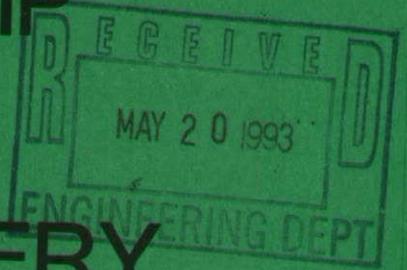


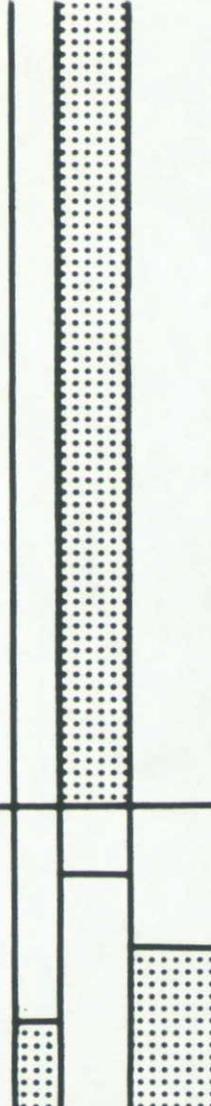
**TOWNSHIP
OF
MONTGOMERY**



**SOMERSET COUNTY
NEW JERSEY**

**MASTER PLAN
SUMMARY DOCUMENT**
And 1993 Periodic Reexamination Report

June 1993



TOWNSHIP OF MONTGOMERY

SOMERSET COUNTY
NEW JERSEY



MASTER PLAN
SUMMARY DOCUMENT
And 1993 Periodic Reexamination Report
June 1993

Most of the professional time necessary
to prepare this document has been
provided as a courtesy to
Montgomery Township
by Coppola and Coppola Associates.

MONTGOMERY TOWNSHIP
 MASTER PLAN SUMMARY DOCUMENT
 And 1993 Periodic Reexamination Report
 June 1993

Table Of Contents

PREFACE

FOREWORD

STATEMENT OF GOALS, POLICIES AND OBJECTIVES

EXISTING LAND USES AND APPROVED DEVELOPMENT

Introduction	1
The Build-Out Base Map	1
Existing Land Uses	2
Single-Family Residential Land Use	2
Multiple-Family Residential/Townhouse Land Use	5
Commercial/Office Land Use	5
Public Land Use	6
Quasi-Public Land Use	6
Industrial Land Use	6
Vacant/Agricultural/Roads Land Use	6
Wooded Land Use	7
Barns	7
Cemeteries	7
Detention Basins	7
Approved Major Residential Developments	7
Other Buildable Residential Lots	9
Approved Non-Residential Site Plans	9
Aggregate Summary	9
Comparison Of Existing Land Use (1990) And Approved Build-Out	12
Lots Capable Of Further Subdivision	12
Potential Lots In Planned Developments	12
Potential Non-Residential Development	14
Conclusion	14
Attachment A: Updated Information	following 15

EXISTING PHYSICAL CHARACTERISTICS

Introduction	1
Physiography	1
Geology And Ground Water Resources	3
Drainage Basins	5
Flood Hazard Areas	5
Soils And Community Development	7
Wetlands And Hydric Soils	10
Critical Areas	12

EXISTING COMMUNITY FACILITIES AND UTILITIES

Introduction	1
Public Schools	1
Library	1
Municipal Offices	1
Fire Protection And First Aid Squad	3
Sanitary Sewers	3
Public Water Service	5

TRAFFIC PLANNING

Introduction	1
Jurisdiction Of Roads	1
Existing Road Functions	1
Street Right-Of-Way Widths	3
Traffic And The Land Use Plan	3
Past Plan Modifications	5
The 1992 Traffic Plan	7
Attachment A: Traffic Circulation Plan Map And Roadway Design Specifications	following 8
Attachment B: Cross-Sections Of Roads	following 8
Attachment C: Area And Yard Requirements For Lots In The "R-1" & "R-2" Districts Fronting Upon Or Abutting Route 206, Service Roads, Major Collectors, Scenic Collectors And Minor Collectors	following 8

RECREATION, CONSERVATION AND OPEN SPACE PLANNING

Introduction	1
Publicly Owned Lands	1
Dedicated Open Space Lands	3
Existing Dedicated Stream Corridor Preservation And Conservation Easements	3
Sidewalks, Detention Basins And Cemeteries	3
Existing Township Recreational Facilities Inventory Assessment Of Existing Township Recreational Facilities Inventory	6
Township Recreation Facility Needs	6
The 1991 Recreation Plan	9
Facility Hierarchy	12
Recreation Plan Recommendations	12
Pedestrian-Bikeway Corridor Plan	13
Conservation Plan	15
Composite Open Space Plan	15

HISTORIC PLANNING

Introduction	1
Landmarks Preservation Commission And Its Objectives	1
Identification Of Districts And Sites	2
Designated Local Historic Districts	2
Designated Local Historic Sites	3
Attachment A: Map Of Designated State And National Historic Districts And Sites	following 3

LAND USE PLANNING AND EXISTING ZONING

Introduction	1
Land Use Plan And Critical Areas Maps	2
Residential District Areas	2
"MR" Mountain Residential	5
"R-3" Single-Family Residential	5
"R-2" Single-Family Residential	5
"R-1" Single-Family Residential	5
"R" Single-Family Residential	7
"APT/TH" Apartment/Townhouse Multiple-Family Residential	8
"VN" Village Neighborhood	8
Commercial District Areas	8
"NC" Neighborhood Commercial	8
"HC" Highway Commercial	9
Research, Engineering And Office District Areas	9
"REO-1" Research, Engineering And Office	9
"REO-2" Research, Engineering And Office	9
"REO-3" Research, Engineering And Office	9
Limited Manufacturing District Areas	11
Special Industrial District Area	13
Small Business District Area	13
Optional Development Alternatives	13
"Residential Cluster I"	6
"Residential Cluster II"	6
"Residential Cluster III"	6
"PRD" Planned Residential Developments	14
Montgomery Village Planned Development	15
"Mt. Laurel II" Housing Obligations	16
Dedication Of Lands For Public Purposes	19
Airport Safety Zone	19
Existing Zoning	19
Land Development Ordinance Comprehensive Update	19
Attachment A: Summary Of Zoning Map Changes In The "REO", "RD" AND "MFG" Districts, 1974 To 1989	following 21

PREFACE



PREFACE

Between 1988 and the present, Montgomery Township has formulated and adopted a relatively large number of land use planning documents, each created to guide the development of the Township in a manner that maintains and builds upon the very positive qualities of life prevailing in the municipality.

However, since each of the documents are comprehensive and oftentimes include many pages of detailed data and information upon which the land use development proposals are based, the cost of reproducing all the documents has become prohibitive.

Additionally, as the various elements of the Master Plan have been formulated and adopted by the Planning Board over the years, relevant data and information appearing in previously adopted portions of the Master Plan have been updated, so that the reader of one particular document may not have all of the most current data and information at hand.

Therefore, it is an important purpose of this document to organize and summarize the material appearing in the various Master Plan Elements adopted between 1988 and the present. In this way, a single document can be affordably reproduced and made available to the public and the officials and staff of the Township.

This document also contains updated information not appearing in previous documents adopted by the Planning Board. An example of such updated information is the mapping of fresh water "wetlands" from photo maps prepared by the N.J. State Department Of Environmental Protection & Energy utilizing March 1986 infrared photographs.

Finally, this document has been prepared to fulfill the Township's responsibility, in accordance with N.J.S.A. 40:55D-89 of the Municipal Land Use Law, to generally reexamine its Master Plan and development regulations. As part of the reexamination, this document contains an updated "Land Use Plan Element" portion of the Township Master Plan.

When adopted by the Planning Board, this "Master Plan Summary And 1993 Periodic Reexamination Report" will become an official part of the Township Master Plan, and any updated information included in this document is intended to replace any older information appearing in prior documents adopted by the Board. However, it is not intended that the previously adopted elements of the Master Plan be replaced by this document, since the previously adopted documents oftentimes include detailed data and information which has not been reproduced in this document.

FOREWORD



FOREWORD

The Planning Process of Montgomery Township

The Master Plan of Montgomery Township represents the goals and policies of the municipality concerning the use and accessibility of its land and the provision of the facilities and services needed to support various land use activities in a manner which protects public health and safety and promotes the general welfare.

Clearly, the extent to which public policy can influence the physical development of the Township of Montgomery is dependent upon a number of considerations: existing land uses and the character of development which already has taken place; housing needs, both on a local and regional level; the need for community services and facilities to service the existing and future population; the problems and potentials of the existing roadway system; and, finally, the physical characteristics of the land, particularly in areas which are not served by public utilities.

The planning process of any municipality is a continuing program of study, discussion, coordination and direct action which is intended to provide perspective and understanding to developmental decisions. The planning process is comprehensive in three (3) ways: first, it involves both the short and long range in terms of time; second, though centered on the guidance of physical change, appropriate consideration is given to social and economic factors; and, third, while implemented by local action, there is careful consideration given to County, regional and State recommendations and requirements.

In order for a municipal planning process to remain viable, systematic review and re-evaluation of the Master Plan and implementing Ordinances is necessary in order to prevent their rapid obsolescence. The rate, location or character of actual growth may require adjustment of basic assumptions in the light of new knowledge and changed conditions. Moreover, the degree of success in implementing certain aspects of the Master Plan may suggest a shifting in the general approach. The review and re-evaluation procedure is a part of the comprehensive planning process and is necessary in order to keep the municipality attuned to current and future needs which can be more clearly realized and dimensioned as time passes.

The overriding purpose of Montgomery Township's Master Plan is to prescribe the most appropriate physical development for the Township, both in terms of long-term positive results and short-term negative impacts. In this regard, Montgomery Township strives for "balanced growth".

While the term "balanced growth" is ambiguous, with no precise percentage ratio of measurement universally applicable, the concept is fundamental; it is the desire and goal to have different types of development take place in concert with each other, including residential development, commercial development, employment generating development, infrastructural improvements, recreational provisions, open space acquisition, and the maintenance of a sufficient level of municipal services and facilities including schools, fire and police protection, and administrative offices; and all of this must take place in a manner which maintains the desired quality of life.

The correct "balanced growth" for Montgomery Township must attempt to preserve the rural residential quality of much of the Township's land area while addressing the inevitable pressures upon the Township for it to develop relatively densely and intensely. If the attempt for "balanced growth" is to be successful, it must be both pragmatic and definitive.

The current Master Plan of Montgomery Township consists of a number of principal documents:

- The "Master Plan Periodic Reexamination Report", dated July, 1988, was adopted by the Planning Board on August 8, 1988.
- The "Part I: Background Studies" portion of the Township Master Plan, dated October 1988, was adopted by the Planning Board on October 31, 1988.
- The "Part II: Traffic Circulation Plan Element" portion of the Township Master Plan, originally adopted December 15, 1986, was comprehensively amended on June 26, 1989, October 15, 1990 and on November 30, 1992.
- The "Part III: Land Use Plan and Housing Plan Elements", dated November 1989, were adopted by the Planning Board on November 20, 1989.
- The "Part IV: Historic Preservation Plan Element" dated May 1992, was adopted by the Planning Board on July 13, 1992.
- The "Part V: Existing Land Use Update And Build-Out Analysis", dated June 1990, was adopted by the Planning Board on October 15, 1990.
- The "Part VI: Recreation Plan And Conservation Plan Elements", dated July 1991, were adopted by the Planning Board on August 12, 1991.

Summarily, the Master Plan of Montgomery Township addresses in broad terms the developmental choices which seem logical in the context of past trends, present conditions, and informed assumptions about the future growth of the municipality. The Master Plan coordinates all relevant objectives, proposals and standards felt appropriate and necessary in determining and clarifying developmental decisions appropriate at the municipal level of government.

A Master Plan is a guide which is adopted by the Planning Board. The laws to implement the Master Plan, however, are the responsibility of the Township Committee, and include the adoption of Land Development Ordinance provisions.

STATEMENT OF GOALS,
POLICIES AND OBJECTIVES



TOWNSHIP OF MONTGOMERY
MASTER PLAN

STATEMENT OF OBJECTIVES, PRINCIPLES, ASSUMPTIONS, POLICIES AND STANDARDS

The Municipal Land Use Law, enacted by the State Legislature on January 14, 1976, empowers municipal governments with the right to control the physical development of the lands within their bounds. N.J.S.A. 40:55D-2 of the Municipal Land Use Law, as amended, lists fifteen (15) general purposes regarding the local planning process which are as follows:

- a. To encourage municipal action to guide the appropriate use or development of all lands in this State, in a manner which will promote the public health, safety, morals and general welfare;
- b. To secure safety from fire, flood, panic and other natural and man-made disasters;
- c. To provide adequate light, air and open space;
- d. To ensure that the development of individual municipalities does not conflict with the development and general welfare of neighboring municipalities, the county and the State as a whole;
- e. To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions and preservation of the environment;
- f. To encourage the appropriate and efficient expenditure of public funds by the coordination of public development with land use policies;
- g. To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens;
- h. To encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which would result in congestion or blight;
- i. To promote a desirable visual environment through creative development techniques and good civic design and arrangements;
- j. To promote the conservation of historic sites and districts, open space, energy resources and valuable natural resources in the State and to prevent urban sprawl and degradation of the environment through improper use of land;

- k. To encourage planned unit developments which incorporate the best features of design and relate the type, design and layout of residential, commercial, industrial and recreational development to the particular site;
- l. To encourage senior citizen community housing construction;
- m. To encourage coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land;
- n. To promote utilization of renewable energy resources;
- o. To promote the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices designed to incorporate the State Recycling Plan goals and to compliment municipal recycling programs.

Land Use Development Goals:

Consistent with the general purposes of the Municipal Land Use Law which the Township of Montgomery embraces, the Township has extrapolated certain specific objectives and goals for its future development which are defined as follows and which were adopted on November 20, 1989 as part of the "Part III: Land Use Plan and Housing Plan Elements" portion of the Township Master Plan:

- 1. The Development Plan of Montgomery Township should maintain the continuity of the Township's planning process and build upon and refine the past planning decisions of the municipality, consistent with present local and regional needs, desires and obligations.
- 2. The identity of the Township as a totality and the integrity of individual neighborhood areas should be preserved, enhanced and created to the maximum extent possible.
- 3. The Development Plan should recognize the physical characteristics of the Township and acknowledge the inherent capabilities and limitations of the land to host different types of community development at appropriate densities and intensities.
 - a. Conservation of existing natural resources should be an integral part of the planning process, with special attention to the constraints of environmentally critical and sensitive areas;
 - b. Applicable facilities, basin and area wide plans, especially concerning the regional potable water supply, should be implemented in order to prevent adverse environmental impacts upon lands

within adjacent municipalities and the general vicinity of the Township; and

- c. Open space and farmland should be preserved to the maximum extent possible.
4. The Development Plan should strive to prevent the homogenous spread of suburban development throughout the municipality. Specific areas of the Township should be designated for specific types of residential and non-residential development. The rural and country atmosphere which prevails throughout most of the municipality should be maintained.
5. Recognizing the housing obligations of the municipality, but attempting to prevent sprawl and maintain a development mix balanced between residential and non-residential construction, the Development Plan should guide and contain the principal commercial and higher density residential development within the municipality to specific areas of concentrated land uses. One of these areas, referred to as the Rocky Hill node, currently exists along Route 206 near its intersection with Route 518. A second area, originally proposed in the 1974 "Housing Report", is situated within the Belle Mead area of the Township at the northern terminus of Route 206 north of Crusier Brook and Belle Mead-Griggstown Road, and is referred to as the Belle Mead node.
6. Between the two (2) nodes of concentrated development along Route 206, both near the Route 518 intersection and in the Belle Mead area, the Development Plan should strive to prevent the evolution of strip commercial uses along Route 206. Clustered single-family residential development should be permitted, thereby providing a reasonable non-commercial use of the lands which abut the major traffic carrier.
7. The Development Plan shall provide that the future relatively high density housing to be permitted in the Belle Mead node be planned as part of relatively large scale developments in order to insure that adequate roads, recreational areas, drainage facilities, public water and sewerage facilities and other infrastructural improvements are constructed commensurate with the residential development.
8. The principal retail shopping facilities within the municipality should be provided within proximity to the two (2) nodes of concentrated residential development in order to avoid the proliferation of vehicular shopping trips.
9. Industrial, research and office acreage should be controlled with appropriate regulations, without denying the needs of modern research and manufacturing activities and without threatening the existing balance between residential and non-residential development within the municipality and the benefits of a balanced tax base.

10. Proper and adequate water supplies and sewerage facilities should be planned along the Route 206 corridor in order to provide the reasonable opportunity for the implementation of the foregoing Development Plan recommendations.
11. A policy of encouraging the preservation of historic districts, sites and structures, through the formulation of appropriate mechanisms to identify and protect those districts, sites and structures which are of value to Montgomery Township, should be pursued and implemented.

Traffic Circulation Goals:

In addition to the preceding goals and objectives adopted by Montgomery Township as part of the combined Land Use Plan and Housing Plan Elements of the Master Plan, the following additional goals and objectives were adopted on November 30, 1992 as part of the "Part II: Traffic Circulation Plan Element" portion of the Township Master Plan:

- a. The Township should utilize the existing roadways within the Township to the greatest extent possible in order to increase the probability of having the Traffic Circulation Plan implemented due to the practicality of improving existing roads rather than building new ones.
- b. All roadways in the Township should be provided with the minimum improvements necessary to provide safe travel; over improvements will cause traffic speeds to unnecessarily increase, will cut-back many existing front yards, and will require the removal of any existing vegetation along the road's frontage.
- c. No particular roadway in the Township should be called upon to move volumes of traffic which will result in the necessity to improve the roadway in a manner incompatible with residential development; therefore, traffic should be diffused among a variety of alternate routes rather than channeling traffic to any particular route.
- d. Residential lots which abut or have direct driveway access to Route 206 and certain other relatively major roadways in the Township should be relatively large in size and have relatively wide frontages in order to achieve the following related objectives:
 - o To lessen the number of potential new driveway access points, thereby lessening turning movements and interference with the through flow of traffic;
 - o To lessen the need to provide wide paved cartways on the roads, thereby maintaining the rural residential character of the Township to the maximum extent possible; and

- To set back a house a sufficient distance from the "arterial" or "major collector" road in order to protect the residents from the nuisances associated with the relatively high volumes of traffic that will travel the roads in the future.

Historic Preservation Goals:

Montgomery Township's desire to preserve and protect the historic districts, sites and structures in the municipality stated in "goal and objective" No. 11 above, coupled with a stated purpose of the Municipal Land Use Law "to promote the conservation of historic sites and districts...", led the Township to establish a Landmarks Preservation Commission pursuant to N.J.S.A. 40:55D-107 of the Municipal Land Use Law and municipal Ordinance No. 89-621. In addition to establishing the Commission, Ordinance No. 89-621 also prescribes the standards and procedures to be followed by the Commission in the designation and preservation of historic landmarks in Montgomery Township.

Municipal Ordinance No. 89-621 contains the following two (2) specific "goals and objectives" relative to historic preservation which were adopted by the Township on July 13, 1992 as part of the "Part IV: Historic Preservation Plan Element" portion of the Township Master Plan:

1. To effect and accomplish the protection, enhancement and perpetuation of historic sites and districts that represent or reflect elements of the Township's cultural, social, economic, political and architectural history; and
2. To safeguard the Township's historic and cultural heritage as embodied and reflected in its historic sites and districts by protecting sites and districts from incompatible new development and inappropriate expansion of infrastructure within those historic districts, to protect isolated sites from inappropriate demolition, and to take other necessary and appropriate actions pursuant to this ordinance to ensure the continued existence of Montgomery Township's rich historical heritage.

Recreation, Conservation & Open Space Goals:

In addition to the preceding goals and objectives adopted by Montgomery Township, the following courses of action relative to the provision of recreational facilities and open spaces were specifically adopted by the Township on August 12, 1991 as part of the "Part VI: Recreation Plan And Conservation Plan Elements" portion of the Township Master Plan:

Recreation Facility Development Goals

- Provide facility development, to the extent practicable, in accordance with the recommendations of the Recreation Plan Element;

- Create a neighborhood level park for each planning district within the Township and consider the development of at least one (1) more community park in the southern section of the Township to augment the facilities provided by Montgomery Park and the Board of Education facilities in the northern and central sections of the Township, with ease of access from both residential and employment areas;
- Provide to the extent possible a complete array of accessory facilities at each major recreation area in the Township, including restrooms, picnic areas, parking, lighting and storage facilities;
- Encourage the on-site development of recreation facilities within major residential development projects and consider the use of development impact fees as an alternative to providing on-site facilities; and
- Encourage the development of recreation facilities on private non-residential projects.

General Recreation Goals

- Exchange a dialogue between the Township and the Board of Education regarding the continued sharing of municipal and school recreational facilities; the development of new facilities on municipal and school lands; and, when appropriate, the creation of separate facilities for municipal or school use;
- Expand maintenance programs as necessary to accommodate the development of new recreational facilities; consider the creation of a Department of Parks Development as opposed to the existing division within the Department of Public Works.
- Provide for the review for all major development projects by the Recreation Committee; and
- Encourage the use of creative recreation development, including adopt-a-park and donate-a-bench programs, in order to provide assistance to the Township in broadening its recreational inventory.

Pathways and Greenbelts Goals

- Preserve and protect environmentally sensitive lands and develop a continuous greenbelt coinciding primarily with the stream corridors within the Township;
- Preserve existing pathways found along streams, through wetlands and adjacent fields;
- Provide, to the extent possible, connections between the active recreation, school and open space facilities of the Township through use of a coordinated pathway system;
- Provide a circulation system which will encourage an alternate to vehicular movement and use by residents as pedestrians or bicyclists; and

- Plan for and acquire public access corridors, in concert with the development of lands, to ensure that non-vehicular public rights-of-way will exist for future use by the Township residents for their enjoyment, recreation and movement.

Open Space Goals

- Preserve, protect and benefit from lands endowed with natural resources such as stream corridors and wetlands;
- Provide a source of passive recreational opportunities for the enjoyment of present and future Township residents;
- Provide for public and semi-public lands through municipal acquisition, private donations, deed restriction, easements and common open space (through clustering); and
- Identify standards for the future preservation of open lands within tracts to be developed, and consider and encourage innovative development design which provides for greater common open space.

Farmland Preservation Goals

- Preserve existing farmland, woodlands and open space and protect prime agricultural lands within the Township; and
- Encourage private and public support and participation in the New Jersey State Farmland Preservation Program.

EXISTING LAND USES
AND APPROVED DEVELOPMENT



EXISTING LAND USES AND APPROVED DEVELOPMENT

INTRODUCTION

Montgomery Township is situated in the southeastern corner of Somerset County and contains approximately 32.26 square miles or 20,646 acres of land. It is traversed from north to south by State Route 206 and County Route 601 and from east to west by County Route 518. Approximately six (6) miles of railroad, formerly known as the Reading Railroad, but now owned by Conrail, spans the Township in a northeast-southwest direction. Montgomery Township is bounded by Hillsborough Township to the north; Princeton Township to the south; Franklin Township to the east; Hopewell and East Amwell Townships to the west and surrounds the Borough of Rocky Hill on its north, west and south sides. The municipality is generally rural in character, with concentrations of development in the northeastern and southeastern portions. The landscape is characterized by many brooks, wooded areas, historic districts and farmland.

An analysis of the existing land use in Montgomery Township documents the current physical development of the municipality and is the fundamental first step in formulating a plan for the allocation of future land uses. Only by mapping the various land uses within a jurisdiction can the underlying relationships between these uses be brought into clear focus. Additionally, an analysis of existing land uses reveals areas in a municipality where current development trends, coupled with other variables which serve to control the physical development of land, may engender future land use related problems, such as destruction of environmental resources, the compounding of traffic circulation problems or the disruption and degradation of existing neighborhood areas.

An overriding purpose of the June 1990 "Existing Land Use Update And Build-Out Analysis" (Part V of the Master Plan) was to analyze the then current development pattern of the Township, both constructed and approved for construction, in order to determine what lands remained for future development and to ensure that the eventual construction of these lands would take place in harmony with the existing development and produce the desired quality of life.

THE BUILD-OUT BASE MAP

The "Build-Out Base Map" used for the presentation of the graphic material within the body of this document was prepared from the January 1990 Township Tax Maps, with information added from major residential developments which received preliminary and/or final approval as of December 31, 1989 and which did not appear on the Township Tax Maps revised to November 1989.

It should be noted at the outset that the data presented in this report is somewhat dated (1989-1990), and both the Township Tax Maps and the approval status of major residential developments in the Township has changed during the last three (3) years. Therefore, the information and data presented in this

report should be understood to indicate only an estimate of the amount of land in the Township which is developed or is approved for development.

Updated information is contained in Attachment A to this report, including the following:

- A new "Build-Out Base Map" updated with January 1993 data;
- A colored map photograph indicating "Existing Land Uses" as of January 1990 and "Approved Residential Development To Be Built" as of January 25, 1993;
- A map and accompanying chart identifying the "Major Subdivisions Appearing On Tax Map Sheets Revised Through December 1992 But Not Yet Built"; and
- A map and accompanying chart identifying the "Preliminary And/Or Finally Approved Major Residential Developments As Of January 25, 1993 Not Appearing On Tax Map Sheets Revised Through December 1992.

However, the updated information contained in Attachment A is not discussed further in the body of this report since the updated information is not directly comparable to the information appearing in the June 1990 "Existing Land Use Update And Build-Out Analysis" (Part V of the Master Plan) which is summarized herein.

EXISTING LAND USES

During January of 1990, a field survey was undertaken to update the existing land uses throughout the Township of Montgomery on a lot-by-lot basis. The findings of the survey are illustrated on the "Existing Land Use, January 1990" map photograph. Eight (8) land use categories have been generated from the field survey to include all lands within the Township. Additionally, barns, cemeteries, and detention basins have been noted on the map. The attached chart, entitled "Existing Land Use And Approved Build-Out Acreage Distribution, January 1990", indicates among other information the approximate amount of land occupied by the various land use categories in 1990.

Single Family Residential Land Use

The majority of the single family dwellings have been constructed in the northeastern portion of the Township, with the greatest concentration east of Pike Brook. Additional major subdivision development has occurred on scattered tracts west of Route 206; but the bulk of residential development in the western portion of the Township continues to be the "ribbon residential" or rural residential pattern of development. The "ribbon residential" development pattern exploits the existing road frontage of the rural collector road network, in large part via creeping minor subdivisions, in order to permit the maximum number of lots along the road frontage without the necessity of constructing any additional roads.

EXISTING LAND USE ACREAGE DISTRIBUTION, JANUARY 1990

<u>Land Use Categories</u>	<u>Approximate Acreage</u>	<u>Percentage of Total</u>
Single-Family Residential	3,427.92	16.60
Multiple-Family Residential/Townhouse	147.50	0.71
Commercial/Office	477.94	2.31
Public	2,524.25	12.23
Quasi-Public	729.66	3.53
Industrial	197.95	0.96
Vacant/Agricultural/Roads	9,426.21	45.66
Wooded	<u>3,714.57</u>	<u>18.00</u>
TOTALS:	20,646.00	100.00

- NOTES:
- Montgomery Township contains 32.26 square miles or 20,646 acres.
 - Yellow square designations for "residential" uses were attributed one (1) acre each.

SOURCE: Richard Thomas Coppola and Associates planimetric and geometric measurement of "Existing Land Use" map dated January 1990.

Public Land Use

Included in the public land use category are the Township school complex on Burnt Hill and Orchard Roads; the Sourland Mountain Park owned by Somerset County; the Township municipal building and police offices on State Route 206; the park and ballfield facilities in the Belle Mead area; the Montgomery Park facility on Harlingen Road; and the extensive lands of the North Princeton Developmental Center. Additionally, the State of New Jersey is continuing to acquire lands as part of the Millstone River Park and the D&R Canal State Park along the eastern boundary of the Township.

Quasi-Public Land Use

Included in this category are the Bedens Brook and Pike Brook Country Clubs; the Carrier Foundation; the New Jersey Beagle Club; the Elks Club; the Waldorf School; the Princeton Montessori School; and a number of churches and cemeteries located throughout the municipality.

Industrial Land Use

The locational pattern of the industrial uses in the Township is much less established than the commercial pattern. Actually, there are only three (3) significant industrial land uses in Montgomery Township: the 3M Corporation in the northwestern corner of the Township comprising approximately twenty (20) acres; the Truesdell Property tract in the western portion of the Township comprising 7.33 acres; and the Johnson & Johnson facility, in the western portion of the Township adjacent the railroad right-of-way at the Grandview Road/County Route 601 intersection, comprising 170.6 acres. It should be noted that the entire Johnson & Johnson tract includes approximately 257 acres; however, 170.6 acres is used and assessed as an industrial use and the remaining 85.5 acres is used and assessed as farmland.

Vacant/Agricultural/Roads Land Use

Vacant and agricultural land uses are dispersed throughout the municipality and exemplify both the rural nature and the tradition of farming in Montgomery Township. Most of the tracts comprising the Vacant/Agricultural land use category are very large, making the category the largest in the Township in terms of acreage.

However, while these lands may be considered the undeveloped lands in Montgomery Township, the lands are not necessarily appropriate for development. The environmental, transportation and community facility limitations imposed upon the undeveloped lands in the Township significantly restricts their availability for future development. Additionally, legitimate policy decisions concerning the preservation

of agricultural lands and open space conservation may limit further the amount of lands which may be considered available and appropriate for new development.

Wooded Land Use

While not always considered a land use per se, significant wooded areas do occupy lands throughout Montgomery Township and are an important land use factor. The single greatest concentration of trees is within the northwestern portion of the Township amidst the rocky soils and rugged topography; elsewhere, the woods generally border the streams, brooks and tributaries throughout the municipality.

Barns

For informational purposes, the approximate location of the many barns within Montgomery Township are indicated on the January 1990 Existing Land Use map.

Cemeteries

For informational purposes, the location of the many cemeteries within Montgomery Township are indicated on the January 1990 Existing Land Use map.

Detention Basins

For informational purposes, the location of the many detention basins within Montgomery Township, both in residential and non-residential developments, are indicated on the January 1990 Existing Land Use Map.

APPROVED MAJOR RESIDENTIAL DEVELOPMENTS

The first step in the Build-Out Analysis process was to analyze in terms of acreage and potential new lots and/or housing units, the preliminary and/or finally approved major residential developments in the Township as of December 31, 1989 which did not appear on the Montgomery Township Tax Maps revised to November 1989. Results of this analysis documented forty-two (42) major residential developments which are delineated on the attached map.

The forty-two (42) major residential developments represent a combined approval of 2,979 potential new lots/units covering 2,988.73 acres of land. It should be noted, however, that 2,219 lots/units or approximately seventy-five percent (75%) of the total have received only preliminary approval and may not receive final approval and/or may not begin construction for several years due to present market conditions.



**PRELIMINARY AND/OR FINALLY
 APPROVED MAJOR RESIDENTIAL
 DEVELOPMENTS
 AS OF DECEMBER 31, 1989
 NOT APPEARING ON
 MONTGOMERY TOWNSHIP TAX MAPS
 REVISED TO NOVEMBER 1989**

**BUILD-OUT BASE MAP
 TOWNSHIP OF MONTGOMERY
 SOMERSET COUNTY, NEW JERSEY**



BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • Revised January 1990
 BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • January 1990
PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey.

OTHER BUILDABLE RESIDENTIAL LOTS

The second step in the Build-Out Analysis was to analyze in terms of acreage and potential new housing units the existing individual buildable residential lots which are incapable of further subdivision under current zoning as they appear on the Montgomery Tax Maps revised to November 1989. A total of 281 existing individual buildable residential lots were present in the Township, covering a total of 541.38 acres. These lots do not include landlocked lots without frontage on approved Township roadways; such lots are included within a later section of this analysis.

