOWNSHIP TAX MAPS - 10/70

MAP 2
TOPOGRAPHY

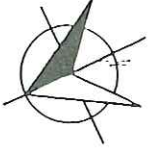
ENVIRONMENTAL RESOURCE INVENTORY
TOWNSHIP OF HOPE
 WARREN COUNTY, NEW JERSEY
 JULY, 1992

SOURCE: U.S.G.S QUAD MAPS

Moskowitz, Heyer & Gruel, PA
 Community Planning Consultants

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



INDICATES AREAS WITH SLOPES 15% OR MORE



SCALE IN FEET
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BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/80

SOURCE: U.S.G.S. DATUM BASED ON 20' CONTOUR INTERVAL

MAP 3

STEEP SLOPES

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY

JULY, 1992

 Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

SURFACE GEOLOGY

Surficial geology is shown on Map 4. The areas indicated on the map represent deposits of materials from glacial deposits, glacial outwashes (Alluvium, Swamp deposits, Colluvium, Boulder colluvium, Till deposits) and deposits of fragmented bedrock (Talus). The remaining area is classified the parent bedrock - indicating the areas of abundant outcrops and areas with less than 1.6 meters (5'3") of surface deposits.

The following list indicates the source and type of surficial geology found within the Township.

OaL, Alluvium: Silt, sand and bouldery gravel with peat and other organic matter on flood plains and along small stream. Generally less than 3 m thick, but as much as 6 m thick along the Delaware River.

Os, Swamp deposits: Peat and muck with silt and clay; includes beds of calcareous shell (gastropod) fragments. Generally 2 to 12 m thick but may be as thick as 25 m in glacial lake basins.

Ota, Talus: Accumulations of angular rock fragments, from 0.25 to 3 m in occurs at the base of Kittatinny Mountain. Sparse vegetation, may be as much as 40 m thick.

Oco, Colluvium: Clay to boulder size material, including organic and glacial deposits and bedrock derived material to thicknesses of as much as 5 to 10 m.

Obc, Boulder colluvium: Bouldery deposits with sparse matrix material, on slopes As much as 15 m thick.

Ot, Wisconsinan till deposits: Firm to loose, unsorted mixture of clay to boulders. Variable color and lithology. Includes end members such as red bouldery calcareous till, clayey and shaley yellowish-brown till, dark to light gray calcareous till, and sandy crystalline lithology till.

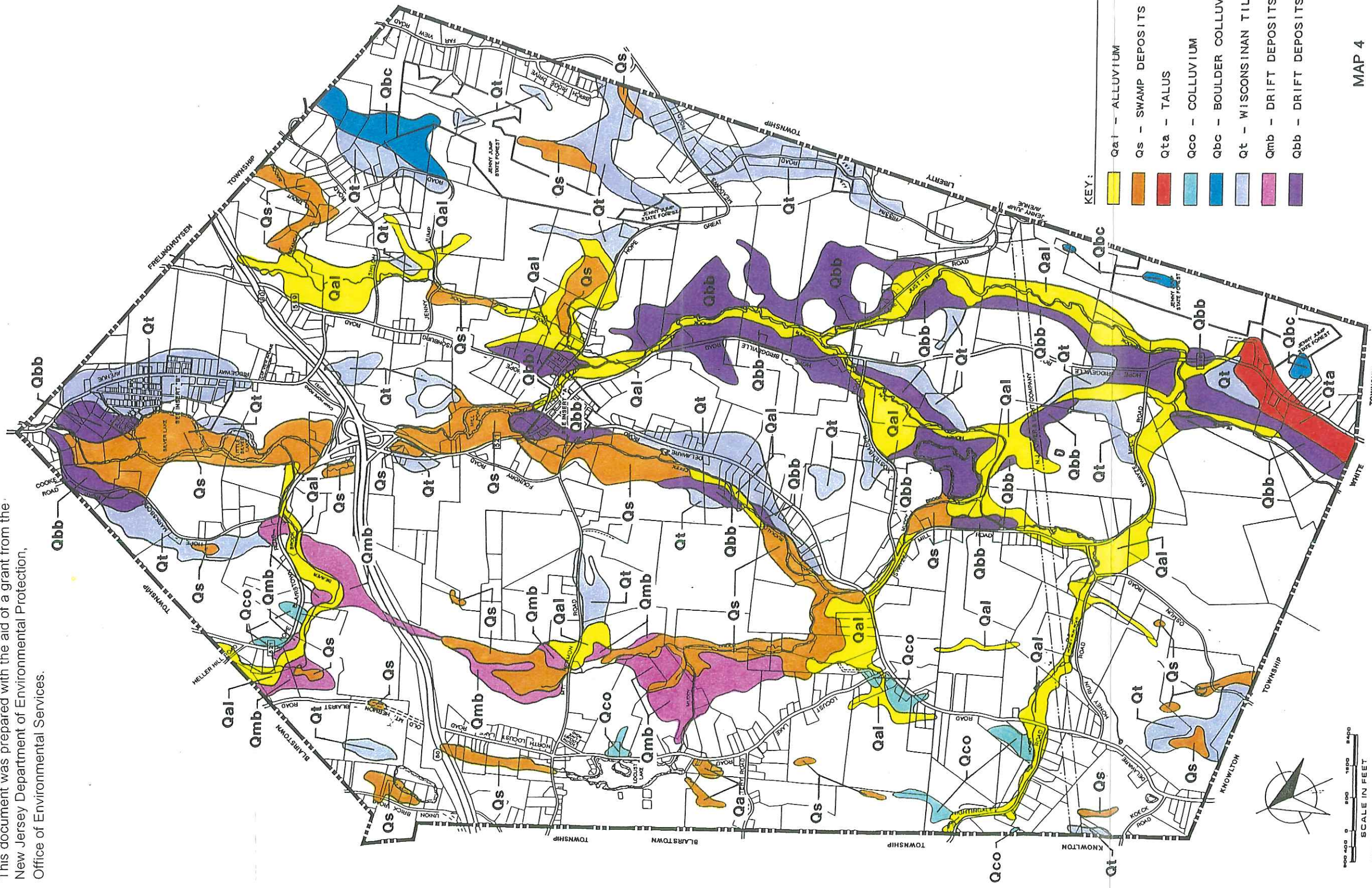
May be as thick as 50 m south of Kittatinny Mountain, but usually occurs as a thin veneer, 1.5 to 3 m thick. Cryoturbation is to a depth of 0.6 to 0.8 m.

OmlA, OmlB, OmlC, OmlD, OmlE, OmlF and OmlG, Morainic positions in the Mountain Lake Valley: End and lateral moraine loops of the Mountain Lake Valley with letters A thru G indicating relative ages of deposits.

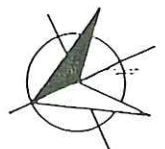
Oma, Omb, Obb, Drift deposits: Stratified drift deposits along Muddy and Beaver Brooks.

Ridge, J.C., 1983, The surficial geology of the Great Valley section of the Valley and Ridge province in eastern Northampton Co., Pennsylvania and Warren Co., New Jersey: unpublished M.S. thesis, Lehigh Univ., Bethlehem, Pa., 234p.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



- KEY:
- Qal - ALLUVIUM
 - Qs - SWAMP DEPOSITS
 - Qta - TALUS
 - Qco - COLLUVIUM
 - Qbc - BOULDER COLLUVIUM
 - Qt - WISCONSINAN TILL DEPOSITS
 - Qmb - DRIFT DEPOSITS
 - Qbb - DRIFT DEPOSITS



0 500 1000 1500 2000
SCALE IN FEET
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/90

MAP 4
SURFICIAL GEOLOGY

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY
JULY, 1992

 Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

SUB-SURFACE GEOLOGY

A description of sub-surface or bedrock geology within the Township of Hope is shown on Map 5. The prominent bedrock types are dolomite and limestone units with minor areas consisting of sandstone, siltstone, shale and slate. The ridgeline found along the entire eastern sections of the Township is characterized by undivided proterozoic rocks.

The following is a detailed description of each bedrock unit:

Omr. Ramseyburg Member of Martinsburg Formation (Late and Middle Ordovician): (Drake and Epstein, 1967): Interbedded medium-gray to brownish-gray, thin- to very thick-bedded, fine- to medium-grained graywacke sandstone; medium- to dark-gray, thickly laminated to medium-bedded siltstone; and less abundant medium- to dark-gray, laminated to thin-bedded shale and slate. Unit may form complete Bouma (1962) sequences, Tabcde, but basal cut out sequences Tcde dominate. Basal scour, sole marks, and soft-sediment distortion of the beds are common in the graywacke. Generally fines downward and southwestward. Near intrusive bodies the Ramseyburg member may be thermally metamorphosed. Lower contact placed at the uppermost occurrence of thick- to very thick-bedded graywacke or where the volume of graywacke and siltstone equals that of siltstone and shale. Drake and others (1989) estimate that the Ramseyburg is Edenian (Caradocian) in age. Thickness ranges from 640 m (2,400 ft.) in the Delaware Valley, 1,524 m (5,000 ft.) near Stillwater and thins to 1,067 m (3,500 ft.) at the New York State Line.

Omb. Bushkill Member of Martinsburg Formation (Middle Ordovician): (Drake and Epstein, 1967): Interbedded medium- to dark-gray, thinly laminated to thick-bedded shale and slate, and less abundant medium-gray to brownish-gray, laminated to thinbedded siltstone. To the southwest, thin dolomite beds occur in the basal section. Complete Bouma turbidite sequences occur in places but commonly without one or more of the basal beds classified as Tbcde, Tcde or Tde turbidites. The lower contact is conformable and placed at the top of the highest carbonate-bearing bed. This contact is commonly disrupted by thrust faulting. The Bushkill is younger than the Jacksonburg Limestone so its lower part is probably Rocklandian to

Kirkfieldian (Llandeilian) age, and on the bases of graptolites, it ranges from Kirkfieldian (Llandeilian) to Edenian (Caradocian) in age (Drake and others, 1989). Thickness ranges from 457 m at the New York State Line to 1,250 m in the Delaware Valley (1,500-4,100 ft).

Oj. Jacksonburg Limestone (Middle Ordovician): (Kummel, 1908; Miller, 1937): Upper cement rock facies is medium-dark to dark-gray, laminated to thin-bedded, shaley limestone and less abundant medium-gray, arenaceous limestone containing quartz-sand lenses. The unit thins to the northeast. Lower cement limestone facies is medium to dark-gray, fossiliferous, very thin- to medium-bedded, interbedded fine- to medium-grained limestone and pebble-and-fossil conglomerate. A thick- to very thickbedded dolomite cobble conglomerate. A thick- to very thick-bedded dolomite cobble conglomerate occurs locally within the basal sequence. The unit is unconformable with the underlying Beekmantown Group, and conformable with the discontinuously distributed "Wantage" sequence. Thickness ranges from 41 to 90 m (135-300 ft).

Ow. "Wantage" Sequence (Middle Ordovician): A restricted, post-Beekmantown veneer, characterized by interbedded, very thin, at places, thick-bedded limestone, dolomite, siltstone, and shale. The upper carbonate facies is conformable with the Jacksonburg Limestone and grades downward into the clastic facies. Where the facies is absent, the contact between the Jacksonburg Limestone and the clastic facies is abrupt, but conformable. The carbonate rocks are medium- to darkgray, massive to laminated, very fine to fine grained, that at places have a very thin moderate-yellowish-brown to olive-gray alteration rind. The clastic rocks range from mudstone to chert pebble conglomerate containing disseminated subangular to subrounded chert gravel and quartz sand lenses in the mudstone and siltstone beds. Colors range from grayish red, medium gray, pale brown, and greenish gray to pale green. Thickness ranges from 0 to 46 m (0-150 ft).

Oo. Ontelaunee Formation (Lower Ordovician): Upper beds, only locally are medium-light to medium-gray, thin- to thick-bedded, aphanitic to mediumgrained dolomite, weathering light- to medium-gray to yellowish-gray; locally laminated and slightly fetid. Medium-dark to dark-gray,

sparsely fossiliferous, medium-bedded, fine grained limestone lenses occur at places. Grades down into medium-dark- to dark-gray, medium- to thick-bedded, medium- to coarse-grained strongly fetid and has a mottled weathered surface. Contains pods and lenses of dark-gray to black chert. Cauliflower-textured black chert beds of variable thickness occur locally. Grades down into laminated to thin-bedded, fine- to medium grained dolomite of the Beekmantown Group, lower part. Contains conodonts high in the *Rossodus manitouensis* zone to low zone D of the North American Midcontinent Realm, so unit is of Ibexian (Tremadocian) age. Eroded to thickness of 0 to 244 m (0-800 ft).

Oe. Epler Formation (Lower Ordovician): Very thin- to thick-bedded, interbedded dolomite and minor limestone. Upper part is light-olive- to dark-gray, thin- to thick-bedded, fine- to medium-grained dolomite, commonly laminated. Middle part is dark-gray, olive-gray to light-brown to dark yellowish-orange weathering, aphanitic to fine-grained, well-laminated dolomite and medium-dark to dark-gray, light-gray to light-bluish-gray weathering limestone that is characterized by dolomitic "reticulate" mottling and light-olive-gray to grayish-orange laminae surrounding limestone lenses. Lower part consists of medium-light to dark-gray, thinly laminated to medium-bedded, aphanitic dolomite. Lower contact is placed above a distinctive zone of curvilinear beds which resemble large stromatolite beds. Unit is about 122 m (440 ft).

Or. Richenback Formation (Lower Ordovician): Thin- to medium-bedded, fine- to coarse-grained dolomite having very thin to thin, black chert beds, quartz-sand locally is slightly fetid. thick lenses of light-gray very-coarse- to coarse grained dolomite occurs at the base of the sequence. "Floating" quartz sand grains and quartz-sand stringers occur near the base of the unit. Lower contact is placed on top of a distinctive steel-gray quartzite. Unit is about 61 m (200 ft.) thick.

Oka. Allentown Dolomite (Lowest Lower Ordovician and Upper Cambrian): (Wherry, 1909): Very-thin- to very-thick-bedded dolomite containing minor interbeds of and shale. The upper part, at most places is medium-light- to medium-darkgray, medium- to very thick-bedded, fine to

medium-grained locally coarse-grained dolomite. "Floating" quartz sand and two sequences of medium-light- to very lightgray, thin-bedded quartzite and discontinuous dark-gray chert lenses occur directly below the upper contact. The rhythmically bedded lower dolomite sequence is medium to very light-gray-weathering and contains oolites and algal stromatolites. Weathered exposures are characterized by alternating light- and dark-gray beds. Ripple marks, cross beds, edgewise conglomerate, mud cracks, and paleosol zones occur in the lower unit. Interbedded shaly dolomite increases downward towards the lower conformable contact with the Leithsville Formation. The lowest part of the unit a trilobite fauna of Dresbachian (early Late Cambrian) age and younger beds contain Trempealean (late Cambrian) fauna (Howell, 1945; Howell and others, 1950). Regionally, the unit is about 579 m (1,900 ft.) thick.

