

# Land Use Plan Element Of the Greenwich Township Master Plan

May 10, 2006  
Amended July 11, 2011

## Greenwich Township Warren County, NJ

### Greenwich Township Planning Board

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*The original of this report was signed and sealed  
in accordance with N.J.A.C. 13:41-1.3*

**GREENWICH TOWNSHIP PLANNING BOARD**

**RESOLUTION AMENDING THE LAND USE PLAN ELEMENT OF THE  
GREENWICH TOWNSHIP MASTER PLAN**

**WHEREAS**, N.J.S.A. 40:55D-28 authorizes the Board to prepare and, after public hearing, adopt or amend a Master Plan or component parts or elements thereof to guide the use of lands within the municipality in a manner which protects public health and safety and promotes the general welfare;

**WHEREAS**, the Board wishes to amend the 2006 Land Use Plan Element of the Greenwich Township Master Plan;

**WHEREAS**, notice of a hearing of the proposed amendment to the Land Use Plan Element of the Master Plan was published and served in accordance with the requirements of N.J.S.A. 40:55D-13, and a hearing was held by the Board on July 11, 2011, at which time the proposed amended Land Use Plan Element was presented and discussed and opportunity to speak and be heard was offered to all interested parties and members of the public;

**NOW, THEREFORE, BE IT RESOLVED** by the Greenwich Township Planning Board, by motion made and seconded on July 11, 2011, that the 2006 Land Use Plan Element of the Master Plan is hereby amended by replacement in its entirety by adoption of the amended Land Use Plan Element of the Master Plan dated July 11, 2011, and the Master Plan is hereby amended to incorporate the amended Land Use Plan Element dated July 11, 2011; and

**BE IT FURTHER RESOLVED** that a certified copy of this resolution, and of the amended Land Use Plan Element referenced above, shall be filed by the Greenwich Township Planning Board Secretary with the Greenwich Township Clerk and the Warren County Planning Board not more than 30 days after the date of the adoption of this resolution.

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I certify that the above resolution was adopted by the Greenwich Township Planning Board at its meeting held on July 11, 2011:

  
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**ALICE OLDFORD, Board Secretary**

*Greenwich Township – Master Plan Update*

*Land Use Plan Element*

Executive Summary / Introduction

Greenwich Township is located in Warren County in the northwest portion of New Jersey, approximately 60 miles west of Manhattan and approximately 65 miles north of Philadelphia. The Township may be best characterized by wide expanses of rolling scenic farmland fields lined with hedgerows, and picturesque pristine trout streams. The Township is situated within the Highlands physiographic province, surrounded by a dramatic landscape of forested mountain ridgelines. The Township's 10.55 square miles or approximately 6,754 acres area of land is endowed with a wealth of irreplaceable natural resources and environmentally sensitive habitat, which establish the basis for the Land Use Plan's focus and concentration on natural resource conservation.

Throughout the 20<sup>th</sup> century, the Township remained a sparsely populated agricultural community that thrived upon farming highly productive soils. Farmsteads surrounded the historic settlement of Stewartsville, which dates to the birth of the nation and is situated at the core of the community. Many historic farmsteads survive today. A modest amount of post-war residential development grew at the outskirts of Stewartsville.

In the late 20<sup>th</sup> Century, the landmark Mount Laurel NJ Supreme Court decisions along with the NJ Fair Housing Act adopted by the NJ Legislature in the 1980's, had the effect of rapid suburban court ordered growth in Greenwich Township, which dramatically increased the population. This court ordered housing, joined by additional suburban growth, resulted in Greenwich Township experiencing population growth from just 1,783 persons in 1980 to a reported population of 5,223 in 2004. Despite this growth, the Township's land base remains predominantly agricultural today, and much of the rural character remains much as it has for more than two centuries.

In 2004, the Highlands Water and Protection Act was signed into law, primarily in response to two factors: (1) the need to protect water resources that emanate from the region and provide water to approximately one-half of New Jersey's population; and (2) the need to dramatically limit unchecked suburban sprawl-type growth, which has been consuming the unspoiled natural resources of the Highlands Region upon which New Jersey's population depends for its water. The Act divided the Highlands region into two areas, including the "Preservation Area" and the "Planning Area". The Act had the effect of designating a majority of Greenwich Township within the Highlands region Planning Area.

The Highlands Water Protection and Planning Act implements series of strict mandatory growth controls to limit development in the Preservation Area. Preservation Area mandatory growth controls do not extend to the Planning Area. However, the Act does

identify resource protection goals for the Planning Area that are appropriate to Greenwich Township's natural resource base, which this plan seeks to advance.

Prior to the adoption of the Highlands Water Protection and Planning Act, Greenwich Township was actively protecting its natural resource base, through the preservation of farmland and open space and rural conservation zoning strategies. The Township enacted a local farmland and open space tax, the revenue from which has been used with County and State funding sources to preserve farmland and open space. To date, there have been significant public investments in farmland and open space preservation in Greenwich Township. Ongoing collection of the local farmland and open space tax revenue continues to generate funding for coordinated land preservation efforts, which continue today and are expected to continue well into the future.

Prior to the adoption of the Highlands Act, the Township began an update of the Master Plan. Greenwich Township's participation in the State Development and Redevelopment Plan Cross Acceptance III included preparation of a Cross Acceptance report to the Warren County Freeholders, in which the Planning Board inventoried and the governing body endorsed a series of designations and strategies for resource conservation in the Township. The report calls for the designation of critical environmental resources for enhanced recognition and protection, including threatened and endangered species habitat, high-quality (C-1) surface water and steep slope protections, scenic corridors and viewsheds, identifying areas of exceptional aesthetic value viewsheds (including the Pohatcong Mountain), and critical resource designation for farmland soils and groundwater aquifers and their recharge areas. At the time the Highlands Water Protection and Planning Act was adopted by the Legislature and signed into law by the Governor, Greenwich Township had begun to advance resource conservation as the primary land use goal for the municipality.

After the Act became law, the Greenwich Township Planning Board and Township Committee prepared a groundwater resources report in 2005 to document the existence of water resources within the municipality, which may be of value to the region as a long-term public water resource. Greenwich Township's geology is best characterized as carbonate rock or limestone, which is generally known to be a highly productive groundwater aquifer. This resource was highlighted in the Environmental Commission's 2003 Environmental Resources Inventory, which inventoried the Township's limestone geology as an important natural resource as well as calling attention to the pervasive problem of sinkhole development due to the rapid movement of water through the carbonate rock. The Township's groundwater resources report completed in 2005 confirmed that Greenwich's limestone geology is a significant groundwater resource that requires protection if it is to remain a valuable asset to the regions water supply in the future, which is acknowledged in the Conservation Plan Element of the Master Plan.

Resource conservation is the fundamental planning principle upon which this Land Use Plan is based. In developing this Land Use Plan, the Planning Board conducted a review of the prior Land Use Plan and existing zoning and found that the type and intensity of

development permitted in local ordinances is inconsistent with resource conservation principles. The Board found that development permitted in accordance with local zoning would result in the loss of irreplaceable natural resources with significant value to the residents of Greenwich, as well as the residents in the region. As such, the Planning Board concluded that the Land Use Plan and zoning ordinance should designate a Resource Conservation District, consistent with local goals and objectives as well as State and Highlands Region goals and objectives to conserve critical natural resources.

This Land Use Plan includes a statement of updated goals and objectives, State and Highlands Regional goals and policies, and a series of land use strategies for the protection of Greenwich Township's natural resource base. This plan also identifies opportunities for a modest amount of nonresidential growth to bring some balance to the disproportionate imbalance of land uses, which have evolved in recent years. The overall strategy of resource conservation is the underpinning of this Land Use Plan, which is established to ensure that Greenwich Township's natural resource base survives into the future and to ensure that the natural functions of irreplaceable resources are maintained to contribute to the health, safety and welfare of generations to come.

This master plan update coordinates with the Township's Environmental Resource Inventory, the Conservation Plan Element, the 2005 Groundwater Resources Report, the purposes of the Municipal Land Use Law (N.J.S.A. 40:55D-2), Highlands Protection goals and State Plan policies to establish sound land use and environmental protection policies that will ensure the protection of the Township's wealth of agricultural and critical ground and surface water resources and other environmental resources. This plan addresses important land use issues and environmental challenges that confront the municipality today and are expected to continue in the future. This plan establishes local land use policies designed to preserve Greenwich Township's essential character and to ensure the survival of the Township's agricultural and environmentally sensitive landscape despite persistent regional growth development pressures that threaten the very survival of these resources, and if altered, would forever alter the Township's destiny. Through careful, well-reasoned and balanced land use policies and regulations, the prized agricultural and environmentally sensitive landscape that defines Greenwich Township can be protected for today's residents and future generations to come. Precious groundwater resources can be protected for future generations.

This Land Use Plan identifies resource conservation policies as the foundation for land use planning, environmental protection and farmland retention in Greenwich Township. Greenwich Township has chosen resource conservation as the planning principle to respond to the constant threat of loss to development of productive farm fields, productive soils and groundwater recharge systems, woodlands, steep slope areas, and critical habitat areas. The goal of natural resource protection has prompted the Planning Board to establish policies that are designed to protect these resources, while at the same time provide for sensible use of the land and water resources upon which all residents and natural systems depend.

### Land Use Plan – Statutory Authorization

This Land Use Plan has been prepared in accordance with the Municipal Land Use Law (M.L.U.L.), which at N.J.S.A. 40:55D-28.b. provides for:

- (1) A statement of objectives, principles, assumptions, policies and standards upon which the constituent proposals for the physical, economic and social development of the municipality are based;
- (2) A land use plan element
  - (a) taking into account and stating its relationship to paragraph (1) hereof, and other master plan elements provided for in paragraphs (3) through (13) hereof and natural conditions, including, but not necessarily limited to, topography, soil conditions, water supply, drainage, flood plain areas, marshes, and woodlands;
  - (b) showing the existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational, educational and other public and private purposes or combination of purposes; and stating the relationship thereof to the existing and any proposed zone plan and zoning ordinance; and
  - (c) showing the existing and proposed location of any airports and the boundaries of any airport safety zones delineated pursuant to the “Air Safety and Zoning Act of 1983,” P.L. 1983, c. 260 (C. 6:1-80 et seq.); and
  - (d) including a statement of the standards of population density and development intensity recommended for the municipality;

### Statement of Goals and Objectives

This land use plan coordinates with the Conservation Plan, which identifies a statement of goals and objectives that also serve as many of the goals and objective of this plan. Much of the statement of goals and objectives discussion in the Conservation Plan is provided below and is supplemented for the Land Use Plan. A discussion of the purposes of the M.L.U.L., policies of the SDRP and Highlands Water Protection and Planning Act are incorporated herein as goals to this plan.

