

# COMPREHENSIVE PLAN



## CONOY TOWNSHIP LANCASTER COUNTY, PENNSYLVANIA

ADOPTED JUNE 2009

**CONOY TOWNSHIP  
LANCASTER COUNTY, PENNSYLVANIA  
RESOLUTION # 1-6-11-2009**

WHEREAS, Article III of the Pennsylvania Municipalities Planning Code (Act 247 of 1968, as amended and re-enacted) authorizes municipalities to prepare and adopt municipal comprehensive plans; and,

WHEREAS, Conoy Township, Lancaster County, finds it necessary to prepare an updated Comprehensive Plan to help guide its future development; and,

WHEREAS, the Conoy Township Planning Commission prepared the Comprehensive Plan consisting of maps, charts and textual matter for Conoy Township; and

WHEREAS, the Conoy Township Planning Commission discussed the Comprehensive Plan at numerous regularly-scheduled and specially advertised Planning Commission meetings since early 2005; and

WHEREAS, the Comprehensive Plan was submitted to the Lancaster County, Dauphin County and York County Planning Commissions, to the Elizabethtown Area School District and to all contiguous municipalities; and

WHEREAS, the Conoy Township Planning Commission conducted a Public Meeting on November 11, 2008, pursuant to public notice concerning the Comprehensive Plan; and

WHEREAS, the Conoy Township Planning Commission recommended to the Conoy Township Council adoption of the Comprehensive Plan; and

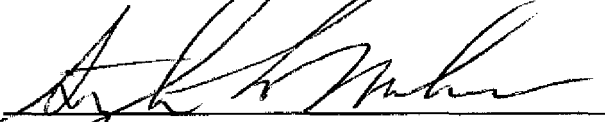
WHEREAS, the Conoy Township Board of Supervisors conducted a Public Hearing on June 11, 2009, pursuant to public notice and considered the review comments of Lancaster, Dauphin and York Counties; all contiguous municipalities; the Elizabethtown Area School District; all Public Meeting comments and the recommendations of the Conoy Township Planning Commission; and

WHEREAS, the Board of Supervisors of Conoy Township deems it appropriate to adopt the Comprehensive Plan as a Comprehensive Plan for Conoy Township.

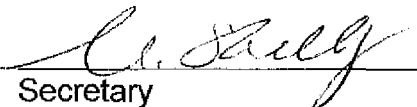
NOW THEREFORE, BE AND IT IS HEREBY RESOLVED that the Board of Supervisors of Conoy Township hereby adopts the draft Comprehensive Plan as the Conoy Township Comprehensive Plan. The Plan includes all maps, charts, textual matter and other matters included in the Comprehensive Plan.

ADOPTED this 11 day of June, 2009 by unanimous vote of the Board of Supervisors at a regularly scheduled public meeting duly advertised.

BOARD OF SUPERVISORS FOR THE  
TOWNSHIP OF CONOY

  
Chairman

I, Mike Skelly, Secretary of the Board of Supervisors of Conoy Township, Lancaster County, Pennsylvania, hereby certify that the foregoing is a true and correct copy of a Resolution duly adopted at a legally constituted meeting of the Board of Supervisors of Conoy Township held on June 11, 2009, at which meeting a quorum was present and voted in favor thereof.

  
Secretary

(Township Seal)

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# CONOY TOWNSHIP COMPREHENSIVE PLAN



## ***CHAPTER 1 INTRODUCTION***

# CHAPTER 1

## INTRODUCTION

Over a decade has passed since the Conoy Township Comprehensive Plan was prepared. Subsequent to the adoption of the Plan, numerous amendments have been made to the Pennsylvania Municipalities Planning Code (MPC), the legislation governing the preparation of Comprehensive Plans and other land use regulations in the Commonwealth of Pennsylvania. Since 1990, the population of the Township has continued to grow, and the development of additional land has occurred, primarily in the form of residential construction. Many of the specific proposals from the previous Plan have been achieved, and many more continue to be pursued by Township officials.

In order to address the changes to the MPC and the continued pressure for and pace of development in the Township, the Board of Supervisors authorized this update of the Conoy Township Comprehensive Plan adopted in August 1990. This document summarizes the results of detailed background studies of existing conditions in Conoy Township, provides updated community development goals and policies, and proposes measures to realize these goals.

### THE NEED FOR A PLAN

A comprehensive plan is an expression of good community sense and forethought. Comprehensive planning illustrates a community's interest in current and future events, both within and beyond its boundaries, and is also a demonstration of civic pride because it represents substantial efforts and funds invested by residents and public officials in developing the means to protect and preserve significant features of the community while addressing the consequences of growth, development and an increasing population. Essentially, a comprehensive plan evaluates resources (both physical and social), identifies goals and objectives, then develops implementation strategies to meet these goals and allocate resources. The comprehensive plan is prepared to help local officials administer the Township's land use planning program based on objective data and clear goals.

The Plan is also a compilation of data (both background information and future projections) that support policy goals and specific regulations. Conoy Township officials and other government agencies, prospective residents, and businesses may use the Plan as a reference resource. Additionally, the comprehensive plan is intended to provide a level of certainty and stability for local neighborhoods, which directly affect people in

personal and physical ways. For a healthy community to prosper, people need reassurance that their environment will maintain its "sense of place." For example, the stability and compatibility of surrounding land uses are crucial issues to the owner of a single-family home. Also, farmers require assurance that their way of life will not be subject to unnecessary restrictions as a result of nearby changes in land use. Prospective developers, additionally, must be able to plan for a project using clear and explicit regulations. A secure investment and business climate must be maintained through reasonable adherence to the comprehensive plan.

A comprehensive plan does not intend to prevent growth. By nature, it encourages well-planned and appropriate growth, while striving for a balance between conflicting or competing interests. Arriving at such a balance is no simple task. Many residents, landowners and officials will contribute to the creation of the Plan. The Plan is an attempt to provide acceptable levels of satisfaction to different groups while conforming to the regulations established in the Pennsylvania Municipalities Planning Code (MPC).

A comprehensive plan is also not a "one time," static document; it is intended to be flexible and accommodate inevitable changes and allow appropriate responses to unforeseen events. It should be a dynamic and evolving tool that must be periodically reviewed and revised so that it may continue to guide the Township in the Twenty-first Century.

## STEPS OF THE PLANNING PROCESS

There are four major steps required in the process of producing a comprehensive plan: (1) the survey and analysis of existing conditions and trends, (2) the determination of policies and goals, (3) the combining of existing conditions and goals into a comprehensive plan, and (4) the implementation of the policies and proposals of the comprehensive plan.

1. ***Community Inventory and Analysis.*** *The initial step in any planning process is to review a wide range of existing conditions. This survey and analysis of existing conditions will provide the information on which policies and the plan are based.*
2. ***Policy Determinants.*** *The identification of the Township's desired role within Lancaster County and the determination of policies that best carry out this role are the heart of the plan. Whereas the survey*

*and analysis and comprehensive plan stages can be accomplished largely through professional planning assistance, there is no way in which policy determination can be made by other than the Township itself and still consider the Plan to be a useful local document.*

3. ***Comprehensive Plan.*** *A comprehensive plan combines the information gained during the survey and analysis with the policies established in the policy determination step. The uses of a comprehensive plan are several. First and foremost, the comprehensive plan provides a means for setting forth a unified group of general proposals for the physical development of the Township. Second, after adoption, the plan will enable the Township Supervisors, Planning Commission and the general public to review current issues and proposals against a clear picture of what has been decided as the most desirable plan for the future physical development and character of Conoy Township. Third, through the plan, the Township will be able to present a clear picture of its long range and general policies of development to all outside persons concerned with the area's development. Fourth, the comprehensive plan will help educate all who read it regarding existing conditions, problems and opportunities; the present status and projected future trends; the possibilities of the future and the policy of government with respect to physical development.*
4. ***Implementation.*** *The final and critical step is the process of carrying out the policies and proposals contained in the plan. Unfortunately, implementation cannot be accomplished by a single act or in a single document. It is a continuous series of individual private actions, which must be monitored by responsible public agencies, and public action initiated when feasible and timely. The success of such efforts will require the cooperation of Township residents and the coordinated efforts of its public officials and agencies.*

## **INTERRELATIONSHIPS AMONG PLAN COMPONENTS**

The six major components of the Comprehensive Plan - Land Use, Housing, Transportation, Community Facilities, Water Supply and Natural and Historic Resources - are all closely interrelated. The premise on which this Comprehensive Plan is based is that the Township will continue to be an attractive location for future residential, and, to a limited extent, commercial and industrial growth as well. The Plan elements have been written with the understanding that this future growth must be accommodated in a way that best benefits the current and future residents of the Township.

The population of the Township is projected to continue to increase into the foreseeable future. In order to accommodate this increased population, additional housings units will need to be provided. There will be a need for a mix of types of housing units so that individuals of all age groups, family size and economic levels have opportunities to reside in Conoy Township. The Future Land Use Plan provides for this by designating areas of the Township for different densities of residential development. The Zoning Ordinance - one of the techniques to implement the proposals of the Comprehensive Plan - will need to be reviewed and updated as necessary to provide the specific detailed regulations to support the accomplishment of the Plan's stated housing goals.

The location of future development, particularly residential development, will have an impact on the transportation facilities of the Township.

The availability of public facilities, primarily water and sewer service, has a direct impact on the location of and intensity of areas proposed for future development in the Township. Limited portions of the Township are proposed for the extension of such utilities. Areas of environmental concern - such as wetlands, floodplains and stream valleys, and steep slope areas - are the areas proposed for open space uses in the Future Land Use Plan.



## HOW TO USE THE PLAN

This Plan is organized to facilitate its easy use and interpretation. The Plan begins with a summary of the opportunities and limitations identified as a result of the Community Inventory and Analysis phase of the planning program, along with an overall Statement of Goals and Objectives, which lists the general goals from which more specific recommendations and policies are developed. In the Comprehensive Plan section, broad plans are suggested for the Township's future land use, transportation, housing, community facilities and utilities and natural and cultural environment. Implementation policies then provide specific steps to achieve the major goals and plans. The Appendices include detailed results from the Community Inventory and Analysis.

This Plan includes a number of maps, which are a basic planning tool for the Township. These maps contain information with which the Township can develop and implement its goals, but can also be used on a continuing, day-to-day basis by the Township Supervisors, Planning Commission, private citizens, builders, business owners, service providers, and others. Other parts of the Plan, including population studies, physical analyses, and transportation analyses can be similarly utilized by others.



# CONOY TOWNSHIP COMPREHENSIVE PLAN



## ***CHAPTER 2*** ***COMMUNITY DEVELOPMENT*** ***GOALS AND OBJECTIVES***

## **CHAPTER 2**

### **COMMUNITY DEVELOPMENT GOALS AND OBJECTIVES**

To be effective, this Comprehensive Plan must reflect the common goals of the residents of the Township. These goals range from physical policies, such as the appropriate use of land, to social and educational policies. Once these goals are formed, they represent a context within which decisions can be made regarding the use of land and the conservation of resources.

#### **COMMUNITY PARTICIPATION**

Since early 2005, Conoy Township representatives have worked with technical experts to prepare this Comprehensive Plan for the Township. As representatives of the residents of the Township, the Planning Commission and, ultimately, the Board of Supervisors must make some critical decisions about where, when, and how the Township will grow. The first and most important section of this Plan is to clearly articulate the goals and objectives of the Township leaders in terms of comprehensive planning for conservation and development.

#### **Resident's Survey**

As one of its initial efforts in the preparation of an update to the Conoy Township Comprehensive Plan, the Township Planning Commission members decided to seek input from all of the Township's residents. Therefore, in August 2005, a Residents and Property Owners Survey was distributed to all residents and property owners within the Township. 1211 surveys were distributed and a total of 320 completed surveys were returned (a response rate of over 26 percent). The majority of the surveys returned included responses from more than one (1) person. The results of the Residents and Property Owners Survey will serve as a valuable tool for the Township Planning Commission and other Township officials.

The Resident and Property Owner Survey responses indicated a desire for a continuation of the Township's "rural lifestyle" and "peace, quiet and serenity," as well as a corresponding preference, on the part of the majority of respondents, for limitations

on future residential, industrial and commercial growth. The following represents a summary of the Township-wide survey responses. A detailed summary of the survey results may be found in Appendix A. Appendix A also breaks down the survey results by each of five planning areas.

- Overall, nearly 70 percent of the respondents have lived in the Township at least 10 years; almost 40 percent have lived there over 25 years.
- Nearly 70 percent of the respondents had heads of household that were 45 years of age and over; included in this number were 20 percent 65 years of age and over.
- The vast majority of respondents indicated that their property was used for residential purposes. (46 percent of the respondents owned one acre or less of land; 75 percent owned 5 acres or less of land.)
- Over 75 percent anticipated that nothing different would happen to their land in the next ten years.
- Approximately 30 percent of the respondents are served by public water; 37 percent are served by public sewer. The rest rely on on-site wells for water supply and on-lot systems for sewage disposal.
- Approximately 20 percent of the respondents indicated that they worked in the Township, with an additional 49 percent working elsewhere in the County; and 30 percent of respondents working outside Lancaster County.
- 12 percent of the respondents indicated that they derived some income from farming – approximately one-third of those considered themselves to be full-time farmers.
- When asked to identify community services that should be added or improved in the Township, “police” was cited the most frequently, followed in order by: “recycling (door-to-door),” “parks” and “recreation center.” Also cited frequently were “municipal trash collection,” minor road improvements,” “postal delivery (in Bainbridge)” and “community meeting facility.”
- In terms of the character of future development in the Township, the majority of respondents were not in favor of additional residential development. In response to a question as to the type of preferred development if future residential development

occurs in the Township, only “residential developments of smaller lot sizes in order to preserve agricultural areas and open space” received a positive response. Residential development “scattered throughout the Township on large lots” received almost equal positive and negative responses. Less than one-third of those responding were in favor of residential development occurring “just like it’s been happening.” The vast majority was opposed to high density forms of residential development – such as townhouses, apartments and mobile home parks.

- The response to the survey question about the need for more business (commercial) locations in the Township was split evenly. If additional commercial development is to occur, the forms of commercial development favored by the respondents were uses that would service the day-to-day needs of Township residents (i.e., home based businesses, convenience stores, office uses and neighborhood shopping). Approximately one-fourth were in favor of additional industrial development. The forms of industrial development most often cited were small scale (machine shops, etc.) and low impact (electronics/“high tech” manufacturing). The location most often identified for new commercial development was in Bainbridge and the location most often identified for new industrial development was along Rt. 441 near the incinerator.
- Over 90 percent of the respondents expressed an opinion supporting the idea that the Township take greater efforts to preserve and/or protect the agricultural lands, woodlands and natural areas. Nearly 90 percent preferred that the Townships historic resources also be preserved/protected.
- Approximately one in five respondents indicated that they used the Township parks often. Slightly more than one-third indicated that they believe that the Township needs more public park land. Almost one half of the respondents indicated that the additional park land should occur in the form of expansions to the existing parks.
- Trails (paved and unpaved), preserved natural areas and a teen center were the three types of additional recreational facilities cited as “most needed” in the Township. In addition, the age groups most often cited as needing more recreation opportunities were teens (ages 15-19) and young teens (ages 13-14).

- Township residents ranked (1) “peace, quiet and serenity,” (2) “rural lifestyle” and (3) “small town lifestyle” as the three most important qualities of life in the Township. “Natural beauty/scenery,” “agricultural areas,” “natural areas (wildlife, etc.)” and “sense of community” were also frequently cited.
- The things most often cited as what residents liked about the Township were (1) the open space/rural atmosphere, (2) the peace and quiet, (3) the farmland and (4) the small town atmosphere (in Bainbridge and Falmouth). Among other things noted were accessibility to larger towns in the region, beauty/scenery, low crime rate, friendly residents, etc.
- The things most often identified as detracting from the Township were (1) too much development, (2) loss of farmland, (3) unkempt properties, (4) traffic, (5) noise, and (6) the lack of enforcement of Township regulations.

## **COMMUNITY DEVELOPMENT GOALS AND OBJECTIVES**

The overall goal guiding the future development of a local community is the creation of physical, social and economic environments which will continue to provide its residents with increasingly better places in which to live, work and play. Above all, protection of the public health, safety and general welfare is a basic goal in the formulation of Conoy Township's Comprehensive Plan and its implementation. In doing so, a continued tax base to support the Township will also be preserved.

The Conoy Township Planning Commission has identified more specific community goals as they relate to the six major components of the Comprehensive Plan. They are as follows:

### NATURAL AND HISTORIC RESOURCES GOALS

1. Steer future development away from valuable and/or sensitive environmental features and historic, cultural and documented/verified archaeological resources.
2. Protect sensitive environmental features (e.g. floodplains, wetlands, steep slopes, marshes, caves, hazardous or unique geology, important wildlife habitats, etc.).
3. Encourage the protection/preservation of prime farmland.

4. Keep land use planning sensitive to the protection and preservation of local historic, cultural and documented/verified archaeological resources.
5. Conserve and enhance the resources of the Highlands region in the Township.

#### LAND USE GOALS

1. Maintain the Township's rural/agricultural character.
2. Minimize the conflicts between different land uses through the use of zoning provisions and other land development regulations.
3. Acknowledge and plan to accommodate the continuation of existing land uses.
4. Ensure that preserved farms on the Township's borders are protected from development.
5. Expand the Agricultural Zoning District to include additional productive farms and prime farmland in the northeastern portion of the Township.
6. Locate future developments in a consolidated pattern in and around Bainbridge and Falmouth that results in an efficient delivery of public services and utilities.
7. Target residential development in the Township to the existing Village Center and Residential Zones in and around Bainbridge and Falmouth to satisfy the residential density and population growth goals of the LCPC Growth Management Plan Update.
8. Steer the majority of residential development to areas served by adequate public utilities and services, and/or areas where an extension of public infrastructure would assist in the alleviation of service deficiencies.
9. Rely upon nearby towns for major commercial goods and services; however, some limited commercial, retail and office uses should be accommodated so long as it relates to the needs of local residents.
10. Prevent strip commercial development along PA Route 441.



11. Encourage the establishment and/or retention of home occupations and no-impact home-based businesses.
12. Allow limited industrial expansion to provide additional employment opportunities for Township residents.
13. Allow low-impact industrial uses.
14. Require industrial uses to adhere to strict design and performance controls to preserve the rural character of the Township.
15. Prevent strip industrial development along PA Route 441.
16. Coordinate the Plan's land use recommendations with the findings of the Township's Act 537 Official Sewage Plan.

#### HOUSING GOALS

1. Allow for a wide range of housing types and costs.
2. Encourage improvement of neglected residential properties.
3. Allow accessory dwelling units.

#### PUBLIC UTILITIES GOALS

1. Maximize the efficient use of the Township's public utility systems.
2. Require that new development in the water service areas provide adequate water quality and quantity for domestic use and fire fighting purposes.
3. Discourage sizeable residential developments in areas that are not served by public utilities.
4. Discourage placement of utilities in and/or through preserved farms
5. Promote underground installation of utilities and the co-location of utilities in common trenches.

6. Promote co-location of facilities that require the use of a tower.
7. Require adequate storm water management measures that prevent adverse impact to surrounding properties and watercourses. Encourage recharge and the use of best management practice to minimize impacts, which may improve water quality.
8. Cooperate with the Lancaster County Solid Waste Management Authority in the disposal of solid waste.

#### PUBLIC FACILITIES AND SERVICES GOALS

1. Encourage cooperation and coordination of Township government and School District facilities and services.
2. Provide for improved recreational opportunities with an emphasis towards physical improvements to existing park sites.
3. Consider conducting the necessary study to establish a park land dedication or fee-in-lieu ordinance.
4. Assure adequate police, fire and ambulance services at all times during the time frame of the Plan.
5. Assure the general welfare of all residents, employees and properties located within the Township.

#### TRANSPORTATION GOALS

1. Coordinate future land use and roadway functions to maximize efficient use of the Township's existing major roads.
2. Coordinate existing roadway functions with appropriate design standards.
3. Coordinate future road improvements with projected roadway functions and adjoining planned land uses.

4. Assure that future developments provide for access designs and locations that minimize traffic congestion and safety problems.
5. Acknowledge and plan for the “regional” traffic that passes through the Township on a regular basis.
6. Encourage developer-provided road improvements that are needed.
7. Encourage non-motorized trails for pedestrian and bicycle use within the Township.

All of the plans for land use, housing, transportation, community facilities and utilities and natural/historic resources preservation that follow have been developed and evaluated according to these stated goals and objectives. The Township should use these goals and objectives to review any proposed land subdivision or development, and to assess its impact on the public health, safety and welfare.

# CONOY TOWNSHIP COMPREHENSIVE PLAN



## ***CHAPTER 3*** ***THE COMPREHENSIVE PLAN***

## **CHAPTER 3**

### **THE PLAN**

The Comprehensive Plan is the Township's guideline for future growth, and is based on the information contained in the preceding chapters. This chapter represents the culmination of the community goals and objectives, and reflects existing land use, environmental constraints and potentials, transportation facilities, population projections, housing (i.e. "fair share"), community facilities, utilities and other elements. This chapter is intended to show, in general categories, recommended types of future land use for the next 15-20 years, proposals for transportation facilities, community facilities and utilities, water supply, natural, cultural and historic features preservation and housing.

#### **PROPOSED FUTURE LAND USE PLAN**

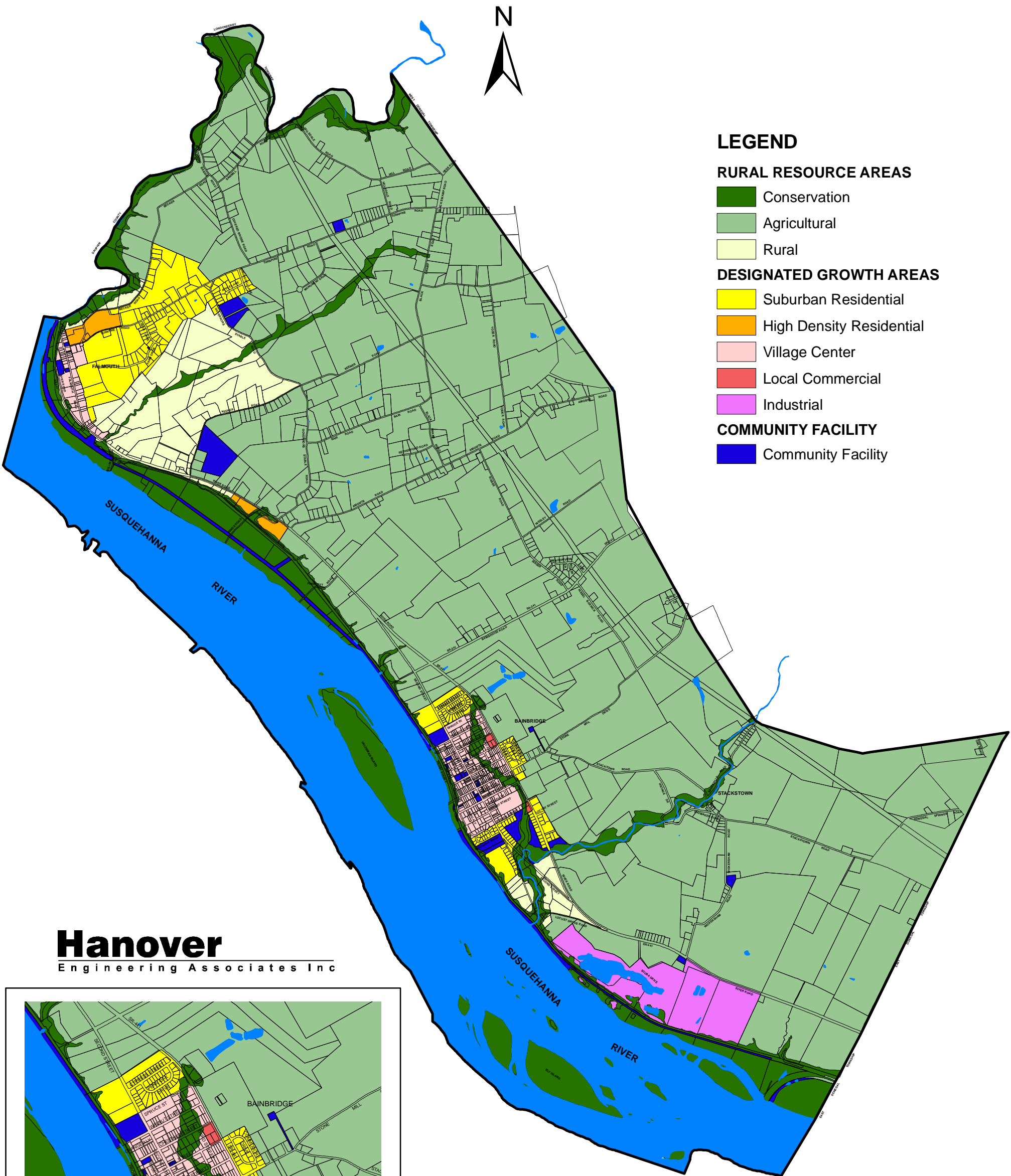
One of the most important elements in the comprehensive planning process is the charting of a municipality's future land use. The proposed Future Land Use Plan, as illustrated in the Future Land Use Map, reflects Conoy Township's goals and objectives, as adopted by the Planning Commission and Board of Supervisors. The overall goal of the Future Land Use Plan is to "Maintain the Township's rural / agricultural character." The plan suggests a broad range of uses consistent with the Township's goals. The Township's land use related goals are identified as follows:

- Protect sensitive environmental features (e.g. floodplains, wetlands, steep slopes, marshes, caves, hazardous or unique geology, important wildlife habitats, etc.).
- Keep land use planning sensitive to the protection and preservation of local historic, cultural and documented/verified archaeological resources.
- Conserve and enhance the resources of the Highlands region in the Township.
- Steer future development areas away from valuable and/or sensitive environmental features and historic, cultural and documented/verified archaeological resources.
- Encourage the protection/preservation of prime farmland.

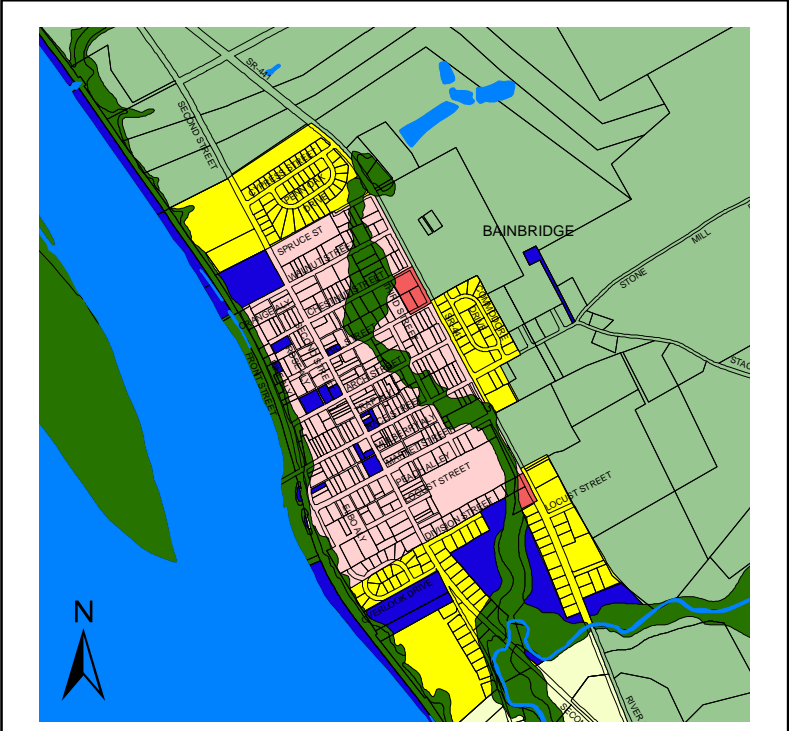
- Expand the Agricultural Zoning District to include additional productive farms and prime farmland in the northeastern portion of the Township.
- Ensure that preserved farms on the Township's borders are protected from development pressure from adjacent municipalities.
- Locate future developments in a consolidated pattern in and around Bainbridge and Falmouth that results in an efficient delivery of public services and utilities.
- Target residential development in the Township to the existing Village Center and Residential Zones in and around Bainbridge and Falmouth to satisfy the residential density and population growth goals of the LCPC Growth Management Plan Update.
- Steer the majority of residential development to areas served by adequate public utilities and services, and/or areas where an extension of public infrastructure would assist in the alleviation of service deficiencies.
- Discourage sizeable residential developments in areas that are not served by public utilities.
- Rely upon nearby towns for major commercial goods and services; however, some growth of limited commercial, retail and office uses should be accommodated so long as it relates to the needs of local residents.
- Prevent strip commercial development along PA Route 441.
- Allow limited industrial expansion to provide additional employment opportunities for Township residents.
- Allow low-impact industrial uses.
- Require industrial uses to adhere to strict design and performance controls to preserve the rural character of the Township.
- Prevent strip industrial development along PA Route 441.
- Acknowledge and plan for the continued use of existing land uses.