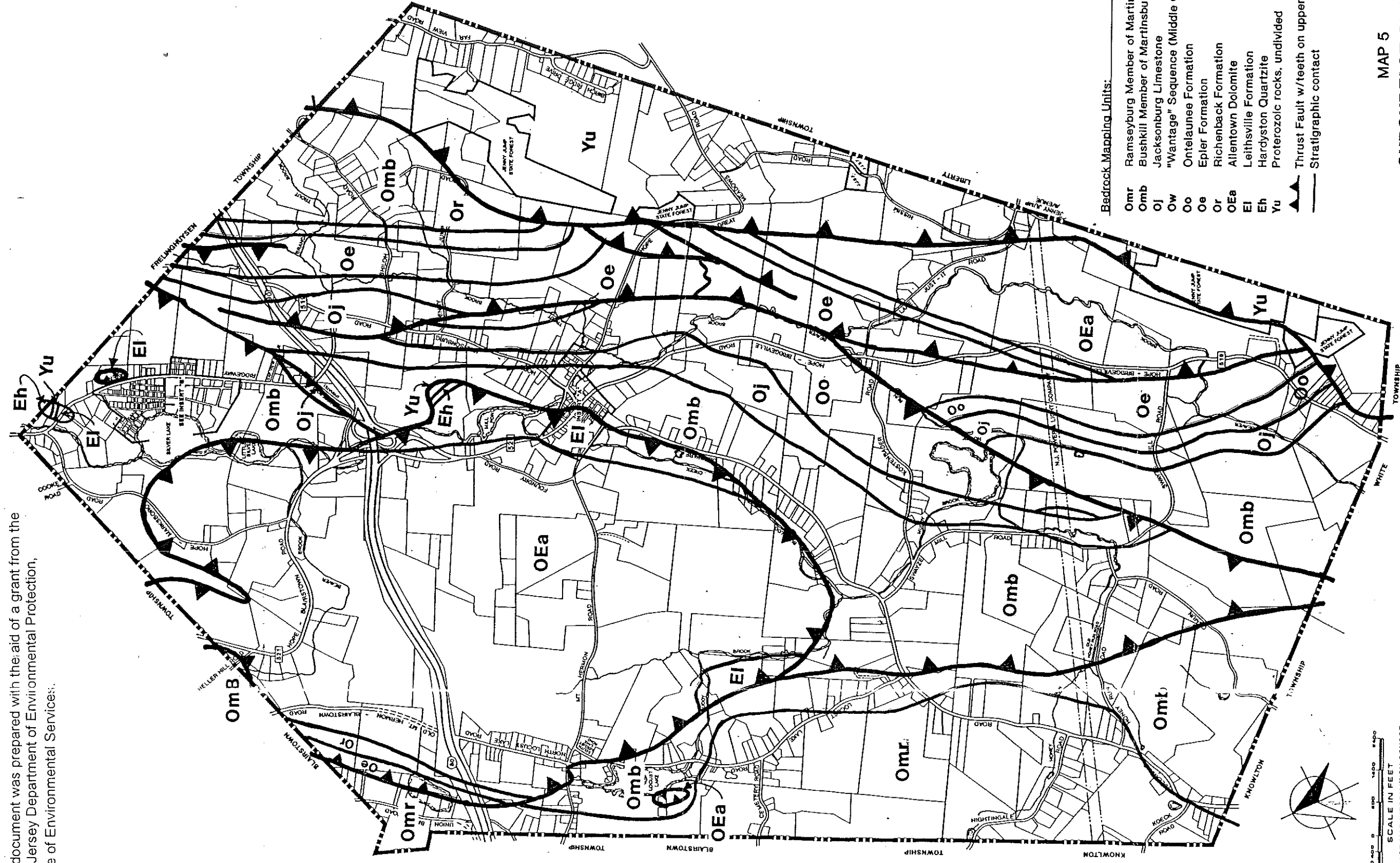
El. Leithsville Formation (Middle to Lower Cambrian): (Wherry, 1909): Thin- to thick-bedded dolomite containing subordinate clastic rocks. Dolomite in the upper part is massive, fine- to medium-grained, pitted, friable, mottled and medium- to medium-dark-gray. Dolomite in the middle part of the unit is thin- to medium-bedded, stylolitic, fine grained and medium-gray. Shaly dolomite and clastic interbeds or varicolored quartz sandstone, siltstone, and shale occur throughout the unit but are most abundant in the middle part. The lower part of the unit contains quartz sand interbeds near the contact with the Hardyston Quartzite. Archaeocyathids of Early Cambrian age occur in the formation, suggesting an intraformational disconformity separating rocks of Middle Cambrian age from that of Early Cambrian age (Palmer and Rozanov, 1976). Thickness is approximately 305 m (1,000 ft).

En. Hardyston Quartzite (Lower Cambrian): (Wolff and Brooks, 1898): Medium- to light-gray, medium- to thick-bedded, fine-grained quartzite, arkosic sandstone and dolomitic sandstone. Contains fragments of the trilobite *Olenellus thompsoni* of Early Cambrian age. Thickness is approximately 3 to 62 m (10-200 ft).

Yu. Proterozoic rocks, undivided: A combined assemblage of meta-igneous and metasedimentary rocks.

Herman, G.C., and Monteverde, D.H., 1988, Bedrock geologic map of the Portland, Pa-NJ, Belvidere, NJ-Pa, Hope and Washington quadrangles: unpublished, on file at the offices of the New Jersey Geological Survey, Trenton, New Jersey.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.

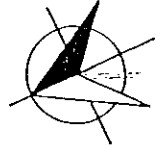


Bedrock Mapping Units:

- Omr Ramseyburg Member of Martinsburg Formation
- Omb Bushkill Member of Martinsburg Formation
- Oj Jacksonburg Limestone
- Ow "Wantage" Sequence (Middle Ordovician)
- Oo Ontelaunee Formation
- Oe Epler Formation
- Or Richenback Formation
- OEa Allentown Dolomite
- Ei Leithsville Formation
- Eh Hardyston Quartzite
- Yu Proterozoic rocks, undivided

- ▲ Thrust Fault w/teeth on upper plate
- Stratigraphic contact

SCALE IN FEET
 0 500 1000 1500 2000
 BASE MAP INFORMATION SOURCE:
 OFFICIAL TOWNSHIP TAX MAPS - 10/90



MAP 5

SUBSURFACE GEOLOGY

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
 WARREN COUNTY, NEW JERSEY

JULY, 1992

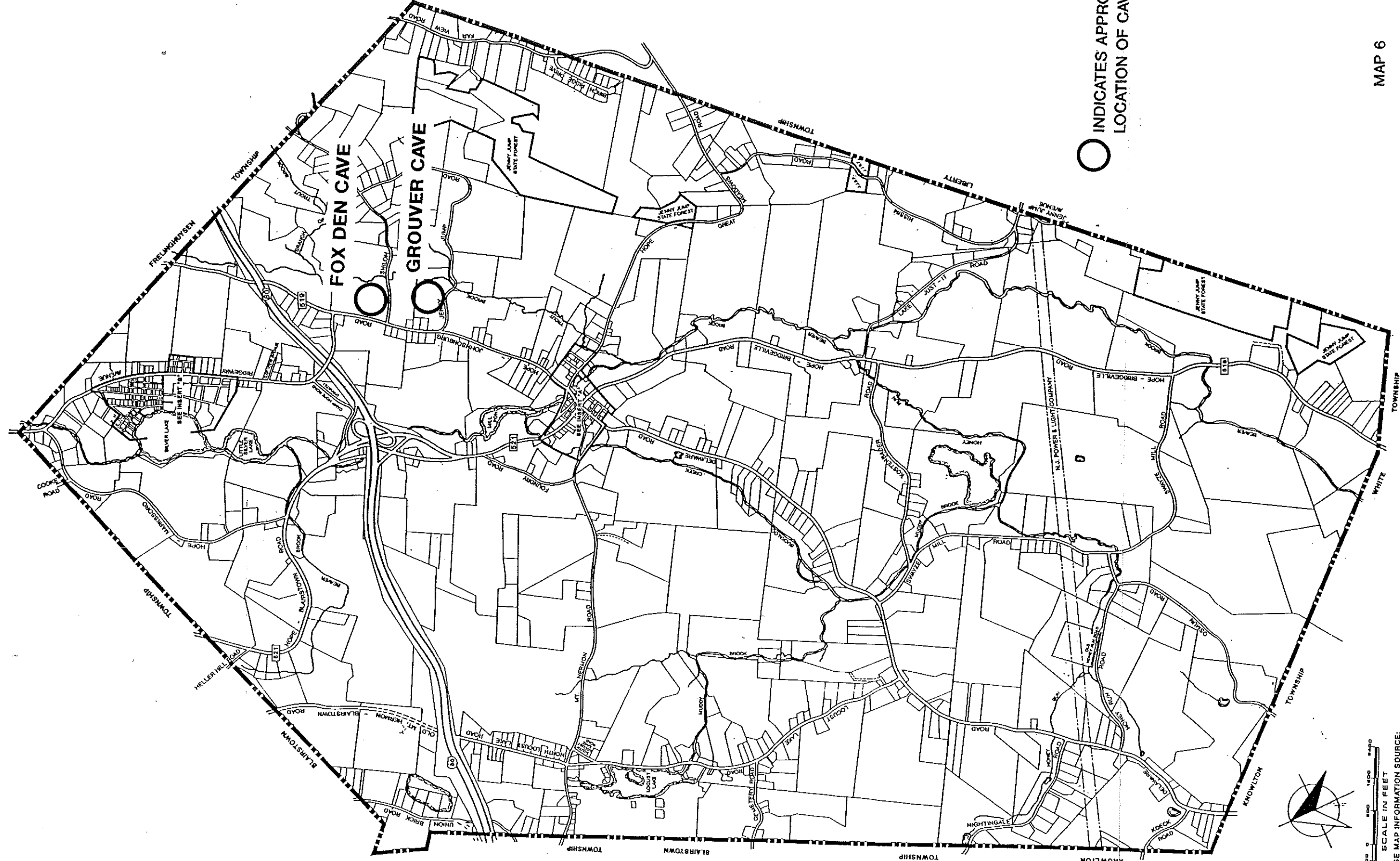
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 Community Planning Consultants

CAVES

Two caves are located in the northeastern portion of the Township. Fox Den Cave is located off of Shiloh Road and Grouver Cave is located off of Jenny Jump Road. Both caves are small in size and can be characterized as fracture caves. Approximate cave locations are shown on Map 6.

In New Jersey, caves are found in various soluble and nonsoluble rock types. The process involved in the formation of caves generally depends on the rock type. The nonsoluble rocks include granites, gneiss, basalt, diabase, shales, sandstones and quartzites. The caves found in and around Hope are fracture caves which were formed when some geologic process, such as faulting or folding which caused breaks or joints in the rock. Sometimes a less resistant rock is weathered away from beneath a more resistant unit. This allows slumpage to occur along joints or fractures.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



○ INDICATES APPROXIMATE LOCATION OF CAVE



SCALE IN FEET
0 500 1000 1500 2000
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/79

MAP 6


CAVE LOCATIONS

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY

JULY, 1992

SOURCE: CAVES OF NEW JERSEY, RICHARD F. DALTON,
NEW JERSEY GEOLOGICAL SURVEY - BULLETIN 70, 6/76

 Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

WETLANDS

Wetlands, including areas of open water, are widely scattered throughout the Township. These wetlands have been identified by the Fish and Wildlife Service on the National Wetlands Inventory Maps (NWI).

Wetlands have been defined as having one or more of the following three attributes:

1. At least periodically the land supports predominantly hydrophytes or wetlands vegetation;
2. The substrate is predominantly undrained hydric soil which is periodically flooded and/or saturated with water; or
3. The substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season each year.

With the adoption of the Freshwater Wetlands Act, virtually all activities within freshwater wetlands have been precluded. Wetlands and their required transition areas currently represent the most significant regulatory constraints to development. Map 7 shows approximate locations of wetlands by type within the Township. These wetlands occur adjacent to streams, rivers, lakes and in isolated pockets.

NOTE: WETLAND LOCATIONS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT REPRESENT AN ACTUAL SURVEY.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



OPEN WATER
 WETLANDS

WETLAND CLASSIFICATION

L	Lacustrine
1	Limnetic
OW	Open Water
R	Riverine
2	Lower Perennial
OW	Open Water
P	Palustrine
OW	Open Water
FO	Forested
SS	Scrub/Shrub
EM	Emergent
1	Broad Leaf Deciduous

MAP 7
WETLANDS
 ENVIRONMENTAL RESOURCE INVENTORY
TOWNSHIP OF HOPE
 WARREN COUNTY, NEW JERSEY
 JULY, 1992

SOURCE: NATIONAL WETLANDS INVENTORY MAPS


Moskowitz, Hoyer & Gruel, PA
 Community Planning Consultants

SCALE IN FEET
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 BASE MAP INFORMATION SOURCE:
 OFFICIAL TOWNSHIP TAX MAPS - 10/90

HIGH QUALITY WATERSHEDS & WATERSHED BOUNDARIES

High quality watersheds are a resource of Statewide significance. These pristine watersheds include Category One and Trout Maintenance Waters. These watersheds are shown on Map 8. The watersheds have been defined in the New Jersey Administrative Code and have been mapped by the New Jersey Department of Environmental Protection. These are waters which are of high quality due to "color, clarity, scenic setting, or other characteristics of aesthetic value, exceptional ecological significance, or exceptional fisheries resources" (Surface Water Quality Standards, N.J.A.C. 7:9-4.1).

These waters may include but are not limited to the following:

- Waters originating wholly within Federal, Interstate, State, County or Municipal parks, forests, fish and wildlife lands, and other special holdings;
- Waters classified as Trout Production Waters and their tributaries;
- Surface waters classified as Trout Maintenance or Nontrout which are upstream of waters classified as Trout Production;
- Shellfish waters of exceptional resource value; or
- Other waters and their tributaries that flow through, or border, Federal, State, County or Municipal parks, forests, fish and wildlife areas, and other special holdings.

All Category One Waters merit protection from any measurable change.

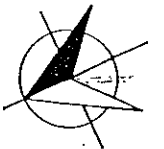
Approximately one-third of Hope is within designated high quality watersheds. The northeastern and southwestern portions of the are Trout Maintenance watersheds. Except for a small area along Koeck Road located in the Delaware drainage basin, the Township is located in the Pequest drainage basin.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.

