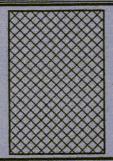
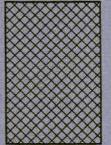
# TOWNSHIP OF SPRINGFIELD

THE COPY

BURLINGTON COUNTY NEW JERSEY



LAND USE PLAN
PERIODIC
REEXAMINATION AND
UPDATE REPORT



THE ORIGINAL OF THIS REPORT WAS SIGNED AND SEALED IN ACCORDANCE WITH N.J.S.A. 45:14A-12

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PREPARED BY: COPPOLA & COPPOLA ASSOCIATES
LAWRENCEVILLE ~ NEW JERSEY

### FOREWORD

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

The Township of Springfield is located at the northern end of Burlington County and is bordered by nine (9) other municipalities in Burlington County, including Florence Township, Mansfield Township, Chesterfield Township, North Hanover Township, Wrightstown Borough, Pemberton Township, Eastampton Township, Westampton Township and Burlington Township. The Township of Springfield contains approximately 30.05 square miles or 19,232 acres of land and water area.

A small portion of the Township of Springfield (approximately 267.5 acres) is part of the United State's Fort Dix Military Reservation. This land area also is under the jurisdiction of the Pinelands Commission; however, since the federal government owns the land, there is no need for the Township of Springfield to regulate the land area in accordance with the "Pinelands Comprehensive Management Plan" at this time.

The major roadways affecting the land development of the Township of Springfield are United States Route 206 and Burlington County Routes 537 (Monmouth Road) and 545 (Georgetown Road). Of secondary importance are Burlington County Routes 670 (Burlington-Jacksonville-Jobstown Road), 668 (Arney's Mount-Pemberton Road), 669 (Juliustown Road) and 628 Mount Holly-Jacksonville Road). While the New Jersey Turnpike and Interstate Highway Route I-295 pass through the western end of Springfield Township, neither have exits within the Township. Moreover, while New Jersey State Route 68 passes through the easterly end of Springfield Township, the highway provides access to the Fort Dix and McGuire Air Force Base military reservations only and does not provide interregional vehicular access.

Between 1980 and 1990 the Township of Springfield almost doubled its small population from 1,691 persons in 1980 to approximately 3,028 persons in 1990. The residential development which has occurred within Springfield Township has been a combination of the creation of residential lots along the frontages of the existing roadways in the Township and some small major residential subdivisions scattered throughout the municipality. Nevertheless, even with the relatively significant residential growth in recent years, the Township of Springfield has maintained its notable rural agricultural character.

The primary reason that the Township of Springfield has maintained its rural agricultural character is that most of its land is not merely "undeveloped", but is actively used for bona fide agricultural purposes. The natural suitability of Springfield Township for farming is one of its prominent features; approximately seventy-five percent (75%) of its land is rated as "prime" farmland (Classes I or II) by the U.S.D.A. Soil Conservation Service in its Burlington County Soil Survey.

Another reason that the Township of Springfield has maintained its rural agricultural character is that the environmental attributes of the land in the Township inhibit and significantly limit the potential for development. The wetness of the land, caused by a combination of high water tables and poorly drained soils, presents a formidable obstacle for the development of single-family detached dwellings and other structures, particularly those with basements.

Moreover, there are no public water or sewerage treatment facilities within the Township of Springfield available for development at this time; all development must rely upon the capacity of the natural environment to support a septic system and a potable water well. It is clearly evident that the wet soils throughout the vast majority of Springfield Township do not readily drain and filter septic effluent.

In recognition of the environmental fragility of its land and with the desire to maintain an atmosphere compatible with the continuation of agricultural activities within its bounds, the Township of Springfield changed the minimum lot size for single-family home construction within its extensive "R-1" zoning district from one (1) acre to three (3) acres during early 1995.

It is the overall "mission" of this 1996 "Land Use Plan Periodic Reexamination And Update Report" to further substantiate and build upon the accomplishments and intentions of Springfield Township to reasonably safeguard its rural agricultural character in a manner which is consistent with the findings and recommendations of the "New Jersey State Development And Redevelopment Plan", adopted by the New Jersey State Planning Commission on June 12, 1992. The preservation of farmland within the Township of Springfield must be accomplished in a manner which is reasonable, achievable and equitable to the farmer.

The current existing Master Plan of the Township of Springfield consists of the following three (3) documents:

- 1987 "MASTER PLAN STUDIES FOR SPRINGFIELD TOWNSHIP", adopted January 5, 1988. The 1987 Master Plan was prepared by the Springfield Township Planning Board with the assistance of engineer Kenneth Anderson, attorney Denis Germano and planner Alan Mallach.
- 1993 "MASTER PLAN REEXAMINATION FOR SPRINGFIELD TOWNSHIP", adopted December 21, 1993. The 1993 Master Plan Reexamination was prepared by the Springfield Township Planning Board with the assistance of engineer Richard Hammerschlag, attorney Denis Germano and planner Craig Marshall.
- September 1987 "HOUSING PLAN ELEMENT AND FAIR SHARE PLAN", adopted June 5, 1988. The document was prepared by planner Alan Mallach.

It is the "Land Use Plan Element" portion of the Master Plan that includes the goals and policies and the specific proposals of the Township of Springfield regarding the use of its land, and these goals and policies and specific proposals must be responsive to the social, environmental, legal and infrastructural needs, desires and mandates of the Township, Burlington County and the State of New Jersey.

Clearly, the extent to which public policy at the local level of government can influence and control the physical development of Springfield Township is dependent upon a number of considerations, including, for example, the following:

- Existing land uses and the character of development which already has taken place;
- Affordable housing needs as mandated by the New Jersey Council On Affordable Housing (COAH);
- The need for services and facilities to support the existing and future residential population;
- The desires of Springfield Township and the Burlington County Agriculture Development Board, in concert with the recommendations of the New Jersey State Development And Redevelopment Plan, to preserve farmland within designated portions of New Jersey, including Springfield Township;
- The problems and potentials of the existing and proposed roadway system; and
- The environmental characteristics of the land to support physical development, particularly in areas not served by public sewerage and/or public water facilities.

Because the Township of Springfield must consider a number of factors when it makes its decisions regarding the desired pattern of land use within the municipality, and because many of these factors change over time, the land use planning process must be a continuing program of study, discussion, coordination and direct action. Certainly, in order for the municipal planning process to remain viable, the systematic review and reevaluation of the various Master Plan Elements and the implementing Land Development Ordinances is necessary in order to prevent their rapid obsolescence.

In accordance with N.J.S.A. 40:55D-89 of the New Jersey State Municipal Land Use Law, every municipality in the State must reexamine its "Master Plan" and "Development Ordinances" at least every six (6) years.

As previously noted, the Township of Springfield adopted its current "Master Plan" on January 5, 1988 and later reexamined the document in a report adopted December 21, 1993. It is the purpose of this document to further review the current "Land Use Plan Element" portion of the Springfield Township Master Plan and recommend further amendments to the plan and the implementing ordinances where appropriate.

In accordance with N.J.S.A. 40:55D-89 of the Municipal Land Use Law, this "Land Use Plan Periodic Reexamination And Update Report" includes an addressment of the following:

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

This 1996 "Land Use Plan Periodic Reexamination And Update Report" of the Springfield Township Master Plan consists of a number of principal work items which are as follows and which are presented separately and sequentially within the report. Included are a number of analyses which serve as the technical foundation for the update of the Land Use Plan Element in accordance with N.J.S.A. 40:55D-28 b.(11) of the Municipal Land Use Law.

### 1. Township Base Map:

The existing Base Map of the Township of Springfield has been updated utilizing the most recent tax map information furnished our office by the Township. The Base Map depicts roadways, lot lines, watercourses and other significant natural and man-made features of the Township. The Base Map has been drafted at an approximate three foot by four foot (3' x 4') size and has been photographically reduced to an eleven inch by seventeen inch (11" x 17") size for use within the planning reports. It is upon the finalized Base Maps that the graphic information compiled during the course of the planning program is shown. One (1) full size mylar copy of the Base Map has been given the Township for its continued use.

### 2. Existing Land Use Analysis:

The land uses existing throughout Springfield Township have been documented via a lot-by-lot field survey augmented by Tax Assessor Information. The documented existing land uses have been categorized and have been depicted in color on a display board of a full size mylar copy of the Base Map. Upon finalization of the existing land use survey map, photographs were taken of the display board for inclusion in the report, and the display board itself has been given to the Township.

### 3. Environmental Analysis:

Relevant environmental data, including the new wetlands delineation by the New Jersey Department of Environmental Protection, 100-year flood plains, slopes fifteen percent (15%) or greater in grade, geology and selected soil information have been mapped upon the Base Map of the Township. The information has been analyzed and discussed as it relates to the ability of the lands within Springfield Township to support physical development.

### 4. Community Facilities Analysis:

The current capacities of the existing community facilities within and serving the Township of Springfield (including schools, fire protection, police protection, first aid service, public works and, very importantly, potable water and sewage treatment facilities) have been documented in order to identify the ability of the Township to support additional land use development.

### 5. Farmland Preservation Program:

The status of Springfield Township's participation in the Farmland Preservation Program administered by Burlington County has been documented in mapped and written form.

### 6. Plans Of Other Jurisdictions:

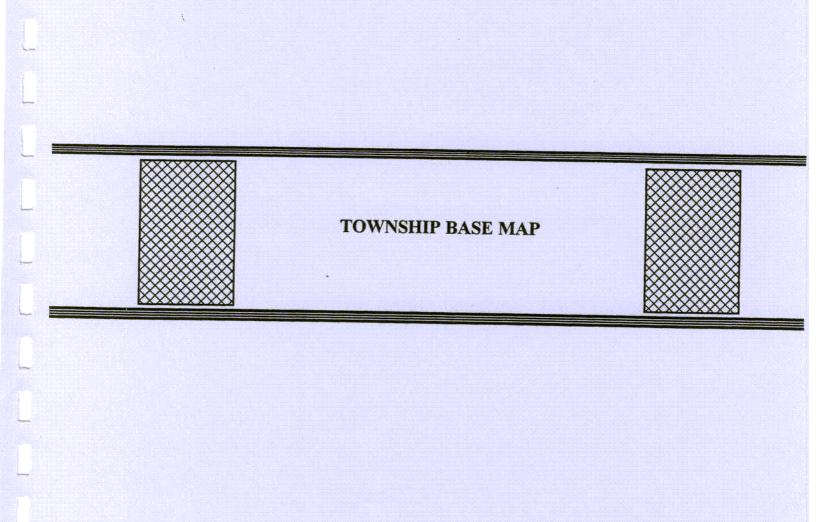
The State Development And Redevelopment Plan, the plans of Burlington County and the zoning of those municipalities bordering Springfield Township have been mapped on the Base Map of the Township and have been discussed as required by the Municipal Land Use Law (N.J.S.A. 40:55D-28 d.).

# 7. Statement Of Objectives, Principles, Assumptions, Policies & Standards:

This "statement" has been prepared in accordance with N.J.S.A. 40:55D-28 b.(1) of the Municipal Land Use Law to reflect the specific current goals and policies of Springfield Township regarding the physical, economic and social development of the Township.

### 8. Land Use Plan Element:

Based upon the technical information compiled and analyzed, and in consideration of the specific goals and policies of Springfield Township, a new "Land Use Plan Element" has been prepared in mapped and written form. The requirements for a "Periodic Reexamination" outlined in N.J.S.A. 40:55D-89 of the Municipal Land Use Law have been addressed. The "Land Use Plan Element" generally recommends the proposed zoning of Springfield Township and will serve as the basis for Land Development Ordinance provisions to be prepared and considered for adoption by the Township Council.



### TOWNSHIP BASE MAP

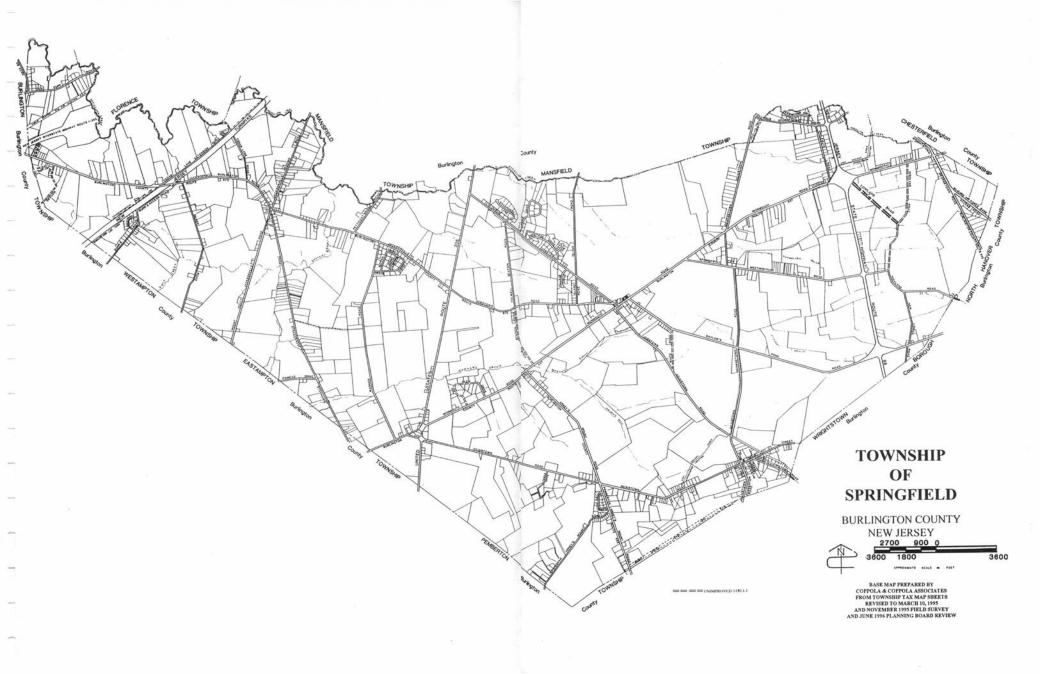
# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

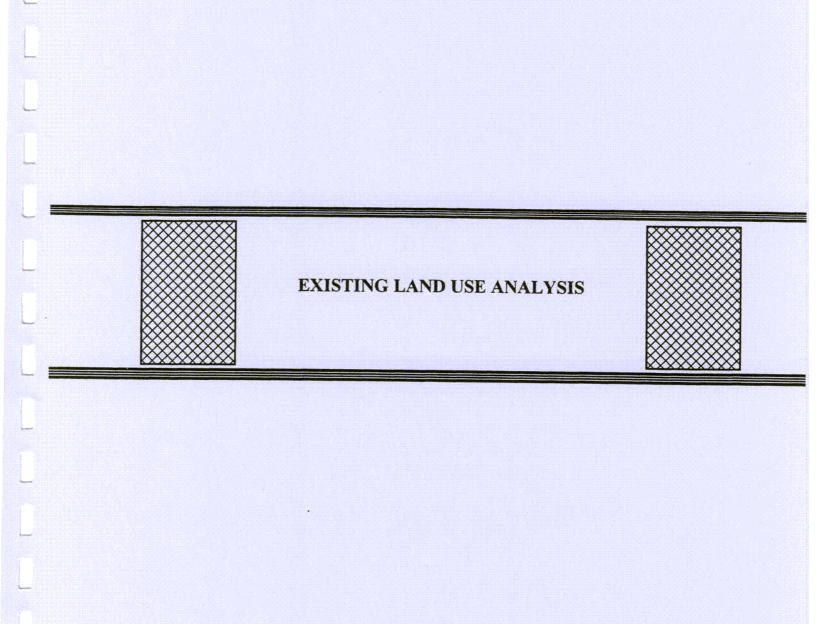
The November 1995 "Base Map" of Springfield Township, which is attached herewith, was prepared by Coppola & Coppola Associates utilizing Township Tax Map sheets, revised through June 24, 1994, and the results of a November 1995 field survey. The "Base Map" depicts roadways, lot lines and water courses.

The "Base Map" was drafted as a scale of 1" = 900', which created a map approximately three and one-half feet by four feet  $(3\frac{1}{2}' \times 4')$  in size. The maps were then photographically reduced to an eleven inch by seventeen inch  $(11" \times 17")$  size for use within published reports.

On the 11" x 17" sheets, the scale of the maps is approximately 1" = 3,600'. At this scale, one (1) square inch equals approximately three hundred (300) acres. The users of the maps, therefore, should be aware of the inherent limitations of portraying graphic material at this scale; while the information is shown as accurately as possible, slight distortions in the drafting and reproduction process will necessarily be magnified several times due to the extreme reduction in the scale of the maps.

A 1" = 900' scale large mylar copy of the "Base Map" has been delivered to the Springfield Township Planning Board at its February 6, 1996 workshop meeting.





# EXISTING LAND USE ANALYSIS

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

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# EXISTING LAND USE ANALYSIS

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

### INTRODUCTION

This section of the 1996 "Land Use Plan Periodic Reexamination And Update Report" for the Township of Springfield documents the existing development which already has occurred within the Township. Only by mapping and analyzing the existing land uses within Springfield Township and their pattern of development can the underlying relationships among the various uses be brought into clear focus.

Summarily, the analysis of existing land uses in the Township of Springfield indicates the prevailing rural agricultural character of the Township. As noted in the "Foreword" of this document, the primary reason that the Township of Springfield has maintained its rural agricultural character is that most of its land is not merely "undeveloped", but is actively used for bona fide agricultural purposes. The natural suitability of Springfield Township for farming is one of its prominent features; approximately seventy-five percent (75%) of its land is rated as "prime" farmland (Classes I or II) by the U.S.D.A. Soil Conservation Service in its Burlington County Soil Survey.

Another reason that the Township of Springfield has maintained its rural agricultural character is that the environmental attributes of the land in the Township inhibit and significantly limit the potential for development. The wetness of the land, caused by a combination of high water tables and poorly drained soils, presents a formidable obstacle for the development of single-family detached dwellings and other structures, particularly those with basements.

Moreover, there are no public water or sewerage treatment facilities within the Township of Springfield available for development at this time; all development must rely upon the capacity of the natural environment to support a septic system and a potable water well. It is clearly evident that the wet soils throughout the vast majority of Springfield Township do not readily drain and filter septic effluent.

# EXISTING LAND USE DEVELOPMENT

During February of 1996, an analysis was undertaken to document the existing land uses throughout the Township of Springfield. The analysis included a lot-by-lot field survey augmented by Township Tax Assessor information and 1990 aerial photographs from the Delaware Valley Regional Planning Commission made available by the Township of Springfield. The results of existing land use analysis are illustrated on the "Existing Land Use" map photograph dated February 1996 and the accompanying "Existing Land Use Acreage Distribution Chart".



# EXISTING LAND USE ACREAGE DISTRIBUTION CHART February 1996

LAND USE CATEGORIES	APPROXIMATE ACREAGE	PERCENTAGE OF TOWNSHIP
Single-Family Residential	2,037.6 ac	10.59 %
Multiple-Family Residential	0.4 ac	0.01 %
Public	484.1 ac	2.52 %
Quasi-Public	128.9 ac	0.67 %
Commercial	292.5 ac	1.52 %
Office	5.8 ac	0.03 %
Industrial	86.3 ac	0.45 %
Agriculture/Vacant/Wooded	13,993.8 ac	72.76 %
Roads	2,202.6 ac	11.45 %
Totals:	19,232.0 ac	100.00 %

### NOTES:

- 1) Springfield Township contains approximately 30.05 square miles or 19,232 acres of land and water.
- Yellow square designations for "Single-Family Residential" uses on the "Existing Land Use" map were attributed five (5) acres each.
- "Wooded" areas indicated on the "Existing Land Use" map are included in the acreage calculations for the "Agriculture/Vacant/Wooded" land use category.

SOURCES: Coppola & Coppola Associates from planimetric measurement of "Existing Land Use" map dated February 1996 and acreage figures indicated on the Springfield Township Tax Map Sheets.

As noted on the "Existing Land Use Acreage Distribution Chart", nine (9) land use categories have been generated from the existing land use analysis to include the acreage of all lands within the Township of Springfield. Additionally, the location of wooded lands, detention basins, cemeteries and farm stands has been shown on the "Existing Land Use" map photograph, although the acreage devoted to each of these land uses has not been calculated.