# FUTURE LAND USE PLAN

## CONOY TOWNSHIP



**Hanover**  
Engineering Associates Inc



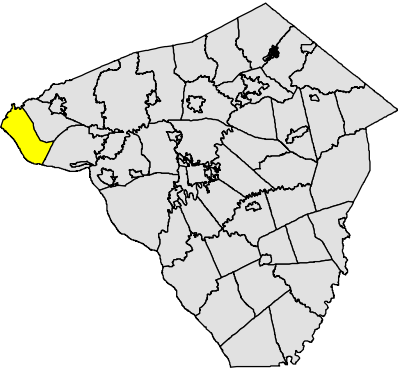
**BAINBRIDGE**

0 2,000 4,000 6,000 Feet

SCALE: 1" = 2000'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'



LOCATION MAP

REVISED: MAY 2009

The Future Land Use Plan is a basic planning tool for Conoy Township, which needs to be periodically reviewed and updated to reflect changing circumstances and aspirations. The Future Land Use Plan is not to be confused with the Township's Zoning Ordinance. The Future Land Use Plan is a **policy document** that identifies the generalized locations of proposed classes of land uses, whereas the Zoning Ordinance is an **enforceable regulation** that maps specific locations (zoning districts) where specific types of land uses are permitted, with specific dimensional and performance regulations. While the Future Land Use Plan is not legally binding under current State law, it does provide the framework for decisions relating to future zoning revisions, community development programming, capital improvements programming and various other planning activities.

The Future Land Use Plan indicates a desirable future pattern of growth by indicating what types of activities should be located within the Township, as well as the intensity and general location of land uses. The Plan is structured based on several influence factors. These include (1) the existing pattern of land use; (2) the natural features of the Township; (3) the existing and contemplated transportation and utility facilities; (4) the importance of agriculture to the Township's economy; and (5) the capability of Township land to support additional growth.

The following paragraphs describe the land use categories shown on the Land Use Plan. It must be remembered that the Plan is meant to be generalized and conceptual in nature, and thus the boundaries of the various land use categories shown on the Future Land Use Map are not meant to be exact.

The Future Land Use Plan for the Township divides its land area into **Rural Resource Areas** and **Designated Growth Areas**. As defined by the Pennsylvania Municipalities Planning Code (MPC), a Rural Resource Area is "an area described in a municipal or multimunicipal plan within which rural resource uses including, but are not limited to, agriculture, timbering, mining, quarrying and other extractive industries, forest and game lands and recreation and tourism are encouraged and enhanced, development that is compatible with or supportive of such uses is permitted, and public infrastructure services are not provided except in villages." A Designated Growth Area is "a region within a county or counties described in a municipal or multimunicipal plan that preferably includes and surrounds a city, borough or village, and within which residential and mixed use development is permitted or planned for at densities of one unit to the acre or more, commercial, industrial and institutional uses are permitted or planned for and public infrastructure services are provided or planned."



The **Rural Resource Areas** of the Township are represented by the Agricultural, Rural and Conservation land use categories on the Future Land Use Map.

### **Agricultural**

This category represents the vast majority of the Township's land area and is comprised of those portions of the Township that are classified as prime agricultural land and/or currently in agricultural production or contain existing agricultural operations. In the agricultural area, limited residential development and agriculturally related commercial and manufacturing uses will also be scattered among the agricultural uses.

The primary purpose of this area is to preserve the Township's prime agricultural soils to the greatest extent possible by encouraging the continuance of farming activities and by allowing land uses that are compatible with agriculture. Development in these areas should be discouraged so that only agricultural and agriculturally related activities occur.

The Township's existing Zoning Ordinance includes provisions aimed at achieving agricultural preservation in its Agricultural Zoning District. The ordinance provisions include a "Sliding Scale" that restricts the number of lots/residential dwelling units that may be developed and/or subdivided in the Agricultural District, based on the size of the farm (or property). The Ordinance also includes provisions related to the siting of new development to minimize its impact on farming operations.

The MPC states that *"Zoning ordinances shall encourage the continuity, development and viability of agricultural operations. Zoning ordinances may not restrict agricultural operations or changes to or expansions of agricultural operations in geographic areas where agriculture has traditionally been present, unless the agricultural operation will have a direct adverse effect on the public health and safety."*

Within the agricultural areas, residents must accept the undesirable consequences of normal farming activities such as odors, dust, truck traffic, and unusual hours of operations. The "Right to Farm Law" protects farmers from nuisance laws that adversely impact normal farming operations.

Agricultural operations that exceed “normal” farming levels are often referred to as “intensive agriculture,” “factory farms,” “concentrated animal operations (CAO’s)” or “concentrated animal feeding operations (CAFO’s)”. Such operations can have a significant detrimental effect on non-compatible adjacent land uses. Major concerns with such operations involve groundwater quality, manure management, odors, flies, storm water, lot area, and lot coverage. Such uses are currently allowed by right in the Agricultural Zoning District. Although state and federal regulations address manure management issues with such uses, Pennsylvania, under Act 38 (also known as ACRE or Agriculture, Communities and the Rural Environment) limits the restrictions that local municipalities can place on normal agricultural operations.

It must be noted that the proposed Agricultural area includes areas of the Township which are currently zoned Rural. Under current zoning regulations, development in the Rural Zone may occur at a density of one (1) dwelling unit per five (5) acres of land area – with residential lots as small as one (1) acre permitted. The anticipated future rezoning of the currently-zoned Rural areas will result in the creation of new dimensionally non-conforming lots, along with numerous such lots in the existing, scattered residential subdivisions located in areas of the Township that are already zoned Agricultural. Any future revisions to the Zoning Ordinance should include provisions related specifically to such otherwise dimensionally nonconforming lots – so that existing and future lot owners do not have to constantly be requesting dimensional variances for dwelling expansions and/or the placement of accessory structures.

## **Rural**

The Rural category is proposed to be comprised mainly of single-family detached residential development at densities of 0.2 dwelling units per acre [one (1) dwelling unit per five (5) acres] or less. Cluster/conservation subdivision designs should also be permitted in these areas to allow increased design flexibility, while still maintaining the targeted residential densities. Compatible public and other community facilities could also be located in these areas. The portions of the Township proposed for Rural development are located (1) east and south of the Village of Falmouth – generally between Turnpike Road and Keener Road and (2) south of the Village of Bainbridge in the Locust Grove area. These areas are generally located adjacent to areas of higher density residential development (i.e.,

Bainbridge and Falmouth) where public sewerage service is available or feasibly could be provided in the future. No public water service is currently (or proposed to be) located in either of these two Rural areas. The proposed Rural areas are for the most part located in portions of the Township that were previously zoned Rural (R). The major differences from existing zoning that are proposed as a part of the Future Land Use Map and concurrent zoning ordinance update include (1) a significant reduction in the existing Rural Zone in the northeastern (Turnpike Road corridor) portion of the Township and (2) the redesignation of the area between Falmouth and Spring Hill Acres from Rural to Suburban Residential use.

## **Conservation**

This land use category is comprised of those areas that should be reserved in open space or restricted from intensive development to protect environmentally sensitive areas. These include (1) the river islands, flood plains and stream valleys of the Susquehanna River, as well as the Conewago, Snitz and Conoy Creeks (and their tributaries); (2) the steep slope areas (slopes greater than 15%) located in the Township; (3) the undeveloped portions of the Highlands Region that are located in the northern portion of the Township and (4) areas that may be subject to development restrictions as a result of hydric (wetlands) soils. These areas are further described in the Natural and Cultural Resources Plan section.

The **Designated Growth Areas** of the Township are represented by the proposed land uses encompassing the Villages of Bainbridge and Falmouth, as shown on the Future Land Use Map. Nearly all of the Township land areas proposed for (1) Suburban Residential, (2) High Density Residential, (3) and Village Center land uses, as well as (4) Local Commercial land uses are located within the confines of these two (2) Designated Growth Areas. The proposed Designated Growth Areas are served by public sewers (or can be served by extensions to the existing system).

Forecasts of future population in the Township do not anticipate a high degree of residential development and related activity in Conoy Township. The proposed Future Land Use Plan identifies areas adequate to accommodate a small to moderate level of growth, in locations meant to minimize disruption to existing and future agricultural operations, as well as to the Township's roadway network.

The population forecast for the Township prepared by the Lancaster County Planning Commission was used to estimate the number of new housing units needed through the Year 2030 and also can be used to estimate the amount of land area needed to accommodate these future housing units. Based on the Year 2000 average of 2.78 persons per dwelling unit, an additional 275 to 300 housing units will be needed in the Township. If the recommendations of the Future Land Use Map are implemented by subsequent amendments to the Township Zoning Map, the amount of residentially-zoned and developable land within the proposed Designated Growth Areas will be sufficient to accommodate the Township's projected population and commercial and industrial land requirements through the year 2030.

### **Suburban Residential**

This category is comprised of single-family detached dwellings, where public sewer service is available (or proposed) and transportation facilities are adequate. Compatible public and other community facilities could also be located in these areas. Anticipated gross residential densities in the suburban residential areas would generally range from four (4) to five and one-half (5½) dwelling units per acre. The areas of the Township proposed for this land use category include areas in or adjacent to the Villages of Bainbridge and Falmouth. While the area surrounding Bainbridge is already zoned Suburban Residential, the proposed area adjacent to the Village of Falmouth is currently zoned Rural. The types of uses and densities proposed in the Suburban Residential area are similar to those provided for in the Township's existing Suburban Residential (R-1) Zone. The existing Zoning Ordinance allows single family detached dwellings at 4.35 units per net acre. Single family detached dwellings at 5.5 units per net acre are permitted by conditional use where the cluster development option is employed.

### **High Density Residential**

The High Density Residential land use category (and corresponding zoning classification) is proposed for two (2) locations in the Township, which generally correspond with the areas of the Township currently located in the High Density Residential (R-2) Zone. These two (2) areas are located (1) in the northeastern portion of Falmouth and (2) along PA Route 441 south of Falmouth – at the King's River Haven Mobile Home Park. Proposed residential uses in the High Density Residential area would include detached (single family), semi-detached (duplex) or attached (townhouse, row) and

multiple-family dwellings. Manufactured home parks, age-restricted residential and cluster developments are also included in this land use category. The higher density dwelling types would require both public water and public sewer service. Densities in the High Density Residential land use category would range from 5.0 to 10.0 dwelling units per acre. The proposed uses and densities are based on the existing provisions of the High Density Residential (R-2) Zone.

### **Village Center**

This category provides for the continuation of the historic "rural village" development pattern exhibited in Bainbridge and Falmouth. These areas of the Township are characterized by an existing mix of residential, institutional and commercial uses. These mixed-use areas are proposed to continue into the foreseeable future. The types of residential uses to be located in these areas would include detached (single family), semi-detached (duplex), attached (townhouse, row) and multiple-family dwellings, along with residential apartment conversions and mixed residential/commercial units. The Village Centers also would provide for the continuation of existing businesses and allow the establishment of new neighborhood/service commercial uses. Residential densities in the Village Center areas would range from two and one-half (2.5) to eight (8) units per acre, since these areas also are currently or proposed to be served by public water and public sewer service. During the updating of the Township's Zoning Ordinance after adoption of this Comprehensive Plan, consideration should be given to expanding the types – and possibly sizes – of commercial uses allowed in the Township's Village Centers.

### **Local Commercial Uses**

This category includes larger scale and/or highway-oriented retail, service and entertainment businesses, convenience shopping areas, shopping centers and business/office uses. The small, scattered commercial uses spread throughout the Township are not identified in this category. This category includes two (2) locations in the northeastern and southeastern portions of the Village of Bainbridge. Portions of these areas are already zoned for and developed in commercial uses. In addition to the existing commercial areas located in Bainbridge, the future areas will be limited to areas adjacent to existing commercial development, which are in easily

accessible locations along the Township's major transportation corridor – PA Route 441.

## **Industrial**

The proposed Industrial area is located in the southern portion of the Township, between PA Route 441 and the Susquehanna River, and would encompass the current Bainbridge Sportsmen's Club, W. S. Frey Company and Lancaster County Solid Waste Management Authority properties. The proposed Industrial land use category provides for low-impact industrial uses, as well as warehousing, wholesale distribution centers, truck and bus terminals, and similar activities. More intensive manufacturing and industrial uses would require additional review and approvals by the Township. The proposed uses in the Industrial area would be consistent with the use currently permitted – either by right or by conditional use – in the existing Industrial (I) Zone. The existing zoning regulations require conditional use approval for any use that may have a potentially adverse impact on adjacent or nearby properties.

## **Community Facilities**

This land use category is comprised of public and private institutional uses (such as the U.S. Post Offices), educational facilities (such as the Bainbridge Elementary School), public utility facilities (such as the Bainbridge Water Authority facilities, Township wastewater treatment plants and numerous PPL holdings and electric substations), religious and civic activities (such as churches, cemeteries, libraries and fire halls), and municipal buildings and grounds (such as the Township office). This category is also comprised of existing and future neighborhood recreation areas, along with municipally and institutionally owned facilities. The locations of such uses on the Future Land Use Plan reflect, for the most part, the locations of existing uses in the Township. New locations of public/institutional facilities are generally located in conjunction with new development and as a result, are not able to be depicted on the Future Land Use Map at this time. However, new community facilities should be located within the Designated Growth Areas, so that they can be provided with public services and not encroach into the agricultural portions of the Township.

## **RELATIONSHIP OF THE PLAN TO ADJACENT MUNICIPALITIES' AND COUNTY PLANNING EFFORTS**

Available comprehensive plans and zoning ordinances were reviewed during the preparation of the Comprehensive Plan to assess the compatibility of Conoy Township's existing and proposed development with that of existing and proposed development and plans in contiguous portions of neighboring municipalities and with the objectives and plans of the Lancaster County Comprehensive Plan. This assessment follows:

Seven (7) municipalities surround Conoy Township. The Township is bordered by Londonderry Township (Dauphin County) to the north; West Donegal Township to the northeast and east, East Donegal Township to the east and southeast; and four (4) York County Municipalities – Newberry Township, York Haven Borough, East Manchester Township and Hellam Township to the west (all on the opposite bank of the Susquehanna River). All three (3) municipalities in Lancaster and Dauphin Counties have adopted both Comprehensive Plans and Zoning Ordinances. The future land use plans and zoning ordinances of the portions of these municipalities adjacent to Conoy Township were considered in the development of the Comprehensive Plan. Since all of the municipalities located in York County are west of the Susquehanna River, their planning regulations were not considered.

Conoy Township's entire border with Londonderry Township consists of the Conewago Creek and its floodplain. The Londonderry Township Zoning Ordinance (last amended in October 2005) has a small portion of its border with Conoy Township (between PA 441 and the Susquehanna River) zoned R-1 Residential, which allows single-family detached dwellings on minimum one (1) acre lots. This portion of Londonderry Township is adjacent to the Conewago Township floodplain, as well as an area in Conoy Township that is proposed for Rural uses. The remainder of Londonderry Township that abuts Conoy Township is zoned Agricultural, which severely limits non-agricultural development. Such zoning is entirely compatible with the proposed (and current) agricultural and conservation (floodplain) uses in Conoy Township.

The boundary between Conoy and West Donegal Townships does not follow any natural or manmade features. The entirety of Conoy Township that abuts West Donegal Township is proposed for Agricultural uses. This is a proposed change from the current Conoy Township Zoning Map, which includes Rural zoning from Yoder Road north to the Conewago Creek. According to the West Donegal Township Zoning Ordinance (October 2003), the portions of West Donegal Township abutting Conoy Township include (1) Rural

(R) zoning from the Conewago Creek south to Amosite Road; (2) Agricultural (A) zoning from Amosite Road south to the Pioneer Hills and Hilltop Acres Developments along Stone Mill Road (which are zoned R-2 Medium Density Residential) and then (3) Agricultural zoning again, south to the East Donegal Township boundary. The Rural zoning district in West Donegal Township permits single family dwellings on minimum one (1) acre lots without public water or public sewer and on minimum 20,000 SF lots with both public water and sewer. While the Rural Zone in Conoy Township only allows a residential density of 0.2 dwelling units per acre, the proposed change to the Agricultural Zone would decrease this allowable density to one (1) dwelling unit per twenty-five (25) acres of land. The provisions of the Agricultural Zoning District in West Donegal are similar to those of Londonderry Township – and of Conoy Township (currently) – which generally allow one (1) single-family dwelling per twenty-five (25) acres of land. The small portion of West Donegal Township that is zoned R-2 allows both single-family detached and single-family semi-detached dwellings at densities up to nearly six (6) units per acre when public sewers are provided. A portion of the Pioneer Hills Development extends into Conoy Township, where it is zoned Agricultural.

The zoning classifications of adjacent land in East Donegal Township include Conservation (C) between the Susquehanna River and PA Route 441 and Agricultural (A) from PA Route 441 north along the remaining contiguous portions of Conoy Township. In both the Conservation and Agricultural Zoning Districts in East Donegal Township, agricultural and conservation uses are permitted. One (1) new residential dwelling is permitted for every twenty-five (25) acres of land. Based on the current zoning and proposed Future Land Use, land use regulations along the common boundary between Conoy and East Donegal Townships are very compatible.

As previously stated, the four (4) York County municipalities that abut Conoy Township's western boundary (Newberry Township, York Haven Borough, East Manchester Township and Hellam Township) are buffered by the expanse of the Susquehanna River. Future land uses in Conoy Township are anticipated to have minimal, if any impact on these four (4) municipalities.

### **County Comprehensive Planning**

The **Lancaster County Comprehensive Plan** is composed of three components:

- The Policy Element (***ReVisions***) – adopted in 1999;
- The Growth Management Element (***Balance***) – adopted in 2006; and



- Seven (7) Functional Elements, as follows:
  - Cultural Heritage (**Heritage**) – adopted in 2006
  - Housing (**Choices**) – adopted in 2006
  - Strategic Tourism Development (**Tourism**) – adopted in 2005
  - Transportation (**Connections**) - adopted in 2008
  - Water Resources – currently being updated
  - Economic Development – to be adopted early 2009

The Policy Element (**ReVisions**), was adopted by the Lancaster County Board of Commissioners in 1999 and contains policy goals and objectives concerning major issues facing the County.

The **Policy Plan** contains the **Vision** and **Goals** of the Lancaster County Comprehensive Plan. It also includes **Key Focus Areas** and **Policies** and **Actions** that need to be implemented to reach the **Vision** for the future. This structure is designed to show the close relationship and interconnection between different planning issues. In addition, the **Key Focus Areas** element of the Plan is designed to help focus energy on the issues that the community has said concerns them the most.

The **Vision** for the future of Lancaster County also includes components specific to (1) Lancaster City, (2) the Boroughs, (3) Suburban Communities, (4) Agricultural Areas, (5) Resource Areas and (6) Villages. According to the County's Growth Management Plan, Conoy Township falls into the last three component areas.

The goals of this Conoy Township Comprehensive Plan generally mirror those of the overall County Plan – to preserve the Township's agricultural heritage and encourage new development within the Township's two historic villages.

The second component of the **Lancaster County Comprehensive Plan**, the **Growth Management Element (Balance)** – adopted in April 2006, is an update of previous plans that were adopted in 1993 and 1997. The **2006 Growth Management Element Update** visually represents the land use goals and objectives contained in the **Policy Plan** and identifies those areas that are appropriate for urban growth and those areas appropriate for agriculture, resource conservation and rural uses.

The **Growth Management Element Update** consists of three main components – (1) an Urban Growth Area Strategy; (2) a Rural Strategy and (3) an Implementation Plan

The **Growth Management Element Update** defines a new, comprehensive **Rural Strategy** “*designed to maintain for future generations the resources and traditional ties to the land that define Lancaster County’s rural character.*” The **Growth Management Element Update** identifies Conoy Township as not being located within an Urban Growth Area and, thus, it is discussed here as it relates to the County’s Rural Strategy.

The **Rural Strategy** establishes **Designated Rural Areas** within which “rural resources, rural character, and a rural way-of-life are to be sustained and development that is incompatible with these uses is to be precluded.” Four types of Rural Area designations are proposed: (1) Agricultural Areas; (2) Agricultural with Natural Areas; (3) Natural Areas; and (4) Rural Centers. These are further described in the Growth Management Update Element, as follows:

- **Designated Agricultural Areas** contain the greatest intensity of agricultural resources and uses, and should be managed to preserve productive farmland, promote a healthy agricultural industry, and maintain scenic and historic rural landscapes.

Apart from the villages of Bainbridge and Falmouth, the bulk of Conoy Township south of Amosite Road is identified as a “Designated Agricultural Area.” This is generally consistent with the Township’s strict Agricultural zoning currently in place in the area.

- **Designated Agricultural with Natural Areas** contain a mixture of high value agricultural and natural resource factors. This designation applies to areas of the County with a predominance of agricultural resources and uses, but which also have a significant proportion of environmentally sensitive resources (steep slopes, stream corridors, etc .) mixed with the agricultural pattern .

Again, apart from the villages of Bainbridge and Falmouth, the bulk of Conoy Township north of Amosite Road is identified as a “Designated Agricultural with Natural Area.” This is generally consistent with the Township’s strict Agricultural zoning and low density Rural zoning currently in place in the area.

- **Designated Natural Areas** are areas with high scenic, recreational, and natural resource value, and should be managed to protect natural resources. This designation applies to areas of the County with a preponderance of significant natural resources, as defined by intrinsically high resource value (e .g. valuable

*natural habitat areas), significant scenic value for passive and active recreation, and/or environmental constraints for development.*

The few areas of Conoy Township that are identified as “Designated Natural Areas” generally include only the Township’s existing parks and recreation areas.

- ***Rural Centers*** are the fourth type of Designated Rural Area. Rural Centers are areas of existing development to which development not directly related to the rural economy is to be guided. Rural Centers should not be designated or supported with public infrastructure without adequate mechanisms in place to protect the surrounding Designated Rural Area (agricultural or conservation zoning, purchase of Development Rights, etc.).

Four types of Rural Centers are described in the Growth Management Element:

1. **Village Growth Areas.** “A Village Growth Area is an area appropriate for future development that includes a traditional village at its center, adjacent developed portions of a township, and additional development capacity to absorb a portion of the township’s future land use needs through reinvestment or new development over a 25-year period. Existing villages in Lancaster County generally have 50 or more dwellings, are pedestrian-oriented in character, and have a radius of between one-quarter and one-half mile from center to edge.”

The Village of Bainbridge has been identified as a Village Growth Area. This is consistent with planning and development activities in Conoy Township, which have (1) zoned the Bainbridge area for development and (2) provided the necessary infrastructure – both public water and public sewer – to accommodate such growth.

2. **Crossroads Communities.** “Crossroads Communities are compact gatherings of generally 20 to 50 dwellings with a distinct identity in a rural area, typically located where two or more roads intersect. A Crossroads Community often has a central gathering place, and may have a few supporting commercial, institutional, or public uses. Where appropriate these communities may accommodate a limited amount of new development. Only development that is compatible with the traditional character and small scale of these communities, and which is feasible to support with rural infrastructure, should be permitted in Crossroads Communities. Crossroads Communities are not expected to have

*public water and sewer. In certain circumstances a Crossroads Community may provide the basis for a Village Growth Area designation.”*

The Village of Falmouth has been identified as a Crossroads Community in the Growth Management Element. However, as public sewer service currently exists in Falmouth and a future public water supply system has been discussed, it would appear more appropriate for the Village of Falmouth to be designated as a Village Growth Area as well.

3. **Rural Business Areas.** *Rural Business Areas are existing developed areas with undeveloped lots or the potential to expand or add uses where additional development could be accommodated rather than sprawled throughout the rural areas. A Rural Business Center would be established through infill and, as appropriate, limited expansion of the existing use(s). Examples include clusters of industrial, commercial, institutional, employment, or service uses; concentrations of recreational or tourist uses; and mixes of these uses.*

No Rural Business Areas have been identified in Conoy Township.

4. **Rural Neighborhoods.** *Rural Neighborhoods are areas of existing residential development or subdivisions with undeveloped lots or adjacent land that would be appropriate to accommodate a portion of a Township's future land use needs. The purpose of Rural Neighborhoods is to focus future residential development in areas where it already exists, on land that is currently subdivided, or on land adjacent to or between existing subdivisions. Rural Neighborhoods should be limited in scope and developed in a compact pattern with a defined edge. Rural Neighborhoods are not intended to attract growth, but to accommodate growth that would otherwise occur as rural sprawl in a compact area.*

While no Rural Neighborhoods have been specifically identified in Conoy Township, existing residential developments such as Conoy Acres, Pioneer Hills, Sagerville and Stackstown could fit into this category. The Township should consider zoning-specific regulations for these areas as part of the Zoning Ordinance update.

The third component of the Lancaster County Comprehensive Plan, **Functional Elements**, are specialized planning documents designed to specifically address issues of concern. The seven identified Functional Elements include the topics of (1) Cultural Heritage, (2) Housing, (3) Regional Open Space, (4) Strategic Tourism Development, (5) Transportation, (6) Water Resources and (7) Economic Development. These plans, when completed and adopted, will be incorporated into the Lancaster County Comprehensive Plan as official amendments. All adopted functional plans were considered in the preparation of this Comprehensive Plan.

In summary, the existing and proposed development of the Conoy Township is generally compatible with the existing and proposed development and plans of the contiguous municipalities and is also generally consistent with the objectives and plans of the Lancaster County Comprehensive Plan.

## PROPOSED HOUSING PLAN

The two identified housing-related goals of this Plan are as follows:

- Allow for a wide range of housing types and costs.
- Encourage improvement of neglected residential as well as non-residential properties.
- Allow accessory dwelling units.

In addition, one of the land use-related goals is to *“Target residential development in the Township to the existing Village Center and Residential Zones in and around Bainbridge and Falmouth to satisfy the residential density and population growth goals of the LCPC Growth Management Plan Update.”*

The population of the Township is projected to continue to increase into the foreseeable future. The Lancaster County Planning Commission’s forecast for Conoy Township anticipates that the total population will increase from an actual population of 3,067 in 2000 to a population of 3,829 by the Year 2030 (an increase of 762 people). In order to accommodate this increased population, additional housing units will need to be provided. Based on an additional population of 762 and a Year 2000 average of 2.78 persons per household, an additional 274 dwelling units may be required by the Year 2030. There will be a need for a mix of types of housing units so that individuals of all age groups, family size and economic level have equal opportunities to reside in Conoy Township.

The existing Conoy Township Zoning Ordinance provides many of the specific detailed regulations to support the accomplishment of this Comprehensive Plan's stated housing goals. Numerous dwelling types are currently permitted in the various zoning districts, including single-family detached dwellings, single-family semi-detached dwellings, two family dwellings, attached dwellings (townhouses), garden apartments and conversion apartments, and manufactured home parks.