HIGH QUALITY WATERSHEDS
C1 - CATEGORY ONE WATERSHEDS
TM - TROUT MAINTENANCE WATERSHEDS



DELAWARE




SCALE IN FEET
0 500 1000 1500 2000
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/90

MAP 8

HIGH QUALITY WATERSHEDS AND
WATERSHED BOUNDARIES

ENVIRONMENTAL RESOURCE INVENTORY

**Moskowitz, Heyer & Gruel, PA**
Community Planning Consultants

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY
JULY, 1992

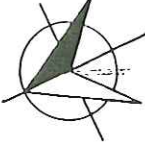
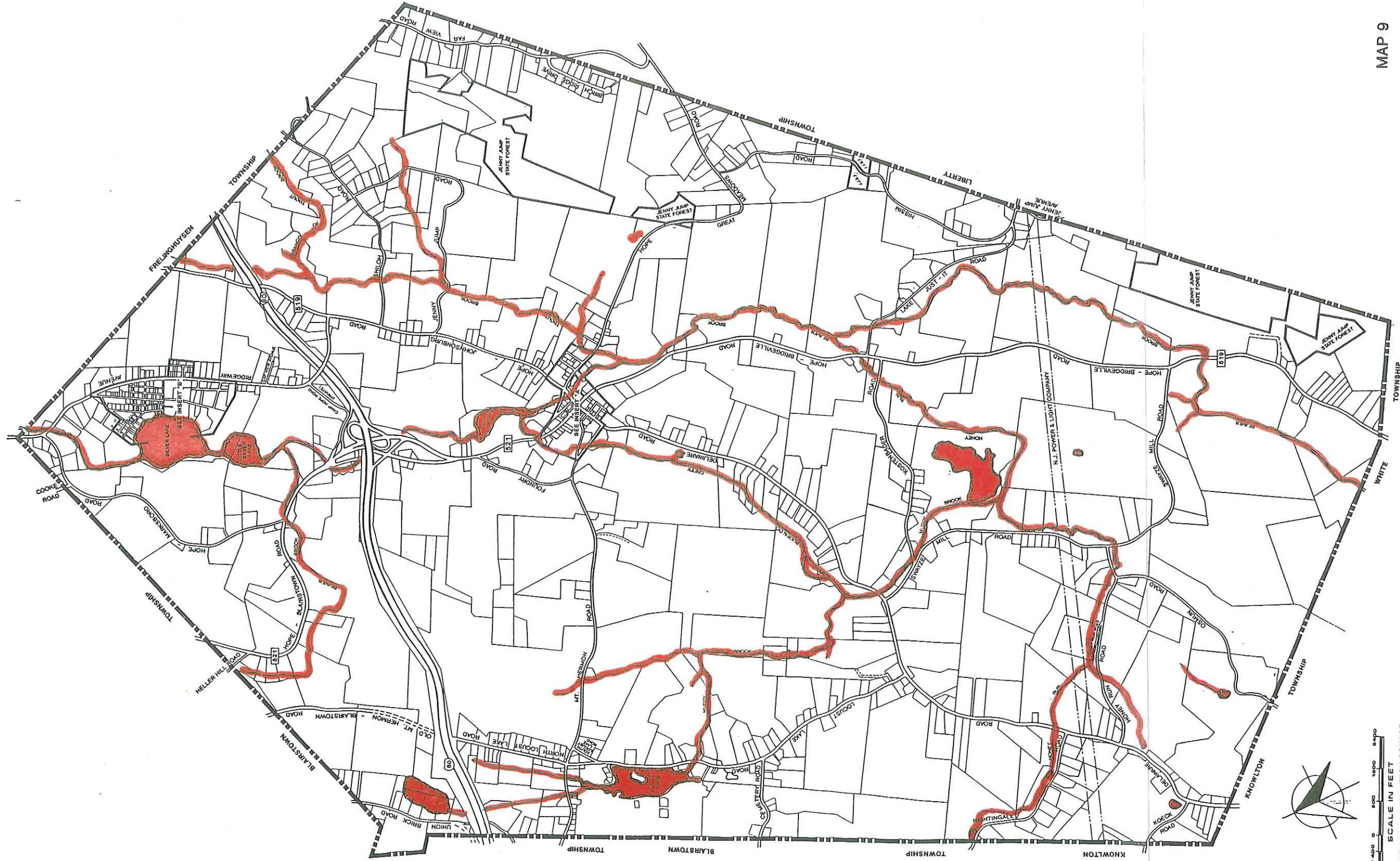
SOURCE: STATE PLANNING COMMISSION FACTOR MAPS, 12/88

SURFACE WATERS

The general pattern of surface water hydrology within the has been shown on Map 9. The entire drains either directly or indirectly into the Delaware River. The general pattern of drainage is from north to south.

Major waterways within the Township are Beaver Brook, Muddy Brook, Trout Brook and Honey Run. Major lakes in the Township include Silver and Little Silver lakes, and Locust Lake, which is currently drained and its future unknown. Other lakes include those located off of Swayze Mill Road and Union Brick Road.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



SCALE IN FEET
0 500 1000 1500 2000
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/90

MAP 9

SURFACE WATERS

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY

JULY, 1992



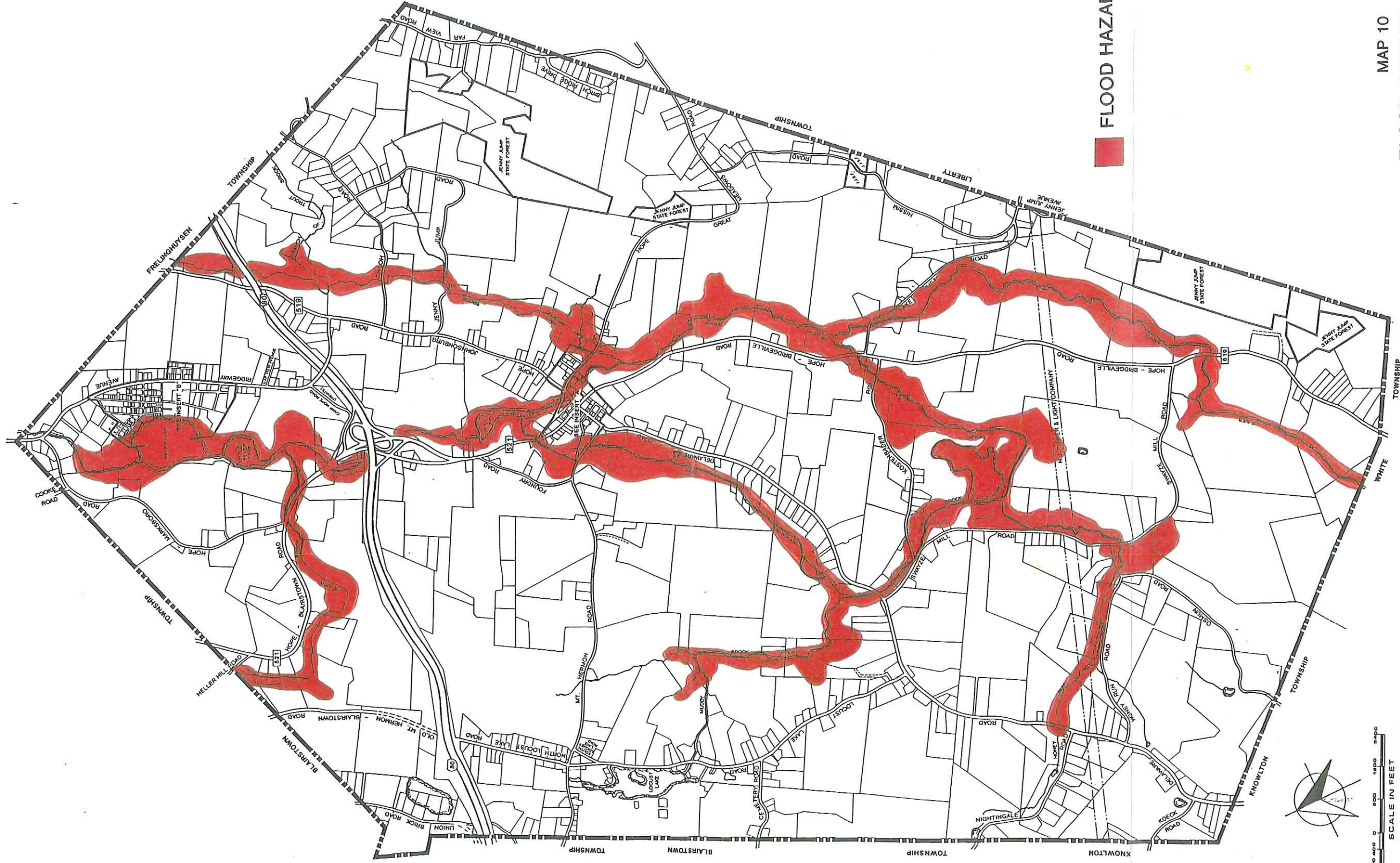
Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

FLOOD HAZARD AREAS

Flood plains present a severe constraint for development. They pose a threat to and life if developed improperly. Additionally, many of these flood plains serve a very important ecological function as habitats for rare and endangered species.

Map 10 shows those 100-year flood plains which have been mapped by the Federal Emergency Management Agency in their Flood Insurance Rate Maps. The major areas of mapped flood plains include those areas adjacent to Beaver Brook, Muddy Brook, Trout Brook, Buckaloo Creek, Honey Run and Silver and Little Silver lakes.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



SCALE IN FEET
0 500 1000 1500 2000
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/80

SOURCE: FIRM - HOPE TWP., 3/14/83

 Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

MAP 10

FLOOD HAZARD AREAS

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY

JULY, 1992

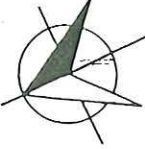
WOODLANDS

The major large-scale contiguous area of woodland is in the eastern third of the township. Several other large sized wooded areas are scattered through the township west of Delaware Road and north of the village. Hope's remaining woodland takes the form of wooded stream corridors, field edges, tree lines, and woodlands on steeply sloped areas and in wetlands.

Woodlands within the Township can be characterized as hardwood deciduous consisting of oak, hickory, beech, birch, maple and ash species. In addition to the various deciduous species, evergreen species such as spruce, pine, cedar and hemlock varieties can also be found.

Map 11 indicates areas of significant existing stands of forest within the Township.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



SCALE IN FEET
0 500 1000 1500 2000
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/90

SOURCE: AERIAL PHOTO-HOPE TOWNSHIP, 12/87

MAP 11

WOODLANDS

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY
JULY, 1992



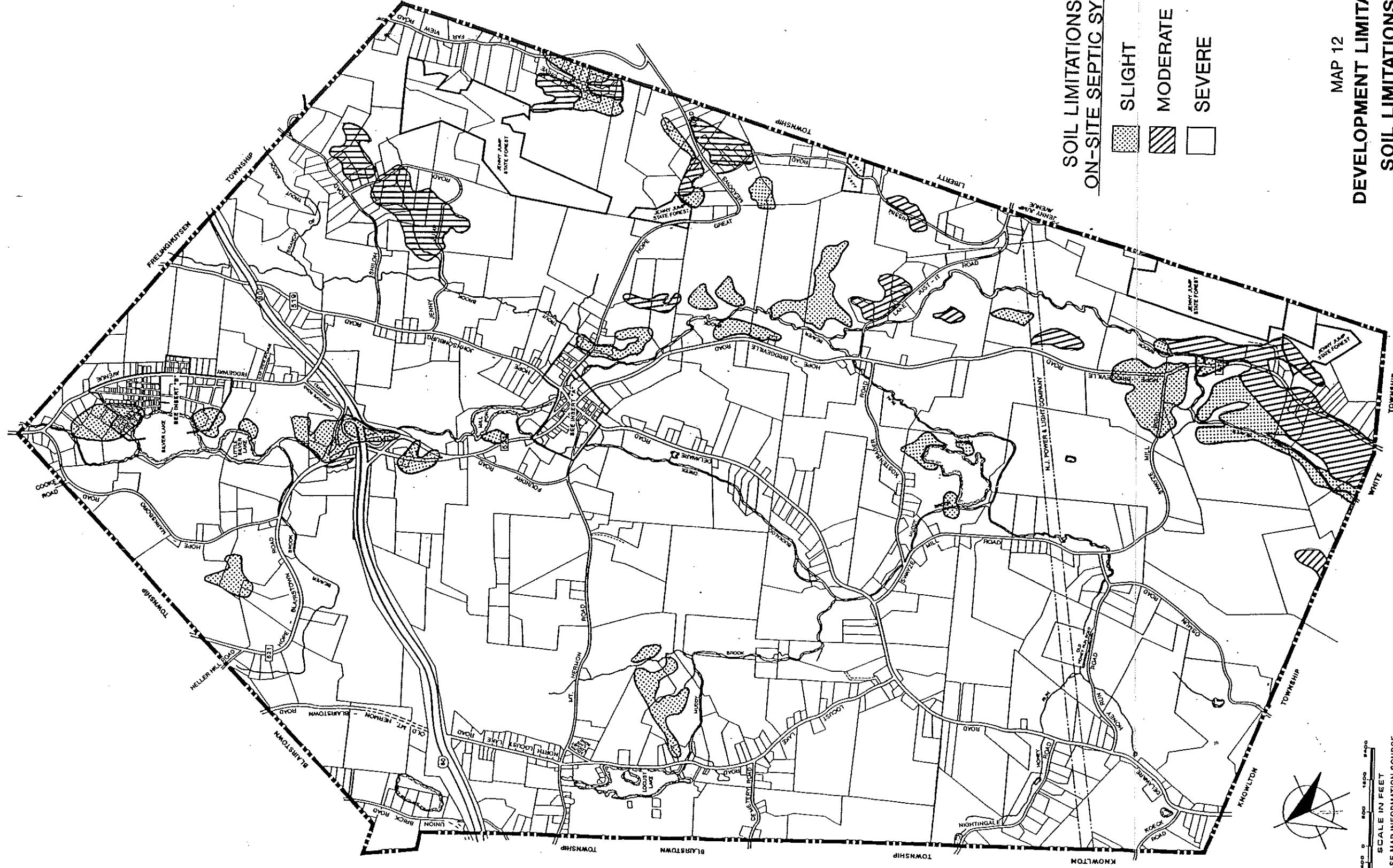
Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

SOIL LIMITATIONS FOR DEVELOPMENT

There are a number of soil conditions which affect the suitability of on-site wastewater disposal systems. Constraints for septic include slope, depth to high water table, susceptibility to flooding, depth to bedrock, and rockiness. Additionally, soil permeability strongly influences disposal suitability. The Soil Survey of Warren County has classified soils based upon their suitability for on-site septic effluent disposal systems. These soils vary from slightly to severely constrained and are listed in Appendix A.

As shown on Map 12, there are no large areas of soils in Hope Township which are only slightly or moderately constrained for septic use. These soils are located along Beaver and Trout brooks and in the Route 629 corridor. The remaining area of the (more than 90 percent), is severely constrained for on-site septic use.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



SOIL LIMITATIONS FOR
ON-SITE SEPTIC SYSTEMS

- SLIGHT
- MODERATE
- SEVERE

MAP 12

DEVELOPMENT LIMITATIONS -
SOIL LIMITATIONS FOR
ON-SITE SEPTIC SYSTEMS
ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY
JULY, 1992

SCALE IN FEET
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/90

SOURCE: SOIL SURVEY OF WARREN COUNTY,
SOIL CONSERVATION SERVICE, 4/79



Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

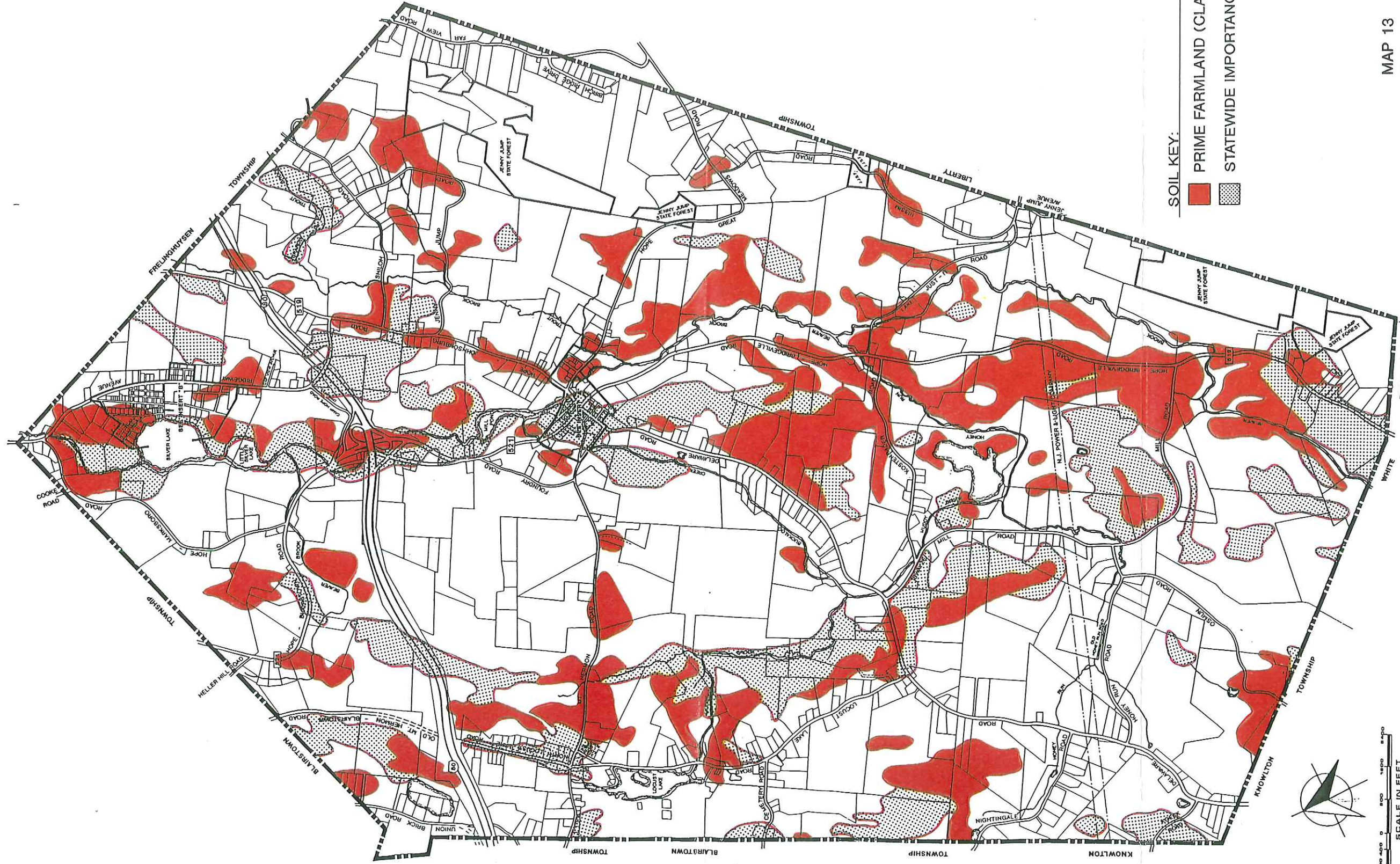
PRIME AGRICULTURAL SOILS

Map 13 depicts the agricultural classifications of Hope prime agricultural soils. This map shows in a very general way, the suitability of the soils for most kinds of field crops. The grouping considers soil limitations and the risk of damage when they are used for field crops and how well they respond to treatment. The classification does not consider unusual practices such as expensive land forming or major reclamation projects. Also, the classification does not apply to crops which require special management practices.