### Purposes of the M.L.U.L.

N.J.S.A. 40:55D-2 identifies the purposes of the M.L.U.L., which establish the statutory authority for municipal land use planning and regulation in New Jersey. More than one-half (eight of fifteen) of the purposes of the M.L.U.L. charge the Planning Board with a mandate to protect the environment, prevent urban sprawl, and protect the State’s natural resources. The Planning Board has prepared the Master Plan to discharge its statutory responsibility to conserve natural resources, protect farmland and natural systems, and

promote the maintenance of a clean and healthy environment. Those eight purposes of the law are listed below.

- (a) To encourage municipal action to guide the appropriate use of or development of all lands in the 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 the preservation of the environment;
- (g) To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial, 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;
- (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 the land;
- (n) To promote utilization of renewable energy sources; and

#### State Development and Redevelopment Plan

The State Development and Redevelopment Plan (SDRP) offers guidance to the Planning Board in the formulation of land management and natural resource conservation policy. The SDRP designates much of Greenwich Township as Rural Planning Area (PA4), Rural/Environmentally Sensitive Planning Area (PA4B) or the Environmentally Sensitive Planning Area (PA5). These designations recognize the valuable agricultural resources and environmentally sensitive natural features that Greenwich Township seeks to protect from the siege of development pressure within the region that threatens to transform these valued resources to suburban sprawl. The suburban planning area, Planning Area 2 is included on the SDRP Policy Map acknowledging the existence of the developed sewer service area in the westerly portion of the Township.

Within the Highlands Region, suburban development is consuming what was once a vast agricultural and natural landscape. The transformation of rural and open natural lands to residential neighborhoods brings with it the loss of irreplaceable natural and economic resources. Unchecked, suburban sprawl will forever alter the rural, natural and cultural landscape that Greenwich Township seeks to protect and preserve. Greenwich acknowledges the SDRP Rural and Environmentally Sensitive planning area designations and embraces the challenge in maintaining and protecting these areas.

SDRP guidance for management of the Rural Planning Area has been provided, as follows:

*“Prudent land development practices are required to protect these resources and retain large contiguous areas of agricultural land. If a viable agricultural industry is to be sustained in the future, the conversion of some of the lands to non-farm uses must be sensitive to the areas predominant rural character and agricultural land base. Throughout New Jersey, some Rural Planning Areas are subject to greater development pressure than other areas. Without greater attention to maintaining and enhancing our rural areas, these economic activities are at risk. Tools and techniques need to be tailored to address the distinctive situation. In particular, new development may require additional attention in areas with environmentally sensitive features.”*

For the Environmentally Sensitive Planning Area, the State Plan offers the following:

*“The Environmentally Sensitive Planning Area contains large contiguous land areas with valuable ecosystems, geological features and wildlife habitats particularly in the . . . Highlands region, . . . The future environmental and economic integrity of the state rests in the protection of these irreplaceable resources. . . Environmentally Sensitive Planning Areas are characterized by watersheds of pristine waters, trout streams and drinking water supply reservoirs; recharge areas for potable water aquifers; habitats of endangered and threatened plant and animal species; coastal and freshwater wetlands; prime forested areas; scenic vistas; and other significant topographical, geological or ecological features, . . . These resources are critically important not only for the residents of these areas, but for all New Jersey citizens.*

*The Environmentally Sensitive Planning Area is highly vulnerable to damage of many sorts from new development in the Environs, including fragmentation of landscapes, degradation of aquifers and potable water, habitat destruction, extinction of plant and animal species and destruction of other irreplaceable resources which are vital for the preservation of the ecological integrity of New Jersey’s natural resources. . . New development in these Environs has the potential to destroy the very characteristics” (environmental sensitivities) “that define the area”.*

The SDRP promotes the retention of large open land areas in PA4B & 5, and the Plan defines “large contiguous area”.

*“When applied to habitat, (large contiguous area) means the area of undisturbed land required to maintain a desired community of plants and animals”, and “when applied to farmland, large contiguous area means the amount of*

*contiguous farmland usually considered necessary to permit normal farm operations to take place on a sustained basis.”*

The Township is endowed with large contiguous land areas with valuable ecosystems, geological features and wildlife habitats that support critical habitat. Whether it is the maintenance of large contiguous areas for farmland or to protect environmentally-sensitive areas, Greenwich’s stewardship of these areas requires policies and management techniques to sustain the landscape in such a way that the long-term viability and function of these lands and natural systems may be assured. Greenwich seeks to manage these resources consistent with the SDRP policy orientation for the Environmentally Sensitive Rural Planning Area and the Environmentally Sensitive Planning Area.

SDRP Policies seek to maintain the viability of agricultural areas and the function of natural systems through strategies aimed at the protection of these resources and coordinated growth policies that orient new development adjacent to either Centers, or existing developed areas with infrastructure capable of supporting development. Development should be compact, and innovative development approaches, such as clustering or open lands zoning will be needed to discourage sprawl-type patterns of development that would fragment and destroy the very resources that the Rural and Environmentally Sensitive Planning Area designations seek to protect.

#### Highlands Water Protection and Planning Act

On Tuesday, August 10, 2004 Governor McGreevey signed the Highlands Water Protection and Planning Act into law. This law designates a Highlands Region, which is divided into two primary management areas, including (1) a Preservation Area and (2) a Planning Area. The entirety of Greenwich Township is included within the Highlands Region. The majority of the Township is designated Planning Area and includes all areas of the Township lying north of CR 639 and south of SR 57. The areas south of CR 639 and north of SR 57 are designated Preservation Area.

The legislation identifies goals and objectives, upon which the highlands regional master plan will be based. The legislation sets forth separate goals for the Preservation Area and the Planning Area, which are listed below. Natural resource protection, ground and surface water protection, historic preservation, farmland preservation, scenic and cultural resource protection, recreation and smart growth planning goals, as articulated in this plan, are identified by the Greenwich Township Planning Board as goals and objectives of this plan.

#### Highlands Preservation and Planning Area Goals

Section 10 of the legislation states the following (underlined emphasis added):

a. The goal of the regional master plan with respect to the entire Highlands Region shall be to protect and enhance the significant values of the resources thereof in a manner which is consistent with the purposes and provisions of this act.

b. The goals of the regional master plan with respect to the preservation area shall be to:

- (1) protect, restore, and enhance the quality and quantity of surface and ground waters therein;
- (2) preserve extensive and, to the maximum extent possible, contiguous areas of land in its natural state, thereby ensuring the continuation of a Highlands environment which contains the unique and significant natural, scenic, and other resources representative of the Highlands Region;
- (3) protect the natural, scenic, and other resources of the Highlands Region, including but not limited to contiguous forests, wetlands, vegetated stream corridors, steep slopes, and critical habitat for fauna and flora;
- (4) preserve farmland and historic sites and other historic resources;
- (5) preserve outdoor recreation opportunities, including hunting and fishing, on publicly owned land;
- (6) promote conservation of water resources;
- (7) promote brownfield remediation and redevelopment;
- (8) promote compatible agricultural, horticultural, recreational, and cultural uses and opportunities within the framework of protecting the Highlands environment; and
- (9) prohibit or limit to the maximum extent possible construction or development which is incompatible with preservation of this unique area.

c. The goals of the regional master plan with respect to the planning area shall be to:

- (1) protect, restore, and enhance the quality and quantity of surface and ground waters therein;
- (2) preserve to the maximum extent possible any environmentally sensitive lands and other lands needed for recreation and conservation purposes;
- (3) protect and maintain the essential character of the Highlands environment;
- (4) preserve farmland and historic sites and other historic resources;
- (5) promote the continuation and expansion of agricultural, horticultural, recreational, and cultural uses and opportunities;
- (6) preserve outdoor recreation opportunities, including hunting and fishing, on publicly owned land;
- (7) promote conservation of water resources;
- (8) promote brownfield remediation and redevelopment;
- (9) encourage, consistent with the State Development and Redevelopment Plan and smart growth strategies and principles, appropriate patterns of compatible residential, commercial, and industrial development, redevelopment, and economic growth, in or adjacent to areas already utilized for such purposes, and discourage piecemeal, scattered, and inappropriate development, in order to

accommodate local and regional growth and economic development in an orderly way while protecting the Highlands environment from the individual and cumulative adverse impacts thereof; and  
(10) promote a sound, balanced transportation system that is consistent with smart growth strategies and principles and which preserves mobility in the Highlands Region.

Land Use Goals and Objectives:

This Master Plan embraces the fundamental goals of the SDRP and Highlands Act. This plan also endorses and incorporates into this Land Use Plan the purposes of the Municipal Land Use Law, which call for the conservation of natural resources, protection of farmland and natural systems, and for promoting the maintenance of a clean and healthy environment, which are consistent with the resource conservation goals and objectives of this plan. The following list identifies locally identified goals and objectives for this land use plan, in addition to those identified above.