APPROVED NON-RESIDENTIAL SITE PLANS

The third step in the Build-Out Analysis was to analyze in terms of acreage and square footage the approved non-residential site plans as of December 31, 1989. Five (5) approved non-residential site plans were identified. The total approved non-residential square footage summed to 712,964 square feet covering 116.95 acres.

AGGREGATE SUMMARY

The fourth step of the Build-Out Analysis was to analyze the information which was gathered thus far. Indicated on the "Aggregate Summary" chart is a compilation of the three (3) previously discussed groups of information as follows:

- Preliminary and/or finally approved major residential developments as of December 31, 1989 not appearing on the Montgomery Township Tax Maps revised to November 1989;
- Existing individual buildable residential lots incapable of further subdivision under current zoning as they appeared on Montgomery Township Tax Maps revised to November 1989; and
- Approved non-residential site plans as of December 31, 1989 not yet constructed or under construction.

As shown on the "Aggregate Summary" chart, the sum of these three (3) groups of information represents a total of 3,260 additional approved and existing buildable residential lots/units and 712,964 square feet of non-residential space; all covering an aggregate 3,647.06 acres of land.

The results of this overall summary are illustrated in appropriate colors on the "Existing Land Use And Lands Approved For Development" map photograph dated January 1990.

AGGREGATE SUMMARY CHART

Aggregate Summary Of Delineated Preliminary
And/Or Finally Approved Major Residential Developments
Not Appearing On Montgomery Township Tax Maps
Revised To November 1989
And Existing Individual Buildable Residential Lots
Incapable Of Further Subdivision Under Current Zoning
And All Approved Non-Residential Site Plans Not Yet Constructed
Or Under Construction As Of December 31, 1989

Acreage And Lot-Unit/Square Footage Breakdown By Land Use Category And Zone District

LAND USE CATEGORY	ACREAGE	NO. LOTS-UNITS OR SQ. FOOTAGE
I. <u>Single Family Residential</u>		
R	2.17	3
R-1	1,085.92	757
R-2	72.67	12
R-3	17.56	5
MR	168.98	40
VN	1.05	2
Residential Clusters I (1)	1,241.63	1,146
Residential Clusters II (1)	<u>81.69</u>	<u>142</u>
Subtotal:	2,671.67	2,107
II. <u>Multiple Family Residential/ Townhouses</u>		
R-1	6.26	26
APT/TH	64.79	441
HC (2)	3.07	16
Planned Residential Developments (1)	<u>48.06</u>	<u>670</u>
Subtotal:	122.18	1,153
III. <u>Commercial/Office</u>		
HC	4.99	34,915
REO-1	61.86	565,838
REO-2	16.50	52,892
REO-3	<u>33.60</u>	<u>59,319</u>
Subtotal:	116.95	712,964 sq. ft.

IV. Public

R-1	27.66	-
MR	1.94	-
Residential Clusters I (1)	<u>47.80</u>	-
<u>Subtotal:</u>	77.40 (3)	-

V. Quasi-Public

Residential Clusters I (1)	<u>252.38</u> (4)	-
<u>Subtotal:</u>	362.89	-

VI. Vacant/Agricultural/Roads

R-1	86.51	-
MR	8.46	-
APT/TH	3.96	-
Residential Clusters I (1)	173.29	-
Residential Clusters II (1)	16.59	-
Planned Residential Developments (1)	<u>7.16</u>	-
<u>Subtotal:</u>	295.97	-

Total Acreage: 3,647.06 Acres

Total Individual Buildable Residential Lots/Units: 3,260 Lots/Units

Total Approved Non-Residential Square Footage: 712,964 Square Feet

FOOTNOTES

- (1) For purposes of this summary, the "Residential Clusters I", "Residential Clusters II" and "Planned Residential Developments" optional development alternatives were separated out from the "R-1" and "R-2" Single-Family Residential Districts.
- (2) Hilton Realty "use"/bulk variance and final site plan approval for sixteen (16) Senior Citizen units within the "HC" Highway Commercial District.
- (3) An additional 62 acres of Public Lands have been acquired by the Township on two (2) sites: the 50 acre Great Road Park and the 12 acre Municipal Complex Park, for a total of 139.40 acres of Public Lands.
- (4) Acreage figure does not include 110.51 acres already included within the Quasi-Public category currently utilized by the Pike Brook Country Club golf course, but included within the total acreage of the Oakmont Country Club development application.



January 1990
**EXISTING LAND USE
 AND LANDS APPROVED FOR DEVELOPMENT***

- Single Family Residential
- Multiple Family Residential/Townhouses
- Commercial/Office
- Public
- Quasi-Public
- Industrial
- Vacant/Agricultural
- Wooded
- Barn
- Cemetery
- Detention Basin

SOURCE: January 1990 field survey.
**BUILD-OUT BASE MAP
 WITH 100-YEAR FLOOD BOUNDARY**
TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY

1" = 100'

0 100 200 300 400 500 FEET

SCALE IN FEET

BAS MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton-New Jersey • Revised January 1990
 BUILD-OUT BAS MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton-New Jersey • January 1990
 DISPLAY PREPARED BY: Richard Thomas Coppola and Associates, Princeton-New Jersey

COMPARISON OF EXISTING LAND USE (1990) AND APPROVED BUILD-OUT

As shown on the "Existing Land Use And Approved Build-Out Acreage Distribution" chart dated January 1990, the acreage distributions by land use category existing in January 1990 and with the approved build-out have been listed and compared in terms of acreage change and total percentage change.

As noted on the chart, all of the land use categories will increase in acreage between January 1990 and the eventual construction of approved build-out lands except for the Vacant/Agricultural/Roads and Wooded land use categories which will experience a decrease in acreage.

LOTS CAPABLE OF FURTHER SUBDIVISION

The fifth step of the build-out analysis process was to analyze in terms of acreage and theoretic number of new housing units, the existing residential lots capable of further subdivision under current (1989) zoning. It should be noted that some of the lots are landlocked and will require consolidation with other lots having frontage on approved Township roadways in order to form feasible development tracts. The analysis concluded that 4,866 theoretic new residential units are possible under current (1989) zoning covering a total of 7,805.40 acres.

It should be noted that for purposes of this procedure the "MR/SI" Mountain Residential/Special Industrial District has been calculated on the basis of future single-family residential land use only, and not on the basis of a "special industrial" use. The reason for this is that the present Minnesota Mining and Manufacturing (3M) quarrying operation is the only non-residential use permitted by Ordinance in this district. Any expansion of this use is unlikely because it depends upon a quarrying operation in neighboring Hillsborough Township which supplies 3M with raw materials for its operation. If the quarry in Hillsborough Township were to cease its operations, the 3M operation in Montgomery also would cease.

POTENTIAL LOTS IN PLANNED DEVELOPMENTS

The sixth step of the Build-Out Analysis was very similar to the fifth step, in that the existing residential lots capable of further subdivision under current zoning were analyzed and quantified; however, in this step the net change in theoretic new units due to the optional development alternatives permitted within the Township have been calculated.

Within the area permitting the "Residential Clusters I" option, 362 theoretic new units are possible on 436.82 acres, compared to 173 theoretic new units under the underlying zoning for a net change of an additional 189 theoretic new units.

Within the area permitting the "Residential Clusters II" option, 223 theoretic new units are possible on 99.57 acres, compared to 99 theoretic new units under the underlying zoning for a net change of an additional 124 theoretic new units.

EXISTING LAND USE AND APPROVED BUILD-OUT ACREAGE DISTRIBUTION
JANUARY 1990

Land Use Categories	1990 Existing		Approved Build-Out		Acreage Change	Total % of Change
	Approx. Acreage	% of Total	Approx Acreage	% of Total		
Single-Family Residential	3,427.92	16.60	6,099.59	29.54	+2,671.67	+12.94
Multiple-Family Residential/Townhouse	147.50	0.71	269.68	1.31	+ 122.18	+ 0.60
Commercial/Office	477.94	2.31	594.89	2.88	+ 116.95	+ 0.57
Public	2,524.25	12.23	2,663.65	12.90	+ 139.40	+ 0.67
Quasi-Public	729.66	3.53	982.04	4.76	+ 252.38	+ 1.23
Industrial	197.95	0.96	197.95	0.96	-	-
Vacant/Agricultural/Roads	9,426.21	45.66	7,313.53	35.42	-2,112.68	-10.24
Wooded	<u>3,714.57</u>	<u>18.00</u>	<u>2,524.67</u>	<u>12.23</u>	<u>-1,189.90</u>	<u>- 5.77</u>
TOTALS:	20,646.00	100.0	20,646.00	100.0	0	

- NOTES:
- Montgomery Township contains 32.26 square miles or 20,646 acres.
 - Yellow square designations for "residential" uses were attributed one (1) acre each.
 - "Approved Build-Out" means all preliminary and/or finally approved major residential developments, and all approved site plans as of December 31, 1989 not appearing on Montgomery Township Tax Maps revised to November 1989, and existing individual buildable residential lots incapable of further subdivision under current zoning.

SOURCE: Richard Thomas Coppola and Associates planimetric and geometric measurement of "Existing Land Use And Lands Approved For Development" map dated January 1990, Montgomery Township Tax Maps revised to November 1989, and preliminary or finally approved subdivision plats and site plans as of December 31, 1989.

Within the area permitting the "Planned Residential Developments" option, 640 theoretic new units are possible on 191.20 acres, compared to 149 theoretic new units under the underlying zoning, resulting in a net change of an additional 491 theoretic new units. It should be noted that the 640 units possible under the "Planned Residential Developments" option have received "concept plan approval" as part of the Pike Run Planned Residential Development; therefore, this land area will not be developed under the underlying zoning. It further should be noted that the Pike Run Planned Residential Development also will yield 100,200 square feet of commercial space.

Within the area permitting the "Montgomery Village Planned Development" option, 591 theoretic new units are possible, compared to 74 theoretic new units under the underlying zoning, resulting in a net change of an additional 517 theoretic new units. It should be noted that the Montgomery Village Planned Development will yield the same amount of commercial, research, office, etc. as would the underlying zoning.

In sum, the grand total theoretic number of new units under current underlying zoning is 4,866 units on 7,805.40 acres, compared to the grand total theoretic number of new units under the optional development alternatives of an additional 6,187 theoretic new units; thereby representing a net change of an additional 1,321 theoretic new units.

POTENTIAL NON-RESIDENTIAL DEVELOPMENT

The seventh step of the Build-Out Analysis was to analyze in terms of acreage and theoretic square feet of non-residential space the development potential of non-residential lots capable of further development under current (1989) zoning in the "REO-1", "REO-2", "REO-3", "LM", "SB", "NC" and "HC" Districts.

Total acreage for the area studied, which includes all lots within the "REO", "LM", and "SB" Districts and vacant lots within the "NC" and "HC" Districts, is 1,484.37 acres; while total critical acreage for the same area is 181.21 acres.

Total additional or potential gross floor area for the study area sums to a minimum of 3,950,453 square feet and a maximum of 6,541,828 square feet, depending upon the particular land uses developed.

CONCLUSION

While no short summary can adequately convey and describe the implications of the data presented in the June 1990 "Part V: Existing Land Use And Build-Out Analysis" portion of the Master Plan, a few items of information may serve to indicate the changes in the development character of Montgomery Township which can occur based upon application approvals already granted by Montgomery Township for future development:

- If all of the approved developments were to be constructed, the amount of vacant, agricultural, and wooded lands in the Township would decrease from approximately sixty-four percent

(64%) of the Township's land area to approximately forty-eight percent (48%); a decrease of approximately 3,300 acres;

- Of the approximate 3,300 acres, approximately 2,800 acres would be utilized for residential construction.

When the additional potential development of the remaining vacant lands within Montgomery Township under current (1989) Zoning Ordinance provisions are factored, the total number of new residential units would be approximately 5,000 to 6,000 units, depending upon the development options utilized. Since the existing (estimated 1988) number of residential units in Montgomery Township was 3,745 units, the theoretic potential is for an increase between 134% and 160%.

Regarding non-residential development, the data indicates that approximately 4-million to 6.5-million square feet of additional development could occur under current zoning within the Township, compared to the approximate 2.4-million square feet of development already existing or approved for construction.

While the information presented in this report is valuable in terms of planning for infrastructure and service needs, the information also presents a clear picture of what will occur in Montgomery Township under current zoning and indicates the limited possibilities for the municipality to modify the 'build-out' pattern that is ordained and in process of occurring at this time.

ATTACHMENT A

UPDATED INFORMATION

- A new "Build-Out Base Map" updated with January 1993 data;
- A colored map photograph indicating "Existing Land Uses" as of January 1990 and "Approved Residential Development To Be Built" as of January 25, 1993;
- A map and accompanying chart identifying the "Major Subdivisions Appearing On Tax Map Sheets Revised Through December 1992 But Not Yet Built"; and
- A map and accompanying chart identifying the "Preliminary And/Or Finally Approved Major Residential Developments As Of January 25, 1993 Not Appearing On Tax Map Sheets Revised Through December 1992.



BUILD-OUT BASE MAP PREPARED BY: Coppola and Coppola Associates, Princeton, New Jersey, February 1993 from Tax Map Sheets revised through December 31, 1992, and Preliminary and finally approved plats from Township records through January 25, 1993.

BUILD-OUT BASE MAP
TOWNSHIP OF MONTGOMERY
 SOMERSET COUNTY, NEW JERSEY



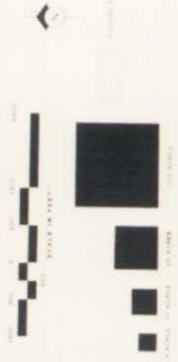


EXISTING LAND USE
 JANUARY 1990
 AND
 APPROVED RESIDENTIAL DEVELOPMENT
 TO BE BUILT

- EXISTING RESIDENTIAL
- APPROVED RESIDENTIAL TO BE BUILT
- PUBLIC AND QUASI-PUBLIC
- EXISTING NON-RESIDENTIAL

PROJECT PREPARED BY Coppola and Coppola Associates, Princeton, New Jersey, April, 1991.

BUILD-OUT BASE MAP
 TOWNSHIP OF MONTGOMERY
 SOMERSET COUNTY - NEW JERSEY



Vehicle Access (Easement)
 Water, Sewer, Unimproved Access, and an Access to Public Utility
 of State, Approved Prior to January 15, 1991.
 State Public Road for Road Right-of-Way Easement

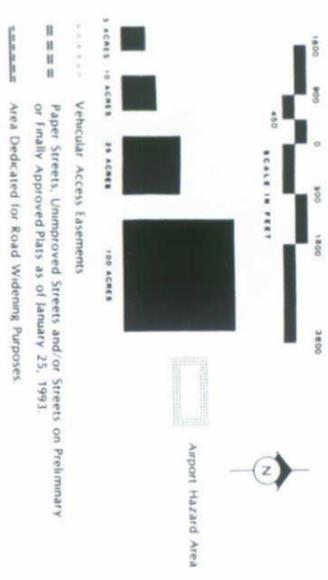
BUILD-OUT BASE MAP PREPARED BY Coppola and Coppola Associates, Princeton, New Jersey, February 1991. Source: LRA. Map digitized through December 31, 1992, and Preliminary and Final Approvals from township records through January 23, 1991.



**MAJOR SUBDIVISIONS
 APPEARING ON TAX MAP SHEETS
 REVISED THROUGH DECEMBER 1992
 BUT NOT YET BUILT**

**NOTE:
 PLEASE SEE ACCOMPANYING CHART FOR
 ADDITIONAL INFORMATION.**

**BUILD-OUT BASE MAP
 TOWNSHIP OF MONTGOMERY
 SOMERSET COUNTY, NEW JERSEY**



PREPARED BY: COPPOLA AND COPPOLA ASSOCIATES, PRINCETON, NEW JERSEY.

BUILD-OUT BASE MAP PREPARED BY Coppla and Coppla Associates, Princeton, New Jersey, February, 1993 from Tax Map Sheets revised through December 31, 1992, and Preliminary and Finally approved plats from Township records through January 25, 1993.

LIST OF MAJOR SUBDIVISIONS APPEARING ON TAX MAP SHEETS
REVISED TO 1992 BUT NOT YET BUILT

<u>Development</u>	<u>Case No.</u>	<u>Block/Lot</u>	<u>Applicant</u>	<u>Approval Status</u>	<u>No. of Lots/Units</u>	<u>Acreage</u>	<u>Zone District</u>
A. Pike Run	82/87	5001/1,4-8	Belle Mead Development Corp.	Final	119	152.48	R-1 (1)
B. Ridgeview Estates	89-87V	15001/15	H.A.K. Associates	Final	12	37.57	R-1
C. Woodcrest Estates	Unavailable	15001/69,71-82	Unavailable	Final	13	17.3	R-1
D. Cherry Valley	35-88V	30002/12-19, 38-45, 72-99 30003/62-67 31001/2.03 & 2.04, 2.13-2.15, 22-33, 117-141 31007/2.01,2.02, 2.11 & 2.12, 3-21	DKM Residential Properties, Inc.	Final	102	652.90 (2)	R-1 (1)
E. Cherry Hill Road	25-88V	33001/28	TM-10, A Limited Partnership	Final	10	68.23	R-2
F. Rockbrook/Princeton Heights	Unavailable	34010/1,2	Unavailable	Final	9	10.19	R-1
G. Princeton Village	Unavailable	37003/2.01-2.20 37004/1.01-1.85	Unavailable	Final	20 84	4.019 12.09	APT/TH

Footnotes:

- (1) Within "Residential Cluster I" Optional Development Alternative.
- (2) Of the total 652.90 acres, 326.95 acres utilized by Pike Brook Country Club and golf course, 41.30 acres for residential uses, and 4.50 acres for roads.

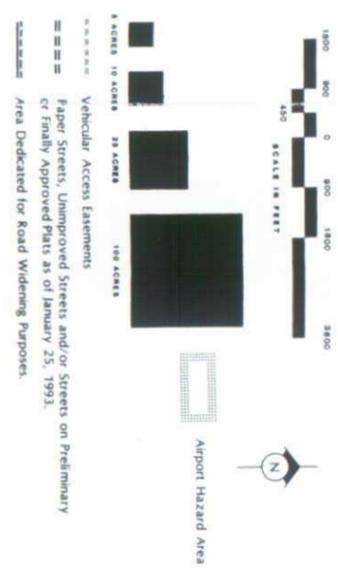
Prepared By:
Coppola & Coppola Associates
May 1993



PRELIMINARY AND/OR FINALLY
 APPROVED MAJOR RESIDENTIAL
 DEVELOPMENTS
 AS OF JANUARY 25, 1993
 NOT APPEARING ON
 TAX MAP SHEETS
 REVISED THROUGH DECEMBER 1992

- NOTES:
- 1.) PLEASE SEE ACCOMPANYING CHART FOR ADDITIONAL INFORMATION.
 - 2.) LOT LAYOUTS AND ROAD CONFIGURATIONS WITHIN PRELIMINARY APPROVED MAJOR RESIDENTIAL DEVELOPMENTS MAY CHANGE AT THE TIME OF FINAL APPROVAL, PRIMARILY AS A RESULT OF MODIFICATIONS IN ACCORDANCE WITH CONDITIONS OF PRELIMINARY APPROVAL.

BUILD-OUT BASE MAP
 TOWNSHIP OF MONTGOMERY
 SOMERSET COUNTY, NEW JERSEY



PREPARED BY: COPPOLA AND COPPOLA ASSOCIATES, PRINCETON, NEW JERSEY.

BUILD-OUT BASE MAP PREPARED BY: Coppola and Coppola Associates, Princeton, New Jersey, February 1993 from Tax Map Sheets revised through December 31, 1992, and Preliminary and finally approved plats from Township records through January 25, 1993.

LIST OF DELINEATED PRELIMINARY AND/OR FINALLY APPROVED MAJOR RESIDENTIAL DEVELOPMENTS AS OF
DECEMBER 31, 1992 NOT APPEARING ON MONTGOMERY TOWNSHIP TAX MAPS REVISED TO 1992.

<u>Development</u>	<u>Case No.</u>	<u>Block/Lot</u>	<u>Applicant</u>	<u>Approval Status</u>	<u>No. of Lots/Units</u>	<u>Acreage</u>	<u>Zone District</u>
1. Pike Run (Phase I)	49-881/ S-51-89	5001/1,4-7	Belle Mead Development Corp.	Final	670 units	55.22	R-1 (1)
2. Crusier Brook	81-87A/ 2-89	4001/34	Turnbridge Associates, Inc.	Final Preliminary	2 40	83.77	R-1 (2)
3. Oakmont C.C.	S-19-88	5001/2,3&22	TMS-1, A Limited	Preliminary	150 (3)	156.31 (4)	R-1
4. Foxbrook	15-89	6001/30	Turnbridge Associates, Inc.	Final	13	56.65	R-1 (2)
5. Mont-Hill	61-87	7001/1	Leonard Blumberg	Final	5	6.25	R-1
6. Stony Brook at Montgomery	59-87V	7001/2,3&4	K.A.T. Builders	Preliminary	33	41.22	R-1
7. North Hills Estates	4-88	7001/50	North Hills Development Corp.	Preliminary	28	54.38	R-1
8. Rosewood Estates	26.89	8001/7	Scribner Village, A Limited Partnership	Preliminary	10	22.3526	R-1
9. Green Field Village	24-79	7001/18	Meyer Gold	Preliminary	42	58.54	R-1
10. Sleepy Hollow Lane	43-87	7001/7	Abrahamsen	Preliminary	18	23.05	R-1
11. Grayson's Estates	95-86V	7001/6	R & S Colonial Builders	Preliminary	52	69.34	R-1
12. Fox Meadow	13-88V	15001/31,32, 33, 33.01	Site, Inc.	Preliminary	34	76.54	R-1 (2)
13. Hickory Brook	9-89	15001/28&29	Insok Yoo	Preliminary	14	62.55	R-1 (2)
14. Oxbridge	5-85	17001/2,6&9 21001/1,1.01 & 1.02	Benenson Capital Co.	Preliminary	183	229.12	R-1 (2)
15. Riversedge III	39-87A	18001/26.02	R & S Colonial Builders	Final	35	58.34	R-1
16. Riversedge Section IV	PB-11-92	18001/26.01	R & S Colonial Builders	Preliminary	22	49.7325	R-1

<u>Development</u>	<u>Case No.</u>	<u>Block/Lot</u>	<u>Applicant</u>	<u>Approval Status</u>	<u>No. of Lots/Units</u>	<u>Acreage</u>	<u>Zone District</u>
17. Dead Tree Farms	7-89	22001/13&14	Lydon Realty	Preliminary	4	23.18	R-1
18. Tammybrook III	6-87	22001/5.01	Juleo, Inc.	Preliminary	7	14.81	R-1
19. Castle Chase I	30-87	19001/8	Castle Chase Corp.	Preliminary	33	46.81	R-1 (2)
20. Castle Chase II	15-88	19001/4,6,7 9,10	Castle Chase Corp.	Preliminary	65	98.64	R-1 (2)
21. 10001/22	43-89	10001/22	Douglas & Susan Rhoda	Final	3	40.0443	-----
22. The Hamlet	PB-36-90	10001/22.01, 23.01,25	Henbell Associates	Approved Preliminary Final	5	57.4411	MR
23. Saxon Ridge	33-87	16001/1.02	Custom Living Communities, Inc.	Preliminary	36	83.25	R-1
24. Westwinds Farm	12-88	16001/9	East Country	Preliminary	61	82.12	R-1 (2)
25. Opossum Road	48-88V	21001/7,9,23	Atlantic Delta	Preliminary	23	39.43	R-1 (2)
26. Williamsburg Estates, Sec. V., Phase III	PB-31-91	21001/9.01	RCT Developers	Final	9	11.3146	R-1
27. Williamsburg Estates, Sec. V., Phase IV	PB-32-91	21001/9.01	RCT Developers	Final	10	12.7664	R-1
28. Wethersfield	29-87V Amended	22001/16&17	Yedin Development, Inc.	Amended Final Preliminary	2 46	93.95	R-1 (2)
29. Bridgepointe Commons	36-88V	21001/20	TMS-1	Preliminary	14	26.63	R-1 (2)
30. Orchard View	90-87	27001/11	Princeton Research Lands, Inc.	Preliminary	8	17.24	R-1
31. Rock Brook Estates	PB-20-91	25001/28	Montgomery Partners, L.P.	Preliminary	39	115.965	R-1
32. Planters View	12-89	24001/29	Thompson Realty	Preliminary	17	32.71	R-1

<u>Development</u>	<u>Case No.</u>	<u>Block/Lot</u>	<u>Applicant</u>	<u>Approval Status</u>	<u>No. of Lots/Units</u>	<u>Acreage</u>	<u>Zone District</u>
33. 30001/9.01	PB-38-91	30001/9.01	Harry Joe Brown II	Preliminary	5	33.489	R-1
34. Bedens Brook Farms	PB-15-90	30001/16,17	Esther Fried	Preliminary	56	95.4174	R-1
35. Hi-Ridge	PB-60-89	31001/5,6,01,7,8	Montgomery Associates	Preliminary	13	36.9274	R-2
36. Cherry Valley	35-88V	31001/1.02, 2.01,2.03, 2.20	DKM Residential Properties, Inc.	Amended Preliminary	373	163.443	R-1
37. Great Road & Mountain View Road	PB-18-90	32001/4,5,6	E.R. Keller Group, Inc.	Informal Major Subdivision	23	165.23	R-2
38. 33001/23	PB-10-91	33001/23	Mountainview Partners	Preliminary	8	11.5	-----
39. Willow Run	29-89	34001/13.01	Morrison Prop.	Preliminary	13	41.788	R-1
40. Cherry Drive at Princeton I	6-89	34001/14, 15&30	R.D. Leighton	Preliminary	9	35.50	R-1
41. Graystan Estates	3-89	34001/48	EDRA Associates	Preliminary	142	98.28	R-1 (5)
42. Princeton Hill	Unknown	37001/1A & 3	-----	-----	160	20.005	APT/TH
43. Montgomery Hills	S-51-88	37001/6; 37002/5	Scribner Village	Preliminary	441 units	68.75	APT/TH
44. Hilton Realty	BA-514/ S-33-89	29001/8 (partial)	Hilton Realty	Final	16 units	3.07	HC

TOTAL LOTS/UNITS

Preliminary: 2,238.788
 Final: 735
 Informal Major Subdivision: 23
TOTAL: 2,973.788

2,955 lots/
units 2,585.0263 ac.

Footnotes: Please see sheet following.

Footnotes:

- (1) Within "Planned Residential Developments" Optional Development Alternative.
- (2) Within "Residential Clusters I" Optional Development Alternative.
- (3) Although preliminary approval has been granted, details of the plan have not been finalized. Includes 124 single-family residential units on 35.04 acres, and 26 multiple-family residential units on 6.26 acres.
- (4) Of the total 156.31 acres, 110.51 acres utilized by Pike Brook Country Club and golf course, 41.30 acres for residential uses, and 4.50 acres for roads.
- (5) Within "Residential Clusters II" Optional Development Alternative.

Prepared By:
Coppola & Coppola Associates
May 1993

EXISTING PHYSICAL CHARACTERISTICS



EXISTING PHYSICAL CHARACTERISTICS

INTRODUCTION

The purpose of documenting the "Physical Characteristics" of Montgomery Township is to provide another instrument to use in formulating a logical allocation of land uses and in assessing future development proposals.

This section is organized as a series of sequential investigations, each dealing with a particular environmental factor. Each section discusses the intrinsic characteristics associated with each of the factors and relates the characteristics to the capacities and limitations of the lands to support future community development.

It must be emphasized that the soil and drainage characteristics of Montgomery Township have a great impact upon the development potential of the municipality. There are two reasons for this: First, most of the soils in Montgomery are residual, originating from underlying bedrock, rather than being deposited by glaciers, wind or water. Thus their composition is largely based upon the interaction of the local bedrock and precipitation (cracks and fissures resulting from freezing, thawing and erosion of the particles). Second, the local segment of the Millstone River approximately parallels the Sourland Mountain ridge line and represents the most significant aspect of the local drainage system because it ultimately drains the entire Township.

This report contains and addresses certain aspects of the environment particularly related to the capacity and limitations of the land to support future development. For additional and more detailed information relating to the physical characteristics of Montgomery Township, the reader is advised to consult the "Natural Resources Inventory", Montgomery Township, New Jersey, published by Rogers, Golden and Halpern in 1984. The 1984 Natural Resources Inventory previously was adopted by the Montgomery Township Environmental Commission and later by the Montgomery Township Planning Board.

PHYSIOGRAPHY

New Jersey is divided into three (3) major physiographic provinces: the Coastal Plain, the Piedmont Plateau and the Highlands. Somerset County lies within two (2) of the physiographic divisions. The portion of Somerset County north of Bernardsville is situated within the Highlands province, which is the southernmost sub-division of the Appalachian province. The portion of Somerset County south of Bernardsville, including Montgomery Township, is situated in the Piedmont Plateau geologic province. The Piedmont Plateau is composed of low land, with gently rounded hills and a few isolated ridges rising above the plain.

Elevations in Montgomery Township range from 10 feet to over 440 feet above sea level. The lower elevations in the Township are located adjacent to the Millstone River and south of Rock Brook; the higher elevations are located along the northwestern boundary of the Township. Except in the southern extremity of the Township below Rocky Hill and the northwestern section of the Township east

of the Sourland Mountain ridge line, the general topography of Montgomery Township is relatively flat with gentle undulations. Nevertheless, there are significant portions of the Township which exhibit rugged terrain and steep slopes, generally caused by geologically folded bedrock and glacier scouring.

Slope is indicated as a percentage; the change in vertical elevation (in feet) per 100 feet of horizontal distance. The 1984 Natural Resources Inventory of Montgomery Township, published by Rogers, Golden and Halpern (RGH) states:

"In Montgomery Township 80% of the land is gently sloping (0-8% slope). The moderately steep slopes (8-15% slope) and the steep slopes (15-25% slope) occur along stream banks particularly Bedens, Rock and Pike Brooks. The highest concentration of steep slopes occur along the southeast face of Sourland Mountain. In most cases slope will not be a primary limitation to new development in terms of cost. However, where slopes are greater than 10% and contiguous with water bodies, they should be considered a primary limitation where the physical and biological integrity of aquatic systems are concerned." (RGH, 1984)

Aside from the sheer physical impediment of improving a site for construction on steep slopes or rocky ledges, the degree of slope has a direct bearing on a number of other physical characteristics. Steep slopes exacerbate the inherent shortcomings of the soils. For example, absorption or soil drainage is inversely related to the degree of slope. Steep slopes necessarily have poor drainage due to increased run-off. The natural evolution of soil types also is impeded on steep slopes due to the inherently limited amount of ground cover that can develop in areas of high erosion.

According to the 1984 Rogers, Golden and Halpern study:

"All slopes greater than 10% pose problems in designing roads and driveways. Also, when denuded of vegetation slopes, greater than 10% fail to form small surface depressions or swales which trap sediment (Leopold, 1968). This makes these steep areas highly erodible and poses hazards to adjacent areas, which could be inundated with sediment. A 12% slope is considered by the Soil Conservation Service to be the maximum steepness for septic fields. Fairly steep slopes (10-15%) can provide creative sites for plantings and structures; however, installation of walks and utilities will prove costly and require runoff and erosion management techniques. Slopes greater than 15% are potentially critical environmental impact areas. On these slopes the soils are often thin and have low natural fertility." (RGH, 1984)

In areas where the slope of the land exceeds fifteen percent (15%), development costs rise sharply along with the potential environmental problems and associated costs that will invariably result if proper attention is not paid to the treatment for hillside or mountain development. For these reasons, it is recommended that relatively low densities prevail in areas where slopes are fifteen percent (15%) or greater in grade. The "Critical Areas" map, appearing later in this report, indicates slopes fifteen percent (15%) or greater in grade.

GEOLOGY AND GROUND WATER RESOURCES

Future development in Montgomery Township is significantly limited by two major physical factors: the soil's capacity to absorb and properly filter effluent, and ground water quantity and quality. Both are closely related and both reflect local geologic conditions. Montgomery Township is underlain with one major (Triassic) and four sub-group geologic formations. In the discussion that follows, refer to the "Geologic Formations" map for the location of the various formations.