As also shown in Appendix A, the capability classes have been designated numerically, 1 through 7 and indicate progressively greater limitations and narrower choices for practical use. Class 1 soils have few limitations that restrict their use. Class 2 and 3 soils have moderate limitations that reduce the choices of plants or that require moderate conservation practices. Class 4 soils have very severe limitations and require very careful management. Class 5, 6, and 7 soils have such severe that they are unsuitable for cultivation.

Map 13 indicates prime farmlands, classes 1 and 2 and class 3 soils, which are considered soils of statewide importance.

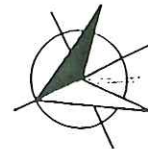
This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



SOIL KEY:

- PRIME FARMLAND (CLASS I & II)
- STATEWIDE IMPORTANCE (CLASS III)

SCALE IN FEET
0 200 400 600 800 1000
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/80



MAP 13

AGRICULTURAL SOILS

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY

JULY, 1992

SOURCE: SOIL SURVEY OF WARREN COUNTY,
SOIL CONSERVATION SERVICE, 4/79



Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

QUALIFIED FARMS

An inventory of properties which are under farmland assessment are shown on Map 14. The term "qualified farm" indicates that a property is subject to farmland assessment. In some cases, portions of tracts under farmland assessment are not being actively used for agriculture and in other instances, properties that may be used for agriculture have not received farmland assessment status.

The extent of lands under qualified farmland assessment is significant; 197 lots of approximately 7,388 acres or 11.54 square miles of the Township is classed under farmland assessment. This represents approximately 62 percent of Hope's total land area of 11,955 acres or 18.68 square miles.

Map 15 identifies individual parcels of more than 75 acres which are farmland assessed. In some instances, farms may function as single entities but are composed of an assemblage of smaller lots. The map identifies quite dramatically the of large, unsubdivided agricultural parcels. Approximately 3,504 acres or over 47 percent of all farmlands are in parcels of over 75 acres. This represents only 28 lots. The median farmland lot size is 21.10 acres.

A table of 1992 Farmland Assessed properties can be found in Appendix B.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



SCALE IN FEET
0 500 1000 1500 2000
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/78

SOURCE: 1992 TOWNSHIP TAX RECORDS

 Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

MAP 14
QUALIFIED FARMS
ENVIRONMENTAL RESOURCE INVENTORY
TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY
JULY, 1992

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



MAP 15

QUALIFIED FARMS WITH AREAS OVER 75 ACRES

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE

WARREN COUNTY, NEW JERSEY

JULY, 1992

SOURCE: 1992 TOWNSHIP OF HOPE TAX RECORDS



Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

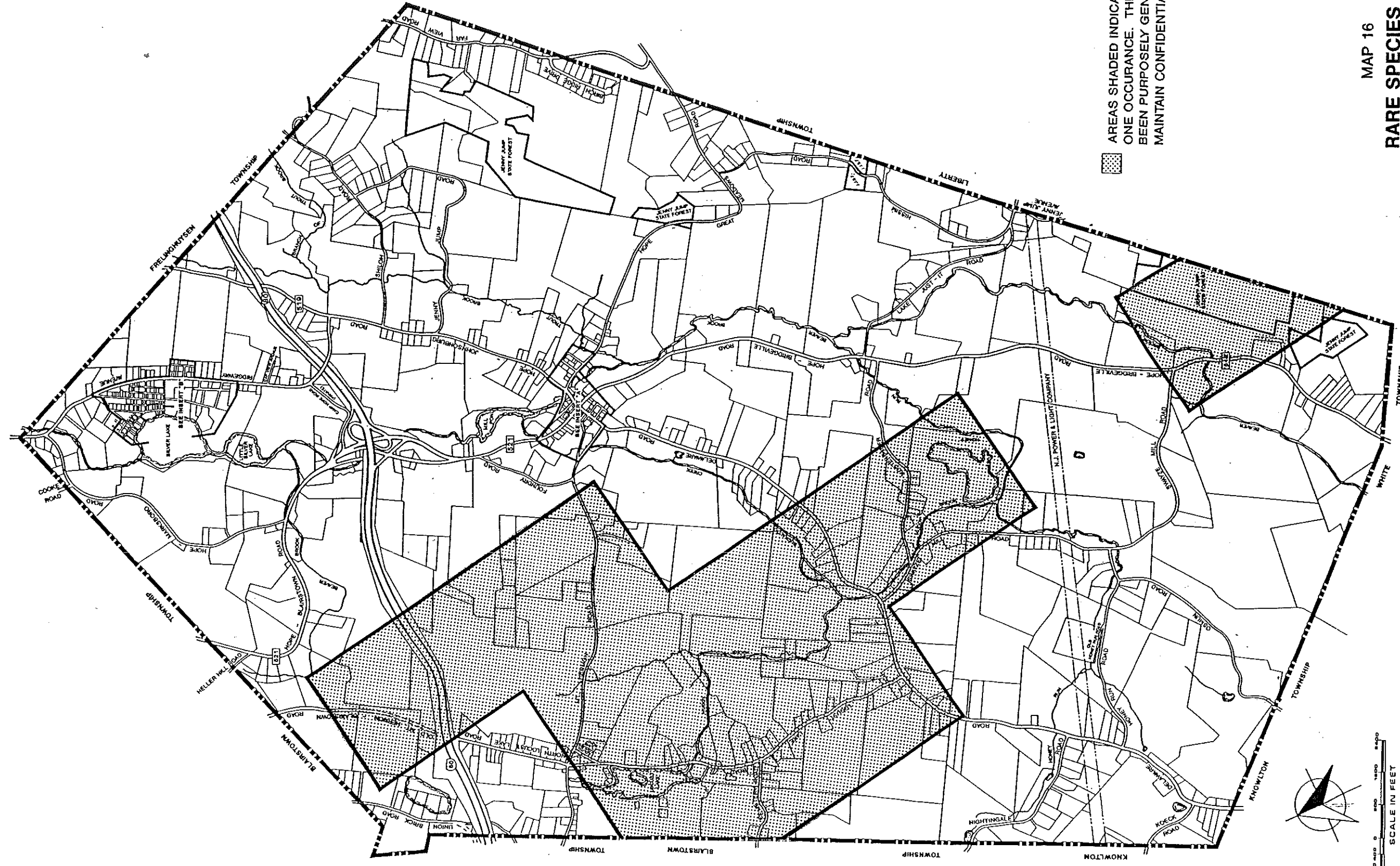
RARE SPECIES AND NATURAL COMMUNITIES

The rare species habitats and natural communities designation includes areas which are probable habitats for rare and endangered species as well as other significant natural communities. Generalized maps have been prepared by the New Jersey Natural Heritage Program (in the Division of Parks and Forestry). Natural communities are those areas which possess rare habitats such as "Old Growth Forests" or which possess a unique "element of natural diversity".

The generalized mapping of the rare species habitats and natural communities areas within Hope identifies two general areas. These areas include the area of the Township around and Locust Lake Road, south to Delaware Road, and north and east of Route 80. The second area is located in the southeastern section of the Township near the intersection of Swayze Mill Road and Route 519. This area consists mostly of Jenny Jump State Forest.

Currently, the most significant aspect of the rare species designation is in the area of wetlands buffers. Wetlands located within rare and endangered species habitat require the most stringent buffer standards. Rare species and natural communities are indicated on Map 16. A table of rare and threatened species for the Township of Hope and Warren County as a whole are found in Appendix C.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



AREAS SHADED INDICATE AT LEAST ONE OCCURRENCE. THIS DATA HAS BEEN PURPOSELY GENERALIZED TO MAINTAIN CONFIDENTIALITY.

SCALE IN FEET
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/80

MAP 16

RARE SPECIES AND NATURAL COMMUNITIES

ENVIRONMENTAL RESOURCE INVENTORY

Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

SOURCE: N.J. STATE PLANNING COMMISSION
NATURAL HERITAGE DATABASE, 3/89

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY
JULY, 1992

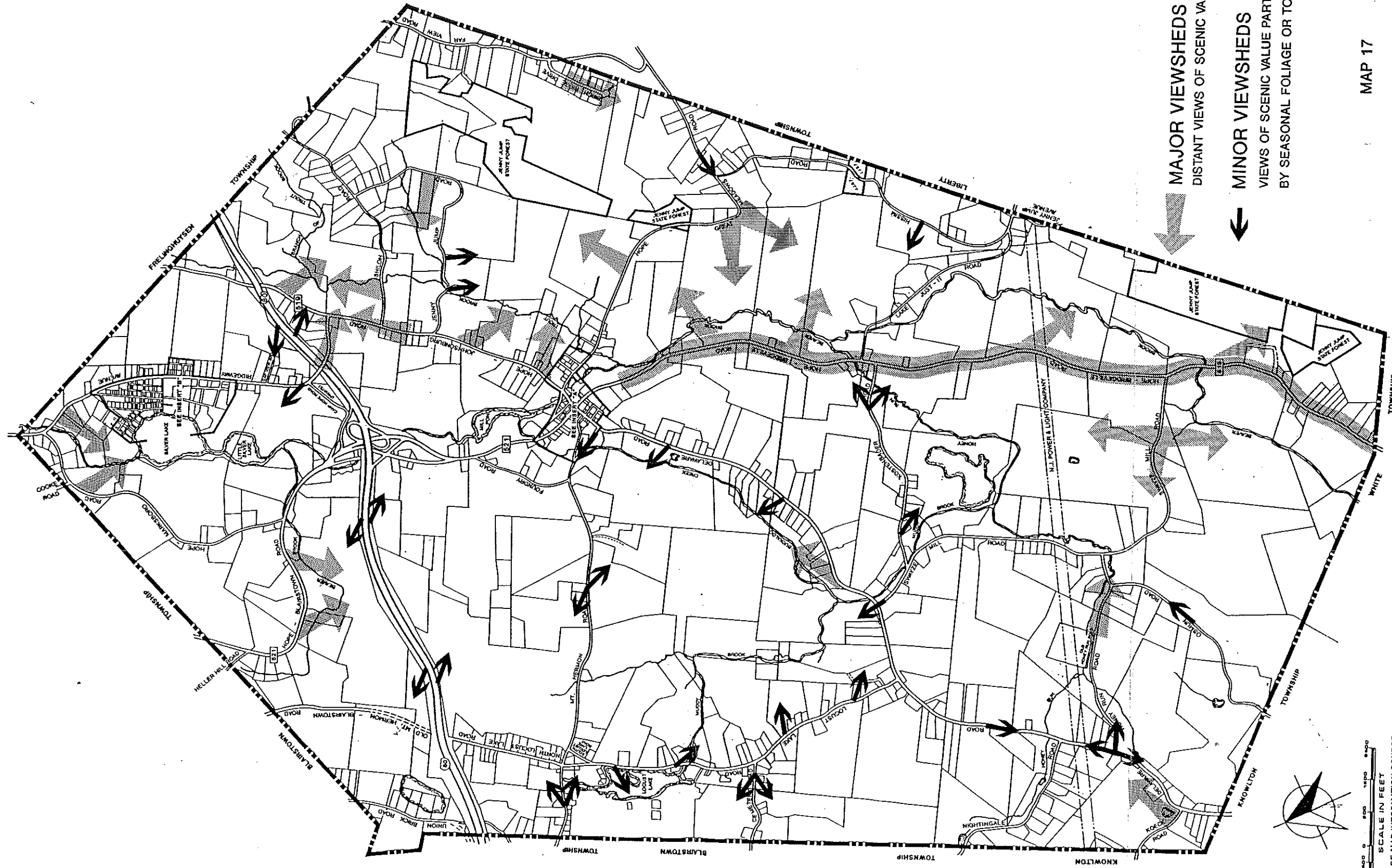
SCENIC VISTAS

Areas within the Township with important and unique viewsheds are indicated on Map 17. The areas shown are comprised of major and minor viewsheds from the various public roads within Hope. Major viewsheds are those considered to be distant with generally unobstructed year-round views while minor viewsheds or those of scenic value which may be partially blocked by seasonal foliage and are view limited to a much smaller area.

As indicated on the map, the most prominent major viewshed is from Hope-Bridgeville Road (County Route 519) south of the village. From along this road, there are views of the Jenny Jump mountains and State Forest areas.

Another area of particular scenic importance is the overlook area located along Hope-Great Meadows Road. From this point, it is possible to see almost the entire Township including distant views of the Delaware Water Gap.

This document was prepared with the aid of a grant from the New Jersey Department of Environmental Protection, Office of Environmental Services.



SCALE IN FEET
0 500 1000 1500 2000
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/70

SOURCE: FIELD SURVEY - 2/92


MAP 17

SCENIC VISTAS

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY

JULY, 1992

 Moskowitz, Heyer & Gruel, PA
Community Planning Consultants

**V. WASTEWATER MANAGEMENT
PLAN**

V. WASTEWATER MANAGEMENT PLAN

INTRODUCTION

The Hope Township Wastewater Management Plan (WMP) has been prepared to resolve wastewater and water quality management concerns for a 20-year planning period. The fundamental goal of the Hope Township (WMP) is to ensure that the surface waters and groundwater in the Township meet and maintain the water quality standards set by the State.

The document is intended to serve as a component of the Warren County Pequest River Municipal Utilities Authority's (WC(PR)MUA) Wastewater Management Plan (WMP). The WC(PR)MUA is the designated wastewater management planning agency for Hope Township. Although the WC(PR)MUA has not yet prepared the comprehensive WMP for its district, Hope Township has proceeded to prepare a WMP addressing the wastewater needs of their municipality. This WMP is being submitted to the NJDEP for adoption into the Upper Delaware Water Quality Management Plan at this time. The Hope Township WMP is considered to be one component of the WC(PR)MUA WMP; the remaining portion of which will be prepared subsequently.

Hope Township proposes to designate areas for groundwater discharge for facilities with design flows of less than 20,000 gallons per day (gpd). The areas include the existing Village of Hope, the POP Planned Office Park Zone located at I-80 and County Route 521 Interchange (exit 12), and the small lot lakeside residential community at Silver Lake. Groundwater disposal facilities with design flows of less than 2,000 gpd (e.g., septic systems) will provide wastewater disposal for the balance of Hope Township. The WMP itself cannot restrict the development in the environmentally constrained areas. If the project can obtain all appropriate Federal, State, and local permits, the disposal systems would be possible.