- To establish farmland preservation and the retention of priority agricultural soils as the highest land use priority.
- To protect groundwater recharge areas and groundwater reserves through the maintenance of these areas in their undeveloped state so as to preserve and provide a regional water supply resource for the residents of New Jersey.
- To protect, restore, and enhance the quality and quantity of surface and ground waters therein;
- Identify land use strategies that will permanently retain large contiguous tracts of farmland to ensure the survival of this valuable natural resource and farming as a way of life in Greenwich Township.
- Coordinate permitted agricultural activities with the need to limit impervious coverage to maintain maximum groundwater recharge of groundwater aquifers.
- Identify a comprehensive strategy for assisting individual landowners in retaining agriculturally viable farmland and for encouraging innovative economically viable agricultural uses that are compatible with the Township's existing neighborhoods and developed areas.
- Establish a series of farm compatible land use options including home-based businesses options and agricultural related land uses, such as farm stands, that could assist in supplementing family farm income.
- Maintain a municipal farmland preservation program that will build upon State Agriculture Development Board and County Agriculture Development Board development easement purchase programs and prior public investments in farmland preservation.
- Discourage the conversion of productive agricultural lands to non-agricultural uses and to preserve productive soils, which are under threat of development.

- Establish farmland and environmentally sensitive land protection strategies through agricultural protection and resource conservation zoning techniques that will retain these natural resources to the greatest extent achievable, while at the same time providing limited opportunities growth in areas of the Township with available infrastructure that can support desired levels of development.
- Establish performance and design standards that will ensure that the greatest amount of farmland will be preserved as part of a limited growth management strategy.
- Discourage sprawl development patterns by managing the arrangement of growth through zoning techniques such as mandatory clustering, lot averaging, open lands zoning, noncontiguous clustering, and through the use of other tools and regulatory techniques.
- Identify sites for public acquisition to respond to the existing and emergent needs of the Greenwich residents.
- Establish design and performance standards that will protect environmentally sensitive and critical habitat lands including floodplains, stream corridors, wetlands, steep slopes, forested areas, and grasslands areas.
- Establish zoning standards that will limit the impact of new development on existing neighborhoods and developed areas.
- Establish design standards to maintain and reinforce rural character and the protection of scenic resources, including important scenic viewsheds and areas of exceptional aesthetic value.
- Provide for limited nonresidential growth to address the imbalance between residential and nonresidential, employment generating land uses, which is disproportionately weighted by residential development.
- Provide for growth of existing research/office/manufacturing land uses to retain existing employers and enhance the employment and nonresidential tax ratable base of the Township.
- Establish zoning provisions to permit professional, office and limited research uses in the westerly portion of the Township immediately adjacent to the sewer service area and interstate highway to provide for growth in the Township's nonresidential tax base.
- Identify critical resource designations in the Highlands Regional Plan, consistent with critical habitat, steep slope, farmland, groundwater recharge, and other goals of the Highlands Regional Plan.

### Existing Land Use

In 1980, Greenwich Township's population stood at 1,738. In 1990, the Census reported a population of 1,899 for the Township. The 2000 Census identified a population of 4,365 persons and the NJ State Data Center estimated the population in 2004 at 5,223 accounting for an increase of 858 persons or an additional 16% over 2000. Between 1980 and 2004, the Township's population grew by just over 300%. To show the amount

of land needed to accommodate this growth, a comparison of changes in land use between the 1998 Master Plan and 2006 Existing Land Use (see Existing Land Use Map, prepared by Finelli Consulting Engineers) provides a perspective on how changes in land use translate into population growth.

Greenwich Township has experienced rapid growth since 1990. As a rural community grows, land use inevitably changes as lands once used for farming or other purposes are developed to accommodate new uses. In Greenwich Township, this may be seen in the loss of farmland. The following table compares Table 1, Existing Land Use in the 1998 Master Plan to Existing Land Use 2006:

Table 1 - Comparison of 1998 Land Use to Existing 2006 Land Use

Land Use Category	1998 <sup>1</sup>		2006 <sup>2</sup>		Change Acres / Percent
	Total Acres (rounded)	Percent (%) of Total Acres (rounded)	Total Acres (rounded)	Percent (%) of Total Acres (rounded)	
Residential	<b>1,121</b>	<b>18</b>	<b>1,454</b>	<b>21.4</b>	<b>324 / 3.4</b>
Agriculture	<b>4,293</b>	<b>70</b>	<b>3,908</b>	<b>57.6</b>	<b>-403 / -12.4</b>
Preserved Farmland			461	6.8	
Farm Q.			1,463	21.6	
Farm Q. & Farm House			1,984	29.2	
Park & Open Space			108	1.6	
Industrial	55	1	56	.8	-
Commercial	102	2	187	2.7	78 / .7
Vacant	389	6	216	3.2	-144 / -2.8
Public / Quasi Public	119	2	323	4.8	
Religious	17	1	25	.4	10
Total	6096	100	6,277	92.5	

<sup>1</sup>Source: 1998 Greenwich Township Master Plan;

<sup>2</sup>Source: Existing Land Use Map, Greenwich Township Tax Map

Note: Township is listed by the NJDCA, Division of Local Government Services as having a total area of 6,754.55 acres. Total area of the Township varies due to the change in technologies available when calculating the 1998 and 2006 data provided.

Despite the loss of farmland to residential development and the resulting population growth cited above, land use in Greenwich in 2006 remains predominantly agricultural. There remains 57.6% or approximately 3,890 acres of farmland, including approximately 460 acres of preserved farmland, approximately 1,455 acres of farm qualified land and approximately 1,972 acres of farm qualified land including farm dwellings. The next leading land use category accounting for a sizeable portion of the Township is the public/quasi public land use category accounting for 4.8% of the land base or approximately 323 acres of land. Vacant land accounts for 3.2% or approximately 216 acres of the Township's land base. Together, these lands use categories account for just over 65% or nearly two-thirds of the Township.

Following farm use, the next leading land use category is land devoted to residential use, accounting for 21.4% of the Township's land base or approximately 1,454 acres of land. A modest amount of land is devoted to commercial (employment generating) uses, including commercial uses at 2.7% or approximately 187 acres of land and industrial uses at just .08% or approximately 56 acres of land.

The comparison provided in Table 1 shows that the largest category from which farmland was lost is the residential land use category, which accounted for 324 acres of the 403 acre loss in Agriculture land. This is followed by the commercial category, which grew by 78 acres of land between 1998 and 2006. A modest loss in farmland may be attributable to the open space category, for which there were two substantial purchases during the time period, including the County's acquisition of Block 23, Lot 7, a 51-acre park, and the Township's acquisition of the 92-acre Hamlen Farm (Block 26, Lot 7).

Changes in land use may also be seen in a review of tax information that is compiled annually by the State of New Jersey. The New Jersey Department of Community Affairs, Division of Local Government Services provides statistical data on all municipalities in New Jersey. For Greenwich Township, the following table shows changes in land use expressed in two ways, the number of parcels devoted to each property tax classification and the aggregate value of each classification.

Table 2  
Comparison of Historic Tax Data 1998 & 2004 Property Value Classification

Classification	1998	2004	6-year Change in Value	6-year % Change in Value
Vacant land	330	89	-241	-73%
Value	15,154,200	3,875,000	-11,279,200	-74%
<i>Percent of total</i>	7%	7%		
Residential parcels	959	1,747	788	82%
Value	172,875,100	<b>461,184,690</b>	288,309,590	166%
<i>Percent of total</i>	75%	<b>80%</b>		
Farmland parcels	48	49	1	2%
Value	8,922,300	10,865,400	1,943,100	22%
<i>Percent of total</i>	4%	2%		
Farmstead parcels	<b>118</b>	<b>110</b>	<b>-8</b>	7%
Value	1,595,440	2,412,000	816,560	-51%
<i>Percent of total</i>	.06%	.04%		
Commercial parcels	37	40	3	8%
Value	24,295,600	<b>77,021,200</b>	52,725,600	217%
<i>Percent of total</i>	10%	<b>14%</b>		
Industrial parcels	5	<b>5</b>	No change	-
Value	8,761,350	<b>14,709,000</b>	5,947,650	67%
<i>Percent of total</i>	4%	<b>3%</b>		
Apartment parcels	-	-	-	
Apartment values	-	-	-	
Total Value	231,603,990	570,067,290	338,463,300	246%

SOURCE: NJ Department of Community Affairs, Division of Local Government Services, Property Tax Information, Historical Data for 1998 & 2004

- Residential land use accounts for 80% of property valuation in the Township;

- Commercial and industrial land use accounts for less than 20% of property valuation; a modest gain was seen in the percentage of commercial property valuation, while the percentage of industrial property value fell by 1%; and
- There was a loss in the number of farmsteads reported, which fell from 118 to 120, and the property value of this category, expressed as an overall percentage of property value, dropped accordingly.

The comparison of Existing Land Use changes between the 1998 Master Plan and 2006 shows a 12.4% loss in the acreage of farmland during that time. This accounts for approximately 1% of the Township's total area. However, the comparison in Property Value Classification shows that as a percentage of property value in the Township, the value of agricultural land including farmsteads was reduced by approximately 2%. Conversely, the increase in residential property value increased by 5% associated with a 3.4% increase in acreage devoted to that use. Similarly, the commercial property value classification increased by 4% of the total, while the percentage of the Township's land mass devoted to commercial uses grew by just .07%. Interestingly, the Industrial land use category, which did not change during this period, was reduced by approximately 1% of the total. While the Existing Land Use comparison spans an eight-year period and the comparison of property value classification spans a six year period, Table 2 provides an interesting view of changes in land use potentially impacting the overall tax base of the community.

At the same time that the Township's land use changed modestly, population grew substantially. As mentioned above, the Township's population between 2000 and 2004 grew from 4,365 to 5,223, or 20% in just four years. Of particular concern is the modest increase in farmland and farmstead property value (\$2,759,660) compared to a substantial increase of residential property valuation, which grew by \$288,309,590, or more than 10 times that of the farmland and farmstead parcels. It appears that the loss in farmland and farmsteads may translate into growth in the residential category, which brings with it not just the loss of an irreplaceable resource, but also a substantial increase in municipal service costs that results in a financial burden to all taxpayers.

### Greenwich Township's Legacy

#### Agricultural Retention

Retention of valuable open land and agricultural land responds to the highest priority land use objectives in Greenwich Township, and at least two of the major goals of this Land Use Plan: (1) to protect and preserve prime agricultural soils, which are an irreplaceable resource; and (2) to maintain large contiguous undeveloped areas that serve as critical recharge areas for vast groundwater reserves that are stored in aquifers beneath the surface of the ground and are of benefit to the residents of New Jersey beyond the Township's boundaries.