Summarily, the existing land use analysis indicates the following:

- Approximately seventy-three percent (i.e., 72.76%) of the Township of Springfield is "Agriculture/Vacant/Wooded" lands, indicating the rural character of the Township in the midst of municipalities adjacent and nearby Springfield Township which have shed their once rural character;
- The "Single-Family Residential" land uses are scattered throughout the Township of Springfield, primarily in a "ribbon residential" pattern along existing roads, and comprise the vast majority of the actual physical development of the Township, yet account for only approximately ten and one-half percent (i.e., 10.59%) of the Township's land area;
- The "Multiple-Family Residential" development encompasses less than one hundredth of one percent (0.01%) of the total land area within Springfield Township;
- The "Public" land use category which, among other uses, includes the Municipal Building, the post office in Juliustown, the Township school property, the Jacksonville Community Center, the Springfield Township Park in Juliustown, the Township land preserve west of the N.J. Turnpike and the lands utilized by the United States Fort Dix Military Reservation, accounts for approximately four hundred eighty-four (484) acres or approximately two and one-half percent (i.e., 2.52%) of the land area within Springfield Township;
- The "Quasi-Public" land use category includes the golf course on Mt. Holly Jacksonville Road and a number of churches (the Methodist Episcopal Church and cemetery, the Society of Friend Meeting House and cemetery, the Jacksonville Presbyterian Church, the Mt. Holly Congregation of Jehovah's Witnesses, the Jobstown Baptist Church and the Saint Andrew's Church of Jobstown), and accounts for approximately one hundred twenty-nine acres (i.e., 128.9 acres), or less than one percent (i.e., 0.67%) of the land area within Springfield Township;
- The combined "Commercial", "Office" and "Industrial" land use category, including the mining operation, the Redwing Airport, the zoo and the Columbus Farmers Market, in aggregate accounts for only approximately two percent (2%) of the land area within Springfield Township; and

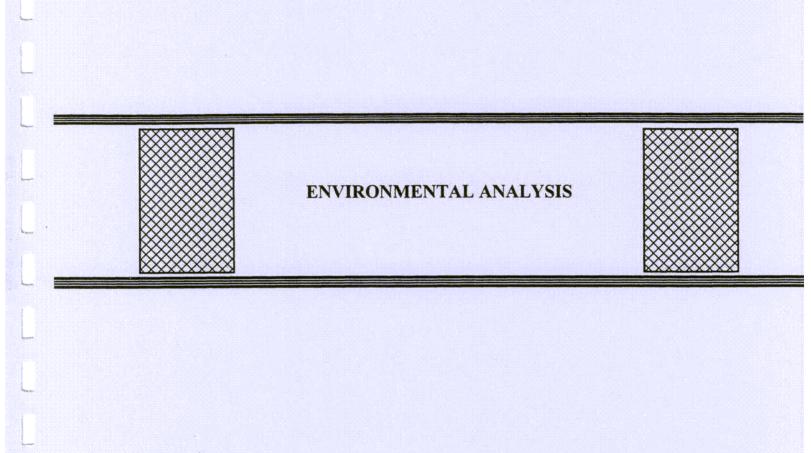
The remaining land area within the Township of Springfield, accounting for approximately eleven and one-half percent (i.e., 11.45%) or 2,202 acres within the Township, is utilized by the right-of-ways for the existing roads.

### CONCLUSION

The existing land use analysis clearly indicates the preponderance of farms throughout the Township of Springfield and the truly rural agricultural character of development which prevails.

Moreover, while the existing land use analysis indicates that approximately seventy-three percent (73%) of the Township of Springfield is not physically developed at this time, these lands are not necessarily available or suitable for relatively intense development.

The environmental and potable water and sewage treatment limitations imposed upon the lands throughout the Township of Springfield significantly restrict their potential for future development. Additionally, legitimate policy decisions concerning the preservation of agricultural lands in Springfield Township further limits the amount of land in the Township which may be considered available for physical development.



# **ENVIRONMENTAL ANALYSIS**

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

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## **ENVIRONMENTAL ANALYSIS**

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

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### **ENVIRONMENTAL ANALYSIS**

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

#### INTRODUCTION

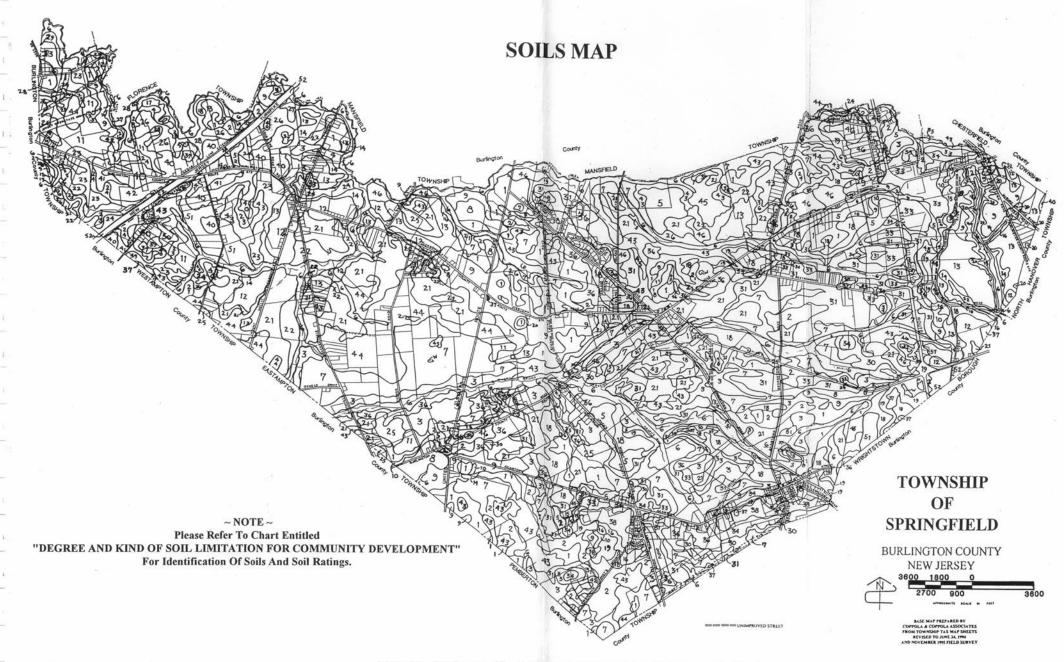
This section of the Land Use Plan Periodic Reexamination And Update Report summarizes for land use planning purposes and analysis of the physical characteristics of the Township of Springfield. The analysis is organized as a series of sequential investigations, each dealing with a particular environmental factor. Each section discusses the intrinsic characteristics associated with each of the factors and relates the characteristics to the capacities and limitations of the lands to support community development.

#### SOILS

Soils have inherent characteristics which pose varying kinds of limitations for community development. The Soil Survey of Burlington County, prepared by the United States Department of Agriculture Soil Conservation Service during October 1971 and revised October 1990, has identified twenty-two (22) soil series throughout the Township of Springfield; each soil series has a number of soil types, or phases, based upon their specific characteristics.

There are a total of sixty-four (64) soil types found in Springfield Township which have been aggregated for the purpose of analysis into fifty-two (52) groupings of soils, each grouping encompassing soils within the same series which exhibit identical degrees of soil limitations for community development. The location of the various soil types within the Township of Springfield are shown on the "Soils Map". The accompanying chart summarizes the "Degree And Kind Of Soil Limitation For Community Development" that each of the soils present for different types of community development.

As indicated by the Burlington County Soil Conservation Service, the soil information and ratings are intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. However, the information has limitations due to the fact that only that part of the soil within a depth of five or six feet (5' - 6') below ground level has been analyzed. Moreover, because of the scale of the Soil Conservation Service maps, small areas of different soils may be included within the mapped areas of a specific soil. In any case, the information is not intended to eliminate the need for on-site engineering investigation, testing and analysis of the soils for the particular type of community development proposed.



SOURCE: Soil Survey of Burlington County, N.J., U.S.D.A. Soil Conservation Service, Issued October 1971 & Revised October 1990.

The criteria utilized by the Soil Conservation Service for the ratings of the various soil types for the different types of community development listed on the "Degree And Kind Of Soil Limitation For Community Development" chart are as follows:

## **Dwellings With Or Without Basements**

This rating is based on undisturbed soils to a depth of five feet (5'), assuming use for single-family dwellings or other structures with similar foundation requirements. Excluded are buildings more than three (3) stories high or buildings with foundation loads in excess of those equal to a three-story building.

Criteria used for the ratings are: low bearing capacity, stability, depth to a seasonal or permanent water table, steepness of the slope, and stream flooding hazard.

## Septic Tank Absorption Fields

Since essentially all development in the Township of Springfield is not served by public wastewater treatment facilities, specific attention should be given to the land's ability to adequately accommodate septic disposal systems. Suitable areas for septic tanks require a soil that has enough, but not excessive, drainage; in other words, an area that can adequately absorb the effluent, yet sufficiently filter the effluent to prevent groundwater contamination. Therefore, there must be unsaturated soil material beneath the absorption field to filter the effluent effectively.

Criteria used for the ratings are: percolation rate, depth to the water table or to perched water, overflow of water, and slope. Severe limitations for septic tank absorption fields result from percolation rates slower than one inch (1") in forty (40) minutes, a high water table, an ironstone layer, susceptibility to stream overflow and slopes greater than ten percent (10%).

As indicated on the "Soil Limitations For Septic Tank Absorption Fields" map, most of the soils throughout the Township of Springfield are rated as having "Restrictive" limitations for the location of septic systems, and most of the remaining land area within the Township contains soils with "Moderate" limitations.

The relatively small aggregate areas of land containing soils with only a "Slight" limitation for the location of septic systems within the Township of Springfield are concentrated either along Jacksonville-Jobstown Road (County Route 670) or in the northeastern corner of the Township in the vicinity of the municipal boundary with North Hanover Township, along the frontage of some of the existing roads or in relatively small isolated pockets.

# TOWNSHIP OF SPRINGFIELD

# DEGREE AND KIND OF SOIL FOR COMMUNITY DEVEL

#### **KEY TO RATINGS**

- S SLIGHT ratings mean little or no limitation or limitations easily corrected by the use of normal equipment.
- M MODERATE ratings mean presence of some limitations which normally can be overcome by careful design and management at somewhat greater cost.
- R RESTRICTIVE or severe limitations are those which normally cannot be overcome without exceptional, complex or costly measures.

KEY TO PROBLEMS 15. DROUGHTY 1. WETNESS 16. TOO CLAYEY 2. PERCS SLOWLY 3. TOO SANDY 17. THIN LAYER 18. SEASONAL HIGH WATER 4. SMALL STONES 19. NEEDS DRAINAGE 5. SLOPE 20. SLOW PERMEABILITY 6. CEMENTED PAN 21. STREAM OVERFLOW 7. ERODES EASILY 22. SEASONAL MOD WATER 8. PONDING 23. SEASONAL WATER 9. EXCESS HUMUS 24. STRONG SLOPES 10. TOO ACID 11. FLOODING 25. MOD SLOPES 26. EXCESS WATER 12. SHRINK/SWELL 27. STONE OBSTRUCTION 13. FROST ACTION 14. LOW STRENGTH

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3	ADELPHIA	AcA	R	1	М	1,12	R	18,20	R	13	М	1	М	1,2	М	1,2	М	1
	ADELPHIA	AnA	R	1	M	1,12	R	18,20	R	13	М	1	M	1,2	M	1,2	М	1
4	ADELPHIA	AcB	R	1	M	1,12	R	18,20	R	13	М	1	M	1,2,5	M	1,2	М	1
5	ADELPHIA	AnB	R	1	М	1,12	R	18,20	R	13	М	1	M	1,2,5	М	1,2	М	1
6	ALLUVIAL	Ao	R	1,11	R	1,11	R	21,22	R	1,11	R	1,11	R	1,11	R	1	R	1
7	COLEMANTOWN	Cm	R	1,11	R	1,11	R	20,23	R	1,11	R	1	R	1	R	1	R	1,7
8	COLLINGTON	CnA	S		М	12	S		М	13	S		М	2	М	2	S	
9	COLLINGTON	CnB	S		М	12	s		М	13	S		М	2,5	М	2	S	
10	COLLINGTON	CnC	S		М	12	М	24	М	12,13	S		R	5	М	2	S	
11	DONLONTON	DeB	R	1	М	1	R	18,20	R	13,14	М	1	· M	1,2	М	1,2	R	7
_	DONLONTON	DIA	R	1	М	1	R	18,20		13,14	·M	1	М	1,2	М	1,2	R	7
12	FREEHOLD	FfA	S		S		s		М	13	S		S		S		S	
13	FREEHOLD	FfB	S		S		S		М	13	s		М	5	S		S	
14	FREEHOLD	FfC	S		S		м	24	м	13	S		R	5	S		S	
15	FREEHOLD	FfE	R	5	R	5	R	5	R	5	R	5	R	5	R	5	М	5
16	FREEHOLD	FfD	M	5	м	5	R	25	М	5,13	М	5	R	5	М	5	S	
	FREEHOLD	FoD3	M	5	М	5	R	25	М	5,13	М	5	R	5	М	5	S	
17	FREEHOLD	FgB	S	_	s		М	20	М	13	S		М	5	S		S	
-	FREEHOLD	FhB	S		s		s		М	13	М	15	М	5	S		S	
19	FREEHOLD	FhC	S		s		М	24	М	13	М	15	R	-5	S		S	
20	FREEHOLD	FoC3			S		м	24	M	13	S		R	5	S		S	
_	HOLMDEL	HdA	F	1	R	1	м	18,19	R	1	R	1	R	1	R	1	R	1
2 1	HOLMDEL	HIB	F	1	R	1	M	18,19	R	1	R	1	R	1	R	1	R	1
22	HOLMDEL	HdB	B	1	R	1	м	18,19	R	1	R	1	R	1	R	1	R	1
23	HOLMDEL	HmA	F	+	_		R	18,20	R	1	R	1	R	1	R	1	R	1
24	HOLMDEL	HmB	F	1	R	1	_			1				1		1	R	1
	KEANSBURG	Ka	R	1	R	-	R	18,20	R	-	R	1	R	1.10	R	1,10	R	1
25	REAMSBURG	I Na	-	1	R	1	R	23	R	1,13	K	-	K	1,10	K	1,10	n	

# TOWNSHIP OF SPRINGFIELD

# DEGREE AND KIND OF SOIL LIMITATION FOR COMMUNITY DEVELOPMENT

KEY	TO	RAT	IN	GS
1/ _ :				$\sim$

- s SLIGHT ratings mean little or no limitation or limitations easily corrected by the use of normal equipment.
- M MODERATE ratings mean presence of some limitations which normally can be overcome by careful design and management at somewhat greater cost.
- R RESTRICTIVE or severe limitations are those which normally cannot be overcome without exceptional, complex or costly measures.

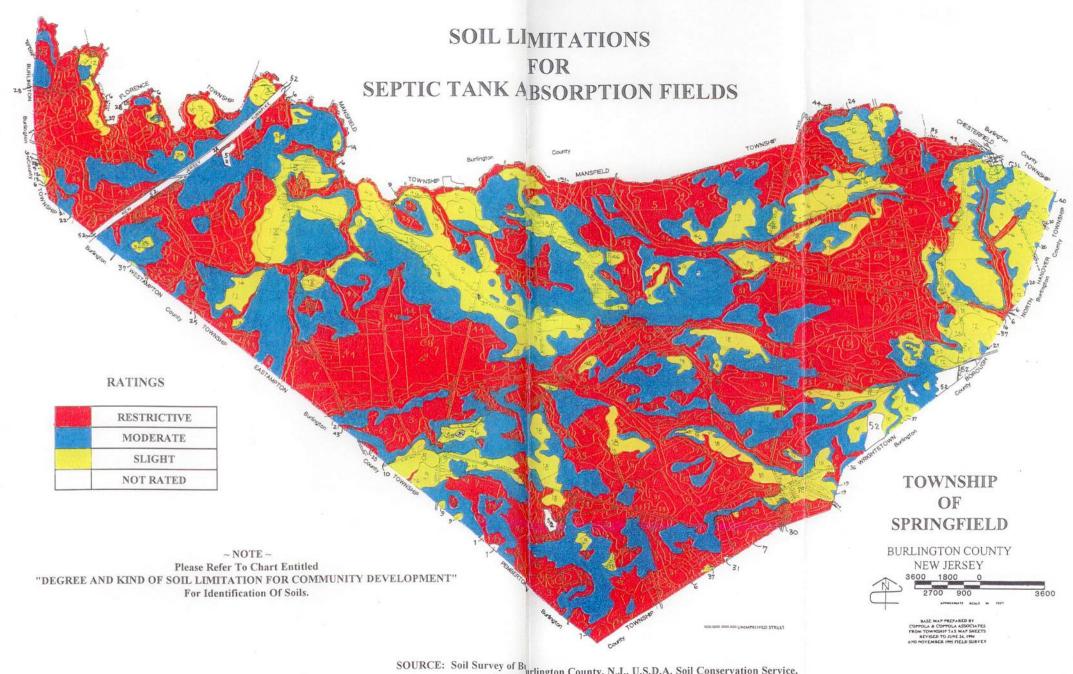
#### **KEY TO PROBLEMS**

- 1. WETNESS 2. PERCS SLOWLY
- 3. TOO SANDY
- 4. SMALL STONES
- 5. SLOPE 6. CEMENTED PAN
- 7. ERODES EASILY
- 8. PONDING 9. EXCESS HUMUS
- 10. TOO ACID 11. FLOODING
- 11. FLOODING
  12. SHRINK/SWELL
- 13. FROST ACTION
- 14. LOW STRENGTH

- 15. DROUGHTY
- 16. TOO CLAYEY
- 17. THIN LAYER
- 18. SEASONAL HIGH WATER
- 19. NEEDS DRAINAGE
- 20. SLOW PERMEABILITY
- 21. STREAM OVERFLOW 22. SEASONAL MOD WATER
- 23. SEASONAL WATER
- 24. STRONG SLOPES
- 25. MOD SLOPES 26. EXCESS WATER
- 27. STONE OBSTRUCTION

OIL LIMITATION ELOPMENT	MAP SYMBOL	FOUNDATIONS FOR DWELLINGS WITH BASEMENTS	PROBLEMS	FOUNDATIONS FOR DWELLINGS WITHOUT BASEMENTS	PROBLEMS	SEPTIC TANK ABSORPTION FIELDS	PROBLEMS	LOCAL ROADS AND STREETS	PROBLEMS	LAWNS AND LANDSCAPING	PROBLEMS	PLAYGROUNDS	PROBLEMS	PICNIC AREAS	PROBLEMS	PATHS AND TRAILS	PROBLEMS
SOIL SERIES	Σ	Ε ≥,						74	۵.	77	W(200	4	Δ.	_		Δ.	
26 KEYPORT	KfB	R	1	М	12	R	20,26	R	13,14	M	1	R	2	R	2	R	7
KEYPORT	KIA	R_	1	M	12	R	20,26		13,14	М	1	R	2	R	2	R	7
KEYPORT	KIB	R	1	М	1,12	R	20,26		13,14	М	1	R	2	R	2	R	7
27 KEYPORT	KIC	R_	1	M	1,12	М	1,12		20,26	М	1	R	2,5	R	2	R	7
28 KEYPORT	KID	R_	1	M	1,12,5	R	20,26	R	13,14	M	1,5	R	2,5	R	2	R	7
29 KLEJ	KmA	R_	1	М	1	M	18,19	М	1,13	M	1,15	R	3	R	3	R	3
KLEJ	KoA	R_	1	M	1	M	18,19	М	1,13	M	1,15	R	3	R	3	R	3
30 KRESSON	KwA	R_	1	R	1,13,14		18,20	R	1,13,14	R	1	R	1	М	1,3	М	1,3
31 KRESSON	KxA	R	1	R	1,13,14	R:	18,20	R	1,13,14	R	1	R	1	М	1	M	1
KRESSON	KyA	R	1	R	1,13,14	R	18,20	R	1,13,14	R	1	R	1	М	1	M	1
32 MARLTON	MhA	М	1	R	13	R	20,24	R	13	М	16	M	2	S		S	
33 MARLTON	MhB	M	1	R	13	R	20,24	R	13	M	16	М	2,5	S		S	
34 MARLTON	MrC3	М	1	R	13	R	20,24	R	13	М	16	R	5	S		S	
35 MUCK	Mu	R	B,11,14	R	8,11,14	R	23	R	B <b>11,13</b>	R	6,9,11	R	8,9,11	R	8,9	R	8,9
36 PEMBERTON	PbA	R	1	R	1	M	18,19	М	1,13	М	1,315	R	1,3	R	3	R	3
PEMBERTON	PcA	R	1	R	1	М	18,19	М	1,13	М	1,315	R	1,3	R	3	R	3
37 PITS	Pt	М	5	M	5	S		М	5	R	15	R	3,4	R	3	R	3
38 SANDY LAND	Se	R	6	М	5,6	R	5,27	М	5,6	R	6,15	R	3,5,6	R	3,6	R	3
39 SASSAFRASS	SgA	S		S		S		М	13	S		М	4	S		S	
40 SASSAFRASS	SgB	S		S		М	24	М	13	S		R	5	S		S	
41 SASSAFRASS	SgC	S		S		М	24	M	13	S		R	5	S		S	
SASSAFRASS	ShB	S		S		R	20	M	13	S		M	4,5	S		S	
43 SHREWSBURY	Sn	R	1	R	1	R	1,2,12	R	1,13	R	13	R	1	R	1	R	1
44 SHREWSBURY	So	R	1	R	1	R	23	R	1,13	R	13	R	1	R	1	R	1
SHREWSBURY	Sp	R	1	R	1	R	23	R	1,13	R	13	R	1	R	1	R	1
45 SHREWSBURY	Sx	R	1,6	R	1,6	R	23	R	1,6,13	R	1,17	R	1,6	R	1,6	R	1
46 TINTON	TsB	S		S		S	24	М	13	М	3,15	R	3	R	3	R	3
TINTON	TtB	S		S		S	24	М	13	М	3,15	R	3	R	3	R	3
47 TINTON	TsC	S		S		М	24	М	13	М	3,15	R	3,5	R	3	R	3
48 WESTPHALIA	WdB	S		S		S		М	13	М	15	М	5	S		R	7

#### TOWNSHIP OF SPRINGFIELD SEPTIC TANK ABSORPTION FIELDS DEGREE AND KIND OF SOIL LIMITATION LOCAL ROADS AND STREETS FOUNDATIONS F WITH BASEMEN PICNIC AREAS FOR COMMUNITY DEVELOPMENT AND PROBLEMS SOIL SERIES M M 1 1 M 1,15 49 WOODSTOWN WmA R M R 13 M 1 18,19 **KEY TO RATINGS** 1 1,5 1 M 1,15 18.19 R 13 M WmB R 1 M 50 WOODSTOWN M S S 18,20 R 13 13 s - SLIGHT ratings mean little or no 51 WOODSTOWN WnA R R R limitation or limitations easily corrected VARIABL **52 URBAN LAND** Ug VARIABL by the use of normal equipment. M - MODERATE ratings mean presence of some limitations which normally can be overcome by careful design and management at somewhat greater cost. R - RESTRICTIVE or severe limitations are those which normally cannot be overcome without exceptional, complex or costly measures. KEY TO PROBLEMS 15. DROUGHTY 1. WETNESS 16. TOO CLAYEY 2. PERCS SLOWLY 17. THIN LAYER 3. TOO SANDY 18. SEASONAL HIGH WATER 4. SMALL STONES 19. NEEDS DRAINAGE 5. SLOPE 20. SLOW PERMEABILITY 6. CEMENTED PAN 7. ERODES EASILY 21. STREAM OVERFLOW 22. SEASONAL MOD WATER 8. PONDING 9. EXCESS HUMUS 23. SEASONAL WATER 24. STRONG SLOPES 10. TOO ACID 25. MOD SLOPES 11. FLOODING 12. SHRINK/SWELL 26. EXCESS WATER 27. STONE OBSTRUCTION 13. FROST ACTION 14. LOW STRENGTH



SOURCE: Soil Survey of Burlington County, N.J., U.S.D.A. Soil Conservation Service, Issued October 1971 & Revised October 1990.