The purpose of this plan is to create service areas which will permit subsurface discharge of less than 20,000 gpd. The service areas have been narrowly drawn to serve areas with existing septic

failure problems and to provide for the appropriate future development of the interchange area. There are no imminent proposals for the construction of centralized facilities at this time. This document is intended to identify service areas and wastewater policies. The future design and construction of all facilities shall be subject to all applicable rules and regulations of the NJDEP and WC(PR)MUA.

The degree of treatment required is primarily dependent upon effluent discharge limitations which are established by the New Jersey Department of Environmental Protection (NJDEP). Properly designed and operated treatment plant facilities, in conjunction with efficiently designed and maintained on-site disposal systems, will ensure and maintain the water quality standards set by the State.

WASTEWATER FACILITIES

Delineation Of WMP Area

The wastewater management area is all of Hope Township. This document is intended to serve as the Hope component of the WC(PR)MUA plan.

Sewerage And MUA Districts

Hope Township is located within the Upper Delaware Water Quality Management (WQM) planning area. The NJDEP is the planning agency responsible for preparing and implementing the areawide WQM plan for this area.

In 1990, Hope Township passed a resolution agreeing to be included within the WC(PR)MUA. The WC(PR)MUA is the agency with wastewater management planning jurisdiction for Hope Township. (See Appendix for resolution.)

The WC(PR)MUA has not yet prepared a Wastewater Management Plan, and Hope Township has elected to prepare its own WMP. This plan will be presented to the WC(PR)MUA for review and inclusion in their WMP.

Existing Domestic Wastewater Treatment Facilities And Service Areas

At present, there are no wastewater treatment facilities located in Hope Township. In addition, no portion of the Township is located within an existing sewer service area. The Township is presently served by individual subsurface sewage disposal systems.

Future Sewer-Related Facilities And Service Areas

At present, there are no NJPDES permits under consideration for constructing any future sewer-related facilities or specific service areas. However, this plan identifies areas to be served by groundwater disposal facilities with design flows of less than 20,000 gpd. These areas include the POP zoned area near the interchange of County Route 521 and Interstate 80, the Silver Lake residential area, and the Hope Historic District. (See map for Future Sewer Service Area). Any plant must have a capacity less than 20,000 gallons per day (gpd) and must discharge to the groundwater.

On-Site Wastewater Disposal Systems

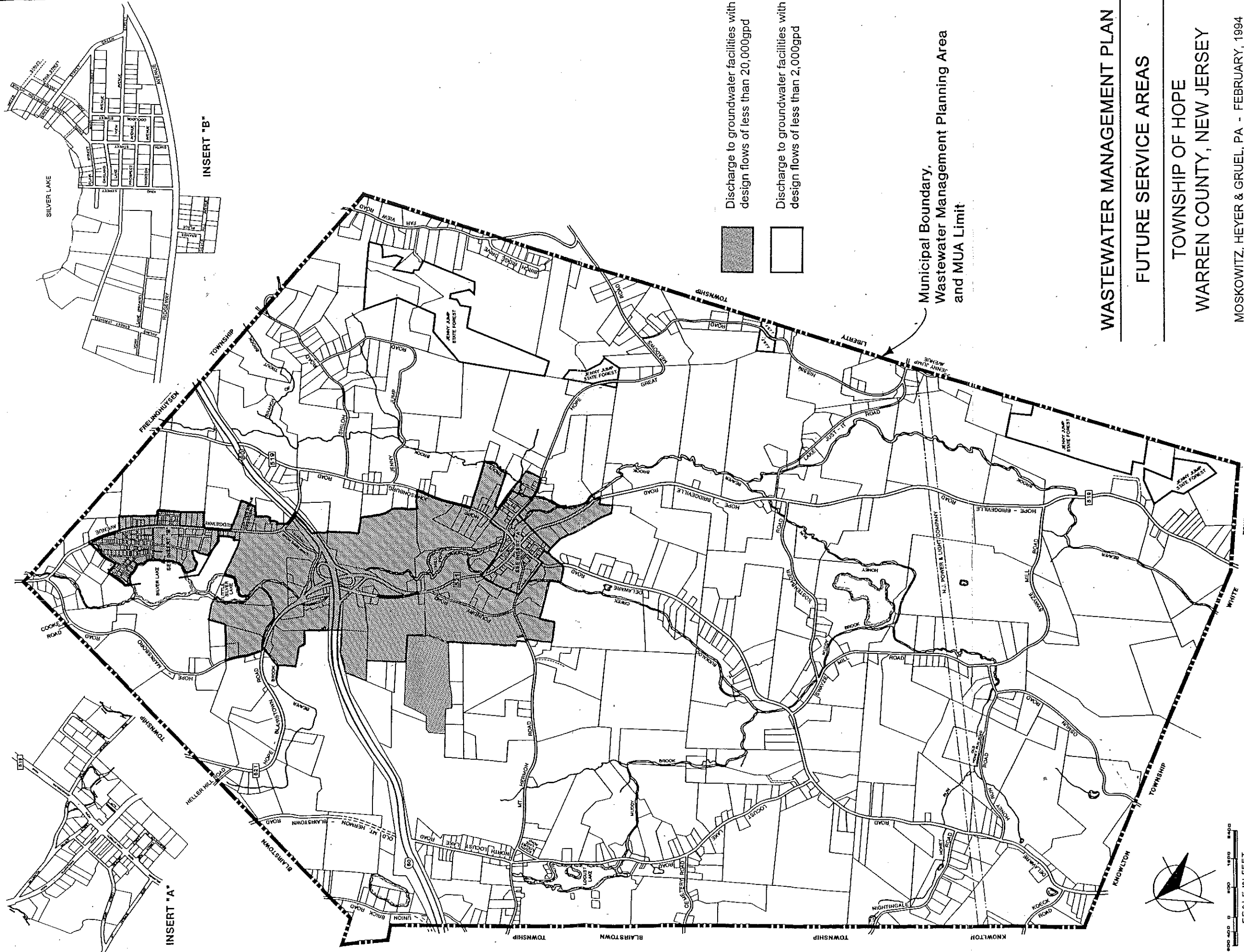
The remainder of wastewater disposal in Hope Township is located on individual lots with groundwater disposal facilities with design flows of less than 2,000 gpd.

POLICY STATEMENT

1. Future wastewater treatment facilities will be nongrowth inducing, serving only those areas with chronic septic system problems and the POP zoned area. This policy will permit limited infill development in the village area and moderate scale nonresidential development at the County Route 521 and Interstate 80 interchange.
2. Co-permittees, if required for future wastewater treatment facilities may be either Hope Township or the WC(PR)MUA, subject to the WC(PR)MUA's policies.
3. Future wastewater treatment facilities are not to be growth-inducing for large scale residential development.

4. The depiction of environmental features in this report is for general informational purposes only. Wastewater facilities will not be provided in environmentally sensitive areas unless all applicable Federal, State, and local permits have been obtained.
5. The future groundwater wastewater treatment facilities shall be built at a capacity necessary to serve the particular area of concern, however, will be built at design capacities of less than 20,000 gpd.
6. The portion of Hope Township not included in the area for groundwater disposal facilities with design flows of less than 20,000 gpd, will be served by groundwater disposal facilities with design flows of less than 2,000 gpd (e.g. septic).

NOTE: Development in areas mapped as wetlands, flood prone areas, or designated river areas may be subject to special regulation under Federal or State statutes or rules. Interested persons should check with the Department of Environmental Protection for the latest information. Depiction of environmental features is for general information purposes only, and shall not be construed to define the legal geographic jurisdiction of such statutes or rules.



Discharge to groundwater facilities with design flows of less than 20,000gpd

Discharge to groundwater facilities with design flows of less than 2,000gpd

Municipal Boundary,
Wastewater Management Planning Area
and MUA Limit

WASTEWATER MANAGEMENT PLAN

FUTURE SERVICE AREAS

TOWNSHIP OF HOPE
WARREN COUNTY, NEW JERSEY

MOSKOWITZ, HEYER & GRUEL, PA - FEBRUARY, 1994

Revised per DEPE Comments: 3/25/94

SCALE IN FEET
BASE MAP INFORMATION SOURCE:
OFFICIAL TOWNSHIP TAX MAPS - 10/80

**VI. HISTORIC PRESERVATION
PLAN ELEMENT**

VI. HISTORIC PRESERVATION PLAN ELEMENT

Hope has a long history of successful historic preservation. A historic district was established along with a historic district commission very early on in the regulatory history of Hope. The Village was placed on both the State and National Registers of Historic Places during 1973. The Historic District includes Union, High, Hickory and Walnut Streets, County Route 521, Beaver Brook, Mill Race, Cedar Alley and County Route 519.

AN HISTORIC OVERVIEW

Hope was created as a community by the Moravian Church of Herrnhut, Germany, acting through Bethlehem, Pennsylvania, its headquarters in the American Colonies. The first purchase of land was in 1769 for an area of about 1,000 acres, then known as Greenland. Later another purchase of about 500 acres was made.

This colony was intended to be a self-supporting economic unit under the full control and support of the Moravian Church. The Township site was completely laid out with roads, homesites, business locations, before any buildings were begun. In this sense, it was probably one of the earliest planned communities in what is now the United States. A complete record of these proceedings, the plans for many of the buildings and the progress of the town - all written in old German script - is in the Moravian Archives in Bethlehen, Pennsylvania. The Moravian settlers built homes, community and business buildings, often limestone, but some of wood. The Moravian town was not able to sustain itself financially and was sold as an entity in 1808. Thereafter, the entire area attracted many settlers as farmers, artisans, etc. The Township of Hope consists of a small village in a rural setting.

STANDARDS FOR PRESERVING HOPE'S HISTORIC HERITAGE

There are three areas which will require separate regulatory approaches in order to preserve Hope's desirable historic and visual environment. The first is the Historic Village core. This is the area of the HMH Historic District which is on the National and State Register of Historic

Places. The second area of concern relates to properties which are within the HMH district but not on the Register of Historic Places themselves. These are important approaches and exits of the Village. These include scenic corridors and distant views. These areas also provide a context or "frame" for the Historic Village itself. The third and final area of concern is sites which may be of historic significance but are located outside of the Village Proper.

During 1995, HOPE (Help Our Preservation Effort) embarked on an inventory of sites known to be of historic significance and additional sites which may be of historic significance. These are shown on the accompanying map.

STANDARDS FOR THE HISTORIC VILLAGE

At the present time the Historic District Commission Ordinance of the Township provides for review of all the applications for development within the Historic District in accordance with generalized review considerations. It is recommended that the ordinances be revised to include more specific and readily understood criteria by which compliance with the applicable ordinances can be determined. Specific criteria could include the following:

Buildings Design

Roof Shape

Any new buildings in the Village should have a gable roof shape. Additions and renovations to existing buildings should not add or eliminate original stories or alter roof shapes, particularly in areas exposed to public view.

Directional Expression

The directional expression of a building is shown by the footprint of the building and the roofline. A building may have a narrow front and deep sides, a wide front and shallow sides or it could be roughly square. A wide building can be placed within an area of narrow buildings by breaking the facade into smaller masses which match the existing buildings. Any additions or expansions of buildings should reflect the directional expression of the original structure.

Proportion And Scale

Proportion deals with the relationship of the height to the width of the building and with the relationship of each parts of the whole. Scale deals with the relationship of each building to the other buildings in the area. For example, a five story building would be out of scale in an area of two story buildings. Similarly, a long low structure would not fit in with a group of narrow buildings. The building width of new construction in the Village should be limited to approximately 2 1/2 times the building height to be consistent with the proportions scales of existing buildings. Additions should maintain the original scale and proportion and be built at the same height as the existing building.

Rhythm Of Openings

Rhythm of openings refers to the number and spacing of windows and doors in a facade. Any new construction should show a rhythm of openings consistent with the existing pattern. Likewise, additions should maintain the original rhythm of openings.

Massing

Massing deals with the volume created by sections of the building. For example, a simple Colonial structure may be one mass, but a Victorian home with a porch, turrets, wings, etc. has varied mass. Placing a box-like structure in a neighborhood of Victorian buildings might be intrusive. Renovations or additions should reflect the original building massing. New construction should complement the massing of adjacent buildings.

Voids And Solids

The Village land use pattern includes a pattern of voids and solids composed of the sequencing of buildings and yard spaces. The voids between the buildings provide glimpses of open space "open lands and landscaped parking areas." These voids provide visual interest and provide an appropriate setting for each building. New construction should be limited in side yard areas and

existing rhythms of voids and solids in the Village should be maintained. Separate structures fronting on public streets should not be combined with obvious breezeways or walls.

Sense Of Entry

Every building has an entry and each can be articulated differently. The entry may be a pedimented door, steps and a door, a porch, a portico or other prominent architectural feature. Porches and pediments should not be removed from enclosed or existing buildings. The front facade of new construction should contain elements which emphasize a sense of entry including porches, steps and pediments.

Setback

A building may be close to the street or set further back, parallel to the street or at an angle and at one side or in the middle of the lot. In Hope Village, structures are placed relatively close to the street for both new construction and additions, the predominant setback within the area surrounding a building that is within the same zone should be maintained.

Building Details

The materials and architectural details used on building form an important part of the building's style and character. Materials used on walls and roofs, any new building or addition should have similar appearance and texture to those of existing buildings. If a building is being restored or expanded, original materials should not be replaced unless they are deteriorated and beyond repair. If this is not possible, a material of similar appearance should be used. Details such as trim, moldings and shutters should be maintained in their original form. Any significant details which have been removed or altered should be replaced. Existing details such as cornices trim, shutters and gingerbread should not be removed, altered or obscured.

Buildings Materials

In Hope building materials include a mix of stone structures and clapboard or shingle walls. These types of materials should be maintained for both new constructions and additions.

Doors

Original doors should be retained whenever possible and new doors should be of the same architectural period of the original building. Doors for new construction should reflect the types of doors that are characteristic of the Village.

Windows And Shutters

Any new windows should duplicate existing windows in size, location, shape and number of panes. Shutters should be sized so that the pair will completely cover the window. Shutters should not be used on bay or large windows unless specifically designed to cover those windows. Windows and shutters for new construction should reflect the type of windows and shutters existing in the Village.

PROPERTIES IN THE HMH DISTRICT OUTSIDE OF THE VILLAGE

Properties located within the Historic District but outside of the Village core area should be developed in a manner so as to minimize their visual impact upon the Historic Village. "A hard edge" is desirable to separate the Village from its environs. Techniques to minimize visual impact include deep setbacks, of 100 or more feet, placement of structures into the wooded edges of farm fields and using topographic features where they exist to screen new construction from the Historic Village.

Other Historic Sites

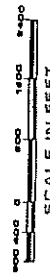
An inventory of known and potential historic sites is shown on the accompanying map. For those sites located outside of the Historic District, it is recommended that any structures identified be investigated for their historic value and for potential preservation prior to the issuance of any demolition permits or development approval.

Design Elements For The Village

During 1991, a preliminary assessment was made of the Hope Historic Village to determine problems and opportunities. The accompanying map graphically shows some of the preliminary recommendations. The recommendations should be considered whenever reviewing site plans and subdivisions in the Village and capital improvements such as road or school construction.