Greenwich Township is endowed with two valuable natural resources, which include (1) prime farmland and (2) tremendous groundwater reserves that are expected to be critically important to sustaining the population of the region in the future. Greenwich Township's prime farmland soils have long been recognized as its most valuable natural resource. Past generations have depended on the productive capacities of these soils to derive their livelihood. If properly managed, this natural resource will yield benefits to future generations of farmers and consumers. The survival of Greenwich Township's prime farmland soils as a productive natural resource depends on managing the resource properly and preventing the loss of productive soils to development pressures that are expected to continue well into the future.

Of the Township's approximately 10.55 square miles, approximately 77% of its land base is characterized as prime farmland, according to data provided by the NJDEP entitled Soil Survey Geographic Database (SSURGO), distributed through the Natural Resource Conservation Service (NRCSA) Tabular Data version 2.2 (see map entitled "Farmland Capability, Greenwich Township, Warren County NJ, dated April 2006). Approximately 11% of Greenwich Township's soils are characterized by SSURGO as Statewide Important soils. Despite the fact that there have been a series of suburban developments that have consumed a portion of these natural resources, much of this natural resource base survives intact, and limiting its loss in the future assumes a high priority in this Land Use Plan.

In New Jersey, a parcel cannot qualify for farmland assessment unless it contains at least five (5) acres, and if the dwelling is included on the property, this minimum increases to six (6) acres. However, since some nonproductive lands may not qualify for farm assessment, a six (6) acre minimum will not assure the potential for preferential farmland tax assessment.

Conflicts between farm and non-farm uses can frequently result in a loss of farmland or farm uses. Agricultural retention objectives have prompted many localities to adopt large lot zoning strategies to retain agricultural lands for farm use and to discourage non-farm uses in agricultural areas. If the farmland base is not protected in the near term, farming may decline sharply with a critical mass of farmland converted to non-farm uses. Viable agriculture cannot be expected to succeed if new development proceeds according to the currently permitted density. Such zoning permits the entry of large numbers of non-farm residences and the conflicts they inevitably bring.

Recommended techniques for preserving agriculture in moderate strength farming areas include comprehensive planning, agricultural zoning, maximum building lot sizes for non-farm development, and establishment of urban growth or village boundaries. A review of the professional literature and research from the American Farmland Trust, the Smart Growth Network, the American Planning Association and the New Jersey Pinelands Commission indicate that large lot zoning for a minimum lot size of 20 to 45 acres is appropriate as an agricultural protective zoning technique, when non-farm residences are to

be permitted. In addition, *lot size averaging and off-site clustering* can be useful land use techniques, when the proper balance is achieved between permitted densities and lot area requirements.

New Jersey courts have recently upheld 10-acre agricultural zoning as a reasonable means to retain agriculture and protect the agricultural land base of a community. Bedminster Township in nearby Somerset County and East Amwell Township, Hunterdon County are two examples where agricultural zoning strategies were found to be valid use of municipal zoning powers when zoning validity was challenged. Additionally, environmental protection weighed heavily into the Bedminster decision in which involved lands included in the Township's Environmentally Sensitive Planning Area. These court decisions are consistent with appropriate agricultural land use strategies for the protection of agricultural areas identified by the National Agricultural Lands Study (NALS) (Coughlin & Keene, 1981) which found that half of the communities surveyed relied on a large minimum lot areas the principal density control in the agricultural zone. Most of these communities were in or adjoining metropolitan areas. Within the communities surveyed by NALS, minimum lot sizes ranged from ten (10) acres to six hundred forty (640) acres.

Greenwich Township's natural resource base includes many of the agricultural and environmentally-sensitive land characteristics of its neighboring Highlands Planning Area municipality, Bedminster Township, which includes a vast area of environmentally sensitive agricultural lands, in which the Courts have endorsed that municipality's land stewardship zoning. Similarly, East Amwell Township is a community in the rural planning area where the Courts have found that the basis for that Township's 10-acre zoning is a valid and well reasoned land management strategy to protect its agricultural base of relatively large lots, consistent with its SDRP Rural Planning Area designation.

As noted in Greenwich Township's 2005 Groundwater Resources report "The structural geology of Greenwich Township indicates that the rocks beneath this municipality have a high potential for the storage and transmittal of large quantities of groundwater within the carbonate rocks. The structural and bedrock geology of Greenwich Township indicate that this Township may be one of the best long-term resources for water supply in New Jersey." In effect, Greenwich Township's underlying geology, aquifers and Greenwich Township's soils are uniquely capable of recharging and storing large quantities of groundwater.

Thus, the added critical resource of Greenwich Township's carbonate rock geology overlain by large contiguous tracts of undeveloped farmland appears to respond to two important goals of this land use plan: (1) to protect and preserve valuable prime agricultural soils, which are an irreplaceable resource; and (2) to maintain large contiguous undeveloped areas that serve as critical recharge areas for vast groundwater reserves that are stored in aquifers beneath the surface of the ground.

It is noteworthy that the NJ Supreme Court upheld 40-acre zoning in the Pinelands in what is known as the Gardner decision. In Gardner, the Court found that a 40-acre minimum lot size requirement was found to be valid under the policies of the Pinelands Comprehensive Management Plan, a regional land management plan that focuses growth into areas that are appropriate and designated for higher densities, while maintaining open areas for continued viable agriculture and natural resource protection, such as the 40-acre zoning district which was the subject of the court challenge. This is a similar situation to the State Plan policies for Planning Area 4, 4B and Planning Area 5, as found throughout Greenwich Township, which are designated for protection of large contiguous environmentally sensitive and agriculturally productive areas, and where zoning is an effective technique to achieving these and groundwater resource protection goals.

In 1997, The American Farmland Trust (AFT) examined a range of approaches to retaining farmland, and recommended “**Agricultural Protection Zoning**” (APZ) as a zoning technique used **to support and protect farming by stabilizing the agricultural land base**. The AFT is a nationwide nonprofit organization dedicated to protecting agricultural resources, founded by a group of concerned farmers in 1980. AFT's mission is to stop the loss of productive farmland and to promote farming practices that lead to a healthy environment. AFT defines APZ as ordinances that allow no more than one house for every 20 acres, support agricultural land uses and significantly restrict non-farm land uses.

As described by AFT, APZ is a zoning technique used to support and protect farming by stabilizing the agricultural land base. APZ designates areas where farming is the desired land use, generally on the basis of soil quality as well as a variety of locational factors. Other land uses are discouraged. APZ ordinances vary in what activities are permitted in agricultural zones. The most restrictive regulations prohibit any uses that might be incompatible with commercial farming. The density of residential development is limited by APZ. Maximum densities range from one dwelling per 20 acres in the eastern United States to one residence per 640 acres in the West.

APZ ordinances establish procedures for delineating agricultural zones and defining the land unit to which regulations apply. They specify allowable residential densities and permitted uses, and sometimes include site design and review guidelines. Some local ordinances also contain right-to-farm provisions and authorize commercial agricultural activities, such as farm stands, that enhance farm profitability. Occasionally, farmers in an agricultural protection zone are required to prepare conservation or farm management plans.

The definition of APZ varies with jurisdiction and by region of the country. A minimum lot size of 20 acres, combined with other restrictions, may be sufficient to reduce development pressures in areas where land is very expensive and farming operations are relatively intensive. Several county APZ ordinances in Maryland permit a maximum density of one unit per 20 acres. In areas where land is less expensive and extensive farming operations such as ranches predominate, much lower densities may be required

to prevent fragmentation of the land base. In Wyoming and Colorado, counties are not permitted to control subdivision of lots that are larger than 35 acres. The 35-acre provision has led to the creation of hundreds of 35-acre "ranchettes" in both states, fragmenting ranches into parcels that are too small for successful commercial ranching.

Many towns and counties have agricultural/residential zoning that allows construction of houses on lots of one to five acres. Although these zoning ordinances permit farming, their function is more to limit the pace and density of development than to protect commercial agriculture. In fact, such ordinances often hasten the decline of agriculture by allowing residences to consume far more land than necessary. AFT defines APZ as ordinances that allow no more than one house for every 20 acres, support agricultural land uses and significantly restrict non-farm land uses. Greenwich's rich, fertile and productive farmland is worthy of such protection. The Resource Conservation District designation identified for Greenwich Township in this plan, is not intended to slow the pace of development, but rather maintain large contiguous areas of farmland for continued agricultural use, protect existing critical habitat and an exceptional groundwater resource for the survival of these resources into the long-term future.

The courts first validated zoning as a legitimate exercise of police power in the 1920s, giving local governments broad authority to regulate local land use. Rural counties in California, Pennsylvania and Washington began using zoning to protect agricultural land from development during the mid-1970s. In 1981, the National Agricultural Lands Study reported 270 counties with agricultural zoning. In 1995, an informal AFT survey found nearly 700 jurisdictions in 24 states with some form of APZ.

APZ helps reserve the most productive soils for agriculture. It stabilizes the agricultural land base by keeping large tracts of land relatively free of non-farm development, thus reducing conflicts between farmers and their non-farming neighbors. Communities also use APZ to conserve a "critical mass" of agricultural land, enough to keep individual farms from becoming isolated islands in a sea of residential neighborhoods. APZ also helps promote orderly growth by preventing sprawl into rural areas, and benefits farmers and non-farmers alike by protecting scenic landscapes and maintaining open space. Greenwich's remaining agricultural landscape may well be an appropriate candidate area for the application of Agricultural Protection Zoning.

APZ can also limit land speculation, which drives up the fair market value of farm and ranch land. By restricting the development potential of large properties, APZ is intended to keep land affordable to farmers. A strong ordinance can demonstrate to farmers that the town or county sees agriculture as a long-term, economically viable activity, instead of an interim land use. APZ also helps promote orderly growth by preventing sprawl into rural areas, and benefits farmers and non-farmers alike by protecting scenic landscapes and maintaining open space, and in Greenwich Township, protecting groundwater as a critical resource that may be used in the future to respond to the ever increasing demand for water by New Jersey's residents.