Under current zoning regulations, development in the Agricultural (A) Zone is limited to approximately one (1) new single family detached dwelling for every twenty-five (25) acres of land. In the Rural (R) Zone, residential development may occur at a density of one (1) dwelling unit per five (5) acres of land area – with residential lots as small as one (1) acre permitted. The existing Suburban Residential (R-1) Zone allows single family detached

dwelling units at 4.35 units per net acre. Single family detached dwelling units at 5.5 units per net acre are permitted by conditional use where the cluster development option is employed. The High Density Residential (R-2) Zone includes provisions for detached (single family), semi-detached (duplex) or attached (townhouse, row) and multiple-family dwellings. Manufactured home parks, age-restricted residential and cluster developments are also included in this land use category. Densities in the High Density Residential Zone range from 5.0 to 10.0 dwelling units per acre. However, the higher density dwelling types would require both public water and public sewer service, which is currently not available in the Falmouth area. Finally, in the Village Center (VC) Zone, the types of residential uses allowed include detached (single family), semi-detached (duplex), attached (townhouse, row) and multiple-family dwellings, along with residential apartment conversions and mixed residential/commercial units. Residential densities in the Village Center Zone range from two (2) to eight (8) units per acre, since these areas also are currently/proposed to be served by public water and public sewer service. Based on the areas of the Township that are currently zoned (and/or proposed to be zoned) to allow residential uses, there is more than adequate land available to accommodate the number of additional dwelling units forecast to be located in the Township by the Year 2030.

In April 2006, the Lancaster County Board of Commissioners adopted *Choices*, The Housing Element of the Lancaster County, Pennsylvania Comprehensive Plan. *Choices* is the Update to the Housing Element of the Lancaster County Comprehensive Plan. The stated Vision of *Choices* is that “*An adequate supply, and diversity, of housing opportunities will be available in Lancaster County to give current and future residents greater choice in housing type and tenure (rental and ownership), location and price for a place to call home.*” The document identifies significant and critical housing needs and issues throughout the County and recommends way in which different sectors of the community can help to address those needs and issues.

The comprehensive update of the Conoy Township Zoning Ordinance currently being undertaken will include an examination of additional means to promote the goals and objectives of both the Township's and the County's Housing Plans. As recommended in *Choices*, “*Rural Centers should be designated to absorb new rural residential development in a coherent manner that minimizes sprawl and maximizes the preservation of farmland and natural areas.*” The same is proposed for the Bainbridge and Falmouth areas. *Choices* also recommends the implementation of “*smart growth planning practices to increase rural housing opportunities and affordability while reducing sprawl and maintaining the unique character of villages and other rural communities through conservation, infill, and revitalization.*”

These and other County recommendations, as well as zoning provisions related to incentives for developers to set aside a certain percentage of units in their proposed development(s) for affordable and specialized housing needs, will be examined as part of the zoning ordinance update process.

The update of the Zoning Ordinance should include provisions to allow the establishment of accessory dwelling units – either in principal or accessory structures. The update should also include opportunities for the conversion of existing unused and/or underutilized commercial and/or industrial buildings. The Township will also investigate the adoption of building codes, housing codes and/or property maintenance codes to ensure the continuance of adequate housing and/or the upgrading of existing substandard housing stock in the Township.



## PROPOSED TRANSPORTATION PLAN

The Township's transportation related goals are as follows:

- Coordinate future land use and roadway functions to maximize efficient use of the Township's existing major roads.
- Coordinate existing roadway functions with appropriate design standards.
- Coordinate future road improvements with projected roadway functions and adjoining planned land uses.
- Assure that future developments provide for access designs and locations that minimize traffic congestion and safety problems.
- Acknowledge and plan for the "regional" traffic that passes through the Township on a regular basis.
- Encourage developer-provided road improvements that are needed.
- Encourage non-motorized trails for pedestrian and bicycle use within the Township.

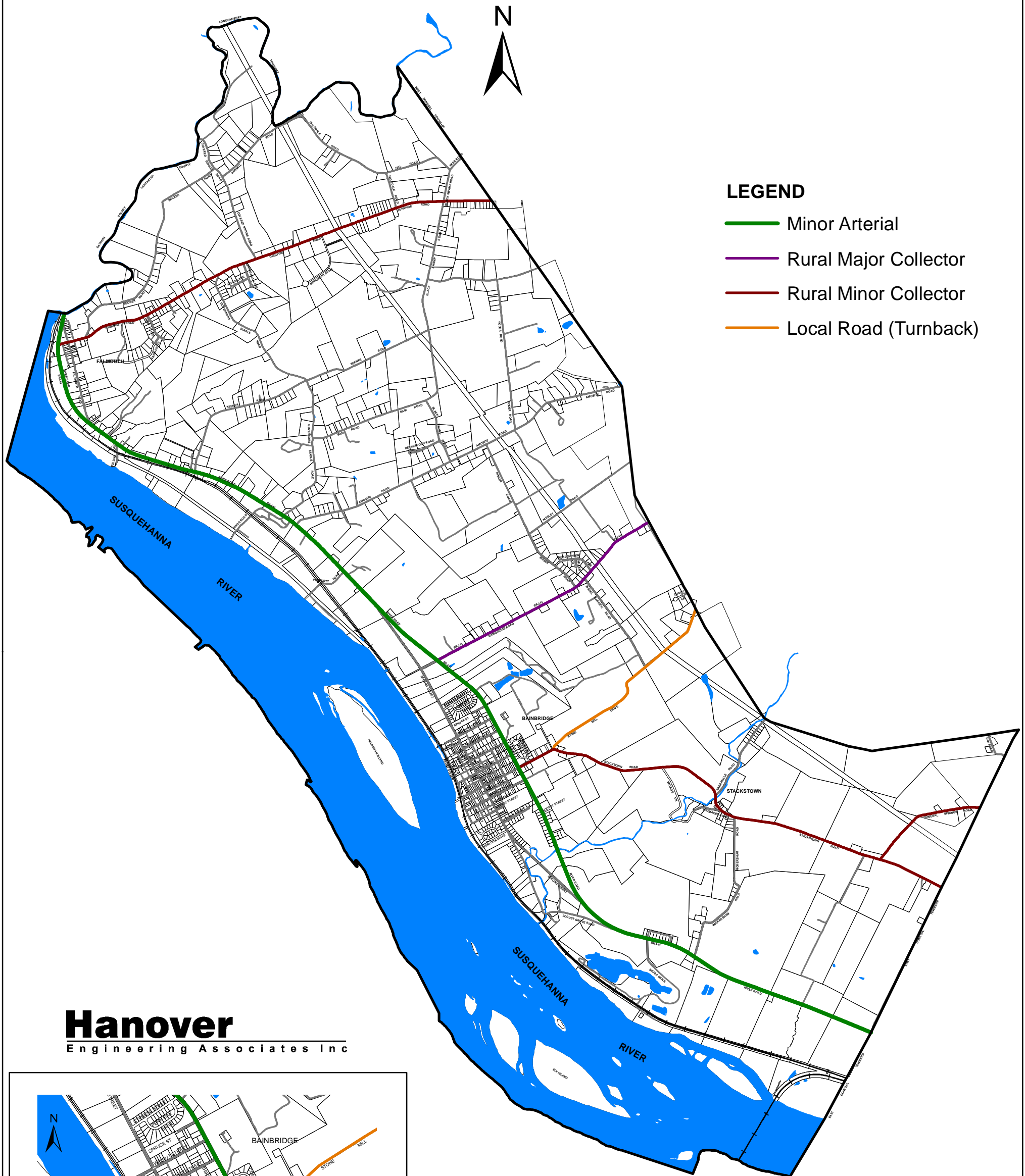
To accomplish the Comprehensive Plan's major transportation goals and objectives, a system of road classifications by functional purpose was established as discussed in the Transportation Facilities section of Chapter 3. In simple form, there are four classifications of roadways in the Township: arterials, major collectors, minor collectors and local roads. Each roadway has a function of moving traffic - the arterial performs this on an interregional basis, collector roads serve as links from the local roads to the regional system and local roads provide direct service between residential and other developed areas and the collector system.

The proposed Transportation Plan does not alter to any great extent the existing circulation pattern in Conoy Township. The traffic carrying capacity of the major roads in the Township should be protected. Failure to control development along the indicated arterials and collector roads can seriously impair their efficiency and create hazardous driving conditions.

It is proposed that all the existing classifications of roadways in the Township be continued into the future. The proposed roadway classifications are as follows:

# TRANSPORTATION PLAN

## CONOY TOWNSHIP



# Hanover

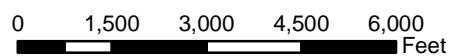
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Engineering Associates Inc

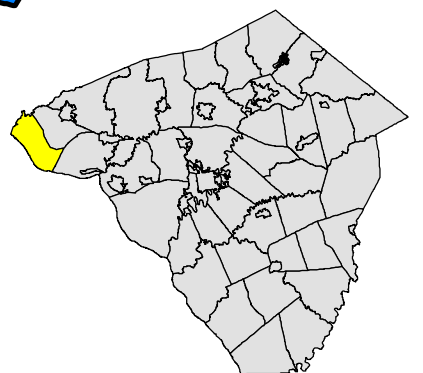


BAINBRIDGE

SCALE: 1" = 2000'



SCALE: 1" = 3000'



## LOCATION MAP

REVISED: MAY 2009

### **Rural Principal Arterials**

There are no roadways in the Township that can be classified as limited access rural principal arterials or rural principal arterials. The closest limited access rural principal arterials to the Township are PA Route 283 and US Route 30. The closest rural principal arterial to the Township is PA Route 230.

### **Rural Minor Arterials**

The only road in the Township classified as a rural minor arterial is the following:

- River Road (SR 441) from the Dauphin County line at Conewago Creek to the East Donegal Township line.

### **Rural Major Collectors**

The following road is classified as a rural major collector:

- Bainbridge Road (SR 241) between Bainbridge and the West Donegal Township Line.

### **Rural Minor Collectors**

The following roads are classified as rural minor collectors:

- SR 4002 (Donegal Springs Road) from Stackstown Road (SR 4004) to the East Donegal Township line.
- SR 4004 (Stackstown Road) from River Road (SR 441) in Bainbridge to the East Donegal Township line.
- SR 4008 (Turnpike Road) from River Road (SR 441) in Falmouth east to the West Donegal Township line.

### **Rural Locals**

The remaining State road, SR 4006 (Stone Mill Road) is currently in the process of being “turned back” to the Township. It as well as all Township-owned and maintained streets and roadways in the Township are classified as rural locals.

The Transportation Plan Map identifies the major system of highways and streets in Conoy Township based on the above classifications.

### **Transportation Plan Proposals**

The overall goal of the Transportation Plan is to insure that existing and future development in the Township is served by transportation facilities adequate to meet the Township's needs. Several means can be employed to accomplish the major transportation plan goals and objectives. Given the high cost of new construction and the limited sources of outside funding available, it would appear that a combined program of (1) upgrading of existing roadways and (2) limited new construction would be the most feasible means of ensuring an adequate road system. A combined program would also allow a time-phased approach whereby individual segments could be upgraded/constructed with planned financing.

Conoy Township should continue to upgrade its transportation system. Road improvements may be made at the Township level where appropriate. Minor improvements related to maintenance should be done on a continual basis. These tasks might include clearing right-of-ways and sight lines at intersections, cleaning stormwater drains, removing loose gravel, trimming unsafe trees, and repairing surface and shoulder problems.

The Township should continue to identify where and when new roads or alignments must occur, and begin to acquire the necessary rights-of-way. Future road improvement locations also may be identified on an adopted Official Map. Existing Township and County ordinances include standards for road design, installation and maintenance. Provisions of the existing Lancaster County Subdivision and Land Development Ordinance and the Conoy Township Road Ordinance also dictate that the Township not accept roads for dedication unless they meet the required standards. The adequacy of the road network should be reviewed annually, which could lead to periodic revisions of the Township's ongoing road maintenance and improvement program.

New developments should be required by ordinance to perform traffic impact studies and limit dwelling units to a number that will not exceed the capacity of the roads that serve them - developments must be thought of as "traffic sheds" which should not produce flows in excess of the receiving "traffic stream". One alternative to developers proposing more units than the level of service can support could be to offer to make the required road improvements to raise the "traffic stream's" capacity.

The proposed Land Use Plan proposes that future development in the Township be located adjacent to or easily accessible to the major traffic routes in the Township. Future development adjacent to the major traffic routes in the Township should also be required to provide adequate turning lanes and to restrict driveway movements, as necessary, to minimize conflicts with through traffic. Similarly, any new streets constructed as part of new residential or other development should be designed in accordance with roadway standards required by existing Township, County and State regulations. Care should be taken to insure that conflicts from on street parking, multiple openings onto roadways, etc., are kept to a minimum.

Major road improvements must be coordinated at the County and State levels. Such projects can only be accomplished through extensive cooperation among local, county, state and Federal officials.

### **Proposed Transportation Projects**

The State's Twelve-Year Program targets the Commonwealth's improvement efforts in all modes of transportation: highways, bridges, aviation, rail and transit over a twelve (12) year period. The TIP - Transportation Improvement Program - is a staged, four-year, intermodal program of transportation projects, which is consistent with the Long-Range Transportation Plan. The Lancaster County Planning Commission prepares and adopts the TIP annually. A project to be funded has to be included in the Lancaster County Long-Range Transportation Plan. The current twelve-year improvement program has no listed road projects related to Conoy Township.

The Township road system is supported in part by the Pennsylvania Department of Transportation through Liquid Fuels Allocations. These monies are for construction, repair and maintenance of Township roads. The funding of major highway projects by the State is usually reflected in the State's twelve-year improvement program.

One ongoing project which will serve the non-motorized, recreational needs of Township (and area) residents is the Northwest Lancaster County River Trail project.

### **Other Transportation Facilities**

The limited amount of public transportation services and regional rail transportation facilities currently made available to Township residents should, at a minimum, be maintained. Any improvements and/or expansions in such services would, however,

provide better opportunities for Township residents to avail themselves of such services - particularly for the residents of the Township who do not operate personal automobiles.

## **Rail Transportation**

### **Freight Rail**

The main line of the Norfolk Southern Railroad runs along the western boundary of Conoy Township, paralleling the Susquehanna River, and carries rail freight traffic through the Township and Lancaster County. It is referred to as the Port Road and connects the Enola Yard just outside of Harrisburg with Perryville, Maryland. The Delaware & Hudson/Canadian Pacific has operating rights to this line for its freight trains traveling from Canada and New York to Maryland and Virginia. This railroad is an industrial railway serving industries along its routes and transporting goods between industries and communities up-and-down the Susquehanna River. The Township's Industrial Zoning District is situated to take advantage of the location of the rail line.

### **Passenger Rail**

The primary passenger rail service available to Township residents is Amtrak, which operates passenger rail service between Philadelphia and Harrisburg via the Keystone Corridor. Keystone service runs daily and stops at the Lancaster City, Mount Joy Borough and Elizabethtown Borough stations. The Pennsylvanian runs daily and stops at the Lancaster and Elizabethtown Borough stations.

## **Air Transportation**

Air transportation facilities will continue to play a minimal role in serving the needs of Conoy Township residents. Lancaster Airport is the only airport facility in Lancaster County with regularly scheduled air service. The airport is the only publicly owned airport (controlled by the Lancaster Airport Authority) and is located north of Lancaster City, in Manheim Township. Facilities and services at Lancaster Airport include an FAA control tower, terminal building, snack bar, hangars, flight instruction, charter service, sales and repair of aircraft, sale of fuel, and other services. Township residents can also travel to Harrisburg International Airport (HIA) in Middletown for passenger service. The Donegal Springs Airport is located south of the Township in East Donegal Township. It is privately-owned and has a 3,250 feet paved runway. The updates to the Township Zoning Ordinance should include Airport Zoning Overlay District regulations for these two (2) airports.

## **Public Transportation Facilities**

The Red Rose Transit Authority (RRTA) provides public transit in Lancaster County and currently operates 17 fixed routes. Presently, Conoy Township possesses no public transportation from the RRTA. The nearest RRTA routes are located in Elizabethtown (Route 18) and Marietta Boroughs (Route 17). If future development becomes such that public transportation is warranted then Township officials should solicit RRTA to extend a route alignment into the Township via the Elizabethtown and/or Columbia-Marietta Routes. In addition to its fixed route bus service, RRTA operates a demand responsive service for transportation-disadvantaged persons. This service, called Red Rose Access, provides county-wide specialized transportation services that address and meet the requirements of the Americans with Disabilities Act of 1990 (ADA).

The Township should support the future expansion of Red Rose Transit Authority (RRTA) bus service into the Township. The Township should also support a review and updating of Lancaster County's Subdivision and Land Development Ordinance, as required, to provide for alternate transportation system management strategies where appropriate, such as van/car pooling, park-and-ride lots, etc.

## **Non-Motorized Transportation**

An identified system of pedestrian and bicycle ways should be developed to enable non-automotive traffic to flow freely and safely throughout the Township. The ideal system for movement of pedestrians in the developed portions of the Township – particularly in the villages - would be the provision of pedestrian ways, separated from vehicular traffic. Developing such a system requires large areas of undeveloped land or the extensive acquisition of rights-of-way from existing landowners. It is recommended that the existing sidewalk network in the developed areas of the Township be used for pedestrian movement. Improved signage and markings may be required at intersections of major vehicular routes. In the case of new development, it is recommended that, where topography and site designs allow, separate sidewalks or other pedestrian ways be provided. The provision of separate bicycle paths meets obstacles similar to those confronting the development of pedestrian ways. A reasonable solution is the identification of certain roadways as bicycle routes. This alternative does not separate automotive from bicycle traffic but, with careful route selection and adequate safety precautions, the system can be successful.

The Township should also continue to pursue the development of the trail system located along the Susquehanna River, which includes the Conoy Canal Trail and the Northwest Lancaster County River Trail.

## PROPOSED NATURAL AND HISTORIC RESOURCES PROTECTION PLAN

Numerous respondents to the Township Residents' Survey indicated their desire that the Township's "Rural/Country Lifestyle" be maintained. One way of maintaining that lifestyle is through the protection and preservation of the natural and historic resources that have helped to define Conoy Township. Over ninety percent of the Residents' Survey respondents expressing an opinion supported the idea that the Township take greater efforts to preserve and/or protect the agricultural lands, woodlands and natural areas. Nearly ninety percent preferred that the Townships historic resources also be preserved/protected.

### **Historic Resources Protection**

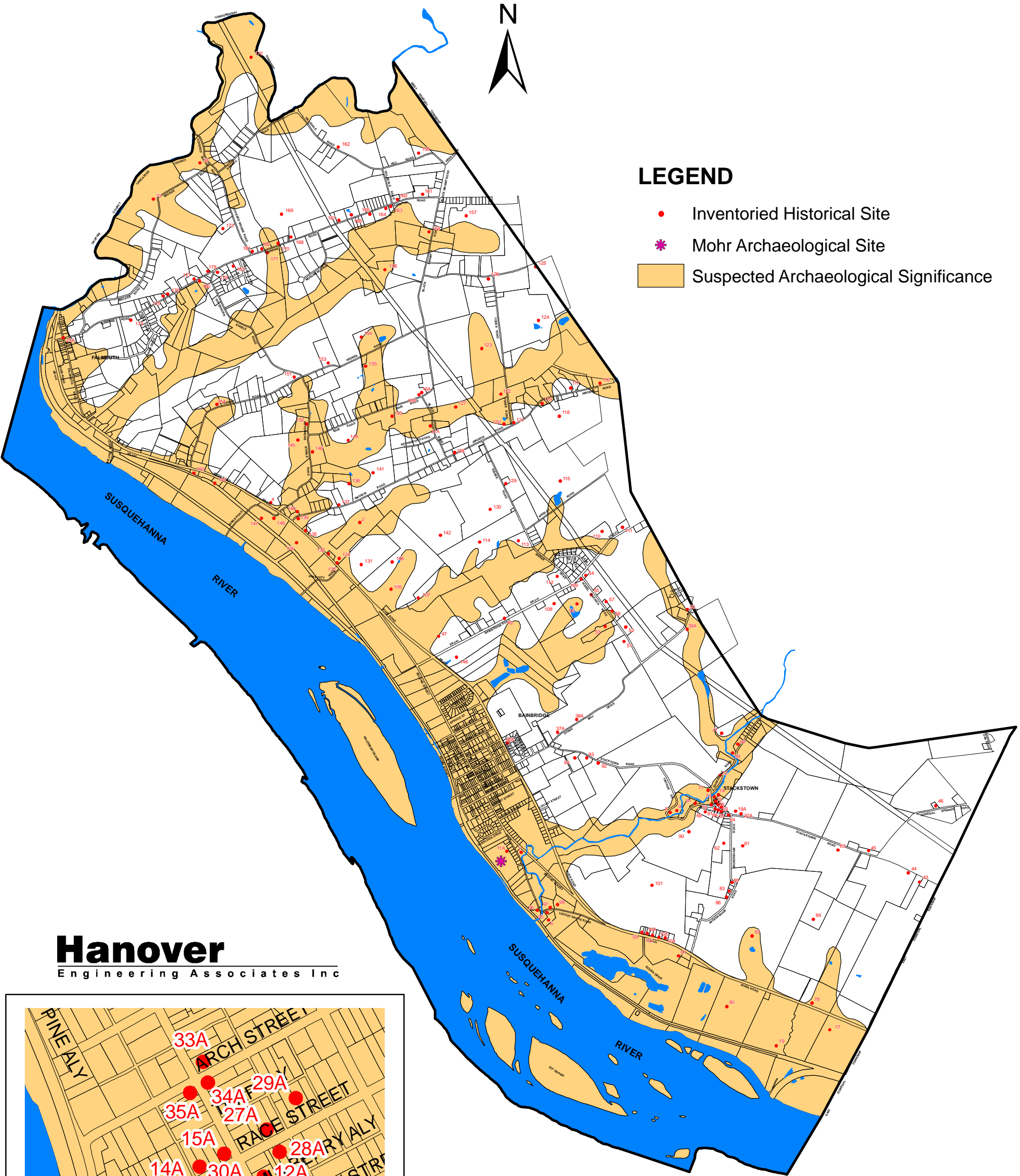
Steps should be taken to ensure that the historic rural villages of Bainbridge and Falmouth are maintained, as well as the numerous historic farmsteads that dot the Township's landscape. Such steps are introduced here and can be further refined in the Township's Zoning Ordinance and through the Lancaster County Subdivision and Land Development Ordinance. The first steps toward preserving the Township's historic resources are related to (1) identification and (2) education.

Conoy Township is rich in historic resources. The Lancaster County Historic Resource Survey compiled by the Historic Preservation Trust of Lancaster County was used to identify historic sites for the 1990 Conoy Township Comprehensive Plan. In all, 33 sites were listed. Listed resources included a variety of houses, mills, bridges, a town-marker, a mansion and a canal lock. Probably the most widely known historic site is the restored Locust Grove - more commonly known as the Haldeman Mansion. This facility is maintained by the Haldeman Mansion Society and is known to be the birthplace of Simon S. Haldeman, a famed naturalist and author. This structure is also listed on the National Register of Historic Places. In addition, two other sites in the Township have been listed by the Pennsylvania Historical Museum Commission (PHMC), Bureau for Historic Preservation, as being eligible for listing on the National Register. They include (1) the Engle (Christian and Maria) Farm – on Shumaker Road, southeast of Stackstown and (2) the Haldeman/Fitzkee House – on Race Street (in Bainbridge) , between Front and 2<sup>nd</sup> Streets. The Mays-Lang Farm (built c. 1798) is also listed in the PHMC's Cultural Resources Database. This site is located on Donegal Springs Road at the Conoy/East Donegal Township line.



# HISTORIC RESOURCES PROTECTION PLAN

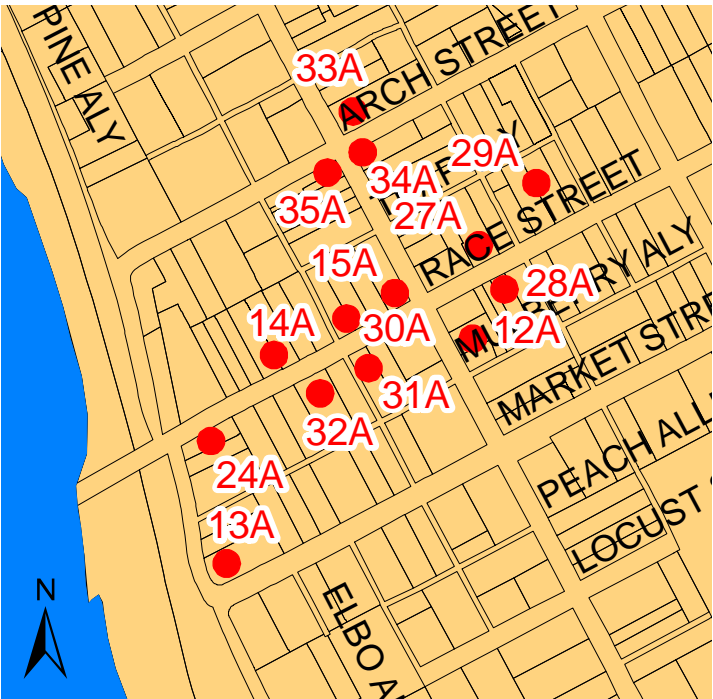
## CONOY TOWNSHIP



### LEGEND

- Inventoried Historical Site
- \* Mohr Archaeological Site
- Suspected Archaeological Significance

**Hanover**  
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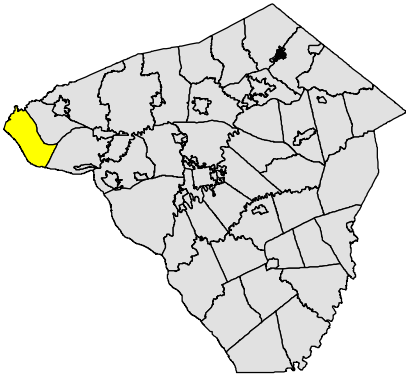
BAINBRIDGE

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SCALE: 1" = 500'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'



LOCATION MAP

REVISED: MAY 2009

The Township should work with the Lancaster County Planning Commission and other historic preservation groups to prepare an updated survey of the Township's historic resources. The Township should also strive to educate both existing and new residents of the agricultural history of the Township. Regulatory provisions that might be considered as implementation steps to this Comprehensive Plan include the following:

- Historic overlay district in the Township's Zoning Ordinance
- Zoning bonuses for the preservation of specific historical structures and/or features
- Ordinance provisions for the protection of landscape features such as scenic vistas or historic roads
- An ordinance that establishes a formal Historic District(s) and Historical and Architectural Review Board

An updated inventory of historic sites and districts will provide a foundation to facilitate the process of developing further historical provisions within the Township. By incorporating historic preservation within the Township's ordinances, the Township will be in a better position to balance the preservation of its historic resources with future development.

Various funding sources are available (through the Pennsylvania Historical and Museum Commission and others) for grant money to assist municipalities with historic preservation studies and plans, as well as money available for rehabilitating and restoring historic properties. Tax incentives may also be available for individual preservation efforts.

### **Archaeological Resources Protection**

According to the PHMC, Conoy Township possesses rather diverse archaeological resources which shed light on the historic activities which have occurred on the land within the Township's boundaries. Included in these resources is what is described as one extremely important site. Known as the Mohr Site, "It is the location of an Indian village of the pre-contact era, probably dating somewhere in the 15<sup>th</sup> century. The site contains archaeological features such as middens, pits and house patterns as well as numerous human burials relating to the village. In addition, one of the burials identified by the original researchers (in the 1960s) may have been a later interment that dated from the 18<sup>th</sup> century. Obviously, destruction of this site would be of concern to present-day Native Americans as well." It is the recommendation of the PHMC that a full archaeological investigation of the entire site be conducted, and at a minimum, the extent of the site be defined and preserved/protected in perpetuity.

Prior to the preparation of the 1990 Comprehensive Plan, the PHMC rendered a map of the Township to depict areas of known and/or suspected archaeological significance. These areas are highlighted on the Historic and Cultural Resources Protection Map. The mapped areas should be referred to and used as a “triggering mechanisms” for some archaeological investigation prior to development in these identified areas. Substantial protection of these resources is provided within the subdivision and land development process. Applicants are typically required to obtain approval by the Township and the Pennsylvania Department of Environmental Protection (DEP) for a “Planning Module for Land Development.” These Planning Modules generally require review by the PHMC to determine if any archaeological or historical resources are present in or near the project area. Known sites are required to do additional archaeological or historical studies. In addition, provisions of the Lancaster County Subdivision and Land Development Ordinance dictate that no project shall be developed on a site identified by the PHMC as containing features of archaeological significance until: (1) a complete level 1 and level 2 archeological survey of the site is completed; or (2) the State Historic Preservation Officer determines that the project will not disturb the cultural significance or artifacts on the site. If in the future the Township determines that significant archaeological resources remain unprotected from development, additional requirements could be established within the Zoning Ordinance or through the adoption of a special protection ordinance.