## **Local Roads And Streets**

For these ratings, it is assumed that the roads will be of the hard surfaced type similar to most of the roads within the Township of Springfield.

Criteria used for the ratings are: natural drainage or depth to the water table, slopes, permeability, the potential for frost action, and stream flooding hazard.

### Lawns And Landscaping

The soils are rated for their ability to support turf and ornamental trees and shrubs.

Criteria used for the ratings are: depth to the water table or perched water table, slope, natural drainage, stream flooding hazard, and the natural fertility of the soils.

## **Playgrounds**

Playgrounds require soils that can withstand intensive foot traffic.

The best soils are almost level and are not wet or subject to flooding during the season of use. The surface is free of stones and boulders, is firm after rains, and is not dusty when dry.

### Picnic Areas

Picnic areas are subject to heavy foot traffic; most vehicular traffic is confined to access roads and parking areas.

The best soils are firm when wet, are not dusty when dry, are not subject to flooding during the period of use, and do not have excessive slopes or boulders.

### **Paths And Trails**

Paths and trails for hiking and horseback riding should require little or no cutting and filling.

The best soils are not wet, are firm after rains, are not dusty when dry, and are not subject to flooding more than once a year during the period of use. The soils should have moderate slopes and no stones or boulders on the surface.

### HYDRIC SOILS

The "Hydric Soils Map" shows the location of the environmentally fragile soils classified as being "Hydric" by the United State Department of Agriculture Soil Conservation Service. By definition, "Hydric Soils" are either:

- A. Saturated at or near the soil surface with water that is virtually lacking free oxygen for significant periods during the growing season; or
- B. Flooded frequently for long periods during the growing season.

Hydric soils are classified into three (3) groups based upon the degree to which they consistently display hydric conditions:

Group 1: Soils nearly always display consistent hydric conditions.

Group 2: Soils display consistent hydric conditions in most places, but additional verification is needed.

Group 3: Soils display hydric conditions in a few places, and additional verification is needed.

It is recommended that lands containing "Hydric Soils" not be developed whenever possible. Care should be taken by applicants during the formative stages of site plan and subdivision preparation, and by the Township Planning Board and Township Zoning Board of Adjustment during the application review process, to incorporate "Hydric Soil" land areas within a portion of a lot which need not be physically developed or, where applicable, within the land area to be set aside as required open space.

# SOIL SUITABILITY FOR AGRICULTURAL PURPOSES

New Jersey's giant industrial capacity often obscures the role of the State's invaluable farmers. New Jersey's farmers are indeed unique, since they operate their business in the midst of the most urbanized state in the nation. In response to the pressure for urbanization, New Jersey's farmland has rapidly decreased during the past thirty (30) years.

To combat the alarming loss of farmland, New Jersey voters approved the "Farmland Assessment Act" in 1964, which has had some beneficial results in stemming the loss of farmland. Yet economic pressures continue to put a squeeze on farm profits, forcing individual farm operators/farmers to dispose of their farms for speculative or development purposes.

The October 1990 Soil Survey of Burlington County classifies each of the soils in Springfield Township according to its potential agricultural productivity for most kinds of field crops. The soils were grouped according to their limitations for the field crops, the risk of damage if they are used for crops, and the way the soils respond to management. The criteria used to classify the soils do not include major and generally expensive modifications to the natural landform that change the slope, depth or other intrinsic characteristics of the soils.

The soils were classified by the Burlington County Soil Conservation Service into one (1) of eight (8) classes, with "Class I" and "Class II" generally considered to be "prime" farmland and other "Class II", some "Class III", and a few "Class IV" soils considered to be farmland of statewide importance. The eight (8) designated classes of farmland and their descriptions are as follows:

Class I	Soils that have few limitations that restrict their use.
Class II	Soils that have some limitations that reduce the choice of plants or that require moderate conservation practices.
Class III	Soils that have severe limitations that reduce the choice of plants, require special conservation practices, or both.
Class IV	Soils that have very severe limitations that restrict the choice of plants, require very careful management, or both.
Class V	Soils that have little or no erosion hazard but have other limitations that make regular cultivation impracticable or that limit their use largely to pasture, range, woodland or wildlife food and cover.
Class VI	Soils that have severe limitations that make them generally unsuited for cultivation and limit their use largely to pasture, woodland or wildlife food and cover.
Class VII	Soils that have very severe limitations that make them generally unsuited to cultivation without major reclamation and that restrict their use largely to grazing, woodland or wildlife.
Class VIII	Soils and land forms that have limitations that preclude their use without major reclamation for commercial production of plants and restrict their use to recreation, wildlife and water supply and to aesthetic purposes.

The October 1990 Soil Survey of Burlington County concludes that the following thirty-nine (39) soil types "meet the criteria for prime farmland", i.e., "Class I" or "Class II". Thirty-two (32) of these thirty-eight (38) soil types exist within Springfield Township and are marked with an asterisk (\*).

```
Adelphia fine sandy loam, 0 to 2 percent slopes.
* AaA
              Adelphia fine sandy loam, 2 to 5 percent slopes.
* AaB
              Adelphia fine sandy loam, clayey substratum, 0 to 2 percent slopes.
* AcA
              Adelphia fine sandy loam, clayey substratum, 2 to 5 percent slopes.
* AcB
              Adelphia loam, 0 to 2 percent slopes.
* AhA
              Adelphia sandy clay loam, truncated.
 Ak
              Adelphia fine sandy loam, glauconitic variant, 0 to 2 percent slopes.
* AnA
              Adelphia fine sandy loam, glauconitic variant, 2 to 5 percent slopes.
* AnB
              Collington fine sandy loam, 0 to 2 percent slopes
* CnA
              Collington fine sandy loam, 2 to 5 percent slopes.
* CnB
              Collington loam, 0 to 2 percent slopes.
  CoA
              Collington loam, 2 to 5 percent slopes.
  CoB
              Donlonton fine sandy loam, 0 to 3 percent slopes.
* DeB
              Donlonton loam, 0 to 3 percent slopes.
* DlA
              Freehold fine sandy loam, 0 to 2 percent slopes.
* FfA
              Freehold fine sandy loam, 2 to 5 percent slopes.
* FfB
              Freehold fine sandy loam, 5 to 10 percent slopes.
* FfC
              Freehold fine sandy loam, clayey substratum, 2 to 5 percent slopes.
* FgB
* FhB
               Freehold loamy sand, 0 to 5 percent slopes.
               Holmdel fine sandy loam, 0 to 2 percent slopes.
* HdA
               Holmdel fine sandy loam, 2 to 5 percent slopes.
* HdB
               Holmdel loamy sand, 0 to 5 percent slopes.
* HIB
               Holmdel fine sandy loam, clayey substratum, 0 to 2 percent slopes.
* HmA
               Holmdel fine sandy loam, clayey substratum, 2 to 5 percent slopes.
* HmB
               Keyport loamy sand, 0 to 5 percent slopes.
  KeB
               Keyport fine sandy loam, 2 to 5 percent slopes.
* KfB
               Keyport loam, 0 to 2 percent slopes.
* KlA
               Keyport loam, 2 to 5 percent slopes.
* K1B
               Marlton fine sandy loam, 0 to 2 percent slopes.
* MhA
               Marlton fine sandy loam, 2 to 5 percent slopes.
* MhB
               Sassafras fine sandy loam, 0 to 2 percent slopes.
* SgA
               Sassafras fine sandy loam, 2 to 5 percent slopes.
* SgB
               Sassafras fine sandy loam, clayey substratum, 0 to 2 percent slopes.
  ShA
               Sassafras fine sandy loam, clayey substratum, 2 to 5 percent slopes.
* ShB
               Woodstown fine sandy loam, 0 to 2 percent slopes.
* WmA
               Woodstown fine sandy loam, 2 to 5 percent slopes.
* WmB
               Woodstown fine sandy loam, clayey substratum, 0 to 2 percent slopes.
* WnA
               Woodstown fine sandy loam, clayey substratum, 2 to 5 percent slopes.
```

WnB

Summarily, and as graphically shown on the "Soil Suitability For Agricultural Purposes" map which appears in the "Farmland Preservation Program" section of this "1996 Land Use Plan Periodic Reexamination And Update Report" document, approximately seventy-five percent (75%) of Springfield Township exhibits soils which are considered "prime" (generally, Classes I & II) or of statewide importance for agricultural use.

The fact that Springfield Township has an abundance of soil types extraordinarily appropriate for agricultural use is evidenced by the large number of active farms existing throughout the Township. As documented by a February 1996 existing land use survey, the results of which are graphically indicated on the "Existing Land Use" map which appears in the "Existing Land Use Analysis" section of this document, approximately seventy-three percent (73%) of Springfield Township is currently "Agricultural/Vacant/Wooded", and it is the agricultural lands which predominate these so-called "undeveloped" lands in the Township.

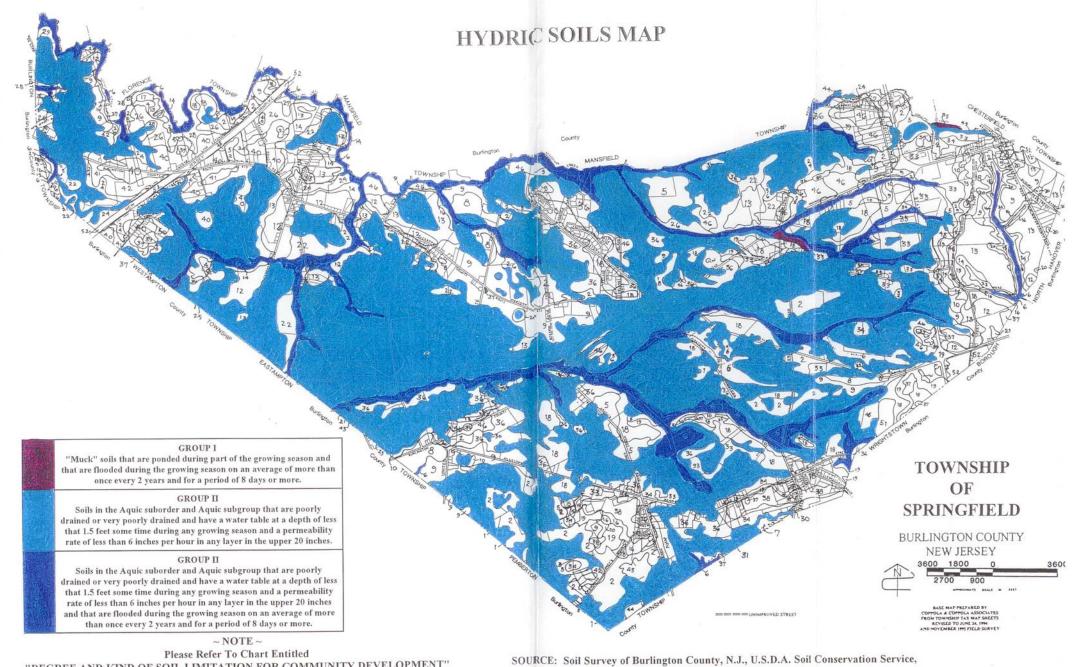
It should be noted that the rating system utilized by the Soil Conservation Service judges the capabilities of the soils to support most kinds of crop farming based upon their inherent qualities; i.e., the natural conditions of the soils with minimal modifications. As a result of basing the rating system upon the natural conditions of the soils, man-made modifications to the lands, such as irrigation from external sources, could cause a modification to the rating system and further enhance the capabilities of the soils for agricultural use.

### CRITICAL AREAS

The "Critical Areas" map indicates those portions of the Township of Springfield environmentally encumbered for development by "Slopes 15% Or Greater", "100-Year Flood Plains" and/or "Freshwater Wetlands". These three (3) categories of environmentally fragile lands are capable of being identified and mapped on a site plan and/or subdivision submission with a high degree of accuracy and certainty, and the presence of one or more of these physical characteristics clearly justify the limitation of development densities and intensities.

# Slopes 15% Or Greater

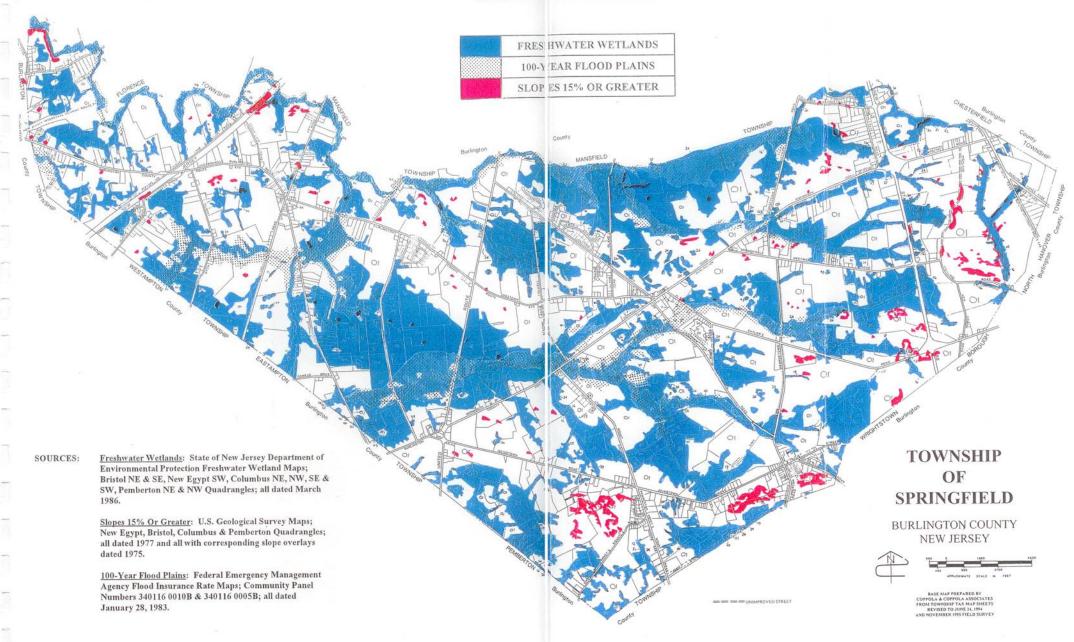
Slope is indicated as a percentage; the change in vertical elevation (in feet) per one hundred feet (100') of horizontal distance. Aside from the sheer physical impediment of improving a site for construction on steep slopes or rocky ledges, the degree of slope has a direct bearing on a number of other physical characteristics, since steep slopes exacerbate the inherent shortcomings of the soils. For example, absorption or soil drainage is inversely related to the degree of slope. Steep slopes necessarily have poor drainage due to increased run-off. The natural evolution of soil types also is impeded on steep slopes due to the inherently limited amount of ground cover that can develop in areas of high erosion.



"DEGREE AND KIND OF SOIL LIMITATION FOR COMMUNITY DEVELOPMENT" For Identification Of Soils.

Issued October 1971 & Revised October 1990.

# CRITICAL AREAS



Slopes greater than fifteen percent (15%) are potentially critical environmental impact areas. On these slopes the soils are often thin and have low natural fertility. Moreover, in areas where the slope of the lands exceeds fifteen percent (15%), development costs rise sharply along with the potential environmental problems and associated costs that will invariably result if proper attention is not paid to the treatment for hillside or mountain development. For these reasons, it is recommended that relatively low densities prevail in areas where slopes are fifteen percent (15%) or greater in grade.

As shown on the "Critical Areas" map from information on the U.S. Geological Survey Maps (New Egypt, Bristol, Columbus & Pemberton Quadrangles), most of the steep slope areas within Springfield Township are *not* situated along the beds of the various waterways in the Township, which is the usual situation, but are scattered in relatively small areas of concentration throughout the Township.

### 100-Year Flood Plains

Lands indicated to be within the 100-year flood boundary have a one percent (1%) chance of flooding in any given year. The source maps used for the delineation of the 100-year flood plains in Springfield Township were prepared by the Federal Emergency Management Agency, through the Federal Insurance Administration, which is charged with the responsibility of delineating the flood prone areas within the Township under the authority of the National Flood Insurance Act of 1968.

It should be understood that the source maps, all dated January 28, 1983, were prepared to facilitate flood plain management activities and do not show all the special flood hazard areas in the Township or all the planimetric features outside the flood plain.

As shown on the "Critical Areas" map, significant 100-year flood plain areas exist within Springfield Township along Assunpink Creek, Birch Creek, Barker's Brook and Hough's Run. However, as noted above, not all of the flood plain areas in the Township have been mapped by the Federal Emergency Management Agency, and it is certain that many additional 100-year flood plain areas exist within Springfield Township associated with the myriad number of stream tributaries in the municipality.

### Freshwater Wetlands

"Wetlands" are physical characteristics which present severe constraints for land development. As indicated on the "Critical Areas" map, significant portions of Springfield Township have been classified as "freshwater wetlands", and not all of these land areas are associated with the extensive stream tributary system within the Township.

The delineation of the freshwater wetlands within Springfield Township was drafted from information mapped by the New Jersey Department Of Environmental Protection (NJDEP) from March 1986 infrared photographs. The extent of the freshwater wetlands mapped by the NJDEP was based upon the definition of "wetlands" adopted by the United States Fish and Wildlife Service as follows:

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

Wetland systems are classified according to type by the United States Fish and Wildlife Service "Cowardin Classification System". The five (5) basic ecological systems are: Marine, Estuarine, Riverine, Palustrine and Lacustrine. Further differentiation is possible by class, subclass, water regime and special modifiers. The twenty-nine (29) types of freshwater wetlands delineated in Springfield Township are listed and described on the chart entitled "Identification Of Freshwater Wetlands".

# GEOLOGY AND GROUND WATER RESOURCES

Springfield Township lies entirely within the Atlantic Coastal Plain physiographic province. The Atlantic Coastal Plain province is underlain by unconsolidated rocks of Mesozoic and Cenozoic age which are composed of sand, silt and clay, with minor amounts of gravel. The major streams in the Township flow to the Delaware River and include Assiscunk Creek, North Run and Barker's Brook.

Future development in Springfield Township is significantly limited by two major physical factors: 1) the soil's capacity to absorb and properly filter effluent, and 2) ground water quantity and quality. Both of these physical factors are closely related to one another, and both reflect local geologic conditions.

The water supply of Springfield Township is derived from surface streams and from groundwater reservoirs beneath the surface. The Atlantic Coastal Plain strata that immediately underlie the land surface form water-table aquifers, i.e., aquifers in which the water is not confined under artesian pressure between strata of low permeability. The water-table aquifers receive recharge from precipitation.