TRIASSIC GEOLOGIC FORMATION

The Triassic is the major geologic formation and was first named by Redfield in 1856 for the area around Newark. The name "Newark Group" was accepted as standard for the Triassic rocks in North America after work done by the State Geologist of New Jersey.

The Triassic formation encompasses all of Montgomery and runs diagonally through the Township. The Triassic formation is divided into and mapped as the Trb Brunswick Formation, Trl Lockatong Formation, Trs Stockton Formation, and Trdb Diabase.

Trs Stockton Formation

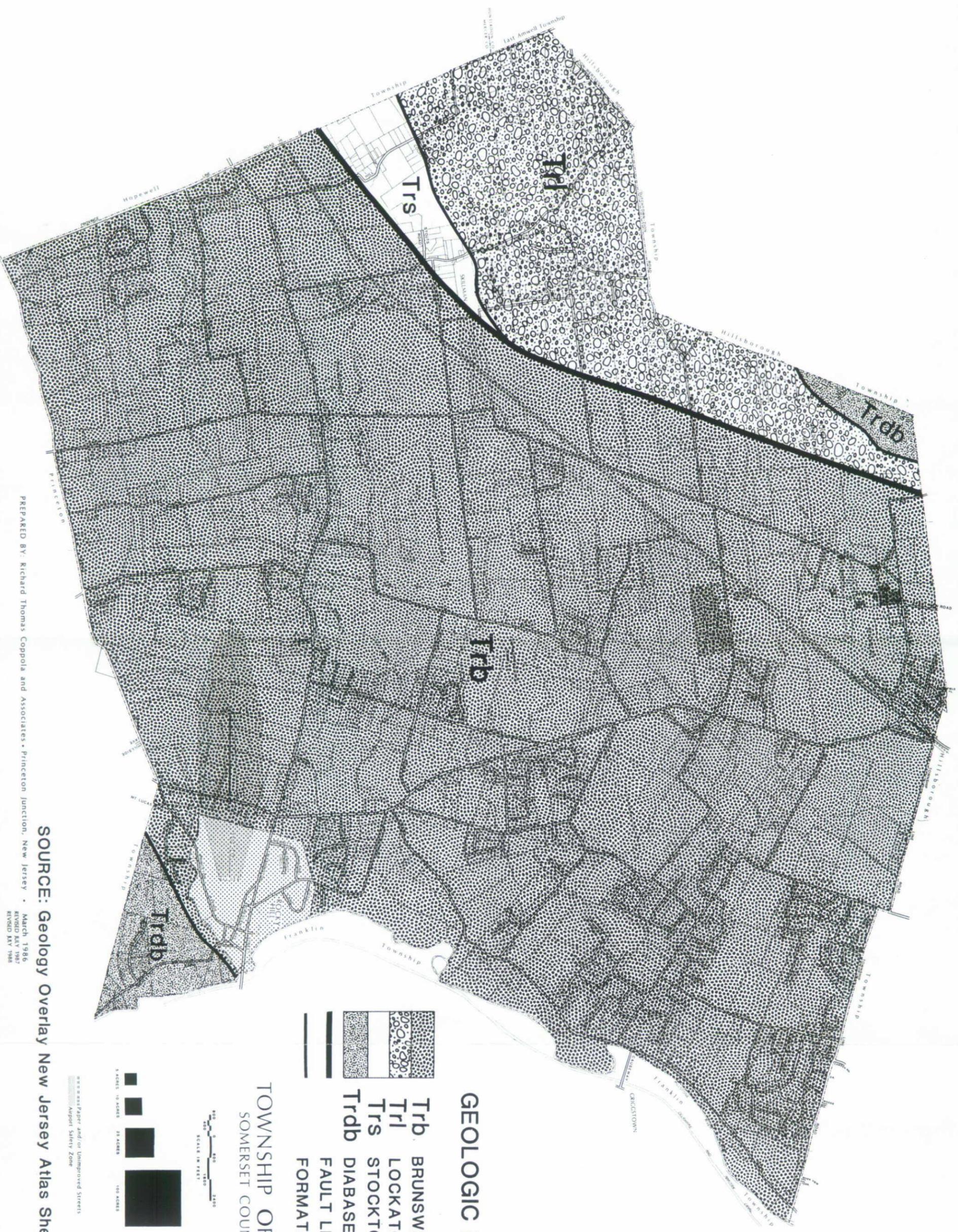
The Trs Stockton Formation is a light colored sandstone and conglomerate embedded with flagstone and shale. Although the Stockton sandstone generally is higher topographically than the Brunswick shale, it is not as resistant to erosion as the diabase directly north and adjacent to the Lockatong. The Stockton sandstone is a relatively good aquifer, although it does not have any inherent permeability of its own. Wells drilled into the formation depend upon cracks or fissures in the rocks to derive their source of water supply.

Trl Lockatong Formation

The Trl Lockatong Formation encompasses the northwestern portion of Montgomery Township bordering Hillsborough Township. Lockatong argillite is a rock type formation composed of black to gray material, with outcroppings of shale, flagstone and, in certain places, impure limestone. Lockatong argillite is very similar to the Brunswick shale, often appearing as outcroppings where shale is indicated on the "Geologic Formations" map. Within the area mapped as Lockatong argillite, there are shale beds, small faults, and structures which cause some argillite wells to yield more water than others. The Lockatong Formation is a poor aquifer. In order for domestic wells to produce adequate water supplies, they usually extend into underlying bedrock fracture zones.

Trb Brunswick Formation

The majority of Montgomery Township is underlain with the Brunswick Formation. Areas underlain by Brunswick shale are topographically low and are usually a reliable source of ground water. While the Brunswick shale is sometimes con-



GEOLOGIC FORMATIONS

-  Trb BRUNSWICK FORMATION
-  Trl LOCKATONG FORMATION
-  Trs STOCKTON FORMATION
-  Trdb DIABASE
-  FAULT LINE
-  FORMATION CONTACT

TOWNSHIP OF MONTCOMERY
SOMERSET COUNTY • NEW JERSEY



--- Paper and/or Unimproved Streets
--- Airport Safety Zone

SOURCE: Geology Overlay New Jersey Atlas Sheets nos. 25 and 28.

PREPARED BY: Richard Thomas Coppola and Associates • Princeton Junction, New Jersey • March 1986
REVISED MAY 1987
REVISED MAY 1988

sidered a relatively good aquifer, the formation has little or no glacial overburden throughout most of Montgomery Township, which significantly limits its water storage capacity. Wells drilled into the formation depend upon cracks or fissures in the rocks to derive their source of water supply. Brunswick shale is very similar to the Lockatong Formation, with the noted exception of its water bearing capacities. Wells drilled into the Brunswick Formation are considered a more reliable source of ground water supply than those found in the Lockatong Formation.

Trdb Diabase

Montgomery Township lies partly between two Trdb Diabase outcroppings which many geologists believe to be a continuation of the Palisades sill (the cliff along the western edge of the Hudson River in Bergen and Hudson Counties). This gives the Township significantly higher elevations along its northwestern and southern extremities. The diabase areas are usually wooded and, topographically, are noticeable above the surrounding areas.

The largest area underlain by diabase is the Rocky Hill sill found below the Borough of Rocky Hill. It should be noted that while the range in depth and yield for domestic diabase wells is much the same as for domestic wells drilled in the Lockatong Formation, the average and median depth of diabase wells is more than the shale wells.

Groundwater conditions in the diabase areas are such that the wells are frequently inadequate. The chances of acquiring large amounts of water drilled into such diabase areas are quite slim.

DRAINAGE BASINS

All of Montgomery Township lies within the Millstone River sub-basin of the Raritan Watershed, one of the major drainage basins in northern and central New Jersey. The major sub-drainage basins located in Montgomery Township are the Millstone River, Roaring Brook, Crusier Brook, Back Brook, Pike Brook, Rock Brook and Bedens Brook. Bedens and Back Brooks are the major tributaries of the Millstone River, flowing in a predominantly easterly direction towards the river. The Millstone River itself flows in a northern direction and drains into the Raritan River.

The boundaries of the Bedens Brook Watershed and the various sub-drainage basins throughout Montgomery Township are shown on the "Surficial Hydrology" map.

FLOOD HAZARD AREAS

The Federal Emergency Management Agency, through the Federal Insurance Administration, is charged with the responsibility of delineating the flood prone areas of Montgomery Township under the authority of the National Flood Insurance Act of 1968. The "Surficial Hydrology" map delineates the flood hazard areas in Montgomery Township as used for flood insurance purposes, effective April 1981. The source maps were prepared to facilitate flood plain mana-

WATERSHED BOUNDARIES

- Beden Brook Watershed
- Sub-Drainage Areas

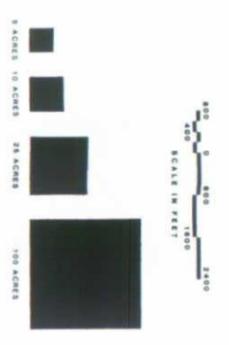


SURFICIAL HYDROLOGY

FLOOD HAZARD AREAS

- Approx. 500-Year Flood Boundary
- Approx. 100-Year Flood Boundary
- FLOODWAY: 100-Year Flood
- Approx. 100-Year Flood Boundary
- Approx. 500-Year Flood Boundary

**TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY**



SOURCE: Flood Boundary & Floodway Map,
Township of Montgomery
Panels 5 of 20; 10 of 20; 15 of 20
and 20 of 20, April 1981.

PREPARED BY: Richard Thomas Coppola and Associates, Princeton Junction, New Jersey
March 1986
REVISED MAY 1987
REVISED MAY 1988

gement activities and do not show all the special flood hazard areas in the Township or all the planimetric features outside the flood plain.

The boundaries of the flood hazard areas were computed at cross-sections and interpolated between cross-sections. Lands within the floodway include the stream channel and portions of the adjoining flood plain usually required to convey flood flows. The floodway is where the most extreme flooding takes place for any given storm, where the depth of the flood water and the velocity of flow are the greatest, and which must be left unobstructed to permit the discharge of floodwaters downstream. The flood fringe area lies within the floodplain, but beyond the floodway. Lands indicated to be within the 100-year flood boundary have a 1.0% chance of flooding in any given year, while lands within the 500-year flood boundary have a 0.2% chance of flooding in any given year. As properties are developed within the Township that include lands within the 100-year flood boundary, the floodplain lands should be preserved as permanent open space.

SOILS AND COMMUNITY DEVELOPMENT

Like the geologic formations, soils also have inherent characteristics which pose varying kinds and degrees of limitations for future community development. The December 1976 Soil Survey of Somerset County prepared by the U.S. Department of Agriculture, Soil Conservation Service, has recognized 38 major soil types throughout Montgomery Township. The distribution of soils is shown on the "Soils" map, while the accompanying chart summarizes the degree and kind of soil limitation for community development that each of the soils presents. By reading across the chart, one can determine the limitations for each of the soils. The first column represents the U.S.D.A. map publication symbols shown in the Soil Survey report; the second column represents the name of the soil series; and the third column represents the map symbol as shown on the "Soils" map. The remaining columns include the types of uses and the limitations for the uses inherent in each of the soils.

A word of caution should be understood in applying the soil information mapped and described in this report. While the information is invaluable and appropriate for general planning purposes, it is not intended to take the place of on-site engineering investigation. As the Soil Survey report states:

"This information, however, does not eliminate the need for further investigations at sites selected for engineering works, especially works that involve heavy loads or that require excavations to depths greater than those shown in the tables, generally depths of more than 6 feet. Also, inspection of sites, especially the small ones, is needed because many delineated areas of a given soil mapping unit may contain small areas of other kinds of soil that have strongly contrasting properties and different suitabilities or limitations for soil engineering."

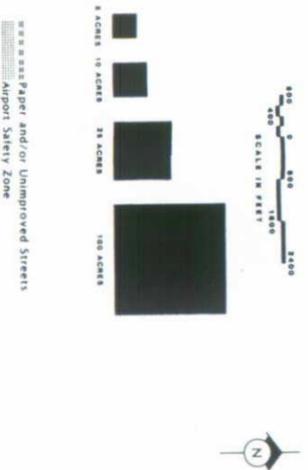
Insofar as Montgomery Township has many unsewered areas, specific attention should be given to the land's ability to adequately accommodate septic disposal systems. Suitable areas for septic tanks require a soil that has enough, but



SOURCE: Soil Survey of Somerset County, New Jersey, U.S. Department of Agriculture, Soil Conservation Service, in cooperation with the New Jersey Agricultural Experiment Station, 1976.

TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY • NEW JERSEY

SOILS



PREPARED BY: Richard Thomas Coppola and Associates • Princeton Junction, New Jersey • March 1986
REVISED MAY 1987
REVISED MAY 1988

not excessive, drainage; in other words, an area that can adequately absorb the effluent, yet sufficiently filter the effluent to prevent ground water contamination.

Most of Montgomery Township's soils have "restrictive" (or "severe") limitations for septic tank absorption fields. In areas of the Township where public sewerage facilities are not available, single-family housing development will require relatively large minimum lot sizes to accommodate on-site septic disposal fields.

WETLANDS AND HYDRIC SOILS

Wetlands and hydric soils (soils with a high seasonal water table or seasonal flooding) are physical characteristics which present severe constraints for land development, and such lands should be maintained in their natural condition, if possible.

The delineation of "Wetlands" in Montgomery Township was drafted from information prepared by the New Jersey Department of Environmental Protection & Energy from March 1986 infrared photographs of the Rocky Hill and Monmouth Junction quadrangles. The "Wetlands" were drafted onto the "Critical Areas" map which is located within the "Land Use Planning And Existing Zoning" portion of this report.

The extent of the "Wetlands" is based on the definition of wetlands adopted by the U.S. Fish and Wildlife Service:

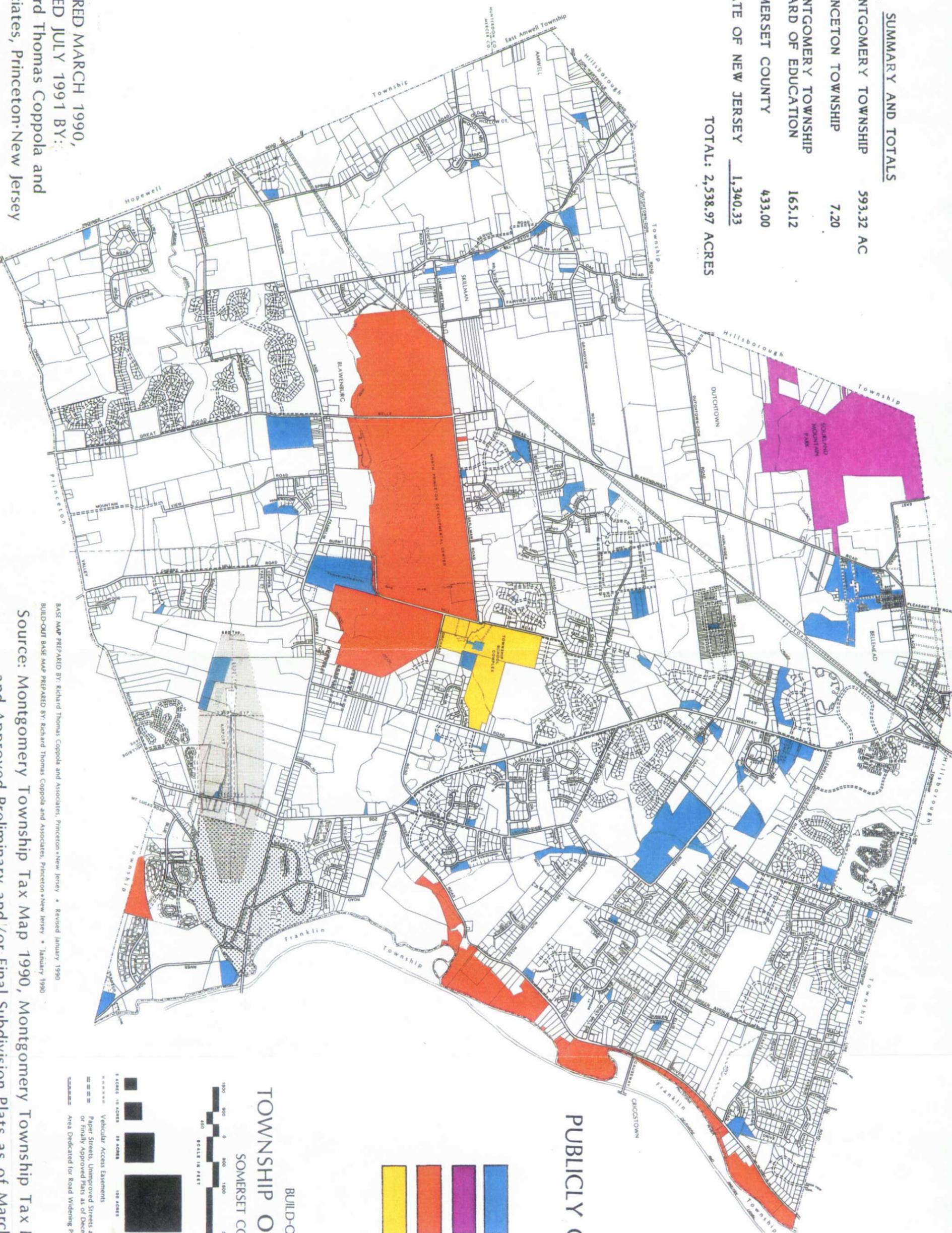
"Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three (3) attributes: 1) at least periodically, the lands support predominantly hydrophytes; 2) the substrate is predominantly undrained hydric soil; and/or 3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year."

The "Hydric Soils" map was drafted from a list of hydric soils in New Jersey prepared by the U.S. Fish and Wildlife Service from U.S. Soil Conservation Service surveys. Hydric soils are defined by the U.S. Soil Conservation Service as soils that are either: 1) saturated at or near the soil surface with water that is virtually lacking free oxygen for significant periods during the growing season or, 2) flooded frequently for long periods during the growing season.

Hydric soils are classified into three (3) groups, based on the degree to which they consistently display hydric conditions. Group 1 soils nearly always display consistent hydric conditions. Group 2 soils display consistent hydric conditions in most places, but additional verification is needed. Group 3 soils display hydric conditions in a few places, and additional verification is needed. A fourth group, alluvial soils, is included as a separate category, because of its variability.

SUMMARY AND TOTALS

MONTGOMERY TOWNSHIP	593.32 AC
PRINCETON TOWNSHIP	7.20
MONTGOMERY TOWNSHIP BOARD OF EDUCATION	165.12
SOMERSET COUNTY	433.00
STATE OF NEW JERSEY	1,340.33
TOTAL:	2,538.97 ACRES



PUBLICLY OWNED LANDS

- TOWNSHIP
- COUNTY
- STATE
- BOARD OF EDUCATION

TOWNSHIP OF MONTGOMERY

SOMERSET COUNTY • NEW JERSEY

BUILD-OUT BASE MAP

SCALE IN FEET

0 300 600 900 1200 1500 1800 2100 2400

0 480 960 1440 1920 2400

1" = 100 FEET

1" = 200 FEET

1" = 400 FEET

1" = 800 FEET

1" = 1600 FEET

1" = 3200 FEET

1" = 6400 FEET

1" = 12800 FEET

1" = 25600 FEET

1" = 51200 FEET

1" = 102400 FEET

1" = 204800 FEET

1" = 409600 FEET

1" = 819200 FEET

1" = 1638400 FEET

1" = 3276800 FEET

1" = 6553600 FEET

1" = 13107200 FEET

1" = 26214400 FEET

1" = 52428800 FEET

1" = 104857600 FEET

1" = 209715200 FEET

1" = 419430400 FEET

1" = 838860800 FEET

1" = 1677721600 FEET

1" = 3355443200 FEET

1" = 6710886400 FEET

1" = 13421772800 FEET

1" = 26843545600 FEET

1" = 53687091200 FEET

1" = 107374182400 FEET

1" = 214748364800 FEET

1" = 429496729600 FEET

1" = 858993459200 FEET

1" = 1717986918400 FEET

1" = 3435973836800 FEET

1" = 6871947673600 FEET

1" = 13743895347200 FEET

1" = 27487790694400 FEET

1" = 54975581388800 FEET

1" = 109951162777600 FEET

1" = 219902325555200 FEET

1" = 439804651110400 FEET

1" = 879609302220800 FEET

1" = 1759218604441600 FEET

1" = 3518437208883200 FEET

1" = 7036874417766400 FEET

1" = 14073748835532800 FEET

1" = 28147497671065600 FEET

1" = 56294995342131200 FEET

1" = 112589990684262400 FEET

1" = 225179981368524800 FEET

1" = 450359962737049600 FEET

1" = 900719925474099200 FEET

1" = 1801439850948198400 FEET

1" = 3602879701896396800 FEET

1" = 7205759403792793600 FEET

1" = 14411518807585587200 FEET

1" = 28823037615171174400 FEET

1" = 57646075230342348800 FEET

1" = 115292150460684697600 FEET

1" = 230584300921369395200 FEET

1" = 461168601842738790400 FEET

1" = 922337203685477580800 FEET

1" = 1844674407370955161600 FEET

1" = 3689348814741910323200 FEET

1" = 7378697629483820646400 FEET

1" = 14757395258967641292800 FEET

1" = 29514790517935282585600 FEET

1" = 59029581035870565171200 FEET

1" = 118059162071741130342400 FEET

1" = 236118324143482260684800 FEET

1" = 472236648286964521369600 FEET

1" = 944473296573929042739200 FEET

1" = 1888946593147858085478400 FEET

1" = 3777893186295716170956800 FEET

1" = 7555786372591432341913600 FEET

1" = 15111572745182864683827200 FEET

1" = 30223145490365729367654400 FEET

1" = 60446290980731458735308800 FEET

1" = 120892581961462917470617600 FEET

1" = 241785163922925834941235200 FEET

1" = 483570327845851669882470400 FEET

1" = 967140655691703339764940800 FEET

1" = 1934281311383406679529881600 FEET

1" = 3868562622766813359059763200 FEET

1" = 7737125245533626718119526400 FEET

1" = 15474250491067253436239052800 FEET

1" = 30948500982134506872478105600 FEET

1" = 61897001964269013744956211200 FEET

1" = 123794003928538027489912422400 FEET

1" = 247588007857076054979824844800 FEET

1" = 495176015714152109959649689600 FEET

1" = 990352031428304219919299379200 FEET

1" = 1980704062856608439838598758400 FEET

1" = 3961408125713216879677197516800 FEET

1" = 7922816251426433759354395033600 FEET

1" = 15845632502852867518708790067200 FEET

1" = 31691265005705735037417580134400 FEET

1" = 63382530011411470074835160268800 FEET

1" = 126765060022822940149670320537600 FEET

1" = 253530120045645880299340641075200 FEET

1" = 507060240091291760598681282150400 FEET

1" = 1014120480182583521197362564300800 FEET

1" = 2028240960365167042394725128601600 FEET

1" = 4056481920730334084789450257203200 FEET

1" = 8112963841460668169578900514406400 FEET

1" = 16225927682921336339157801028812800 FEET

1" = 32451855365842672678315602057625600 FEET

1" = 64903710731685345356631204115251200 FEET

1" = 129807421463370690713262408230502400 FEET

1" = 259614842926741381426524816461004800 FEET

1" = 519229685853482762853049632922009600 FEET

1" = 1038459371706965525706099265844019200 FEET

1" = 2076918743413931051412198531688038400 FEET

1" = 4153837486827862102824397063376076800 FEET

1" = 8307674973655724205648794126752153600 FEET

1" = 16615349947311448411297588253504307200 FEET

1" = 33230699894622896822595176507008614400 FEET

1" = 66461399789245793645190353014017228800 FEET

1" = 132922799578491587290380706028034457600 FEET

1" = 265845599156983174580761412056068915200 FEET

1" = 531691198313966349161522824112137830400 FEET

1" = 1063382396627932698323045648224275660800 FEET

1" = 2126764793255865396646091296448551321600 FEET

1" = 4253529586511730793292182592897102643200 FEET

1" = 8507059173023461586584365185794205286400 FEET

1" = 17014118346046923173168730371588410572800 FEET

1" = 34028236692093846346337460743176821145600 FEET

1" = 68056473384187692692674921486353642291200 FEET

1" = 136112946768375385385349842972707284582400 FEET

1" = 272225893536750770770699685945414569164800 FEET

1" = 544451787073501541541399371890829138329600 FEET

1" = 1088903574147003083082798743781658276659200 FEET

1" = 2177807148294006166165597487563316553318400 FEET

1" = 4355614296588012332331194975126633106636800 FEET

1" = 8711228593176024664662389950253266213273600 FEET

1" = 17422457186352049329324779900506532426547200 FEET

1" = 34844914372704098658649559801013064853094400 FEET

1" = 69689828745408197317299119602026129106188800 FEET

1" = 139379657490816394634598239204052258212377600 FEET

1" = 278759314981632789269196478408104516424755200 FEET

1" = 557518629963265578538392956816209032849510400 FEET

1" = 1115037259926531157076785913632418065699020800 FEET

1" = 2230074519853062314153571827264836131398041600 FEET

1" = 4460149039706124628307143654529672262796083200 FEET

1" = 8920298079412249256614287309059344525592166400 FEET

1" = 17840596158824498513228574618118689051184332800 FEET

1" = 35681192317648997026457149236237378102368665600 FEET

1" = 71362384635297994052914298472474756204737331200 FEET

1" = 142724769270595988105828596944949512409474662400 FEET

1" = 285449538541191976211657193889899024818949324800 FEET

1" = 570899077082383952423314387779798049637898649600 FEET

1" = 1141798154164767904846628775559596099275797299200 FEET

1" = 2283596308329535809693257551119192198551594598400 FEET

1" = 4567192616659071619386515102238384397103189196800 FEET

1" = 9134385233318143238773030204476768794206378393600 FEET

1" = 18268770466636286477546060408953537588412756787200 FEET

1" = 36537540933272572955092120817907075176825513574400 FEET

1" = 73075081866545145910184241635814150353651027148800 FEET

1" = 146150163733090291820368483271628300707302054297600 FEET

1" = 292300327466180583640736966543256601414604108595200 FEET

1" = 584600654932361167281473933086513202829208217190400 FEET

1" = 1169201309864722334562947866173026405658416434380800 FEET

1" = 2338402619729444669125895732346052811316832868761600 FEET

1" = 4676805239458889338251791464692105622633665737523200 FEET

1" = 9353610478917778676503582929384211245267331475046400 FEET

1" = 18707220957835557353007165858768422490534662950092800 FEET

1" = 37414441915671114706014331717536844981069325900185600 FEET

1" = 74828883831342229412028663435073689962138658000371200 FEET

1" = 149657767662684458824057326870147379924277316000742400 FEET

1" = 299315535325368917648114653740294759848554632001484800 FEET

1" = 598631070650737835296229307480589519697109264002969600 FEET

1" = 1197262141301475670592458614961179039394218528005939200 FEET

1" = 2394524282602951341184917229922358078788437056011878400 FEET

1" = 4789048565205902682369834459844716157576874112023756800 FEET

1" = 9578097130411805364739668919689432315153748224047513600 FEET

1" = 19156194260823610729479337839378864630307496448095027200 FEET

1" = 38312388521647221458958675678757729260614992896190054400 FEET

1" = 76624777043294442917917351357515458521229985792380108800 FEET

1" = 153249554086588885835834702715030917042459971584760217600 FEET

1" = 306499108173177771671669405430061834084919943169520435200 FEET

1" = 612998216346355543343338810860123668169839886339040870400 FEET

1" = 122599643269271108668667762172024733633967977267808172800 FEET

1" = 245199286538542217337335524344049467267935954535616345600 FEET

1" = 490398573077084434674671048688098934535871909071232691200 FEET

1" = 980797146154168869349342097376197869071743818142465382400 FEET

1" = 1961594292308337738698684194752395738143487636284930764800 FEET

1" = 3923188584616675477397368389504791476286975272569861529600 FEET

1" = 7846377169233350954794736779009582952573950545139723059200 FEET

1" = 15692754338466701909589473558019165905147901090279446118400 FEET

1" = 3138550867693340381917894711603833181029580218055889236800 FEET

1" = 6277101735386680763835789423207666362059160436111778473600 FEET

1" = 12554203470773361527671578846415332724118320872223556947200 FEET

1" = 25108406941546723055343157692830665448236641744447113894400 FEET

1" = 50216813883093446110686315385661330896473283488894227788800 FEET

1" = 100433627766186892221372630771322661792946566977788455577600 FEET

1" = 200867255532373784442745261542645323585893133955576911155200 FEET

1" = 401734511064747568885490523085290647171786267911153822310400 FEET

1" = 803469022129495137770981046170581294343572535822307644620800 FEET

1" = 1606938044258990275541962092341162588687145071644615289241600 FEET

1" = 3213876088517980551083924184682325177374290143289230578483200 FEET

1" = 6427752177035961102167848369364650354748580286578461156966400 FEET

1" = 12855504354071922204335696738729300709497160573156922313932800 FEET

1" = 25711008708143844408671393477458601418994321146313844627865600 FEET

1" = 51422017416287688817342786954917202837988642292627689255731200 FEET

1" = 102844034832575377634685573909834405675977284585255378511462400 FEET

1" = 205688069665150755269371147819668811351954569170510757022924800 FEET

1" = 411376139330301510538742295639337622703909138341021514045849600 FEET

1" = 822752278660603021077484591278675245407818276682043028091699200 FEET

1" = 1645504557321206042154969182557350490815636553364086056183398400 FEET

1" = 3291009114642412084309938365114700981631273106728172112366796800 FEET

1" = 6582018229284824168619876730229401963262546213456344224733593600 FEET

1" = 13164036458569648337239753460458803926525092426912688449467187200 FEET

1" = 26328072917139296674479506920917607853050184853825376898934374400 FEET

1" = 52656145834278593348959013841835215706100369707650753797868748800 FEET

1" = 105312291668557186697918027683670431412200739415301507595737497600 FEET

1" = 210624583337114373395836055367340862824401478230603015191474995200 FEET

1" = 421249166674228746791672110734681725648802956461206030382949990400 FEET

1" = 842498333348457493583344221469363451297605912922412060765899980800 FEET

1" = 1684996666896914987166688442938726902595211825844824121531799961600 FEET

1" = 3369993333793829974333376885877453805190423651689648243063599923200 FEET

1" = 6739986667587659948666753771754907610380847303379296486127199846400 FEET

1" = 1347997333517531989733350754350981522076169460675859297225439692800 FEET

1" = 2695994667035063979466701508701963044152338921351718594450879385600 FEET

1" = 5391989334070127958933403017403926088304677822703437188901758771200 FEET

1" = 10783978668140255917866806034807852176609355645406874377803517542400 FEET

1" = 2156795733628051183573361206961570435321871129081374875560703484800 FEET

1" = 4313591467256102367146722413923140870643742258162749751121406969600 FEET

1" = 8627182934512204734293444827846281741287484516325499502242813939200 FEET

1" = 1725436586902440946858688965569256348257496903265099900448562778400 FEET

1" = 3450873173804881893717377931138512696514993806530199800897125556800 FEET

1" = 6901746347609763787434755862277025393029987613060399601794251113600 FEET

1" = 13803492



PREPARED BY: Richard Thomas Coppola and Associates • Princeton Junction, New Jersey • January 1986

Hydric Soils

GROUP 1

Bowmansville - Bt
 Croton - CrA, CrB
 Elkton - Ek

GROUP 2

Reaville - ReA, ReB

GROUP 3

Abbottstown - AbA, AbB
 Chalfont - CdB, CeB, Cdc, Cec, Cel
 Rowland - Ro

TOWNSHIP OF MONTGOMERY SOMERSET COUNTY • NEW JERSEY



----- Paper and/or Unimproved Streets

SOURCE: National Wetlands Inventory, "Wetlands of New Jersey", U.S. Fish and Wildlife Service, July 1985 Soil Survey of Somerset County, U.S. Soil Conservation Service, December 1976.