### **Natural Resources Protection**

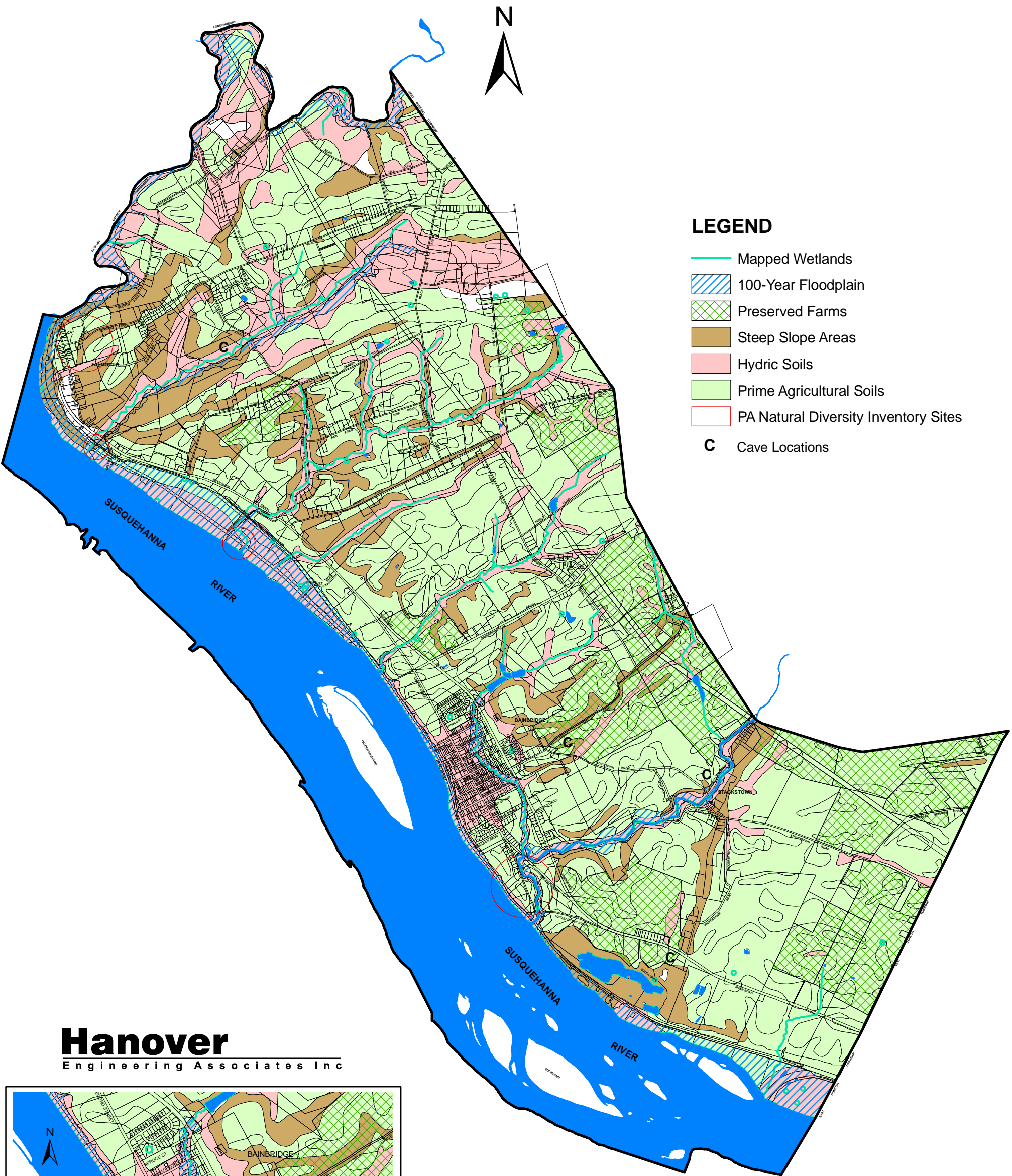
Equally important to the Township’s past history and future development are its natural resources. As described in the background studies, Conoy Township contains prime agricultural soils, streams and flood prone areas, wetlands, steep slopes, hazardous bedrock geology, woodlands, unique geologic features and sensitive natural diversity sites. Streams and flood prone areas are located in the Conservation Area on the Future Land Use Map. During the comprehensive update of the Township’s Zoning Ordinance, consideration should be given to the inclusion of overlay zoning districts to regulation development activities in these natural resources areas.

Of the total land (non-water) area in Conoy Township, approximately one half is classified as Prime Farmland by the NRCS. An additional one third is classified as prime farmland under the MPC guidelines. Thus, more than four out of every five acres of land in the Township are classified as some type of “prime” farmland. One of the recently enacted provisions of the MPC requires that zoning ordinances “protect” prime agricultural land. The preservation of prime agricultural land (and the Township’s agricultural heritage) is one of this Comprehensive Plan’s primary goals. The Future Land Use Plan proposes changes to the existing Township Zoning Map to expand the existing Agricultural Zoning District. Zoning Ordinance provisions should also be reviewed/revised to make it easier for



# NATURAL RESOURCES PROTECTION PLAN

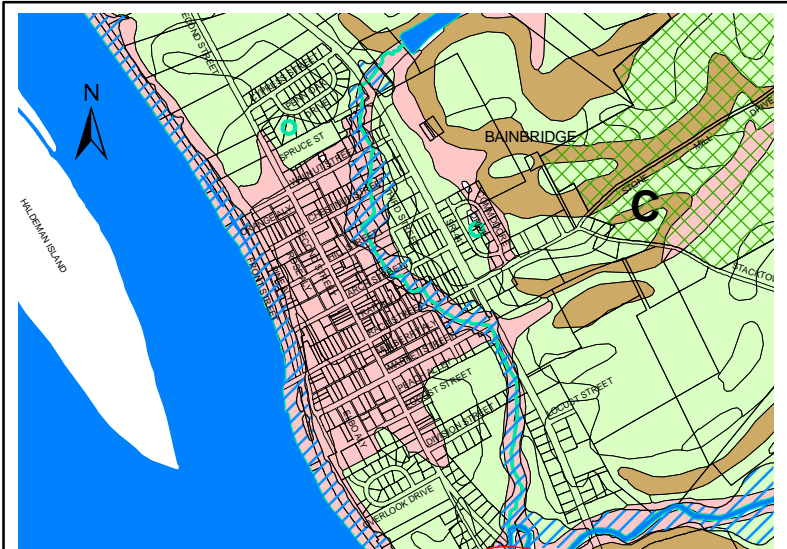
## CONOY TOWNSHIP



### LEGEND

- Mapped Wetlands
- 100-Year Floodplain
- Preserved Farms
- Steep Slope Areas
- Hydric Soils
- Prime Agricultural Soils
- PA Natural Diversity Inventory Sites
- C Cave Locations

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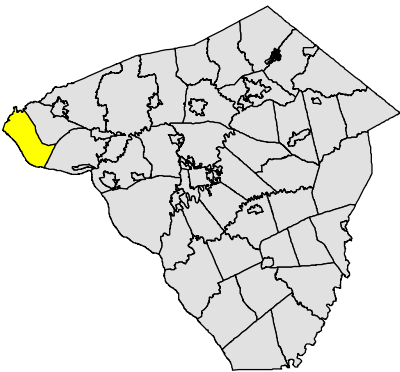
BAINBRIDGE

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SCALE: 1" = 2000'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'



LOCATION MAP

REVISED: MAY 2009

the existing farming community to stay in agriculture – and thereby preserve both the Township's farmland and the Township's farmers.

Areas that are prone to flooding should not be developed for residential, commercial or industrial purposes. This can be achieved through the strict enforcement of the floodplain district regulations in the Township's Zoning Ordinance. On-site sewage disposal systems should not be located within the areas subject to flooding because of the danger of contamination of the stream and the groundwater due to the proximity of the stream and the presence of a high water table. (The Future Land Use Plan proposes that the majority of future development occur in areas of the Township that can be served by the existing public sewer facilities.)

Stormwater runoff may erode stream banks and channels. If sedimentation is increased, the streambed may be filled, causing floodwaters to cover a larger area, stream meandering may be caused, aquatic life in the stream may be choked, and the esthetic value of the stream seriously impaired. Conoy Township has not adopted its own storm water management ordinance, and therefore relies on the County regulations. The Lancaster County Subdivision and Land Development Ordinance includes performance standards for stormwater runoff and serves to encourage the use of innovative measures for the control of stormwater runoff. The enactment of Act 167, the Storm Water Management Act, has resulted in additional requirements for provision of stormwater and floodplain management facilities in new land developments. When Act 167 Watershed Storm Water Management Plans are prepared and adopted for the watersheds located in Conoy Township, subdivision, land development and other selected earth disturbance activities will need to reflect the design requirements of those studies.

To minimize erosion, sedimentation, flooding and surface water degradation, man-made encroachments on floodplains, wetlands and stream corridors should only be permitted when no other feasible options exist. Such encroachments must be monitored to ensure that all necessary local, state and federal permits are obtained. Stream corridors are extremely sensitive. Vegetated filter strips should be planted along the borders of fields, adjacent to roads and streams, to prevent the surface runoff of soil, nutrients and fertilizers. Streams should also be fenced to keep livestock out. Trees also play an important role in maintaining high water quality and keeping water temperature low enough for trout throughout the summer. For these reasons, the Township should consider overlay zoning requirements for the preservation of stream valleys. Typically such regulations are referred to as "riparian buffers." In addition to the environmental significance of such areas, the preservation of stream corridors maintains the scenic beauty of the Township and provides the potential to link areas with a network of trails

within “greenways.” Pedestrian trails could be created with new subdivisions or acquired from current property owners

Wetlands have become recognized as uniquely important components of the landscape by scientists, engineers, public interest groups and governmental agencies. Their importance lies both on the traditional values of wetlands as areas of fish and wildlife protection as well as in newly found values of wetlands as areas of stormwater management. The NWI maps, along with land cover interpretations prepared as part of the Lancaster County GIS system, indicate that the Township contains numerous wetlands. Another source for wetland information is the occurrence of hydric soils which usually are indicators of wetland conditions. Less than three (3) percent of the Township’s soils are identified as having major components hydric. However, an additional 20 percent of the soils have the potential for having inclusions of hydric soil components. Areas with the potential for the existence of wetlands must be studied/delineated prior to any otherwise permitted development activities.

The limitations on the use of the land increase greatly with an increase in slope. Steep slopes, those which are 15 percent or greater, are generally considered as having severe limitations to conventional development and agricultural applications. The vast majority of the Township land area consists of slopes of 8 percent or less. The few areas of slope in excess of 15 percent are located primarily along tributaries to the Conewago, Snitz and Conoy Creeks and Susquehanna River. The steep slope areas in the Township should be limited to existing agricultural uses, low-density residential, open space and passive recreational uses. The Township should also consider overlay zoning requirements for these areas.

The Township’s limestone bedrock formations (which are located predominantly in the southern portion of the Township) pose the greatest problems related to development and environmental quality. These geologic formations are prone to the development of sinkholes. In addition, the formations, with the presence of solution channels, can intercept on-lot sewage disposal system effluent and agricultural fertilizers before the soil has had the chance to purify them. The polluted groundwater can then travel along the solution channels and degrade other water sources.

According to the Pennsylvania Geological Survey’s publication entitled Outstanding Scenic Geological Features of Pennsylvania, two unique geologic features are located within the banks of Susquehanna River just east of the Dauphin County line. Specifically, “Conewago Falls” and “Potholes in the Susquehanna River” adjoin Falmouth along the river. A third feature noted in the same publication is named “Governors Stables.” This feature is located on the north side of Stony Creek approximately 1,100 feet west of

Governor Stable Road. In addition, four caves are identified within Conoy Township by Caves of Southeastern Pennsylvania. The approximate locations of these caves are noted on the Natural Resources Protection Plan map. Any development proposals in the vicinity of these identified features should consider their preservation/protection.

The extent of wooded areas in the Township can be seen on the Topography and Woodlands Map. Most of the Township's woodlands are located in the numerous stream valleys in the Township. Wooded areas have a recreational potential, whether for hunting, fishing, hiking, or similar activities. When areas are left wooded the quantity and quality of ground water can be better maintained than if the woods are removed because the natural cover allows for infiltration of rainfall into the ground water system. Efforts should be made to limit future development that would severely impact the wooded areas of the Township.

Wildlife in Conoy Township consists primarily of mammal and bird species characteristic of rural farmland environments. Mourning doves are plentiful, as are fox, rabbit, squirrel, and white-tail deer. In addition, the numerous islands in the Susquehanna River are among the few places in Pennsylvania where the Bald Eagle, African Cattle Egret and Glossy Ibis nest. These islands also provide habitat for many species of migratory waterfowl. These areas should be preserved to the greatest extent possible.

One of the stated goals of this Comprehensive Plan is to "conserve and enhance the resources of the Highlands region in the Township." The Highlands region (part of the Appalachians) stretches from eastern Pennsylvania through New Jersey and New York to northwestern Connecticut. The Highlands form a "greenbelt" of forests and farmland adjacent to the urbanizing portions of eastern Pennsylvania and beyond. The region has been recognized as "a landscape of national significance," by the US Forest Service and has been provided funding and mechanisms for protection through the Federal Highlands Conservation Act (Act 108-421 of 2004). The Township should work with the Lancaster County Planning Commission, Lancaster County Conservancy and other groups to attempt to protect and/or preserve some of the unique characteristics of The Highlands that are located in the Township.

While the Township's existing ordinances should be reviewed to identify additional measures that may be needed to further protect its natural and historic resources, the requirements of Township ordinances may not exceed those requirements imposed under the following State Legislation:

- Act of June 22, 1937 (P.L.1987, No.394), known as "The Clean Streams Law";
- Act of May 31, 1945 (P.L.1198, No.418), known as the "Surface Mining Conservation and Reclamation Act";
- Act of April 27, 1966 (1st SP.SESS., P.L.31, No.1), known as "The Bituminous Mine Subsidence and Land Conservation Act";
- Act of September 24, 1968 (P.L.1040, No.318), known as the "Coal Refuse Disposal Control Act";
- Act of December 19, 1984 (P.L.1140, No.223), known as the "Oil and Gas Act";
- Act of December 19, 1984 (P.L.1093, No.219), known as the "Noncoal Surface Mining Conservation and Reclamation Act";
- Act of June 30, 1981 (P.L.128, No.43), known as the "Agricultural Area Security Law";
- Act of June 10, 1982 (P.L.454, No.133), entitled "An Act Protecting Agricultural Operations from Nuisance Suits and Ordinances Under Certain Circumstances"; and
- Act of May 20, 1993 (P.L.12, No.6), known as the "Nutrient Management Act."



## **PROPOSED COMMUNITY FACILITIES AND UTILITIES PLAN**

Services and facilities must be provided according to the existing and projected needs of a community. It is important that these facilities be readily available. Therefore, suitable land that is conveniently located should be reserved for those purposes, and a capital budget should be established so that such facilities can be provided without incurring an excessive bonded indebtedness.

### **Open Space, Parks and Recreation**

Conoy Township residents have access to a variety of facilities owned by public and private agencies in and around the Township, facilities that are owned and/or operated directly by the Township, with support from the Township's Parks and Recreation Board. In addition, recreational programs are provided through the Greater Elizabethtown Area Recreation Services (GEARS). The GEARS Board consists of members from Conoy Township, Elizabethtown Borough, Mount Joy Township, West Donegal Township and Elizabethtown Area School District. Limited recreational facilities are also located at the Bainbridge Elementary School.

The Township-owned and operated parks include Governors Stable Park in the northern portion of the Township and Conoy Park East and Conoy Park West in Bainbridge. The Township also has the Kreider Tract Park, as well as the Conoy Canal Trail/Park, which runs along the Susquehanna River from Conewago Falls in Falmouth to Race Street in Bainbridge. The Township is continually upgrading and improving its park facilities. The Township also has been cooperating with East Donegal Township in the development of the Northwest Lancaster County River Trail.

Other recreational and related facilities located in the Township include the PA Fish Commission's Public Boat Access at Falmouth, as well as private facilities such as the Bainbridge Island Gun Club, American Legion Post #197, and the Bainbridge Sportsman Club. As additional residential areas are developed, neighborhood and sub-neighborhood recreation areas/facilities should be required to be provided as part of the subdivision/land development approval process. An example of such a facility is the land provided to the Township for a playing field as part of the recently constructed Townsedge Development (on Second Street).

When asked to identify community services that should be added or improved in the Township, respondents to the Residents and Property Owners Survey cited “parks” and “a recreation center” as the third and fourth of the top four issues. Trails (paved and unpaved), preserved natural areas and a teen center were the three types of additional recreational facilities cited as “most needed” in the Township. In addition, the age groups most often cited as needing more recreation opportunities were teens (ages 15-19) and young teens (ages 13-14). The Township should continue to maintain and improve the conditions of the existing recreational facilities and investigate the addition of the types of recreational facilities identified by its residents. The Township should also consider the preparation of the necessary study required to enact a park land dedication or fee-in-lieu of ordinance.

### **Police Protection**

The Township is one of the member municipalities, along with Marietta Borough and East Donegal Township, which comprise the Susquehanna Regional Police Department. When asked to identify community services that should be added or improved in the Township, respondents to the Residents and Property Owners Survey indicated that the service most often identified for improvement was that of police service. The service most often identified for reduction was also that of police service (i.e., get out of the regional police force). The Board of Supervisors should continue to monitor the service received from the regional police force and make adjustments/changes as necessary.

### **Fire Protection**

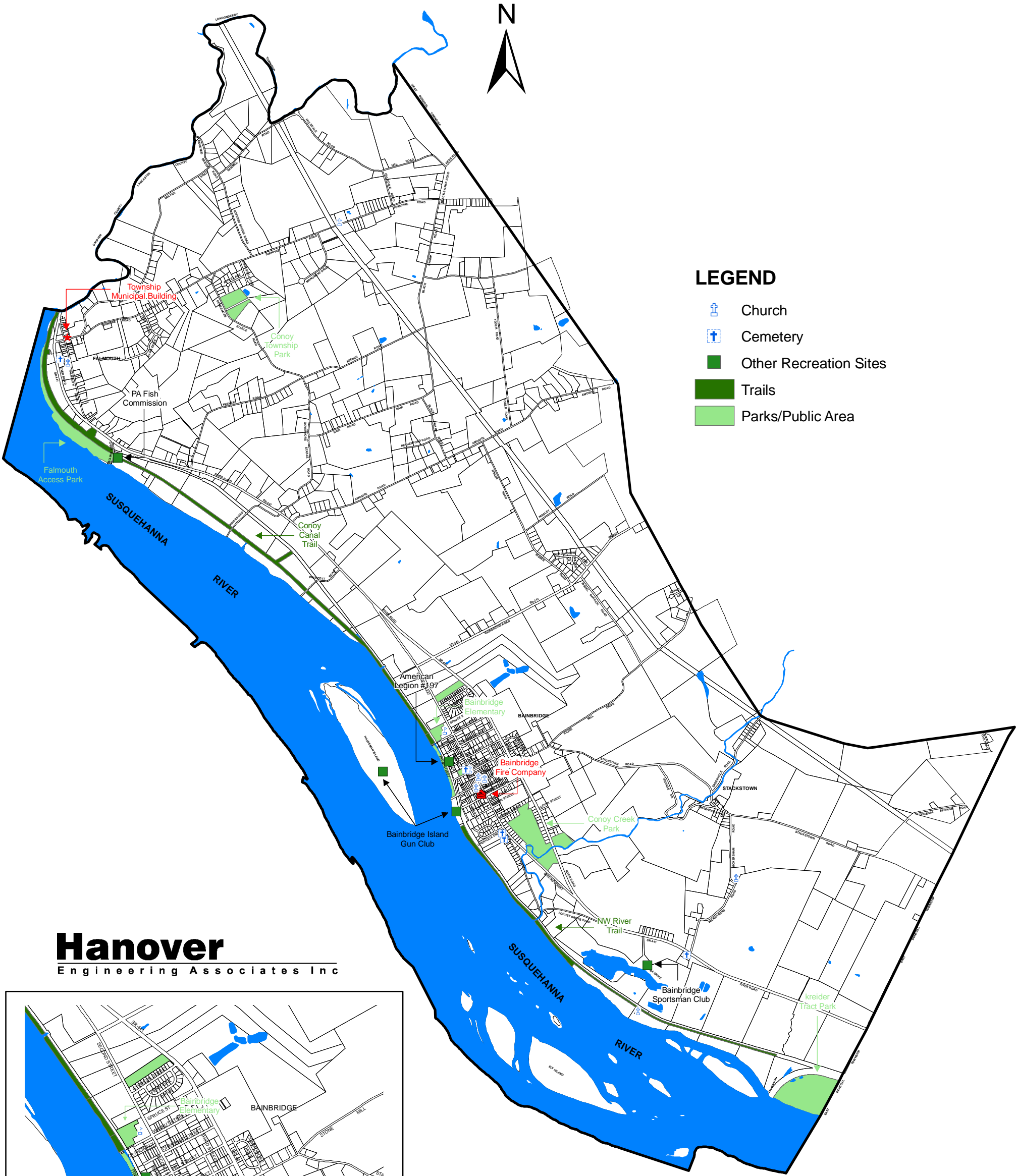
Based on current fire protection standards, the fire protection facilities provided by the Bainbridge Fire Company, supported by various fire companies located outside the Township, appear adequate for existing as well as expected needs during the planning period. All fire calls are dispatched by Lancaster County-Wide Communications to appropriate fire departments when needed.

### **Emergency Medical Services**

Northwest EMS from Elizabethtown provides emergency medical services to Conoy Township. The 24 hour/7 days a week agency can provide both basic and advanced life support. As is the case with fire protection, emergency medical services provided by the Northwest EMS also appear adequate to meet the Township’s existing and future needs into the foreseeable future.

# COMMUNITY FACILITIES PLAN

## CONOY TOWNSHIP



- LEGEND**
- Church
  - Cemetery
  - Other Recreation Sites
  - Trails
  - Parks/Public Area

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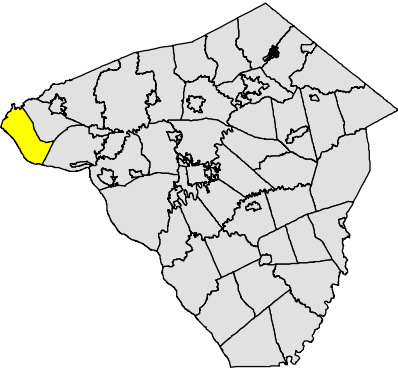
**BAINBRIDGE**

0 2,000 4,000 6,000 Feet

SCALE: 1" = 2000'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'



LOCATION MAP

REVISED: MAY 2009

### **School Facilities**

The entire area of Conoy Township is served by the Elizabethtown Area School District, which serves school-age children from kindergarten (K) through grade 12. The Bainbridge Elementary School is located on Second Street in the Village of Bainbridge. Meeting the educational needs of the Township falls under the sole jurisdiction of the School District. However, the Township should continue to maintain a close working relationship with the School District.

### **Library Facilities**

The Township should continue to support the Elizabethtown Public Library.

### **Municipal Administrative Space**

As the population of the Township continues to grow, and as additional municipal services are made available to Township residents, additional space may be required for administration and equipment. The existing adequacy and the long-term viability of the existing Township Municipal Building should be evaluated by the Township. Many respondents to the Residents and Property Owners Survey identified the need for a “community meeting facility.”

### **Sanitary Sewerage Service**

The Township provides public sewer service to the more densely developed portions of the Township, including the Bainbridge and Falmouth areas. Areas of the Township proposed for future, dense development have been located so that they can be served by extensions to the existing Township system.

The two municipally-owned facilities are located in the Villages of Bainbridge and Falmouth. The Bainbridge Treatment Facility is located south of S.R. 441 (and south of Bainbridge) near the Conoy Creek. The Bainbridge Treatment Facility has a design capacity of 80,000 gpd. It is designed to be able to be expanded by an additional 80,000 gallons of capacity with the addition of more tanks. Currently the average daily flow is 46,300 gpd. 33,700 gpd of capacity are available for future development. There is sufficient capacity in the existing plant to accommodate the recently approved Townsedge and Riverview developments, as well as “infill” lots in the Village of Bainbridge. Any large scale development will probably require the expansion of the wastewater treatment facility.

The Falmouth Treatment Facility is located south of S.R. 441 near the intersection of Falmouth Road and S.R. 441. The Falmouth Treatment Facility has a design capacity of 25,000 gallons per day (gpd). Currently the average daily flow is 13,100 gpd. Based on this flow, there is approximately 11,900 gpd available for future development. This available capacity could accommodate the connection of approximately 40 additional equivalent dwelling units to the system.

There are also two private wastewater facilities located in the Township. The King's River Haven Mobile Home Park operates a 10,000 gpd stream discharge wastewater facility that serves mobile homes, a bath-house and a recreational vehicle/tent campground. The only other private wastewater treatment facility is the one located in the County's Solid Waste Incinerator located south of Bainbridge on S.R. 441. This DEP-regulated facility treats its own wastewater and discharges into the Susquehanna River.

The portions of the Township projected to remain unsewered must also be reviewed in terms of their adequacy for continued use of on-lot sewage disposal methods. The existing Township Act 537 Plan should be reviewed and amended, if necessary, to address any identified problem areas.

### **Stormwater Drainage**

As development occurs within Conoy Township and areas adjacent to it, problems resulting from stormwater runoff will increase. As Act 167 Watershed Storm Water Management Plans are prepared and adopted in the northwestern portion of Lancaster County, the stormwater management provisions of the Lancaster County Subdivision and Land Development Ordinance may need to be amended to reflect the design requirements of those studies.

The Township may also want to consider the adoption of a stand-alone Stormwater Management and Earth Disturbance Ordinance, which would provide additional regulations for those development activities not covered in the existing County Subdivision and Land Development Ordinance.

## **Solid Waste Disposal**

The Lancaster County Solid Waste Management Authority (LCSWMA) operates a Resource Recovery Facility (RRF) on a property located south of SR 441 in the southern portion of the Township. The Resource Recovery Facility is part of an integrated county-wide solid waste handling process, which includes the transfer station in Lancaster City (where solid waste is collected), the Resource Recovery Facility (where materials are separated and the combustible materials incinerated), and the Frey Farm Landfill (where incinerator ash and some local solid waste is landfilled). The LCSWMA provides “host fees” to Conoy Township, which have allowed the Township to operate without the requirements for a local property tax.

There is currently no public solid waste collection provided in the Township. Township residents must rely on private collectors or remove their own refuse from their homes. Local solid waste is hauled directly to the Resource Recovery Facility. When asked to identify community services that should be added or improved in the Township, “recycling (door-to-door)” was cited the second most frequently. “Municipal trash collection” was also cited frequently. These two services are not currently available to Township residents and should be evaluated by the Township.

## **Electric Power**

First Energy – Metropolitan Edison Company (Met-Ed) supplies electricity to Conoy Township residents and businesses. Met-Ed also operates and maintains five (5) overhead electric transmission lines in Conoy Township. The Pennsylvania Power and Light Company (PP&L) maintains five (5) separate rights-of-way that traverse the Township as well. Each of these rights-of-way prohibits the placement of buildings, but generally permits roads and parking lots to be constructed, subject to individual design review. The transmission rights-of-way in Conoy Township are considerably more varied, due to their proximity to the Brunner Island Power Station, which is located on the west bank of the Susquehanna River in York County.

## **Natural Gas Service**

UGI Corporation operates and maintains a transmission main from Bainbridge Road to Steelton, PA. This main carries natural gas from the Columbia Gas Company metering station to Steelton. However, no local natural gas service is provided to Township residents.