#### IDENTIFICATION OF FRESHWATER WETLANDS CHART

#### Township of Springfield

Twenty-nine (29) types of freshwater wetlands have been delineated in Springfield Township by the New Jersey Department Of Environmental Protection. Wetland systems are classified according to type by the United States Fish and Wildlife Service "Cowardin Classification System". The five (5) basic ecological systems are: Marine, Estuarine, Riverine, Palustrine and Lacustrine. Further differentiation is possible by class, subclass, water regime and special modifiers as follows:

- UPLAND, non-wetlands; but may include unclassified wetlands less than one acre, non photo identifiable areas and/or unintentional omissions.
- 03 PFO1A-PALUSTRINE, Forested; broad leaved deciduous, non-tidal temporary.
- 05 PEM1C-PALUSTRINE, Emergent; persistent, non-tidal seasonal.
- 06 R2OW-RIVERINE, Lower Perennial; open water, unknown bottom.
- 09 PFO1C-PALUSTRINE, Forested; broad leaved deciduous, non-tidal seasonal.
- PEMIC-PALUSTRINE, Emergent; persistent, non-tidal seasonal, and PSS1C-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal seasonal.
- POWHh-PALUSTRINE, Open Water; unknown bottom, non-tidal permanent, diked/impounded.
- 12 PSS1A-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal temporary.
- 16 PFO1B-PALUSTRINE, Forested; broad leaved deciduous, non-tidal saturated.
- 19 PEM1B-PALUSTRINE, Emergent; persistent, non-tidal saturated.
- 20 PSS1B-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal saturated.
- PFO1B-PALUSTRINE, Forested; broad leaved deciduous, non-tidal saturated, and PSS1B-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal saturated.
- 24 MODAg-AGRICULTURAL LANDS, TURF FARMS; both row crops and turf cultivation.
- 26 PEM1B-PALUSTRINE, Emergent; persistent, non-tidal saturated, and PSS1B-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal saturated.
- 27 PSS1C-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal seasonal.
- PSS1C-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal seasonal, and PFO1C-PALUSTRINE, Forested; broad leaved deciduous, non-tidal seasonal.
- 38 PFO1A-PALUSTRINE, Forested; broad leaved deciduous, non-tidal seasonal, and PSS1A-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal temporary.
- 39 PFO1E-PALUSTRINE, Forested; broad leaved deciduous, non-tidal seasonal saturated.

#### IDENTIFICATION OF FRESHWATER WETLANDS CHART

#### Township of Springfield

- 42 MODR-RIGHT-OF-WAYS (areas maintained by utilities).
- POWHx-PALUSTRINE, Open Water; unknown bottom, non-tidal permanent, excavated.
- MODL-Lawns, Stormwater Management Areas; areas are not normally inundated.
- 48 MODD-DISTURBED AREAS; surface/vegetation disturbed by unknown activity.
- 50 PSS1C-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal seasonal, and PEM1C-PALUSTRINE, Emergent; persistent, non-tidal seasonal.
- PSS1B-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal saturated, and PEM1B-PALUSTRINE, Emergent; persistent, non-tidal saturated.
- PFO1C-PALUSTRINE, Forested; broad leaved deciduous, non-tidal seasonal, and PEM1C-PALUSTRINE, Emergent; persistent, non-tidal seasonal.
- PFO1B-PALUSTRINE, Forested, broad leaved deciduous, non-tidal saturated, and PEM1B-PALUSTRINE, Emergent; persistent, non-tidal saturated.
- 59 PSS1B-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal saturated, and PFO1B-PALUSTRINE, Forested; broad leaved deciduous, non-tidal saturated.
- 60 PFO1C-PALUSTRINE, Forested; broad leaved deciduous, non-tidal seasonal, and PSS1C-PALUSTRINE, Scrub/Shrub; broad leaved deciduous, non-tidal seasonal.
- 64 PEM1E-PALUSTRINE, Emergent; persistent, non-tidal seasonal saturated.

However, a significant amount of the precipitation is not available as a potable water supply, since it is returned to the atmosphere by evaporation and by the transpiration of plants. It is only the precipitation that enters the streams within the Township and/or otherwise becomes groundwater that is potentially available as a potable water supply.

However, the actual amount of water that is available from wells drilled into the ground is related to the water storage capacity of the underlying geologic formation. The "Geologic Formations" map shows the geologic formations within Springfield Township.

The formations which serve as aquifers throughout the entirety of Burlington County include the Raritan and Magothy, Englishtown, Wenonah Sand, Mount Laurel Sand, Vincentown Sand, Kirkwood Sand and Cohansey Sand Formations. The remaining formations, including the Merchantville Clay, Woodbury Clay, Marshalltown, Navesink Marl, Hornerstown Marl and Manasquan Formations, function as water confining beds. As noted on the "Geologic Formations" map, all but the Manasquan Formation are present within the Township of Springfield.

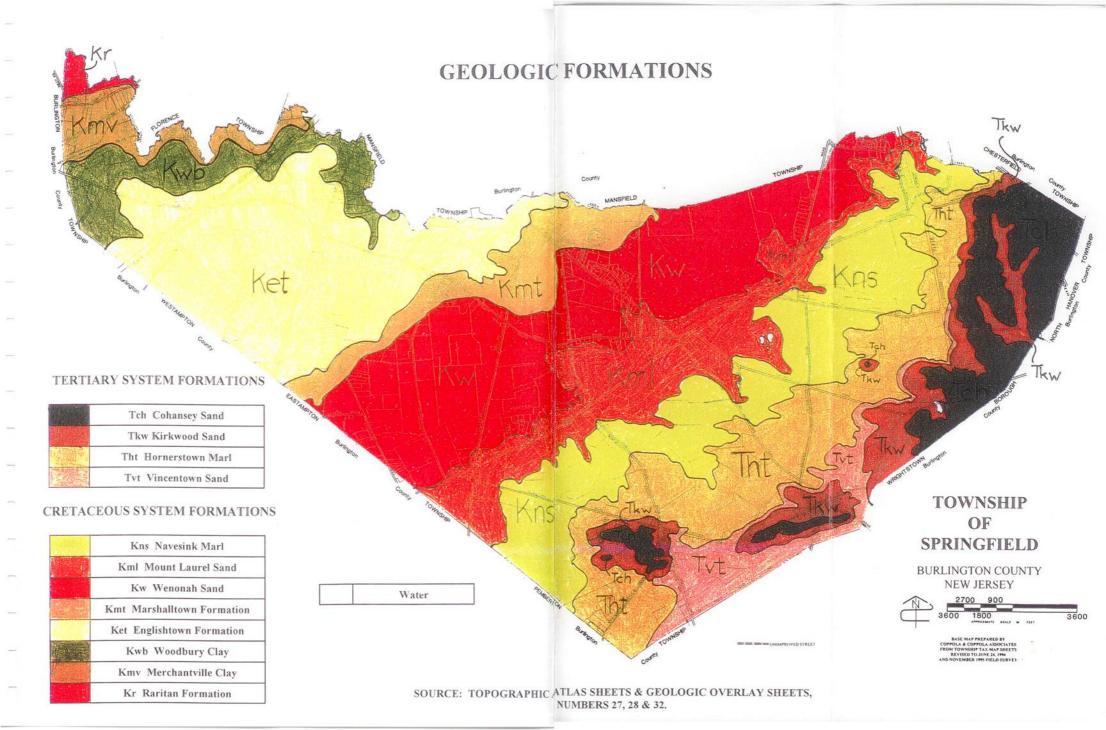
The geologic formations in Springfield Township and their general water bearing properties throughout Burlington County are as follows:

#### Kr Raritan Formation

The most important source of potable water throughout Burlington County is the Raritan-Magothy Formation, which accounts for approximately eighty percent (80%) of the total water pumped in the County; however, the formation is almost non-existent in the Township of Springfield.

# Ket Englishtown Sand

The Englishtown Formation is one of the formations which is partially covered by Pleistocene deposits in areas where it would otherwise intersect the surface, i.e. the "outcrop" areas. The Englishtown Formation consists of fine grained quartz sand with a thickness up to sixty feet (60'). It has a lower ability to transmit water than the aquifer in the Raritan and Magothy Formations, but it accounts for approximately five percent (5%) of the ground water pumped in Burlington County, primarily for potable wells serving private homes.



# Kml Mount Laurel Sand Kw Wenonah Sand

The Wenonah and Mount Laurel Sand Formations, although distinct formations, are considered as one unit because they are hydraulically connected and function as a single aquifer. The aquifer in the two formations has a relatively low capacity for transmitting water, but the uniform thickness and lithology of the aquifer and the good quality of its water make it an important source of potable water in Burlington County, accounting for approximately thirteen percent (13%) of the ground water pumped in the County.

#### Tvt Vincentown Sand

The Vincentown Sand Formation is not a continuous outcrop in Burlington County since it has been overlain in places by the Kirkwood Formation. The Vincentown Sand Formation is not considered an important aquifer in Burlington County and generally is considered to be a confining bed.

#### Tkw Kirkwood Sand

While the aquifer in the Kirkwood Sand Formation accounts for only approximately onequarter of one percent (0.25%) of the water yield in Burlington County, it has the potential for extensive development. The width of the formation varies between fifteen feet (15') and two hundred eighty-five feet (285'), with the widest areas considered to permit large yields of water. The water obtained from the Kirkwood Sand Formation generally contains iron and sulfide and is acid.

#### Tch Cohansey Sand

The Cohansey Sand Formation also is a potentially high yielding, largely untapped water resource in Burlington County. The formation presently provides water for residential and agricultural uses primarily in the extreme southeast portions of Burlington County and accounts for approximately two percent (2%) of the ground water pumped in the County. While the water generally is of good quality, it probably will never be a major source of potable water supply because of the high water tables which exist throughout most of the formation and the resulting susceptibility to contamination.

#### Kwb Woodbury Clay

The Woodbury Clay Formation functions with the Merchantville Formation as a confining layer separating the aquifer in the Raritan and Magothy Formations from the overlying aquifers. The Woodbury Clay Formation is not considered water bearing in Burlington County.

#### Kmt Marshalltown

Being primarily clayey, the Marshalltown Formation acts as an aquilude or confining layer between the Englishtown Formation and overlying formations. The Marshalltown Formation is not considered water bearing in Burlington County.

#### Kns Navesink Marl

The Navesink Marl Formation consists of a clayey glauconite sand and forms a confining layer between the Mount Laurel Sand and overlying formations. The Navesink Marl Formation is not considered water bearing in Burlington County.

#### Tht Hornerstown Marl

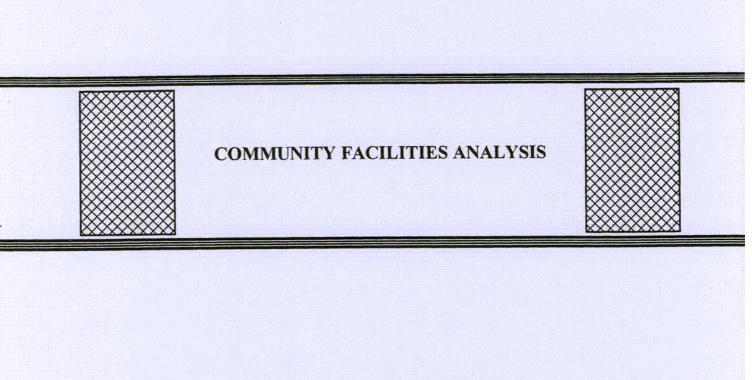
Being mostly clayey, the Hornerstown Marl Formation probably serves as an aquilude or confining layer, either independently or in conjunction with adjacent formations. The Hornerstown Marl Formation is not considered to be water bearing in Burlington County.

#### Kmv Merchantville Clay

The confining beds of the Merchantville Clay Formation are dark grey to black and are not considered to be water bearing in Burlington County.

#### **CONCLUSION**

An analysis of the environmental attributes of a municipality is an integral part of the planning process. Regarding the Township of Springfield, the environmental analysis clearly indicates that the natural characteristics of most of the lands within the Township are not supportive of dense or intense physical development.



# COMMUNITY FACILITIES AND UTILITIES ANALYSIS

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

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## COMMUNITY FACILITIES AND UTILITIES ANALYSES

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

#### INTRODUCTION

This section of the 1996 "Land Use Plan Periodic Reexamination And Update Report" for the Township of Springfield documents the existing community facilities and water and sewerage utilities serving the residents and workers within the Township.

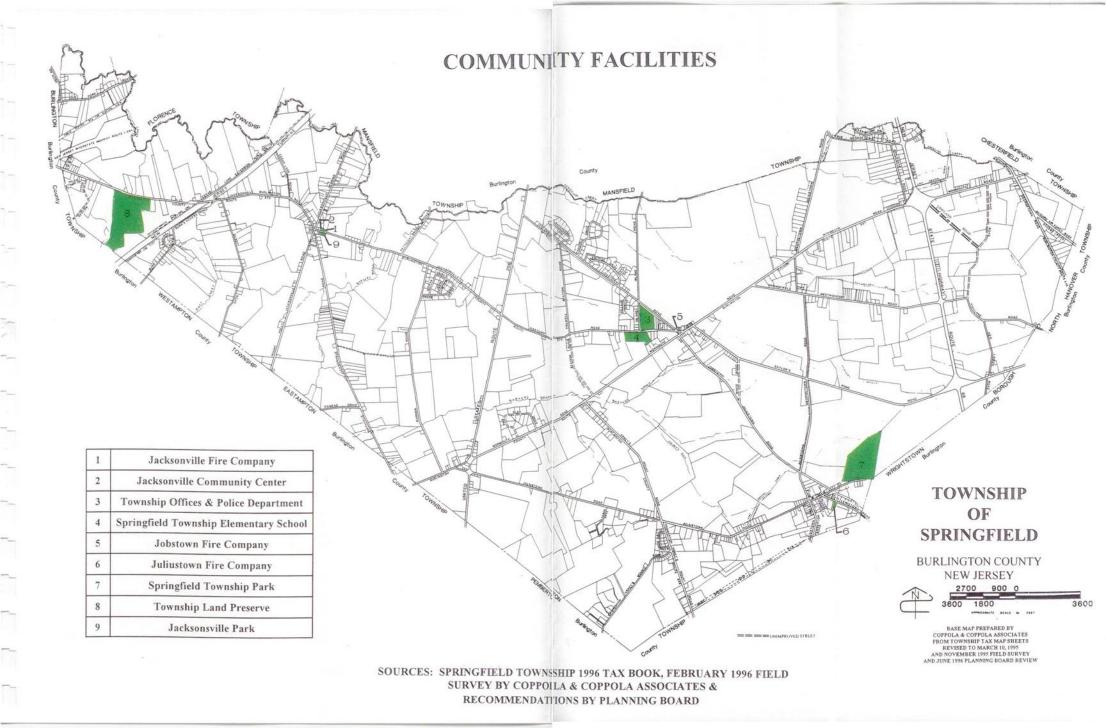
Regarding the existing community facilities, the analysis is intentionally general and is not intended to critique the current operations of the facilities within Springfield Township or supplant their long-term planning programs. Instead, the community facilities information is provided to help understand the implications increased development within Springfield Township will have upon the ability of the community facilities to adequately serve the needs of additional residents and workers within the Township.

In a municipality such as the Township of Springfield, with a very low density of population, even a relatively small increase in the number of residents or employees within the Township can have a significant affect upon the ability of the current community facilities to continue to provide an adequate level of service. It is interesting to note that Springfield Township's density of population is only 100.81 persons per square mile, which is less than the population density of Burlington County as a whole (i.e., 491.03 persons per square mile) and less than any of the municipalities which surround Springfield Township (i.e., from 178.37 persons per square mile for Mansfield Township to 2,200.70 persons per square mile for Wrightstown Borough).

Regarding the water and sewerage utilities within the Township of Springfield, an understanding of the existing and planned extent and nature of such utilities will dictate how much the environmental attributes of individual properties throughout the Township will be relied upon to provide potable water and sewage treatment capabilities for the people using the land.

#### **EXISTING COMMUNITY FACILITIES**

The existing community facilities within the Township of Springfield are shown on the "Community Facilities" map. As indicated, and as one would expect for such a rural agricultural municipality, the existing community facilities serving the residents and workers within Springfield Township are few in number and small in extent. Summarily, the existing "community facilities" within the Township of Springfield include one (1) community center, three (3) volunteer fire companies, one (1) combined municipal office and police department building, one (1) elementary school, two (2) large municipal park areas and one (1) small neighborhood park.



More specifically, the existing community facilities serving the residents and workers within the Township of Springfield include the following:

<u>Township Offices & Police Department</u>: The municipal administration offices and the police department share the municipal building located in Jobstown on a 20.49 acre lot along Island Road between Jacksonville-Jobstown Road (County Route 670) and Columbus-Jobstown Road.

Fire Companies: Three (3) all volunteer fire fighting companies exist within the Township of Springfield, one (1) each appropriately located within the relatively densely populated settlement areas of Jacksonville, Jobstown and Juliustown.

<u>Schools</u>: The Springfield Township Elementary School is located along Jacksonville-Jobstown Road on a 15.6 acre tract of land across from the municipal building in Jobstown. Thereafter, public education for the junior and senior high school aged children within the Township attend the Northern Burlington County Regional High School located on Mansfield-Georgetown Road in Mansfield Township.

<u>Community Center</u>: A small community center used by the residents of the Township of Springfield is located adjacent the Jacksonville Fire Company along Jacksonville-Jobstown Road.

Municipal Park Areas: The Springfield Township Park currently contains a ballfield and tennis courts located on a 78.48 acre land area near Juliustown in the southeastern corner of the municipality. Additionally, the Township owns a relatively large 109.55 acre land area in the western portion of the municipality between the NJ Turnpike and County Route 670 which currently is vacant and farmed.

<u>Neighborhood Park</u>: The Jacksonville Park currently is an unimproved 1.89 acre land area located along the southerly side of Jacksonville-Jobstown Road across from the Jacksonville Fire Company.

## WATER AND SEWERAGE FACILITIES

Regarding the supply of potable water within the Township of Springfield, no public water supply system exists in the Township and all potable water is pumped from private, individual wells throughout the municipality. However, it is noted that Burlington Township has extended a twelve inch (12") water main a few hundred feet into the western portion of Springfield Township (along Old York Road to its intersection with Neck Road and continuing northerly up Neck Road to loop back into Burlington Township), which potentially could provide public water to a very limited number of Springfield Township residents.

Regarding the treatment of sewage effluent, almost all of Springfield Township relies on individual subsurface sewage disposal systems.

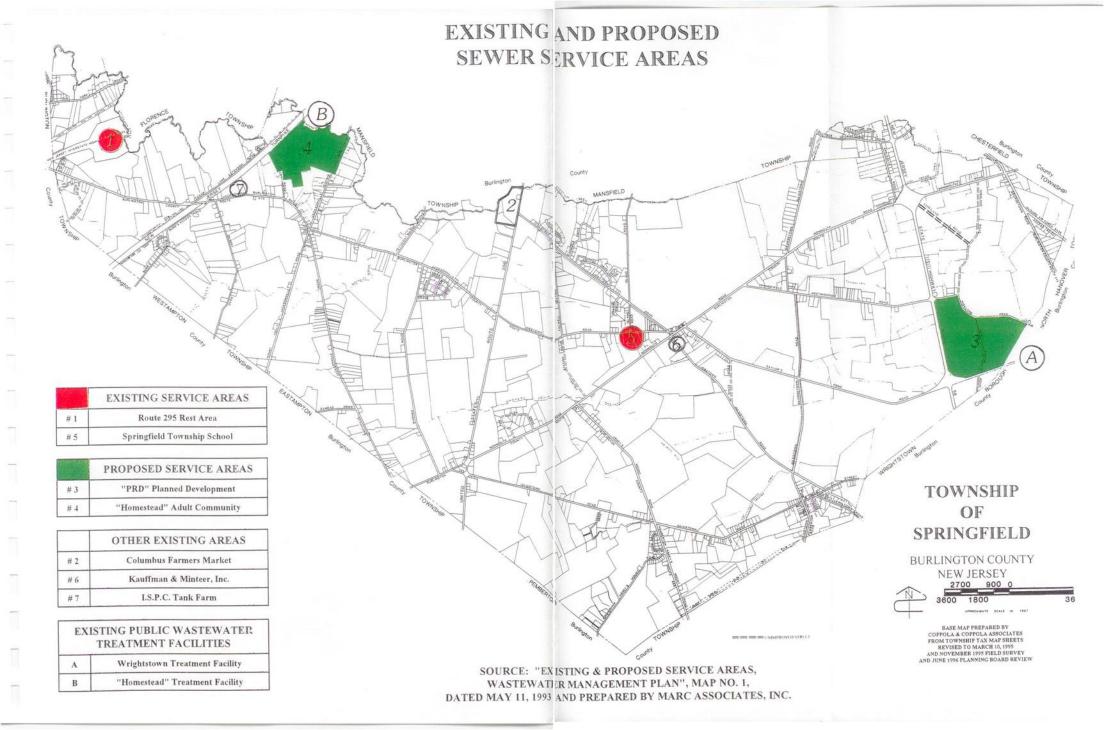
The "Wastewater Management Plan", dated May 11, 1993 and prepared by Marc Associates, Inc. for the Township of Springfield, notes that there are only two (2) small existing areas within the Township presently serviced by wastewater treatment facilities. Additionally two (2) large residential areas within Springfield Township are proposed for sewage treatment service with sewer line extensions from existing wastewater treatment plants located outside the Township. The "Existing And Proposed Service Areas" map indicates the locations of the existing sewer service areas as well as the proposed sewer service areas and the off-site wastewater treatment facilities intended to serve them.