CRITICAL AREAS

The "Critical Areas" map, which is located within the "Land Use Planning And Existing Zoning" portion of this report, indicates those areas in the Township within the 100-year floodplain; lands with a topographic slope 15% or greater; and wetlands. It is intended that the "Critical Areas" map be made part of the Land Development Ordinance of the Township and be used as an important reference in administering the provisions of the Ordinance.

EXISTING COMMUNITY
FACILITIES AND UTILITIES



EXISTING COMMUNITY FACILITIES AND UTILITIES

INTRODUCTION

The purpose of documenting the existing community facilities and utilities within Montgomery Township is to provide the basis for future planning in order to assure that the future needs of the citizens of the municipality will be met.

PUBLIC SCHOOLS

The map entitled "Location of Community Service Facilities and Township Schools" shows the location of the Township's four (4) public schools, including the Orchard Road Elementary School, the Burnt Hill Road Elementary School, the Montgomery Township Middle School and the Montgomery Township High School. Enrollment for the Middle School for grades 7 and 8 began in September 1988.

The Burnt Hill School, built in 1956, is used for Kindergarten through grade 3; the Orchard Road School, built in 1966, serves grades 4 through 6; and both the Montgomery Middle School, serving grades 7 and 8, and the Montgomery High School, serving grades 9 through 12, are located in the same building, which was built in 1969.

The Montgomery Township Board of Education operates the schools from its offices on the school complex lands.

LIBRARY

The Mary Jacobs Memorial Library, located in Rocky Hill, was built in 1974. As a branch of the Somerset County system, the library serves not only Montgomery Township and Rocky Hill Borough residents, but all residents throughout Somerset County.

The library is funded mainly from the dedicated library tax, but also from community contributions, photo-copies, overdue fines and gifts.

MUNICIPAL OFFICES

The municipal building on Route 206 in the Belle Mead area includes the Township administrative offices and the Police Department. The building's area was expanded in 1989 from 13,829 square feet to 27,855 square feet. All of the Township administrative offices are located in the municipal building except for the "Kid Connection" day care facility located on property leased from the Board of Education on the school complex lands, and the Parks and Road Departments located in the Road Department Building on Harlingen Road.

Additionally, the Superintendent's office of the Department of Public Works is located at the Pike Brook Treatment Plant.

LOCATION OF COMMUNITY FACILITIES AND TOWNSHIP SCHOOLS



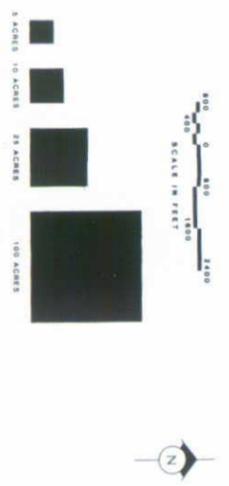
COMMUNITY SERVICE FACILITIES

1. Municipal Offices and Police Department
2. First Aid Squad
3. Road Department
4. Mary Jacobs Memorial Library
5. Fire Company #2
6. Blawenberg Post Office
7. Skillman Post Office
8. Fire Company #1
9. Belle Mead Post Office

TOWNSHIP SCHOOLS

10. Orchard Road Elementary School
11. Burnt Hill Road Elementary School
12. Montgomery Township High School and Montgomery Township Middle School.

TOWNSHIP OF MONTGOMERY SOMERSET COUNTY, NEW JERSEY



PREPARED BY: Richard Thomas Coppola and Associates • Princeton Junction, New Jersey • March 1986
REVISED MAY 1987
REVISED MAY 1988

SOURCE: Field Survey, Richard Thomas Coppola, P.P.

FIRE PROTECTION AND FIRST AID SQUAD

The "Location Of Community Service Facilities And Township Schools" map also indicates the location and service areas of the Township's two (2) volunteer fire departments and the location of the Township's first aid squad.

Fire Company No. 1, which serves the northern half of the Township, is located on Route 206 in Belle Mead and was constructed in 1950. Fire Company No. 2, which serves the southern half of the Township, is located on Route 518 near Blawenburg and was constructed in 1968.

The Montgomery Township First Aid Squad is located on Harlingen Road and serves the entirety of Montgomery Township. The squad's facility is centrally located and accessible to both residential and non-residential development in the Township.

SANITARY SEWERS

The location of the existing and proposed sewerage treatment plants and discharge lines in Montgomery Township are indicated on the "Sanitary Sewer Map". As noted, there are a total of thirteen (13) approved wastewater treatment facilities in Montgomery Township. Eight (8) of these facilities are non-municipal and privately operated (one actually is owned and operated by the State of New Jersey) and the remaining five (5) facilities are operated by Montgomery Township. Two (2) new municipal sewerage treatment plants are proposed, one of which (Cherry Valley) will take the place of two existing private plants (Bedens Brook and Bedens Brook Country Club).

Details of the various existing and proposed sewerage treatment plants are included as part of the November 1991 Montgomery Township "Amendment To The Wastewater Management Plan" document, revised to January 1992. The document was prepared by the Township Engineering Department, under the direction of Township Engineer Donald Johnson, pursuant to the New Jersey Water Quality Planning Act (N.J.S.A. 58:11a-1 et seq.) and the Water Quality Management Planning And Implementation Process Regulations (N.J.A.C. 7:15-3.4 et seq.). The plan represents the anticipated Wastewater Management needs for Montgomery Township through the year 2000.

As indicated in the "Amendment To The Wastewater Management Plan":

"The plan is based upon current sewer policies of Montgomery Township, existing wastewater treatment facilities and their service areas approved by N.J.D.E.P., proposed developments that have preliminary approval from the Planning Board, and those being reviewed by the Zoning Board of Adjustment and the Planning Board. Current zoning and existing land use have been utilized to determine the future wastewater needs. This plan may be amended from time to time to meet the wastewater management needs of Montgomery Township." (page 1)

PLANT LEGEND

- 1 CHERRY VALLEY
- 2 RIVERSIDE
- 3 PIKE BROOK
- 4 BELLE MEAD FARMS
- 5 HIGH SCHHOOOL
- 6 BURNT HILL
- 7 INSTITUTE-STATE
- 8 INGERSOLL RAND
- 9 STAGE II
- 10 BEDENS BROOK COUNTRY CLUB
- 11 BEDENS BROOK
- 12 JOHNSON & JOHNSON
- 13 CARRIER FOUNDATION
- 14 3-M COMPANY
- 15 3-M COMPANY

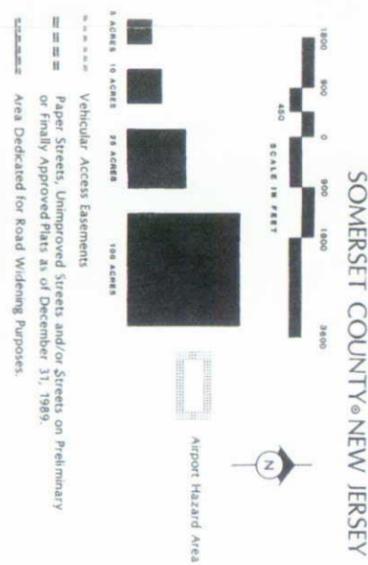


SANITARY SEWER MAP

- ▲ EXISTING PRIVATE SEWERAGE TREATMENT PLANT
- EXISTING MUNICIPAL SEWERAGE TREATMENT PLANT
- ▲ PROPOSED MUNICIPAL SEWERAGE TREATMENT PLANT
- ACTIVE COLLECTOR LINES
- DRY COLLECTOR LINES
- PROPOSED DISCHARGE LINE

SOURCE: SANITARY SEWER MAP SUPPLIED BY MONTGOMERY TOWNSHIP, REVISED TO JANUARY 6, 1992.

TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY



PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey. Revised to January 6, 1992.

BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey. Revised January 1990.

The "Wastewater Management Plan Map" indicates the designated service areas for the surface water discharge of treated effluent from sewerage treatment plants. Most other areas of the Township are required to utilize individual subsurface sewage disposal facilities (i.e., septic systems). However, where individual subsurface sewage disposal facilities are determined not to be practicable, then alternate on-site groundwater disposal facilities may be permitted where indicated on the "Wastewater Management Plan Map".

PUBLIC WATER SERVICE

The "Water Main Map" shows the water mains, fire hydrants and major potable water supply wells within Montgomery Township.

Although Montgomery Township has a public water supply, and even though a number of sewerage treatment plants exist in the municipality, most municipal residents rely on individual wells and on-site septic disposal.

NOTE: This map has been prepared for informational purposes only and is not intended to take the place of the official Wastewater Management Plan Map which is more detailed and which appears as part of the Township's Wastewater Management Plan as may be amended in the future.



WASTEWATER MANAGEMENT PLAN MAP

AS OF JUNE 1993

- SURFACE WATER DISCHARGE**
1. RIVERSIDE
 2. PIKE BROOK
 3. OXBRIDGE
 4. HIGH SCHOOL
 5. BURN'T HILL
 6. N. P. D. C.
 7. STAGE II
 8. CHERRY VALLEY
 9. INGERSOLL RAND
 10. JOHNSON & JOHNSON
 11. CARRIER FOUNDATION

- ON-SITE GROUNDWATER DISPOSAL FACILITIES**
- A. 518 BUSINESS PARK
 - B. TAMMYBROOK III DEVELOPMENT
 - C. HEADQUARTERS PARK
 - D. OAKMONT COUNTRY CLUB
 - E. MONTGOMERY KNOLL
 - F. PAVILIONS AT PRINCETON
 - G. COMPUTER ASSOCIATES
 - H. VILLAGE SHOPPER
 - I. PRINCETON MONTESSORI SCHOOL
 - J. PRINCETON RESEARCH INSTRUMENTS

BUILD-OUT BASE MAP
TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY NEW JERSEY

1400 700 350 0 350 700 1400
450 0 450
SCALE IN FEET
SCALE IN METERS

PREPARED BY: Coppola and Coppola Associates, Princeton, New Jersey.

BUILD-OUT BASE MAP PREPARED BY: Coppola and Coppola Associates, Princeton, New Jersey, February 1993 from Tax Map Sheets revised through December 31, 1992, and Preliminary and Finally Approved Plans from Township records through January 25, 1993.

WATER MAIN MAP

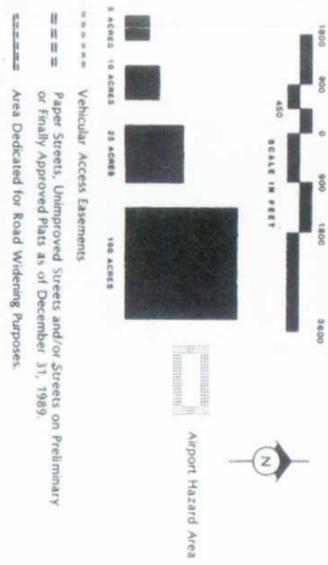
DETAIL



EXISTING	PROPOSED
4" LINE	4" LINE
6" LINE	6" LINE
8" LINE	8" LINE
12" LINE	12" LINE
16" LINE	16" LINE
20" LINE	20" LINE
24" LINE	24" LINE
30" LINE	30" LINE
36" LINE	36" LINE

SOURCE: WATER MAIN MAP SUPPLIED BY MONTGOMERY TOWNSHIP, REVISED TO JANUARY 6, 1992.

TOWNSHIP OF MONTGOMERY SOMERSET COUNTY, NEW JERSEY



- FIRE HYDRANT
- * WELL/TANK
- SUPERFUND SITE
- PUBLIC NON-COMMUNITY WELLS
- ELIZABETHTOWN WELLS

SEE DETAIL

PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey. Revised to January 6, 1992.

BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • Revised January 1990
 BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • January 1990

TRAFFIC PLANNING



TRAFFIC PLANNING

INTRODUCTION

The Township of Montgomery is dependent upon the automobile and has very adequate transportation access via the existing road system. North-south access is provided by State Route 206 which traverses the entire Township, the Belle Mead-Blawenburg and Great Roads (County Route 601), River Road North (County Route 533), and River Road South (County Route 605). East-west access is provided by the Georgetown and Franklin Turnpike (County Route 518), Dutchtown-Harlingen Road (County Route 604), and Skillman Road (County Route 602, in conjunction with Orchard Road and portions of Sunset and Burnt Hill Roads). In addition to these State and County roads, the various local roads provide access to the remaining areas of the Township.

JURISDICTION OF ROADS

The "Jurisdiction Of Roads" map shows the roads in Montgomery Township owned by the State of New Jersey, Somerset County and the Township.

State Route 206 is the major traffic artery within the municipality. Roads under the jurisdiction of Somerset County include the Belle Mead-Blawenburg and Great Roads (Route 601), Belle Mead-Griggstown Road (Route 630), River Road-North (Route 533), River Road-South (Route 605), the Georgetown and Franklin Turnpike (Route 518), Dutchtown-Harlingen Road (Route 604), Bridgepoint Road (Route 609), and Skillman Road (Route 602).

Generally speaking, the volume of traffic and the function that a road performs are revealed by the political jurisdiction which has control of its design and maintenance. This correlation is evident in Montgomery Township with the one significant exception being Cherry Valley Road. Although Cherry Valley Road is a local road throughout its entire length in Montgomery Township, it exhibits functional qualities more similar to the other roads under County jurisdiction than those which serve a more localized function.

EXISTING ROAD FUNCTIONS

Each of the various roads in the Township of Montgomery is called upon to perform a different type of function in the overall transportation network. For planning purposes, roads are generally classified into three (3) major types: "Arterial", "Collector" or "Local". Each of these types defines a certain range of function.

"Arterial" roads transport regional traffic; i.e., traffic characterized by high volumes, extended destinations and/or a substantial number of commercial vehicles. State Route 206 is the only "Arterial" road in Montgomery Township.

"Local" roads should function primarily as accessways to abutting properties, both for vehicles and pedestrians. "Collector" roads, in theory, should gather traffic from the local roads, before the design capacity of the local roads is

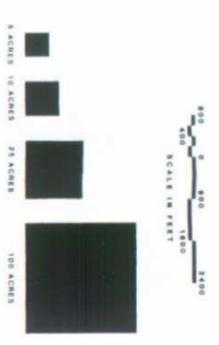


JURISDICTION OF ROADS

- STATE ROADS
- - - SOMERSET COUNTY ROADS
- LOCAL THRU ROADS

SOURCE: 1992 Montgomery Township Tax Maps.

TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY



--- Paper and/or Unimproved Streets
--- Airport Safety Zone

MAP PREPARED BY: COPPOLA AND COPPOLA ASSOCIATES, PRINCETON, NEW JERSEY, FEBRUARY 1993.
PREPARED BY: Richard Thomas Coppola and Associates • Princeton Junction, New Jersey • March 1986
REVISED MAY 1987
REVISED MAY 1988

exceeded, and funnel the traffic to major land uses, such as concentrated areas of residential development, shopping centers or office parks, or to "Arterial" roads.

Depending upon the characteristics of adjacent land uses and the volume, source and composition of the traffic, "Collector" roads may be broken down into sub-categories with their own individualized design standards. In any case, no on-street parking should be permitted on "Collector" roads, and the access points to the major "Collector" roads should be limited or strictly regulated to insure an uninterrupted flow of traffic.

These functional classifications are clearly ideal types, since they rarely exist in true form. One of the most obvious defects in the existing "Arterial" and "Collector" road network in Montgomery Township, for example, is the occurrence of many closely spaced access points abutting commercial properties. Such "strip commercial" development decreases the design volume of the road and, consequently, creates points of friction which cause accidents. In other instances, the "ribbon residential" development along roadways in the Township performing "Collector" functions will lead to future problems when traffic volumes increase.

STREET RIGHT-OF-WAY WIDTHS

The width of the street right-of-way should give an indication of the volume and function performed by the various roadways in the traffic circulation network. It should be noted that street right-of-way widths are not synonymous with the paved area of a roadway which is referred to as the "cartway" width. The right-of-way width includes the paved area, or cartway, the shoulders, and the sidewalks, if present. The "Existing Right-Of-Way Widths" map shows the widths of streets within Montgomery Township.

Generally speaking, State and County roads have the widest right-of-way widths within a municipality, and this correlation is evident in Montgomery Township. State Route 206 and County Route 518 have the widest right-of-way widths within the Township, each being sixty-six feet (66'). However, the other roadways within the Township, whether under local or County jurisdiction, reflect a wide array of right-of-way widths.

Generally speaking, no roadway other than certain types of access roads in planned developments should have a right-of-way width less than fifty feet (50'), and these roadways should be designed only to perform basic "Local" traffic functions. The most consistent pattern of right-of-way widths within Montgomery Township is found within recently subdivided detached dwelling residential developments, wherein the fifty foot (50') right-of-way is the rule. "Collector" roads should have rights-of-way wider than "Local" roads and less than "Arterial" roads.

TRAFFIC AND THE LAND USE PLAN

The Land Use Plan Element of the Township has continually and forthrightly acknowledged and addressed its regional land use planning obligations, including



EXISTING RIGHT-OF-WAY WIDTHS

- 30.0' to 33.0'
- 40.0' to 46.5'
- 49.5' to 50.0'
- 55.0' to 56.5'
- 60.0' to 65.0'
- 66.0' or greater

**TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY**



See map paper and/or Unimproved Streets
Airport Safety Zone

SOURCE: Montgomery Township Tax Maps 1992.

MAP PREPARED BY: COPPOLA & COPPOLA, PRINCETON, NEW JERSEY, FEBRUARY 1983.
 PREPARED BY: Richard Thomas Coppola and Associates • Princeton Junction, New Jersey • March 1986
 REVISED MAY 1987
 REVISED MAY 1988

its "Mt. Laurel" "fair share" housing obligations. Importantly, the Township has managed to satisfy its regional obligations in the context of a Land Use Plan which has not deviated from its basic conception since it was first formulated twenty (20) years ago in 1972. Specifically, Montgomery Township has planned and zoned for two (2) areas of relatively concentrated residential and commercial development, both along State Route 206, with one located near Rocky Hill and the Route 206/Route 518 intersection, and the other located in the Belle Mead area of the Township north of Crusier Brook.

Most of the Route 206 frontage land between these two areas has been planned, zoned and is being developed for single-family homes, possibly in a clustered format, at a gross density of approximately one dwelling unit per acre. Montgomery Township does not want "strip commercial" development along the frontage of Route 206 within its bounds.

Route 206 is Montgomery Township's "Main Street". Known and referred to as Van Horne Road in the municipality, the maintenance of the single-family residential zoning along the roadway's frontage is the key to the success or failure of the Montgomery Township Land Use Plan. If improvements are made to Route 206 which make it undesirable for the construction of the single-family homes, pressures will increase for alternative multiple-family housing and/or the unwanted 'strip commercial' development. The end result will be the complete destruction to the heretofore successful Land Use Plan of the Township which has been developed and refined during the past twenty (20) years.

Because of this concern, Montgomery Township litigated with the United States and New Jersey State Departments of Transportation in order to prevent improvements to State Route 206 which would have effectively destroyed Montgomery Township's Land Use Plan and the rural residential character of the Township. The result of the litigation was favorable to the Township and is contained in a July 20, 1992 "Stipulation And Order Of Dismissal".

A basic goal of the traffic circulation planning in Montgomery Township is to utilize, as much as possible, the existing roadways within the Township. As a result, the improvements to the existing system of roads can be small-scale "doable" endeavors which have a reasonable probability of being accomplished and which will result in the greatest possibility of preserving the rural residential character existent throughout most of the municipality.

PAST PLAN MODIFICATIONS

The Traffic Circulation Plan was comprehensively amended twice since its adoption on December 15, 1986. The June 26, 1989 amendment included updated roadway design specifications for the various categories of roadways in the Township. Moreover, a table of proposed area and yard requirements for lots within the "R-1" and "R-2" Districts which front upon or abut Route 206 or any of the 'arterial' or 'collector' roadways was included. The table included in the June 1989 Traffic Circulation Plan Element has been included in modified form in all subsequent versions of the plan and required larger lots with increased road frontages for the following reasons:

- ° To discourage the creation of new lots with driveway

access points to Route 206 or an 'arterial' or 'collector' road;

- To limit the potential number of new driveway access points; and
- To provide lots of sufficient size and depth along Route 206 or an 'arterial' or 'collector' road in order to have any house set back a sufficient distance from the road right-of-way and the traffic thereon.

The June 1989 Traffic Circulation Plan Map included only three (3) modifications to the 1986 version:

- A "minor collector" roadway was proposed to connect Trent Place and Reading Boulevard in the northern portion of the Township within the "SB" Small Business District;
- That portion of Orchard Road directly east of its intersection with Opossum Road was changed from a "major collector" designation to a "minor collector" designation, reflecting the Township's intention to channel the traffic generated from the office/research uses along Orchard Road towards Route 206 as well as to the proposed "Service Road" proceeding southwardly from Orchard Road, across County Route 518, to an eventual intersection with Cherry Valley Road; and
- The alignment of the proposed "arterial" service road between Orchard Road to the north and Cherry Valley Road to the south, and the alignment of the proposed east-west "arterial" connector to Route 206 south of the airport were modified pursuant to additional civil engineering and traffic engineering information and recommendations.

The October 15, 1990 amendment to the Traffic Circulation Plan Element introduced a new and more diverse road classification system based upon a more definitive consideration of the functions and types of existing roads within the Township. From the six (6) road classifications included within the June 1989 Traffic Circulation Plan, ten (10) classifications were adopted in 1990. The thrust of the change was to decrease the degree of road improvements required and the amount of impervious surface coverage attributable to roadways. New roadway design specifications and cross-sections of roads also were included in the October 15, 1990 Traffic Circulation Plan Element.

The September 25, 1990 Traffic Circulation Plan Map indicated a new classification for River Road as a "Scenic Collector" in response to the Township's desire to preserve the River Road Corridor.

During May 1989, Montgomery Township, Princeton Township, Princeton Borough and Rocky Hill Borough initiated an "Origin and Destination Study" to provide a database for the evaluation of traffic circulation on an intra-municipal basis. The "Origin and Destination Study" documented a traffic movement desire line

between the northern portion of the Township in the vicinity of State Route 206 and the southwestern portion of the Township in the direction of northern Lawrence Township and Trenton City. Currently, a significant portion of this traffic utilizes State Route 206 and leaves Route 206 toward the southwestern portion of the Township primarily via Sunset Road or County Route 518.

One specific recommendation of the "Origin and Destination Study" was to provide a new singular "westerly by-pass" road. However, since a basic concept of the traffic circulation planning of Montgomery Township is to utilize as much as possible the existing roadways within the Township and diffuse traffic volumes among a variety of alternate routes, the by-pass road was rejected by the Planning Board and does not appear on the September 25, 1990 Traffic Circulation Plan Map. However, Montgomery Township does endorse the plan for "West County Drive" as a northern entry into the Township's western "capillary" system.

THE 1992 TRAFFIC PLAN

The November 30, 1992 Traffic Circulation Plan continues to build upon, refine and update past traffic circulation planning recommendations. One particular recommendation of the current plan is to modify the treatment of the "shoulders" within the cartways of "Minor Collector", "Rural Collector" and "Rural Local" roadways. The purpose of the modification is to prevent the needless clearing and paving of the shoulders and is written as part of the "Roadway Design Specifications" as follows:

Shoulder areas shall not be paved except as may be required by the Planning Board or Zoning Board of Adjustment, as the case may be, for proper surface water drainage, intersection traffic movements, and road geometry through curves. When not required to be paved, the shoulder area, or portion(s) thereof, shall be approved by the Township Planning Board or Zoning Board of Adjustment, as the case may be, to remain in its natural vegetative state, be cleared for sight distance safety purposes, be improved for drainage purposes, and/or be cleared, graded and appropriately stabilized with an all-weather surface for traffic movements and the parking of disabled vehicles.

The proposed Traffic Circulation Plan also includes a number of changes to the road network within the Apartment/Townhouse District in order to insure that the traffic within the area will be primarily the "local" traffic of the residents rather than "regional" through traffic. The specific changes include the following:

- ° The proposed "Major Collector" road along the Princeton Township border has been deleted from the Traffic Circulation Plan Map.
- ° The proposed "Minor Collector" extension of Carrington Road northwardly through Rocky Hill Borough to the Princeton North Shopping Center has been deleted from the Traffic Circulation Plan Map.

- The proposed "Major Collector" connection between Blue Spring Road and Bunn Road in Princeton Township has been deleted from the Traffic Circulation Plan Map.
- Blue Spring Road and Salisbury Road have been classified with a new "Residential Boulevard" designation on the Traffic Circulation Plan Map.
- The proposed "Roadway Design Specifications" for the "Residential Boulevard" reflect the recommendations of the Roadway Committee designated by the Township Committee.

Finally, the 1992 Traffic Circulation Plan indicates that State Route 206 is to remain as currently improved, except for the required additional improvements at intersections, and subject to the reevaluation by the Department of Transportation of any further need for improvements to the roadway in accordance with the July 20, 1992 Settlement Agreement between the Township of Montgomery and the U.S. Department of Transportation, et al.

The following are organized as "Attachments" to this Traffic Circulation Plan Element:

- The Traffic Circulation Plan Map and Roadway Design Specifications are included as Attachment A.
- The Cross-Sections Of Roads are included as Attachment B.
- The Area And Yard Requirements For Lots In The "R-1" & "R-2" Districts Fronting Upon Or Abutting Route 206, Service Roads, Major Collectors, Scenic Collectors, And Minor Collectors are included as Attachment C.

ATTACHMENT A

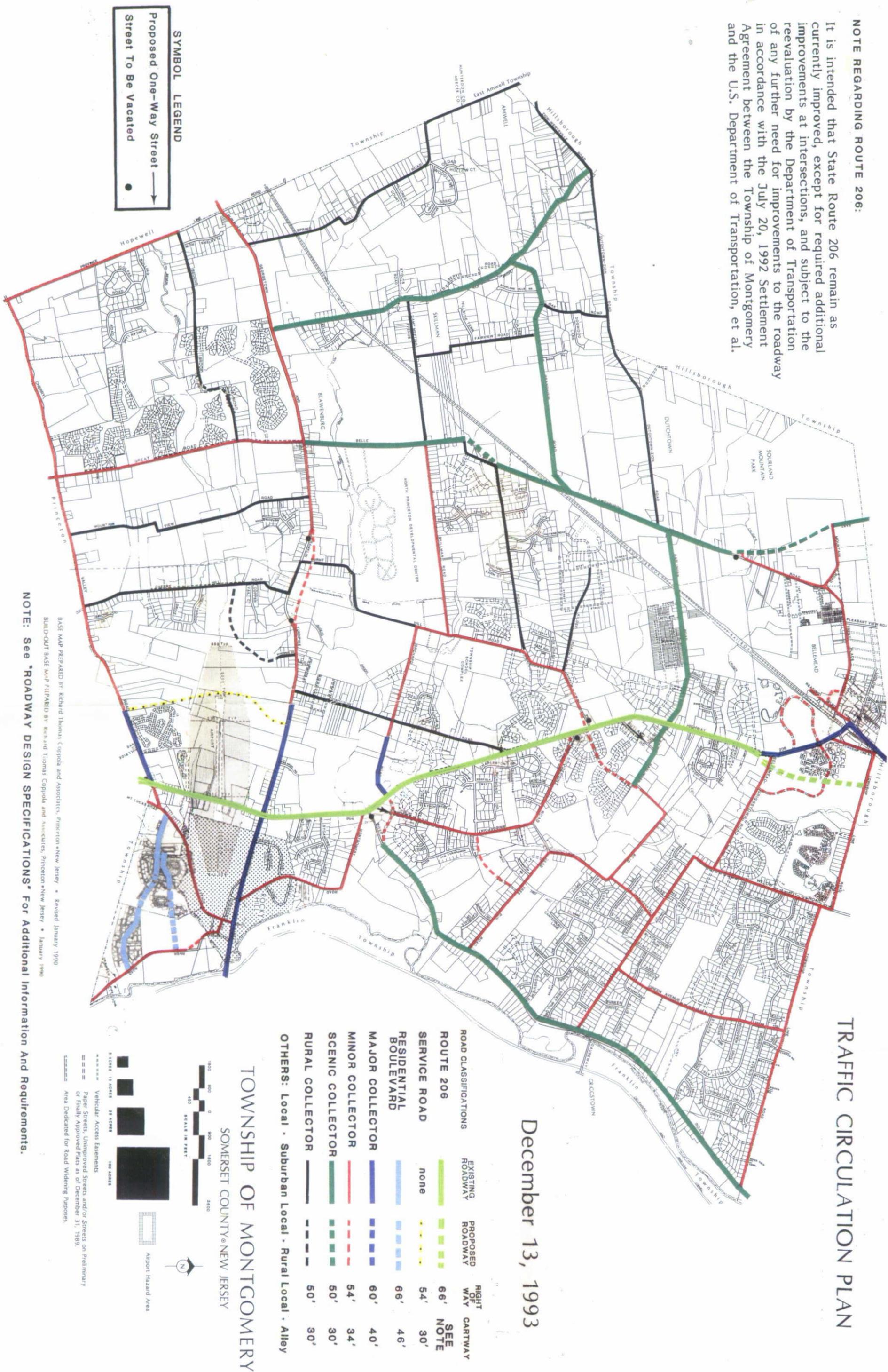
TRAFFIC CIRCULATION PLAN MAP
AND
ROADWAY DESIGN SPECIFICATIONS

NOTE REGARDING ROUTE 206:

It is intended that State Route 206 remain as currently improved, except for required additional improvements at intersections, and subject to the reevaluation by the Department of Transportation of any further need for improvements to the roadway in accordance with the July 20, 1992 Settlement Agreement between the Township of Montgomery and the U.S. Department of Transportation, et al.

TRAFFIC CIRCULATION PLAN

December 13, 1993



SYMBOL LEGEND

Proposed One-Way Street →

Street To Be Vacated ●

ROAD CLASSIFICATIONS	EXISTING ROADWAY	PROPOSED ROADWAY	RIGHT OF WAY	CARTWAY	SEE NOTE
ROUTE 206	None	Green	66'	30'	30'
SERVICE ROAD	None	Yellow	54'	30'	30'
RESIDENTIAL BOULEVARD	Blue	Blue	66'	46'	46'
MAJOR COLLECTOR	Blue	Blue	60'	40'	40'
MINOR COLLECTOR	Red	Red	54'	34'	34'
SCENIC COLLECTOR	Green	Green	50'	30'	30'
RURAL COLLECTOR	Black	Black	50'	30'	30'
OTHERS: Local - Suburban Local - Rural Local - Alley	Black	Black	50'	30'	30'

TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY

1800 900 0 900 1800 2700
600 300 0 300 600 900
SCALE IN FEET

Vehicle Access Estimations
Paper Streets, Unimproved Streets and/or Streets on Preliminary or Finally Approved Plans as of December 31, 1989.
Area Dedicated for Road Widening Purposes.

180 ACRES
90 ACRES
45 ACRES
22.5 ACRES

Airport Hazard Area

BASE MAP PREPARED BY: Richard Thomas Coppiola and Associates, Princeton, New Jersey • Revised January 1990
BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppiola and Associates, Princeton, New Jersey • January 1990

NOTE: See "ROADWAY DESIGN SPECIFICATIONS" For Additional Information And Requirements.

ROADWAY DESIGN SPECIFICATIONS

Montgomery Township, Somerset County, New Jersey
October 15, 1992

In all developments, the minimum public street right-of-way shall be measured from lot line to lot line and shall be in accordance with the following schedule, but in no case shall a new street that is a continuation of an existing street be continued at a width less than the existing street although a greater width may be required in accordance with the following schedule:

<u>Roadway Category</u>	<u>R-O-W Width(1)</u>	<u>Traffic Lanes</u> <u>No.</u> <u>Width</u>	<u>Shoulder Width</u> <u>Within Cartway</u>	<u>Width</u> <u>Outside Cartway</u> <u>On Each Side(3)</u>	<u>Width</u> <u>Of</u> <u>Cartway(1)</u>
Route 206	66'	To Remain As Currently Improved Except As Required At Intersections			
Service Road	70'	2 @ 12'	6'(2)	7' - 15'(4)	48'(5)(6)
Residential Boulevard	66'	2 @ 15'	----	10'	46'(6)(7)
Major Collector	60'	2 @ 12'	8'(2)	10'	40'(6)
Minor Collector	54'	2 @ 12'	5'(8)	10'	34'(6)
Scenic Collector	50'	2 @ 12'	3'(2)	10'	30'(6)(9)
Rural Collector	50'	2 @ 10'	5'(8)	10'	30'(6)
Suburban Local (10)	50'(11)	2 @ 15'	----	10'	30'(12)
Rural Local (13)	50'	2 @ 12'	3'(8)	10'	30'(6)
Alley (14)	20'(15)	2 @ 10'	----	---	20'(16)

FOOTNOTES

- (1) Right-of-way width and/or width of cartway may be required to be more within and approaching intersections.