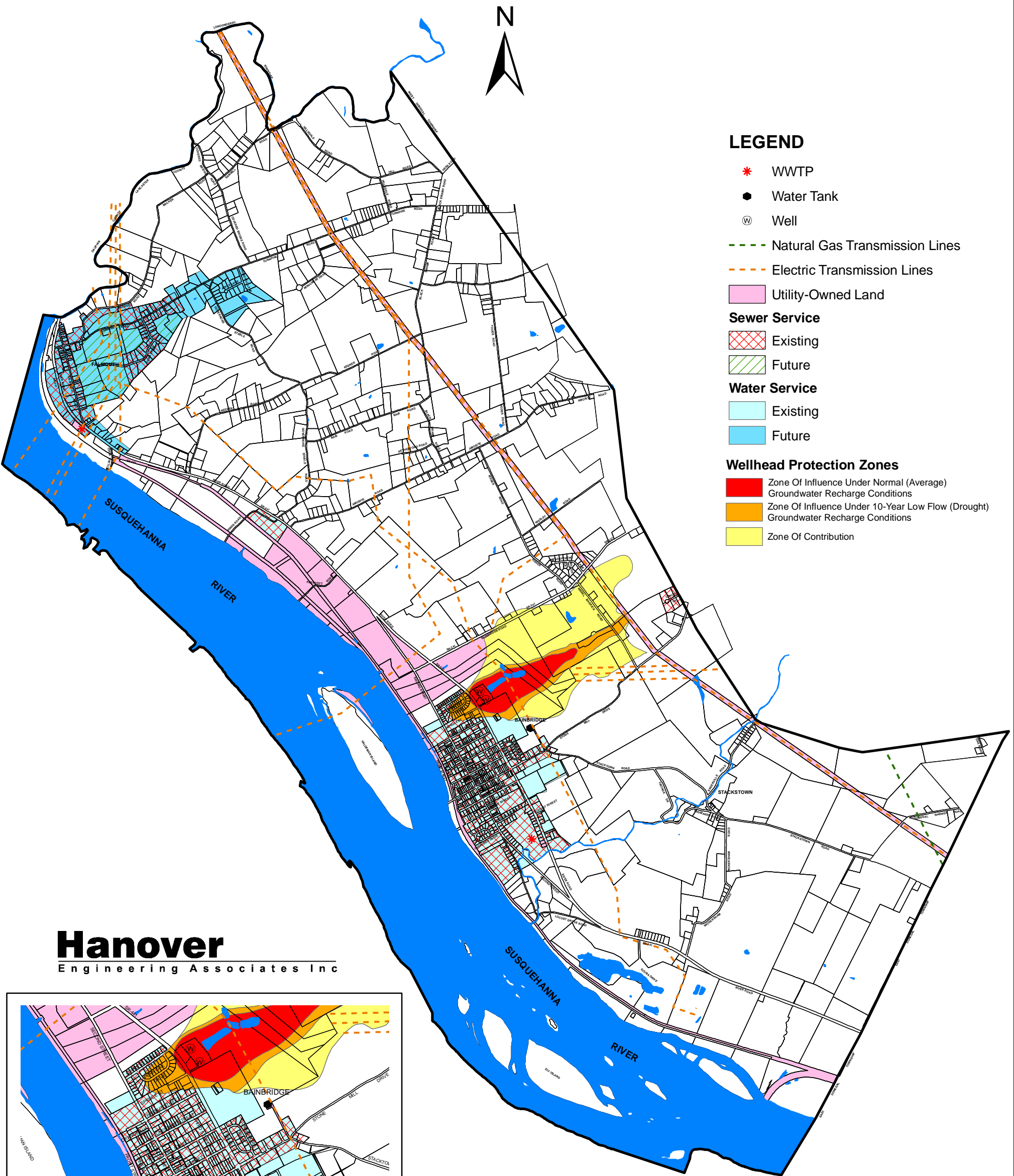
### **Other Utility Services**

Heating fuel sources for Conoy Township residents also include fuel oil from commercial fuel oil suppliers. Telephone service is provided by Embarq (formerly Sprint). Cable TV service throughout the Township is provided by Comcast Cable. The Public Utilities Commission of the Commonwealth of Pennsylvania provides supervision of all public utilities.



# UTILITIES PLAN

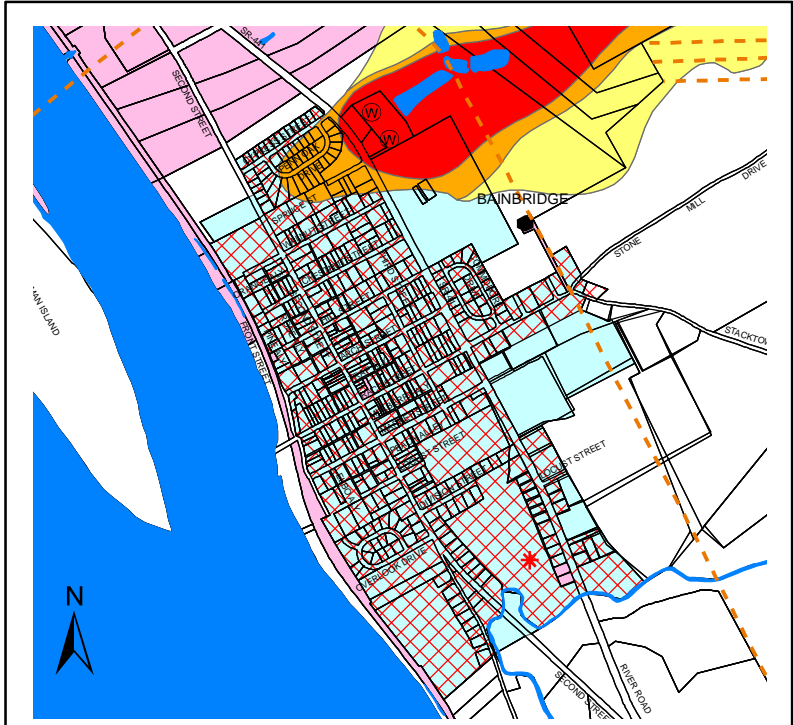
## CONOY TOWNSHIP



### LEGEND

- ★ WWTP
- Water Tank
- ⊙ Well
- Natural Gas Transmission Lines
- Electric Transmission Lines
- Utility-Owned Land
- Sewer Service**
  - Existing
  - Future
- Water Service**
  - Existing
  - Future
- Wellhead Protection Zones**
  - Zone Of Influence Under Normal (Average) Groundwater Recharge Conditions
  - Zone Of Influence Under 10-Year Low Flow (Drought) Groundwater Recharge Conditions
  - Zone Of Contribution

**Hanover**  
Engineering Associates Inc



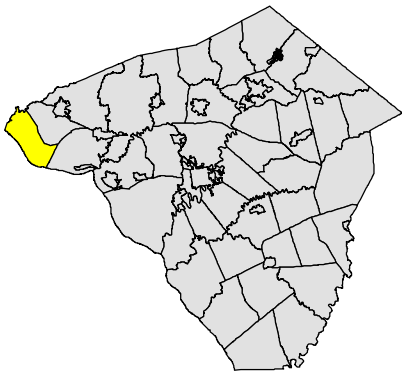
BAINBRIDGE

0 2,000 4,000 6,000 Feet

SCALE: 1" = 2000'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'



LOCATION MAP

REVISED: MAY 2009



## PROPOSED WATER SUPPLY PLAN

The Water Supply Plan proposes the continued reliance upon groundwater resources to meet the water supply needs of all residents and businesses in the Township. Well water is supplied to the majority of residential and commercial uses through individual well supplies. In Conoy Township, the geologic formations that underlay it typically supply enough groundwater to accommodate domestic uses.

The Bainbridge Water Authority (BWA) operates and maintains the primary public water supply system in Conoy Township. The system was originally constructed in the mid-1960's. This system only serves the Village of Bainbridge in a service area that extends from Cypress Street to Conoy Creek and Front Street to the Stackstown and Stone Mill Roads split. The system is supplied by two wells located east of S.R. 441, across from Spruce Street. With a combined capacity of 172,800 gallons per day (gpd) and a current average daily usage of approximately 58,000 gpd, the system is at approximately one-third of capacity. Water pressure is maintained by a 200,000 gallon ground storage welded steel tank located on the hill behind the Commodore's Landing development. In addition to water supply, the Bainbridge Water distribution system is designed to provide fire protection. A system of hydrants and 6 and 8-inch diameter distribution piping provides capacity for fire protection in the Village of Bainbridge. The Susquehanna River is used as a backup water source for fire protection.

The community water system in the Kings River Haven Mobile Home Park is also designated as a public water supply. This system only serves the mobile home park and campground.

A preliminary hydrogeologic analysis of groundwater quality in the Conoy Township was performed in February 1989 as part of the preparation of an updated Act 537 Sewage Facilities Plan for the Township. In general the results of groundwater testing have indicated the evidence of ground water degradation. Wells with elevated nitrate-nitrogen values were evenly distributed throughout the Township, reflecting the dominant agricultural activities and the decentralized pattern of development. Because of the widespread distribution of elevated nitrate levels in the groundwater as well as contamination from malfunctioning on-lot sewage disposal systems, the Township constructed public sewers in both the Bainbridge and Falmouth areas in the mid-1990s.

In 1990, the BWA initiated the development of a Wellhead Protection Program. The Bainbridge Wellhead Protection Program report was published in March 1992. The project included the collection of data on the existing well site, reviewed geologic characteristics and identified wellhead protection areas. A draft wellhead protection zone ordinance was also proposed, but never adopted. The draft wellhead protection zoning district regulations were updated in 2008. In order to protect the Township's groundwater resources, groundwater quality should be continually monitored and needs addressed as they arise. The Township should seriously consider the adoption of these proposed zoning regulations to protect its groundwater supply sources.

Protection from groundwater degradation also can be promoted by the implementation and periodic evaluation of the Township's Act 537 (Sewage Facilities) Plan. Separation of industrial development from private residential wells should be encouraged to minimize any potential aquifer competition.

It is recommended that new developments relying upon on-lot sewage disposal and/or water supply be discouraged. and that future land use planning policies target future residential growth in those areas of the Township that are, or will be, served by public water. The Future Land Use Plan proposes that higher density development occur only (1) in the Bainbridge area, where both public water and public sewer services exists and can be extended and (2) in the Falmouth area, where public sewer service currently exists. Problems with on-site water supplies are common in the Falmouth area. As a result, the growth proposed on the Future Land Use Plan Map will not occur without the provision of some form of public or community water system to accommodate the new, as well as the existing residential and commercial units. A potential future water service area for the Falmouth area is shown on the Utilities Plan Map.

It must be recognized that lawful activities such as extraction of minerals may impact water supply sources in the Township. Such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities. In addition, commercial agricultural production may also impact water supply sources in the Township. The BWA is very concerned about agricultural practices impacting their water supply but are not aware of any mining activities that could do so.

A key resource in water supply planning for the Township is the Lancaster County Water Resources Plan of 1996. The stated purpose of the County Plan is to "protect groundwater resources, improve water supply planning, secure future drinking water supplies and improve environmental quality." The plan specifically focuses on water supply planning and wellhead protection. The two main goals of the Lancaster County Water Resources Plan are to (1) protect the quality and quantity of public water supply

sources and (2) coordinate water supply planning with County, regional and local growth management efforts. The Lancaster County Water Resources Plan provides information and guidance for the County, municipalities, authorities and water companies to use in developing and coordinating water supply plans, wellhead protection programs and related water resources management activities on a regional basis.



# CONOY TOWNSHIP COMPREHENSIVE PLAN



## ***CHAPTER 4 IMPLEMENTATION***

## CHAPTER 4

### IMPLEMENTATION

The proposed goals and policies for the future development of Conoy Township have previously been outlined. It is now imperative that methods of effectuating this program be considered. Examination of the community goals makes it apparent that the Township should consider a program of effectuation from two viewpoints. The first should include a program of carrying out the local desires and goals at the municipal level and should comprise those desirable elements that will not adversely affect neighboring communities.

The second approach involves putting elements of the plan into effect from a broader regional viewpoint. Many long-range goals and policies involve not only the Township but also adjacent and nearby municipalities, the Elizabethtown Area School District, the County and the State. Conoy Township can carry out those programs which affect the local community only, but it must participate with its neighbors and with larger governmental bodies in order to gain the necessary impetus required to carry out an overall program which would best suit the region as a whole.

#### SHORT- AND LONG-RANGE PLAN IMPLEMENTATION STEPS

One of the required elements of a municipal Comprehensive Plan is a discussion of short- and long-range plan implementation strategies, which may include "... (1) implications for capital improvements programming, (2) new or updated development regulations and (3) the identification of public funds potentially available."

#### Short-Range Implementation Techniques

For the purposes of the Conoy Township Comprehensive Plan, recommended implementation actions proposed in the five (5) years following plan adoption have been designated short-range implementation techniques. They include the following proposals:

**Prepare and enact amendments to the Zoning Ordinance and Map to implement stated land use objectives.** The proposed amendments include (1) rezoning of the northeastern portion of the township from Rural to Agricultural, (2) the addition of a new Conservation Zoning District and (3) limited rezonings of existing developed areas to more accurately reflect the character of existing development. The Township should also consider the development of cluster/open space zoning provisions, as well as possible

“overlay” districts to protect natural and cultural resources. Administrative provisions of the Ordinance will also need to be reviewed for conformance with the latest amendments to the Municipalities Planning Code.

Some of the specific issues to be addressed as part of the comprehensive review and update of the Township’s Zoning Ordinance (and Map) include the following:

1. Adopt changes to the Zoning Map to reflect the land use proposals identified in the Future Land Use Plan.
2. Adopt a new “Conservation” Zoning District to better protect the Township’s sensitive environmental features (e.g. river islands, floodplains, wetlands, steep slopes, marshes, caves, hazardous or unique geology, important wildlife habitats, the undeveloped portions of the Highlands Region, etc.). Also consider “overlay districts” to include additional “natural features” preservation regulations (i.e., woodlands, wellhead protection, greenways and riparian buffers).
3. Consider the adoption of zoning provisions to enhance the protection and/or preservation of the Township’s numerous historic and archaeological resources. At a minimum, a Historic Overlay District should be considered for adoption.
4. Revise, as necessary, the existing Agricultural District provisions to preserve prime agricultural land and farm families by encouraging small scale farming activities and farm-related businesses and allowing additional on-farm residential uses.
5. Review the existing Agricultural District regulations for compliance with the requirements of Act 38 (also known as ACRE or Agriculture, Communities and the Rural Environment), which limits the restrictions that local municipalities can place on normal agricultural operations.
6. Add provisions in the Agricultural District regulations to reduce the regulatory hurdles of property owners in the Township’s existing “rural neighborhoods” – by providing reduced building setbacks, etc. - that are consistent with the residential uses, and which preclude the need to apply for variances to locate residential accessory buildings and structures.

7. Add provisions in the Zoning Ordinance that promote “Growing Greener/Conservation Subdivision” design concepts for new residential development within the Township’s Residential Zoning Districts.
8. Update or revise existing Ordinance provisions to encourage the establishment and/or retention of home occupations and no-impact home-based businesses.
9. Consider expanding the types – and possibly sizes – of commercial uses allowed in the Township’s Village Centers.
10. Amend the existing provisions of the Commercial and Industrial Districts to minimize the potential for strip development (with multiple access points) along PA Route 441.
11. Allow low-impact industrial uses, as well as warehousing, wholesale distribution centers, truck and bus terminals and similar activities by right in the Industrial District.
12. Require that more intensive manufacturing and industrial uses receive additional review and approvals by the Township (i.e., special exception or conditional use).
13. Review, and modify as necessary, the Industrial District regulations to require industrial uses to adhere to strict design and performance controls to preserve the rural character of the Township.
14. Include Airport Zoning Overlay District regulations for Harrisburg International Airport (HIA) and the Donegal Springs Airport.
15. Provide for adequate off-street parking facilities and safe pedestrian access in those areas of the Township where warranted by traffic and/or specific land uses.
16. Include provisions in the Zoning Ordinance to allow the utilization of energy conservation techniques in both residential and non-residential construction.
17. Rewrite provisions to try to eliminate existing and minimize the creation of new non-conforming uses.
18. Adopt other Ordinance changes as necessary to implement the recommendations of the Comprehensive Plan, as well as conform to the latest amendments to the MPC.



**Continue to work with Elizabethtown Borough, West Donegal Township and Mount Joy Township on the preparation and implementation of the Regional Comprehensive Plan to reflect the Goals and Objectives of this (Conoy Township's) Plan.** The resultant Regional Comprehensive Plan may allow Conoy Township to eliminate the need to provide for some (more intensive) land uses in the Township's Zoning Ordinance.

**Work with neighboring East Donegal Township, West Donegal Township and Londonderry Township on mutual issues.** Of particular concern are (1) the preservation of a viable agricultural economy in the region and (2) cooperative efforts between the townships to ensure that existing and proposed land uses along the township's common boundaries are compatible.

**Facilitate the extension of public sewer and public water in a manner that is consistent with this Comprehensive Plan and with the existing and future needs identified by its Sewage Facilities Plan.** Such services are critical to the health, safety and welfare of Township residents, particularly in areas that have experienced malfunctioning on-lot disposal systems and groundwater pollution. The provision of public sewer and public water services to address problem areas, and the increased Township requirements related to development with on-lot water supply and sewage disposal will also serve to protect surface water and groundwater from further degradation.

**Specific actions to be taken include the following:**

1. Support the Bainbridge Water Authority in its continuing efforts to make water system improvements in order to meet the needs of existing and future Township residents and businesses.
2. Adopt a well head protection ordinance (or include overlay district provisions in the Township's Zoning Ordinance).
3. Continue to pursue the possibility of the installation of a public/community water supply system to serve the Falmouth area.
4. Continue to make sewer system improvements in order to meet the needs of existing and future Township residents and businesses.

**Promote the road improvements and evaluations recommended in Chapter 3.**

Specific actions to be taken include the following:

1. Continue to plan and implement the Township's Road Improvement and Paving Program.
2. Work closely with County and State agencies to provide adequate and timely improvements to the Township's roadway system.
3. Continue to work with the Red Rose Transit Authority (RRTA) to maintain and/or improve mass transit and para-transit service to Township residents.
4. Review and amend, as necessary, the Township's existing Road Ordinance.

**Work with and support the Lancaster County Planning Commission, Lancaster County Agricultural Preserve Board, Lancaster Farmland Trust, Lancaster County Conservancy, Highlands Coalition, and other area organizations to encourage the protection and preservation of prime agricultural land and other natural and environmental amenities in the Township.**

Specific actions to be taken include the following:

1. Work with the Lancaster County Agricultural Preserve Board and the Farmland Trust to update information on preserved farms and farms eligible to be preserved. Also support applications for inclusion in Agricultural Security Areas.
2. Support increased County and State funding for agricultural preservation programs.
3. Work with the Lancaster County Planning Commission, Highlands Coalition, Lancaster County Conservancy and other groups to attempt to protect and/or preserve some of the unique characteristics of The Highlands that are located in the Township.
4. Support efforts by the Lancaster County Conservation District and other agencies and groups to reduce nutrient and sediment runoff into the Township's streams through the establishment of streamside (riparian) buffers and other conservation techniques.

**Work with and support the Elizabethtown Area School District, the Greater Elizabethtown Area Recreation Services (GEARS) and other Conoy Township area organizations to encourage adequate educational, recreational and cultural opportunities for Township residents.**

The Elizabethtown Area School District maintains recreational facilities at the Bainbridge Elementary School. The Township should continue a dialog with the School District officials related to access to both the recreational facilities and the school buildings for after hour programs.

**Specific actions to be taken include the following:**

1. Coordinate with the Elizabethtown Area School District, the Greater Elizabethtown Area Recreation Services (GEARS) and various County agencies to continually update information on the size and makeup of the Township's resident population so that adequate facilities and services can be provided to meet its varied needs.
2. Cooperate with school district officials and encourage the retention of neighborhood school facilities to serve Township residents.
3. Support the Historic Preservation Trust of Lancaster County and other historic preservation groups in their efforts relating to historic preservation in the Township.
4. Continue to provide support to the Elizabethtown Public Library.
5. Continue the maintenance and improvement of the existing Township-owned recreational facilities.
6. Work closely with the Township Park and Recreation Commission and the Greater Elizabethtown Area Recreation Services to provide a full range of recreational opportunities for Township residents of all ages.
7. Encourage the development of pedestrian and/or bicycle trails in new subdivisions and land developments, as well as in existing developed areas of the Township.
8. Continue to pursue the development of the trail system located along the Susquehanna River, which includes the Conoy Canal Trail and the Northwest Lancaster County River Trail.

**Prepare and distribute a Township newsletter on a regular basis and expand use of the Township website to disseminate information and increase public awareness.**

In order to meet the needs and expectations of their constituents, the Township's municipal leaders need to know what those needs and expectations are. They should endeavor to regularly disseminate information to their residents - through newsletters, website articles, periodic mass mailings, etc. Efforts should also be made to solicit citizen input (through surveys, etc.) as well as citizen participation on advisory boards and committees.

**Specific actions to be taken include the following:**

1. Distribute an informational newsletter to Township residents on a regular basis.
2. Establish a Township website for the dissemination of information to Township residents and businesses.

**Other short-range or on-going Plan implementation actions include the following:**

1. Review the existing Township Floodplain regulations and make changes as necessary to implement the Comprehensive Plan.
2. Review and adopt other Ordinance and Code changes as necessary to implement the recommendations of the Comprehensive Plan.
3. Continue to participate in the existing Susquehanna Regional Police Department with expansion of manpower and facilities as needed, and strive toward increased cooperation with neighboring police departments.
4. Continue to provide support to the Bainbridge Fire Company and Northwest EMS that provide service to the Township.
5. Cooperate with County agencies in identifying health and human services needs in the Township and providing facilities to meet these needs.

The preceding actions should be considered short-range implementation measures since they represent solutions to problems identified in the context of the Plan. However, the successful completion of these implementation measures does not suggest that the Township is finished with its comprehensive planning process.

### **Long-Range Implementation Techniques**

For the purposes of the Conoy Township Comprehensive Plan, the following recommended implementation actions proposed beyond five (5) years following plan adoption have been designated long-range implementation techniques. This designation, however, does not preclude them from being instituted prior to that timeframe.

1. Evaluate the adequacy and the long-term viability of the existing Township Municipal Building.
2. Investigate the addition of municipal trash collection and curb-side recycling as additional services to Township residents.
3. Investigate the establishment of a teen center / recreation center / community meeting facility in the Township.
4. Investigate the establishment of additional non-motorized trails for pedestrian and bicycle use within the Township.
5. Work with the County in the preparation of Act 167 Watershed Plans for all watersheds located in the Township.
6. Investigate the extension of natural gas service to Township residents.
7. Consider the adoption of a Township Subdivision and Land Development Ordinance, instead of continued use of the Lancaster County Ordinance.
8. Consider the adoption of a Township Stormwater Management Ordinance, instead of continued use of the Lancaster County Ordinance.
9. Update the Township's Act 537 Sewage Facilities Plan to reflect the proposals of this Comprehensive Plan.
10. Pursue / continue inter-governmental and institutional cooperation in such areas as group buying programs to reduce the cost of government operations, stormwater management, local road planning, park and recreation facilities, codes and ordinances (i.e., sign regulations), and fire/police protection.

11. Prepare a Capital Improvements Program to finance public improvements such as road construction, recreational facilities, sewer service, etc. The Township has an ongoing program for the repair and upgrading of its Township road network. The potential for other projects in the future – such as financing of additional Township owned recreational facilities, building facilities, etc., - would be well served by the establishment of a formal Capital Improvements Program by the Township. Future public water facilities to serve the Falmouth area could also be included in a Township Capital Improvements Program.
12. Prepare an Official Map. The preferred location(s) of future roadways and other public lands serving Conoy Township can be identified and located on an Official Map of the Township. In addition, desired rights-of-way for existing streets are shown on an Official Map. The purpose of the Official Map is to notify the property owners of the intention of the Township to acquire right-of-way(s) and/or land at some time in the future, thereby preventing the erection of structures or other improvements in the future right-of-way or on parcels of land deemed necessary for future municipal use.
13. Reexamine the Comprehensive Plan in five years and make adjustments as necessary. The Township's Comprehensive Plan should be reviewed within five years, if not before, to gauge whether or not its proposals are being adequately accomplished. As part of this review, development over the five-year period should be reviewed to assess whether or not adjustments to the Zoning Map need to be made.

## **PARTICIPANTS**

Putting the proposals of a comprehensive plan into effect requires the active participation of many agencies at different governmental levels. Aside from the purely local controls that are available, many departmental actions at county or state levels already are, or can be, interrelated with municipal action to implement local planning. Among others, the Elizabethtown Area School District can become an effective planning ally, particularly in the provision of recreation facilities, since these are normally provided as part of any school plant and can readily be put to wider use outside of school hours. County and state health inspections and requirements can supplement municipal efforts, as can highway planning at both county and state levels. Highway planning and development is the one activity at higher governmental levels that ordinarily has the greatest impact on municipal development. Alterations in the regional and road network can vastly change the situation

in the community. Equally important, the circulation problems that are already apparent in the Township can best be resolved in conjunction with the state and the county.

State and county programs for planning and development are becoming increasingly important in Pennsylvania. The various components of the Pennsylvania Department of Community and Economic Development, the Department of Transportation, the Department of Environmental Protection, the Natural Resources Conservation Service (Soil Conservation Service), and the Lancaster County Planning Commission are effective planning allies for any municipality.

Semi-official bodies, such as Area Business and Professional Associations, Industrial Development Authorities, Private Industry Councils, Transportation Authorities, and Chambers of Commerce have specialized knowledge that they willingly place at the disposal of the municipalities. Altogether, effective long-range planning depends not on purely regulatory measures and fiscal effort alone but on ingenuity applied to the solution of particular problems, especially on the merging of activities that form part of the planning concern of several municipal bodies.

In view of the suburbanization which has taken place in the Lancaster County area and in South Central Pennsylvania in general, and of the future transportation movements foreseeable in the area, it would be fitting that local planning commissions meet together at intervals in an effort to resolve common problems, particularly highway and circulation problems, which are basically regional in nature.

In Pennsylvania, as almost everywhere else, intermunicipal cooperation represents an underutilized area of problem solving. Increased cooperation with the Township's neighbors can go a long way toward solving some of the issues identified in this Plan.

The key players that should be involved in each of the major Plan categories are as follows:

<b>Future Land Use Plan</b>
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*Township Board of Supervisors, Township Planning Commission, Township Zoning Officer, Township Zoning Hearing Board, Lancaster County Planning Commission, Bainbridge Water Authority*

### **Housing Plan**

*Township Board of Supervisors, Lancaster County Association of Realtors, Countywide Public and Non-Profit Housing Agencies*

### **Transportation Plan**

*Township Board of Supervisors, Township Planning Commission, Township Roadmaster, Lancaster County Planning Commission, Red Rose Transit Authority, Pennsylvania Department of Transportation, Adjacent Municipalities*

### **Community Facilities and Utilities Plan**

*Township Board of Supervisors, Township Planning Commission, Township Park and Recreation Commission, Greater Elizabethtown Area Recreation Services, Township Sewage Enforcement Officer, Lancaster County Solid Waste Management Authority, Lancaster County Planning Commission, Lancaster County Conservation District, Elizabethtown Area School District, Susquehanna Regional Police Department and State Police, Bainbridge Fire Company and Northwest EMS, Elizabethtown Public Library*

### **Water Supply Plan**

*Township Board of Supervisors, Township Planning Commission, Bainbridge Water Authority, Township Sewage Enforcement Officer, Lancaster County Planning Commission, Pennsylvania Department of Environmental Protection*

### **Natural and Historic Resources Protection Plan**

*Township Board of Supervisors, Township Planning Commission, Lancaster County Planning Commission, Lancaster County Agricultural Preserve Board, Lancaster Farmland Trust, Highlands Coalition, Lancaster County Conservancy, Historic Preservation Trust of Lancaster County, Pennsylvania Historical and Museum Commission, Other Local Environmental and Historical Preservation Groups*



## **PRIORITIES**

Some of the planning proposals presented assume a priority of implementation over the other proposals. This is the case for the following reasons:

- the severity of need (as it relates to community health and safety)
- the number of Township residents affected
- funding availability
- the degree to which a given proposal is interrelated to other proposals
- the relative ease of implementation - both from a legislative and a timing standpoint

The highest priority for completion of the proposed implementation actions is the writing and enacting of revisions to the Township Zoning Ordinance and Map to implement the land use and related proposals of this Comprehensive Plan.