There only are two (2) small land areas and land uses within Springfield Township which presently are served by their own wastewater treatment plants: the Route 295 "Rest Area" within the northwestern corner of the Township and the Springfield Township Elementary School in Jobstown. These wastewater treatment plants are individually designed to service only the two (2) specific uses and are not intended to be expanded beyond the designated land areas.

Additionally, the 1993 "Wastewater Management Plan" of Springfield Township identifies three (3) other specific locations and land uses within the Township which have onsite wastewater treatment facilities: one (1) such location and land use is the Columbus Farmers Market along U.S. Route 206 which has a subsurface disposal system; the other two (2) locations are industrial land uses.

The first of the wastewater treatment facilities designated for a specific industrial use is located on the Kauffman & Minteer, Inc. property along Monmouth Road. Kauffman & Minteer, Inc. had utilized industrial surface impoundment methods for treating the wastewater, but the company has abandoned its operation and the New Jersey State permit for treating the wastewater is expected to be formally terminated. The second of the wastewater treatment facilities designated for a specific industrial use is located on the I.S.P.C. Tank Farm on Jacksonville-Burlington Road near the New Jersey Turnpike, which has an industrial infiltration/percolation lagoon for the treatment of its wastewater discharge.

The two (2) currently proposed sewer service areas are planned for two (2) residential developments. The first of the proposed sewer service areas is the property presently zoned "PRD" Planned Residential Development and located east of State Highway Route 68 and north of Saylor's Pond Road in the eastern portion of Springfield Township along the Wrightstown Borough boundary. The "PRD" zoning of the subject property is to satisfy Springfield Township's current "fair share" affordable housing obligation as mandated by the New Jersey Council On Affordable Housing (COAH). The "PRD" housing development is to be served with both public sewerage facilities and public water facilities by the Wrightstown Municipal Utility Authority as a result of a 1995 Interlocal Service Agreement between Springfield Township and Wrightstown Borough. The Wrightstown wastewater treatment plant capacity is 200,000 GPD, of which 0.0645 MGD is reserved to serve the two hundred fifteen (215) total residential units in the proposed "inclusionary" planned development.

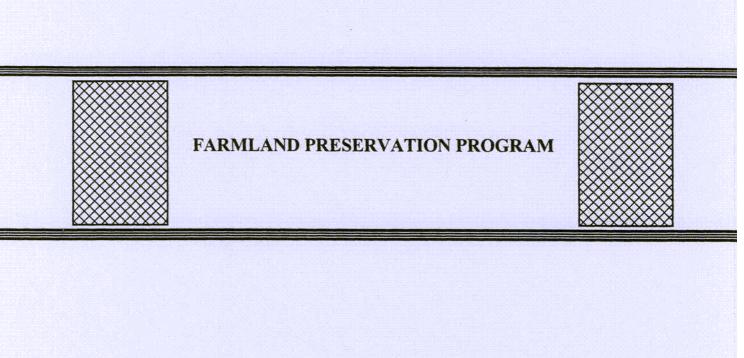


The second of the proposed sewer service areas included in Springfield Township's 1993 "Wastewater Management Plan" is the property currently zoned "R-5" for the proposed "Homestead At Springfield" development, an age restricted adult community of five hundred ten (510) dwelling units to be located between Jacksonville-Hedding Road and the NJ Turnpike along the Mansfield Township municipal boundary line. An additional sixteen (16) existing residential lots adjacent thereto also are proposed to be included within the sewer service area. The wastewater treatment plant to treat the sewage effluent is located in Mansfield Township, is owned and operated by Homestead Treatment Utility Inc. and has a capacity of 250,000 GPD.

#### CONCLUSION

The basic conclusion of this brief "Community Facilities And Utilities Analysis" is that, as one would expect for a rural agricultural municipality such as Springfield Township, the existing community facilities servicing the residents and workers within the Township are few in number and small in extent. Additionally, with very few and specific exceptions, all the lands within Springfield Township are without the existing or planned services of public water facilities or public sewerage facilities, and future development must rely upon the carrying capacity of the land to support both an onsite septic system and potable water well.

It is expected that one outcome of this "Land Use Plan Reexamination And Update Report" will be to reassess the existing "Wastewater Management Plan" for Springfield Township in order to assure that the wastewater management planning for the Township and the land use planning for the Township are completely compatible.



# FARMLAND PRESERVATION PROGRAM

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

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#### FARMLAND PRESERVATION PROGRAM

# Township Of Springfield Land Use Plan Periodic Reexamination And Update Report

#### INTRODUCTION

The Township of Springfield historically is a rural community which has been farmed for many years. The rapid growth experienced during the last decade within many municipalities throughout the State of New Jersey has resulted in the loss of much valued agricultural land and open space. In an effort to encourage the preservation of existing farms and to protect the agricultural lands within Springfield Township, the Township has been and continues to be an active participant in the Farmland Preservation Program established by the State of New Jersey and regulated by the Burlington County Agriculture Development Board.

Three (3) mutually supportive documents have been adopted by the New Jersey State Legislature in order to preserve the economic, social and environmental benefits of agriculture in New Jersey:

#### The Farmland Preservation Bond Act, 1981

This Act expressed the desire of the citizens of New Jersey to preserve farmland by authorizing the expenditure of fifty million dollars (\$50,000,000) to purchase development easements; i.e., the interest in a tract of land which enables the property owner to develop the land for non-agricultural uses. The Act also authorized the payment of state matching funds for soil and water conservation projects.

#### The Right To Farm Act, 1983

This Act established a policy of protecting commercial farm operations using recognized agricultural management practices from legal actions arguing that the farm operation should be curtailed because of perceived "nuisances". The Act also established the State Agriculture Development Committee.

#### The Agriculture Retention And Development Act, 1983

The Act specified the function of the State Agriculture Development Committee and enabled the establishment of County Agriculture Development Boards. The Act also provided for the establishment of voluntary farmland preservation programs and authorized the purchase of development easements and funding of soil and water conservation projects on agriculture lands.

#### SOIL SUITABILITY FOR AGRICULTURAL PURPOSES

As indicated in the "Environmental Analysis" section of this 1996 "Land Use Plan Periodic Reexamination And Update Report", the October 1990 Soil Survey of Burlington County classifies each of the soils in Springfield Township according to its potential agricultural productivity for most kinds of field crops. The soils were grouped according to their limitations for the field crops, the risk of damage if they are used for crops, and the way the soils respond to management. The criteria used to classify the soils do not include major and generally expensive modifications to the natural landform that change the slope, depth or other intrinsic characteristics of the soils.

The soils were classified by the Burlington County U.S.D.A. Soil Conservation Service into one (1) of eight (8) classes, with "Class I" and "Class II" soils generally considered to be "prime" farmland and other "Class II", some "Class III" and a few "Class IV" soils considered to be "farmland of statewide importance". The eight (8) designated classes of farmland and their descriptions are as follows:

Class I	Soils that have few limitations that restrict their use.
Class II	Soils that have some limitations that reduce the choice of plants or that require moderate conservation practices.
Class III	Soils that have severe limitations that reduce the choice of plants, require special conservation practices, or both.
Class IV	Soils that have very severe limitations that restrict the choice of plants, require very careful management, or both.
Class V	Soils that have little or no erosion hazard but have other limitations that make regular cultivation impracticable or that limit their use largely to pasture, range, woodland or wildlife food and cover.
Class VI	Soils that have severe limitations that make them generally unsuited for cultivation and limit their use largely to pasture, woodland or wildlife food and cover.
Class VII	Soils that have very severe limitations that make them generally unsuited to cultivation without major reclamation and that restrict their use largely to grazing, woodland or wildlife.
Class VIII	Soils and land forms that have limitations that preclude their use without major reclamation for commercial production of plants and restrict their use to recreation, wildlife and water supply and to aesthetic purposes.

The October 1990 Soil Survey of Burlington County concludes that thirty-two (32) of the sixty-four (64) soil types within the Township of Springfield "meet the criteria for prime farmland", i.e., including "Class I" and some "Class II" soils.

Summarily, and as graphically shown on the "Soil Suitability For Agricultural Purposes" map, approximately seventy-five percent (75%) of Springfield Township exhibits soils which are considered "prime" (generally Classes I & II) or other soils considered to be "farmland of statewide importance" (Class II, some Class III and a few Class IV).

The fact that the Township of Springfield has an abundance of soil types extraordinarily appropriate for agricultural use is evidenced by the large number of active farms existing throughout the Township. As documented by a February 1996 existing land use survey, the results of which are graphically indicated on the "Existing Land Use" map which appears in the "Existing Land Use Analysis" section of this document, approximately seventy-three percent (73%) of the Township of Springfield is currently "Agricultural/Vacant/Wooded", and it is the agricultural lands which predominate these so-called "undeveloped" lands in the Township.

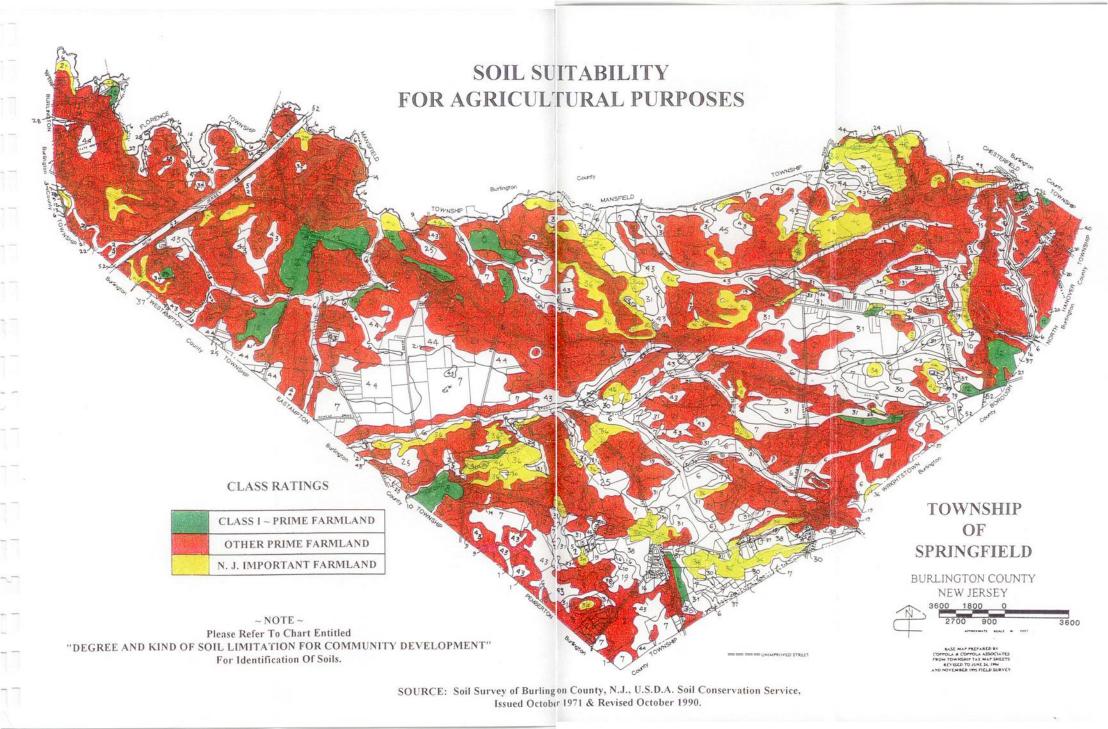
It should be noted that the rating system utilized by the Soil Conservation Service judges the capabilities of the soils to support most kinds of crop farming based upon their inherent qualities; i.e., the natural conditions of the soils with minimal modifications. As a result of basing the rating system upon the natural conditions of the soils, man-made modifications to the lands could cause a modification to the rating system and further enhance the capabilities of the soils for agricultural use.

#### THE BURLINGTON COUNTY AGRICULTURAL DEVELOPMENT BOARD

The Burlington County Board of Chosen Freeholders created the Burlington County Agriculture Development Board (BCADB) which is organized under the Agriculture Retention And Development Act as adopted by the State of New Jersey. It is clear that Burlington County is a leader in farmland preservation.

The Burlington County Agriculture Development Board has the following principal authorities and responsibilities:

- Develop and adopt agriculture retention and development programs which encourage agricultural business and preserve farmland;
- Establish the minimum acreage required for the creation of a farmland preservation program;
- Establish the standards for inclusion of land in a farmland preservation program;

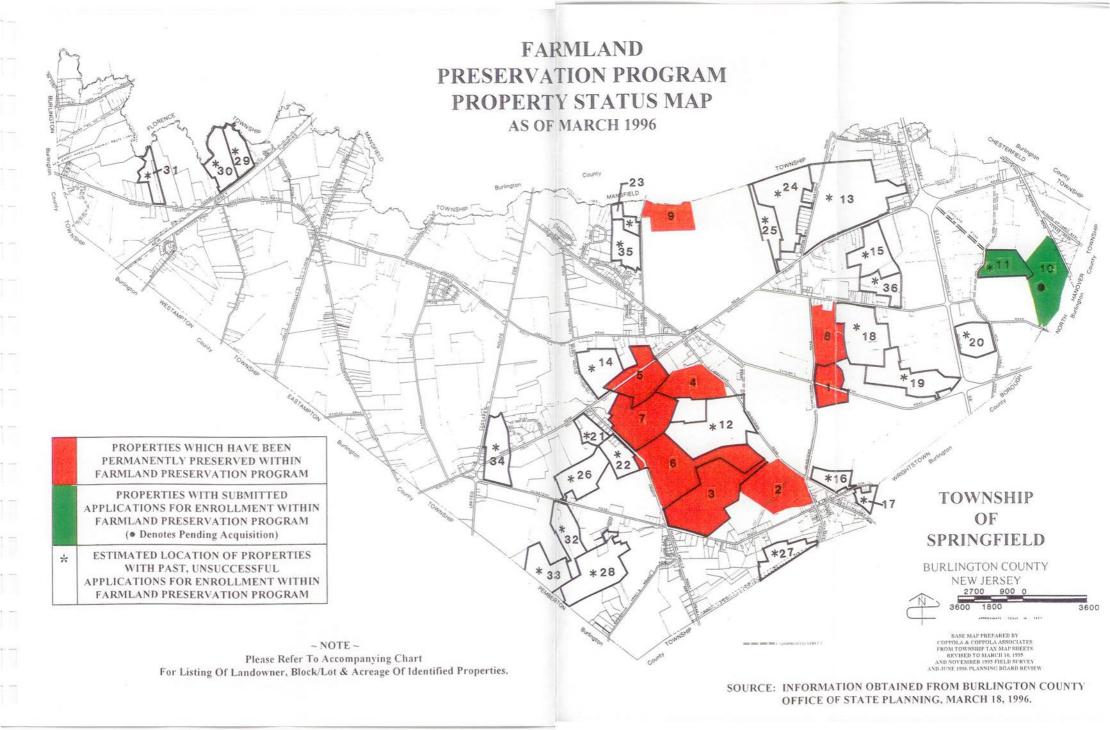


- Review and act on petitions for the formation of a farmland preservation program;
- Review and act on (prior to applications to the State Agriculture Development Committee) applications for financial assistance for development easement purchase and soil and water conservation projects;
- Monitor and make recommendations with respect to resolutions, ordinances, regulations and development approvals that threaten the viability of agricultural activities and farm preservation programs within agricultural development areas; and
- At a municipality's request, require that anyone proposing nonagricultural development in an agricultural development area prepare and submit a statement regarding the proposed development's impact on agricultural activities.

#### THE STATUS OF FARMLAND PRESERVATION IN SPRINGFIELD TOWNSHIP

For informational purposes, and as an unmistakable indication of the extensive participation of the Township's farmers in the Farmland Preservation Program, the "Farmland Preservation Program Property Status Map" shows the land areas in Springfield Township currently deed restricted or proposed for deed restriction under the Farmland Preservation Program. Additionally, the map identifies the approximate location of those properties which have unsuccessfully attempted to enroll within the Farmland Preservation Program, further indicating the interest of the farmers within Springfield Township to preserve their agricultural land uses.

As tabulated on the "Description Of Properties Indicated On Farmland Program Property Status Map" chart, the total land area of Springfield Township currently deed restricted or proposed for deed restriction under the Farmland Preservation Program computes to approximately 1,436.536 acres, or 7.47% of the Township's total area. More specifically, a total of approximately 1,260.536 acres, or 6.55% of Springfield Township, currently are deed restricted under the Farmland Preservation Program, and an additional 176 acres, or 0.92% of the Township, are proposed for deed restriction. Additionally, an added approximate 2,279.94 acres, or 11.85% of the land area within the Township of Springfield, was requested to be enrolled within the Farmland Preservation Program, but money was not available.



# DESCRIPTION OF PROPERTIES INDICATED ON FARMLAND PROGRAM PROPERTY STATUS MAP FOR SPRINGFIELD TOWNSHIP

	Properties Whi Preserved Within F	ch Have Been Pe armland Preserv		
MAP ID#	LANDOWNER	BLOCK # (s)	LOT # (s)	ACREAGE
1	Schumann	1801 & 1901	1 & 13.01	80.011
2	Pettit	1401	11	140.642
3	McDaniel	1401	17.01	233.793
4	Farrell	1401	5	106.175
5	Lamberg	1002 & 1401	4.01 & 23	106.598
6	Brunt	1401	17.02 & 18	236.720
7	Rue	1101 & 1401	17 & 19.01	173.260
8	Shinn	1901	1.01	101.337
9	Bishop	1501	18	82.000
			Total:	1,260.536 ac

	Properties Wit For Enrollment Within	h Submitted App Farmland Preso	•	n
MAP ID#	LANDOWNER	BLOCK # (s)	LOT # (s)	ACREAGE
10	Rahilly	2303	14.01	107 Est.
11	Dublin Creators	2303	12	69 Est.
			Total:	176 ac Est.

	Properties With Pa Enrollment Within	st, Unsuccessful A Farmland Preser	Applications For vation Program	
MAP ID#	LANDOWNER	BLOCK # (s)	LOT # (s)	ACREAGE
12	Russo/Nasto	1401 & 1601	8 & 14	177
13	Tallman	2104 & 1501	5 & 22	328
14	Mottola	1002	1.01	94
15	Banning	2003	3.01	98.1
16	Haines, J.	1801	5	47.5
17	Haines, P.	1801	7.01	32
18	Hidden Oak	1901	1.06 & 2.01	160
19	Hayes	1901	11	118.45
20	Nicholson	1902	3	73
21	Hoopes	1101	7.02 & 7.03	38
22	Schoenlebar	1101	16.01 - 16.04	61.88
23	Adams	802	8.01	25
24	Springfield Assoc.	1501	21.01	157.61
25	Garrison	1501	19	35
26	Holden	1101	15.01	95
27	Roberts	1301	17.01	74
28	Calmon	1201	15 & 28.01	150
29	Bauma, James	303	28.02	55
30	Bauma, John	303	28.01	79
31	Frank	303	21.01 & 21.02	50.4
32	Choi	1201	10.01 & 10.02	81
33	Cramer	1201	8	80
34	Shulman	1001 & 1101	11.01 & 3	102
35	Patel	802	9.01	34
36	Patel	2003	12.03	34
			Total:	2,279.94 ac

#### AGRICULTURAL DEVELOPMENT AREAS

In order for a property to be included under the Farmland Preservation Program, the property must be identified by the Burlington County Agriculture Development Board as being located within an "Agriculture Development Area" (ADA). An "Agriculture Development Area" is an area where agriculture is the preferred use of land, although not necessarily the exclusive use of land.

The following criteria must be met in order for a land area to be identified as an "Agriculture Development Area":

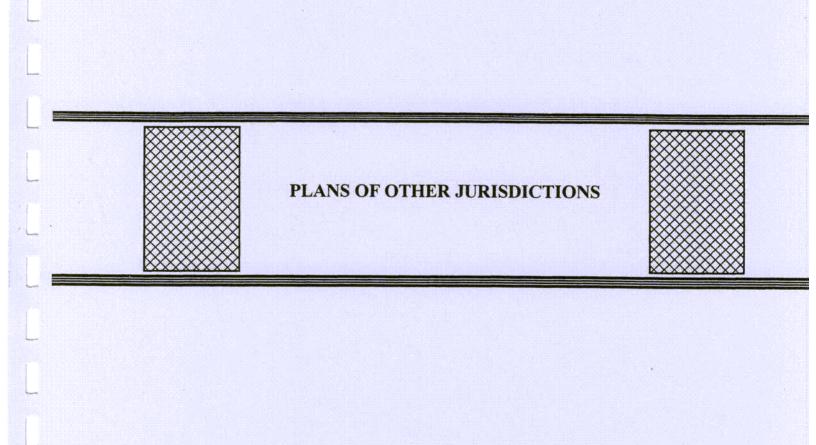
- The land area must encompass productive agricultural lands which are currently in production and/or have a strong potential for future farming;
- Agriculture must be a permitted land use under the current municipal zoning ordinance provisions;
- The land area must be relatively free of non-agricultural suburban and/or conflicting commercial development;
- The aggregate land area identified within all ADA's in Burlington County cannot exceed ninety percent (90%) of the total agriculture land mass in the County;
- The owner of the land must be eligible to qualify for differential property tax assessment pursuant to the Farmland Assessment Act of 1964; and
- Woodland areas can be included within an ADA if forest management plans are followed.