HISTORIC DISTRICT



SCALE IN FEET
 BASE MAP INFORMATION SOURCE:
 OFFICIAL TOWNSHIP TAX MAPS - 10/90

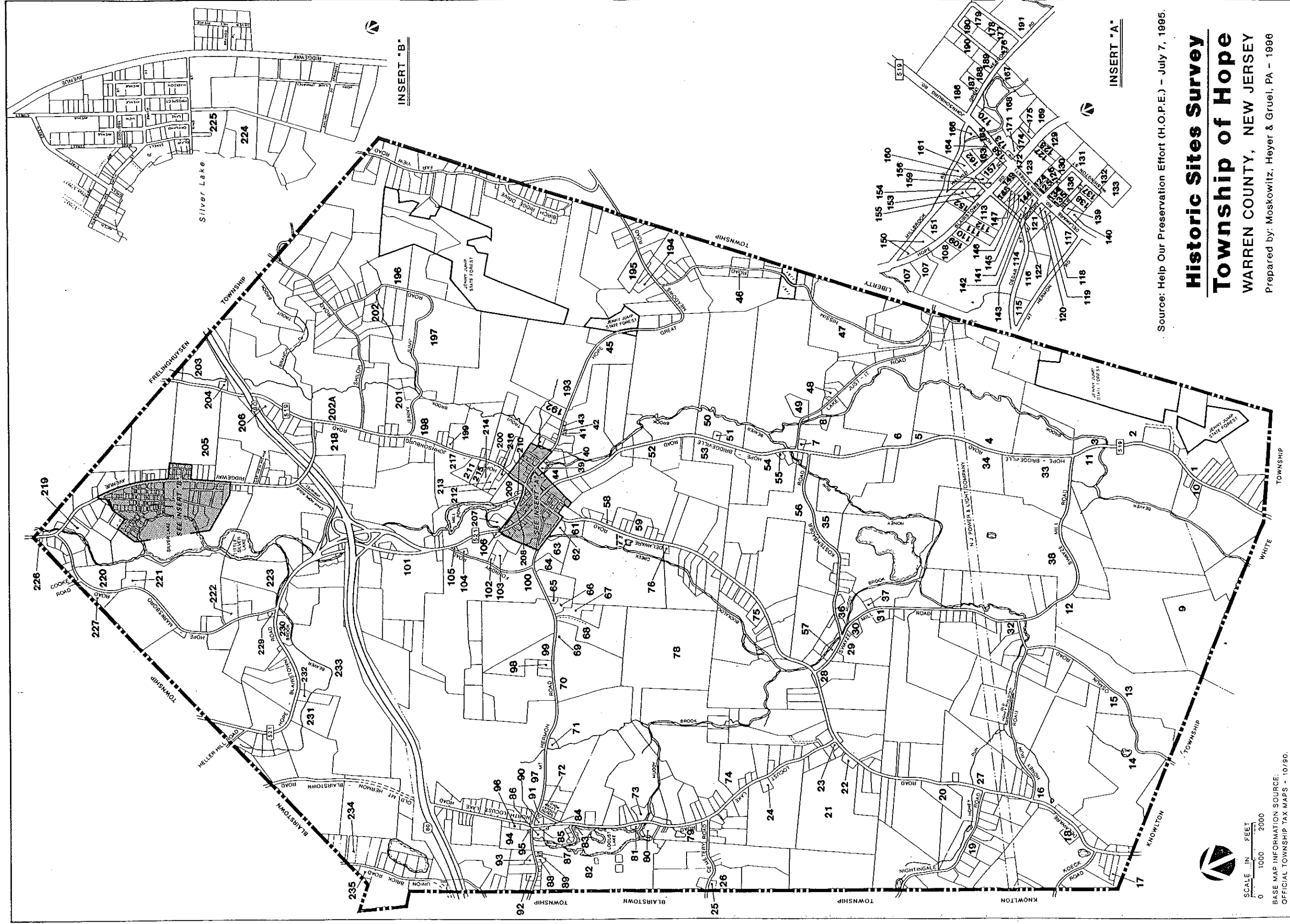


MAP 18

HISTORIC AREAS

ENVIRONMENTAL RESOURCE INVENTORY

TOWNSHIP OF HOPE
 WARREN COUNTY, NEW JERSEY
 MARCH, 1992



Source: Help Our Preservation Effort (H.O.P.E.) - July 7, 1995.

Historic Sites Survey

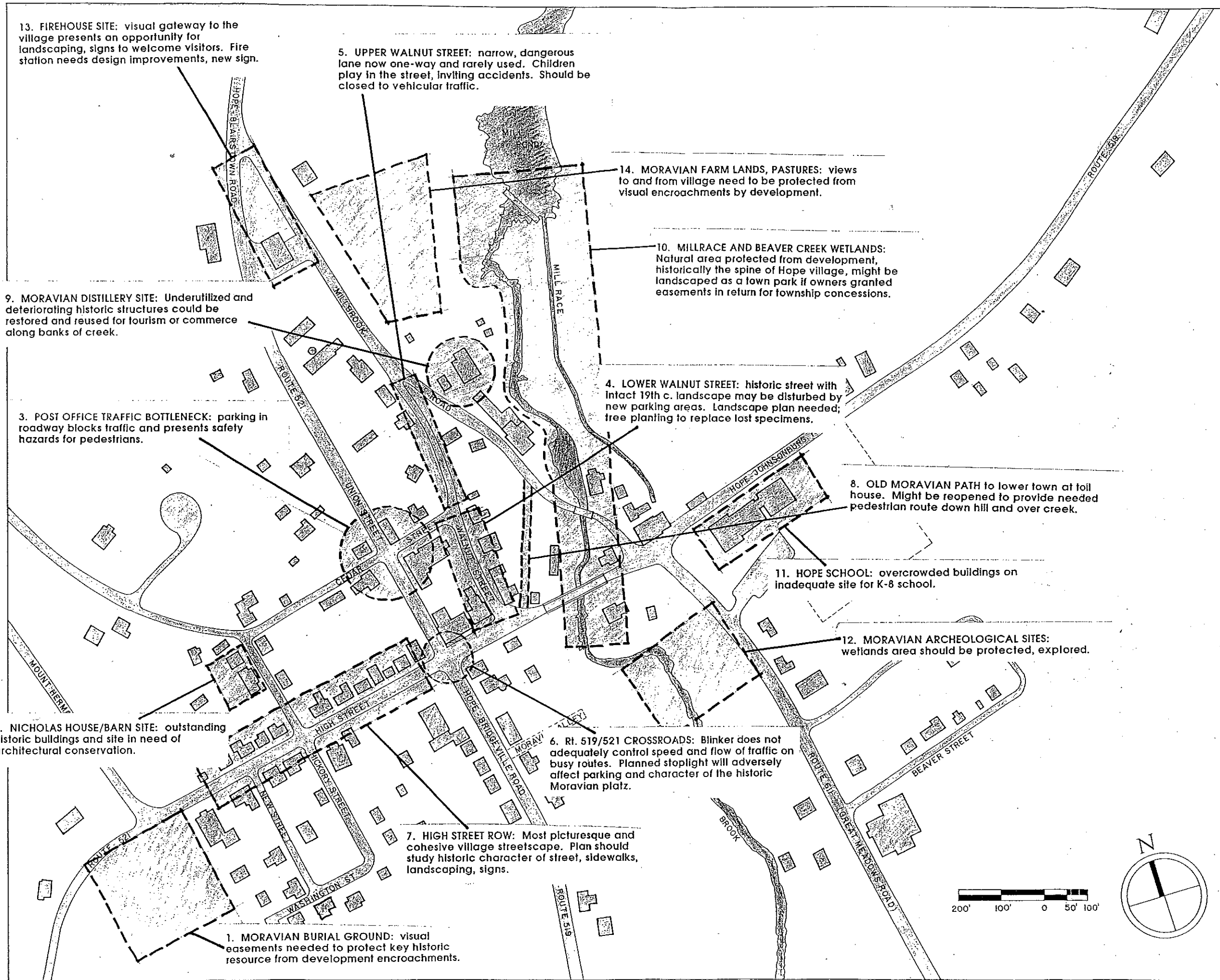
Township of Hope

WARREN COUNTY, NEW JERSEY

Prepared by: Moskowitz, Heyer & Gruel, PA - 1996



SCALE IN FEET
 0 1000 2000
 BASE MAP INFORMATION SOURCE:
 OFFICIAL TOWNSHIP TAX MAPS - 10/79.



13. FIREHOUSE SITE: visual gateway to the village presents an opportunity for landscaping, signs to welcome visitors. Fire station needs design improvements, new sign.

5. UPPER WALNUT STREET: narrow, dangerous lane now one-way and rarely used. Children play in the street, inviting accidents. Should be closed to vehicular traffic.

14. MORAVIAN FARM LANDS, PASTURES: views to and from village need to be protected from visual encroachments by development.

10. MILLRACE AND BEAVER CREEK WETLANDS: Natural area protected from development, historically the spine of Hope village, might be landscaped as a town park if owners granted easements in return for township concessions.

9. MORAVIAN DISTILLERY SITE: Underutilized and deteriorating historic structures could be restored and reused for tourism or commerce along banks of creek.

4. LOWER WALNUT STREET: historic street with intact 19th c. landscape may be disturbed by new parking areas. Landscape plan needed; tree planting to replace lost specimens.

3. POST OFFICE TRAFFIC BOTTLENECK: parking in roadway blocks traffic and presents safety hazards for pedestrians.

8. OLD MORAVIAN PATH to lower town at toll house. Might be reopened to provide needed pedestrian route down hill and over creek.

11. HOPE SCHOOL: overcrowded buildings on inadequate site for K-8 school.

12. MORAVIAN ARCHEOLOGICAL SITES: wetlands area should be protected, explored.

2. NICHOLAS HOUSE/BARN SITE: outstanding historic buildings and site in need of architectural conservation.

6. Rt. 519/521 CROSSROADS: Blinker does not adequately control speed and flow of traffic on busy routes. Planned stoplight will adversely affect parking and character of the historic Moravian platz.

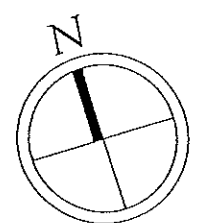
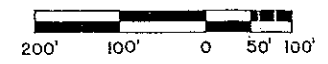
7. HIGH STREET ROW: Most picturesque and cohesive village streetscape. Plan should study historic character of street, sidewalks, landscaping, signs.

1. MORAVIAN BURIAL GROUND: visual easements needed to protect key historic resource from development encroachments.

PRELIMINARY ASSESSMENTS
Problems and Opportunities

HOPE HISTORIC VILLAGE STUDY

1991



NOV. 4, 1991

DATE SHEET NO.

VII. CIRCULATION PLAN ELEMENT

VII. CIRCULATION PLAN ELEMENT

Automobiles and trucks are the primary means of movement of people and goods throughout Hope Township. The regional road network has been constructed to serve this demand including Interstate Route 80, a system of County roads and local streets.

ROADWAY CLASSIFICATION

The roadway classification system is necessary to develop standards for rights-of-way and roadways such as widths, improvements and land use. Efficient and safe operation of the system requires that facilities be designed to serve a specific purpose within the street hierarchy. For example, the freeway carries no local traffic, while the cul-de-sac carries no thru traffic. Access control ranges from complete control in the case the freeway to minimal control in the case of the cul-de-sac.

Functional Classification Of Roads In Hope

Freeway/Expressway

The primary function of these roadways is to serve thru traffic and provide high speed mobility. Access is provided from major streets at interchanges. Limited or no access is provided to abutting land uses. In Hope, there is a single freeway or expressway, Interstate Route 80. Exit 12 forms a full interchange with County Route 521 in Hope.

Arterials

Arterials provide a high degree of mobility and serve longer trips. The principal function is movement, not necessarily access. Direct residential access to arterials should be minimized. In the case of Hope, the arterial network consists principally of major County routes including Routes 519 and 521.

Collectors

Collectors provide both land access and movement within residential areas. These penetrate but do not continue through residential areas. In Hope, the collector road network includes Swayze Mill Road, Locust Lake Road, Hope-Marksborough Road and Ridgeway Avenue.

Local Streets

Local streets provide land access and can exist in any land use setting. Movement is incidental and involves travel to and from a collector road. The balance of all of Hope's municipal streets and development roads are classified as local access streets.

Existing Problem Areas

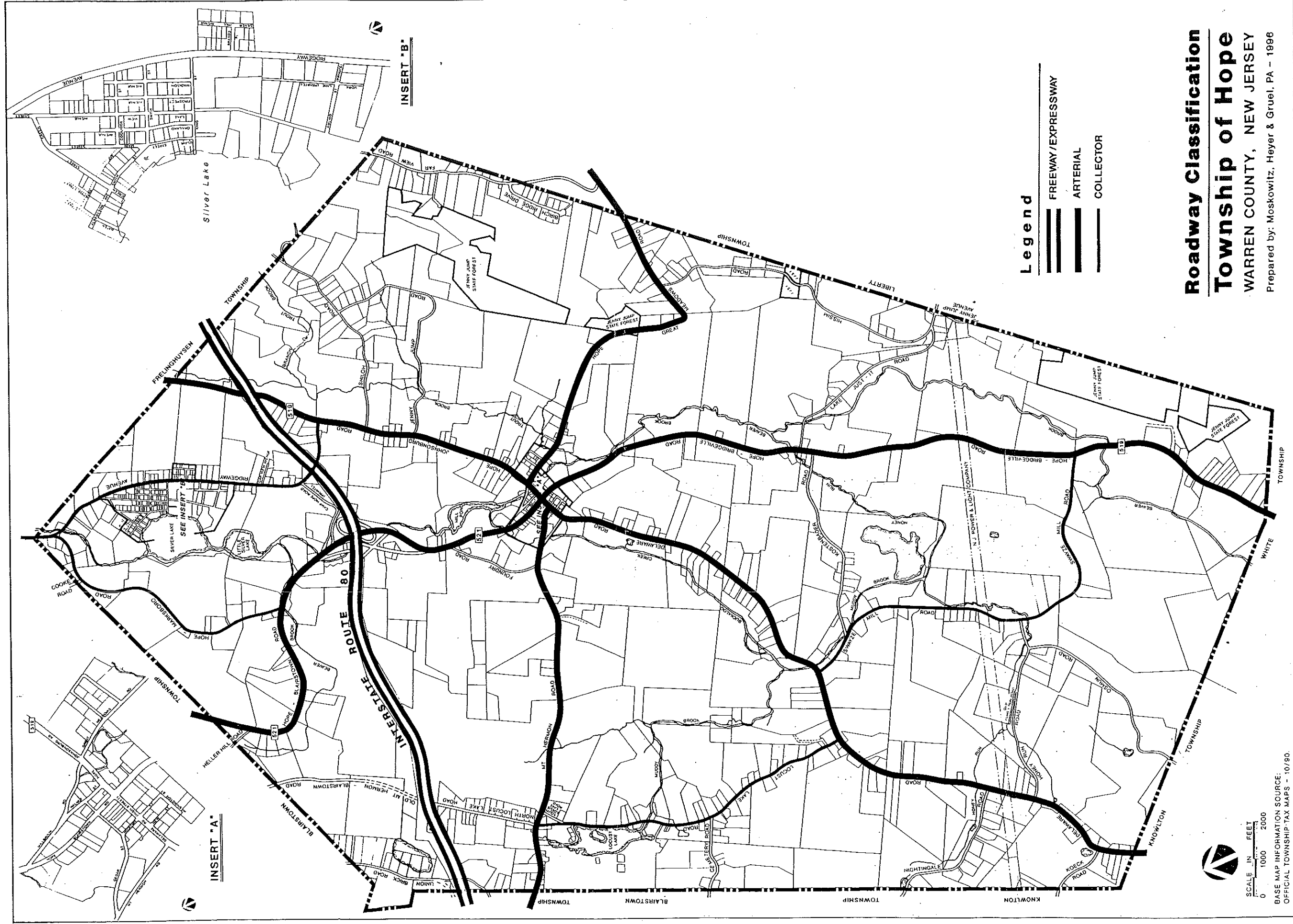
As the region develops, the average daily traffic volumes on the arterial road network can be expected to rise. The presence of the interchange located north of the Village creates problems for the Village itself. Traffic accessing Route 80 from areas east, south and west of the Village must pass through it first. Increased traffic volume in general and increased truck traffic in particular can interfere with the quality of life and the historic character of the Village.