APZ also protects equity. Webster's New World Dictionary defines "equity", in part as fairness; impartiality; justice; and anything that is fair or equitable." In Greenwich Township, there has been significant public investment in preserving farmland and open space. Steady growth in preserved farmland demonstrates the public interest in preserving farmland, which will be best served through APZ strategies that reinforce these public expenditures and protect the Township's agricultural base. Zoning strategies should be implemented that effectively assure the protection of these limited resources, protect public equity, build upon prior public investments and enhance quality of life.

## BENEFITS

- APZ is an inexpensive way to protect large areas of agricultural land.
- By separating farms from non-agricultural land uses, APZ reduces the likelihood of conflicts between farmers and non-farming neighbors.
- APZ helps prevent suburban sprawl and reduces infrastructure costs.
- Compared to purchase of conservation easement and transfer of development rights programs, APZ can be implemented relatively quickly.
- APZ is easy to explain to the public because most landowners are familiar with zoning.
- APZ is flexible. If economic conditions change, the zoning can be modified as necessary.

Source: American Farmland Trust, *Saving American Farmland: What Works* (Northampton, Mass., 1997).

In 2005, the Greenwich Township Planning Board conducted an investigation into the concept of sustainable agriculture. The fundamental long-term goal for Greenwich Township as stewards of its precious natural resource base is embedded in the concept of sustainability. Sustainable agriculture, sustainable water resources, and a sustainable natural environment are goals that are central to protecting the natural resources and environment with which Greenwich Township has been endowed. The sustainable agriculture investigation will be ongoing, but it has resulted in an interim report that identifies a series of challenges and findings that are aimed at ensuring the survival of Greenwich Township's farmland base and protection of natural resources for future generations. The findings and recommendations of the Planning Board's sustainable agriculture investigations provide a basis for management of agricultural lands consistent with the goals of this land use plan and the report on sustainability is included as an Appendix to this plan element.

This Land Use Plan acknowledges and embraces the findings and recommendations of Greenwich Township's 2005 Groundwater resources report, which was prepared to document the groundwater resources of the Township. The findings and recommendations contained in the report directly respond to the Highlands Planning Area goal 'to protect, restore, and enhance the quality and quantity of surface and ground

waters' in the Highlands Planning Area. A summary of the recommendations of the 2005 report are incorporated into the Conservation Plan and are by reference incorporated herein. For a more complete discussion of this planning objective, refer to the Greenwich Township Conservation Plan, dated May 2006.

#### Resource Conservation District Subdivision Development Techniques

As part of the development of this Land Use Plan, the Planning Board reviewed a series of subdivision and zoning techniques to determine how conventional subdivision could be replaced with other zoning techniques that may serve to better advance local, State and Highlands goals and objectives for resource conservation and avoid 'sprawl' development patterns that are associated with conventional subdivision design. The Appendix entitled "Resource Conservation District Subdivision Techniques", which may be found in the appendices of this Plan includes materials that the Planning Board reviewed in this analysis.

The analysis reviewed a 'natural resource conservation limitations' approach, which involves the reduction of constrained land from the overall area of a tract to calculate unit yield. This zoning technique does have the effect of considering only 'good' land, that is land that is unconstrained, when determining unit yield. This technique also provides the benefit of establishing a minimum area for each lot, if a minimum improvable lot area standard is used in conjunction with this technique. This zoning technique was contrasted with conventional subdivision design and concluded that it may be a useful tool in ensuring that areas of a tract inappropriate for development could be better protected when subdivision is proposed.

The Resource Conservation District analysis included an evaluation of an 'open lands' or clustering type subdivision approach that was contrasted with conventional subdivision design. This included a conventional subdivision configuration based upon a base density of one dwelling unit per 20 acres of land, which may be increased when a minimum open lands set aside of 80% of a tract area is provided as a by-product of subdivision. The open lands or cluster arrangement permits an increase in residential density to one dwelling unit per 10 acres of land, provided that the residential lots created are arranged on lots not larger than 2 acres.

One approach that should also be considered is allowing lot-size averaging in accordance with the clustering approach described above. This would be based upon the base density of 1 dwelling unit per 20 acres of land, with an incentive to lot-size average at a density of 1 dwelling unit per 10 acres provided that not less than 80% of the gross tract area is provided as permanently deed restricted open lands. Under this subdivision option, the overall open lands goal may be achieved, while at the same time provide flexibility of design with a variety of lot sizes.

Whether lots clustering, open lands, lot-size averaging or a hybrid of the three are utilized, the primary objective to maintain at least 80% open lands should be maintained. In addition to the 80% open lands requirement, the Resource Conservation District zone should require that not less than 50% of the ‘unconstrained land’ of a tract is included in the 80% open lands area. Unconstrained land is defined as land that is not encumbered by wetlands, transition areas, state open waters, floodplain areas, riparian corridors, Category 1 (C-1) buffer areas, areas, steep slope areas in excess of 20%, existing easement areas, and roads and Highlands special or critical resource protection areas.

*The Land Use Plan  
Proposed Land Use Districts*

Highlands Preservation Area

The Highlands Preservation Area accounts for approximately 10% of Greenwich Township’s land area. This zoning designation will permit types and intensities of development in accordance with those uses and standards identified in the Highlands Water Protection and Planning Act. However within the Preservation Area is a B-1 Neighborhood Business zone, which the Township will retain to permit neighborhood businesses in existence to continue and to permit limited neighborhood business zone development.

The Highlands Regional Master Plan (RMP) is expected to be adopted by the Highlands Regional Council in 2006, which will identify Preservation Area development regulations that all Highlands municipalities will be required to adopt for the Preservation Area. At the time of adoption of this Land Use Plan, the Highlands Regional Plan has not been adopted and it is believed that maximum development intensities that will be provided for in the Highlands Preservation Area will be more restrictive than development densities permitted in the Township’s RCD (see below), which are considered maximum development intensities in the undeveloped portions of the Township.

Resource Conservation District (RCD)

This Land Use Plan designates the Resource Conservation District to respond to the goals and objectives of this plan. The RCD seeks maximize retention of agricultural lands and prime farmland soils for continued agricultural use. The RCD designation also responds to the uniquely important groundwater recharge and storage capacities of Greenwich’s geology, which are dependent on the undeveloped character of the land. The RCD also responds to the following goals of this plan:

- protect, restore, and enhance the quality and quantity of surface and ground waters therein

- preserve to the maximum extent possible any environmentally sensitive lands and other lands needed for recreation and conservation purposes;
- protect and maintain the essential character of the Highlands environment;
- preserve farmland and historic sites and other historic resources;
- promote the continuation and expansion of agricultural, horticultural, recreational, and cultural uses and opportunities;
- preserve outdoor recreation opportunities, including hunting and fishing, on publicly owned land;

This land use plan seeks to maintain large undeveloped contiguous areas for agricultural and groundwater recharge purposes, protect critical natural resources and historically, culturally and recreationally significant resources within Greenwich Township. In order to achieve these goals, permitted development will be managed through the pattern and intensity of development. Therefore, the RCD permits low-density residential development in accordance with strict development standards, through a variety of development techniques, including conventional subdivision, clustering, lot-size averaging and open lands patterns and arrangements.

The RCD permits conventional single-family residential dwellings at a density of .05 dwelling units per acre on lots of one (1) dwelling units per 20-acres. Development options including cluster arrangement, lot size averaging and open lands zoning are permitted at a maximum density of .1 residential dwelling units per acres, provided that not less than 80% of the total tract area is maintained as open lands, and deed restricted against future subdivision so that open lands are maintained for agriculture, and resource conservation purposes. Minimum lot sizes of 81,000 sq. ft. are permitted in conjunction with these development options.

This Land Use Plan calls for the following permitted uses in the RCD:

- Farms. See Right-to-Farm Ordinance.
- Single-family detached dwellings.
- Public recreation and small-scale community facilities, in conjunction with strict impervious coverage standards for the RCD.
- Public parks and playgrounds, but not including amusement parks or similar uses which detract from the natural rural characteristics of the district or are operated for profit.
- Agricultural uses.
- The keeping of livestock.
- Harvesting of wild crops, such as berries and tree fruits.
- Repair and maintenance of farm buildings and machinery located and used on the same premises, including required workshops.
- Conservation areas and public purpose areas.
- Conventional residential development in accordance with the standards identified above;

- Development options such as clustering, lot-size averaging, open lands zoning, in accordance with standards for optional development identified above.
- Horticulture, forest management, nurseries, arboretums.
- Home occupation accessory uses, provided that the home occupation is limited to not more than 20% of the floor area of the dwelling in which it is located, and further that all vehicles are stored in garages.

One of the primary objectives for the Resource Conservation District is to limit impervious coverage to the extent achievable in order to maximize groundwater recharge, maintain prime farmland and at the same time provide for permitted uses, such as farming, that rely upon open lands. Therefore, impervious coverage in the RCD should not exceed 5% of the land. By limiting impervious coverage for permitted uses to the minimum necessary, natural resource protection goals may be achieved. Uses requiring a greater area of impervious coverage than 5% should not be permitted in the RCD, but rather should be located within the Township's zoning districts where development at greater intensities is permitted, such as the B-1, B-2, RO, & ROM zones. Therefore, the RCD does not permit uses such as public buildings, government and civic uses, houses of worship, as well as office, research, business and employment generating uses that require building footprints and associated parking areas that would result in increased impervious coverage in excess of the allowable 5%.

The RCD includes all areas outside of sewer service areas, including the residential developments formerly designated R-75, R-1 and R-2. These zones will be reclassified RCD, however a grandfathering provision in the zoning ordinance will permit these neighborhoods to develop in accordance with the area, yard and building requirements for their respective pre-RCD zoning district designations.