FOOTNOTES (continued)

- (2) Shoulder area shall be paved.
- (3) Shall be grass stabilized topsoil, minimum 4" thick, unless otherwise specifically approved by the Township Planning Board or Zoning Board of Adjustment, as the case may be.
- (4) Fifteen foot (15') area includes six foot (6') pathway (see cross-section).
- (5) Includes twelve foot (12') grassed and treed median strip for left-hand turn slots.
- (6) No on-street parking permitted.
- (7) Includes four foot (4') shrubbed median strip and two (2) six foot (6') pathways (see cross-section).
- (8) Shoulder areas shall not be paved except as may be required by the Planning Board or Zoning Board of Adjustment, as the case may be, for proper surface water drainage, intersection traffic movements, and road geometry through curves. When not required to be paved, the shoulder area, or portion(s) thereof, shall be approved by the Township Planning Board or Zoning Board of Adjustment, as the case may be, to remain in its natural vegetative state, be cleared for sight distance safety purposes, be improved for drainage purposes, and/or be cleared, graded and appropriately stabilized with an all-weather surface for traffic movements and the parking of disabled vehicles.
- (9) Existing centerline of roadway to be maintained; should individual circumstances make it necessary to shift the centerline, then the extent and location of the shift should be undertaken so as not to encroach upon patriarch trees and other significant vegetation.
- (10) Streets within a Planned Residential Development or within a Montgomery Village Planned Development not otherwise specified on the Traffic Circulation Plan Element of the Township Master Plan shall ordinarily be considered "Suburban Local" streets, except for the major streets within the development expected to carry relatively significant volumes of traffic; such major streets shall meet the standards herein for "Residential Boulevard", "Major Collector" or "Minor Collector" streets as appropriate and approved by the Board.
- (11) Except that for "Suburban Local" streets within a Planned Residential Development or within a Montgomery Village Planned Development (i.e., streets which are not indicated on the Traffic Circulation Plan Element of the Township Master Plan and/or which do not provide for through traffic

FOOTNOTES (continued)

movement through the planned development), the right-of-way shall be considered coterminous with the required cartway, provided an easement of ten feet (10') in width is provided either on both sides of the cartway or in other appropriate locations as may be specifically approved by the Planning Board for the placement of curbs, sidewalks, utilities, drainage and landscaping.

- (12) Except in specific instances within a non-clustered subdivision of single-family detached dwelling lots or within a Residential Cluster or within a Planned Residential Development or within the "APT/TH" District where a pavement width of twenty-eight feet to thirty feet (28' - 30') may be appropriate and may be approved by the Planning Board based upon adequate information that the eventual street network in the area will not necessitate a wider cartway. Within a Montgomery Village Planned Development for streets which have no non-residential use fronting thereon, it may be appropriate to further reduce the pavement width to twenty-six feet (26') for two-way traffic and to twenty-one feet (21') for one-way traffic.

On-street parking shall be permitted as follows:

- Within any development where the pavement width is thirty feet (30'), parking is permitted on both sides of the street, except that any "Suburban Local" street within a Montgomery Village Planned Development which has any non-residential use fronting thereon shall have a pavement width of at least thirty-six feet (36') in order for parking to be permitted on both sides of the street.
- Within a Montgomery Village Planned Development, where the pavement width is twenty-eight feet (28') for two-way traffic flow, parking is permitted only on one (1) side. Where the pavement width is between twenty-six feet (26') and twenty-eight feet (28') for two-way traffic flow, no parking is permitted on the street. Where the pavement width is between twenty-three feet (23') and twenty-six feet (26') for one-way traffic flow, parking is permitted only on one (1) side. Where the pavement width is between twenty-one feet (21') and twenty-three feet (23') for one-way traffic flow, no parking is permitted on the street.
- Within the "R-1" and "R-2" Districts, where the pavement width has been reduced to less than thirty feet (30') in non-clustered developments of detached single-family dwellings, no on-street parking shall be permitted and the minimum front yard setback shall be seventy-five feet (75') in all cases.

FOOTNOTES (continued)

- Within a Residential Cluster, where the pavement width has been reduced to less than thirty feet (30'), no on-street parking shall be permitted and designated off-street guest parking spaces shall be provided at the ratio of one-half (1/2) space per residential lot.
- Within a Planned Residential Development or within the "APT/TH" District, where the pavement width has been reduced to less than thirty feet (30'), no on-street parking shall be permitted.

Mountable Belgian block curbing may be required on one or both sides of the street as determined appropriate by the Planning Board after consultation with the Fire Prevention Bureau, considering both the necessity of emergency vehicular access and the practical ability to provide a transition between vertical and mountable curbing.

- (13) Applies only to streets approved as part of a "Rural Residential Development" in accordance with Subsection 16-5.17 of the Land Development Ordinance.
- (14) Permitted only within a Montgomery Village Planned Development. No parking is permitted on an alley. Alleys must be straight, through streets having a maximum length of 250 feet and must intersect with a local street on each end.
- (15) For alleys, the right-of-way shall be considered coterminous with the required cartway (width between gutters).
- (16) Where traffic is restricted to one-way, the width between gutters may be reduced to seventeen feet (17').

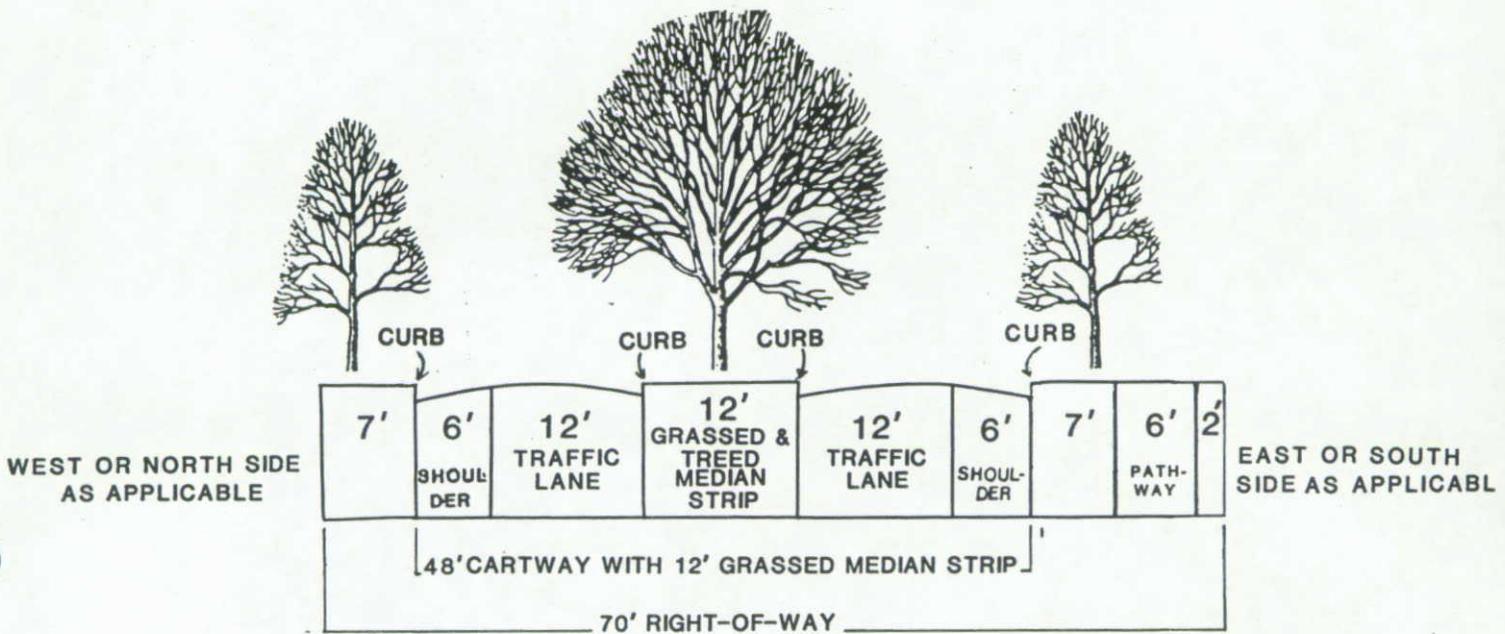
ATTACHMENT B

CROSS-SECTIONS OF ROADS

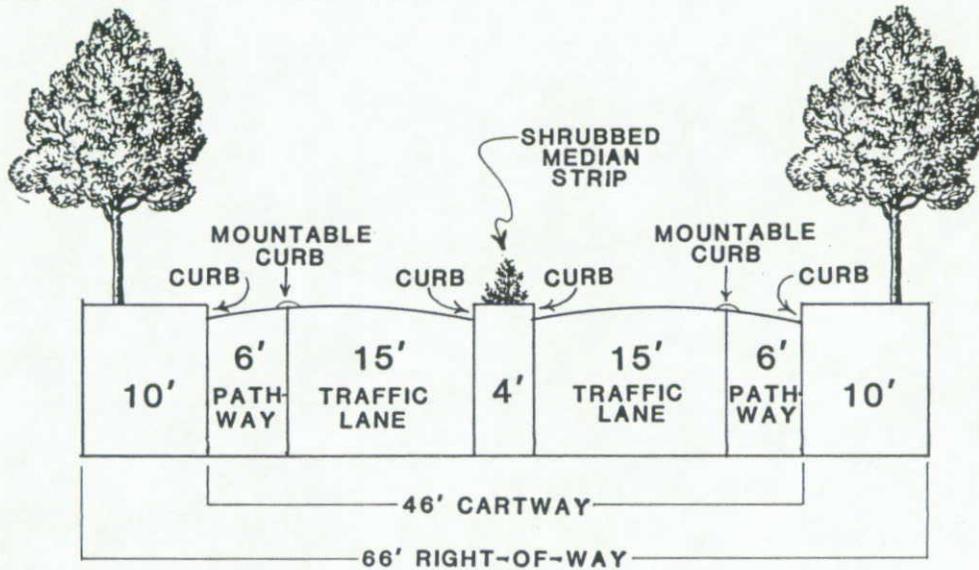
CROSS-SECTIONS OF ROADS

MONTGOMERY TOWNSHIP • SOMERSET COUNTY

SERVICE ROAD

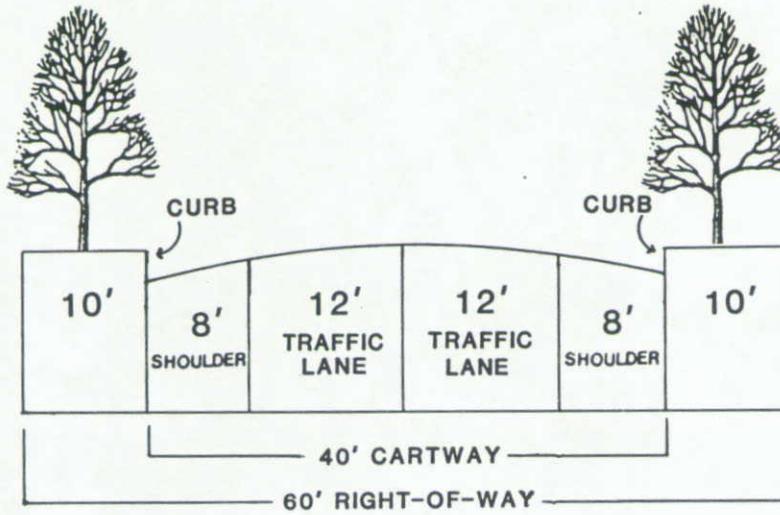


RESIDENTIAL BOULEVARD

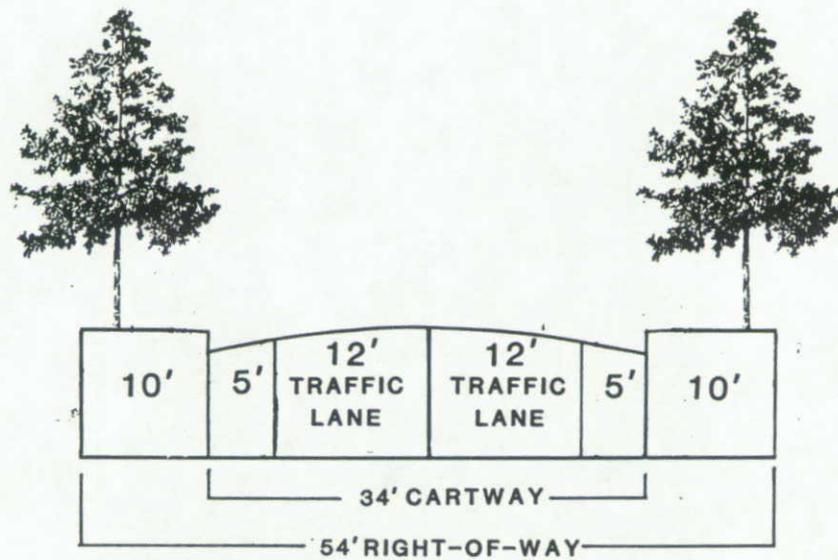


SCALE IS 1"=15'

MAJOR COLLECTOR

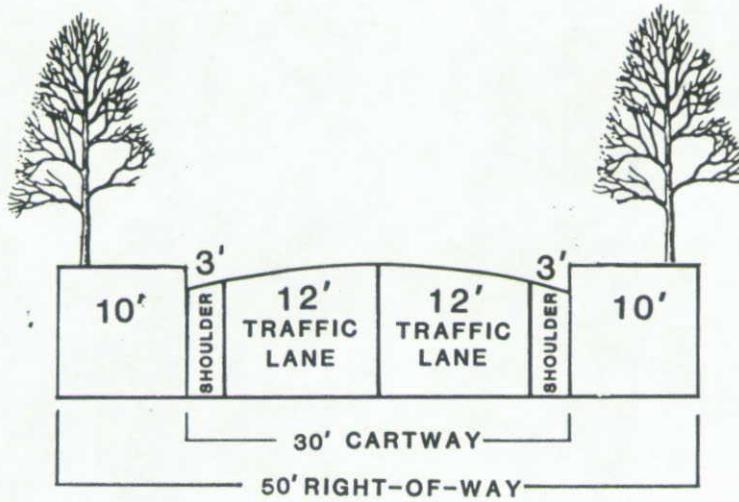


MINOR COLLECTOR

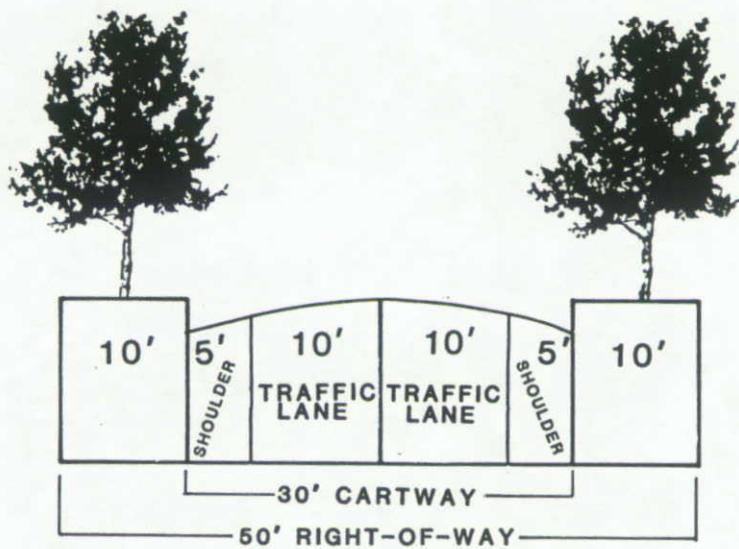


SCALE IS 1"=15'

SCENIC COLLECTOR

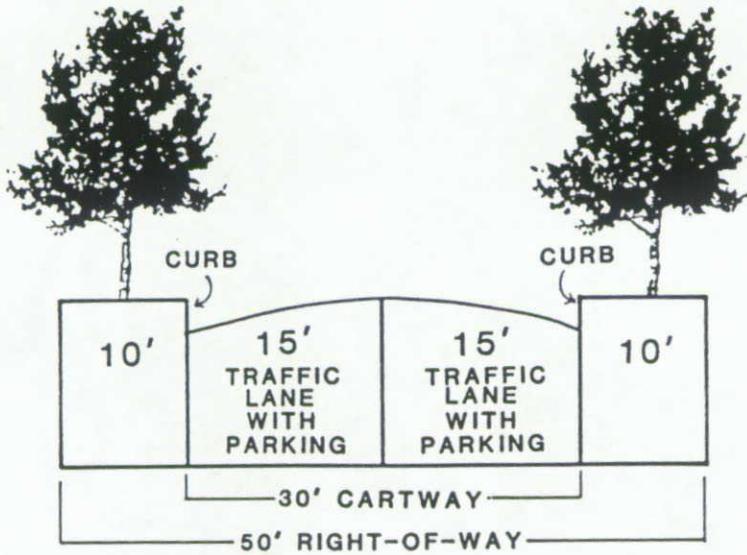


RURAL COLLECTOR

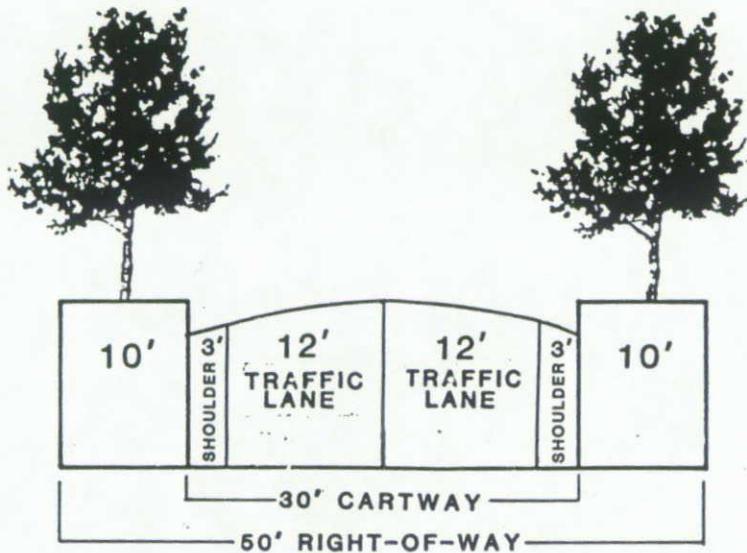


SCALE IS 1" = 15'

SUBURBAN LOCAL



RURAL LOCAL



SCALE IS 1" = 15'

NOTES:

- 1) Sidewalks are to be constructed where and when required by the Montgomery Township Land Development Ordinance and approved by the appropriate municipal agency.
- 2) See "Roadway Design Specifications" for further details and explanation.

ATTACHMENT C

AREA AND YARD REQUIREMENTS
FOR LOTS IN THE "R-1" & "R-2" DISTRICTS
FRONTING UPON OR ABUTTING
ROUTE 206, SERVICE ROADS,
MAJOR COLLECTORS, SCENIC COLLECTORS,
AND MINOR COLLECTORS

MONTGOMERY TOWNSHIP, SOMERSET COUNTY, NEW JERSEY

AREA AND YARD REQUIREMENTS FOR RESIDENTIAL LOTS IN THE "R-1" and "R-2" DISTRICTS
FRONTING UPON OR ABUTTING
ROUTE 206, SERVICE ROADS, MAJOR COLLECTORS, SCENIC COLLECTORS AND MINOR COLLECTORS (1)(2)

October 15, 1992

DISTRICT	LOT ORIENTATION	ROUTE 206				SERVICE ROADS, MAJOR COLLECTORS AND SCENIC COLLECTORS(3)				MINOR COLLECTORS(3)			
		ACREAGE	FRONTAGE	DEPTH	SETBACK(4)	ACREAGE	FRONTAGE	DEPTH	SETBACK(4)	ACREAGE	FRONTAGE	DEPTH	SETBACK(4)
"R-1"	Fronting	-- NOT	PERMITTED	--	2 1/2 ac.	225'	350'	125'	2 ac.	200'	300'	100'	
	Abutting	3 ac.	250'	400'	200'	300'	125'	1 1/2 ac.	175'	250'	100'		
"R-2"	Fronting	-- NOT	APPLICABLE	--	3 1/4 ac.	275'	450'	125'	3 ac.	250'	400'	100'	
	Abutting	-- NOT	APPLICABLE	--	3 ac.	250'	400'	125'	2 1/2 ac.	225'	350'	100'	
Optional Residential Cluster	Fronting	-- NOT	PERMITTED	--(5)	-- NOT	PERMITTED	--	-- NOT	PERMITTED	--	--	--	
	Abutting	-- NOT	PERMITTED	--(5)	3/4 ac.	100'	275'	125'	3/4 ac.	100'	250'	100'	

FOOTNOTES:

- (1) These provisions are not applicable to existing lots in the "R-1" or "R-2" Districts with existing single-family detached dwellings situated thereon, nor are these provisions applicable to any existing vacant lot which abuts any type of collector roadway and which is undersized compared to the requirements specified herein, if the lot has previously been approved by the Montgomery Township Planning Board or Zoning Board of Adjustment since June 26, 1974.
- (2) There are no special lot size and dimension requirements for lots "fronting" or "abutting" "Residential Boulevards", "Rural Collectors", "Suburban Locals", "Rural Locals" or "Alleys".
- (3) Lots within a "Rural Residential Development" in the "R-1" and/or "R-2" Districts abutting any type of collector roadway shall have the acreage, frontage, depth and setback requirements specified above for lots within the "R-2" District abutting "Service Roads, Major Collectors and Scenic Collectors".
- (4) "Setback" provisions apply to principal building only.
- (5) In any case, the setback of any residential principal building from Route 206 shall be a minimum of two hundred twenty-five feet (225').

RECREATION, CONSERVATION
AND OPEN SPACE PLANNING



RECREATION, CONSERVATION AND OPEN SPACE PLANNING

INTRODUCTION

Montgomery Township has long recognized the need to balance the different types of land uses and growth within the Township while, at the same time, attempting to preserve the suburban-rural atmosphere and quality of life in the Township. The Land Use Plan and Housing Plan Elements of the Township Master Plan include specific goals and objectives addressing the need for open space lands, active and passive recreational facilities, and the preservation of existing farmland, natural resources, and 'critical' land areas.

While the Land Use Plan Element of the Master and the subsequent Land Development Ordinance include provisions for open space preservation and recreational facilities, the increasing physical development of the Township has threatened the remaining open spaces and farms. The Township Committee, recognizing that the preservation of open space areas is vital to the provision of recreational opportunities and the preservation of the Township's farming heritage, formed the Open Space Committee in early 1989 in order to aid the Township in the acquisition of open space lands. The Open Space Committee was charged to make recommendations on the acceptance of open space lands already offered to the Township; seek opportunities for the acquisition of additional open spaces, stream corridors and farms; and provide assistance in the formulation and implementation of open space, stream corridor and farmland preservation programs.

Another citizen group previously created by the Township Committee is the Recreation Committee which has been charged with the responsibilities to analyze the existing Township recreational facilities in order to determine what other facilities currently are needed and, further, to anticipate future needs for active and passive recreational facilities, including recreational equipment and land areas.

PUBLICLY OWNED LANDS

The "Publicly Owned Lands" map indicates those properties within the Township that are owned by Montgomery Township, Princeton Township, Somerset County, the State of New Jersey, or the Montgomery Township Board of Education; all as indicated in the Montgomery Township Tax Book updated through February 1991. Additionally, the map identifies properties that are shown to be dedicated to, but not necessarily accepted at this time, by Montgomery Township on approved preliminary and final subdivision plats as of March 1991. Most of these smaller lots are detention basins; others are open space lands for public purpose uses.

Montgomery Township owns varying sized tracts of land scattered throughout the Township totalling approximately 593 acres; the lands consist of unimproved open spaces, public parks, dedicated detention basins, and public facilities. The largest single lot under Montgomery Township ownership is Montgomery Park on Harlingen Road, consisting of approximately 100 acres.

Somerset County owns one property within Montgomery Township, the Sourland Mountain Park located in the northwestern corner of the Township and consisting of 433 acres. The State of New Jersey owns much of the land along the Millstone River which comprises the Delaware and Raritan Canal Park; other State properties include the North Princeton Developmental Center lands and dedicated land for future road rights-of-way. The Montgomery Township Board of Education lands are clustered together on Orchard and Burnt Hill Roads upon which the Township school complex is located; the lands total approximately 165 acres.

DEDICATED OPEN SPACE LANDS

The "Dedicated Open Space Lands" map indicates the lands dedicated for open space use in Montgomery Township. The land either is currently being used as a form of open space or is planned to be used for open space when the land is finally developed as approved by the Township.

Whether all the areas of dedicated open space lands remain as open space in the future depends on whether deed restrictions or easements exist on the property to protect the land from development.

EXISTING DEDICATED STREAM CORRIDOR PRESERVATION AND CONSERVATION EASEMENTS

In recognition of the need to preserve natural resources such as woodlands and to protect stream corridors, Montgomery Township has been requesting the dedication of easements for such preservation and protection on applicable lands within proposed subdivision developments as part of the application review process. The easements are deed restrictions on the use of the land which generally remains in private or common ownership. The language of the easement agreement between the property owners and Montgomery Township may include provisions for pedestrian or pedestrian-bikeway usage within the easements where such uses are deemed desirable and in concert with the Township's Master Plan. Additionally, a conservation and agricultural easement granted to the New Jersey Conservation Foundation in 1989 exists on a large portion of a 100-acre tract of land fronting on Cherry Valley Road and owned by the Raymond family.

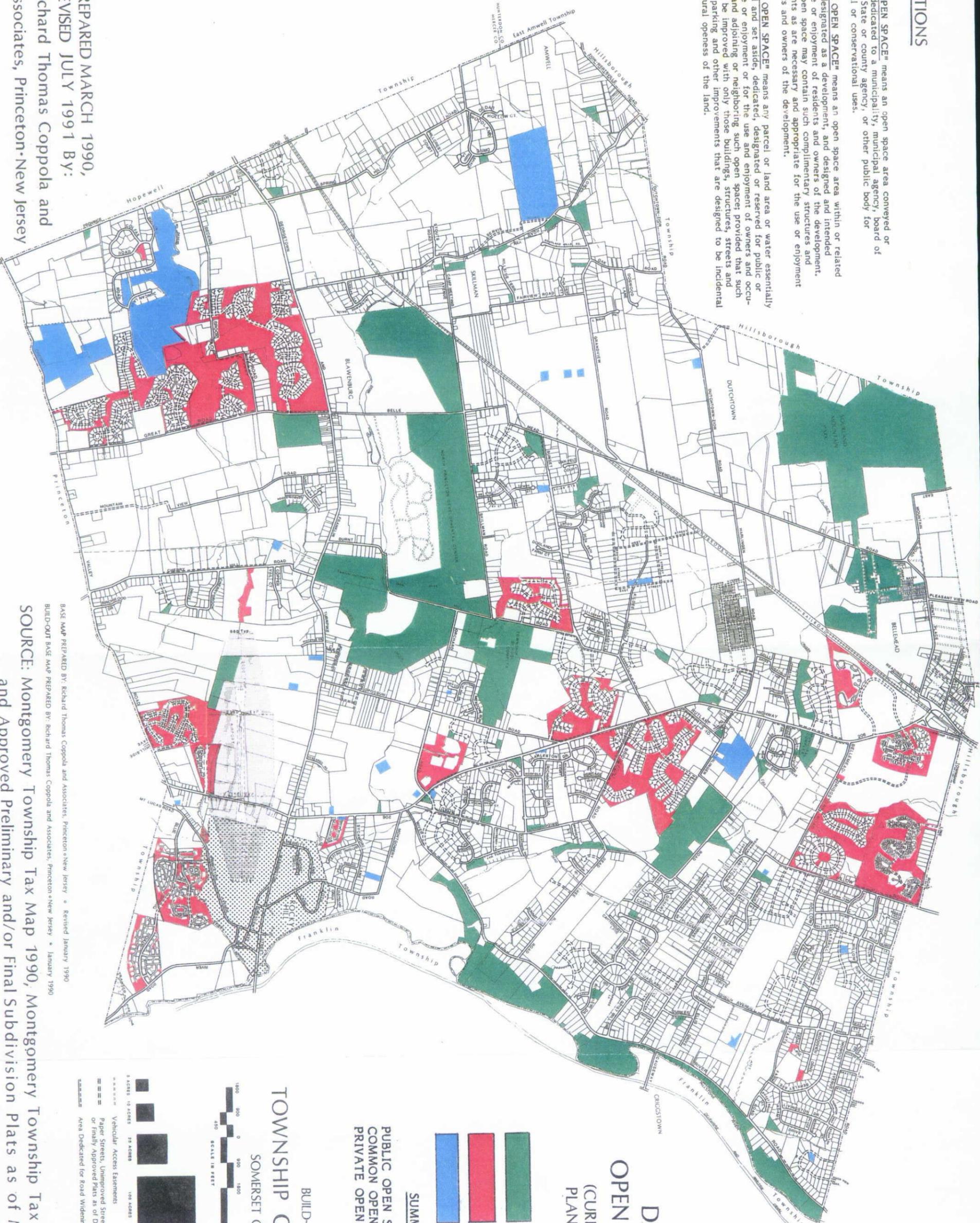
The "stream corridor preservation easements" exist along stream corridors that traverse common open space lands or private property. "Conservation easements" also can be found along stream corridors as well as woodlands or hedge rows, landscaped buffer areas, and environmentally fragile or critical land areas.

SIDEWALKS, DETENTION BASINS AND CEMETERIES

The "Sidewalks, Detention Basins And Cemeteries" map indicates the location of existing concrete sidewalks (on one or both side(s) of a street), detention basins (both public and private), and cemeteries within Montgomery Township. Also indicated are the location of proposed sidewalks as approved by the Township as part of preliminary and/or final subdivision applications through March 1991.

DEFINITIONS

- (1) "PUBLIC OPEN SPACE" means an open space area conveyed or otherwise dedicated to a municipality, municipal agency, board of education, State or county agency, or other public body for recreational or conservational uses.
- (2) "COMMON OPEN SPACE" means an open space area within or related to a site designated as a development, and designed and intended for the use or enjoyment of residents and owners of the development. Common open space may contain such complimentary structures and improvements as are necessary and appropriate for the use or enjoyment of residents and owners of the development.
- (3) "PRIVATE OPEN SPACE" means any parcel or land area or water essentially unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment or for the use and enjoyment of owners and occupants of land adjoining or neighboring such open space; provided that such areas may be improved with only those buildings, structures, streets and off-street parking and other improvements that are designed to be incidental to the natural openness of the land.



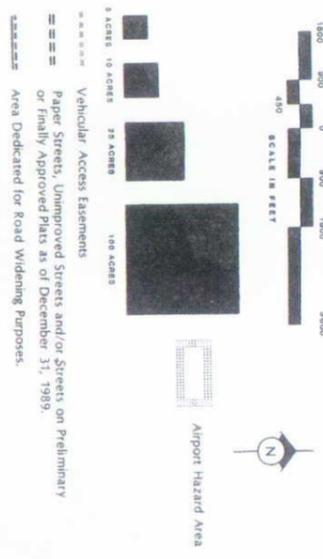
**DEDICATED
OPEN SPACE LANDS
(CURRENTLY USED OR
PLANNED TO BE USED)**

- PUBLIC OPEN SPACE (1)
- COMMON OPEN SPACE (2)
- PRIVATE OPEN SPACE (3)

SUMMARY TOTALS

PUBLIC OPEN SPACE:	1,935.30 Acres
COMMON OPEN SPACE:	1,031.48 Acres
PRIVATE OPEN SPACE:	402.36 Acres
TOTAL:	3,369.14 Acres

**TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY**



PREPARED MARCH 1990,
REVISED JULY 1991 BY:
Richard Thomas Coppola and
Associates, Princeton-New Jersey

BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton-New Jersey • Revised January 1990
BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton-New Jersey • January 1990
SOURCE: Montgomery Township Tax Map 1990, Montgomery Township Tax Book 1991,
and Approved Preliminary and/or Final Subdivision Plats as of March 1991.