Once a property is identified as being located within an "Agriculture Development Area" (ADA), the property owner may petition the Burlington County Agriculture Development Board for it to purchase the farm's "development easements"; i.e., the interest in the farm which enables the farm owner to develop the land for non-agricultural land uses.

The Land Evaluation Site Assessment (LESA) system developed by the United States Soil Conservation Service is used by the Burlington County Agriculture Development Board to rank a property being considered for the purchasing of development easements. In accordance with the LESA rating system, a property can achieve a maximum of one hundred (100) points based upon soil productivity plus an additional two hundred (200) points for location and land use planning factors.

#### CONCLUSION

The fact that the Township of Springfield has an abundance of soil types extraordinarily appropriate for agricultural use is evidenced by the large number of active farms existing throughout the Township. Approximately seventy-three percent (73%) of Springfield Township's land area has been classified as being "Agricultural/Vacant/Wooded", and it is the agricultural lands which predominate these so-called "undeveloped" lands. In an effort to encourage the preservation of the existing farms within Springfield Township, the Township has been and will continue to be an active participant in the Farmland Preservation Program established by the State of New Jersey and regulated by the Burlington County Agriculture Development Board.



# PLANS OF OTHER JURISDICTIONS

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

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# PLANS OF OTHER JURISDICTIONS

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

#### INTRODUCTION

Although land use planning in New Jersey remains principally a municipal prerogative, local governments must take into account regional forces and trends which may impact upon the municipality. Both New Jersey State legislative policies and relatively recent New Jersey court decisions have necessitated that local governments adopt a responsive and responsible approach to certain problems which may be regional in scope.

Additionally, N.J.S.A. 40:55D-28 d. of the Municipal Land Use Law requires that a municipal Master Plan "shall include a specific policy statement indicating the relationship of the proposed development of the municipality as developed in the master plan to (1) the master plans of contiguous municipalities, (2) the master plan of the county in which the municipality is located, (3) the State Development and Redevelopment Plan..., and (4) the district solid waste management plan required pursuant to the provisions of the "Solid Waste Management Act..." of the County in which the municipality is located."

Whether or not the municipal Master Plan actually integrates the policies of these other governmental agencies or, instead, offers a rational alternative to them, it is clear that appropriate regional policies must at least be acknowledged and evaluated in light of local planning objectives.

Therefore, this portion of the Springfield Township 1996 "Land Use Plan Periodic Reexamination And Update Report" identifies and discusses the land use planning policies of the New Jersey State Development And Redevelopment Plan, the plans of the Burlington County Office of Land Use Planning, the zone plans of the municipalities adjacent to Springfield Township, and the Burlington County Solid Waste Management Plan; each as they affect and are affected by the land use planning decisions of the Township of Springfield.

# THE NEW JERSEY STATE DEVELOPMENT AND REDEVELOPMENT PLAN

On June 12, 1992, the New Jersey Planning Commission adopted "Communities Of Place: The New Jersey State Development And Redevelopment Plan" (SDRP) which is to serve as a guide for municipal and county master planning. The SDRP provides two (2) components to achieve the stated goals: 1) a "Statewide Policy Structure"; and 2) a "Resource Planning And Management Structure". Regarding the "Statewide Policy Structure", seventeen (17) general policies for the State of New Jersey are set forth in the SDRP.

Regarding the "Resource Planning And Management Structure", the State Development And Redevelopment Plan (SDRP) has allocated the land with New Jersey into "Planning Areas" and "Centers". The "Centers" are those lands within the "Planning Areas" where growth is first encouraged. The surrounding areas, or "Environs", are those lands outside the "Centers".

As indicated on the "Resource Planning And Management Map (RPMM)", the New Jersey State Planning Commission has included almost the entirety of the Township of Springfield's land area within "Planning Area 4" (the "Rural Planning Area").

Additionally, one (1) very small portion of Springfield Township (seven [7] lots) has been included within "Planning Area 2" (the "Suburban Planning District"). Finally, the military reservation lands (Fort Dix and the McGuire Air Force Base) have been included within "Planning Area 10" (Pinelands). Essentially, therefore, the entirety of the Township of Springfield has been included within "Planning Area 4" (the "Rural Planning Area").

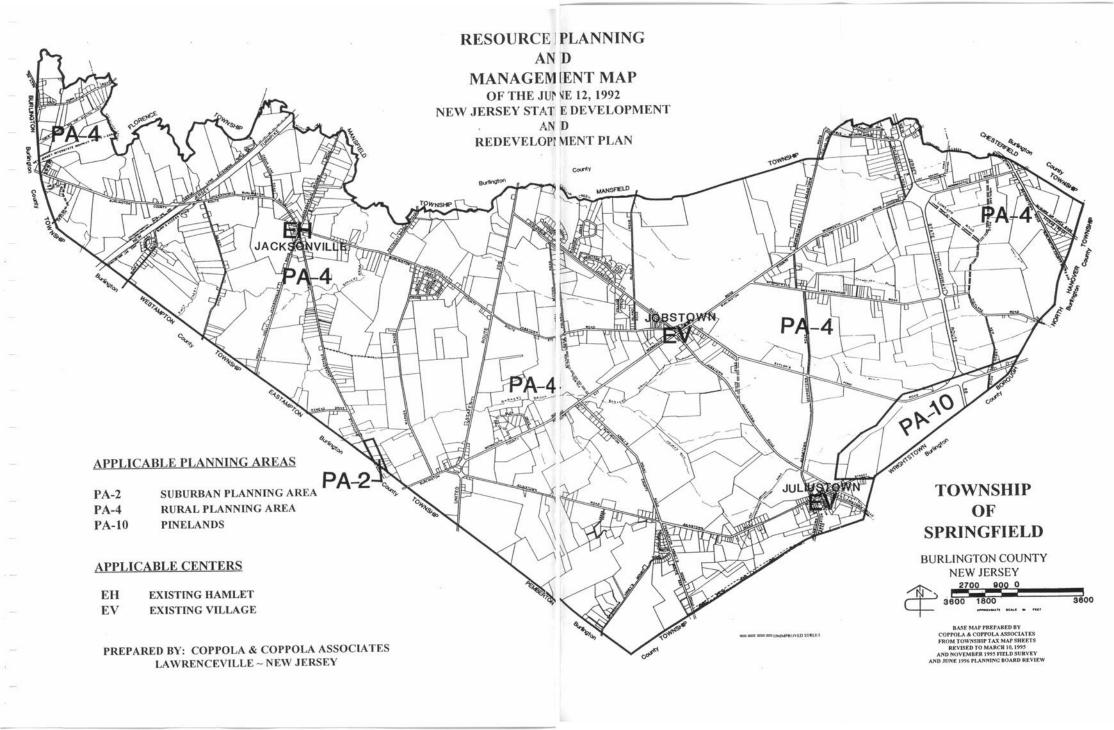
## Planning Area 4

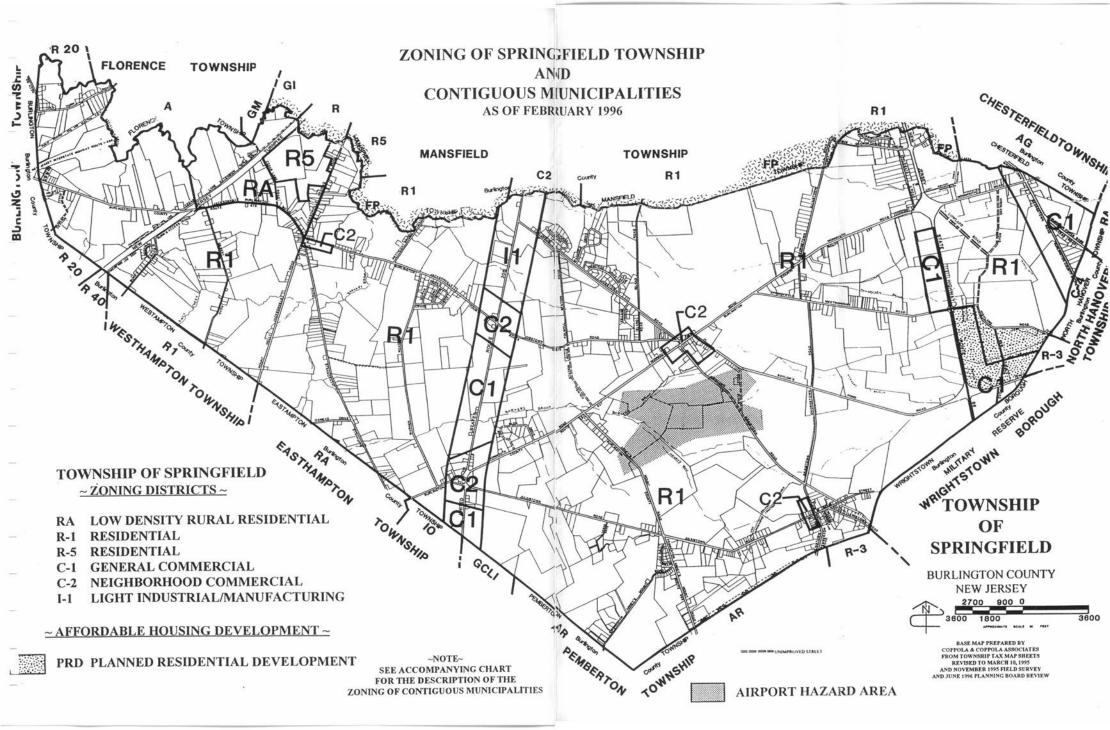
The State Development And Redevelopment Plan (SDRP), on page 110, contains the following "General Description" of the "Rural Planning Area" (i.e., "Planning Area 4") ":

"The Rural Planning Area includes large masses of undeveloped land interspersed by sparse residential, commercial and industrial development; wooded tracts; rural towns and villages; and most of the State's prime farmland... With respect to agriculture, these lands are currently under cultivation and are the State's most productive. They also have the greatest potential of sustaining continued agricultural activities in the future. Their location, current use and high soil quality distinguish them from agricultural lands in other Planning Areas.

"...Prudent land development practices are required to protect water resources and retain large, contiguous tracts of agricultural land. If a viable agricultural industry is to be sustained in the future, the conversion of some of these lands to nonfarm uses must be sensitive to the Area's predominant rural character and agricultural land base."

It is the stated "Intent" of the State Development And Redevelopment Plan (SDRP) to protect agricultural lands "by encouraging future rural development in a form that supports, rather than conflicts with, the Area's predominant rural character and agricultural land base." The SDRP further recommends that the development within the "Rural Planning Area" occur within designated "Centers", and the "Environs" lands outside of the "Centers" remain available for agricultural purposes.





Area 4" (the "Rural Planning Area"), N.J.A.C. 5:93-5.4 (c) of the "Substantive Rules" of the New Jersey Council On Affordable Housing (COAH) states the following regarding the location of "inclusionary" developments within the municipality:

(c) In Planning Areas 4 or 5, as designated in the SDRP, the Council shall require inclusionary development to be located in centers. Where the Council determines that a municipality has not created a realistic opportunity within the development boundaries of a center to accommodate that portion of the municipal inclusionary component that the municipality proposes to address within the municipality, the Council shall require the municipality to identify an expanded center(s) or a new center(s) and submit the expanded or new center(s) to the State Planning Commission for designation.

#### **BURLINGTON COUNTY MASTER PLAN**

At this time, Burlington County has not formulated a "Land Use Plan Element" of a Master Plan, but has formulated a November 8, 1989 "Burlington County Highway Master Plan" which comprehensively considers the existing and future road network throughout the County. Summarily, for the purposes of this "Land Use Plan Periodic Reexamination And Update Report", the information within the "Burlington County Highway Master Plan" is not relevant; however, it is relevant and will be considered as part of the "Traffic Circulation Plan Element" portion of the Springfield Township Master Plan.

Additionally, Burlington County recently adopted a comprehensive "Farmland Preservation Plan", which is very relevant to the ongoing objective of the Township of Springfield to preserve farmland and maintain is rural agricultural character.

Finally, it should be noted that while Burlington County has no "Planning Department", it does have an "Office of Land Use Planning" which has been very helpful and supportive of Springfield Township's efforts to complete this Master Plan document.

# ZONING OF CONTIGUOUS MUNICIPALITIES

N.J.S.A. 40:55D-28 d.(1) of the Municipal Land Use Law stipulates that a municipal Master Plan must contain a statement indicating the relationship of the proposed development of the municipality to the master plans of contiguous municipalities. The essential goal is to assure that the zoning districts on either side of the municipal jurisdictional boundaries permit land uses which are compatible with each other.

The "Zoning Of Springfield Township And Contiguous Municipalities" map indicates the existing zoning (as of February 1996) both within Springfield Township and at the border of the nine (9) municipalities contiguous to Springfield Township.

The "Description Of The Zoning Of Contiguous Municipalities" chart indicates the names of the applicable zoning districts within the subject nine (9) municipalities and the minimum lot size or maximum density permitted.

Summarily, an analysis of the "Zoning Of Springfield Township And Contiguous Municipalities" map and the information on the accompanying chart indicates that almost all of the existing zoning along the municipal borders is compatible. However, the following contiguous zoning districts may create the close proximity of incompatible land uses:

- The "IO" Industrial Office and "GCLI" General Commercial/Light Industrial zoning districts in Pemberton Township abut the existing "R-1" Residential zoning district within Springfield Township which backs up against both sides of the "C1" General Commercial zoning district which extends in a strip pattern along both sides of U.S. Route 206;
- The "C2" Highway Commercial zoning district in Mansfield Township abuts the "R-1" Residential zoning district within Springfield Township which backs up against the "I-1" Light Industrial/Manufacturing zoning district along the east side of U.S. Route 206, although the potential problem of incompatible land uses is mitigated because of the extensive flood plains associated with the Assiscunk Creek;
- The "AG" Agriculture zoning district in Chesterfield Township and the "R-A" Residential-Agriculture zoning district in North Hanover Township abut the "C-1" General Commercial zoning district within Springfield Township; and
- The "C-4" Commercial Zone-Restricted zoning district in North Hanover Township abuts the "R-1" Residential zoning district within Springfield Township.

The Township of Springfield should attempt to remove or mitigate against these potential areas of incompatible land uses as part of the update of the "Land Use Plan Element" portion of the Township Master Plan.

# THE SOLID WASTE MANAGEMENT PLAN

Burlington County has adopted "The Solid Waste Management Plan For Burlington County", dated February 1979, as amended, and the Township of Springfield helps implement the plan.

# DESCRIPTION OF THE ZONING OF CONTIGUOUS MUNICIPALITIES As Of February 1996

<b>Burlington Township</b>
----------------------------

R 40 Low Density Residential 40,000 s.f. R 20 Medium Density Residential 20,000 s.f.

# **Chesterfield Township**

AG Agriculture With Farmland Preservation: 1 ac. on 10%

of tract plus 3% ac. on remaining 90%, OR Without Farmland Preservation: 1 ac. on 10% of tract plus 10 ac. on remaining 90%.

# **Eastampton Township**

RA Rural Agriculture 3 ac. IO Industrial Office 5 ac.

# Florence Township

A Agriculture 3 ac.
GM General Manufacturing 60,000 s.f.

## **Mansfield Township**

R1 Residence 3 ac.
R5 Residence 5,000 s.f.
C2 Highway Commercial 2 ac.
GI General Commercial 2 ac.
FP Flood Plain Not Applicable

#### North Hanover Township

R-A Residential-Agricultural 2 ac. C-4 Commercial Zone-Restricted 2 ac.

# Pemberton Township

AR R-3 GCLI Agricultural Residential Medium Density Residential General Commercial/

6 ac. 3.2 ac.

Light Industrial

30,000 s.f. w/sewers OR 1 ac. without sewers.

# Westampton Township

R1

Residential

l ac.

# Wrightstown Borough

R-3

Single-Family Residential

15,000 s.f.

Sources:

Current Municipal Zoning Ordinances As Of February 1996.

The State Development And Redevelopment Plan (SDRP) proposes that the following "planning and mitigation tools". among others, will be helpful in encouraging appropriate patterns of development in the "Rural Planning Area" (i.e., "Planning Area 4"): clustering; capacity-based planning; timing and sequencing; privately coordinated multi-tract development; transfer of development rights programs; purchase of development rights programs; and "right-to-farm" ordinances.

The following specific "Policy Objectives", among others, are recommended on pages 113 and 114 of the State Development And Redevelopment Plan (SDRP) for the "Rural Planning Area":

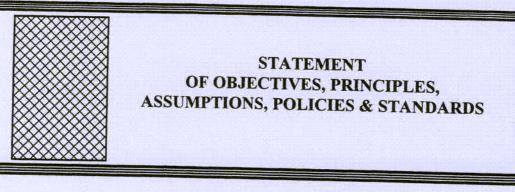
Land Use: Enhance agricultural viability and rural character by guiding development and redevelopment into Centers. Ensure that the location, pattern and intensity of any development in the Environs maintains existing low-density development patterns that complement the rural character and landscape, and maintain large contiguous areas of open space. Any development in Planning Area 4 should be designed using creative land use and design techniques to ensure that it does not conflict with agricultural operations, does not exceed the capacity of natural and built systems and protects areas where past public investments in farmland preservation have been made.

<u>Housing:</u> Encourage the production of reasonably priced housing for all segments of the population within Centers, recognizing the special locational needs of agricultural employees.

<u>Economic Development:</u> Promote economic activities within Centers that complement and support the rural and agricultural communities and that provide diversity in the rural economy and opportunities for off-farm income and employment.

Agriculture and Farmland: Give priority to Rural Planning Area for farmland preservation funding and agricultural incentive programs.

<u>Public Facilities and Services:</u> Support appropriate infrastructure development by establishing adequate levels of capital facilities and services to support Centers; to protect large contiguous areas of productive farmlands; to protect past public investments in farmland preservation programs; and to minimize conflicts between Centers and surrounding farms.



# STATEMENT OF OBJECTIVES, PRINCIPLES, ASSUMPTIONS, POLICIES AND STANDARDS

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

The Municipal Land Use Law, enacted by the State Legislature on January 14, 1976, empowers municipal governments with the right to control the physical development of the lands within their bounds subject to adherence to the provisions of the law, including its "intent and purpose". N.J.S.A. 40:55D-2 of the Municipal Land Use Law, as amended, lists fifteen (15) general purposes regarding the local planning process which are as follows and which must be accepted by the Township of Springfield and promoted by the municipal Master Plan and the implementing Land Development Ordinance provisions:

- "a. To encourage municipal action to guide the appropriate use or development of lands in this State, in a manner which will promote the public health, safety, morals, and general welfare;
- To secure safety from fire, flood, panic and other natural and manmade disasters;
- To provide adequate light, air and open space;
- d. To ensure that the development of individual municipalities does not conflict with the development and general welfare of neighboring municipalities, the county and the State as a whole;
- e. To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions and preservation of the environment;
- f. To encourage the appropriate and efficient expenditure of public funds by the coordination of public development with land use policies;
- g. To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens;

- To encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which result in congestion or blight;
- To promote desirable visual environment through creative development techniques and good civic design and arrangements;
- j. To promote the conservation of historic sites and districts, open space, energy resources and valuable natural resources in the State and to prevent urban sprawl and degradation of the environment through improper use of land;
- k. To encourage planned unit developments which incorporate the best features of design and relate the type, design and layout of residential, commercial, industrial and recreational development of the particular site;
- To encourage senior citizen community housing construction;
- m. To encourage the coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land;
- n. To promote utilization of renewable energy sources; and
- O. To promote the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices designed to incorporate the State Recycling Plan goals and to compliment municipal recycling programs."

Additionally, N.J.S.A. 40:55D-28 b. of the Municipal Land Use Law requires that each municipal master plan contain 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". Clearly, the "goals and objectives" formulated by the municipality must be consistent with the fifteen (15) general purposes listed in the Municipal Land Use Law.

The 1987 Master Plan of the Township of Springfield included the following eight (8) "goals and objectives":

- "1. To maintain the rural character of the Township, but recognize the requirements of several laws that pertain to development.
- To provide a desirable place to live, work, and play.
- 3. To preserve farmlands, woods, streams, and the natural areas that presently characterize the Township.
- To guide development to locations that are consistent with the environment and can be adequately served by the municipal facilities.
- 5. To provide for a variety of residential, commercial, industrial, public, agricultural, recreational, and conservation uses.
- To insure that development is compatible with existing and proposed development in the surrounding communities.
- To provide for the efficient movement of people and traffic through the Township.
- To provide the opportunity for housing low and moderate income families."