The RCD designation extends to areas of the Township, that were formally included in wastewater treatment areas (formerly designated sewer service areas) and which the 1998 Master Plan designated Research Office Manufacturing (ROM) and Research Office (RO) use zones. These former designations permitted development and intensities, which are inconsistent with the goals and objectives of the RCD. Not only are these uses inconsistent with locally identified land use and natural resource protection goals, the permitted uses and intensities in these zones are inconsistent with goals of the recently enacted Highlands Water Protection Act and the existing SDRP Rural, Rural Environmentally sensitive and Environmentally Sensitive Planning Area designations and associated policies for these areas. Existing ROM uses will be permitted to continue in the RCD and expand in accordance with development standards prior to the adoption of RCD designation.

#### Office Professional / Limited Research OP/LR

The Office Professional / Limited Research office zone permits a variety of office, professional and limited research facilities when served by public sewer collection

services. This zoning district is located in the westerly portion of the Township and includes Block 26, Lot 2 & 33. This is a transitional zoning district designation, between residential neighborhoods located to the east, and intensely developed commercial areas located along Route 22. The OP/LR is intended to provide for high-quality jobs (employment generation), and provide some balance in the employment opportunities available in the Township, which is imbalanced with retail commercial and retail service industry jobs.

Development in this OP/LR will be permitted up to a maximum of 45% impervious coverage with a maximum FAR of 15%. Development within this zoning district will be required to provide for a substantial separation (landscaped buffer) of not less than 200' between residential neighborhoods and impervious coverage areas on the site.

OP / LR Zone:

Includes:	Block 26, Lot 2	14.576 acres
	Block 26, Lot 33	<u>99.935 acres</u>
		114.511 acres total

The permitted uses the Board determined appropriate to the OP:

- Professional, executive, corporate offices and administrative offices.
- Data Processing.
- Telephone exchange or public utility office building (not including storage or garages).
- Agricultural activities.
- Public and private schools.
- Child care centers.
- Planned Office Parks on tracts of at least 15 acres.
  - Personal Service Uses as part of a planned office park, 5% of the square footage proposed as part of that development.
  - Health clubs, racquet sports courts.

Suggested maximum development standards:

Floor Area Ratio (FAR):	.15
Maximum Lot Coverage:	45%

Development under these development standards will be dependent upon the availability of sewer service area. Maximum height permitted in the OP/LR should not exceed a maximum of 30' and buildings should be limited to occupancy in 2-stories.

RO Research Office Zone:

Includes:	Block 36, Lot 1	27.12 acres
	Lot 1.01	1 acre

Lot 1.02	10 acres
Lot 2	117 acres
Lot 3	<u>13.6 acres</u>
	168.72 acres

This land use plan calls for the following uses as principal permitted uses in the Research Office zone.

- Administrative, business, professional or executive office buildings.
- Scientific or research laboratory.
  - (to be defined and look at the impact)
- Warehouses only when provided in connection and clearly subordinate to (i.e. not more than 20% of a permitted use in the zone, and further provided that no outside storage of vehicles is required).
- Telephone exchange or public utility office building (not including storage or garages).
- Agricultural activities.
- Banks and bank branches within an approved office and/or industrial park.
- Health clubs, racquet sports courts, etc.
- Public and private schools.
- Child care centers.

Suggested maximum development standards:

Floor Area Ratio (FAR): .15

Maximum Lot Coverage: 50%

This zoning district permits hotels and conference centers as a conditional use, provided that all driveway access to the site is provided from a State highway, all buildings are designed in accordance with strict architectural design standards and further provided that a setback of all development on site of not less than 500' is maintained from the frontage of any adjoining local street or road.

#### Research Office Manufacturing – ROM

This zoning designation acknowledges the existence of limited ROM development existing as of the date of adoption of this Land Use Plan. The ROM designation is retained primarily to permit the continuation and expansion of existing ROM uses. The ROM zone is designed for a building or a group of buildings in single ownership used for offices for business, professional, executive or administrative purposes, scientific or research laboratories and light industry, the operation of which shall not exceed the limitations established by existing performance standards for the ROM zone. It is primary intent of this zone to encourage high quality research and office park development. Uses which require large amounts of truck activity are discouraged.

The permitted uses in the zone are as follows:

- Administrative, business, professional or executive office buildings
- Scientific or research laboratory.
- Light industrial operations including the processing, manufacture, fabrication, finishing or assembly of goods or material.
- Warehouses only in association with approved research office and manufacturing uses. No stand-alone warehouse or distribution facilities shall be permitted.
- Telephone exchange or public utility office building or substation serving the immediate area.
- Agricultural activities, provided that the minimum size for such activity shall not be less than that required in the RCD, and provided further that all structures shall be subject to all other setback and use restrictions for the RCD.
- Planned Office and/or industrial. parks on tracts of at least 50 acres, consisting of all or some of the uses listed above.
- Child care centers as governed by C.40:55D-66.6 of the Municipal Land Use Law.

ROM - Suggested maximum development standards:  
Floor Area Ratio (FAR): .15  
Maximum Lot Coverage: 50%

#### B-1 Neighborhood Business Zone:

The purpose of this district is to promote neighborhood convenience retail and service type business designed to serve local consumer needs. It is intended that the scale and design of commercial development match the residential / rural character of the area. Where such development is in the form of a planned neighborhood convenience shopping center, the center shall be designed in a manner complementary to the scale and character of the area. Permitted uses and development intensities in the B-1 are to remain as provided for in the land use ordinances at the time of adoption of this Land Use Plan.

This zone provides an additional conditional use development option of a farmers market, on lots of at least 10 acres in area, provided that driveway access is limited to State Highway Rte. 57. Farmers market hours of operation are to be limited to 7PM weekdays and Saturdays and 5PM Sundays.

The zone also provides for houses of worship as a conditional use development option, for the zone located along Route 57, with the conditions being that houses of worship must have direct driveway access to the state highway and that a dense landscaped buffer at least 50' in width be provided along all tract boundaries.

#### B-2 Highway Business Zone:

Planned Neighborhood Convenience Shopping Centers shall be permitted in the B-2 zone in accordance with the requirements of this zone, except that the following special requirements shall apply for such uses. These standards support small scale, everyday

shopping and services assembled together in an attractive, convenient destination to primarily serve local and nearby consumer demand.

Permitted uses and development intensities in the B-2 are to remain as provided for in the land use ordinances at the time of adoption of this Master Plan. B-2 lands are primarily situated along Route 22, which is well-suited to accommodate relatively high-traffic volume uses such those that may be associated with a farmer's market or house of worship. As with the B-1, the B-2 includes two conditional use development options including farmer's market on lots of at least 10 acres in area, and that driveway access to Route 22 or County Route 519 is provided. In addition, the B-2 provides for houses of worship as a conditional use development option, with the conditions being that houses of worship must have direct driveway access to a State highway and that a dense landscaped buffer at least 50' in width be provided along all tract boundaries.

#### Planned Development Single Family Zone – PDSFZ

The Planned Development Single Family Zone permits single-family detached dwellings on lots of at least 13,000 sq. ft. pursuant to a settlement agreement involving Block 26, Lots 5, 6 and 60, and Block 23, Lots 5.01, 33 and 33Q. The zone was established as a between the higher density residential neighborhoods of the Planned Development zone and lower density zoning districts located to the east. A patio home development option is included in this zone, which permits patio homes on lots of not less than 5,000 sq. ft. The development is permitted in the area indicated on the Greenwich Township Zoning Map as the "Planned Development Single Family Zone." This land use plan calls for no changes to this existing zoning designation or the development standards permitted therein owing to the fact that the zone is built to its maximum capacity, however the need for bulk and development standards remains due to the need of the residents that may require changes to their property over time.

#### Planned Development Zone - PDZ

The purpose of the Planned Development Zone (PDZ) (hereinafter PDZ or PD) is to implement the Greenwich Township fair share plan in a manner which promotes flexibility, economy and environmental soundness in the layout and design of development and to provide a realistic opportunity for the construction of housing for low and moderate income households as provided by the Fair Housing Act of 1985. This land use plan calls for no changes to this existing zoning designation or the development standards permitted therein owing to the fact that the zone is built to its maximum capacity, however the need for bulk and development standards remains due to the need of the residents that may require changes to their property over time.

The planned development zone was established on lands designated as Lots 1, 1 03, 34, 36 and 40 in Block 23 pursuant to a developer's agreement, and the Greenwich Township Fair Share Plan, as submitted to the Council on Affordable Housing. The purpose of this development is to implement the fair share plan and for the Township to accommodate its

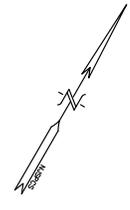
obligation to provide a realistic opportunity for the creation of low and moderate income housing, which has been fully constructed.

SDRP Cross Acceptance Map Changes  
&  
Highlands Critical Resource Area Designations:

This land use plan calls for the following designations through the Cross Acceptance III process and the Highlands Regional Planning process:

Historic & Cultural Site (HCS) designations:

- (a) On the SDRP Policy Map, identify the following Historic and Cultural Site Designations:
  - (1) Hamlet of Stewartsville - Historic District – will require identification of Historic District in Township’s Land Use Plan;
  - (2) Potentially historic farmsteads and numerous structures throughout Township as mapped in the Warren County Historic Sites Survey, dated 1992 and all historic designations identified in the 1998 Greenwich Township Master Plan.
  - (3) Designate the portion of Pohatcong Mountain lying within Greenwich Township as Critical Environmental Site (CES), which is a prominent unique natural landscape feature of exceptional aesthetic value for the motoring public on westbound I-78 at the easterly municipal boundary. The site is a visual gateway to Greenwich Township and meets the criteria for either a HCS or CES.
  