**SIDEWALKS,
DETENTION BASINS
AND CEMETERIES**

- SIDEWALK BOTH SIDES (Existing)
- SIDEWALK ONE SIDE (Existing)
- DETENTION BASIN (Existing And Approved)
- +
- CEMETERY (Existing)

TOWNSHIP OF MONTGOMERY

SOMERSET COUNTY • NEW JERSEY

BUILD-OUT BASE MAP

SCALE IN FEET

1500 900 0 900 1800 3600

SCALE IN FEET

450 0 450 900 1800

9 ACRES 18 ACRES 27 ACRES 108 ACRES

Vehicular Access Easements

Paper Streets, Unimproved Streets and/or Streets on Preliminary or Finally Approved Plats as of December 31, 1989

Area Dedicated for Road Widening Purposes

Airport Hazard Area

PREPARED MARCH 1990,
REVISED MARCH 1991 BY:
Richard Thomas Coppola and
Associates, Princeton • New Jersey.

BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton • New Jersey • Revised January 1990
BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton • New Jersey • January 1990
SOURCE: Field Survey March 1990, Montgomery Township Tax Map 1989,
and Approved Preliminary and Final Plats as of March 1991.

As can be seen, there is no discernible pattern of sidewalk construction in Montgomery Township at this time. However, the location of existing sidewalks provides a basis for the formulation of an overall system of pedestrian circulation, possibly coupled with the plan for off-street pedestrian and bikeway corridors in the Township.

Detention basins are forms of open space; while their location was included on the "Dedicated Open Space Lands" map, they were not identified specifically as detention basins and therefore not specifically differentiated from other forms of open space. Cemeteries also are forms of open space; their locations were not identified on the "Dedicated Open Space Lands" map as most of the cemeteries exist on properties serving other principal uses, primarily residential uses.

EXISTING TOWNSHIP RECREATIONAL FACILITIES INVENTORY

An inventory of existing recreational facilities in Montgomery Township was conducted as an initial step in the preparation of the Recreation Plan Element portion of this document. The existing recreational facilities of the Township are graphically depicted and identified on the "Composite Open Space" map which appears later in this report.

The existing recreational facilities inventory includes fifteen (15) Township recreation areas (including Board of Education facilities), six (6) major private recreational facilities, and two (2) parks, one each owned by Somerset County and the State of New Jersey. The "Description Of Existing Recreational Facilities" chart identifies each of the twenty-three (23) facilities in the Township by size, facility type, purpose and ownership.

ASSESSMENT OF EXISTING TOWNSHIP RECREATIONAL FACILITIES INVENTORY

The evaluation of the Township's existing recreational facilities conducted through input from the Recreation Committee and Recreation Director involved a review of detailed comments collected for each of the Township's major recreation programs, each of which relies heavily on the availability of local fields, courts and similar facilities. A summary of this information for each of the subject programs appears on the "Description And Assessment Of Major Active Township Recreation Programs" chart.

As indicated, virtually all of the Township's major recreation programs are realizing major scheduling problems due to the limited inventory of facilities. Other problems include a growing number of participants within certain programs; the sharing of Township and Board of Education facilities for popular sports such as tennis and youth basketball; the limited opportunity for facility maintenance due to the tight scheduling evident at most facilities; and the growing use of Township fields by corporate users.

TOWNSHIP RECREATIONAL FACILITY NEEDS

In addition to the preceding Township evaluation of existing recreation programs and facilities, Township officials were interviewed in order to establish the

DESCRIPTION OF EXISTING RECREATIONAL FACILITIES
MONTGOMERY TOWNSHIP
1991

<u>Map No.</u>	<u>Name of Facility</u>	<u>Approx. Size (Acres)</u>	<u>Facility Type</u>	<u>Purpose/Use</u>	<u>Ownership</u>
1 - 5	Baseball Field; Track and Field; Soccer Fields; Baseball Field; Softball Fields	Included in school grounds	Community	Active Recreation; jointly used by schools and Township residents	Board of Education
6	Schuss Woods	7.50	Neighborhood	Nature Study (passive)	Township
7	Tennis Courts	14.00	Community	10 Tennis Courts (daytime use by Board of Ed.; public use at other times; 2 courts always available to public); 1 Soccer Field; 1 Softball/Baseball Field	Board of Ed. (leased to Township)
8	Lubas Field	3.25 (18.8)*	District	1 Softball Field (lighted)	Township
9	Broadway Fields	3.62 (27.3)*	District	2 Softball Fields	Township

(continued)

<u>Map No.</u>	<u>Name of Facility</u>	<u>Approx. Size (Acres)</u>	<u>Facility Type</u>	<u>Purpose/Use</u>	<u>Ownership</u>
10	Montgomery Park	100.1	Community	3 Softball/ Baseball Fields, 2 Soccer Fields, 1 Basketball Ct., 1 Playfield, 1 Volleyball Ct., 1 Bicycling/Running Trail, Picnicking, Fishing, Playground, Open Space	Township
11	Mill Pond	0.5	Neighborhood	Fishing, Ice Skating	Township
12	Harlingen Green	2.01	Neighborhood	Passive Rec./ Gazebo	Township
13	Bessie Grover Park	1.4	Neighborhood	Small Tot Lot; Boat Launch Ramp; Picnicking	Township
14	Municipal Complex Park Site	13.0	To be determined	To be determined	To be acquired by Township
15	Hoebler Park	49.4	To be determined	To be determined	Township
16	Ingersoll-Rand Playground	3.9 (8.2)*	Neighborhood	1 Basketball Ct., 1 Baseball Field, 1 Playfield, Playground	Ingersoll- Rand (leased to Township)
17	Pike Brook Country Club		Private	Golf Course, Swimming Pool	Private

(continued)

<u>Map No.</u>	<u>Name of Facility</u>	<u>Approx. Size (Acres)</u>	<u>Facility Type</u>	<u>Purpose/Use</u>	<u>Ownership</u>
18	Bedens Brook Country Club		Private	Golf Course, Tennis & Paddle-Ball, Swimming Pool	Private
19	Lenape Swim Club		Private	Swimming Pool	Private
20	Nassau Raquet & Tennis Club	13.0	Private	Tennis/Swimming Pool	Private
21	Province Line Swim Club	2.5	Private	Swimming Pool	Private
22	Sourland Mountain Park	1,700 in Township	Regional	Nature Preserve and Future Development	County
23	Delaware and Raritan Canal Park		Regional	River Access, Open Space Conservation	State

NOTE: Other private recreation facilities in the Township include one swim club, two swim and tennis clubs, and four riding stables.

SOURCE: Montgomery Township Recreation and Open Space Inventory Form, Green Acres Application, 1990; Montgomery Township Recreation Master Plan, 1983; Master Plan Part I: Background Studies, 1988; and Montgomery Township Recreation Department, 1989.

* Total Tract Acreage

DESCRIPTION AND ASSESSMENT OF
MAJOR ACTIVE TOWNSHIP RECREATION PROGRAMS

<u>Program</u>	<u>Facilities Used</u>	<u>No. of Participants</u> (estimate)	<u>Program Assessment</u>
Youth Basketball	2 courts at Orchard and Burnt Hill Schools plus use of court at Princeton Day School (on rental basis) for practice.	215	Courts are generally available on weekday evenings only, presenting major scheduling problems and program limitations.
Little League/ Babe Ruth Baseball	3 fields at Montgomery Park; 1 high school field and 2 other school fields. 1 additional school field used when school is out of session.	600	Limited availability of fields and growing number of participants requires 6 to 7 day weekly scheduling of all fields, and virtually no opportunity for rain dates. Participants play 12 games per season; other programs in area play 20 games per season. Lighted fields would improve scheduling.
Adult Softball	Exclusive use of 3 fields and Lubas and Broadway facilities, plus use of 3 fields at Montgomery Park after completion of Little League.	40 teams; many of which are from industrial leagues.	Major scheduling limitation due in part to new corporate participation. As a result, Lubas and Broadway fields available for general public on Saturdays only. Lighted fields would improve scheduling.
Youth Soccer	3 to 4 fields at High School plus 2 fields at Montgomery Park.	16 teams/200 youths	Tight scheduling and expanding program has created maintenance and wear problems at park fields and high level of dependence on Board of Education facilities.

acceptable levels of recreational facilities which have been determined to be needed in order to meet program scheduling and facility maintenance needs. This information was compiled for an "immediate need" scenario and, in order to illustrate long-term recreational facility needs, for a maximum "Township population of 15,000". The information and need estimates are indicated on the chart entitled "Projected Township Recreation Committee's Immediate And Anticipated Recreational Facility Needs".

Additionally, the Recreation Director and members of the Recreation Committee have stated the need for a community center, a municipal swimming pool, and a football facility. Other stated needs include additional picnic tables, along with restrooms, gazebos, benches and related support facilities. One (1) tot lot in each major developed area of the Township in addition to the one (1) existing at Montgomery Park also is needed.

THE 1991 RECREATION PLAN

The current 1991 Recreation Plan compliments the prior 1983 Plan by the continued use of recreation planning districts. Reflecting the substantial land use changes in the Township since the last plan was prepared, the current plan presents a simplified district system as described below and shown on the "Recreation Planning Districts" map.

Planning District 1 is located to the north of Georgetown-Franklin Turnpike (Route 518) and to the west of Belle Mead-Blawenburg Road. This area is characterized by rural residential development and can be expected to generate relatively modest development activity over the next decade. With the exception of Sourland Mountain Park, the only public recreation land in this district is Bessie Grover Park, a neighborhood facility.

Planning District 2 is located north of Georgetown-Franklin Turnpike (Route 518) between Belle Mead-Blawenburg Road and Route 206. The district includes a number of existing and approved residential subdivisions throughout the Sunset Road area and a number of major public, institutional and office uses in the southern third of the district. At the center of the district lies the Board of Education recreation facilities, one of two (2) community recreation areas in the Township. At the northern end of the district are two (2) district parks.

District 3 is located to the east of Route 206 and to the north of Georgetown-Franklin Turnpike (Route 518). This area represents the largest suburban residential area of the Township, and includes Montgomery Park, Delaware and Raritan Canal Park and several neighborhood parks. The district also includes the municipal complex and the partially approved Bellemead planned development site; it is anticipated that certain lands located between these two (2) land uses will be dedicated to the Township for recreational use.

District 4 is located to the south of Georgetown-Franklin Turnpike (Route 518) and represents, from a land use perspective, the most diverse area of the Township. This area includes the preliminary and/or finally approved Cherry Valley Country Club and Graystan Estates planned developments; multiple-family residential areas near Rocky Hill; other areas zoned for planned development; Princeton Airport; and large areas characterized by rural residential develop-

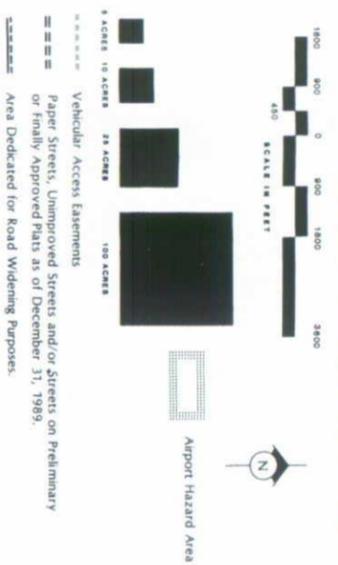
PROJECTED TOWNSHIP RECREATION COMMITTEE'S IMMEDIATE
AND ANTICIPATED RECREATIONAL FACILITY NEEDS

<u>Facility</u>	<u>Immediate Need</u>	<u>Facilities Needed For A Township Population of 15,000</u>
Basketball (indoor)	3 Courts	5 Courts
Baseball	1 Little League Field (lighted) 1 Babe Ruth Field (lighted)	4 Little League Fields (2 lighted) in a centralized complex 2 Babe Ruth Fields (lighted) in a centralized complex
Softball	3 Lighted Fields	-
Tennis	8 more Courts throughout the Township in Units of 2, plus complete renovation of existing 10 Courts	-
Soccer	4 Fields	8 Fields
Basketball (outdoor)	Add as needed to each 10+ acre Park	-



RECREATION PLANNING DISTRICTS

BUILD-OUT BASE MAP
 TOWNSHIP OF MONTGOMERY
 SOMERSET COUNTY, NEW JERSEY



PREPARED MARCH 1990 BY:
 Richard Thomas Coppola and
 Associates, Princeton, New Jersey

BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • Revised January 1990
 BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • January 1990

ment. The district contains no public recreation facilities at this time; however, the recent dedication of a park site near the Cherry Valley Country Club provides a fifty (50) acre tract of land to be developed as a district or community park. No specific plans for recreational facilities improvements have been determined at this time.

FACILITY HIERARCHY

The 1991 Recreation Plan recognizes three (3) types of parks for use in the Township. "Community Parks" are intended to serve Township-wide recreational needs and should be a minimum of twenty (20) acres in size. "District Parks" should provide facilities for specified planning districts and range from three (3) to twenty (20) acres in size. "Neighborhood Parks" should provide relatively small scale and generally passive facilities for localized areas and should not exceed five (5) acres in size.

RECREATION PLAN RECOMMENDATIONS

The 1991 Recreation Plan does not contain a map recommending site specific uses and facilities. Instead, the Recreation Plan seeks to incorporate and consolidate the previously described goals and objectives, siting criteria and recommended planning districts in an appropriate manner that provides flexibility in developing additional recreational facilities for the residents of Montgomery Township.

The Recreation Plan recognizes the limitations and problems of existing recreation programs within the Township and the numerous new facilities the Township would need to address these current shortcomings. However, the Recreation Plan also recognizes the substantial financial burden of developing all the "immediate need" facilities in the near future. When combined with other practical considerations, including environmental constraints, land use impacts, liability concerns and siting difficulties, it is noted that many of the needed facilities may take many years to develop. With this in mind, the following recommendations for recreational facility development are offered as a general guide:

1. A district park is recommended for Planning District 1 in the area generally formed by Dutchtown-Zion Road, Belle Mead-Blawenburg Road and Grandview Road. This location will be relatively centralized in the district and will provide some overlap facilities for residents of District 2. At a minimum, the park should include one (1) baseball field, one (1) soccer field and two (2) tennis courts. A neighborhood park also is recommended in the Grandview Road area.
2. A district park is recommended for Planning District 2 in the area generally between Kildee Road and Skillman Road/Orchard Road. Such a facility should include one (1) baseball field, one (1) lighted softball field, one (1) soccer field and two (2) tennis courts. At least two (2) neighborhood parks are recommended for this area as well.

3. A district park is recommended for the municipal complex section of Planning District 3. This park should include one (1) lighted baseball field, one (1) lighted softball field, one (1) soccer field and two (2) tennis courts. Alternatively, these facilities may be divided into two smaller district parks, with one at the municipal complex and one in the Bridgepoint Road area. While this district has three (3) neighborhood parks, as well as Montgomery Park and the Delaware and Raritan Canal Park to serve local residents, the addition of neighborhood parks in the larger subdivisions in the area may be warranted in light of the population density in this area.
4. A district park is recommended for Planning District 4 to serve existing and anticipated residents. This park should contain one (1) baseball field, one (1) softball field, two (2) tennis courts and one (1) soccer field. Locating the recommended park in the center of the district would provide a centralized location for the higher density projections at each end of the district. The plan recognizes the Great Road Park site recently dedicated to the Township as one potential location for such a park and also recognizes that a community park at this location may be an appropriate alternative for district park development in Planning Districts 1, 2 and 4. Also, neighborhood parks appear warranted in the eastern and central portions of this district.
5. A site selection study should be undertaken as part of the long term planning needed to develop a municipal community center, swimming pool and football facility.
6. It is a specific recommendation of the 1991 Recreation Plan to explore the use of development impact fees and other creative financing tools for recreational facility development, providing appropriate State enabling legislation is enacted.

PEDESTRIAN-BIKEWAY CORRIDOR PLAN

Pedestrian paths and bike routes provide many positive amenities to a municipality; they link public areas, offer and encourage an alternative mode of travel to the automobile, provide relatively unique and enjoyable recreational opportunities, and increase pedestrian and bicycle safety via separating them from automobile traffic. While walking and bicycling as healthful recreational activities have been increasing during recent years in Montgomery Township, so has automobile traffic. Therefore, the need for dedicated and appropriately designed safe and continuous pedestrian and bicycle corridors has become more apparent, especially given the recent past rate of development and commensurate loss of open lands in the Township.

The "Pedestrian-Bikeway Corridor Plan", included on the "Composite Open Space Plan" map appearing later in this report, shows the location of proposed pedestrian paths and bike routes in the Township. The pedestrian paths and bike routes follow stream corridors, existing paths and the Transcontinental Gas Pipeline Easement on properties that can provide for the establishment of the pedestrian-bikeway corridors at the time of their development.

The provision of the pedestrian-bikeway corridors may be via the dedication to the Township of the lands or by the granting of a "conservation and pedestrian easement" or "conservation and pedestrian-bikeway path easement". In areas where development already has occurred and/or no natural course is available, pedestrian-bikeway corridors are planned to be located within existing and future road rights-of-way.

It should be noted that while the attached map reflects the general location of the proposed pedestrian-bikeway corridors, the exact location of the corridors must be determined on a site specific basis during the development application review process.

Additionally, there exist other pedestrian-bikeway corridors in the Township which are not shown on the "Pedestrian-Bikeway Corridor Plan" map and which serve more localized neighborhood areas.

Importantly, sidewalks also serve as a "corridor" for pedestrian movement, and the implementation of the "Pedestrian-Bikeway Corridor Plan" must be coordinated with the established sidewalk policy of the Township.

It is suggested that all pedestrian paths and bike routes be designated by a marker or some other form of signage to indicate the location of the pedestrian-bikeway corridor system throughout the Township. Since some of the corridor system will traverse private property through the granting of easements, the provision of the markers is particularly important to clearly delineate those areas of the property permitting public access.

In instances where the pedestrian path and/or bike route is not located within a street right-of-way, a minimum easement width of ten feet (10') is suggested so that adequate shoulders of at least one foot (1') can be provided on both sides of the corridor to allow pedestrian and/or bicycle movement without interference from undergrowth.

On public or semi-public lands across which corridors meander, outdoor benches, trash cans and bicycle racks should be provided when feasible and appropriate.

As shown on the "Composite Open Space Plan" map, the pedestrian-bikeway corridors have been classified by use and location into five (5) major types: recreational paths, separated bike routes, bike routes on shoulders with sidewalks, bike routes on shoulders, and natural paths.

"Recreational Paths" are corridors across open lands permitting pedestrian and/or bicycle utilization depending upon the surface of the path, which is primarily to be dictated by physical and environmental conditions. "Separated Bike Routes" are to be located within road rights-of-way in order to provide a safe bike route apart from vehicular traffic via a landscaped or planted shoulder; pedestrians are not necessarily excluded from the use of this corridor. "Bike Routes On Shoulders" provide for bicycle movements within road rights-of-way. The bike routes will be within the road cartway on paved shoulders; any and all sidewalks provided for pedestrian movement will be constructed in accordance with the design standards specified in the Township Land Development Ordinance. The last type of corridor, the "Natural Path", is a pedestrian only corridor which is generally along streams.

CONSERVATION PLAN

With the formulation of the "Pedestrian-Bikeway Corridor Plan" and the adoption of an ordinance to regulate development in stream corridors, the concept of a greenbelt throughout the Township evolved as part of an overall plan for open space preservation.

The purpose of the "Conservation Plan", included on the "Composite Open Space Plan" map appearing later in this report, is to provide a continuous belt of open or forested land which is protected from further development and is to be maintained in a natural state except for the inclusion of pedestrian-bikeway corridors where recommended. The extensive stream and river corridors which tend to be heavily wooded in the Township provided the basic foundation for the formulation of the greenbelt.

The "Conservation Plan" also includes lands that may be added to the greenbelt which are the subject of a Green Acres application to the New Jersey Department of Environmental Protection & Energy's "Green Trust Local Assistance Program". The "Conservation Plan" map should not be construed to preclude the addition of other lands which may be deemed appropriate to be included as part of the Township's greenbelt.

The exact location and width of the linear greenbelt should be established during the development application process; however, it is recommended, where reasonable and feasible, that the greenbelt be no less than three hundred feet (300') in width along any segment.

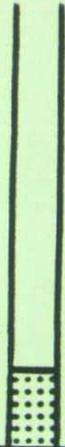
The greenbelt should be protected by a "conservation" easement. Where pedestrian-bikeway corridors traverse the greenbelt, a "conservation and pedestrian" or "pedestrian-bikeway path" easement also should be utilized to allow for public access only within the area designated for the corridor. Public access or use should not be permitted in other areas of the greenbelt except for inspection by the Township of the property to assure compliance with the terms of the easement.

The edge of the greenbelt, where the conservation easement begins, should be designated by some form of markers. Where necessary, reforestation of the greenbelt area, especially within the outer buffer areas, should be encouraged as part of any development plan and be placed under the supervision of the Township Shade Tree Committee.

COMPOSITE OPEN SPACE PLAN

A primary purpose of the "Pedestrian-Bikeway Corridor Plan" is to link public uses and public open spaces. The "Composite Open Space Plan" map shows the existing recreational facilities in the Township with the "Pedestrian-Bikeway Corridor Plan" transposed onto the "Conservation Plan" in order to provide a composite view of how the pedestrian-bikeway corridors link the designated areas. Most of the pedestrian-bikeway corridors lie within the greenbelt; however, some corridors are proposed across lands outside the greenbelt in order to provide more direct linkages where existing development does not allow for open spaces or where no greenbelt is proposed.

HISTORIC PLANNING



HISTORIC PLANNING

INTRODUCTION

Montgomery Township has long been proud of its historical and cultural heritage which has been well documented in text. However, population growth and continuing development pressures are transforming the once rural farming community into a more suburban municipality. Montgomery Township's desire to preserve the remaining historic sites, structures and areas of the Township for future generations, and to protect them from adverse impacts caused by incompatible land uses and from demolition or inappropriate alteration, caused the Township to create a Landmarks Preservation Commission pursuant to N.J.S.A. 40:55D-107 of the Municipal Land Use Law and municipal Ordinance No. 89-621. It is the Members of the Landmarks Preservation Commission who were instrumental in the development of this Historic Preservation Plan Element of the Montgomery Township Master Plan. The data, analysis, and information included herein is the result of work product, time and effort contributed by the Members of the Landmarks Preservation Commission, both individually and collectively.

LANDMARKS PRESERVATION COMMISSION AND ITS OBJECTIVES

The seven (7) member Historic Preservation Commission was established by the Township Committee in 1989 with its members to be appointed by the Mayor. The Commission was charged with specific powers and duties as set forth on pages 10 through 13 of municipal Ordinance No. 89-621.

Summarily, the duties of the Commission include the preparation of a survey of historic sites and districts in the Township, the results of which are to be made part of the Township Master Plan adopted by the Planning Board and, if also adopted by the Township Committee, are to be made part of the Land Development Ordinance. Additionally, the Commission is to: a) provide advice to the Planning Board and Zoning Board of Adjustment on historic matters; b) assist owners of historic sites or structures within historic districts on aspects of preservation; c) hold public hearings and review applications for any development plans affecting historic sites or properties within historic districts; and d) develop specific design guidelines for the alteration, construction or removal of landmarks or structures within historic districts.

Specifically, the survey compiled by the Landmarks Preservation Commission identified "neighborhoods, areas, sites, structures and objects over fifty (50) years of age that may have historic, architectural, or aesthetic importance, interest or value as evidenced by evolution" using the specific criteria set forth in Ordinance No. 89-621. Once identified, the property owners were notified that their property was under consideration for inclusion within a "historic district" or as an "historic site".

Regarding historic sites, a property owner had to voluntarily consent for his/her property to be considered a "designated local historic site". Regarding historic districts, at least a three-quarter (3/4) concurrence by all property owners in a proposed historic district was required in order to consider the

area as a "designated local historic district". The historic sites and districts so designated to date are the focal parts of this Historic Preservation Plan Element; data regarding additional potential historic sites and districts are included or referenced in this document for informational purposes only and indicate the on-going work effort being accomplished by the Landmark Preservation Commission.

The criteria used in the selection and designation of an historic district, site or landmark are as follows:

- "1. Any individual building, structure or site that is listed on the National and/or State Register, or that is declared eligible for the National and/or State Register shall automatically qualify as a local landmark;
2. A site or building associated with a person who has contributed to an historical or cultural township, state or national event;
3. Any structure, building, house or grouping of these (district), as well as man-made or natural landscape sites which are significant in exemplifying the cultural, social, economic, or historical heritage of the Township;
4. Individual houses and supporting structures or districts that exhibit architectural value in either reflecting an historic era or reflecting a specific architectural type, or that exhibit significant architectural innovation or are the work of a particularly significant architect or builder;
5. Any building, site or other structure related to accepted folklore, legend, or a significant historic event;
6. Any site containing ruins that have important prehistoric or historic in value."

IDENTIFICATION OF DISTRICTS AND SITES

Designated Local Historic Districts

The Landmark Preservation Commission's survey identified five (5) areas within Montgomery Township that met the criteria established by the Township to select an area or neighborhood as an "historic district". Three (3) of the five (5) surveyed areas currently are listed with both the New Jersey and National Registers of Historic Places: the Blawenburg Historic District; the River Road Historic District; and the Bridgepoint Historic District. A mapping of these three (3) designated State and National Historic Districts, and the individually designated Historic Sites within them, is included for informational purposes in Attachment A. The New Jersey State Register Law requires that any application for development affecting State Register properties be reported to the Office of New Jersey Heritage within the N.J. Department of Environmental Protection and Energy for their review and authorization. The designation of a "local" historic district, however, requires only municipal review of an appli-

cation for development affecting the designated property. In its designation of a local historic district, a municipality may include or exclude properties listed as part of a State or National Historic District.

The five (5) potential local historic districts identified by the Landmark Preservation Commission as meeting the established municipal criteria to be considered "historic" are indicated on the "Inventory Of Potential Local Historic Districts" map.

The property owners within all five (5) of the potential local historic districts were notified that their property was being considered for formal designation as part of a "local historic district". At least seventy-five percent (75%) of all property owners within a potential district must vote "yes" for the district area to be formally designated as a "local historic district."

As a result of the voting to date, two (2) local historic districts have been formally designated: the River Road Local Historic District and the Blawenburg Local Historic District. The "Designated Local Historic Districts" map indicates the land area included within each of the districts.

The three (3) other potential local historic districts depicted on the "Inventory Of Potential Local Historic Districts" map each may someday be formally designated as a "local historic district", if and when the necessary concurrence from the included property owners is obtained. Moreover, the land areas of the two (2) currently designated local historic districts may be expanded in the future to reflect the boundaries of the districts as shown on the "Inventory Of Potential Local Historic Districts" map if the necessary concurrence from the property owners is obtained.

Designated Local Historic Sites

In addition to historic districts, the Landmarks Preservation Commission surveyed individual structures and sites within Montgomery Township which have historic, archeological, cultural, scenic and/or architectural significance in accordance with the criteria specified in Subsection 16-13.15 of municipal Ordinance No. 89-621. One hundred sixty-four (164) structures and sites were found to meet at least one (1) of the six (6) specified criteria and, therefore, were each considered eligible to be formally designated as a "local historic site." The property owners were individually notified that their property was considered by the Landmarks Preservation Commission as a candidate for formal designation as a "local historic site", and the Commission advised each owner of the significance and consequence of such a designation.

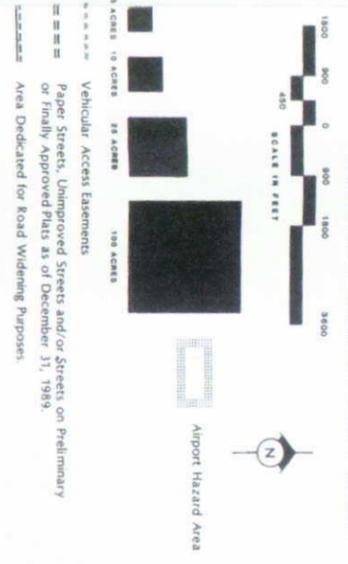
The "Designated Local Historic Sites" map indicates those particular properties which received the property owner's voluntary consent and approval to be formally designated as a "local historic site". The number of designated local historic sites in Montgomery Township may increase over time, as owners of other eligible sites agree to have their properties so designated.



INVENTORY OF POTENTIAL LOCAL HISTORIC DISTRICTS AS OF MAY 1991

NOTE: The purpose of this map is to indicate the full extent of the land areas in Montgomery Township deemed appropriate by the Montgomery Township Landmarks Preservation Commission to be included as part of a "Local Historic District". In accordance with Section 16-13.14, the "Blawenburg Historic District" indicated on this map already has been formally designated as a "Local Historic District" by the Landmarks Preservation Commission and a portion of the "River Road Local Historic District" indicated on this map also has been so designated.

BUILD-OUT BASE MAP TOWNSHIP OF MONTGOMERY SOMERSET COUNTY • NEW JERSEY



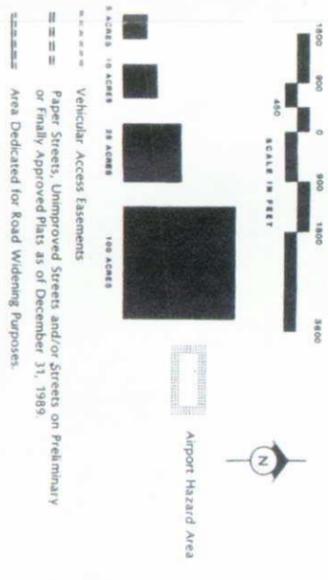
SOURCE: MONTGOMERY TOWNSHIP LANDMARKS PRESERVATION COMMISSION, MAY 1991.
PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey, February 1992.

BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton • New Jersey • Revised January 1990
 BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton • New Jersey • January 1990



DESIGNATED LOCAL HISTORIC DISTRICTS

**TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY**

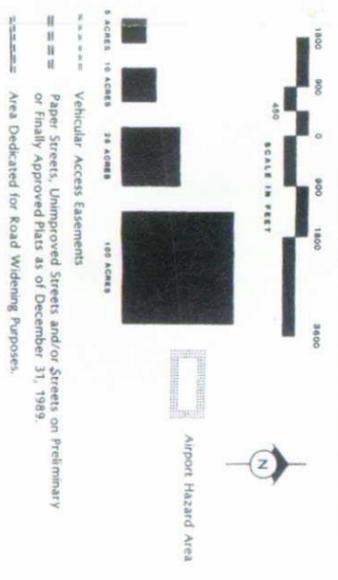


SOURCE: MONTGOMERY TOWNSHIP LANDMARKS PRESERVATION COMMISSION, NOVEMBER 1991.
 PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey, February 1992.

BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • Revised January 1990
 BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • January 1990

DESIGNATED LOCAL HISTORIC SITES

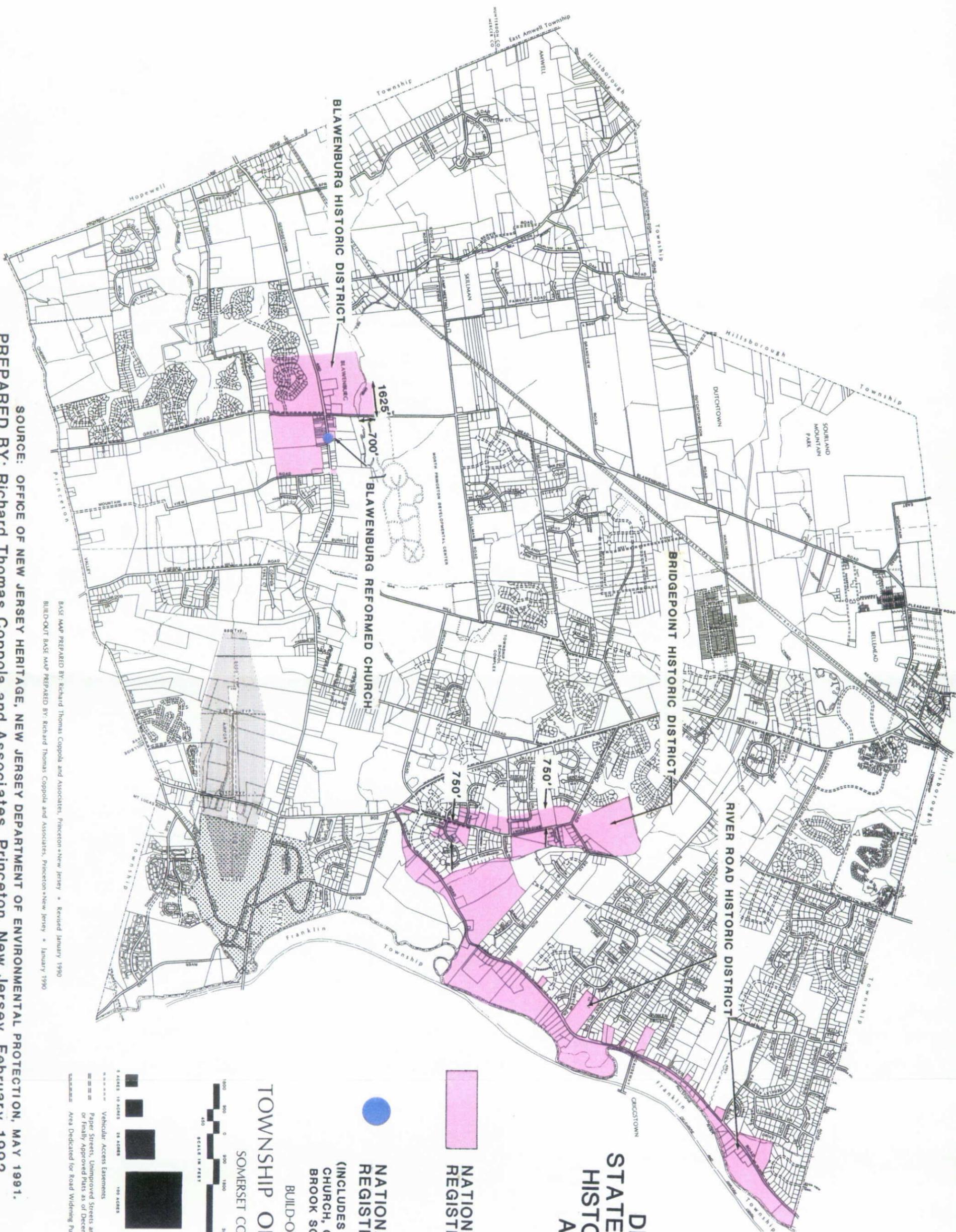
BUILD-OUT BASE MAP
TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY • NEW JERSEY



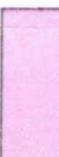
BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton • New Jersey • Revised January 1990
BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton • New Jersey • January 1990
SOURCE: MONTGOMERY TOWNSHIP LANDMARKS PRESERVATION COMMISSION, FEBRUARY 1992.
PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey, February 1992; revised June 1992.

Attachment A

MAP OF DESIGNATED STATE
AND NATIONAL
HISTORIC DISTRICTS AND SITES

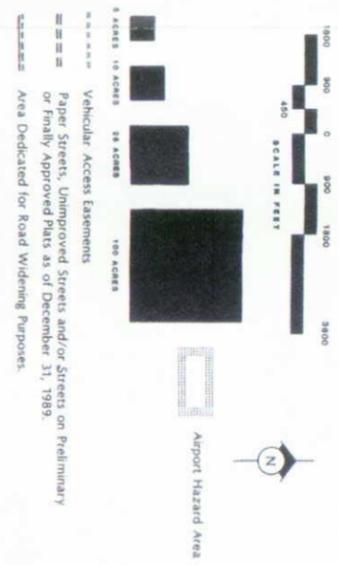


**DESIGNATED
STATE AND NATIONAL
HISTORIC DISTRICTS
AND SITES**

 NATIONAL AND STATE REGISTER DISTRICT

 NATIONAL AND STATE REGISTER SITE
(INCLUDES BLAWENBURG REFORMED CHURCH, OLD PARSONAGE, AND ROCK BROOK SCHOOL BUILDING)

TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY
BUILD-OUT BASE MAP



SOURCE: OFFICE OF NEW JERSEY HERITAGE, NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION, MAY 1991.
PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey, February 1992.

BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey * Revised January 1990
BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey * January 1990

LAND USE PLANNING AND EXISTING ZONING



LAND USE PLANNING AND EXISTING ZONING

INTRODUCTION

In accordance with the N.J.S.A. of the Municipal Land Use Law, every municipality in the State of New Jersey must reexamine its Master Plan and Land Development Regulations at least every six (6) years and modify them accordingly. During the 1980's, Montgomery Township updated its Land Use Plan Element portion of its Master Plan on two occasions; first on April 15, 1985 and most recently on November 20, 1989.

The major modifications to prior Land Use Plans included in the April 15, 1985 Land Use Plan Element resulted from a comprehensive addressment of the Township's "Mt. Laurel II" housing obligations as well as modifications to the "Residential Cluster" optional development regulations. Additionally, the April 15, 1985 Land Use Plan introduced the mapping of "critical" lands, including both 100-year flood plains and lands with slopes fifteen percent (15%) or more, as an integral part of the Township's land use regulations; subsequent Ordinance provisions added "wetlands" as a third component of "critical" lands.

On August 8, 1988, the Montgomery Township Planning Board adopted a "Periodic Reexamination Report" which documented the numerous and varied planning issues considered by the Planning Board since 1985. The 1988 Periodic Reexamination Report incorporated by reference an earlier but not adopted Master Plan Periodic Reexamination Report entitled "Part I: Land Use Plan Element" and dated August 1986. The 1986 report was the subject of a number of public meetings and hearings during 1986 and 1987. The public meetings and hearings were forums for discussion of the material in the report and provided an extensive amount of time for the public and developers to voice their opinions and preferences to the Township Planning Board. This process resulted in a number of subsequent memorandums, letters and proposed Ordinance drafts addressing further refinements, changes and recommendations to the Master Plan and Land Development Ordinance, all of which were attached as appendices to the 1988 "Periodic Reexamination Report" adopted by the Planning Board.

The overriding purpose of the Land Use Plan Element adopted by the Planning Board on November 20, 1989 was to clearly consolidate into one document the numerous changes and modifications to the Land Use Plan of the Township considered and recommended by the Planning Board since the adoption of the 1985 Land Use Plan Element. Many of these changes and modifications regarded the old "REO", "RD" and "MFG" Districts which are specifically summarized in Attachment A to this report.

Since 1989, relatively few changes have been made to the overall Zone Plan of Montgomery Township, and all of the changes have been consistent with the 1989 Land Use Plan Element and subsequently adopted additional elements of the Township Master Plan. Therefore, a major purpose of this 1993 update of the Land Use Plan Element is to formally incorporate the few changes made to the Zone Plan since 1989 directly into the Land Use Plan so there is clear consistency. Additionally, a new "Residential Cluster III" option is proposed on those lands owned by Ingersoll-Rand along Montgomery Road in the Township to replace the currently zoned "Residential Cluster I" option.

LAND USE PLAN AND CRITICAL AREAS MAPS

As indicated on the "Land Use Plan Map" dated June 1993, the Land Use Plan of Montgomery Township includes a total of fifteen (15) districts consisting of seven (7) residential districts, two (2) commercial districts, three (3) research, engineering, office districts, one (1) limited manufacturing district, one (1) special industrial district and one (1) small business district.

In addition to the district areas, five (5) optional "planned development" alternatives are recommended to be permitted on specified lands where indicated on the Land Use Plan Map. Moreover, both the "Airport Safety Zone", as required by State law, and the "Landmarks Preservation Overlay Area", as required by the Township Land Development Ordinance, are indicated on the Land Use Plan Map.

The Land Use Plan Map should be viewed in conjunction with the "Critical Areas" map dated February 1993 which delineates 100-year flood plains within the Township, lands with a topographic slope fifteen percent (15%) or greater, and wetlands.

As noted on the "Critical Areas" map:

- The basis for delineation of the 100-year flood plain areas were the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency, dated April 1981;
- The basis for delineation of the wetlands were the photo maps prepared by the N.J. State Department Of Environmental Protection And Energy, from March 1986 infrared photographs of the Rocky Hill and Monmouth Junction quadrangles; and
- The basis for delineation of the steep slope areas were the U.S. Geological Survey Maps, 1975, for the Rocky Hill and Monmouth Junction quadrangles.

While the information depicted on the "Critical Areas" map has been prepared as accurately as possible, it must be understood that detailed information mapped at such a large scale may not represent the actual conditions on any one particular parcel of land. Moreover, the information is from secondary sources rather than the results of on-site investigations. Therefore, the information is not intended to take the place of specific on-site engineering data presented to the Township at the time applications are submitted for approval of a subdivision, site plan, construction permit, and/or any other application which considers the "critical areas" categories of information depicted on the map.

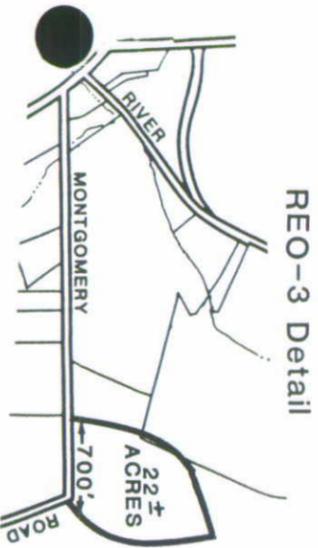
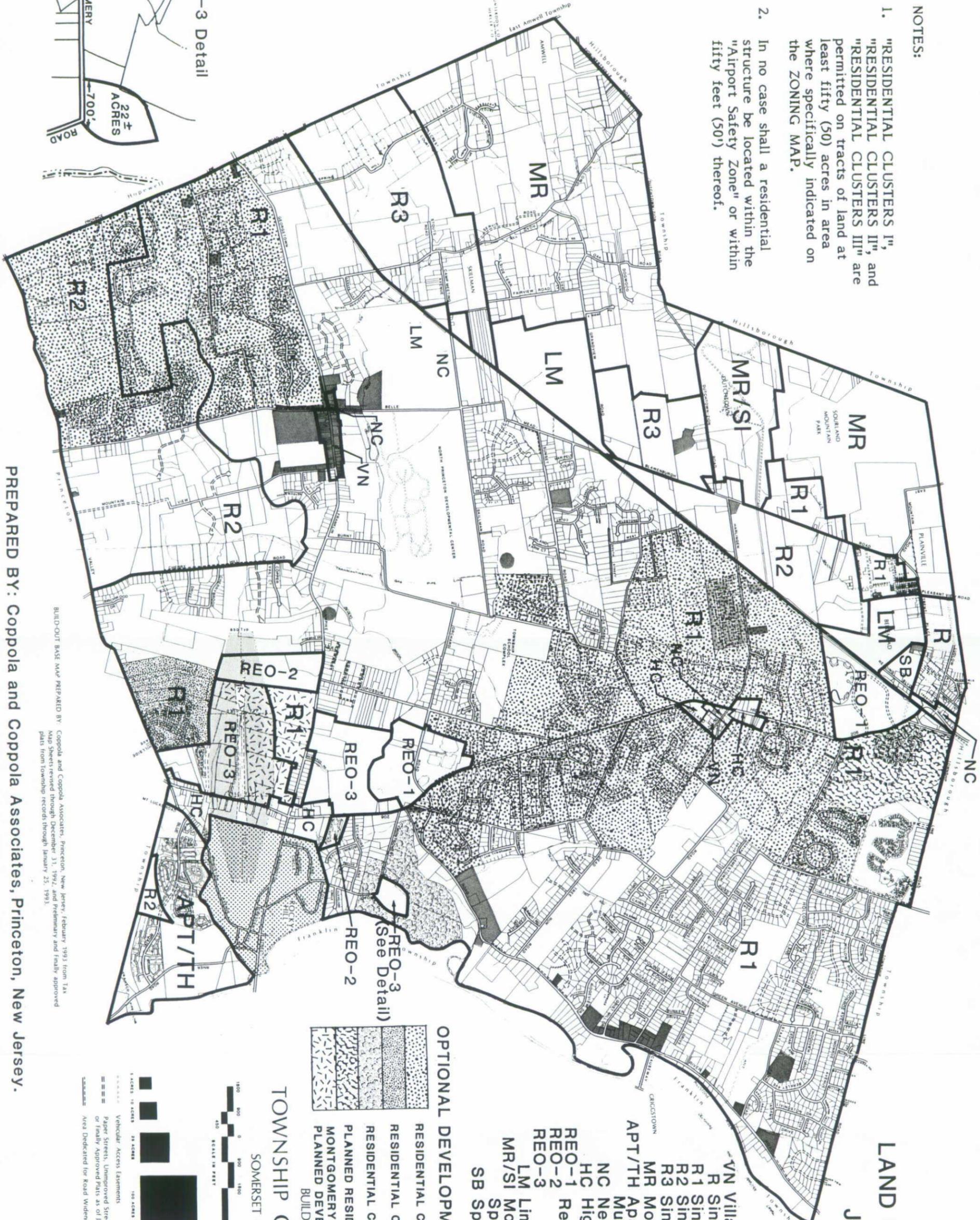
RESIDENTIAL DISTRICT AREAS

The Montgomery Township Land Use Plan continues to provide for a range of housing types to meet a variety of needs, inclinations and economic circumstances. In addition to providing a range of housing types, an overall theme of the Township's Land Use Plan is to channel moderate and high density residential development to specific areas of the Township, while maintaining the country and rural atmosphere elsewhere. Since a major amount of future residential

NOTES:

1. "RESIDENTIAL CLUSTERS I", "RESIDENTIAL CLUSTERS II", and "RESIDENTIAL CLUSTERS III" are permitted on tracts of land at least fifty (50) acres in area where specifically indicated on the ZONING MAP.
2. In no case shall a residential structure be located within the "Airport Safety Zone" or within fifty feet (50') thereof.

LAND USE PLAN MAP
JUNE 1993



- DISTRICT AREAS**
- VN Village Neighborhood
 - R Single Family Residential
 - R1 Single Family Residential
 - R2 Single Family Residential
 - R3 Single Family Residential
 - MR Mountain Residential
 - APT/TH Apartment/Townhouse
 - NC Neighborhood Commercial
 - HC Highway Commercial
 - REO-1 Research, Engineering and Offices
 - REO-2
 - REO-3
 - LM Limited Manufacturing
 - MR/SI Mountain Residential/Special Industrial
 - SB Special Business

- OPTIONAL DEVELOPMENT ALTERNATIVES**
- RESIDENTIAL CLUSTERS I
 - RESIDENTIAL CLUSTERS II
 - RESIDENTIAL CLUSTERS III
 - PLANNED RESIDENTIAL DEVELOPMENTS
 - MONTGOMERY VILLAGE PLANNED DEVELOPMENT
 - BUILD-OUT BASE MAP

TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY, NEW JERSEY



PREPARED BY: Coppola and Coppola Associates, Princeton, New Jersey.

BUILD-OUT BASE MAP PREPARED BY: Coppola and Coppola Associates, Princeton, New Jersey, February 1993 from Tax Map Sheets revised through December 31, 1992, and Preliminary and finally approved plats from Township records through January 25, 1993.

SOURCES: THE MAPPED DATA IS FROM THE FOLLOWING SOURCES, AND NOT FROM ON-SITE INVESTIGATION:

- 1) 100 YEAR FLOOD BOUNDARY FROM FLOOD INSURANCE RATE MAPS APRIL 1, 1981, FEDERAL EMERGENCY MANAGEMENT AGENCY, PANELS 6 OF 20, 10 OF 20, 15 OF 20, AND 20 OF 20.
- 2) SLOPES 15% AND GREATER FROM GEOLOGICAL SURVEY SLOPE MAPS 1975, ROCKY HILL AND MONMOUTH JUNCTION QUADRANGLES.
- 3) FRESH WATER WETLANDS FROM PHOTO MAPS PREPARED BY THE N.J. STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY, FROM MARCH 1986 INFRARED PHOTOGRAPHS, ROCKY HILL AND MONMOUTH JUNCTION QUADRANGLES.



CRITICAL AREAS

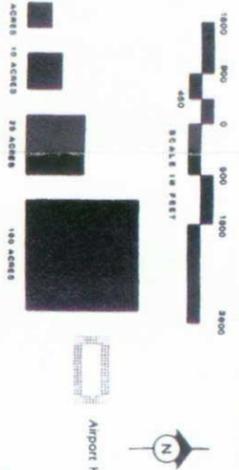
100 YEAR FLOOD BOUNDARY SLOPES 15% AND GREATER AND WETLANDS



Code	WETLAND/WATER TYPES
01	UPLAND
03	PALUSTRINE FORESTED: Broad Leaved Deciduous, temporary
06	R20W RIVERINE LOWER PERENNIAL: Open Water, Induced, in bottom
09	PALUSTRINE FORESTED: Broad Leaved Deciduous, seasonal
11	PALUSTRINE OPEN WATER: Permanent, diked, impounded
12	PALUSTRINE SCRUB/SHRUB: Broad Leaved Deciduous, temporary
16	PFOIB FORESTED: Broad Leaved Deciduous, saturated
19	PSSIB FORESTED: Broad Leaved Deciduous, saturated
20	PFOIB/PSSIB
21	PFOIB/PSSIB
24	MODA Agricultural Lands: turf farms (both row crop and turf cultivation)
26	PEMB/PSSB
29	R30W RIVERINE UPPER PERENNIAL: Saturated, unknown bottom
38	PFOIA/PSSIA
39	PFOIE FORESTED: Broad Leaved Deciduous, seasonal saturated
42	MODR Right-Of-Ways (areas maintained by utilities)
43	POWH PALUSTRINE: Open water, permanent, excavated
44	MODL Stormwater Management Areas
48	MODD DISTURBED AREAS (areas are not normally inundated)
51	PSSIB/PEMIB PALUSTRINE: Scrub/Shrub (not readily apparent)
55	PSSIE/PEMIE PALUSTRINE: Deciduous, Saturated, Broad Leaved
56	PFOIB/PEMIB PALUSTRINE: Deciduous, Persistent, seasonal saturated
59	PSSIB/PFOIB PALUSTRINE: Deciduous, Persistent, saturated
60	PFOIC/PSSIC PALUSTRINE: Deciduous, saturated
64	PEMIE PALUSTRINE: Deciduous, seasonal
75	PSSIA/PFOIA PALUSTRINE: Emergent, Persistent, seasonal saturated
100	PFOA PALUSTRINE: Forested, temporary
103	PFOIE PALUSTRINE: Forested, temporary
112	PFOIE/PSSIE PALUSTRINE: Forested, SCRUB/SHRUB: Broad Leaved
116	PSSIA/4B PALUSTRINE: Deciduous, seasonal saturated
124	R20WX RIVERINE LOWER PERENNIAL: Open Water excavated
142	PFOIA PALUSTRINE FORESTED: Broad Leaved Evergreen, temporary
147	PFOIA PALUSTRINE FORESTED: Broad Leaved Evergreen, temporary
191	PSS4B/PFO4B PALUSTRINE FORESTED SCRUB/SHRUB: Needle Leaved Evergreen, saturated

TOWNSHIP OF MONTGOMERY

SOMERSET COUNTY, NEW JERSEY



NOTE: WHILE THE INFORMATION PRESENTED ON THIS MAP IS APPROPRIATE FOR GENERAL PLANNING PURPOSES IT IS NOT INTENDED TO TAKE THE PLACE OF ON-SITE INVESTIGATION.

BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • Revised January 1990
 BUILD-OUT BASE MAP PREPARED BY: Richard Thomas Coppola and Associates, Princeton, New Jersey • January 1990
 MAP PREPARED BY: COPPOLA AND COPPOLA ASSOCIATES, PRINCETON, NEW JERSEY, FEBRUARY 1993.

construction is expected to occur in well defined nodes of moderate and high density development, future residents may be provided community facilities and services at a lesser cost than would be the case were a comparable population scattered homogeneously throughout the Township.

The designated residential district areas within Montgomery Township are as follows:

"MR" Mountain Residential
"R-3" Single-Family Residential

The "MR" Mountain Residential and "R-3" Single-Family Residential District areas have been established primarily in recognition of the inherent limitations imposed by the geologic formations and soil characteristics within the Sourland Mountain areas of the Township and the need to protect the potable water supply from septic effluent contamination. All of the designated lands are without existing or proposed services of public sewers or public water supplies; therefore, the physical attributes and constraints of the land must be used as a benchmark for the residential densities which can appropriately and safely be provided.

The necessity of maintaining the environmental integrity of the Sourland Mountain area of the Township is a high priority of the Land Use Plan for Montgomery Township. The major types of land uses proposed within the "MR" and "R-3" District areas include low density residential construction and passive recreational areas compatible with the prevailing rural atmosphere. It is recommended that the minimum lot size for residential construction be five (5) acres in the "MR" District and three (3) acres in the "R-3" District.

"R-2" Single-Family Residential
"R-1" Single-Family Residential

The "R-2" and "R-1" Single-Family Residential District areas have been provided to accommodate a large portion of the future residential growth expected in Montgomery Township. The areas are designated in recognition of the soil and geologic data.

While sections of the "R-1" and "R-2" areas have been provided with public water and sewer service, most of the designated land areas are without current public facilities, and it is expected that major portions of the residentially designated lands will not receive the benefits of such public facilities within the foreseeable future. Therefore, the suggested minimum lot sizes are based upon a consideration of the capacity of the physical environment to support an on-site septic system and well.

The major land uses proposed for the "R-2" and "R-1" Single-Family Residential District areas include farming and single-family home construction. The minimum suggested lot sizes for residential development without public water and public sewerage facilities is two (2) acres [87,120 s.f.] within the "R-2" area and one (1) acre [43,560 s.f.] within the "R-1" areas, although reports from the Township Board of Health recommends that the adequacy of the minimum lot size

continually be monitored in order to assure the workability of septic systems and avoid contamination of the underground potable water supplies.

As noted on the Land Use Plan Map under the "Optional Development Alternatives" heading, "Residential Cluster I", "Residential Cluster II" and "Residential Cluster III" alternatives are recommended to be permitted on tracts of land at least fifty (50) acres in size within certain portions of the "R-1" and "R-2" Districts where specifically indicated on the Land Use Plan Map.

The clustering alternative is not proposed for the purpose of increasing the number of single-family homes that might otherwise be constructed upon the land, but is proposed to permit the reduction of individual lot sizes in order to promote imaginative design, preserve environmentally fragile areas, provide limited and controlled traffic access points to abutting collector roads, and provide necessary and desired open space and recreational lands in accordance with the "Recreation Plan And Conservation Plan Elements" adopted by the Planning Board.

Specifically:

- ° Residential Cluster I: No lot in a "Residential Cluster I" development should be less than approximately one-fifth (1/5) acre [8,712 s.f.] in size and no lot shall be more than approximately one-third (1/3) acre [14,520 s.f.] in size; provided that the average size of all residential lots within the cluster development should be no less than approximately one-quarter (1/4) acre [10,890 s.f.].
- ° Residential Cluster II: No lot in a "Residential Cluster II" development should be less than approximately 4,500 s.f. in size and no lot should be more than approximately 17,500 s.f. in size; provided that the average size of all residential lots within the cluster development should be no less than approximately 6,000 s.f.
- ° Residential Cluster III: No less than two-thirds (2/3) of the total lots within a "Residential Cluster III" development should be required to be at least one-third (1/3) acre [14,500 s.f.] in size and no more than one-third (1/3) of the total lots should be permitted to be as small as one-sixth acre [7,260 s.f.] in size.

These recommended variable lot size provisions will enable, and implementing Ordinance provisions should require, that at least forty percent (40%) of any tract of land be left undeveloped in its natural state and/or improved for desired recreational purposes. The open space should not include detention or retention basins, streets or any lands utilized for any septic systems.

Moreover, it is a specific intent and purpose of the "Residential Cluster I", "Residential Cluster II" and "Residential Cluster III" development provisions that no "critical" lands be physically developed within a cluster development, except that up to ten percent (10%) of any individual residential lot may be within the established "critical" land area.

The maximum density of single-family residential dwelling units permitted within a "Residential Cluster I" depends upon whether or not the cluster will be served by both public water and public sewer facilities or, in the alternative, by public water and non-individual (community) septic systems. The maximum number of residential lots permitted when non-individual septic systems will be used is markedly less than when public sewer facilities are utilized, since the non-individual septic system will occupy a very significant amount of acreage within the development. "Residential Cluster II" and "Residential Cluster III" developments shall not be permitted unless served by both public water and public sewer facilities.

Specifically, the maximum density of residential lots permitted within the three (3) types of "Residential Clusters" is proposed to be as follows:

- Residential Cluster I:
When both public water and public sewer facilities are provided, the maximum number of dwelling units permitted shall be approximately one (1) dwelling unit per gross acre of lands within the tract.

When public water and non-individual (community) septic systems are provided, the maximum number of dwelling units permitted shall be approximately one-third (1/3) dwelling unit per gross acre of lands within the tract.
- Residential Cluster II:
The maximum number of dwelling units permitted shall be approximately two (2) dwelling units per gross acre of lands within the tract, and both public water and public sewer facilities shall be provided.
- Residential Cluster III:
The maximum number of dwelling units permitted shall be approximately one (1) dwelling unit per gross acre of lands within the tract, and both public water and public sewer facilities shall be provided.

"R" Single-Family Residential

The "R" Single-Family Residential District areas have been provided in recognition of the existing residential development of one-half (1/2) acre [21,780 s.f.] lots established in the Belle Mead area of the Township, north of Trent Avenue. While a significant portion of this area already has been developed, vacant land does exist for further subdivision activity.

While one-half (1/2) acre lots is the prevailing density, given the environmental data which indicates severe soil constraints for septic filter fields within this portion of the Township, it is possible that one-half (1/2) acre lots cannot be created for the construction of single-family detached dwellings without the provision of public water and/or public sewer facilities.

"APT/TH" Apartment/Townhouse Multiple-Family Residential

The "APT/TH" Apartment/Townhouse Multiple-Family Residential District is proposed to continue within the Route 206/518 node of development in the southern portion of the Township. Specifically, that land area south and east of Princeton Avenue and the Van Horn Brook is provided for relatively small-scale multiple-family developments at relatively high densities.

The "APT/TH" District area was initially established in the July 1974 Zoning Ordinance of Montgomery Township, based upon the recommendations of the Planning Board's 1972 Master Plan. It is recommended that the "APT/TH" District areas continue to permit apartment and/or townhouse residential development on tracts of land at least fifteen (15) acres in area and at a maximum density computed on the basis of eight (8) dwelling units per acre of "non-critical" lands, plus a transfer of an additional one-fifth (1/5) dwelling unit per acre from the "critical" lands on the tract to the so-called "uplands" proposed for development. It is specifically intended that no apartments or townhouses be situated on any "critical" lands.

The development of "APT/TH" District area lands will require a set-aside of "Mt. Laurel II" affordable dwelling units in accordance with the requirements of the N.J. Council On Affordable Housing and the appropriate Montgomery Township Land Development Ordinance provisions.

"VN" Village Neighborhood

The "VN" Village Neighborhood District areas have been established in recognition of the Villages of Blawenburg and Harlingen. These areas of Montgomery Township are unique, both in terms of their historical significance as well as the existing pattern of development. Consisting of many older structures situated on relatively small lots, the Village areas are unique assets to the municipality and should be protected and preserved to the greatest extent possible, so that the nineteenth century architectural scheme will remain a part of Montgomery Township.

It is suggested, therefore, that the existing residential structures be permitted to continue on their existing small lots. It is further suggested, however, that any new residential construction take place on lots no less than one-quarter acre [10,890 s.f.] in size.

COMMERCIAL DISTRICT AREAS

Two (2) types of commercial areas have been designated on the Land Use Plan, each of which is intended to attract patrons from different areas and to fulfill different needs. The designated commercial areas within Montgomery Township are as follows:

"NC" Neighborhood Commercial

The "NC" Neighborhood Commercial District areas are designated to provide locations within Montgomery Township where retail and service activities may be

established for the convenience needs of the immediately surrounding residential areas. The designated areas are large enough to permit an expansion of the existing collection of uses in anticipation of continued population growth and the commensurate increased demand for goods and services.

It is recommended that the "NC" District areas permit uses such as local retail and service activities, restaurants, banks and professional offices on lots approximately one-half (1/2) acre in size [20,000 s.f.].

"HC" Highway Commercial

The "HC" Highway Commercial District areas are designated to serve the commercial needs of a number of residential neighborhoods. The areas are located along Route 206, near the existing and planned locations of concentrated development, for easy accessibility and because most of the commercial activities will be geared to serve the needs of the automobile travelling public.

In addition to retail sales of goods and services, permitted uses should include car dealerships, car washes, automobile service stations, and community sized shopping centers. It is recommended that the minimum lot sizes be approximately one (1) acre [40,000 s.f.] for individual uses and eight (8) acres for shopping centers.

RESEARCH, ENGINEERING AND OFFICE DISTRICT AREAS

Three (3) research, engineering and office district areas have been designated on the Land Use Plan, each located to take advantage of the major highway access afforded by State Route 206 and the overall development pattern existing and proposed in the so-called Rocky Hill and Belle Mead node areas of the Township.

The designated research, engineering and office areas within Montgomery Township are as follows:

- "REO-1" Research, Engineering And Office
- "REO-2" Research, Engineering And Office
- "REO-3" Research, Engineering And Office

The "REO-1", REO-2" and "REO-3" Research, Engineering and Office District areas are designated for the location of low-profile and non-nuisance office and research activities. Since the "REO" areas are located in close proximity to existing and/or proposed residential construction, it is specifically intended that any "REO" development be compatible with its residential surroundings.

In order to encourage site design flexibility, incentives for the development of "Research/Office Parks" on tracts of land at least twenty-five (25) acres in area should be provided within adopted Ordinance regulations. Therefore, it is recommended that the minimum lot size for single lots not created or built upon as part of a "Research/Office Park" be five (5) acres in area, while the minimum lot size for lots created and built upon within an overall "Research/Office Park" tract design be reduced to three (3) acres in area.

Whether or not a lot is part of a "Research/Office Park", the amount of square footage within a building on a given lot shall be computed on the basis of a designated "floor area ratio" (F.A.R.); i.e., the sum of all floors of all buildings or structures on a lot compared to the total area of the lot itself:

- **"REO-1" District:**
The maximum gross floor area of buildings and structures within the "REO-1" District is to be computed on the basis of an F.A.R. of 0.15 on the 'non-critical' acreage of the lot, plus a transfer of an additional 0.03 F.A.R. from any 'critical' acreage of the lot to the 'non-critical' lands.
- **"REO-2" District:**
The maximum gross floor area of buildings and structures within the "REO-2" District is to be computed on the basis of an F.A.R. of 0.125 for the 'non-critical' acreage of the lot, plus a transfer of an additional 0.025 F.A.R. from any "critical" acreage of the lot to the 'non-critical' lands.
- **"REO-3" District:**
The maximum gross floor area of buildings and structures within the "REO-3" District is based upon the percentage proportion of the gross floor area to be utilized for "offices" versus "research laboratories" as defined in Section 200 of the Township Land Development Ordinance. Specifically, the following floor area ratios shall apply within the "REO-3" District:

<u>Percentage Of Gross Floor Area Utilized By Offices</u>	<u>Maximum F.A.R. For Non-Critical Acreage</u>	<u>Maximum F.A.R. For "Critical" Acreage</u>
0% to 40%	0.125	0.025
over 40% to 60%	0.100	0.020
over 60% to 100%	0.080	0.016

The maximum lot coverage within the "REO-1" and "REO-2" District areas are recommended to be 40.0% and 37.5% respectively. Within the "REO-3" District area, the maximum lot coverage is to be computed on the basis of the percentage proportion of the gross floor area to be utilized for "offices" versus "research laboratories" as follows:

<u>Percentage Of Gross Floor Area Utilized By Offices</u>	<u>Maximum Lot Coverage</u>
0% to 40%	37.5%
over 40% to 60%	35.0%
over 60% to 100%	32.5%

Parking requirements for each individual use are to be provided according to the following minimum provisions: One (1) space for every 1,000 s.f. or fraction

thereof of net habitable floor area used for inside storage, plus one (1) space for every 500 s.f. or fraction thereof of net habitable floor area used for "research laboratories", plus one (1) space for every 250 s.f. or fraction thereof of net habitable floor area used for "offices"; provided that the number of parking spaces resulting from the application of these provisions to the subject building shall not be increased by more than ten percent (10%).