Of secondary priority are (1) continued cooperative efforts with PENNDOT, Red Rose Transit Authority, and adjacent Townships related to road improvements and transit facilities in the Township and overall region; (2) dissemination of Township news through a newsletter, website, or other means; (3) preparation of an Official Map; (4) dialog with the Elizabethtown Area School District regarding after-hours use of District facilities for Community functions; and (5) preparation of a Capital Improvements Program.

## **ORDINANCES AND REGULATIONS**

The concepts and purposes of the Comprehensive Plan are embodied in ordinances specifically enacted to implement it. Several types of ordinances are necessary to achieve safe, stable land development, according to the objectives established by the Plan and by the planning enabling statutes.

In addition to these basic ordinances - zoning, subdivision and land development, stormwater management, floodplain management, and official map - building and housing standards in code form are desirable to assure quality of construction in new buildings or, alternatively, to establish standards for occupancy and maintenance of existing buildings.

Building standards and codes ensure structural soundness, proper plumbing and electrical installations, and reasonable safety from fire.

## **Zoning**

Zoning is one means by which the uses of land are regulated. Underlying the concept of zoning is the protection of the health, safety and general welfare of property owners. The legal basis for zoning ordinances is found in the police power, which permits governmental units to enact laws to provide and protect the health, safety and general welfare of the community. However, this power can never be used to restrict the use of private property in such a way that the restrictions amount to an unconstitutional deprivation of property without due process of law.

The current Conoy Township Zoning Ordinance establishes the following zoning districts:

- Agricultural (A)
- Rural (R)
- Suburban Residential (R-1)
- High Density Residential (R-2)
- Village Center (VC)
- Local Commercial (LC)
- Industrial (I)
- Floodplain Overlay (F)

The existing Zoning Map reflects the majority of the land use policies established in the 1991 Comprehensive Plan. However, numerous zoning map and text changes have been made subsequent to the adoption of the 1991 Plan. The Township's Zoning Ordinance contains some regulations that protect environmentally sensitive areas, such as floodplains. Currently, however, the Township's Ordinance does not specifically address all the natural resources discussed in this plan.

Revisions to the Conoy Township Zoning Ordinance subsequent to adoption of the updated Comprehensive Plan will include adjustments to the Zoning Map and additional and/or altered provisions based on the Comprehensive Plan proposals.

Proposed revisions to the Conoy Township Zoning Ordinance would result in both changes to the current list of zoning districts (by the addition of the Conservation (C)

District), as well as revisions to the specific regulations - in particular zoning districts - or in the regulations which apply to the entire Township.

Potential zoning overlay districts could include the following:

- Historic Overlay District
- Wellhead Protection Overlay District
- Streamside (Riparian) Buffer Overlay District
- Steep Slope Overlay District
- Woodland Overlay District
- Archaeological/Natural Features Overlay District

### **Subdivision and Land Development**

Subdivision and land development regulations are concerned with establishing locational and construction controls that ensure sound community growth while at the same time safeguard the interest of all property owners. Such regulations can assure that the subdivision and development of land will create permanent assets for the Township. Since the subdivision and/or development of land is both a technical and a business venture affecting not only the return to investors in land but also Township finances, consideration of subdivision and development proposals should be very thorough.

The Lancaster County Subdivision and Land Development Ordinance currently governs subdivision and land development activity in the Township. The provisions of the ordinance are administered by the Lancaster County Planning Commission with only advisory input from the Township Planning Commission and the Board of Supervisors.

The Lancaster County Subdivision and Land Development Ordinance contains regulations pertaining to stormwater management as well as sewage disposal methods. The County's Subdivision and Land Development Ordinance also contains requirements for traffic/transportation impacts. The Township has adopted and administers its own road construction regulations.

### **Stormwater Management**

The Lancaster County Subdivision and Land Development Ordinance currently contains requirements for stormwater management. As Act 167 Watershed Storm Water

Management Plans are prepared and adopted in Lancaster County, the stormwater management provisions of the Lancaster County Subdivision and Land Development Ordinance will need to be amended to reflect the design requirements of those studies. In the alternative, the Township should consider adoption of a separate Stormwater Management and Earth Disturbance Ordinance, which would provide additional regulations for those development activities not covered in the existing County Subdivision and Land Development Ordinance.

### **Official Map**

One of the proposals relating to future transportation facilities in the Township calls for the consideration of adoption of an Official Map. The legal basis for adoption of an Official Map lies in Act 247, as amended, the Pennsylvania Municipalities Planning Code. An Official Map would show the exact location of the lines of existing and proposed streets (after detailed surveys are conducted) for the whole of the Township. The purpose of an official map is to notify property owners in the Township of the intention of the Township to develop or expand the street network at some time in the future. Under the provisions of an official map ordinance, when a parcel of land identified for future street construction is proposed for development, the Township would have the opportunity to acquire that portion of property needed for the future street, or to begin condemnation proceedings to acquire such property.

As mentioned, a detailed study and survey may be required to identify the exact geographical limits of the proposed road network. This study/survey would require the expenditure of Township funds for technical assistance in its preparation.

### **Building Controls**

Conoy Township has available to it numerous other powers that it may employ to implement the proposals of the Comprehensive Plan. Among these are building, housing and fire codes. A building code provides minimum requirements designed to protect life and health and yield a maximum of structural safety. Specific provisions apply to construction, alteration, equipment, use and occupancy, location, and maintenance of buildings and structures. The Township currently enforces the Statewide Building Code.

A housing code is concerned with individual structures and is one of only a few retroactive regulatory devices. It establishes minimum housing standards relating to health and safety.

It does so by governing dwelling facilities (such as plumbing and heating systems), providing minimum standards relating to safe, sanitary maintenance of dwelling units, specifying the responsibilities of owners and occupants, and indicating minimum space, use and location requirements. Since a housing code provides a legal basis for condemnation, it is particularly useful in arresting or removing conditions of spot blight. The Township does not currently have such a code in effect.

## **CAPITAL IMPROVEMENT PROGRAMMING**

Capital improvement programming is the scheduling of public improvements over a given period of time. Scheduling is based on a series of priorities that are established according to need, desire and/or importance of the improvements, and on the present and anticipated ability of the community to pay for those improvements.

Capital improvement programming can be the bridge between the Comprehensive Plan and the actual accomplishment of public improvements. Because the provisions, nature and location of public facilities exert a great influence on the pattern of community growth, a well conceived capital program is probably the most important plan implementation tool related to the construction of public infrastructure available to the community. While ordinances concerning zoning, subdivision and land development, and stormwater management are guides more for private development, a capital improvement program gives direction to public development.

## **CONTINUING PLANNING**

Continuing review of specific problems and proposals forms an essential part of the planning process. Implementation of the policies contained in the Comprehensive Plan and related ordinances and regulations will demand subsequent and repeated re-evaluation, addition and modification, as circumstances dictate. It is the responsibility of Township officials to see that the Township regulations continue to reflect established policy decisions. If particular problems cannot be solved in the light of such policies, changes or additions will be necessary in policy, and these will once again be subject to review by the public and adoption by the Board of Supervisors.

# CONOY TOWNSHIP COMPREHENSIVE PLAN



## ***APPENDICES***

## **APPENDIX A**

### **CONOY TOWNSHIP**

#### **RESIDENTS AND PROPERTY OWNERS SURVEY RESULTS**

As one of its initial efforts in the preparation of an update to the Conoy Township Comprehensive Plan, the Township Planning Commission members decided to seek input from all of the Township's residents. Therefore, in August 2005, a Residents and Property Owners Survey was distributed to all residents within the Township. 1211 surveys were distributed and a total of 320 completed surveys were returned (a response rate of over 26 percent). The majority of the surveys returned included responses from more than one (1) person. The results of the Residents and Property Owners Survey will serve as a valuable tool for the Township Planning Commission and other Township officials.

The Resident and Property Owner Survey responses indicated a desire for a continuation of the Township's "rural lifestyle" and "peace, quiet and serenity," as well as a corresponding preference, on the part of the majority of respondents, for limitations on future residential, industrial and commercial growth.

#### **DETAILED ANALYSIS**

##### **Actual Population Sampled**

As was previously mentioned, a total of 1211 surveys were distributed. The sources of the distribution list included information from (1) the Elizabethtown Area School District and (2) the Bainbridge Post Office. Based on the number of responses to several of the survey questions, it is estimated that at least 585 adults (18 years and older) provided input to the survey. According to the Year 2000 U.S. Census of Population and Housing, there were 2,199 persons aged 18 years and older in the Township in the Year 2000. Allowing for some increase in adult population since the Year 2000, the estimated number of respondents is approximately twenty-five percent of the current total adult population of the Township.

##### **Township-Wide Results**

The survey questions posed were broken down into eight (8) groups, as follows:

- General Background Information
- Property Description
- Public Utilities and Services
- Work (Employment)
- Agriculture (if engaged in agricultural activities)
- Future Development
- Leisure and Recreation
- Quality of Life Issues

### General Background Information

Nearly 97 percent of the respondents to the survey identified themselves as full-time residents of the Township. Only eight (2.5 percent) were part-time residents and two more (0.6 percent) were non-resident landowners.

When asked how long they had lived in the Township, nearly 40 percent indicated that they had resided in the Township for more than 25 years. An additional 30 percent had lived there for 10 to 25 years. Fourteen (14 percent) each of the respondents had lived in the Township for 1 to 5 years or 5 to 10 years. Only 7 (2.2 percent) of the total respondents had lived in the Township for less than a year.

Approximately 21 percent of the respondents indicated that they were life-long residents.

The ages of the heads of household of the respondents were as follows:

- 18-24 years – 0.3 percent
- 25-44 years – 30.9 percent
- 45-64 years – 48.3 percent
- 65 years and over – 20.5 percent

### Property Description

In response to the question (Question No. 6) regarding how much land the respondent owned in the Township, over 60 percent owned two (2) acres or less of land, while only six (6) percent owned 50 acres or more. The percentage breakdown by acreage owned is as follows:

- Less than ½ acre – 19.9 percent
- ½ acre to 1 acre– 26.5 percent
- 1 to 2 acres– 16.1 percent
- 2 to 5 acres– 12.9 percent
- 6 to 24 acres– 8.8 percent
- 25 to 49 acres– 3.2 percent
- 50 to 100 acres– 2.5 percent
- More than 100 acres– 3.5 percent
- None, I rent– 6.6 percent

Multiple responses were allowed in response to the question (Question No. 7) regarding how the respondent's property was presently being used. The vast majority (over 76 percent) indicated that their property was in residential use. An additional 11 percent indicated that their property was in agricultural use. The percentage breakdown by present use is as follows:

- Residential – 76.7 percent
- Agriculture – 11.4 percent
- Woodland – 6.1 percent
- Commercial– 3.1 percent
- Recreation – 1.7 percent
- Intensive Agriculture – 0.8 percent
- Industrial– 0.3 percent



Multiple responses were also allowed in response to the question (Question No. 8) regarding what the respondent would like to happen to his land in the future. The vast majority (over 75 percent) indicated that they would like for it to remain in present ownership and in near present condition. Approximately 7 percent would like to sell it as a single parcel – and another 7 percent would like to transfer it to their heirs and remain in the family. The percentage breakdown by future use is as follows:

- Remain in present ownership and in near present condition – 75.4 percent
- Sell as single parcel– 7.5 percent
- Transfer to heirs and remain in family– 7.2 percent
- Operate a home business– 4.0 percent
- Preserve with conservation easements or other means– 2.6 percent
- Other– 1.4 percent
- Subdivide and sell some lots– 1.2 percent
- Develop total parcel yourself– 0.6 percent

#### Public Utilities and Services

Several questions were asked obtain information on the utilities utilized by the respondents. The first question (Question No. 9) was related to the respondent's primary water source. (Several returned surveys included multiple responses to this question.) By far the most common water source for the respondents was a drilled well, representing nearly two-thirds of the total.

The percentage breakdown by water source is as follows:

- Drilled well – 65.5 percent
- Public water – 29.5 percent
- Spring – 2.2 percent
- Hand-dug well – 2.2 percent
- Cistern – 0.6 percent

Of the 227 respondents not served by public water, 26 (or 11.5 percent) indicated an interest in being connected to the public water system.

Multiple responses were also given in response to the question (Question No. 11) raised as to what was used for drinking water. Nearly half of the respondents indicated that they drank well water, while over one-fourth drank bottled water. It is interesting to note that while 95 were connected to the public water system, only 74 (78 percent) indicated that they used public water for drinking. Similarly, 218 had wells, but only 172 (79 percent) indicated that they used well water for drinking. The percentage breakdown by drinking water source is as follows:

- Well water – 49.0 percent
- Bottled water – 27.6 percent
- Public water – 21.1 percent
- Other – 2.3 percent

Nearly two-thirds of the respondents rely on on-lot sewage disposal systems – utilizing either (1) septic tanks and conventional drainfields or (2) septic tanks and sand mounds. The remaining respondents are served by public sewers (in the Bainbridge and Falmouth areas). The percentage breakdown by sewage disposal method employed is as follows:

- Septic tank/drainfield – 48.1 percent
- Public sewer – 37.0 percent
- Septic tank/sand mound – 14.2 percent
- Other – 0.6 percent

A question (Question No. 13) was asked as to what kind of community services should be added, improved or reduced in the Township (multiple responses were permitted). Recycling (door to door) was the most frequently identified service recommended to be added, followed by development of a recreation center, provision of municipal trash collection, and development of a senior center. The service most often identified for improvement was that of police service, followed by parks, minor road improvements, and postal delivery. The service most often identified for reduction was also that of police service (i.e., get out of the regional police force), followed by public sewer and public water (supposedly due to high user costs).

The percentage breakdown by each of these categories is as follows:

	<u>Combined Add/Improve</u>	<u>Add</u>	<u>Improve</u>	<u>Reduce</u>
Police	10.9%	4.9%	18.3%	16.1%
Recycling (door to door)	9.8%	16.1%	1.9%	4.8%
Parks	8.0%	3.6%	13.5 %	6.5%
Recreation Center	7.6%	12.2%	1.9%	1.6%
Municipal Trash Collection	7.3%	10.7%	3.0%	3.2%
Minor Road Improvements	7.2%	3.2%	12.1%	3.2%
Postal Delivery	6.2%	5.8%	6.7%	1.6%
Community Meeting Facility	5.0%	4.3%	5.9%	4.8%
Senior Center	4.3%	6.6%	1.4%	4.8%
Public Sewer	4.3%	5.8%	2.4%	9.7%
Other	3.9%	4.3%	3.5%	1.6%
Natural Gas	3.6%	5.4%	1.4%	8.1%
Public Water	3.5%	4.3%	2.4%	8.1%
Library	3.3%	5.6%	0.5%	4.8%
Cable TV	3.2%	2.1%	4.6%	6.5%
Major Road Improvements	3.1%	1.1%	5.7%	6.5%
Medical	3.0%	2.6%	3.5%	1.6%
Ambulance	3.0%	1.1%	5.4%	3.2%
Fire	2.9%	0.4%	5.9%	3.2%

#### Work (Employment)

A question was asked (Question No. 14) regarding the primary occupation of each person in the home. “Professional,” “retired” and “homemaker” were the three most frequent responses. The percentage breakdown by each of the employment categories is as follows:

- Professional - 17.4 percent
- Retired - 14.3 percent
- Homemaker – 12.2 percent
- Health Services - 8.7 percent
- Management - 8.1 percent
- Laborer - 7.9 percent
- Construction – 6.8 percent

- Service - 6.0 percent
- Food Industry - 4.4 percent
- Farmer - 3.5 percent
- Factory - 2.7 percent
- Sales - 1.5 percent
- Delivery - 1.4 percent
- Other - 5.2 percent

Of the persons responding, approximately 20 percent were employed in Conoy Township, while nearly one-half were employed elsewhere in Lancaster County. The percentage breakdown by employment location is as follows:

- Elsewhere in Lancaster County - 49.3 percent
- Outside Lancaster County - 30.1 percent
- Conoy Township - 20.7 percent

#### Agriculture (if engaged in agricultural activities)

39 of the 320 respondents to the survey indicated that they received a percentage of their family income from farming - and less than 40 percent of these indicated that they received more than 50 percent. Of the 40 responding to the question, nearly one-half of the respondents farmed 50 acres or more. The percentage breakdowns by agricultural responses are as follows:

Percentage of family income derived from farming:

- 1 - 10% - 43.6 percent
- 11 - 25% - 12.8 percent
- 26 - 50% - 13.2 percent
- 51 - 75% - 7.9 percent
- 76 - 99% - 15.4 percent
- 100% - 15.4 percent

Acres farmed (owned and rented):

- 1 to 5 - 26.3 percent
- 6 to 10 - 5.3 percent
- 11 to 25 - 13.2 percent
- 26 to 50 - 7.9 percent
- 51 to 75 - 10.5 percent
- 76 to 100 - 5.3 percent
- More Than 100 - 31.6 percent

#### Future Development

Several questions were asked relating to agricultural operations, residential growth, commercial growth, industrial growth and the protection/preservation of natural and historic resources. In response to the question (Question No. 19) as to whether or not the Township should do more to promote family-owned farms, over 85 percent responded in the affirmative (yes - 85.6 percent; no - 14.4 percent). When asked whether or not the Township should invest some of its financial resources toward the purchase of agricultural easements (Question No. 20), the response was mixed; 52.9 percent of the respondents were in favor, while 47.1 percent were opposed. A similar

result occurred when the question was raised as to whether or not intensive agricultural operations in the Township were of concern (Question No. 21); 52.1 percent of the respondents expressed concern, while 47.9 percent did not.

As some residential growth in the Township is inevitable, the question (Question No. 22) was asked as to what type of residential growth should occur. Respondents were asked to indicate whether or not they were in favor of various patterns of residential development. The percentage breakdowns by development type and by affirmative or negative response are as follows. (It must be noted that there were a total of 2,171 negative responses - compared to only 1,211 affirmative responses. It should also be noted that, despite how the question was worded, several respondents marked “no” for all listed growth patterns.)

	<u>Yes</u>	<u>No</u>
• In developments of smaller lot sizes in order to preserve agricultural areas and open space	19.5%	7.8%
• Scattered throughout the Township on large lots	15.6%	9.1%
• In retirement communities	12.1%	9.8%
• In developments with medium lot sizes (1/4 to 1/2 acre) served by public water and sewer	12.1%	11.1%
• On small lots (1/4 acre or less) served by public water and sewer with open space / recreation areas	11.1%	11.5%
• In developments with larger lots (1 acre or more)	10.7%	10.7%
• Just like it has been happening	9.1%	11.5%
• As a mixture of single family homes, townhouses and apartments, with areas of open space	7.3%	12.6%
• In mobile home parks	2.4%	15.8%
• Other	0.1%	0.1%

As can be seen above, approximately one in ten respondents were in favor of future residential growth occurring “just like it has been happening.” Similarly growth in mobile home parks received the lowest (2.4 percent) affirmative and highest (15.8 percent) negative responses. The five highest ranked growth patterns receiving affirmative responses were (1) “in developments of smaller lot sizes in order to preserve agricultural areas and open space”; (2) “scattered throughout the Township on large lots”; (3) “in retirement communities”; (4) “in developments with medium lot sizes (1/4 to 1/2 acre) served by public water and sewer” and (5) “on small lots (1/4 acre or less) served by public water and sewer with open space/recreation areas”. The five highest ranked growth patterns receiving negative responses were (1) “mobile home parks”; (2) “as a mixture of single family homes, townhouses and apartments, with areas of open space”; (3) “on small lots (1/4 acre or less) served by public water and sewer with open space/recreation areas”; (4) “just like it has been happening”; and (5) “in developments with medium lot sizes (1/4 to 1/2 acre) served by public water and sewer”. It is interesting to note that developments on both small and medium lots were ranked high for both affirmative and negative responses.

There appears to be solid agreement as to where future residential growth should occur. By a wide margin, respondents indicated that future residential growth should occur in “areas served/proposed to be served by public water and sewer” and not just “anywhere in the Township, without restrictions” (see breakdown of responses below).

	<u>Yes</u>	<u>No</u>
• In areas served/proposed to be served		
• by public water and sewer	55.2%	9.0%
• In areas where on-lot sewage disposal is not limited		
• by soils and/or high nitrates	17.7%	25.8%
• In areas where on-lot water supply (wells) is not limited	20.8%	24.2%
• Anywhere in the Township, without restrictions	6.0%	41.0%
• Other	0.3%	0.0%

The perceived need for more commercial locations in the Township was split almost evenly, with 49.8 percent of the respondents indicating “yes” and 50.2 percent indicating “no.” For those indicating that more commercial locations are needed, the forms of commercial development favored by the respondents to the survey were uses that would service the day-to-day needs of Township residents - with services such as gas stations and restaurants the most frequently mentioned.

The percentage breakdown by business type is as follows:

• Services (Restaurants, gas stations, etc)	29.6 percent
• Home-Based Businesses	24.8 percent
• Office Uses (Professional, medical, etc)	17.2 percent
• Neighborhood Shopping (Small shopping centers)	12.6 percent
• Regional Shopping (Wal-Mart, etc)	7.2 percent
• Convenience Stores (UniMart, etc)	6.8 percent
• Other	1.8 percent

The location most often identified for new commercial development was in the Bainbridge area.

The interest in additional industrial development in the Township was markedly lower, with only approximately one-third (34.7 percent) of those responding in favor. Small scale and “low impact” industrial uses were greatly preferred over warehousing and “heavy” industrial uses. The percentage breakdown by industrial type is as follows:

• Small scale (Machine shops, etc)	40.8 percent
• Low impact (Electronics/“High Tech”, etc)	38.7 percent
• Warehousing	15.6 percent
• “Heavy” Industrial	4.8 percent

The locations most often identified for new industrial development were (1) along Rt. 441 and (2) near the incinerator.

Over ninety percent of the respondents expressing an opinion supported the idea that the Township take greater efforts to preserve and/or protect the agricultural lands, woodlands and natural areas. Nearly ninety percent preferred that the Townships historic resources also be preserved/protected. The percentage breakdown for each of the four amenities is as follows:

	<u>Yes</u>	<u>No</u>
• Woodlands	93.8 percent	6.2 percent
• Natural Areas	93.8 percent	6.2 percent
• Agricultural Lands	91.3 percent	8.7 percent
• Historical Resources	88.8 percent	11.2 percent

## Leisure and Recreation

Approximately one in five respondents (22.2 percent) indicated that they used the Township parks often. 71.7 percent of the respondents indicated they seldom used the public parks - 6.1 percent indicated that they never used them. 38 percent indicated that they believe that the Township needs more public park land. Of the respondents indicating that additional park land was needed, nearly one half (48.6 percent) indicated that the additional park land should occur in the form of expansions to the existing parks. Approximately one-third were in favor of smaller, neighborhood-oriented parks. Larger, centrally located parks were the least favored option. The percentage breakdown for each of the three types of park land addition is as follows:

- Expand existing parks 48.6 percent
- Smaller, neighborhood-oriented parks 33.9 percent
- Larger, centrally located parks 17.5 percent

Respondents were asked to identify the three (3) types of additional recreation facilities they felt were most needed in Conoy Township. "Paved jogging/walking/biking trails"; "preserved natural areas"; "unpaved, interconnected trail system"; and "teen center" were ranked as the four types of additional recreational facilities cited as "most needed" in the Township. The percentage breakdown for each of the recreation facilities is as follows:

- Paved Jogging/Walking/Biking 16.8 percent
- Preserved Natural Areas 15.1 percent
- Unpaved, Interconnected Trail System 12.7 percent
- Teen Center 10.5 percent
- Picnic Area & Pavilions 7.3 percent
- Children's Playground 6.5 percent
- Outdoor Basketball 5.2 percent
- Other 5.0 percent
- In-Line Skating/Skateboard Facility 3.8 percent
- Horse Riding Trails 3.3 percent
- Volleyball Courts 3.1 percent
- Baseball/Softball Fields 2.6 percent
- Ice Skating Facility 2.4 percent
- Performing Arts Space 2.2 percent
- Golf Course/Driving Range 1.7 percent
- Football/Soccer Fields 1.3 percent
- Street Hockey Area 0.5 percent

The "other" category included numerous mentions of a need for a community swimming pool.

When asked what group(s) in the Township they believed most needed more recreation opportunities, the age groups most often cited were teens ages 15-19 (29.8 percent), young teens ages 13-14 (26.4 percent), and children ages 6-12 (14.0 percent). The percentage breakdown for each of the age groups is as follows:

- Teens (15-19) 29.8 percent
- Young Teens (13-14) 26.4 percent
- Children (6-12) 14.0 percent
- Seniors 11.6 percent

- Adults 7.2 percent
- Preschoolers 5.7 percent
- Disabled Persons 5.0 percent
- Other 0.3 percent

### Quality of Life Issues

Respondents were asked to identify and rank the three most important qualities of life in the Township. The top three ranked qualities were (1) “peace, quiet and serenity,” (2) “rural lifestyle,” and (3) “small town lifestyle.” “Natural beauty/scenery,” “agricultural areas,” “natural areas (wildlife, etc.),” and “sense of community” were next most-frequently cited qualities. The percentage breakdowns for (1) the combined ranking and (2) each of the top three rankings are as follows:

	<u>Overall</u>	<u>(Rank #1)</u>	<u>(Rank #2)</u>	<u>(Rank #3)</u>
• Peace, quiet, serenity	22.4%	27.5%	23.7%	17.2%
• Rural lifestyle	21.9%	39.3%	17.6%	11.6%
• Small town lifestyle	15.7%	20.5%	18.5%	9.0%
• Natural beauty/scenery	10.1%	4.0%	11.8%	13.7%
• Agricultural areas	8.2%	2.7%	8.7%	12.8%
• Natural areas (wildlife, etc.)	7.6%	0.7%	7.8%	13.7%
• Sense of “community”	5.4%	1.3%	4.9%	9.6%
• Location convenient to work/shopping	3.5%	0.7%	3.5%	6.1%
• Family ties	3.2%	3.4%	3.5%	2.9%
• School facilities	1.4%	0%	1.7%	2.3%
• Recreational opportunities	0.3%	0%	0%	0.9%
• Economic opportunity/employment	0.1%	0%	0%	0.3%

When residents were asked what they liked most about the Township, the things most often cited were (1) the open space/rural atmosphere, (2) the peace and quiet, (3) the farmland and (4) the small town atmosphere (in Bainbridge and Falmouth). Among other things noted were accessibility to larger towns in the region, beauty/scenery, low crime rate, friendly residents, etc.

When residents were asked what they felt detracted from the Township, the things most often identified were (1) too much development, (2) loss of farmland, (3) unkempt properties, (4) traffic, (5) noise, and (6) the lack of enforcement of Township regulations.

When residents were asked what was the “most important issue for Township officials to consider,” by far the most frequent response was “development” - the need for the Township to adopt the necessary regulations to control both (1) the amount and pace of future residential and nonresidential growth and (2) the location(s) of that growth. Respondents want future growth in the Township to be minimized to preserve the Township’s “rural character.” In addition, the majority of respondents also want any future growth directed away from the existing agricultural and natural areas of the Township. The concern over the issues of “trash” and “unkempt properties” were also frequently stated - specifically related to (1) property/building maintenance - or lack thereof; (2) “junked” vehicles, farm equipment, etc., cluttering properties; and (3) trash/litter conditions - particularly along Route 441 in the vicinity of the County Incinerator. Intelligent, consistent and fair/impartial leadership on the part of Township officials was frequently cited, along with the need for them to “listen to Township

residents.” The perceived lack of - or inconsistent - enforcement of existing Township ordinances and regulations was also cited frequently.