A number of possible solutions to this problem have been discussed, including easterly and westerly bypass roads around the Village. Neither of the options are viable given the presence of severe environmental constraints, regulatory problems, specifically with respect to wetlands, and alignments which do not provide reasonably short distances around the Village. Additionally, the major roads within the Village are within County jurisdiction and limit what the Township can unilaterally do.




RECOMMENDATIONS

1. In order to control traffic through the Village, the density of development within the Township, particularly those areas south, east and west of the Village should be minimized.

2. The Township should participate in the regional transportation planning efforts of Warren County. The County's most recent transportation plan does not specifically address the problem in Hope.
3. The Township should investigate the use of weight limitations to limit heavy vehicle traffic through the Village.
4. The possibility of rerouting eastbound truck traffic to Exit 19 and westbound truck traffic to Exit 4 should be further investigated.
5. Measures should be taken to slow the speed of vehicles traveling through the Village. These could include "traffic calming" techniques such as: (a) the use of speed tables which are essentially elongated speed bumps across which vehicles can not comfortably travel more than 15 to 25 miles per hour; (b) rumble strips or changes in the roadway surface; (c) chokers or roadway narrowing through the Village; (d) chicanes, which are a form of curb extension which alternates from one side of the street to another; (e) speed limit signs and other more subtle techniques such as tree planting can all create the incentive for slowing traffic through the Village.

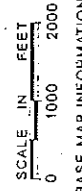


Legend

-  FREEWAY/EXPRESSWAY
-  ARTERIAL
-  COLLECTOR

Roadway Classification
Township of Hope
 WARREN COUNTY, NEW JERSEY

Prepared by: Moskowitz, Hoyer & Gruel, PA - 1996



BASE MAP INFORMATION SOURCE:
 OFFICIAL TOWNSHIP-TAX MAPS - 10/90.

VIII. RECYCLING PLAN ELEMENT

VIII. RECYCLING PLAN ELEMENT

Hope currently has a mandatory recycling program which is consistent with its recycling ordinances. The Ordinance provides for mandatory recycling for owners and occupants of residential properties for glass bottles, jars, aluminum cans, tin and bimetal cans, plastic and beverage containers and newspapers.

Commercial and business properties are subject to mandatory recycling for separation of glass bottles, jars, aluminum cans, tin and bimetal cans, plastic and beverage containers and newspapers. The Township's service stations, which include used oil holding tanks, are required to accept used motor oil from individuals.

Hope has appointed a recycling coordinator who, subject to the approval of the Township Committee, establishes and promulgates reasonable rules and regulations as to the manner in which collection and recycling occurs.

**IX. COMMUNITY FACILITIES
PLAN ELEMENT**

IX. COMMUNITY FACILITIES PLAN ELEMENT

INTRODUCTION

The adequacy and expectation of community services such as schools and parks is an important component of the quality of life in the community. This plan evaluates existing municipal resources, existing levels of service and potential deficiencies and considers future community facilities and service needs based upon the Township's present and future demographic composition.

Existing Facilities

Municipal Building

The Township's municipal building and Township offices are located on County Route 611 (Great Meadows Road). This newly completed space is adequate for the Township's present and anticipated future needs.

Schools

Hope Township maintains a K-8 grade plan and includes a single school building located on Route 519 (Hope-Johnsonburg Road) at the eastern edge of the Village of Hope. Present enrollment is approximately 230 students. School capacity is an issue and on-site expansion potential is limited.

Police

The Township does not maintain a police force. General law enforcement services are provided by the New Jersey State Police. The State police maintain a barracks located just north of the Route 80 interchange.

Fire Department

Hope's fire fighting services are provided by a volunteer fire department. The firehouse site is located on Hope-Blairstown Road (Route 521) at its intersection with Millbrook Road located at the northern entrance to the Village.

Parks And Recreation

Municipal Facilities

Hope's recreational facilities are located in a municipal park located east of Swayze Mill Road and south of Kostenbader Road. This is a large site which provides for the present needs of Hope with significant expansion potential as the Township grows. This area will include ball fields and accompanying parking, a lake with hiking and picnicking areas. Additional ball fields are located adjacent to the school south of Hope-Johnsonburg Road.

Anticipated Future Needs

Hope Township's estimated population is approximately 1,700 persons for 1995. Population growth is expected to remain modest over the next six year planning horizon. The Township has been issuing between 7 and 14 permits for single family construction annually over the last few years. The Township's zoning does not provide for any high density housing opportunities, nor are there any large scale approved subdivisions likely to take place. Assuming the rate of construction remains relatively constant, an additional 25 - 30 new residents of Hope will be added each year over the next 6 years. This modest growth will not trigger the need for any major new community facilities.

**X. COMPATIBILITY WITH OTHER
PLANNING EFFORTS**

X. COMPATIBILITY WITH OTHER PLANNING EFFORTS

The revised Land Use and Housing Plan Elements of Hope Township are consistent with the planning efforts of other jurisdictions as follows:

State Development And Redevelopment Plan.

In June of 1992, the New Jersey State Planning Commission adopted the State Development and Redevelopment Plan. The Plan divides New Jersey into planning areas and includes the concept of centers development. Hope presently has land within two planning areas: Planning Area 4A and 4B and Planning Area 5. Planning Area 4 is the rural planning area. Planning Area 4B is a subarea which is the environmentally sensitive rural planning area. The rural planning area includes large areas of undeveloped land interspersed by sparse residential development, wooded tracts, rural towns and villages and most of New Jersey's productive farmland. The intent of the rural planning area is to protect agricultural lands and environmentally sensitive areas.

Planning Area 5 is the environmentally sensitive planning area. These areas include contiguous areas with valuable ecosystems and wildlife habitats. The intent of this planning area is to protect these critical natural resources. The State Plan attempts to channel most new development into existing and proposed "centers" throughout the State. The Village of Hope has been identified as an existing village. Camp Hope, Mount Hermon, have been identified as existing hamlet.

The Township's Master Plan identifies community development boundaries for Hope Village and the Mount Hermon Hamlet. The designation of these centers and the low density approach to the environs are consistent with the State Plan's policy.

Warren County Master Plan

Warren County's most recent Master Plan and General Development Plan identified the Village of Hope as being a "Village Center" and the balance of the Township within an area designated

for rural style development. The County Plan states: "Hope Village Center. This designation is somewhat unique because of the historic aspect of the Village of Hope. This, together with the locational advantages at the interchange of Interstate Route 80, creates a somewhat unusual development proposal. The Hope Village Center Designation is based on the awareness that new growth can be expected in the area and substantial development pressures will be placed on the Township radiating out from the interchange of the Interstate highway. In view of the objective to concentrate new economic activity so that new growth will be coordinated with transportation and utility networks, it is recommended that the center designation could include not only the land surrounding the interstate highway, but also the Historic Village. . . . Extreme care must be taken in the development and implementation of the Township Plan so that new growth does not adversely affect the natural resources that exist in the Village Center area, nor should the new growth jeopardize the historic character of Hope. It is reasonable to assume that some new development will occur within the Village provided that it conforms with the historical architectural design that exists in this village."

The planned office park at the interchange of Route 80, the neighborhood commercial designation on Route 521 and the Village itself are generally consistent with the County Plan.

Adjacent Municipalities

Hope Township shares borders with five municipalities including Frelinghuysen, Liberty, White, Knowlton and Blairstown Townships. All of these boundaries are adjacent to areas currently zoned for low density residential development, with lot sizes greater than one acre. This is compatible with Hope's low density residential zoning.

APPENDIX A

Soil Characteristics

SOIL CHARACTERISTICS

Township of Hope
Warren County, New Jersey

Symbol	Soil Name	Depth to Water Table (feet)	Depth to Bedrock (feet)	Agricultural Soil Class	LIMITATIONS FOR DEVELOPMENT			
					Dwellings w/basements	Dwellings w/basements	Septic Tank Absorption Fields	Local Roads and Streets
Ad	Adrian Muck	0.0-1.0	>60	IV	Severe (2,3,8)	Severe (2,3)	Severe (2,3)	Severe (2,8)
AnC2	Annandale gravelly loam, 8-15% slopes, eroded	>6.0	>60	III	Moderate (1,8)	Moderate (1,8)	Severe (5)	Moderate (1,8)
BaA	Bartley loam, 0-3% slopes	2.0-3.0	>60	II	Moderate (2,8)	Moderate (2)	Severe (2,5)	Moderate (8)
BaB	Bartley loam, 3-8% slopes	2.0-3.0	>60	II	Moderate (2,8)	Moderate (2)	Severe (2,5)	Moderate (8)
BtB	Bath gravelly loam, 3-8% slopes	>6.0	>60	II	Moderate (8)	Slight	Severe (5)	Moderate (8)
BtC	Bath gravelly loam, 8-15% slopes	>6.0	>60	III	Moderate (1,8)	Moderate (1)	Severe (5)	Moderate (1,8)
BtD	Bath gravelly loam, 15-25% slopes	>6.0	>60	IV	Severe (1)	Severe (1)	Severe (1,5)	Severe (1)
BtE	Bath gravelly loam, 25-40% slopes	>6.0	>60	VI	Severe (1)	Severe (1)	Severe (1,5)	Severe (1)
BgB	Bath very stony loam, 3-8% slopes	NA	>60	VI	Moderate (6)	Moderate (6)	Severe (5)	Moderate (8)
BgC	Bath very stony loam, 8-15% slopes	NA	>60	VI	Moderate (1,6)	Moderate (1,6)	Severe (5)	Moderate (1,8)
Ck	Catilsie muck	0.0-1.0	>60	III	Severe (2,3)	Severe (2,3)	Severe (2,3)	Severe (2,3)
CmA	Chippewa silt loam, 0-3% slopes	0.0-0.5	>60	IV	Severe (2)	Severe (2)	Severe (2,5)	Severe (2)
CmB	Chippewa silt loam, 3-8% slopes	0.0-0.5	>60	IV	Severe (2)	Severe (2)	Severe (2,5)	Severe (2)
CnA	Chippewa very stony loam, 0-3% slopes	0.0-0.5	>60	VII	Severe (2)	Severe (2)	Severe (2,5)	Severe (2)
CnB	Chippewa very stony loam, 3-8% slopes	0.0-0.5	>60	VII	Severe (2)	Severe (2)	Severe (2,5)	Severe (2)
EdB	Edneyville gravelly loam, 3-8% slopes	>6.0	>40	II	Moderate (8)	Slight	Slight	Moderate (8)
EdC	Edneyville gravelly loam, 8-15% slopes	>6.0	>40	III	Moderate (1,8)	Moderate (1)	Moderate (1)	Moderate (1,8)
EeB	Edneyville extremely stony loam, 3-8% slopes	>6.0	>60	VII	Severe (6)	Severe (6)	Severe (6)	Moderate (6)
EeC	Edneyville extremely stony loam, 8-15% slopes	>6.0	>60	VII	Severe (6)	Severe (6)	Severe (6)	Moderate (1,6)
EPD	Edneyville-Parker-Rock outcrop association	>6.0	>60	VII	Severe (1,6)	Severe (1,6)	Severe (1,6)	Severe (1)
FrA	Fredon loam, 0-3% slopes	0.0-1.5	>60	III	Severe (2,8)	Severe (2)	Severe (2)	Severe (2,8)
Ha	Halsey Loam	0.0-0.5	>60	III	Severe (2,8)	Severe (2)	Severe (2)	Severe (2,8)
HbA	Hazen loam, 0-3% slopes	>6.0	>60	I	Moderate (8)	Slight	Slight	Moderate (8)
HbB	Hazen loam, 3-8% slopes	>6.0	>60	II	Moderate (8)	Slight	Slight	Moderate (8)
HbC	Hazen loam, 8-15% slopes	>6.0	>60	III	Moderate (1,8)	Moderate (1)	Moderate (1)	Moderate (1,8)
HfA	Hazen gravelly loam, 0-3% slopes	>6.0	>60	I	Moderate (8)	Slight	Slight	Moderate (8)
HfB	Hazen gravelly loam, 3-8% slopes	>6.0	>60	II	Moderate (1,8)	Moderate (1)	Slight	Moderate (8)
HfD	Hazen gravelly loam, 8-15% slopes	>6.0	>60	IV	Severe (1)	Severe (1)	Severe (1)	Severe (1)
HfE	Hazen gravelly loam, 15-25% slopes	>6.0	>60	VI	Severe (1)	Severe (1)	Severe (1)	Severe (1)
HkA	Hero loam, 0-3% slopes	1.5-3.5	>60	II	Severe (8)	Severe (2)	Severe (2)	Severe (8)

Soil Characteristics (Continued)

Symbol	Soil Name	Depth to Water Table (feet)	Depth to Bedrock (feet)	Agricultural Soil Class	LIMITATIONS FOR DEVELOPMENT			
					Dwellings w/basements	Dwellings w/basements	Dwellings w/basements	Local Roads and Streets
LYA	Lyons silt loam, 0-4% slopes	0.0-0.5	>60	IV	Severe (2,8)	Severe (2)	Severe (2,5)	Severe (2,8)
LZB	Lyons very stony silt loam, 0-3% slopes	0.0-0.5	>60	VII	Severe (2,8)	Severe (2)	Severe (2,5)	Severe (2,8)
Md	Middlebury loam	0.5-2.0	>60	II	Severe (3,8)	Severe (3)	Severe (2,3)	Severe (8)
NaC	Nassau rocky silt loam, 8-15% slopes	>6.0	10-20	IV	Severe (7)	Severe (7)	Severe (7)	Severe (7)
NbB	Nassau shaly silt loam, 3-8% slopes	>6.0	10-20	III	Severe (7)	Severe (7)	Severe (7)	Severe (7)
NFD	Nassau-Rock Outcrop Complex, 15-25% slopes	>6.0	10-20	VI	Severe (1,7)	Severe (1,7)	Severe (1,7)	Severe (1,7)
NFE	Nassau-Rock Outcrop Complex, 25-45% slopes	>6.0	10-20	VII	Severe (1,7)	Severe (1,7)	Severe (1,7)	Severe (1,7)
PbD	Parker gravelly sandy loam, 15-25% slopes	>6.0	>48	IV	Severe (1)	Severe (1)	Severe (1)	Severe (1)
RPF	Rock Outcrop-Parker-Edneyville Association	>6.0	>48	VII	Severe (1,6)	Severe (1,6)	Severe (1,6)	Severe (1)
RWD	Rock Outcrop-Wassaic complex, 15-25% slopes	>6.0	20-40	VII	Severe (1,7)	Severe (1,7)	Severe (1,7)	Severe (1)
RWF	Rock Outcrop-Wassaic complex, 25-45% slopes	>6.0	20-40	VII	Severe (1,7)	Severe (1,7)	Severe (1,7)	Severe (1)
VnB	Venango gravelly loam, 3-8% slopes	0.5-1.5	>60	III	Severe (2,8)	Severe (2)	Severe (2,5)	Severe (8)
VsB	Venango very stony loam, 3-8% slopes	0.5-1.5	>60	VI	Severe (2,8)	Severe (2)	Severe (2,5)	Severe (8)
WaD2	Washington loam, 15-25% slopes	>6.0	>60	IV	Severe (1)	Severe (1)	Severe (1)	Severe (1)
WgB	Washington gravelly loam, 3-8% slopes	>6.0	>60	II	Moderate (8)	Moderate (8)	Slight	Moderate (8)
WgC	Washington gravelly loam, 8-15% slopes	>6.0	>60	III	Moderate (1,8)	Moderate (1,8)	Moderate (1)	Moderate (1,8)
WgD	Washington gravelly loam, 15-25% slopes	>6.0	>60	IV	Severe (1)	Severe (1)	Severe (1)	Severe (1)
WkB	Washington very stony loam, 3-8% slopes	>6.0	>60	VI	Moderate (6,8)	Moderate (6)	Moderate (6)	Moderate (8)
WkC	Washington very stony loam, 8-15% slopes	>6.0	>60	VI	Moderate (1,8)	Moderate (1)	Moderate (1,6)	Moderate (1,8)
WkD	Washington very stony loam, 15-25% slopes	>6.0	>60	VI	Severe (1)	Severe (1)	Severe (1)	Severe (1)
WkE	Washington very stony loam, 25-45% slopes	>6.0	>60	VII	Severe (1)	Severe (1)	Severe (1)	Severe (1)
WmB	Wassaic gravelly loam, 3-8% slopes	>6.0	20-40	II	Moderate (7,8)	Moderate (7)	Severe (7)	Moderate (7,8)
WnC	Wassaic rocky gravelly loam, 8-15% slopes	>6.0	20-40	III	Moderate (1,7,8)	Severe (7)	Severe (7)	Moderate (1,7,8)
WnD	Wassaic rocky gravelly loam, 15-25% slopes	>6.0	20-40	IV	Severe (1)	Severe (1,7)	Severe (1,7)	Severe (1)
WOB	Wassaic-Rock Outcrop Complex, 3-8% slopes	>6.0	20-40	VII	Moderate (6,7,8)	Severe (7)	Severe (7)	Moderate (7,8)
WOC	Wassaic-Rock Outcrop Complex, 6-15% slopes	>6.0	20-40	VII	Moderate (1,7,8)	Severe (7)	Severe (7)	Moderate (1,7,8)
WOD	Wassaic-Rock Outcrop Complex, 15-25% slopes	>6.0	20-40	VII	Severe (1,7)	Severe (1,7)	Severe (1,7)	Severe (1)
Wp	Wayland silt loam	0.0-0.5	>60	VI	Severe (2,3,8)	Severe (2,3)	Severe (2,3,5)	Severe (2,3,8)