The ten percent (10%) limit on the number of "extra" parking spaces is intended to encourage van pooling and other shared use of vehicles to and from work. Moreover, the Township intends to modify its Land Development Ordinance provisions as may be necessary to encourage and require, where possible and appropriate, full compliance with the "New Jersey Traffic Congestion And Air Pollution Control Act", June 30, 1992. In accordance with the federal "Clean Air Act Amendment Of 1990", the purpose of the State law is to require, at a minimum, employers of more than one hundred (100) employees at a particular location to "achieve an average passenger occupancy (APO) rate per vehicle in commuting trips between home and the workplace during peak travel periods of not less than 25% above the average vehicle occupancy (AVO) rate for all such trips in the area".

Only 'non-critical' lands shall be developed. Additionally, and in an effort to maintain as much land as possible in its natural state, Ordinance provisions should include a phased parking mechanism, so that the Township may require the planning and commitment of the full number of parking spaces required by Ordinance, but the paving of possibly unnecessary spaces only as needed.

The principal permitted uses in the "REO-1", "REO-2" and "REO-3" District areas should continue to be "offices", "research laboratories" and "child care centers". Additionally, it is suggested that restaurants be permitted as a "conditional use" in the two (2) land areas designated "REO-1"; thereby recognizing the existing restaurant adjacent the "REO-1" District north of Orchard Road, and the appropriateness for the location of a restaurant in the "REO-1" District across from the approved "Pike Run" "Planned Residential Development."

Moreover, it is suggested that the current Ordinance provisions governing the development of "Townhouses For Adults" in the "REO-3" District be modified to permit, instead, a residential life care facility for the elderly, significantly less dense and less intensive than the "Residential Care Facilities For The Elderly" currently permitted in the "REO-1" District.

In all cases, Ordinance regulations should require maximum attention to proper site design, including drainage patterns and the need to avoid visual intrusions and performance nuisances upon adjacent and nearby residences and residential zones. Existing foliage and natural features should be retained and enhanced in relationship to the site as well as to the surrounding areas.

LIMITED MANUFACTURING DISTRICT AREAS

The "LM" Limited Manufacturing District was created to permit a spectrum of office, research and limited manufacturing uses, in addition to detached single-family dwellings in accordance with the "R-2" District requirements.

As a result of Ordinance #89-612, adopted April 6, 1989, the minimum lot size for single lots not created or built upon as part of a "Limited Manufacturing Park" is five (5) acres in area, while the minimum lot size for lots created and built upon as part of an overall subdivided "Limited Manufacturing Park" tract design is two (2) acres in area.

The maximum gross floor area of buildings and structures within the "LM" District is based upon the percentage proportion of the gross floor area to be utilized for "offices" versus "research laboratories" and/or "limited manufacturing" as defined in Section 200 of the Land Development Ordinance. Specifically, the following floor area ratios shall apply to the "LM" District:

<u>Percentage Of Gross Floor Area Utilized By Offices</u>	<u>Maximum F.A.R. For Non-Critical Acreage</u>	<u>Maximum F.A.R. For "Critical" Acreage</u>
0% to 40%	0.175	0.035
over 40% to 60%	0.125	0.025
over 60% to 100%	0.080	0.016

The maximum lot coverage within the "LM" District areas is to be computed on the basis of the percentage proportion of the gross floor area to be utilized for "offices" versus "research laboratories" and/or "limited manufacturing" as follows:

<u>Percentage Of Gross Floor Area Utilized By Offices</u>	<u>Maximum Lot Coverage</u>
0% to 40%	42.5%
over 40% to 60%	37.5%
over 60% to 100%	32.5%

Parking requirements for each individual use are to be provided according to the following minimum provisions: One (1) space for every 1,000 s.f. or fraction thereof of net habitable floor area used for inside storage, plus one (1) space for every 500 s.f. or fraction thereof of net habitable floor area used for "research laboratories" or "limited manufacturing", plus one (1) space for every 250 s.f. or fraction thereof of net habitable floor area used for "offices"; provided that the number of parking spaces resulting from the application of these provisions to the subject building shall not be increased by more than ten percent (10%).

Only 'non-critical' lands shall be developed. Additionally, and in an effort to maintain as much land as possible in its natural state, Ordinance provisions should include a phased parking mechanism, so that the Township may require the planning and commitment of the full number of parking spaces required by Ordinance, but the paving of possibly unnecessary spaces only as needed.

SPECIAL INDUSTRIAL DISTRICT AREA

The "MR/SI" Mountain Residential/Special Industrial District area is designated to permit the construction of low density single-family homes in the vicinity of the existing homes in the area as well as the nearby recreational and open space area known as the Sourland Mountain Park. The Ordinance controls governing the residential construction within the "MR/SI" District area should be identical to those adopted for the "MR" District area.

Additionally, sound planning judgement concerning the best and most appropriate land use pattern for Montgomery Township must reflect upon, among other considerations, the basic physical and economic features of the Township and its environs.

Directly next to the Township of Montgomery, natural resources in the form of rock and stone are available and are currently being mined from the land. The economic development of these natural resources requires related accessory facilities, including processing machinery and equipment and railroad and highway access. Therefore, in addition to permitting residential construction, the "MR/SI" District area has been designated to permit processing facilities in conjunction with the stone and rock quarrying operation in Hillsborough Township.

The minimum lot size for each processing facility should be fifty (50) acres, with the permitted industrial uses limited to the processing of the stone and rock products of the neighboring excavating and quarrying operations.

SMALL BUSINESS DISTRICT AREA

The "SB" Small Business District area was created to permit a full spectrum of small retail and service type businesses on minimum lots of one (1) acre in size. All buildings should be required to have either mansard, hip, gambrel or gable roof types; no flat or shed roofs should be permitted.

The maximum gross floor area of buildings and structures within the "SB" District is recommended to be calculated on the basis of a floor area ratio of 0.25. The maximum lot coverage is recommended to be sixty percent (60%).

Parking requirements for each individual use in the "SB" District should be provided on the basis of one (1) space for every 250 s.f. or fraction thereof of net habitable floor area.

OPTIONAL DEVELOPMENT ALTERNATIVES

In addition to the "Residential Cluster I", "Residential Cluster II" and "Residential Cluster III" optional development alternatives previously discussed in the context of the "R-1" and "R-2" District, two (2) additional optional development alternatives are indicated on the Land Use Plan map. All five (5) of the optional development alternatives are types of "planned developments" as defined in the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.).

Generally speaking, the purpose of the planned development concept is to permit the clustering of uses on the most developable portions of a tract of land, with the remainder of the tract set aside for open space, recreation and/or conservation purposes, as appropriate and desired.

The previously discussed single-family "Residential Cluster I", "Residential Cluster II" and "Residential Cluster III" development alternatives on specified lands within the "R-1" and "R-2" District areas are basic applications of the planned development clustering technique. The major aim in varying the standard development controls is to encourage an imaginative development design while, at the same time, preserving major amounts of land in its natural state and/or creating common open space areas for use by the residents of the development and/or public open space areas for use by the residents throughout the Township.

The planned development technique, however, may proceed beyond the simple clustering of single-family detached dwellings by providing the construction of a self-contained neighborhood or community, incorporating a variety of residential dwelling unit types as well as desired non-residential uses. In instances where the planned development concept is applied in this manner, the objectives may be summarized as follows:

- To provide for greater variety in the type, design and layout of housing;
- To provide convenient open space and recreational facilities within easy access to all residents within the development;
- To provide for the necessary community facilities and infrastructural improvements, both planned and executed as part of the overall site design;
- To provide for non-residential uses as may be appropriate to the specific development;
- To provide for a harmonious relationship between residential and non-residential uses, both existing and proposed; and
- To conserve and maintain the environmental attributes of the lands.

"PRD" Planned Residential Developments

The Planned Residential Development "PRD" area is located in the northernmost portion of the Township and is bordered by Township Line Road to the north, Pike Brook to the east, Belle Mead/Griggstown Road to the south and State Route 206 to the west. The area, therefore, is provided excellent road accessibility. Moreover, the roadways and brook isolate the lands so that they may be effectively developed as a single entity.

Planned Residential Developments require a minimum tract size of one hundred (100) acres. The maximum number of dwelling units permitted shall be computed on the basis of seven (7) dwelling units per acre of 'non-critical' lands,

having first subtracted ten percent (10%) of the total land area for permitted non-residential uses, plus a transfer of an additional one-fifth (1/5) dwelling unit per acre from the 'critical' lands in the tract to the non-critical lands.

A mixture of residential units is proposed within a Planned Residential Development, including single-family detached dwellings, patio homes, townhouses and apartments. Approximately twenty percent (20%) of the total dwelling units within the development should be single-family detached dwellings and/or patio homes, with the remaining residential units being either townhouses or apartments.

In addition to the residential construction, the developer should devote approximately ten percent (10%) of the overall tract acreage for non-residential uses, including professional offices and residentially oriented retail and service uses.

It is specifically intended that no structure be situated on any 'critical' lands within the tract.

Moreover, a minimum forty percent (40%) of the tract acreage devoted to residential development should be specifically planned, improved and dedicated for open space and/or recreational uses, provided that one-half (1/2) of the open space/recreational acreage may be 'critical' lands and provided further that no lands dedicated by the developer for the future realignment of State Route 206 should be considered part of the tract when the forty percent (40%) open space requirement is calculated.

Twenty percent (20%) of the total multiple-family units within the development must be set aside as 'low' and 'moderate' income "Mt. Laurel II" units in accordance with the requirements of the N.J. Council On Affordable Housing and the appropriate Montgomery Township Land Development Ordinance provisions.

Montgomery Village Planned Development

The concept of the "Montgomery Village Planned Development" originated in early 1987 as a result of many discussions by the Planning Board and Township Committee concerning the subject land area, then zoned "RD" Research Development, and the increasing non-residential development and resultant traffic occurring within the area.

The motives behind the concept were to create a development that would be different from typical non-residential zoning, provide another focal point of retail development within the Township, and create the type of development which, although relatively dense, would embellish the country and 'village' character of the Township.

Essentially, the general objective of the Montgomery Village Planned Development option may be summarized as follows:

- To facilitate the planning design and construction of a traditional village community, reflecting the character of historical small towns and villages in New Jersey.

- To create a mixed-use village environment which emphasizes pedestrian circulation, attractive civic spaces, squares, greens and parks, with a special sense of community and identity.
- To reduce dependence upon the automobile by providing living, shopping, employment and recreational opportunities within convenient and reasonable walking distance within the village.
- To encourage a village core or central area which is a relatively compact, mixed-use, pedestrian oriented environment.
- To encourage architectural themes which reflect the scale, details, ornamentation and mix of uses characteristic of traditional villages.
- To facilitate residential neighborhoods surrounding the village core, containing a variety of housing types typically found in traditional villages, including single-family detached homes, patio homes, townhouses, apartments and residential flats above retail shops.
- To encourage the creation of a "Main Street", with broad sidewalks and public spaces for a variety of pedestrian activities.
- To encourage dispersed parking spaces, the sharing of parking between residential and non-residential land uses, and to discourage large parking lots.
- To encourage a village-wide pedestrian circulation system, linking the major elements of the community.

The current Ordinance provisions governing the development of the "Montgomery Village Planned Development" alternative were formulated with the assumption that the development would occur on a tract of land consisting of a number of individual lots which, at the time, were controlled by a single individual. Since that time, however, development control of the individual lots has transferred to a number of different property owners.

As a result of the changed ownership patterns and the possibility that some individual lots may be developed in accordance with their underlying zoning, the Planning Board recognizes that changes to the Land Development Ordinance provisions governing the development of the "Montgomery Village Planned Development" may be warranted.

"MT. LAUREL II" HOUSING OBLIGATIONS

According to the January 20, 1983 Decision of the New Jersey Supreme Court known as "Mt. Laurel II", every municipality in the State has a constitutional obligation to provide opportunities for affordable housing. The Court Decision also states that "Mt. Laurel litigation will ordinarily include proof of the municipi-

pality's "fair share" of "low" and "moderate" income housing in terms of the number of units needed...numberless resolution of the issue...will be insufficient." (p.28)

Subsequent to the "Mt. Laurel II" Supreme Court Decision, municipalities calculated their "fair share" housing obligation utilizing the so-called "consensus methodology" sanctioned by Judge Serpentelli in his July 16, 1984 Decision regarding a "Mt. Laurel" litigation in Warren Township, Somerset County, New Jersey. In accordance with the so-called "consensus methodology", Montgomery Township's "fair share" housing obligation through December 31, 1991 was calculated to be seven hundred thirty-one (731) affordable housing units.

However, Montgomery Township disagreed with the "consensus methodology" and, in the face of imminent litigation, voluntarily petitioned Judge Serpentelli's Court for a review and sanction of its "Mt. Laurel II" housing obligation and the Township's plans to satisfy its obligation. During the Court proceedings, Montgomery Township corrected certain of the statistical data utilized in the "consensus methodology" and successfully argued against certain other aspects of the methodology, with the result that the Court found that Montgomery Township's "fair share" housing obligation was three hundred twenty-five (325) 'low' and 'moderate' income units. Moreover, the Court found that the Township's zoning provisions for the "APT" Apartment District and the optional "Planned Residential Development" provided a reasonable opportunity for the construction of the required three hundred twenty-five (325) affordable units.

On July 2, 1985, after Montgomery Township voluntarily petitioned Judge Serpentelli's Court for a finding that it was complying with its "Mt. Laurel II" housing obligation, the "Fair Housing Act" was signed into law by the Governor. A belated response to the "Mt. Laurel II" Supreme Court Decision, the legislation continues to affect every municipality in the State of New Jersey and required the formation of the "New Jersey Council On Affordable Housing" (COAH).

In accordance with the "Substantive Rules" (N.J.A.C. 5:92) adopted by the New Jersey Council On Affordable Housing pursuant to the "Fair Housing Act", the mandated "fair share" housing need obligation for Montgomery Township was one hundred eight (108) affordable units between the years 1987 and 1993.

As published on March 15, 1993 in the New Jersey Register, Montgomery Township's updated "fair share" housing obligation for the years 1987 to 1999 include an additional two hundred seven (207) affordable units, resulting in a total obligation of three hundred fifteen (315) affordable units. However, since the Court found that the Township's zoning provisions for the "APT" Apartment District and the optional "Planned Residential Development" provided a reasonable opportunity for the construction of three hundred twenty-five (325) affordable units, no further changes to the Township's Zone Plan are necessary at this time.

The following summarizes the litigations in which Montgomery Township has been involved regarding claims that the Township's zoning provisions were "exclusionary", and the Township's victory in each case demonstrates Montgomery's adherence to, and fulfillment of, the goals and requirements of Mount Laurel I (South Burlington County NAACP v. Mount Laurel Township, 67 N.J.

151 (1975, app. dism. and cert. den. 423 U.S. 808 (1975) and Mount Laurel II (South Burlington County NAACP v. Mount Laurel Township, 92 N.J. 158 (1983)):

- Taberna Corp. et al v. Township of Montgomery et al., Docket No. L-699-73, P.W.

Unreported opinion filed July 29, 1975 held that the Zoning Ordinance of Montgomery Township complied with the standards of the "Mount Laurel I" New Jersey State Supreme Court Decision by providing its "fair share" of the regional housing need for 'low' and 'moderate' income housing, as then determined.

- Montgomery Associates v. Montgomery Township, 149 N.J. Super. 536 (Law Div. 1977) aff'd 160 N.J. Super. 219 (App. Div. 1978)

Held that Montgomery Township's Zoning Ordinance was valid since it provided for its "fair share" of the regional housing needs of 'low' and 'moderate' income families, even though only a single area of the Township (the "APT/TH" Apartment/Townhouse District) was provided for the required affordable housing.

- Township of Montgomery c/w Bellemead Development Corporation v. Township of Montgomery, et al. Docket Nos. L-012713-85 and L-021050-85 P.W.

With a Judgement of Compliance entered July 31, 1985, Montgomery Township became the first municipality in the State of New Jersey deemed to be in compliance with its "Mount Laurel II" housing obligations through voluntary measures.

The Court approved a comprehensive Zoning Ordinance for the municipality which established two (2) areas in the Township where 'low' and 'moderate' income housing would be built: the "APT/TH" Apartment/Townhouse District and the "PRD" Planned Residential Development area. Further, the Township's "fair share" housing obligation was established to be three hundred twenty-five (325) affordable units.

On March 23, 1989 pursuant to an application filed by Montgomery Township, a Court Order was entered amending the Township's Mount Laurel compliance provisions to incorporate a settlement agreement between Montgomery Township and the developer of Scribner Village in the "APT/TH" zoning district. The amendment was necessitated by the NJDOT's condemnation of lands where 'low' and 'moderate' income housing was required by the Township Land Development Ordinance.

The agreement obligated the developer of Scribner Village to develop the remaining lands with at least twenty one and six

tenths percent (21.6%) 'low' and 'moderate' income units, which resulted in Montgomery Township receiving one hundred fifteen (115) "Mount Laurel II" credits from the development as follows: thirty-five (35) sales units plus eighty (80) rental units [60 senior citizen rental units credited at 1 1/3 per unit].

DEDICATION OF LANDS FOR PUBLIC PURPOSES

Oftentimes when subdivision or site plan applications for development are approved by the Township, lands are dedicated to the Township by the landowner for roadways, parks, conservation areas and other public uses, all in accordance with the land use recommendations incorporated within the various elements of the Township Master Plan. In order to encourage an applicant to readily dedicate the applicable land areas, it is suggested that the Land Development Ordinance provisions be amended as necessary to clearly indicate that a property owner will not be penalized as a result of such voluntary land dedication.

AIRPORT SAFETY ZONE

As required by the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.), the boundary of the "Airport Safety Zone", including the "Runway Subzone", the "Runway End Subzones" and the "Clear Zones", should continue to be delineated on the Zoning Map pursuant to the Air Safety And Hazardous Zoning Act Of 1983, P.L. 1983, c.260 (N.J.S.A. 6:1-80 et seq.). Moreover, development on lands located within the delineated "Airport Safety Zone", including the existing airport itself, should be in accordance with the provisions specified within the Act.

EXISTING ZONING

A comparison of the existing Zoning Map of Montgomery Township (as of May 1993) with the proposed Land Use Plan map (June 1993) indicates only those few changes previously discussed herein. Given the fact that the Township continuously updates its Master Plan, the fact that only few changes are proposed at this time is not surprising.

What may be surprising, however, given the large number of modifications and refinements made to the Zone Plan over the past twenty (20) years, is that the basic concept of land development within Montgomery Township, and the adopted "Goals, Policies And Objectives" of the Master Plan, have remained totally consistent over that time.

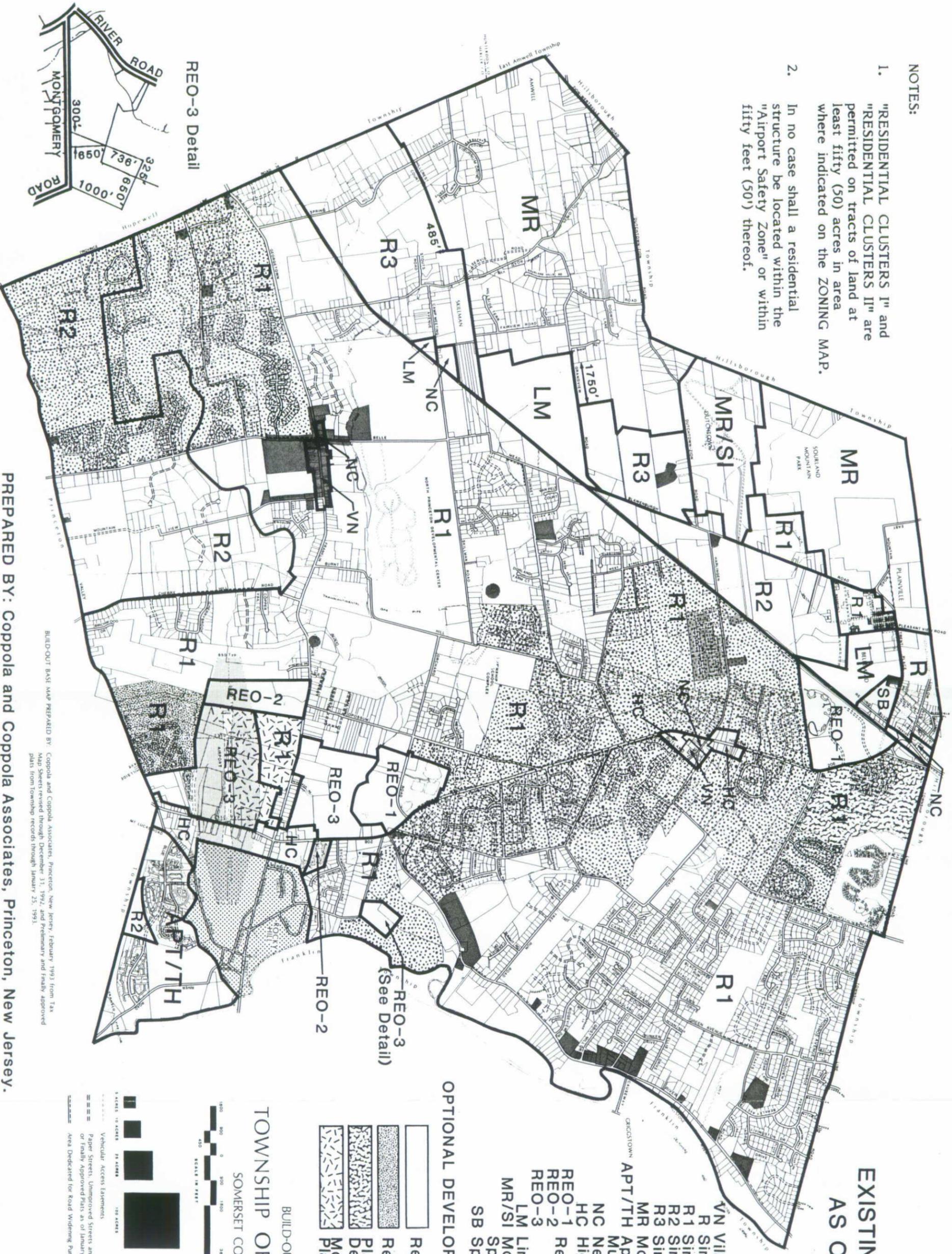
LAND DEVELOPMENT ORDINANCE COMPREHENSIVE UPDATE

A most important endeavor to be accomplished by Montgomery Township as soon as possible is a comprehensive update of the Land Development Ordinance provisions governing development within the Township.

NOTES:

1. "RESIDENTIAL CLUSTERS I" and "RESIDENTIAL CLUSTERS II" are permitted on tracts of land at least fifty (50) acres in area where indicated on the ZONING MAP.
2. In no case shall a residential structure be located within the "Airport Safety Zone" or within fifty feet (50') thereof.

EXISTING ZONING MAP
AS OF MAY 1993



PREPARED BY: Coppola and Coppola Associates, Princeton, New Jersey.

BUILD-OUT BASE MAP PREPARED BY: Coppola and Coppola Associates, Princeton, New Jersey, February 1993 from Tax Map Sheets revised through December 31, 1992, and Preliminary and finally approved plats from Township records through January 25, 1993.

OPTIONAL DEVELOPMENT ALTERNATIVES

- Residential Clusters I
- Residential Clusters II
- Planned Residential Developments
- Montgomery Village Planned Development

DISTRICT AREAS

- VN Village Neighborhood
- R Single Family Residential
- R1 Single Family Residential
- R2 Single Family Residential
- R3 Single Family Residential
- MR Mountain Residential
- APT/TH Apartment/Townhouse
- Multiple-Family Residential
- NC Neighborhood Commercial
- HC Highway Commercial
- REO-1 Research, Engineering and Offices
- REO-2
- REO-3
- LM Limited Manufacturing
- MR/SI Mountain Residential/Special Industrial
- SB Special Business

TOWNSHIP OF MONTGOMERY

SOMERSET COUNTY, NEW JERSEY

BUILD-OUT BASE MAP



The Land Development Ordinance provisions are in need of substantive updates regarding changes to the Municipal Land Use Law as well as other technical corrective changes. Additionally, the Land Development Ordinance has been amended numerous times over the past few years, including such major additions as the Landmarks Preservation Ordinance and the Affordable Housing Ordinance, as well as numerous minor additions to the zoning provisions, particularly those governing development in the "R-1" and "R-2" Districts.

The end result is that the Land Development Ordinance has become somewhat cumbersome to use and, therefore, should be revised as necessary in order to present the provisions in a more understandable and readable manner.

Over the past twenty (20) years, various Superior Court Judges hearing the merits of lawsuits brought against Montgomery Township have specifically commented upon the good organization and readability of Montgomery Township's Land Development Ordinance provisions as they decided in favor of the Township's position. It is important to bring back that high quality to the Land Development Ordinance.

ATTACHMENT A

SUMMARY OF ZONING MAP CHANGES
IN THE
"REO", "RD", AND "MFG" DISTRICTS

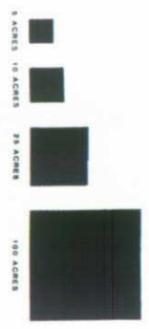
1974 TO 1989



ZONING MAP CHANGES IN THE "REO", "RD" AND "MFG" DISTRICTS 1974-1989

NOTE: See accompanying chart
for explanation of
changes.

TOWNSHIP OF MONTGOMERY
SOMERSET COUNTY • NEW JERSEY



Orange Paper and/or Unimproved Streets
Airport Safety Zone

SUMMARY OF ZONING MAP CHANGES
IN THE "REO", "RD" AND "MFG" DISTRICTS
1974 TO 1989

	<u>"REO"</u>	<u>"RD"</u>	<u>"MFG"</u>	Acreage Changes Within				
				<u>"REO-1"</u>	<u>"REO-2"</u>	<u>"REO-3"</u>	<u>"LM"</u>	<u>"SB"</u>
1. "REO" to "R-1" north of Orchard Road (New Zoning Ordinance) (June 13, 1974) (A)	- 40.09							
2. Reduction of "RD" west of airport to "R-1" (New Zoning Ordinance) (June 13, 1974) (A)		-112.00						
3. Addition of "MFG" south of Camp Meeting Road (New Zoning Ordinance) (June 13, 1974)			+ 10.33					
4. Change of "MFG" to "R-3/SI" (Ord. # 76-304) (March 18, 1976)			-347.02					
5. Realignment of "MFG" boundary with I-95 elimination (Ord. # 83-455) (July 7, 1983)			-156.44					
6. "REO" to "R-1" along I-95 Interchange with Route 518 (Ord. # 83-455) (July 7, 1983) (A)		-363.00						
7. Elimination of "RC" and addition of "REO" in Belle Mead Node (Ord. # 85-482) (May 1, 1985) (B)		+158.58						
8. Reduction of "RD" along Route 206 to "HC" (Ord. # 85-482) (May 1, 1985) (B)			- 12.15					
9. Reduction of "REO" along Opossum Road (Ord. # 87-544) (March 19, 1987) (C) (D)	- 20.34							

	"REO"	"RD"	"MFG"	Acreage Changes Within			"LM"	"SB"
				"REO-1"	"REO-2"	"REO-3"		
10. Change of "REO" to "REO-1" (Ord. #87-570) (December 17, 1987) (E)	-225.18			+225.18				
11. Change of "REO" to "R-1" (Ord. # 87-570) (December 17, 1987) (E)	- 19.33							
12. Change of "REO" to "REO-1" (Ord. #87-570) (December 17, 1987) (E)	-203.44			+203.44				
13. Change of "REO" to "REO-3" (Ord. #87-570) (December 17, 1987) (E)	-195.27					+195.27		
14. Change of "REO" to "REO-2" (Ord. #87-570) (December 17, 1987) (E)	- 15.00				+ 15.00			
15. Change of "RD" to "REO-2" (Ord. #87-570) (December 17, 1987) (E)		- 97.38			+ 97.38			
16. Change of "RD" to "R-1" (Ord. #87-570) (December 17, 1987) (C) portion, (D) portion, and (E)		- 91.40						
17. Change of "RD" to "REO-3" (Ord. #87-570) (December 17, 1987) (E)		-355.88				+355.88		
18. Change of "REO" to "REO-1" (Ord. #87-570) (December 17, 1987) (E)	-158.58			+158.58				
19. Reduction of "REO-3" to "R-1" (Ord. #88-602) (November 22, 1988) (F)						- 47.50		

	<u>"REO"</u>	<u>"RD"</u>	<u>"MFG"</u>	<u>"REO-1"</u>	<u>"REO-2"</u>	<u>"REO-3"</u>	<u>"LM"</u>	<u>"SB"</u>
20. Change of "MFG" to "LM" (Ord. #89-612) (April 6, 1989) (G)			-259.33				+259.33	
21. Reduction of "MFG" to "R-2" (Ord. #89-612) (April 6, 1989) (G)			-493.15					
22. Change of "MFG" to "LM" (Ord. #89-612) (April 6, 1989) (G)			-141.44				+141.44	
23. Change of "MFG" to "SB" (Ord. #89-612) (April 6, 1989) (G)				- 30.91				+ 30.91
24. Change of "REO-1" to "R-1" (Ord. #89-615) (May 18, 1989) (C), (D) and (H)				-202.97				
25. Change of "REO-1" to "REO-3" (Ord. #89-615) (May 18, 1989) (H)				- 22.21		+ 22.21		
Net Acreage Changes:	-1,081.65	-668.81	-1,373.52	+ 362.02	+112.38	+525.86	+400.77	+ 30.91
Current Total Acreage:	0	0	0	362.02	112.38	525.86	400.77	30.91

* Footnotes follow on next page. *

FOOTNOTES:

- A. Recommended in 1974 Planning Report of Montgomery Township entitled "Analysis of Non-Residentially Zoned Lands".
- B. In accordance with April 15, 1986 Land Use Plan Element; remaining portion of "RC" Regional Commercial District rezoned to permit "Planned Residential Development".
- C. Recommended in Memorandum Report 77-86 dated June 23, 1986.
- D. Recommended in updated August 1986 "Master Plan Periodic Reexamination Report".
- E. Lands zoned "REO" and "RD" on the January 1987 Zoning Map were transferred into the "R-1", "REO-1", "REO-2" and "REO-3" Districts on the November 1987 Zoning Map by Ordinance #87-570, adopted December 17, 1987.
- F. November 10, 1988 Zoning Map.
- G. All lands zoned as "MFG" Limited Manufacturing on the November 10, 1988 Zoning Map were transferred into the "R-2", "LM" and "SB" Districts on the February 16, 1989 Zoning Map by Ordinance #89-612, adopted April 6, 1989.
- H. March 1, 1989 Zoning Map.

GENERAL NOTE:

Acreege figures calculated from Montgomery Township Tax Map lot dimensions, calculated by planimetric measurement, or taken directly from Township Tax Map notations.

PREPARED BY:
COPPOLA AND COPPOLA ASSOCIATES, PRINCETON, NEW JERSEY, MAY 1993.