- (b) Scenic Vistas and scenic corridors. The Township identifies the following scenic roadways which provide public views to prominent unique natural landscapes of exceptional aesthetic value:
  - (1) SR 57 entire length
  - (2) South Main Street from SR 173 to SR 57;
  - (3) Beatty’s Road and its extension onto Greenwich Church Road from SR 173 to South Main Street;
  - (4) New Village Road, entire length
  - (5) Greenwich Street, from easterly terminus of Wyndham Farm neighborhoods to Main Street in Village of Stewartsville;
  - (6) Richline Road from SR 57 to Stewartsville Road;
  - (7) Lowe’s Hollow Road;
  - (8) Willow Grove Road;
  - (9) Herleman Road;
  
  - (10) Washington Street & Stewartsville Road to municipal boundary with Franklin Twp.
  - (11) Prospect Street, from SR 57 to Morris & Essex r-o-w;



**LEGEND**

SCENIC CORRIDORS

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CH2M HILL CONSULTING ENGINEERS, INC. IS AN EQUAL OPPORTUNITY EMPLOYER. THIS HAS BEEN REVIEWED FOR COMPLIANCE WITH THE FEDERAL EQUAL OPPORTUNITY ACT AND STATE AND LOCAL ANTI-DISCRIMINATION LAWS. THE COMPANY IS AN EQUAL OPPORTUNITY EMPLOYER.

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**TOWNSHIP SCENIC CORRIDORS**  
 GREENWICH TOWNSHIP  
 WARREN COUNTY, NEW JERSEY  
 SCALE: 1" = 100'  
 SHEET: 1 of 1

- (12) CR 638 (Warren Glen Rd.) from SR173 to Municipal boundary with Pohatcong Twp.;
  - (13) Voorhees Road;
  - (14) SR 173, from Voorhees Road to CR 644; and from Bloomsbury to South Main Street;
  - (15) Ravine Road;
  - (16) Asbury Road;
  - (17) I-78 from Musconetcong River to US 22 exit ramp.
- (18) Natural landscapes of exceptional aesthetic or cultural value.
- i. Pohatcong Mountain viewed from I-78 east and westbound;
- (c) Critical Environmental Sites - On the SDRP Policy May, identify the following Critical Environmental Sites:
- (1) Critical Grassland Habitat: In the northeasterly portion of the Township, designate a Critical Environmental Site including the Rank 4 grassland habitat area bound by North Main Street, SR 57, the Franklin/Greenwich municipal boundary and Herleman Rd./Willow Grove Rd./Washington St.;
  - (2) Critical Forest Habitat: In the easterly portion of the Township, designate a Critical Environmental Site including the area of the Pohatcong Mountain and all lands lying between two westerly flowing branches of the Pohatcong Creek. This includes Rank 4 Grassland Habitat, Rank 3 Forest Habitat, Steep Slopes;
  - (3) Critical Grassland Habitat: In the southerly portion of the Township, designate a Critical Environmental Site including the Rank 2 grassland habitat area bound by SR 173, Voorhees Road and the municipal boundary with Pohatcong Township and Hunterdon County;
  - (4) Critical Grassland Habitat: In the central portion of the Township, designate a Critical Environmental Site including the Rank 4 grassland habitat area bound by Greenwich Street, South Main Street, I-78 and US Route 22;
  - (5) All reaches of and tributaries to the Pohatcong Creek, the Merrill Creek and the Musconetcong River – these are pristine surface waters worthy of C-1 designation and are of unique scenic and recreational resource value to the residents of the State of NJ;
  - (6) Various sites that are essential to the preservation of the Township’s rural character and exhibit one or more of the following characteristics:
    - i. Wellhead and wellhead protection areas;
    - ii. Critical Slope Areas; and
    - iii. Significant natural features such as ridgelines, gorges and ravines; or unique geologic features (including limestone outcrops).
- (d) Designate the following municipal parkland sites as Park
- (1) Block 18, Lots 3.01
  - (2) Block 23, Lots 2, 5, 7 & 31.01;
  - (3) Block 26, Lot 7

- (e) On the SDRP Policy Map, designate Stewartsville as a Hamlet Center with special historic and cultural significance.
- (f) Specific changes needed in the local plans include amendments to the Wastewater Management Plan and Master Plan:
  - (g) Amend the Waster Management Plan to eliminate inappropriately sited sewer service area designations;
  - (h) Amend the Land Use Plan to replace nonresidential zoning designations with very low density zoning designations that are more compatible with local farmland preservation and natural resource protection goals and objectives.

This Land Use Plan believes that there are certain goals of the Highlands Act, which should be consistently reflected, whether resources are found to exist in the Preservation Area or in the Planning Area. These goals are articulated in the section discussing the Highlands Water Protection Act (above), however the following two critical area designations are fundamental to the effective protection of Highlands irreplaceable resources:

- Aquifer recharge areas should be mapped and afforded a special designation on the SDRP Policy Map. The designation should identify these areas as priority protection areas within the Highlands region. Policies should be adopted to protect undeveloped aquifer recharge areas and limit impervious coverage to the maximum extent achievable.
- Prime agricultural soils and soils of statewide importance should be mapped and afforded a special designation on the SDRP Policy Map. Regional growth pressure continues to place demands on the conversion of prime agricultural soils to non-agricultural uses. These soils are a dwindling resource in the State and the SDRP should identify prime agricultural soils as critical resource areas, which should be preserved to the maximum extent achievable. These soils and associated farmland should receive Highlands Critical Resource designation in the Highlands Regional Master Plan, due to their unique ability to respond to the farmland protection and preservation goals of the Highlands Act.

The planning goals and objectives and specific strategies for Greenwich Township's Resource Conservation District seek to directly respond to the protection of these resources, which should be provided the highest protection under the Highlands Regional Master Plan (RMP). If the regional plan allows for the fragmentation of or compromising these resources to accommodate the regional demand for suburban development, particularly in a municipality such as Greenwich Township where these resources remain largely in tact, the purpose and intent of the Highlands Act would be subverted.

#### Scenic Resources & Steep Slope Protection

This plan designates Scenic Corridors and Scenic Protection Areas, which are cornerstone elements of Greenwich Township's essential character. Protection of public views and vistas of Greenwich's scenic country roads, its rural landscape of rolling countryside, hedgerows and picturesque hilly and mountainous terrain is an important component of Greenwich Township's Resource Conservation objectives. These are resources that are evident to the motorist traveling almost any highway or road through the municipality.

Greenwich Township's picturesque landscape is also enhanced by dramatic views and vistas of steep slope areas as well as gently sloping conditions that prevail throughout the municipality. This Land Use Plan calls for a coordinated regulatory approach to the protection of these areas, which serve to, in part, establish the Township's essential character. This plan calls for the protection of scenic resources through the implementation of enhanced setbacks along scenic corridors, and through regulations requiring that scenic areas including hillsides, ridgelines and hilltops, and steep slope areas remain undisturbed in accordance with steep slope disturbance limitations. Additionally, this plan calls for the protection of these scenic landscapes and viewsheds through the use of enhanced landscape buffering where development is proposed on hillsides, within scenic viewsheds and along scenic corridors. Development should not be located on hilltops or ridgelines, as the views of these features establish the picturesque views and viewsheds that are the cornerstone of Greenwich Township's rural character, and development on these areas would dramatically alter the character of the terrain.

### Steep Slopes

Issues surrounding steep slope protection and limiting development are especially important in high quality watersheds, such as those found in the northern half of the Township. The trout production and trout maintenance status of Greenwich's streams indicate very high quality waterway. Stream corridors are frequently characterized by a prevalence of slopes greater than 15% and frequently in excess of 20 or 25%. Tree clearing in these areas could lead to significant runoff and subsequent sedimentation of these high quality waters. Trout and their ability to thrive and reproduce is directly related to water quality, which is why Trout are good indicators of high quality streams. Any fluctuation in suspended solids and sediment can severely impact trout's ability to reproduce and even survive. Tree clearing is also directly related to an increase in water temperature, which is also vital to trout survival and reproduction. Trees that line stream and river banks provide shade from hot summer sun that effectively regulates water temperatures to ensure trout survival.

The distinctive rolling terrain that provides Greenwich Township with the scenic values and the perception that people have of the attractiveness of countryside depends largely on the views to which at they are exposed. Pleasant views from a parcel of land to the surrounding countryside provide people with a sense of well being about their environs, and attractive views into a parcel of land by passersby establish the particular ambiance

of an area that makes it distinctive. Therefore, the Township should enact hillside and related development standards that govern the location of buildings so that attractive views are maintained into and away from the lot, while minimizing the infringement on the views of neighboring properties. Similarly, the traveling public that passes through Greenwich Township enjoys signature scenic views and vistas that will require careful management and protection to protect these views and vistas.

Development standards for steep slope areas should be based on the degree of slope. On slopes less than 15% all activities should be permitted. On slopes between 15% and less than 20%, all activities should be permitted subject to review and approval of grading plans by the Township Engineer. On slopes greater than 20% only transitional grading, or disturbance in that area of land between the original grade and the finished grade, adjacent to buildings, roads, driveways, parking areas, septic systems, retaining walls and other similar improvements should be permitted. All other slope disturbance in slopes areas exceeding 20% should be prohibited without prior approval of the Planning Board or Zoning Board of Adjustment. However, the need to protect slopes should be balanced with residents' need to use their land, protection of the environment, preservation of the landscape and important viewsheds and scenic vistas, and the impact disturbance activities may have on the community and neighbors. For this reason an exemption to permit the disturbance of up to 1,000-sq. ft. of slopes in excess of 20% should be provided. In this way, the Township can protect attractive views while maintaining infringement of such activities on neighbors and at the same time accommodate a resident's need to use their land.

#### Scenic Corridor and Scenic Resource Protection

Maintaining the Township's unique rural character, particularly as viewed from the public traveled way, will require ordinance standards if scenic corridors and other scenic views such as the rolling countryside, ridgelines, scenic vistas and environmentally sensitive steep slope are to be effectively maintained as attractive contributing elements of Greenwich's character. These standards should include a definition of the areas requiring protection, such as scenic corridors and scenic resource protection areas, and should focus on limiting land disturbance in proximity to these areas as well as controls on disturbance of steep slope areas and ridges. Consistent with the Township's policy orientation in protecting steep slopes by limiting disturbance and clearing in areas characterized as 15% slope and greater, "scenic corridor and scenic resources protection" will limit visual impacts of development and reduce and environmental impacts adjacent to steep slope areas, or areas of exceptional aesthetic beauty, which may or may not be in proximity to streams, water bodies or in proximity to steep slope areas.