Other issues raised by one or more respondents included the following:

Utility Services:

- Provide public water and sewer service where needed
- Provide good quality drinking water
- Keeping sewer rates reasonable
- Trash collection at a reasonable price
- Curbside recycling

Township Finances:

- Keep taxes in line
- Keep Township expenses low
- Spend Township monies carefully

Recreation:

- Need activities for our children to do - so families will want to live here
- Need a place for the kids, including teens, to go and hang out and stay out of trouble
- Put some money into the youth activities. It will help cut down on the trouble makers
- Maintenance and upgrading of the Township’s existing parks

Transportation and Traffic:

- Repaving of roads
- Speeding on Route 441
- Better traffic control on Turnpike Road

Emergency Services:

- Keep the Township low-crime or crime-free
- Addition of police substation located within the Village of Bainbridge; Regular patrol by police has decreased greatly since new chief of police took over

Other Identified Issues:

- Fix the Township building or build a new one
- Provide additional work/job opportunities in the Township
- Stop open burning
- Improvements to Bainbridge Elementary School - especially air conditioning
- Control pollution - air and water

When residents were asked how they felt about being a Township resident, the overwhelming majority of respondents indicated that they “felt good about” and/or “were proud” to be a Township resident. Representative responses included the following:



- “I am proud to be a Conoy resident. The area is beautiful and I can't imagine living anywhere else. Make it a better place to live? I think it's good enough.”
- “I think this is the BEST Township in the County.”
- “We are very happy and content here.”
- “I enjoy Township life very much the way it is today.”
- “I love Conoy Township. I work in Philadelphia and it's always a pleasure to come home to "Mayberry." We have a hidden treasure here which the residents know about - let's keep it that way!”
- “I enjoy the rural area and am proud to live in Conoy Township. I am happy with the services that are offered the residents. I think it is great just as it is!”
- “Extremely proud. My mother's father's side of the family has been in Falmouth since around 1820!”

When residents were asked what should be done to make the Township a better place to live, again, by far, the most frequent response was “control development to maintain the Township's rural atmosphere.” The need for new regulations and/or enforcement of existing regulations regarding junk cars and trash on properties, etc., was again mentioned frequently in the responses to this question. The existing Township government and Township operations were another topic that resulted in numerous responses. A sampling of the responses includes the following:

#### Township Government:

- Increase the number of Township Supervisors to five
- Keep government involvement to a minimum
- Encourage participation by more people to serve on the various Township commissions and authorities
- Get community people involved. Have active subcommittees that report to the Supervisors at their meeting
- Keep asking residents what is needed. Keep an open mind when residents express concerns
- Announce all Township expenditures, including payroll, at public meetings
- Keep an open communication with all residents
- Produce a Township web site with contacts for Township officials, dates, times and places of Township meetings, Township codes, budget and other information pertaining to the Township
- It's important to keep residents informed about what's going on - a community newsletter would help achieve this
- It would be nice to see more community togetherness

#### Utility Services:

- We worry about the availability of water, especially as more and more houses are built near us and tap into the ground water.
- We would gladly hookup to public water and sewer if offered.
- Keep constant checks on the incinerator to make sure that they are following the state and national guidelines for keeping pollution to a minimum.
- Maybe put sidewalks in town - like Maytown did
- Put tax money into beautifying/improving the town: curbs, walks, trees, etc.
- Lower sewer cost

- Free trash collection - the incinerator should allow our Township to dump for free - also free recycling
- I appreciate dumpster days - it's a good thing.
- Stop open burning!

#### Recreation:

- Need more recreation like biking, hiking, horse riding trails, community pool, etc. Would like a few more things to do here (i.e., swimming pool)
- Give more opportunity for children to play
- Enhance the rail/trail (Falmouth to Bainbridge); widen, place gravel, pave; Improve safety for bike riding (children) on township roads
- Work with the area churches (who have been very involved already) in reaching our youth (teens) with a positive place to spend their time
- Have things for children and teenagers to do

#### Transportation and Traffic:

- Better road management
- Pave remainder of Governor Stable Road
- Address transportation (bus) issue
- Be careful when improving roads; when roads are better, people drive faster - even when the speed limit hasn't changed.
- Require that snow be removed from sidewalks within a reasonable time
- Clean the streets periodically; more often than once a year
- Enforce speed limit along Turnpike Road
- Better weed cutting at intersection; line painting on Township roads

#### Emergency Services:

- Get better police protection
- Establish a police force that serves the needs of the Township
- Increase police patrols in the town of Bainbridge
- Curfews should be enforced - too many teens hanging out
- Enforcement of dog laws
- Enforce noise ordinance in town (vehicles)
- Control speed and noise level

#### Other Identified Issues:

- Get business to move in only if they pay an excellent wage to their workers
- Keep out large industry
- Need more shops and some more restaurants
- Keep out home businesses
- Better elementary school
- Rezone the parcel of land adjacent to the incinerator back to agricultural
- Please continue your agricultural focus
- Clean up the river

- Control the building of chicken houses and hog farms; institute inspections laws to control flies, etc.; must work with neighboring townships on fly problem, as flies have no borders
- Keep a Conoy Township identity; don't try to be like every other Township/Borough

Finally, all survey respondents were given an opportunity to provide any additional thoughts, comments or concerns. Many of the points made in the responses to other questions were reiterated here. A sampling of other comments provided includes the following:

- All-in-all, this is a great township and we are glad to live here.
- Limiting development is what keeps Conoy Township unique.
- I moved here and chose to live here because it was rural and away from crowded roads, stop lights, etc. Please don't make me move.
- Improve parks. Hire somebody to lead a parks/recreation team. Have more local community events (music in the park; Haldeman Mansion Festivals; old fashion field days, etc.)
- Where we came from there were so many rules and restriction put on residents that it created an unhealthy community. We as a family are not for "land preservation" because it only preserves the farm, not the farmer. We would encourage and support more farmers to direct market their products without regulations that prevent signage and buildings to sell their products.
- Prohibit any expenditure of Township funds to purchase agricultural and/or conservation easements on private land.
- We enjoy living here. In many ways it reminds us of our hometown growing up. We really appreciate the incinerator producing funds to keep our taxes low.
- No corn plant, limited growth. Fund the sports, let Governor Stable Road primitive. Do not civilize everything off the face of the earth.
- Let PENNDOT take care of 441. Township can take care of streets and rural roads.
- Present Township road crew needs to be commended!!!
- All other streets have been repaved, Why not Arch Street?
- We like the Conoy cleanup service in spring and fall.
- Also, we really need some kind of recreation center for our residents and young people. It would be great to have a pool and biking/hiking trails.
- If you decide to purchase a new playground, I would be willing to be on committee to raise funds.
- I think this area needs to become more community-oriented. Promote community activities and when there are community activities, they should be better advertised!
- We wish we saw more of the Regional Police on Turnpike Road between Black Swamp and the Township line. I believe the police think we are part of W Donegal Township.
- Have mail delivery to all residents unless requested by residents to have post office box.
- Get organized at the top - run the Township like a business - be fair and respectful. All Township income should be used for the benefit of the residents and should not be put in savings accounts so that large balances are constantly on hand in local banks.
- Require a cost/benefit analysis for all major Township expenditures.

- I think a Township web site would be great - having the Township rules/regs at fingertips to download/print would be very helpful to those who work and can't readily contact supervisors re: issues.
- A quarterly newsletter of the things going on in the Township. A brief on the Township meetings.
- This is a very good idea to get an interest in the Township. I hope people get more involved and make life good in the Township.
- Thanks for the opportunity for input.
- Thanks for your interest.
- Keep up the good work.
- I think I've stated my interests but it remains to be seen if any thing will be done about it, or even considered.

### **Detailed Responses by Survey Regions**

To obtain more geographically-specific responses, the Township was divided into five (5) Survey Regions and respondents were asked to identify the region(s) in which they lived and/or owned property. The five Survey Regions are generally defined as follows:

#### **Survey Region No. 1**

This region encompasses the northwestern portion of the Township, bounded on the south by Keener Road, on the east by Governors Stable Road, on the north by Dauphin County and on the west by the Susquehanna River. This region includes the Village of Falmouth. Portions of this survey region are served by public sewers.

#### **Survey Region No. 2**

This region encompasses the northeastern portion of the Township, bounded on the south by Keener, Black Swamp and Yoder Roads, on the east by the West Donegal Township line, on the north by Dauphin County and on the west by Governors Stable Road.

#### **Survey Region No. 3**

This region encompasses the central portion of the Township, bounded on the south by Bainbridge Road, on the east by the West Donegal Township line, on the north by Keener, Black Swamp and Yoder Roads and on the west by the Susquehanna River.

#### **Survey Region No. 4**

This region encompasses the Bainbridge area, generally bounded on the south by Locust Grove Road, on the east by the limits of development east of River Road in Bainbridge, on the north by the limits of development north of Spruce Street and on the west by the Susquehanna River. This region also generally encompasses the areas served by public water and sewer.

**SURVEY REGIONS**



### Survey Region No. 5

This region encompasses the southern portion of the Township, bounded on the south by the East Donegal Township line, on the east by the West Donegal Township line, on the north by Bainbridge Road, and on the west by the Susquehanna River and by Region No. 4.

The distribution by Survey Region of the 320 survey responses received was as follows:

Survey Region No. 1	57 responses (18.0 percent)
Survey Region No. 2	41 responses (12.9 percent)
Survey Region No. 3	70 responses (22.1 percent)
Survey Region No. 4	103 responses (32.5 percent)
Survey Region No. 5	46 responses (14.5 percent)

### General Background Information

The percentage of full-time residents was nearly constant throughout the five survey regions. The highest percentage (5 percent) of part-time residents is found in Survey Region No. 2. The two (2) non-resident landowners are found in Survey Region No. 5.

The number of years lived in the Township was also fairly consistent among the five survey regions. Survey Region No. 5 had the highest percentage (44.4 percent) of respondents who had lived in the Township for more than 25 years. Conversely, Survey Region No. 3 had the highest percentage (7.1 percent) of respondents who had lived in the Township for 5 years or less.

### Property Description

In four of the five survey regions, the responses to Question No. 6 regarding land areas owned showed the largest percentages in the categories of (1) ½ to 1 acre and (2) 1 to 2 acres. In same four survey regions, the percentage of responses indicating land owned of 5 acres or more exceeded 20 percent. The one exception was Survey Region No. 4 (Bainbridge), where 43 percent of the respondents had lot sizes less than ½ acre and an additional 28 percent had lot sizes between ½ and 1 acre. 5 percent of the respondents in Survey Region No. 4 indicated land areas owned of 5 acres or more. Survey Region No. 4 is the only region where both public water and public sewer is available.

The responses to the question (Question No. 7) regarding how the property was used generally followed the Township-wide results - residential use was identified by two-thirds (or more) of the respondents. The highest percentage of residential use was indicated in Survey Region No. 4 (85 percent), while the lowest percentages of residential use were indicated in Survey Region Nos. 3 and 5 (the primary farming areas in the Township), where 18 and 20 percent, respectively, indicated agricultural uses and a small percentage in each also indicated intensive agricultural uses.

Responses to the question (Question No. 8) regarding the desired future disposition of the respondents' property generally followed the Township-wide response - "remain in present ownership and in near present condition." No survey regions had more than 2 responses indicating an intention to develop or subdivide their property within the next ten years.

## Public Utilities and Services

Responses to Question No. 9 regarding the primary water source highlighted to presence of public water in the Bainbridge Area. Nearly 4 out of 5 respondents in Survey Region No. 4 had public water, with smaller percentage responses seen also in Survey Region No. 5 (19 percent) and Survey Region No. 3 (4 percent). The remaining survey regions rely entirely upon on-site water sources (overwhelmingly in the form of drilled wells).

The percentage of respondents indicating a desire to be connected to a public water system ranged from 7 percent in Survey region No. 1 to 16 percent in Survey Region No. 3.

Responses to Question No. 11 regarding the source of water used for drinking highlighted several trends. The percentage of respondents using bottled water ranged from 23 percent on Survey Region No. 1 to nearly 30 percent in Survey Region Nos. 3 and 5. Also of interest is the fact that in Survey Region No. 4, which is served by public water, only 75 percent of the respondents who indicated public water as their primary water source also indicated public water as their primary drinking water source.

Portions of Survey Region Nos. 1 and 4 are served by public sewers. Responses to Question No. 12 indicated 40 percent on public sewers in Falmouth (Survey Region No. 1) and 78 percent in Bainbridge (Survey Region No. 4). Where public sewers are not available, residents must rely on on-site sewage disposal systems (either septic tank-drainfields or septic tank-sand mounds). The two survey regions with the highest percentage of sand mound systems are Survey Region Nos. 1 and 2 - in the northern portion of the Township. The higher incidence of sand mound systems in these two regions is consistent with the marginal suitability of the soils in this portion of the Township.

Township-wide, the top six (combined) responses to Question No. 13 regarding what kind of community services should be added or improved were, (1) police; (2) recycling (door to door); (3) parks; (4) recreation center; (5) municipal trash collection and (6) minor road improvements. For the most part, these six community services appeared in the individual survey region results as well, although sometimes in different order. The breakdown by survey region was as follows:

- |                       |   |
|-----------------------|---|
| Survey Region No. 1 - | (1) recycling; (2) police and parks [tie]; (4) recreation center; (5) municipal trash collection  |
| Survey Region No. 2 - | (1) recycling; (2) police and minor road improvements [tie]; (4) municipal trash collection, public sewers and community meeting facility [tie] |
| Survey Region No. 3 - | (1) parks; (2) police; (3) minor road improvements; (4) public sewers; (5) recreation center  |
| Survey Region No. 4 - | (1) police; (2) postal delivery; (3) recycling; (4) recreation center; (5) parks  |
| Survey Region No. 5 - | (1) recycling; (2) municipal trash collection; (3) police and recreation center [tie]; (5) minor road improvements                              |

As can be seen above, police issues and the lack of door-to-door mail delivery are the primary issues in the Bainbridge area.

### Work (Employment)

“Professional” was the most frequent response in all five survey regions to Question No. 14 regarding occupations of the members of the respondents’ households. “Retired” or “homemaker” were the second most frequent response.

Responses to Question No. 15 (work location) generally followed the Township-wide results as well within the separate regions - with “works elsewhere in Lancaster County” having the highest percentage response in four out of the five survey regions. Only in Survey Region No. 1, the region most conveniently accessible to Dauphin County, was the percentage of respondents “working outside Lancaster County” (43 percent) higher than that of those “working elsewhere in Lancaster County” (39 percent). The survey region with by far the lowest percentage (9 percent) of respondents “working in Conoy Township” was Survey Region No. 2. Survey Region No. 3 was the region with the most uniform distribution of responses, with 25 percent “working in Conoy Township,” 45 percent “working elsewhere in Lancaster County,” and 30 percent “working outside Lancaster County.”

### Agriculture (if engaged in agricultural activities)

Only 15 of 43 (35 percent) of those responding to Question No. 17, indicated that they considered themselves full-time farmers. 5 each of these are located in Survey Region Nos. 3 and 5. Question No. 18 asked “how many acres (owned and rented) do you farm?” The highest number of responses to this question that indicated 50 or more acres being farmed were in Survey Region No. 5 (8 responses) and Survey Region No. 3 ( 3 responses).

### Future Development

Question Nos. 18 through 20 requested opinions regarding the future of farming in the Township. Township-wide, the response to whether or not the Township should do more to promote family-owned farms (Question No. 18) was approximately 85 percent affirmative. The survey region with the lowest affirmative response was Survey Region No. 1 - with 78 percent. Conversely, the survey region with the highest affirmative response was Survey Region No. 5 - with 94 percent.

Township-wide, 52.9 percent of the respondents were in favor of the Township investing some of its financial resources toward the purchase of agricultural easements (Question No. 19). However, when the individual survey regions are examined, Survey Region No. 5 was the only survey region that had more than a 49 percent affirmative response to the question. In that region, the breakdown was 63 percent affirmative and only 37 percent negative. Survey Region No. 3 had the highest negative response - with approximately 59 percent negative.

52.1 percent of the respondents Township-wide expressed concern over intensive agricultural operations in the Township (Question No. 20). Again, however, when the individual survey regions are examined, less than 38 percent of the respondents from Survey Region Nos. 1 and 2 had a concern - while 53 percent and 65 percent, respectively, of the respondents from Survey Region Nos. 4 and 5 expressed concerns.

As some residential growth in the Township is inevitable, Question No. 22 was asked as to what type of residential growth should occur. Respondents were asked to indicate whether or not they were in favor of various patterns of residential development. Township-wide, the five highest ranked growth patterns receiving affirmative responses were (1) “in developments of smaller lot sizes in order to preserve agricultural areas and open space”; (2) “scattered throughout the Township on large lots”; (3) “in retirement communities”; (4) “in developments with medium lot sizes (1/4 to 1/2 acre) served by public water and sewer” and (5) “on small lots (1/4 acre or less)



served by public water and sewer with open space / recreation areas.” All five survey regions also had “in developments of smaller lot sizes in order to preserve agricultural areas and open space” as the highest ranked growth pattern receiving an affirmative response. “Scattered throughout the Township on large lots” was the second-ranked response in Survey Region Nos. 2, 3 and 5, while “on small lots (1/4 acre or less) served by public water and sewer with open space / recreation areas” was the second-ranked response in Survey Region No. 1 and “in retirement communities” was the second-ranked response in Survey Region No. 4.

Township-wide, the five highest ranked growth patterns receiving negative responses were (1) “mobile home parks”; (2) “as a mixture of single family homes, townhouses and apartments, with areas of open space”; (3) “on small lots (1/4 acre or less) served by public water and sewer with open space / recreation areas”; (4) “just like it has been happening” and (5) “in developments with medium lot sizes (1/4 to 1/2 acre) served by public water and sewer.” All five survey regions also had “mobile home parks” as the highest ranked growth pattern receiving a negative response. “As a mixture of single family homes, townhouses and apartments, with areas of open space” was the second-ranked response in Survey Region Nos. 1 and 3, while “in developments with medium lot sizes (1/4 to 1/2 acre) served by public water and sewer” was the second-ranked response in Survey Region No. 2, “just like it has been happening” was the second-ranked response in Survey Region No. 4 and “in developments with larger lots (1 acre or more) was the second-ranked response in Survey Region No. 5.

In four of the five survey regions, and by percentages ranging from 56 to 61 percent, respondents indicated that future residential growth should occur in “areas served/proposed to be served by public water and sewer” and not “anywhere in the Township, without restrictions” (38 to 44 percent). In Survey Region No. 5, however, only 44 percent of the respondents selected “areas served/proposed to be served by public water and sewer” as the best location for residential growth, while 50 percent had a negative response to locating future residential growth “anywhere in the Township, without restrictions.”

Township-wide, the perceived need for more commercial locations in the Township (Question No. 23) was split almost evenly, with 49.8 percent of the respondents indicating “yes” and 50.2 percent indicating “no.” In four of the five survey regions, and by percentages ranging from 53 to 59 percent, respondents indicated that they did not feel a need for more commercial locations in the Township. The one exception was Survey Region No. 4, where nearly 61 percent of the respondents indicated a need.

For those indicating that more commercial locations are needed, the forms of commercial development favored by the respondents to the survey in the survey regions were uses that would service the day-to-day needs of Township residents - with services such as gas stations and restaurants the most frequently mentioned. The second highest-ranked form was “home-based businesses.” These responses were consistent with the Township results overall.

The interest in additional industrial development (Question No. 24) at the survey region level was similar to the Township-wide results. Affirmative responses in Survey Region Nos. 2 through 5 ranged from 32 to 36 percent. In Survey Region No. 1, however, the percentage of affirmative responses exceeded 42 percent. As was the case in the Township overall, small scale and “low impact” industrial uses were greatly preferred over warehousing and “heavy” industrial uses in all five of the survey regions.

Township-wide, over ninety percent of the respondents expressing an opinion supported the idea that the Township take greater efforts to preserve and/or protect the agricultural lands, woodlands and natural areas (Question No. 25). Nearly ninety percent preferred that the Townships historic

resources also be preserved/protected. The survey regions with the lowest affirmative responses were Survey Region No. 1, where there was an 85 percent affirmative response for the preservation of historic resources and Survey Region No. 3, where there was an 87 percent affirmative response for the preservation of agricultural land. Responses to all the other questions equaled or exceeded 90 percent affirmative.

### Leisure and Recreation

The frequency of the respondents' usage of the public parks in the Township varied greatly among the five survey regions (Question No. 26). Responses indicating frequent (often) usage exceeded 27 percent in Survey Region Nos. 1, 4 and 5. Roughly 6 and 11 percent, respectively of the respondents in Survey Region Nos. 2 and 3 indicated that they used the public parks often. These two survey regions also had the highest percentage of respondents who indicated that they never used the facilities.

Of the respondents who indicated that they believe that the Township needs more public park land (Question No. 27), Survey Region No. 2 had the lowest affirmative response (27 percent) and Survey Region No. 4 had the highest response (48 percent). All five survey regions indicated that the additional park land should occur in the form of expansions to the existing parks.

Question No. 28 asked the respondents to identify the three types of additional recreation facilities most needed in the Township. Township-wide, "paved jogging/walking/biking trails"; "preserved natural areas"; "unpaved, interconnected trail system" and "teen center" were ranked as the four types of additional recreational facilities cited as "most needed" in the Township. "Paved jogging/walking/biking trails"; "preserved natural areas" and "unpaved, interconnected trail system" were the top three responses (in varying orders) in Survey Region Nos. 1, 2, 3 and 5. Survey Region No. 4 ranked a "teen center" as one of its top three needs.

As was the case for the Township overall, "teens (ages 15-19)" and "young teens (ages 13-14)" were the two most frequently cited age groups that need more recreational opportunities in the Township (Question 29).

### Quality of Life Issues

Question No. 33 asked the respondents to identify and rank the three most important qualities of life in the Township. When the top three rankings are combined, the top three ranked qualities Township-wide were (1) "peace, quiet and serenity," (2) "rural lifestyle" and (3) "small town lifestyle." "Natural beauty/scenery," "agricultural areas," "natural areas (wildlife, etc.)" and "sense of community" were next most-frequently cited qualities. The top three ranked qualities for each of the survey regions are as follows:

- Survey Region No. 1 - (1) peace, quiet and serenity; (2) rural lifestyle; (3) natural areas (wildlife, etc.)
- Survey Region No. 2 - (1) peace, quiet and serenity; (2) rural lifestyle; (3) agricultural areas
- Survey Region No. 3 - (1) rural lifestyle; (2) peace, quiet and serenity; (3) small town lifestyle
- Survey Region No. 4 - (1) small town lifestyle; (2) peace, quiet and serenity; (3) rural lifestyle
- Survey Region No. 5 - (1) rural lifestyle; (2) peace, quiet and serenity; (3) Natural beauty/scenery

## **ANSWERS FROM “FULL-TIME FARMERS”**

Fifteen of the respondents to the survey indicated that they were “full-time” farmers. Of the fifteen, four indicated that they have lived in the Township for one (1) to five (5) years - while nine of the fifteen, or sixty percent, have lived in the Township for more than twenty-five (25) years. Of the full-time farmers responding, four out of every five indicated that they would like their land to remain in its present ownership and near present condition within the next ten (10) years. None indicated any plans to (1) sell it, (2) subdivide and sell some lots or (3) develop it themselves.

87 percent of the “full-time” farmers thought that the Township should do more to promote family-owned farms. Nearly 70 percent indicated that intensive agricultural operations in the Township were not of concern to them. Of some significance was the response that over 61 percent were not in favor of the Township investing some of its financial resources toward the purchase of agricultural easements. This is in contrast to nearly 53 percent of the respondents Township wide who were in favor of such an effort.

In response to Question No. 22 regarding the preferred type of further residential development, approximately 20 percent indicated the preference for “developments of smaller lot sizes in order to preserve agricultural areas and open space.” 65 percent of the responses were in favor of other higher density forms of residential development, including (1) on small lots (1/4 acre or less) served by public water and sewer; (2) in developments with medium sized lots (1/4 to 1/2 acre) served by public water and sewer; (3) as a mixture of single family homes, townhouses and apartments, with areas of open space; (4) in mobile home parks or (5) in retirement communities. Five percent were in favor of developments with larger lots (1 acre or more); an additional 10 percent were in favor of development scattered throughout the Township on large lots. Eighteen percent of the “full-time” farmers were in favor of residential development “just like it’s been happening.”

## **ANSWERS BASED ON LOT SIZE**

Answers to various questions were also cross-tabulated based on the size of the lot owned/rented by the respondent. A summary of the results follows:

Nearly three-quarters of those who had a lot size of less than one-half acre are served by public water. However, less than 50 percent of all respondents in the category indicated that they used public water for drinking; an additional one-third drank bottled water. In the lot size category of one-half to one acre, one third were served by public water - and 26 percent of all respondents in the category indicated that they used public water for drinking. 55 percent of renters were served by public water; 29 percent used it for drinking. Very few respondents with lot sizes greater than one acre were served by public water. The vast majority were served by drilled wells, although some of the large (25 acre+) tracts were also served by hand-dug wells or springs. The percentage of larger lot owners utilizing bottled water for drinking purposes ranged from 10 to 30 percent.

Over 87 percent of those who had a lot size of less than one-half acre are served by public sewer. In the lot size category of one-half to one acre, approximately 45 percent were served by public sewer. 53 percent of renters were also served by public sewer. Very few respondents with lot sizes greater than one acre were served by public sewer. The vast majority were served by conventional septic tank/drainfield sewage disposal systems, although septic tank/sand

mound sewage disposal systems were utilized in 20 percent of the 1 to 2 acre and 2 to 5 acre lot size categories and nearly 40 percent in the 6 to 24 acre lot size category.

In response to the question whether or not the Township should do more to promote family-owned farms (Question No. 19), respondents in the “less than 1/2 acre” category had a positive response rate less than 82 percent (at 76 percent). The remaining lot size categories all had positive responses - ranging from 82 to 93 percent.

Of some significance was the response that over 60 percent of those with lot sizes (1) less than 1/2 acre or (2) more than 100 acres were not in favor of the Township investing some of its financial resources toward the purchase of agricultural easements. Lot size categories with more than 50 percent positive responses included (1) 1/2 to 1 acre; (2) 2 to 5 acres; (3) 25 to 49 acres and (4) renters.

Three lot size categories indicated that intensive agricultural operations in the Township were of concern to them. These categories included (1) 1 to 2 acre; (2) 2 to 5 and (3) more than 100 acres. The categories where less than 40 percent of the respondents had a concern included the (1) 6 to 24 acre; (2) 25 to 49 acre and (3) 50 to 100 acre categories.

In response to Question No. 22 regarding the preferred type of further residential development, the lot size category with the highest positive response in favor of residential development scattered throughout the Township on large lots was in the 2 to 5 acre category (26 percent); the highest negative response for that development pattern was in the 50 to 100 acre category (approximately 16 percent). Approximately 25 percent of the respondents in all categories from 1/2 acre through 100 acres indicated the preference for “developments of smaller lot sizes in order to preserve agricultural areas and open space.” Development forms that favored increased density, opens space and the preservation of agricultural areas were viewed favorably in the (1) 25 to 49 acre; (2) 50 to 100 acre and (3) more than 100 acre categories. “Development in mobile home parks” and “development just like it’s been happening” scored the highest negative responses throughout most of the lot size categories.

In response to Question No. 24 regarding the need for more commercial locations in the Township, renters and respondents with less than 1/2 acre had the highest favorable responses (63 and 64 percent respectively). The lot size categories with the lowest favorable responses included (1) 1 to 2 acres - 28 percent; (2) 25 to 49 acres - 33 percent and (3) more than 100 acres - 35 percent.

When the same question was asked related to industrial development (Question No. 25), only the 50 to 100 acre lot size category exhibited a favorable response (of 60 percent). Respondents with less than 1/2 acre had a 48 percent positive response. The four lot size categories with the highest negative response included (1) renters - 82 percent; (2) more than 100 acres - 77 percent; (3) 1/2 to 1 acre - 73 percent; and (4) 1 to 2 acres - 70 percent.

Utilization of the Township’s parks was also examined based on lot size. Responses that indicated that the parks were used “often” ranged from a low of 12 percent (1 to 2 acre lot size) to a high of 33 percent (25 to 49 acre lot size). At least one in five respondents in the categories encompassing one acre or less and 50 acres or more, including renters, indicated that they used the parks often. The lot size categories with the highest percentages of respondents who indicated that they never used the Township parks were the 25 to 49 acre lot size (22 percent) and the 50 to 100 acre lot size (13 percent).

In response to the question (Question No. 29) regarding the need for more public park land, no lot size category had an affirmative response rate of greater than 48 percent - most were in the

30 percent or less range. The lot size categories with the three highest affirmative response rates were (1) ½ to 1 acre - 48 percent; (2) 25 to 49 acres - 44 percent and (3) ½ to 1 acre - 43 percent. In the “more than 100 acres” category, 15 of 16 (94 percent) of the responses to this question were unfavorable. Unfavorable responses in excess of 65 percent were also seen in the (1) renters; (2) 1 to 2 acres; (3) 6 to 24 acres and (4) 50 to 100 acres categories.