On December 21, 1993, the Springfield Township Planning Board adopted a "Master Plan Reexamination" report which included the following important "Goal Statement":

"The central goal and focus of this Master Plan is to preserve and promote the viability of the local agricultural economy and the rural character which farms and farming lend to the Township as a whole and to insure that future development in Springfield Township is consistent with the goals and objectives of the State Development and Redevelopment Plan."

The 1993 "Master Plan Reexamination" report carried forward the "goals and objectives" of the 1987 Master Plan, but added the following "objectives" which were noted as being particularly germane to the "Master Plan Reexamination" report:

- "1. To manage and control growth and development in such a way as to preserve and protect the Township's physical environment and natural resources, especially productive agricultural land.
- 2. Encourage farming to remain the predominant land use in Springfield Township. Create an atmosphere conducive to the economic well-being of the agricultural industry by minimizing or eliminating conflicts between development and agricultural operations, encouraging investment in agriculture, creating opportunities for new generations of farm families to stay on the land and protecting the farmer's equity.
- Control, direct and guide future development to areas of the Township where the use of existing infrastructure can be maximized and where the need for new infrastructure can be minimized, where the land and the environment is best suited for it and has the carrying capacity to accommodate it and where it will be consistent with development in adjoining municipalities but not intrude into the agricultural heart of the Township.
- Provide for a balance of agricultural, residential and commercial uses in locations that compliment, not conflict with one another.
- 5. Provide for a variety of housing, including a realistic opportunity for the creation of the Township's fair share of low and moderate income housing."

The "goals and objectives" of the Springfield Township's 1987 Master Plan and its 1993 "Master Plan Reexamination" report essentially remain valid today. However, given the comprehensive scope of this current "Land Use Plan Periodic Reexamination And Update Report", it is advisable and prudent to consolidate, refine, embellish and expand upon the previously written "goals and objectives" into one cohesive and updated statement.

Therefore, the following fourteen (14) "goals and objectives" represent the "statement of objectives, principles, assumptions, policies and standards" upon which the development of the Township of Springfield shall be based:

- 1. The Master Plan of the Township of Springfield should maintain the continuity of the Township's planning process and build upon and refine the past planning decisions of the municipality, consistent with present local and regional needs, desires and obligations.
- The identity of the Township of Springfield as a totality and the integrity of its individual neighborhood areas should be preserved, enhanced and created to the maximum extent possible.
- 3. The Master Plan should strive to prevent the homogenous spread of suburban type development throughout the Township of Springfield. Specific areas of the Township should be designated for specific types of residential and non-residential development. The rural and agricultural atmosphere which prevails throughout most of Springfield Township should be maintained.
- 4. Farmland should be preserved to the maximum extent possible in a manner that is reasonable, achievable and equitable to the farmer:
  - a. In order to preserve farmland within the Township of Springfield, a pattern of development should be created and maintained whereby the well-being of the agricultural industry is safeguarded from the conflicts ordinarily resulting from the location of large suburban type development adjacent farmland operations;
  - b. The "Right To Farm" ordinance should be required to be shown on all approved subdivision maps and should be communicated to all prospective home buyers within the Township; and
  - Both public and private participation in the New Jersey State Farmland Preservation Program should be encouraged.

### **Hamlet Centers**

In addition to the designated "Planning Areas", a number of "Centers" are designated within the Township of Springfield. The term "Center" generally means an existing or planned core or node of development which ranges in scale from an "Urban Center" to a "Regional Center", a "Town", a "Village", and a "Hamlet". Specifically regarding the Township of Springfield, there are three (3) "Existing Hamlets" indicated on the "Resource Planning And Management Map (RPMM)" including "Jacksonville", "Jobstown" and "Juliustown".

The State Development And Redevelopment Plan (SDRP) defines the term "Hamlet" as follows:

"Hamlet means an existing or planned settlement, predominantly residential, that accommodates development in a more compact form than might occur otherwise in scattered clusters and single-tract, standard-design subdivisions on nearby individual tracts of land."

Regarding the "Jacksonville", "Jobstown" and "Juliustown" "Existing Hamlets" indicated on the "Resource Planning And Management Map (RPMM)" within Springfield Township, each has been indicated to acknowledge the existing compact settlements which have an historic role in the development of Springfield Township. They were not indicated necessarily as the locations for extensive future development; in fact, there is very little capacity of the natural resources within these portions of Springfield Township to support significant additional development and the three (3) "Existing Hamlets" are not served by public sewerage and/or water facilities.

At this time, the "Existing Hamlets" are only generally indicated on the "Resource Planning And Management Map (RPMM)" and the precise limits of the "Centers" have not been established. If requested by Springfield Township, the Office of State Planning will review petitions for the official "designation" of one (1) or more of the "Existing Hamlets". When and if so "designated", the "community development boundary" of the "Center" and the targets for population and employment within the "Center" will be established. When a "Center" is officially "designated" as part of the State Development And Redevelopment Plan (SDRP), the land area is given priority for public investment and expedited permit reviews and approvals by New Jersey State governmental agencies.

# **Location Of Affordable Housing Developments**

The State Development And Redevelopment Plan (SDRP) has a direct relationship with the "Substantive Rules" of the New Jersey Council On Affordable Housing (COAH) regarding how and where a municipality can satisfy its "fair share" affordable housing obligation. Regarding those municipalities which have their potentially developable lands located within "Planning

- 5. The Master Plan should recognize the physical characteristics of the Township of Springfield and acknowledge the inherent capabilities and limitations of the land to host different types of community development at appropriate densities and intensities:
  - a. Conservation of the existing natural resources with the Township should be an integral part of the planning process, with special attention to the constraints of environmentally critical and sensitive areas, including wetlands, 100-year flood plains and lands with topographic slope of fifteen percent (15%) and greater;
  - b. In order to safeguard against the contamination of underground potable water supplies from the septic effluent discharged above near ground level, the capacity of the soils throughout the Township to absorb *and* adequately filter septic effluent before the effluent enters the potable water supply should be considered when establishing residential densities and minimum lot sizes for housing within the Township;
  - c. The groundwater resources of the various geologic formations within the Township should be considered, and care should be taken to permit densities and intensities of development commensurate with the capacities of the underlying aquifers to provide an adequate potable water supply; and
  - d. Based upon the documented information regarding the physical characteristics of the land and its ability to support the development of residential dwelling units which rely upon septic disposal systems, the minimum lot sizes required within the residentially zoned land areas of the Township should be periodically reassessed and changed when deemed prudent in order to protect existing and future homeowners from any degradation of the environment which would affect the homeowners' quality of life.
- 6. The Master Plan should adhere to the policy objective of the "New Jersey State Development And Redevelopment Plan" which basically states that "Rural Planning Areas" such as the Township of Springfield should maintain existing low density development

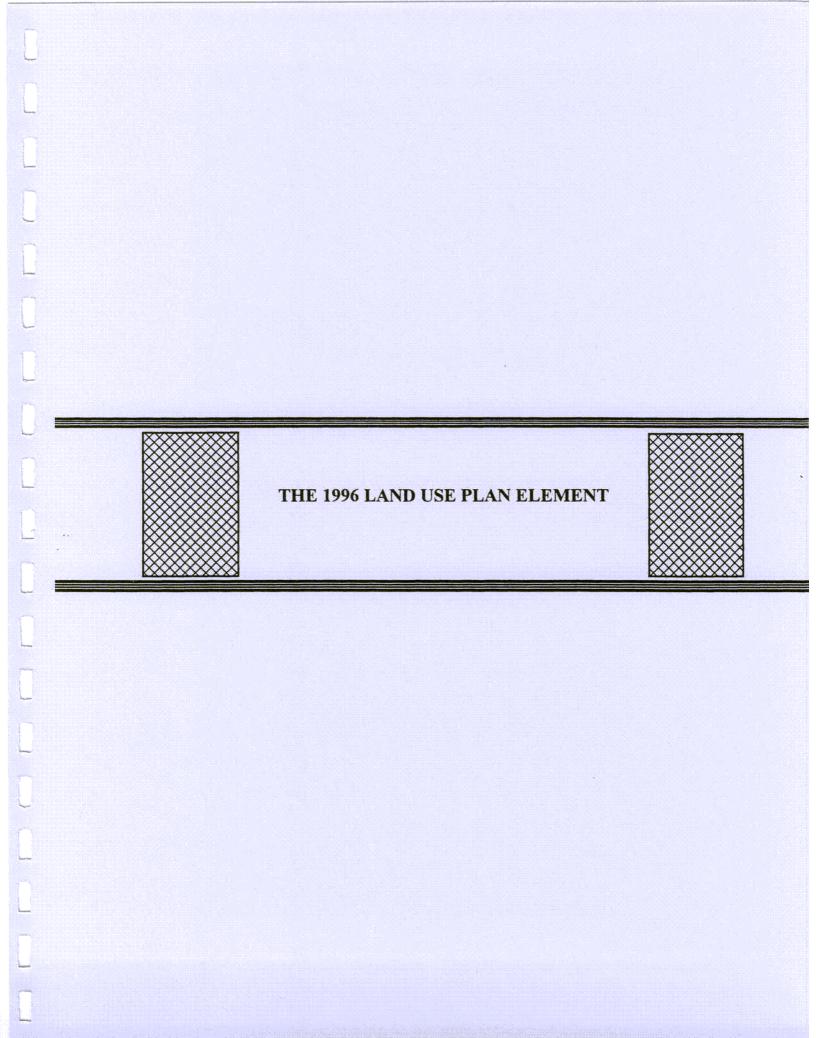
patterns that complement the rural character of the landscape by using creative land use and design techniques to ensure that any future development does not conflict with the agricultural operations, does not exceed the capacity of the natural environment to support such development and protects those areas of the Township where past public investments in farmland preservation have been made.

- 7. The Master Plan should recognize and reasonably limit the probability of excessively rapid development which can cause a radical transformation of Springfield Township and which can have negative impacts upon the natural environment, jeopardize the agricultural industry and create a suddenly acute need for community services and infrastructure.
- 8. Recognizing the pressures for land development along State Route 206, which passes through the center of Springfield Township, but also desiring to prevent the evolution of so-called "strip commercial" development along the highway's frontage, the Township should provide for the reasonable development of single-family homes in a clustered pattern which will set the homes back from the highway and which will protect the scenic viewsheds along the highway which exemplify the Township's rural character and atmosphere.
- 9. To the extent reasonable possible and of secondary importance to the preservation of farmland within the Township, the Master Plan should attempt to ensure that all future major residential developments in the Township of Springfield provide sufficient amounts and types of appropriate facilities for a variety of passive and active recreational purposes.
- 10. The Master Plan should strive to improve upon the commercial and industrial vitality of the Township of Springfield, including the following objectives:
  - a. The Township should promote new development of nonresidential uses, but only within appropriate locations which are self-contained and which discourage the evolution of so-called "strip commercial" development;
  - The Township should continually consider innovative methods of permitting and controlling non-residential development in the Township, such as the clustering

concept within "planned commercial developments" and "planned industrial developments" which would allow the permitted non-residential development on the tract of land, but which also would encourage the preservation of environmentally fragile lands, require the provision of expansive buffer strips bordering agriculturally and residentially zoned land areas and permit the provision of useable open space for appropriate recreational activities; and

- c. The Township should maintain an overall goal to promote a strong local economy so that appropriate retail establishments are provided for the convenience of the Township residents, job opportunities are available and a balanced tax base is created.
- The Master Plan should attempt to lessen the need to widen and improve the roads located throughout the rural agricultural portions of Springfield Township. Therefore, the so-called "ribbon residential" pattern of single-family detached dwelling development, with a succession of driveway access points along the frontage of the rural roads, should be discouraged, since the driveway access points themselves can create a need to widen the roads with additional pavement.
- 12. The Master Plan should continue to address the mandate of the "Mt. Laurel II" New Jersey State Supreme Court Decision and the requirements of the New Jersey Council On Affordable Housing (COAH), which obligates each municipality to provide for its "fair share" of its region's "low" and "moderate" income housing.
- 13. The Master Plan (including the Land Use Plan Map) and the Land Development Ordinance provisions adopted to implement the Master Plan (including the Zoning Map) should be clearly and concisely drafted in order to eliminate the necessity for landowners to request deviation from the adopted provisions in order to remedy inconsistencies in the plan or the ordinance provisions. Moreover, variances from the ordinance provisions should only be requested and granted for legitimate "hardship" and/or "special" reasons in accordance with the Municipal Land Use Law (N.J.S.A. 40:55D-1, et seq.).

14. Since the Planning Board and the Zoning Board of Adjustment rely heavily upon the Township Zoning Officer, the Township Construction Official and the Township Engineer to enforce the provisions of the Land Development Ordinance and to assure that any approved site plan and/or subdivision plat is developed in accordance with all conditions of the applicable Board approval, the Township should continue to provide the necessary support to these individuals so that they fulfill their responsibilities to their offices and to the Township.



# THE LAND USE PLAN ELEMENT

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

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#### THE LAND USE PLAN ELEMENT

# Township of Springfield Land Use Plan Periodic Reexamination And Update Report

#### INTRODUCTION

The Township of Springfield is located at the northern end of Burlington County and is bordered by nine (9) other municipalities in Burlington County. The Township of Springfield contains approximately 30.05 square miles or 19,232 acres of land and water area.

A small portion of the Township of Springfield (approximately 267.5 acres) is part of the United State's Fort Dix Military Reservation. This land area also is under the jurisdiction of the Pinelands Commission; however, since the federal government owns the land, there is no need for the Township of Springfield to regulate the land area in accordance with the "Pinelands Comprehensive Management Plan" at this time.

Between 1980 and 1990 the Township of Springfield almost doubled its small population from 1,691 persons in 1980 to approximately 3,028 persons in 1990. The residential development which has occurred within Springfield Township has been a combination of the creation of residential lots along the frontages of the existing roadways in the Township and some small major residential subdivisions scattered throughout the municipality. Nevertheless, even with the relatively significant residential growth in recent years, the Township of Springfield has maintained its notable rural agricultural character.

The primary reason that the Township of Springfield has maintained its rural agricultural character is that most of its land is not merely "undeveloped", but is actively used for bona fide agricultural purposes. The natural suitability of Springfield Township for farming is one of its prominent features; approximately seventy-five percent (75%) of its land is rated as "prime" farmland (Classes I or II) by the U.S.D.A. Soil Conservation Service in its Burlington County Soil Survey.

Another reason that the Township of Springfield has maintained its rural agricultural character is that the environmental attributes of the land in the Township inhibit and significantly limit the potential for development. The wetness of the land, caused by a combination of high water tables and poorly drained soils, presents a formidable obstacle for the development of single-family detached dwellings and other structures, particularly those with basements.

Moreover, there are no public water or sewerage treatment facilities within the Township of Springfield available for development at this time; all development must rely upon the capacity of the natural environment to support a septic system and a potable water well. It is clearly evident that the wet soils throughout the vast majority of Springfield Township do not readily drain and filter septic effluent.

It is the overall "mission" of this 1996 "Land Use Plan Periodic Reexamination And Update Report" to further substantiate and build upon the accomplishments and intentions of Springfield Township to reasonably safeguard its rural agricultural character in a manner which is consistent with the findings and recommendations of the "New Jersey State Development And Redevelopment Plan", adopted by the New Jersey State Planning Commission on June 12, 1992. The preservation of farmland within the Township of Springfield must be accomplished in a manner which is reasonable, achievable and equitable to the farmer.

The current existing Master Plan of the Township of Springfield consists of the following three (3) documents:

- 1987 "MASTER PLAN STUDIES FOR SPRINGFIELD TOWNSHIP", adopted January 5, 1988. The 1987 Master Plan was prepared by the Springfield Township Planning Board with the assistance of engineer Kenneth Anderson, attorney Denis Germano and planner Alan Mallach.
- 1993 "MASTER PLAN REEXAMINATION FOR SPRINGFIELD TOWNSHIP", adopted December 21, 1993. The 1993 Master Plan Reexamination was prepared by the Springfield Township Planning Board with the assistance of engineer Richard Hammerschlag, attorney Denis Germano and planner Craig Marshall.
- September 1987 "HOUSING PLAN ELEMENT AND FAIR SHARE PLAN", adopted June 5, 1988. The document was prepared by planner Alan Mallach.

It is the "Land Use Plan Element" portion of the Master Plan that includes the goals and policies and the specific proposals of the Township of Springfield regarding the use of its land, and these goals and policies and specific proposals must be responsive to the social, environmental, legal and infrastructural needs, desires and mandates of the Township, Burlington County and the State of New Jersey.

Because the Township of Springfield must consider a number of factors when it makes its decisions regarding the desired pattern of land use within the municipality, and because many of these factors change over time, the land use planning process must be a continuing program of study, discussion, coordination and direct action. Certainly, in order for the municipal planning process to remain viable, the systematic review and reevaluation of the various Master Plan Elements and the implementing Land Development Ordinances is necessary in order to prevent their rapid obsolescence.

In accordance with N.J.S.A. 40:55D-89 of the New Jersey State Municipal Land Use Law, every municipality in the State must reexamine its "Master Plan" and "Development Ordinances" at least every six (6) years.

As previously noted, the Township of Springfield adopted its current "Master Plan" on January 5, 1988 and later reexamined the document in a report adopted December 21, 1993. It is the purpose of this document to further review the current "Land Use Plan Element" portion of the Springfield Township Master Plan and recommend further amendments to the plan and the implementing ordinances where appropriate.

Pursuant to the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.), a Master Plan indicates land use and development proposals, with maps, diagrams and text. A "Land Use Plan Element", together with the "Statement Of Objectives, Principles, Assumptions, Policies And Standards" and the "Housing Plan Element", is a prerequisite component of a municipal Master Plan in order for the municipality to adopt zoning provisions governing the development of the land within its bounds.

The "Housing Plan Element And Fair Share Plan" portion of the Springfield Township Master Plan is contained in a separate document. The "Statement Of Objectives, Principles, Assumptions, Policies And Standards" is included within this document and should be read in conjunction with this "Land Use Plan Element".

A "Land Use Plan Element" is described in the Municipal Land Use Law (N.J.S.A. 40:55 D-28a.[2]) as a document:

- Taking into account the other Master Plan elements and natural conditions, including, but not necessarily limited to, topography, soil conditions, water supply, drainage, flood plain areas, marshes, and woodlands;
- 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, education and other public and private purposes or combination of purposes;
- Showing the existing and proposed location of any airport and the boundaries of any airport hazard areas delineated pursuant to the "Air Safety and Hazardous Zoning Act of 1983", P.L. 1983, c.260 (C.6:1-80 et seq.); and
- Including a statement of the standards of population density and development intensity recommendation for the municipality.

The basis for the recommendations offered within this "Land Use Plan Element" is the information contained in the earlier sections of this document, particularly those sections entitled "Existing Land Use Analysis", "Environmental Analysis", "Farmland Preservation Program", and "Plans Of Other Jurisdictions". Essentially, the information contained in these earlier sections of this document help define the capacities, limitations and the appropriateness of the land area within Springfield Township to absorb new development.

### SPRINGFIELD TOWNSHIP'S EXISTING ZONE PLAN

The "Existing Zoning Map of the Township of Springfield", as of February 1996, is included within this report for informational purposes and as an aide to the reader in order to more easily understand the textual discussions.