The attached maps entitled Scenic Corridors and Scenic Protection Areas show the locations from which development controls should be established. For example, along Scenic Corridors, development should be situated at least 200' from the scenic corridor. Where the view of development will be seen from a scenic corridor, additional mitigating

measures may be necessary, such as landscaping to screen development from the traveled way.

The Scenic Protection Areas map identifies ‘scenic protection areas and ‘scenic protection buffer areas’. On the attached map, the scenic protection area is established by that portion of the terrain that exceeds 400’ elevation. Scenic buffer areas exceed 380’ elevation and are less than 400’, and defines an area where development should be expected to result in a negative visual impact, either on the horizon or when viewed as a high spot from a distance. If not property managed, development within these areas is expected to alter Greenwich Township unique countryside views and vistas, and the higher elevation land formations, which establish the signature views and vistas that may be viewed from a distance.

Greenwich’s landscape may be primarily characterized by rolling countryside, with an typical ‘high’ elevation of approximately 400’. Two noteworthy exceptions are Scott Mountain in the northeasterly reach of the Township, and the Pohatcong Mountain, which is a prominent visual gateway to the municipality as viewed from I-78 westbound in the southeasterly area of the Township. Special protections will be needed in these areas to limit the visual impacts of development in these areas, which are also likely to be locations desirable for development, because views from these locations maybe most desirable.

#### Purposes of Scenic Corridor and Scenic Areas Protection:

- To locate new development away from scenic corridors, scenic protection areas, including ridgelines in order to protect scenic values and a rural and natural landscape appearance, and to conserve and promote property values.
- To prevent soil erosion and drainage problems related to development steep slopes, along hillsides and near ridgelines.
- To minimize the visual impacts of new development on the natural appearance of the Township’s rural landscape and rolling countryside terrain.
- To preserve, protect and enhance the visual character of the community.
- To retain existing native vegetation and a contiguous forest canopy along ridgeline.
- To establish design standards for new development so as to minimize the view and visual impact of new development.
- To reduce the impacts of clearing on steep slope areas associated with high quality water courses and water bodies.

Scenic resources protection serves to reinforce the Township’s essential character, minimizes development intrusions into the scenic landscape and preserves areas of unique and exceptional beauty. This Land Use Plan calls for the establishment and implement of development regulations to protect scenic resources and guide development in a way that reinforces the purposes of the Municipal Land Use Law, the Highlands Act

and local goals and objectives to preserve the visual environment through the use of creative development techniques.

#### Affordable Housing/Green Design

The Greenwich Township Planning Board engaged in an investigation of ‘green design’ for affordable housing, which was funded by a grant the Township received from the NJ Highlands Council. The Planning Board developed recommendations for incorporating at least some measure of ‘green design’ in all affordable housing to be constructed in the Township under COAH’s third round. The Township’s third round Housing Element and Fair Share Plan calls for the Township to ‘buy and fix’ existing dwellings in the Township and maintaining those remodeled homes as affordable housing. The plan also provides for the creation of accessory apartments. In addition, the Township has a municipal rehabilitation obligation, which will be coordinated with the Warren County Community Development Office. The Township will utilize its affordable housing trust fund, future development fees and growth-share in-lieu contributions to meet its affordable housing obligation.

Greenwich Township’s Third Round Fair Share Plan forecasts that the majority of the affordable housing growth share obligation will be constructed by the private development community in conjunction with nonresidential development that is provided for in the Land Use Plan. It is the policy of this Land Use Plan to require that all affordable housing to be developed under the growth share ordinance to incorporate ‘green design’ features into all affordable housing units created.

It is the policy of this land use plan to incorporate at least 10% ‘green design’ components into each affordable housing project. This includes all affordable housing projects, whether subsidized through the County community development program, funded through the Township’s affordable housing trust fund, or projects undertaken by the private sector in conjunction with new development. This goal requires that 10% of the cost of affordable housing production in the Township will be attributable to measures, including, but not limited to energy efficiency, building design, orientation, materials used, etc. The following list provides an overview of the goals for designing affordable housing ‘green’:

- Exceed the specifications of the New Jersey Uniform Construction Code with identifiable benefits to the occupants with respect to indoor air quality, energy efficiency and production, water efficiency and material specification.
- Encourage superior building design that enhances the health and safety of the occupants and improves environmental quality.
- Demonstrate low and moderate-income housing can be attractive and an asset to the community.

#### *Energy*

- Promote implementation of the New Jersey State Sustainability Greenhouse Gas action Plan by applying proven energy-efficient and renewable energy technologies to reduce carbon emissions.
- Incorporate a comprehensive approach to energy-efficient design and construction beyond the requirements of rule 5:43-3.1 (u).
- Incorporate renewable energy technologies such as solar technologies.

*Resource Efficiency*

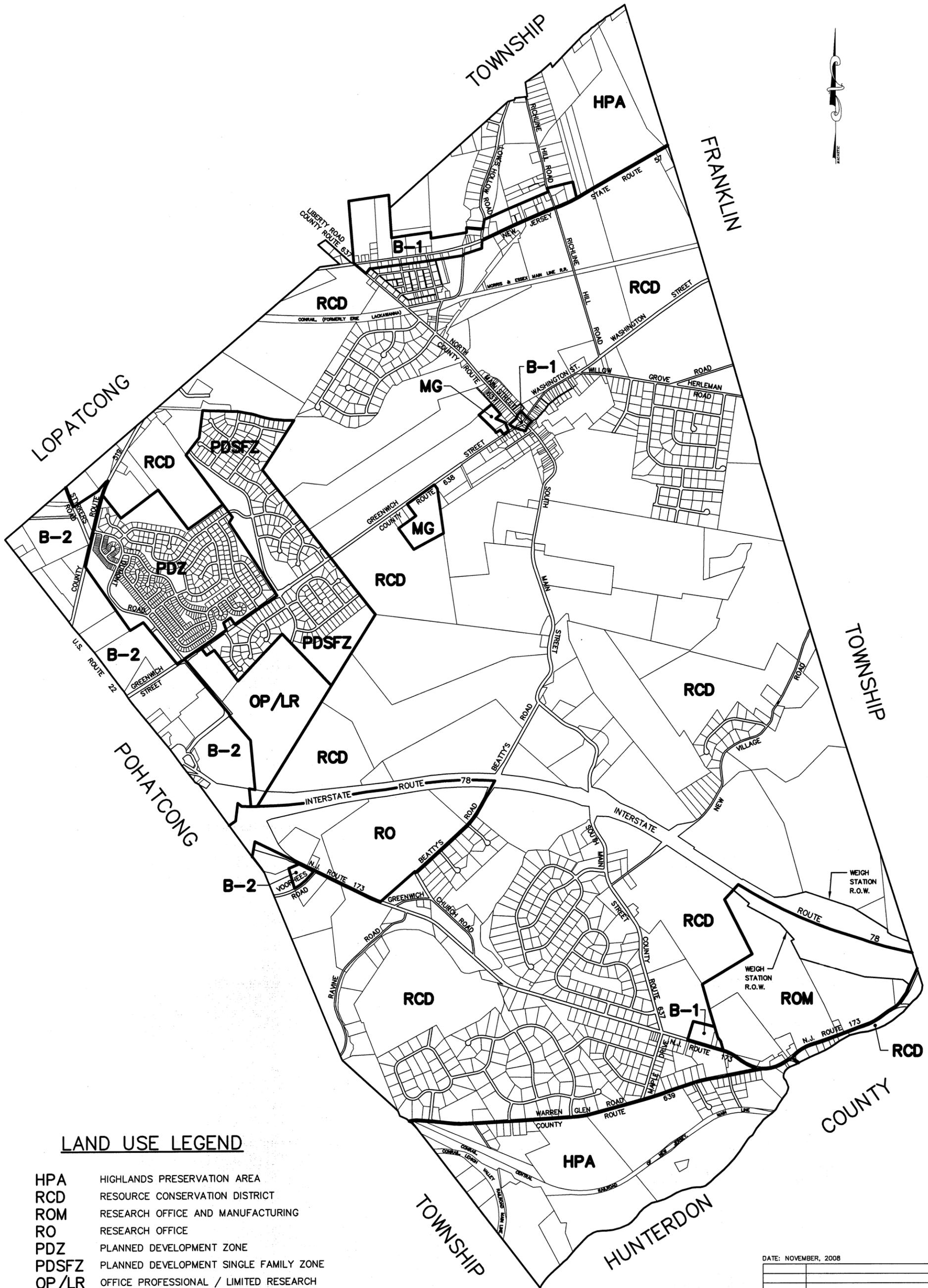
- • Promote the design and construction of durable, low-maintenance and long lasting buildings.
- Specify resource-efficient, environmentally preferable, recycled or recyclable and agricultural-based building materials.
- Support a comprehensive approach to water efficiency.
- Manage, minimize and eliminate waste, implementing recycling during and post building construction and over the lifetime occupancy of the building.

*Operations and Maintenance*

- Produce housing for low and moderate-income households that has a low total owning, operating and maintenance budget, including purchase costs, energy costs and maintenance costs.

Airport Safety Zones –

There are no airport safety zones in Greenwich Township that have been delineated in accordance with the “Air Safety and Zoning Act of 1983”.



**LAND USE LEGEND**

- HPA HIGHLANDS PRESERVATION AREA
- RCD RESOURCE CONSERVATION DISTRICT
- ROM RESEARCH OFFICE AND MANUFACTURING
- RO RESEARCH OFFICE
- PDZ PLANNED DEVELOPMENT ZONE
- PDSFZ PLANNED DEVELOPMENT SINGLE FAMILY ZONE
- OP/LR OFFICE PROFESSIONAL / LIMITED RESEARCH
- B-1 NEIGHBORHOOD BUSINESS ZONE
- B-2 HIGHWAY BUSINESS ZONE
- MG MUNICIPAL GOVERNMENT ZONE
- ZONE BOUNDARY LINE



DATE: NOVEMBER, 2008


**LAND USE PLAN**

TOWNSHIP OF GREENWICH  
WARREN COUNTY, NEW JERSEY



FINELLI CONSULTING ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. 240427918500

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