Source: Warren County Soil Survey, Soil Conservation Service, 4/79

Key:

(1)-Slope, (2)-Wetness, (3)-Floods, (4)-Seepage, (5)-Percs Slowly
 (6)-Large Stones, (7)-Depth to Bedrock, (8)-Frost Action

Prepared by: Moskowitz, Heyer & Gruel, PA - July, 1992

APPENDIX B

Qualified Farms

QUALIFIED FARMS (Tax Class 3B)

Township of Hope
Warren County, New Jersey

BLOCK	LOT	ACREAGE	BLOCK	LOT	ACREAGE	BLOCK	LOT	ACREAGE	BLOCK	LOT	ACREAGE	BLOCK	LOT	ACREAGE
100	600	103.03	700	100	30.00	1100	100	11.41	1500	800	11.40	3300	103	3.18
100	700	5.19	700	105	5.50	1100	300	15.66						
100	800	41.31	700	107	6.00	1100	301	39.60	1600	1300	242.11	3400	400	93.96
100	900	174.00	700	200	63.08	1100	400	30.30	1600	1500	45.60	3400	800	28.03
100	1000	2.80	700	300	20.00	1100	500	37.20	1600	1800	21.10	3400	1400	38.46
100	1100	95.66	700	400	1.90	1100	1100	62.35	1600	2000	121.13	3400	1500	11.91
100	1200	42.34	700	503	1.35	1100	1900	65.95	1600	2200	49.00	3400	1505	5.93
100	1400	0.50	700	700	14.05	1100	1901	5.13	1600	3100	9.00	3400	1506	3.01
			700	900	43.35	1100	1903	11.89				3400	1900	45.46
			700	1000	9.20	1100	2100	29.03	1700	100	15.05	3400	2100	0.50
200	200	24.45	700	1100	39.36	1100	2103	12.19	1700	600	22.36	3400	2200	12.53
200	300	68.76	700	1300	88.34	1100	2104	8.79	1700	1600	7.90			
200	301	13.94	700	1301	69.00	1100	2300	85.05				3401	400	8.00
200	302	1.48				1100	2302	0.95	2700	2400	108.58			
200	400	221.81	800	100	70.52	1100	2303	0.92	2700	2500	68.22	4000	300	24.15
200	500	11.80	800	200	133.64	1100	2304	0.92	2700	2800	21.10	4000	400	5.68
200	700	169.00	800	300	6.47	1100	2305	0.92	2700	3100	9.73	4000	500	60.00
200	900	94.72	800	400	63.63	1100	2306	5.00	2700	3506	10.28			
200	1000	23.32	800	500	23.45	1100	2307	6.00	2700	3900	47.54	5000	100	4.50
			800	702	10.11	1100	2309	2.79	2700	4200	9.18	5000	200	49.20
			800	1000	22.82	1100	2311	2.53	2700	4300	22.91	5000	400	95.51
300	100	4.79	800	1100	45.59				2700	4302	27.86	5000	500	10.62
300	200	119.66	800	1101	5.06	1200	500	19.80	2700	4600	71.23	5000	600	44.07
300	300	80.46	800	1102	10.36	1200	1000	30.15	2700	4800	27.21	5000	1000	20.01
300	400	11.04	800	1104	6.00	1200	1200	58.40				5000	1001	21.01
300	401	5.18	800	1105	14.01	1200	1300	95.52	2900	100	30.02	5000	1002	17.88
300	402	6.22	800	1200	192.16	1200	1301	7.00	2900	300	18.26			
300	403	4.80				1200	1700	59.16	2900	400	48.27	5200	200	17.96
300	500	56.37				1200	2300	60.80	2900	502	6.00	5200	400	20.00
300	600	121.84	900	500	35.65	1200	2303	8.00				5200	600	6.90
300	700	3.83	900	1000	20.10	1200	2400	77.00	3000	100	69.68	5200	700	12.07
300	702	3.03				1200	2403	24.72	3000	200	81.95	5200	702	34.63
			1000	800	64.80	1200	2600	9.00	3000	401	13.15	5200	1000	20.82
400	101	7.32	1000	900	31.32	1200	3000	29.20	3000	500	43.80	5200	1100	169.50
400	300	13.20	1000	1100	17.77	1200	3300	72.83	3000	600	24.00			
400	301	1.33	1000	1400	4.24	1200	3700	33.81				5300	100	53.63
			1000	1900	38.96	1200	3800	130.22	3100	100	0.73	5300	506	22.30
500	300	82.96	1000	2200	0.14				3100	700	22.54			
500	500	1.26	1000	2800	6.79	1300	200	9.00				5400	400	13.93
500	900	3.44	1000	2900	176.34	1300	300	12.35	3200	100	13.48	5400	500	5.23
			1000	3000	110.45	1300	1100	1.32	3200	200	3.71			
600	100	43.97	1000	3300	6.84	1300	1200	1.38	3200	300	52.38	5500	200	1.06
600	300	27.11	1000	3500	30.00	1300	1500	133.95	3200	400	62.21			
600	1000	105.77							3200	500	41.50			
600	1500	70.88							3200	600	9.20			
600	1600	5.66							3200	5800	0.90			
600	2200	32.75							3200	5900	0.59			
600	2300	56.40												
600	2302	25.65												

Source: 1992 Hope Township Tax Records

APPENDIX C

Rare Species and Natural Communities

5\15\87

NEW JERSEY NATURAL HERITAGE PROGRAM
POTENTIAL THREATENED AND ENDANGERED VERTEBRATE SPECIES
OF WARREN COUNTY

AMERICAN BITTERN FEDERAL STATUS: COUNTY
BOTAURUS LENTIGINOSUS STATE STATUS: LT OCCURRENCE: ?

HABITAT COMMENTS

Fresh water bogs, swamps, wet fields, cattail and bulrush marshes, brackish and saltwater marshes and meadows.

BALD EAGLE FEDERAL STATUS: LE COUNTY
HALIAEETUS LEUCOCEPHALUS STATE STATUS: LE OCCURRENCE: W*

HABITAT COMMENTS

Primarily near seacoasts, rivers, and large lakes.

BARRED OWL FEDERAL STATUS: COUNTY
STRIX VARIA STATE STATUS: LT OCCURRENCE: Y

HABITAT COMMENTS

Dense woodland and forest (conif. or hardwood), swamps, wooded river valleys, cabbage palm-live oak hammocks, especially where bordering streams, marshes, and meadows.

BOBOLINK FEDERAL STATUS: COUNTY
DOLICHONYX ORYZIVORUS STATE STATUS: LT OCCURRENCE: B

HABITAT COMMENTS

Tall grass areas, flooded meadows, prairie, deep cultivated grains, alfalfa and clover fields. In migration and winter also in rice fields, marshes, and open woody areas.

BOG TURTLE FEDERAL STATUS: C2 COUNTY
CLEMMYS MUHLENBERGII STATE STATUS: LE OCCURRENCE: Y

HABITAT COMMENTS

Slow, shallow rivulets of sphagnum bogs, swamps, and marshy meadows; sea level to 1200 m in Appalachians. Commonly basks on tussocks in morning in spring and early summer. Hibernates in subterreanean rivulet or seepage area.

BROOK TROUT FEDERAL STATUS: COUNTY
SALVELINUS FONTINALIS STATE STATUS: LT OCCURRENCE: Y

HABITAT COMMENTS

Clear cool well-oxygenated streams and lakes. May move from streams into lakes or sea to avoid high temps. in summer.

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CLIFF SWALLOW FEDERAL STATUS: COUNTY
HIRUNDO PYRRHONOTA STATE STATUS: LE OCCURRENCE: Y

HABITAT COMMENTS
Open to semiwooded habitat, cliffs, canyons, farms. Near meadows,
marshes, and water.

COOPER'S HAWK FEDERAL STATUS: COUNTY
ACCIPITER COOPERII STATE STATUS: LE OCCURRENCE: Y

HABITAT COMMENTS
Primarily mature forest, either broadleaf or coniferous, mostly
the former; also open woodland and forest edge.

GRASSHOPPER SPARROW FEDERAL STATUS: COUNTY
AMMODRAMUS SAVANNARUM STATE STATUS: LT OCCURRENCE: B

HABITAT COMMENTS
Prairie, old fields, open grasslands, cultivated fields, savanna.

GREAT BLUE HERON FEDERAL STATUS: COUNTY
ARDEA HERODIAS STATE STATUS: LT OCCURRENCE: Y

HABITAT COMMENTS
Freshwater and brackish marshes, along lakes, rivers, bays,
lagoons, ocean beaches, mangroves, fields, and meadows.

LONGTAIL SALAMANDER FEDERAL STATUS: COUNTY
EURYCEA LONGICAUDA STATE STATUS: LT OCCURRENCE: Y

HABITAT COMMENTS
Streamsides, spring runs, cave mouths, forested floodplains in
South. May disperse into wooded terrestrial habitats in wet
weather. Hides under rocks, logs, and other debris.

NORTHERN GOSHAWK FEDERAL STATUS: COUNTY
ACCIPITER GENTILIS STATE STATUS: LT OCCURRENCE: Y

HABITAT COMMENTS
Deciduous and coniferous forest, forest edge and open woodland,
foraging also in cultivated regions; primarily in mountains
towards the south.

OSPREY FEDERAL STATUS: COUNTY
PANDION HALIAETUS STATE STATUS: LT OCCURRENCE: T*

HABITAT COMMENTS
Primarily along rivers, lakes, and seacoasts, occurring widely in
migration, often crossing land between bodies of water.

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PIED-BILLED GREBE FEDERAL STATUS: COUNTY
PODILYMBUS PODICEPS STATE STATUS: LE OCCURRENCE: Y

HABITAT COMMENTS

Lakes, ponds, sluggish streams, and marshes; in migration and in winter also in brackish bays and estuaries.

RED-HEADED WOODPECKER FEDERAL STATUS: COUNTY
MELANERPES ERYTHROCEPHALUS STATE STATUS: LT OCCURRENCE: ?

HABITAT COMMENTS

Open woodland, especially with beech or oak, open situations with scattered trees, parks, cultivated areas and gardens.

RED-SHOULDERED HAWK FEDERAL STATUS: COUNTY
BUTEO LINEATUS STATE STATUS: LT OCCURRENCE: W*

HABITAT COMMENTS

Moist and riverine forest, and in e. N. Am. in wooded swamps, foraging in forest edge and open woodland.

SAVANNAH SPARROW FEDERAL STATUS: COUNTY
PASSERCULUS SANDWICHENSIS STATE STATUS: LT OCCURRENCE: Y

HABITAT COMMENTS

"Open areas, especially grasslands, tundra, meadows, bogs, farmlands, grassy areas with scattered bushes, and marshes, including salt marshes in the BELDINGI and ROSTRATUS groups (Subtropical and Temperate zones)" (B83COM01).

TIMBER RATTLESNAKE FEDERAL STATUS: COUNTY
CROTALUS HORRIDUS STATE STATUS: LE OCCURRENCE: Y

HABITAT COMMENTS

Wooded rocky hillsides in north; swampy areas, canebrake thickets, and floodplains in south. Near streams in late summer in some areas. Often hibernates in burrows and crevices of rock outcroppings.

VESPER SPARROW FEDERAL STATUS: COUNTY
POOECETES GRAMINEUS STATE STATUS: LE OCCURRENCE: Y

HABITAT COMMENTS

"Plains, prairie, dry shrublands, savanna, weedy pastures, fields, sagebrush, arid scrub and woodland clearings".

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WOOD TURTLE FEDERAL STATUS: COUNTY
CLEMMYS INSCULPTA STATE STATUS: LT OCCURRENCE: Y

HABITAT COMMENTS

Vicinity of streams and rivers. In streams and in wooded areas and fields adjacent to streams in summer. In streams in spring and fall. Hibernates in banks or bottoms of streams in winter.

DEFINITION OF ACRONYMS

FEDERAL STATUS

LE=listed endangered.
 LT=listed threatened.
 PE=proposed endangered.
 PT=proposed threatened.
 C2=candidate for listing.

STATE STATUS

LE=listed as endangered. (short-eared owl winter pop. listed as stable:S)
 LT=listed as threatened.

COUNTY OCCURRENCE

Y=present year-round, breeds.
 N=present year-round, not recorded breeding.
 B=present during the summer, breeds.
 W=present during the winter.
 T=present as a transient.
 ?=present status undetermined.
 *=indicates that the county is within the species known breeding range.

21 NOV 1990

HOPE TOWNSHIP, WARREN COUNTY
 RARE SPECIES AND NATURAL COMMUNITIES PRESENTLY RECORDED IN
 THE NEW JERSEY NATURAL HERITAGE DATABASE

NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	REGIONAL STATUS	GRANK	SRANK	DATE OBSERVED	IDENT.
*** Vertebrates								
ARDEA HERODIAS	GREAT BLUE HERON		T		G5	S2	1982-??-??	Y
CLEMmys INSCULPTA	WOOD TURTLE		T		G5	S4	1983-08-01	Y
CROTALUS HORRIDUS	TIMBER RATTLESNAKE		E		G5	S2	1977-07-??	Y
EURYCEA LONGICAUDA	LONGTAIL SALAMANDER		T		G5	S2	1942-08-11	Y
STRIX VARIA	BARRED OWL		T		G5	S3	1984-04-??	Y
STRIX VARIA	BARRED OWL		T		G5	S3	1984-05-??	
*** Vascular plants								
CAREX ALOPECOIDEA	FOXTAIL SEDGE		E		G5	SH	1923-06-16	Y
CAREX FRANKII	FRANK'S SEDGE				G5	S2	1974-06-27	Y
CAREX TUCKERMANII	TUCKERMAN'S SEDGE		E		G4	SH	1923-06-16	Y
POTAMOGETON VAGINATUS	SHEATHED PONDWEED				G5	SH	1923-06-16	Y
LIUS LAXUS SSP LAXUS	SPREADING GLOBE FLOWER	3C	E		G4T3Q	S1	1918-05-05	Y