#### PROPOSED LAND USE PLAN MAP

As indicated on the "Land Use Plan Map", dated November 1996, it is recommended that the Township of Springfield be divided into seven (7) "Land Use Planning Districts" as follows:

#### LAND USE PLANNING DISTRICTS

AR-3 Agricultural Residential

VPC Viewshed Protection Cluster

PPE Public, Park & Education

VN Village Neighborhood

CC Community Commercial

HC Highway Commercial

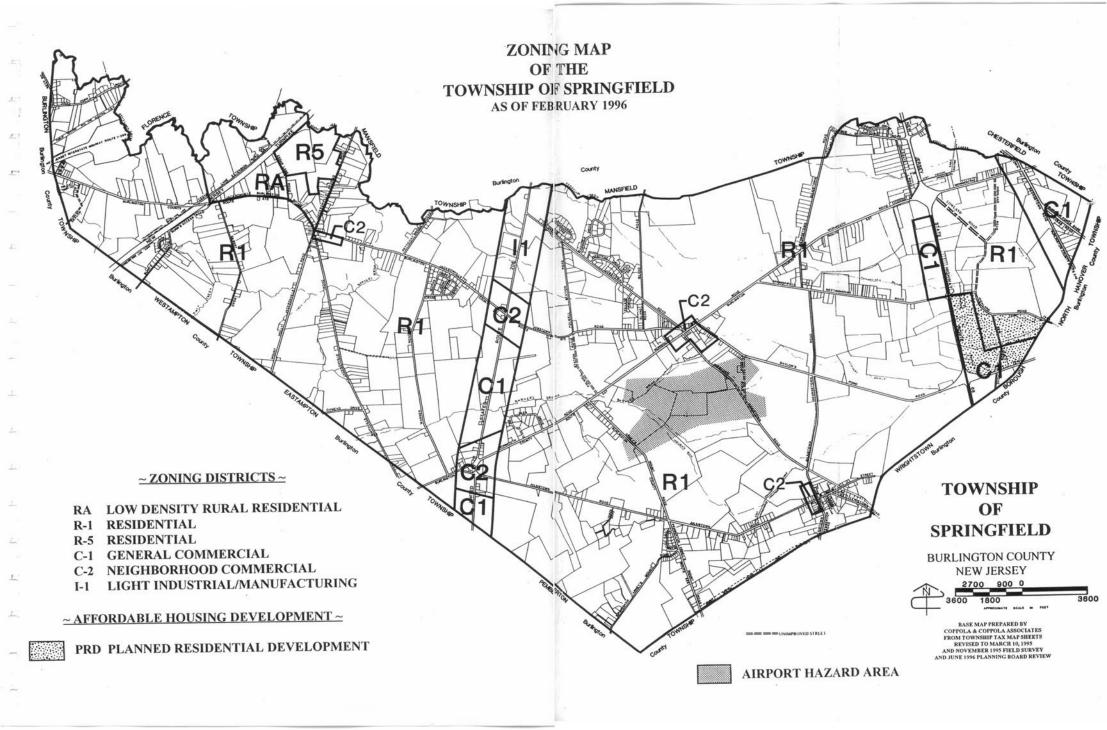
LM Limited Manufacturing

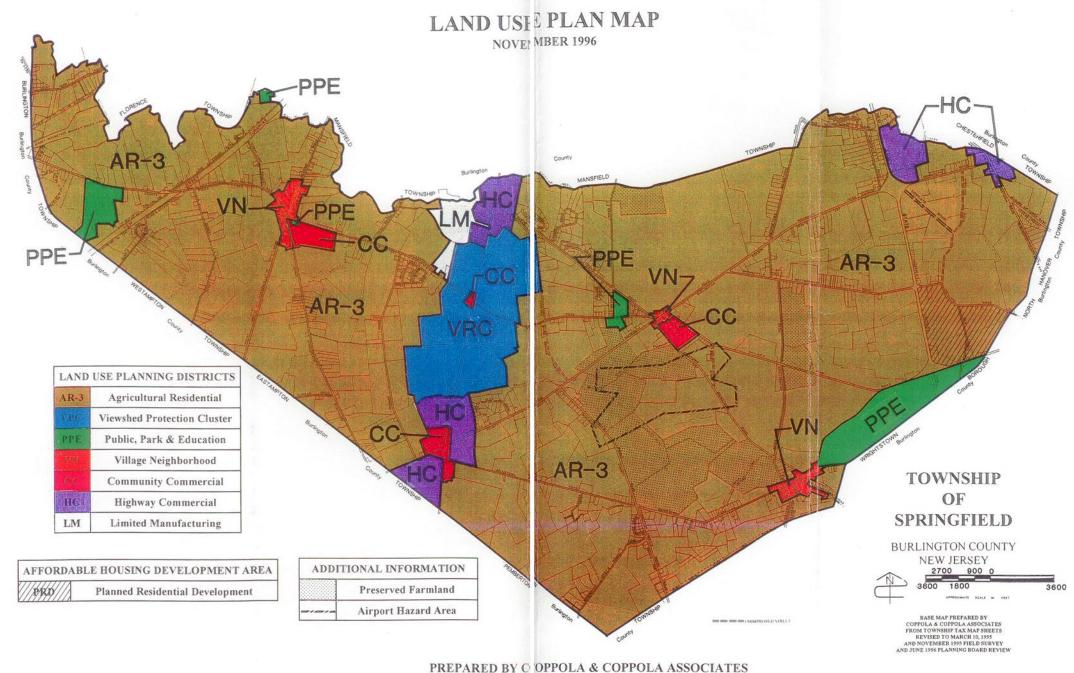
The recommended "Land Use Planning Districts" are proposed to accomplish the overall theme of the "Land Use Plan Element" of Springfield Township which is to maintain the rural agricultural character which prevails throughout the Township and channel the higher residential densities and non-residential development to specifically designated areas.

Finally, in addition to the seven (7) districts, an "Affordable Housing Development Area" is indicated on the "Land Use Plan Map", indicating those lands zoned for "Planned Residential Development" in accordance with the "fair share plan" of Springfield Township which received "Substantive Certification" from the New Jersey Council On Affordable Housing (COAH).

#### CRITICAL AREAS MAP

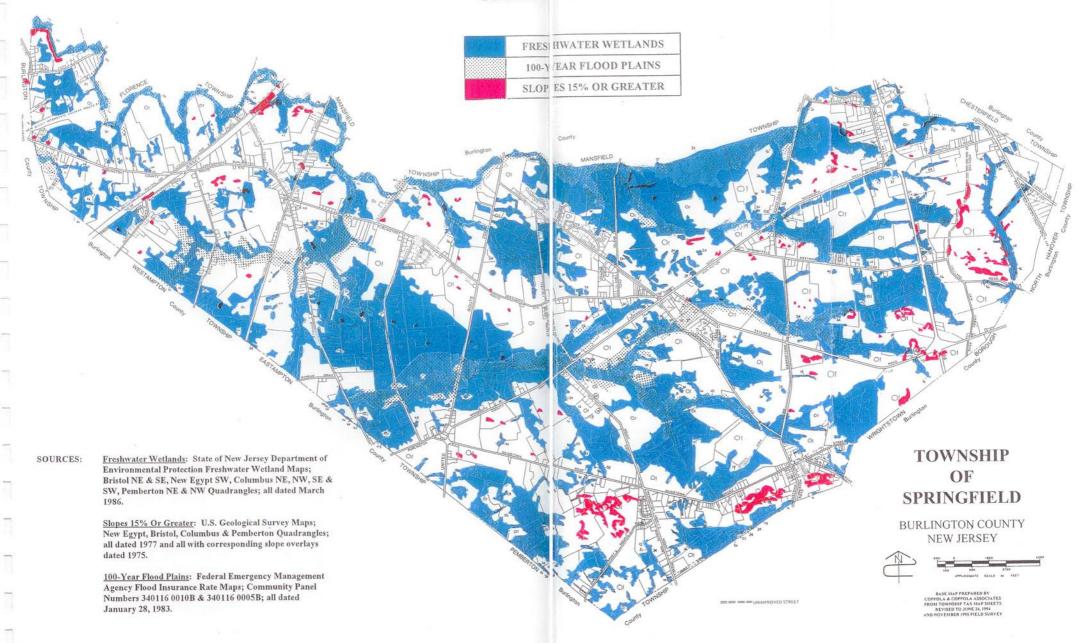
While the "Land Use Plan Map" and the accompanying text within this portion of the 1996 "Land Use Plan Periodic Reexamination And Update Report" document of Springfield Township should be viewed in conjunction with all the preceding mapped and textual information contained in the document, it is recommended that the "Critical Areas" map be adopted as a companion map to the "Land Use Plan Map".





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LAWREI NCEVILLE ~ NEW JERSEY

# CRITICAL AREAS



The "Critical Areas" map indicates those portions of the Township of Springfield environmentally encumbered for development by "Slopes 15% Or Greater", "100-Year Flood Plains" and/or "Freshwater Wetlands". These three (3) categories of environmentally fragile lands are capable of being identified and mapped on a site plan and/or subdivision submission with a high degree of accuracy and certainty, and the presence of one (1) or more of these physical characteristics clearly justify the limitation of development densities and intensities.

As noted on the "Critical Areas" map, the sources for the mapped information are as follows:

<u>Freshwater Wetlands</u>: State of New Jersey Department of Environmental Protection Freshwater Wetland Maps; Bristol NE & SE, New Egypt SW, Columbus NE, NW, SE & SW, Pemberton NE & NW Quadrangles; all dated March 1986.

Slopes 15% Or Greater: U.S. Geological Survey Maps; New Egypt, Bristol, Columbus & Pemberton Quadrangles; all dated 1977 and all with corresponding slope overlays dated 1975.

100-Year Flood Plains: Federal Emergency Management Agency Flood Insurance Rate Maps; Community Panel Numbers 340116 0010B & 340116 0005B; all dated January 28, 1983.

It should be noted that the information indicated on the "Critical Areas" map is from secondary sources and is not intended to take the place of specific on-site engineering data presented to Springfield Township at the time applications are submitted for approval of a subdivision, site plan, construction permit, and/or for any other application which considers the categories of "critical areas" depicted on the map. Moreover, while the information depicted on the "Critical Areas" map has been prepared as accurately as possible, it must be understood that detailed information mapped at such a large scale may not represent the actual conditions on any one (1) particular parcel of land.

#### LAND USE PLANNING DISTRICTS

#### "AR-3" Agricultural Residential

The "AR-3" Agricultural Residential district areas have been designated primarily in recognition of the rural agricultural character of development prevailing throughout most of Springfield Township. All of the lands within the "AR-3" district areas are predominantly rural farmland interspersed with single-family homes. The principal land uses proposed to be permitted within the "AR-3" district areas are farms and single-family detached dwellings.

Virtually all of the lands within the "AR-3" district area are without existing or proposed services of public sewers or public water supplies; therefore, the physical attributes and constraints of the lands must be used as a benchmark for the residential densities which can appropriately and safely be provided.

In addition to supporting the farmers within Springfield Township and maintaining the prevailing rural agricultural character of the Township, the necessity of maintaining the environmental integrity of the Township also is a high priority of the "Land Use Plan Element". Therefore, the suggested minimum lot size for single-family detached dwellings is based upon a consideration of the capacity of the physical environment to support an on-site septic system and potable water well.

As indicated on the "Soil Limitations For Septic Tank Absorption Fields" map within the "Environmental Analysis" section of this document, most of the soils within Springfield Township have been identified by the Burlington County Soil Conservation Service to have "severe" limitations for the location of septic systems. Moreover, as indicated on the "Hydric Soils Map", the vast majority of the lands within the Township of Springfield are poorly drained and have a water table at a depth of less than one and one-half feet (1½') below the soil surface.

Also as indicated in the "Environmental Analysis" section of this document, the most important aquifers in Burlington County are the Raritan and Magothy Formations and the Englishtown Formation. The Raritan and Magothy Formations are almost non-existent within Springfield Township, and the Englishtown Formation is limited in extent to the northeastern portion of the Township in the vicinity of Jacksonville and the New Jersey Turnpike. The other aquifers in Springfield Township are not considered major sources of potable water or are not considered water bearing in Burlington County.

Given the capacity limitations of the soil's within Springfield Township to absorb and properly filter effluent, and given the relative limitations of the aquifers in the Township to provide ground water and related need to protect the quality of the water t hat is provided, it is recommended that the minimum lot size for single-family detached dwellings in the "AR-3" Agricultural Residential district be continued at three (3) acres.

Moreover, it is recommended that at least one (1) acre of a single-family detached dwelling lot be contiguous "non-critical" acreage (i.e., not 100-year flood plains, freshwater wetlands or slopes 15% or greater) and that the "non-critical" acreage be appropriately situated for the location and construction of the detached dwelling and its appurtenances, including the septic system and potable water well serving the lot.

#### "VPC" Viewshed Protection Cluster

The "VPC" Viewshed Protection Cluster district area encompasses the land along the Route 206 corridor between the two (2) nodes of non-residential development which currently exist and which are proposed to be enlarged. The intent is both to prevent the evolution of so-called "strip commercial" development along Route 206 and to maintain the rural agricultural vistas along the highway. In order to accomplish these objectives and still permit appropriate development of the subject lands compatible with the abutting "AR-3" district areas to the east and west, a clustering of single-family homes should be required if agricultural use of the lands ceases.

The clustering of the single-family detached dwellings on reduced individual lot sizes is not proposed for the purpose of increasing the number of single-family homes that might otherwise be constructed upon the land were the lands included in the "AR-3" district area; instead, the clustering design is proposed to preserve scenic vistas and select concentrations of treed areas and to limit the number of additional traffic access points to Route 206.

At the outset, it is recommended that the ordinance provisions governing development within the proposed "VPC" district area assure that no more lots are permitted to be developed within a "cluster" development than would otherwise be permitted if the lands were developed as a "conventional" development in accordance with the requirements for the "AR-3" district area. Therefore, the suggested language governing the number of lots to be permitted within a "Viewshed Protection Cluster" might read as follows:

The maximum number of dwelling units permitted in a "Viewshed Protection Cluster" is the number of dwelling units which could be constructed on the tract if the tract were being developed as a "conventional development" in conformance with the zoning regulations governing development within the "AR-3" zoning district and in conformance with other related provisions of the Land Development Ordinance, with no "variances" or "waivers" required.

The applicant shall submit a schematic test subdivision plan for such a "conventional development" for purposes of demonstrating the number of lots which could be produced under a "conventional development". The schematic test subdivision plan must include a delineation of all "critical" acreage on the tract (i.e., freshwater wetlands, 100-year floodplains and topographic slopes 15% or greater). Additionally, if deemed necessary by the Planning Board, the applicant may be required to submit other data supporting the probability that a lot or lots shown on the schematic test subdivision plan could be constructed upon, including, for example, soil test borings and/or other information related to the ability of the proposed lot or lots to support a septic system.

The Planning Board shall evaluate the submitted test subdivision plan for the "conventional development" and shall reach a consensus regarding the total number of residential lots that could be developed on the subject tract were the tract developed as a "conventional development".

In its evaluation of the submitted test subdivision plan for the "conventional development", the Planning Board shall not count lots which reasonably can be concluded to be practically unusable for residential construction because of environmental constraints and, additionally, the Planning Board shall not count lots which would require a "variance" or a "waiver" from the ordinance provisions governing "conventional development".

Once the maximum number of lots to be permitted within a "Viewshed Protection Cluster" has been established, it also is recommended that the applicant be required to submit a "concept plan" of the proposed development for review and informal approval by the Planning Board or its authorized committee.

The design of a "Viewshed Protection Cluster" should first identify the portions of the tract to be preserved including, to the extent possible, all lands within one thousand feet (1,000') of the Route 206 right-of-way and any additional environmentally fragile lands, treed areas or scenic vistas. The residential lots should be located secondarily and in consideration of the portions of the tract to be preserved. Moreover, and as a general rule, the residential lots should be located within portions of the tract not obviously visible from existing roads; certainly, no "ribbon residential" pattern of successive lots along a road's frontage should be permitted.

It is recommended that individual lots within a "Viewshed Protection Cluster" contain a minimum of one (1) acre of "non-critical" acreage. Moreover, each "Viewshed Protection Cluster" should specifically identify and set aside at least fifty percent (50%) of the tract acreage for preservation.

#### "PPE" Public, Park & Education

A "PPE" Public, Parks & Education district area is proposed. The proposed "PPE" district area consists of six (6) properties which, in aggregate, contain approximately 493.51 acres. The properties included within the proposed "PPE" district area are owned by either Springfield Township (i.e., two [2] municipal parks, one [1] neighborhood park and the municipal complex = 210.41 acres), the Springfield Township Board of Education (elementary school = 15.6 acres) or the United States (Fort Dix Military Reservation = 267.5 acres). It should be noted that the mapping of the "PPE" district area may change over time if additional "PPE" lands are acquired by the owners.

By indicating these various "public, parks and education" properties on the "Land Use Plan Map" and on the "Zoning Map", the overall "Zone Plan" of Springfield Township is brought into sharper focus.

Currently, it is proposed that the principal land uses permitted within the "PPE" Public, Parks & Education district include agriculture, public parks, schools, conservation areas, other "Public Purpose Uses" authorized by the Township of Springfield and single-family detached dwellings on lots at least ten (10) acres in size.

# "VN" Village Neighborhood

The "VN" Village Neighborhood district areas recognize the existence of the distinct and identifiable village neighborhoods of Jacksonville, Juliustown and Jobstown. The "VN" district concept reflects the "Hamlet" center concept of the adopted "New Jersey State Development And Redevelopment Plan".

As reflective of a "Hamlet", the principal permitted uses within the "VN" Village Neighborhood district are proposed to include single-family detached dwellings, schools and day care centers, churches and other quasi-public uses, parks and playgrounds, professional offices and limited commercial uses. Additionally, "Residential Flats" are proposed to be permitted above the permitted professional offices and commercial uses.

The minimum lot size for single-family detached dwellings is proposed to be one-quarter acre or 10,890 square feet in area and the minimum lot size for the quasi-public, professional office and commercial uses is proposed to be one-half ( ½) acre or 21,780 square feet.

Given the relatively small lots within the proposed "VN" district areas and their reliance on septic systems for effluent disposal, it is recommended that lands within and adjacent the "VN" district areas be permitted to be utilized for individual and non-individual (community) septic systems as may be approved by the Board of Health.

All of the non-residential uses proposed to be permitted within the "VN" Village Neighborhood district should be in buildings that compliment the residential character of the neighborhood and reflect the scale and design of the existing buildings within the neighborhood. No non-residential building should be larger than five thousand (5,000) square feet in area, and all buildings should have a gable, hip, gambrel or mansard rood (or other dual pitched, single ridge roof), with no flat roofs permitted.

Where "Residential Flats" are provided, they should be located above the ground floor, which is to be occupied by a permitted professional office or commercial use, and no directly contiguous non-residential use should be permitted on the same floor as a "Residential flat" or above a "Residential Flat".

### "CC" Community Commercial

Four (4) proposed "CC" Community Commercial district areas have been designated to serve the everyday retail commercial and service needs of the residents within Springfield Township. One (1) of the designated "CC" districts is located along Route 206, at its intersection with County Route 670. The three (3) other "CC" district areas are located in Jacksonville, Jobstown and Chambers Corners.

In addition to the retail sales of goods and services, the principal permitted land uses in the "CC" Community Commercial District are proposed to include professional, business and medical offices, restaurants, delicatessens, banks, small animal clinics and child care centers. Service stations should be permitted as "conditional uses". The minimum lot size for an individual use is recommended to be one (1) acre, and the maximum floor area ratio (F.A.R.) is proposed to be 0.20.

In recognition of the vacant lands included within the designated "CC" Community Commercial District areas, it is proposed that provisions be included for the construction of small scale shopping complexes comprised of a mixture of the permitted uses. The overall planning of such shopping complexes will enable a more comprehensive addressment and control of traffic, architecture, signage, and surface water management than would be possible if the overall land area developed in a piecemeal manner.

The minimum lot size for a shopping complex is recommended to be six (6) acres, and the maximum floor area ratio (F.A.R.) is proposed to be 0.25 which acknowledges the advantages associated with comprehensively designing the relatively large land area.

## "HC" Highway Commercial

The five (5) designated "HC" Highway Commercial district areas are intended to provide locations within Springfield Township for the development of non-residential uses which depend upon their location along a highway; visible to the travelling public and readily accessible to a relative large geographic area. Three (3) of the designated "HC" district areas within Springfield Township are located along State Route 206; one in the vicinity of the Columbus Farmers Market, and two in the vicinity of Chambers Corner. The two (2) other "HC" district areas are proposed in the eastern portion of Springfield Township; one at the intersection of State Route 68 and County Route 537, and the other at the intersection of County Route 537 with County Route 545.

Because of their location and the physical attributes of the land areas, each of the locations afford the opportunity to provide a diverse mixture of non-residential activities without substantial impact upon adjacent uses and areas.

It is recommended that the principal permitted uses in the "HC" district areas include all the principal permitted uses in the "CC" Community Commercial district as well as such additional uses as animal hospitals, funeral homes, automobile sales, garden centers, lumber yards and supply centers, hotels and motels, automobile repair garages and the existing open air merchandise market. The minimum lot size is recommended to be two (2) acres in area, and the maximum floor area ratio (F.A.R.) is recommended to be 0.20.

# "LM" Limited Manufacturing

The single "LM" Limited Manufacturing district area also is located along the Route 206 corridor in the vicinity of the Columbus Farmers Market and includes the existing asphalt manufacturing operation. The principal uses proposed to be permitted in the "LM" Limited Manufacturing district are intended to include a wide spectrum of non-residential uses including research laboratories, offices, limited manufacturing activities, warehousing and agricultural support uses (e.g., feed and supply stores, granaries and brokerages).

In order to encourage site design flexibility, incentives for the development of "Limited Manufacturing Parks" on tracts of land at least fifty (50) acres in area should be provided within the Land Development Ordinance provisions implementing the Master Plan. Therefore, it is recommended that the minimum lot size for single lots not created or built upon as part of a "Limited Manufacturing Park" be five (5) acres in area, while the minimum lot size for lots created and built upon within an overall "Limited Manufacturing Park" tract design be reduced to three (3) acre in area.

Whether or not a lot is part of a "Limited Manufacturing Park", the maximum floor area ratio (F.A.R.) for the development of any lot within the "LM" district area is recommended to be 0.175.

# AFFORDABLE HOUSING DEVELOPMENT AREA

The "PRD" Planned Residential Development area in the eastern portion of Springfield Township is the addressment by the Township to fulfill its current "Mt. Laurel II" "fair share" affordable housing obligation as mandated by the New Jersey Council On Affordable Housing (COAH). The "PRD" area is zoned for relatively high density residential development at a gross density of five (5) dwelling units per acre in accordance with the "Substantive Certification" granted to Springfield Township by COAH.