## **APPENDIX B**

### **BACKGROUND STUDIES**

This Appendix includes inventories and analyses of various physical, cultural and demographic resources that will have a direct bearing on the development of the Borough. This information will be valuable for Borough officials as well as property owners, developers, and others.

<b>PHYSICAL FEATURES AND NATURAL RESOURCES</b>
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A study of topography, geology, hydrology, soils, along with scenic, historic and aesthetic features is important in understanding the physical influences that have shaped the present-day character of any municipality. Knowledge of the environment also plays a considerable role in planning for future growth and development. Defining which areas are flat and which are steep, which areas are well suited or poorly suited to agriculture, which areas have limitations to development, and which areas contain unique natural, scenic, historic or aesthetic features is essential in planning for such things as home sites, recreation areas, or areas desirable for agriculture. It is, therefore, very important to take a close look at the environmental features of Conoy Township.

Physical features and natural resources may be either renewable or non-renewable. Some resources are easily ruined and many are irreplaceable. Although many resources such as air, water and timber can renew themselves, they do so in a time frame often beyond cultural intervention. Frequently, the ability of humans to deplete resources has not been balanced by our ability to restore them. While individual landowners have few limitations upon their land use and may not intend to degrade the natural environment at the Township level, the cumulative effects of improper land use management can pose severe threats to public health, safety and welfare. Encroachment of development in marginal areas may result in damage to existing homes through flooding and landslides.

Prime agricultural topsoil, which formed over centuries, may be lost through erosion in a single season. Entire tracts of mature woodlands and wildlife areas that have stood for generations may fall in a single season if they are clear-cut. A single new home with soil unable to renovate septic tank effluent may pollute wells, groundwater and surface water for an entire village.

There is a practical implication to viewing land as a resource rather than as a commodity. The unique and irreplaceable beauty, character and sense of community in the Township have been recognized as a resource worth protecting. Land use management should occur in a framework of stewardship and in harmony with the long-term preservation of the land. Natural resources are essential to the quality of life in Conoy Township and the following sections provide information intended to promote their appropriate management.

<b>Climate</b>
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The average annual precipitation in Lancaster County is approximately 43 inches. Of this, approximately 24 inches (56%) falls between April and September. The average seasonal snowfall is 27 inches. In winter the average temperature is 31° F, and the average daily minimum temperature is 23°. In summer, the average temperature is 72°, and the average daily maximum is 83°.

## Topography

The land area of Conoy Township lies completely within the Piedmont physiographic province. The northern portion of the Township is located in the Gettysburg-Newark Lowland Section. The Gettysburg-Newark Lowland Section is characterized by rolling lowlands, shallow valleys and isolated hills, with low to moderate relief. Its underlying rock types include mainly red shale, siltstone and sandstone, and some conglomerate and diabase. The remainder of the Township is located in the Piedmont Lowland Section. The Piedmont Lowland Section is characterized by broad, moderately dissected, karst valleys separated by broad, low hills, with low relief. Its underlying rock types are dominated by limestone and dolomite, with some phyllitic shale and sandstone.

The limitations on the use of the land increase greatly with an increase in slope. Steep slopes, those which are 15 percent or greater, are generally considered as having severe limitations to conventional development and agricultural applications. The majority of steep slopes occur along the numerous drainageways in the Township. These would include the Conewago Creek and its several tributaries, which forms the northern boundary of the Township, the Snitz Creek and its several tributaries, the Conoy Creek and its several tributaries, and the Susquehanna River itself, and its several tributaries (See Topography and Woodlands Map).

The lower elevations in Conoy Township are found along the Susquehanna River in the southern portion of the Township, just north of the railroad bridge. Here are found elevations of less than 250 feet above sea level. The highest elevations are found in the northeastern section of the Township. An elevation of 582 feet above sea level is found on the ridge just south of Turnpike Road, near the West Donegal Township line.

## Slope

The slope of the land is one of the most important physical features, which plays a role in the present and future use of the land. The areas of gentler slope are those that are best suited for cultivation. These areas are best suited to the use of farm machinery, less susceptible to erosion, and are often the areas having the most fertile soils. At the same time, these areas are also the ones that are best suited for industrial, commercial and residential uses.

A five-category system, based on Soil Survey mapping, has been used to identify degree of slope.

- 0% to 3% Slope: Such slopes are generally suitable for all development uses.
- 3% to 8% Slopes: These slopes are suitable for medium density residential development, agriculture, and nearly all commercial, industrial and institutional uses.
- 8% to 15% Slopes: Slopes of this nature are best suited for moderate to low density residential development. However, considerable care should be exercised in the location of any commercial, industrial or institutional uses.
- 15% to 25% Slopes: Such areas are only suitable for low-density residential, limited agriculture, and recreational uses.
- Over 25% Slope: This steeply sloping land should be used for only open space and certain recreational uses.



The vast majority of the Township land area consists of slopes of 8 percent or less (over 60 percent). (See the Soils-Based Slope Map). Approximately 25 percent of the Township land area is in slopes of 8 to 15 percent. The few areas of slope in excess of 15 percent are located primarily along tributaries to the Conewago, Snitz and Conoy Creeks and Susquehanna River.

### **Drainage**

Drainage is a physical characteristic that is closely related to elevations and slope. Studying the drainage patterns of an area involves analysis of the streams and the various areas from which water flows into these streams.

A major drainage area can be divided many times into smaller drainage areas. Conoy Township is drained by the Susquehanna River and its tributaries. Because of the Township's location adjacent to the Susquehanna River, numerous small tributaries drain directly into the River. There are two major divisions of the Susquehanna River Basin in Conoy Township, the Conewago Creek drainage area and the Conoy Creek drainage area. The Conewago Creek forms the northern boundary of the Township. The Conoy Creek drainage area drains the central portion of the Township. The smaller drainage areas of Stony Run and Snitz Creek are both located in the northern portion of the Township.

### **Water Quality**

With the exception of the Conewago and Conoy Creeks, all of the streams in the Township are classified as warm water fisheries according to the Water Quality Standards of the Pennsylvania Department of Environmental Protection (DEP). More specifically, this means that these streams are protected for maintenance and propagation of fish species and additional flora and fauna that are indigenous to a warm water habitat. Both the Conewago and Conoy Creeks are protected by the Chapter 93 regulations for the maintenance of trout stocked from February 15 to July 31 and maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat. The Conoy Creek north to Elizabethtown has been identified as an impaired water way – due to agriculture.

### **Floodplains**

Another important facet of the Township's physical features is the floodplains. The floodplain area is defined as that area subject to frequent periodic flooding. The basic reasons for interest in floodplains are as follows:

- to prevent unnecessary property damage;
- to minimize danger to public health by protecting the water supply and promoting safe and sanitary drainage;
- to reduce financial burdens imposed on the community, its government, and its residents by frequent and periodic floods;
- to provide sufficient drainage courses to carry abnormal flows of storm water in periods of heavy precipitation; and
- to provide area for groundwater absorption for maintenance of the subsurface water supply.

Portions of Conoy Township, particularly the Bainbridge area, experienced extensive damage by flooding from the Susquehanna River during Tropical Storm Agnes in June 1972 and again during Tropical Storm Eloise in September 1975. The Conoy Township Zoning Ordinance includes standards to strictly regulate development activities in the identified flood plains.

Subsequent to those flooding events, the Conoy Township Flood Insurance Study was prepared by the Federal Emergency Management Agency (FEMA) in 1979. This study defined 100-year floodplain boundaries for selected streams in the Township. The 100-year flood plain boundaries for water bodies in the Township are shown on the Floodplains and Wetlands Map.

Areas that are prone to flooding should not be developed for residential, commercial or industrial purposes. These areas adjacent to water bodies which are covered by flood water during times of flooding play the important role of carrying flood waters during periods of flooding. If development occurs within these areas subject to flooding, a danger to persons and property can result. Increased flood damage downstream may occur because the flood waters have been constricted and not allowed to flow where they normally would, thus increasing flood velocity.

If development occurs within the areas along watercourses, increased sedimentation within the stream (increased depositing of soil within the stream) is likely to occur because sediment will be more likely to reach the stream if the land along the stream is disturbed and if more impervious surfaces (roofs, paved areas) increase the storm water runoff near the streams. This runoff may erode stream banks and channels. If sedimentation is increased, the streambed may be filled, causing flood waters to cover a larger area, stream meandering may be caused, life in the stream may be choked, and the esthetic value of the stream seriously impaired.

It is best if the areas on either side of streams are not impervious (such as paved) surfaces. As surface runoff of water moves toward streams, water can be absorbed into the ground if the water does not move over impervious surfaces. Increased absorption can result in replenishment of the ground water and also in decreased flood peaks because less water reaches the stream from the surface of the land. An inadequate supply of ground water can mean an inadequate flow of water in the stream during dry summer months. Failure to sustain stream flow also could mean a greater concentration of pollutants at periods of low flow.

On-site sewage disposal systems should not be located within the areas subject to flooding because of the danger of contamination of the stream and the groundwater due to the proximity of the stream and the presence of a high water table. Since there may not be an adequate distance between the on-site facility and the surface water, sewage effluent may not be able to be renovated prior to reaching the stream. In some instances, soils found in flood plains are very porous and the movement of sewage effluent is too rapid to allow for the renovation of the effluent prior to reaching the ground water table or the stream. In other situations, the soil near the surface may be saturated with water or become readily saturated with sewage effluent, resulting in effluent remaining near or rising to the surface of the land. When flooding occurs, sewage effluent may contaminate the surface water. The efficiency of filter fields of septic tanks can be impaired or destroyed as a result of flooding.

## Wetlands

As defined by DEP, EPA and the US Army Corps of Engineers, wetlands are those areas which are inundated or saturated by surface or groundwater at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas that possess three essential characteristics: (1) hydrophytic vegetation, (2) hydric soils and (3) wetland hydrology.

Wetlands have become recognized as uniquely important components of the landscape by scientists, engineers, public interest groups and governmental agencies. Their importance lies both on the traditional values of wetlands as areas of fish and wildlife protection as well as in newly found values of wetlands as areas of stormwater management. Wetlands are a critical component of the following:

- Fish and Wildlife Habitat
- Water Quality Maintenance
- Pollution Filter
- Sedimentation Removal
- Oxygen Production
- Nutrient Recycling
- Aquatic Productivity
- Open Space Preservation
- Microclimate Regulation
- World Climate Regulation
- Flood Control
- Energy Source Production (peat)
- Recreational Land Preservation
- Chemical and Nutrient Absorption

The National Wetlands Inventory (NWI) Maps were compiled by the U.S. Fish and Wildlife Service using color infrared aerial photos for the identification of wetlands using soil moisture content. The quality of the maps varies greatly depending on the quality of the photos, the time the photos were taken and the type of wetlands being identified. The NWI map is a helpful background source for wetland investigations. However, field research by a trained expert is necessary to determine the prevalence or absence of wetlands. The NWI maps, along with land cover interpretations prepared as part of the Lancaster County GIS system, indicate that the Township contains numerous wetlands. Another source for wetland information is the occurrence of hydric soils - which usually are indicators of wetland conditions.

Soil series with major components hydric and soils with inclusions of hydric soil located in Conoy Township are listed in the following table. As can be seen in the table, only approximately 2.6 percent of the Township's soils are identified as having major components hydric. However, an additional 20 percent of the soils have the potential for having inclusions of hydric soil components.

**TABLE N-1  
HYDRIC SOILS**

<b>Soil Symbol</b>	<b>Soil Name</b>	<b>Approximate Acres</b>
<b>Soils with Major Components Hydric</b>		
Bo	Bowmansville silt loam	31.9
Hg	Holly silt loam	213.3
<b>Total</b>		<b>245.2</b>
<b>Percent of Township Total</b>		<b>2.6%</b>
<b>Soils with Inclusions of Hydric Components</b>		
AbB	Abbottstown silt loam	34.9
CkA	Clarksburg silt Loam	43.8
Eu	Elk-Urban land complex	59.3
Ff	Fluvaquents and Udifluvents, loamy	130.6
LbB	Lehigh silt loam	130.7
LbC	Lehigh silt loam	54.8
Ln	Lindside silt loam	152.4
MdB	Mount Lucas silt loam	52.0
MeB	Mount Lucas very stony silt loam	251.3
Nc	Newark silt loam	189.0
Ne	Nolin silt loam	203.6
RaB	Readington silt loam	366.8
Rd	Rowland silt loam	136.6
Uc	Urban land	29.8
Ud	Urdothents, loamy	97.8
<b>Total</b>		<b>1,933.6</b>
<b>Percent of Township Total</b>		<b>20.6%</b>
Source: USDA/NRCS; Lancaster County GIS Landbase; and Consultant's calculations		

### High Water Table Areas

A few small, scattered areas of high water table, aside from the flood plains, are found in the Township. If development occurs in areas of high water table, a public sewage disposal system should be available because where on-lot sewage disposal systems are used, the ground water supply may be contaminated by sewage effluent. When the ground water level is high and near the surface, the soil near the surface is saturated or will readily become saturated with septic tank effluent. If there is not enough room in the soil for septic tank effluent, the effluent must remain near the surface or rise to the surface, endangering public health and giving off foul odors.

These areas where the water table is high perform an important water storage function and should be allowed to continue this function and continue to store uncontaminated water. Foundations constructed in areas of high water table may settle and fail. Stagnant pools may exist during certain periods, creating an unattractive residential environment.

## Geology and Hydrogeology

The geology of an area plays an important role in determining the surficial shape of the environment. Throughout the ages, underlying rock is subjected to natural weathering forces that chemically and physically erode its original shape. These weathered materials then form soils, which remain stationary or can be transported to another area. Then, these soils possess distinct characteristics that often dictate which land uses can be accommodated.

Geology is also a primary determinant of groundwater quality and quantity. Certain rock types and structures convey water better and yield more abundant well sources. For example, limestone areas are characterized by solution channels that readily allow the passage of water; whereas, other local metamorphic rocks have very low secondary porosity. Rock type and structure can affect the degree of filtration that takes place within the groundwater and the chemical composition of the rock can also contribute to the chemical properties of its groundwater.

Finally, the physical properties of underlying rock determine its strength and suitability to support development. These properties determine the ease of excavation, and ability to support the foundations of various structural types.

Conoy Township lies within the Piedmont Province of the Appalachian Highlands. The Township can be characterized by two sub-formations within the Piedmont Province. The northern and central portions of the Township are underlain by Triassic sandstone and the southeastern portion by limestone.

The Geology Map illustrates the geologic conditions within the Township; the map shows ten distinct geologic formations. These formations include, from north to south: Gettysburg Formation, Diabase, New Oxford Formation, Hammer Creek Formation, Stonehenge Formation, Epler Formation, Millbach Formation, Snitz Creek-Buffalo Springs Formation, Ledger Formation and Vintage Formation. These formations are primarily found in bands running from west to east across the Township. The most prevalent formations are the New Oxford and the Snitz Creek – Buffalo Springs Formation. A table has been constructed showing the relationship between the geology of the Township and such land use planning elements as quantity of groundwater resources, porosity and permeability, ease of excavation and foundation stability. These four elements are important to consider when allocating and planning land use activities. This table is intended for a reference use only and should be utilized to determine general characteristics of the formation types.

The porosity and permeability of a geologic formation refers to how quickly and easily water, air, and other substances pass through the rock. A classification of low value means that the rock is essentially impermeable. A classification of moderate refers to a permeability of about 14 feet per day. A high permeability means that substances may pass through the rock at a rate somewhere between 14 feet per day and 847 feet per day.

The ease of excavation refers to how pliable the rock is when moving it or drilling it. The classifications range as follows:

- **Easy** – Can be excavated by hand tools or lightweight power equipment.
- **Moderately Easy** – Rippable by heavy weight power equipment at least to weathered-rock/fresh rock interface and locally to greater depths.

**TABLE N-2  
GEOLOGIC FORMATION CHARACTERISTICS**

Formation Name (Composition)	Symbol	Porosity & Permeability	Groundwater	Ease of Excavation	Foundation Stability
<b>GETTYSBURG FORMATION</b> (maroon silty mudstone and shale)	Trg	Joint- and bedding-plane openings provide a secondary porosity of moderate magnitude; moderate permeability.	Median yield is 66 gpm; hardness and dissolved solids are frequently high.	Weathered zone may be moderately easy; excavated unweathered rock is difficult; moderate to fast drilling rate except adjacent to diabase where rock is harder and drilling rate slow.	Good; should be excavated to sound material; good drainage.
<b>DIABASE</b> (medium-to coarse-grained, dark gray rock composed mainly of plagioclase feldspar, pyroxene, and accessory magnetite)	Trd	Joint openings provide a very low secondary porosity; low permeability.	Median yield is 5 gal./min.; yields are usually obtained from the fractured, weathered zone at the top of bedrock; water levels show strong seasonal influence.	Difficult; large boulders are a special problem; slow drilling rate.	Good, should be excavated to sound material.
<b>NEW OXFORD FORMATION</b> (red mudstone and shale and fine grained sandstone interbedded with arkosic sandstone)	Trn	Primary porosity occurs in weathered portion; joint- and bedding-plane openings provide a secondary porosity in unweathered rock; high to moderate total effective porosity; moderate permeability.	Median yield is 66 gal./min.; hardness and total dissolved solids are frequently high.	Moderately easy; relatively fast drilling rate may be expected.	Good; should be excavated to sound material; under-drainage may possibly be required.
<b>HAMMER CREEK FORMATION</b> (pebbles to boulders of limestone in a matrix of red or gray sandstone or shale and/or cobble and pebble quartz conglomerate with red sandstone)	Trh Trgc	Low primary porosity; moderate secondary porosity from joint- and bedding-plane openings; moderate to low permeability.	Median yield is 66 gal./min.; hardness and total dissolved solids are frequently high.	Difficult; slow drilling rate due to quartz-pebble conglomerate and in areas where rock is adjacent to diabase.	Good; should be excavated to sound material.
<b>STONEHENGE FORMATION</b> (gray, finely crystalline limestone containing dark-gray silty laminations)	Os	Joint and solution-channel openings provide a secondary porosity of low to moderate magnitude; high permeability.	Median yield is 100 gal./min.; highest yields are obtained from fractures and solution cavities; water is relatively hard.	Difficult; bedrock pinnacles are a special problem; fast drilling rate.	Good; should be excavated to sound bedrock and thoroughly investigated for solution openings.
Source: Engineering Characteristics of the Rocks of Pennsylvania, 1982.					

**TABLE N-2  
GEOLOGIC FORMATION CHARACTERISTICS  
(CONTINUED)**

Formation Name (Composition)	Symbol	Porosity & Permeability	Groundwater	Ease of Excavation	Foundation Stability
<b>EPLER FORMATION</b> (gray interbedded limestone and dolomite)	Oe	Joint- and solution-channel openings provide a secondary porosity of low to medium magnitude; low permeability.	In the Lebanon Valley, medium yield is 15 gal/min; in the Lancaster Valley, Epler is a fair source for public supply and industrial use.	Difficult; bedrock pinnacles are a special problem; fast drilling rate.	Good; should be excavated to sound bedrock and thoroughly investigated for cavernous areas.
<b>MILLBACH FORMATION</b> (white to pinkish-gray, interbedded limestone and dolomite; scattered beds of sandstone)	Cm	Solution channels provide a secondary porosity of moderate to high magnitude; high permeability.	In the Lebanon Valley, yields of 200 to 500 gal/min are not uncommon; in the Lancaster Valley, the opposite is true, and formation is a poor source of public supply and only a fair source for small public supply (37% of wells studied have yields greater than 25 gal/min.	Difficult; bedrock pinnacles are a special problem; moderate drilling rate.	Good; thorough investigation should be undertaken for solution cavities.
<b>SNITZ CREEK-BUFFALO SPRINGS FORMATION</b> (white to pinkish-gray, interbedded limestone and dolomite; scattered beds of sandstone and/or gray, argillaceous, silty and sandy dolomite)	Csb	Primary porosity occurs in weathered portion; solution channels provide a secondary porosity of moderate to high porosity if encountered; moderate to high permeability.	Median yield of wells in Lebanon Valley is 75 gal./min.; in Lancaster Valley, a fair source for small public supply (38% of wells studied have yields greater than 25 gal/min.	Difficult; bedrock pinnacles are a special problem; numerous sandstone beds slow fast drilling rates.	Good; a thorough investigation for solution cavities should be undertaken.
<b>LEDGER FORMATION</b> (light, gray, coarsely crystalline dolomite)	Cl	Joint- and bedding plane openings and solution channels provide secondary porosity of low to high permeability.	Median yield is 30 gal./min; well yields range from less than 1 to 400 gal/min; 82 percent of wells tested had yields greater than 25 gal/min.	Difficult; bedrock pinnacles are a special problem; fast drilling rates.	Good; solution openings and bedrock openings should be thoroughly investigated.
<b>VINTAGE FORMATION</b> (largely gray, thick bedded to massive, finely crystalline dolomite; upper part is primarily pure, fine-grained limestone)	Cv	Joint and solution openings provide a secondary porosity of moderate magnitude; low permeability.	Median yield is 30 gal./min; water is relatively hard. However, locally this formation has a median yield of .44 gal/min.	Difficult; bedrock pinnacles are a special problem; fast drilling rate.	Good; solution cavities and bedrock pinnacles should be thoroughly investigated.

Source: Engineering Characteristics of the Rocks of Pennsylvania, 1982.

<sup>1</sup> Summary Ground-Water Resources of Lancaster County, Pennsylvania (1977) pg. 23.

- **Intermediate** – Rippable by heavy weight power equipment to depths chiefly limited by the maneuverability of the equipment. Hard rock layers or zones of hard rock may require drilling or blasting.
- **Moderately Difficult** – Requires drilling and blasting for most deep excavations, but locally may be ripped to depths of several feet due to closely spaced joints, bedding, or weathered rock.
- **Difficult** – Requires drilling and blasting in most excavations, except where extensively fractured or weathered.

Foundation stability can be classified as either good, fair, or poor. Good foundation stability means that the bearing capacity of the rock is sufficient for the heaviest classes of construction, except where located on intensely fractured zones or solution openings. Fair foundation stability is determined by the presence of the water table, the type of rock composition and weathering depth. Poor foundation stability means that foundations must be artificially stabilized to allow sufficient bearing capacity for light or moderate construction.

The sandstone formations are usually associated with high resistance to erosion, rock outcroppings and steep topography, therefore making those areas less desirable for agriculture or urban development. The limestone formations, however, are characterized by weak resistance to erosive forces. This characteristics has several distinct implications for land use planning. The presence of solution channels usually suggests abundant supply of groundwater but at the same time may pose hazards due to the formation of large solution channels and caverns, which in turn make create sinkhole problems. The soils associated with limestone formations are usually very suitable for agriculture due to the years of erosion of the relatively soft limestone – permitting a smoothing and leveling action. This results in the gentle roll and deep soil characteristic of the fertile Lancaster Plain.

The proper installation and operation of on-site septic fields relies upon the subsurface soil and rock particles to filter impurities from the effluent entering the groundwater. With relation to the suitability for the operation of on-site sewage disposal systems, the sandstone formations offer relatively good conditions, however, the presence of steep slopes limits the suitability for the operation of on-site disposal systems.

The limestone formations with the presence of solution channels can intercept effluent and agricultural fertilizers before the soil has had the chance to purify them; then, the polluted groundwater can travel along the solution channel and degrade other water sources.

### Groundwater Supply

As described earlier, the geology of an area largely determines the quantity and quality of an area's groundwater supply. An understanding of local groundwater conditions is important in allocating future land use so as to protect important groundwater recharge areas, assure adequate well-water for rural to suburban neighborhoods, and in the planning for sewage facilities.

Based on two studies entitled Summary Ground-Water Resources of Lancaster County, Pennsylvania (1977) and the Engineering Characteristics of the Rocks of Pennsylvania (1982)



the following table has been constructed to illustrate the reported groundwater yields of the Township's respective geologic formations:

**TABLE N-3  
REPORTED GROUNDWATER YIELDS**

Map Symbol	Formation Name	Yield Range (gpm)	Median Yield (gpm)
*Trg, Trf1, Trgc	Gettysburg-Hammer Creek Formation	5-94	16
*Trd	Diabase	3-15	10
*Trn	New Oxford-Stockton Formation	1-450	12
**Os	Stonehenge Formation	NA	100
**Oe	Epler Formation	NA	NA
**Cm	Millbach Formation	37% of wells studied have yields greater than 25 gpm	
**Csb	Snitz Creek – Buffalo Springs Formation	38% of wells studied have yields greater than 25 gpm	
*C1	Ledger Formation	2 to 550	30
*Cv	Vintage Formation	2 to 70	.44***
Sources:      * Summary Ground-Water Resources of Lancaster County, Pennsylvania, 1977 ** Engineering Characteristics of the Rocks of Pennsylvania, 1982 *** Because of its small areal extent, the Vintage Formation is not important as an aquifer.			

According to the Lancaster County Sewer and Water Resources Study prepared in May 1987 by Gannett Fleming Environmental Engineers:

*"A typical household with three family members would require an average of 0.2 to 0.4 gallons per minute (gpm). Peak rates of use would range between 3 and 5 gpm for the same household. Actual well yields needed to supply this demand depends upon the amount of storage capacity in the household system."*

From the above data, it is evident that most of the formations in this area typically have enough groundwater supply for domestic uses. However, the Vintage and Diabase Formations may provide less than adequate domestic well yields.

### Groundwater Quality

Lancaster County is plagued with widespread groundwater contamination. High concentration of nitrates have been identified within many water supply wells throughout the County.

Furthermore, on-site well testing conducted as an ongoing part of the Township Sewage Facilities Plan update prepared by Rettew Associates in 1989, revealed that 37 of the 138 tested wells (27%) had nitrate levels exceeding 10 milligrams per liter. In addition 52 wells (38%) had values between 5.0 and 9.9 milligrams per liter.

High nitrate levels (above the U.S. Public Health Service and Environmental Protection Agency standard of 10 milligrams per liter) can be harmful to human infants and cattle, and can even result in death due to oxygen starvation within the blood stream; however, such instances are rare.

Primary sources of nitrates existing within Lancaster County are fertilizer, manure, effluent from on-lot sewage disposal systems and residue from decaying vegetation. Based upon calculations performed in the Lancaster County Sewer and Water Resources Study (May, 1987), excess fertilizer and manure are the principal causes of high nitrate concentrations throughout the County rather than on-lot disposal systems.

Remedial measures to improve groundwater quality can include pumping and treatment of groundwater, construction of walls and caps to block water movement, biological treatment of groundwater in place, and site excavation. All of these measures are very expensive and impractical for widespread contamination. Consequently, practical remedial actions appear limited to the treatment of groundwater withdrawn for specific water uses. By comparison, the prevention of groundwater contamination is far less costly. Many of these preventive measures require actions at the State and County levels; however, some can be undertaken at the local level.

### **Unique Geologic Formations and Caves**

The geology of an area is largely responsible for its landform. Unique geology formations can produce scenic vistas and places of special interest. Similarly, underground caves also provide recreational, scientific and educational opportunities that deserve protection. The following text was prepared as part of the 1990 Conoy Township Comprehensive Plan.

After literary research, it was discovered that Conoy Township possesses several unique features and caves. The following describes those unique geologic features found within the Township:

According to the Pennsylvania Geological Survey's publication entitled Outstanding Scenic Geological Features of Pennsylvania, two features are located within the banks of Susquehanna River just east of the Dauphin County line. Specifically, "Conewago Falls" and "Potholes in the Susquehanna River" adjoin Falmouth along the river. These features are described as "a series of extremely large potholes in diabase (Triassic age) in the bed of the Susquehanna River; visible yearly at low water levels <sup>1</sup>".

A third feature noted in the same publication is named "Governors Stables." This feature is located on the north side of Stony Creek west of Governor Stable Road.

"Before 1800 a notorious horse thief known as "The Governor" established his headquarters here. Another legend has it that the cave was visited by Andrew Curtin, Governor of Pennsylvania from 1861 to 1867, who took shelter here with his aides during a storm while traveling the Falmouth-Elizabethtown Pike on the way from Lancaster to Harrisburg. This is a boulder cave made up of two huge boulders capped by a third boulder, surrounded by other boulders; it has a convenient natural chimney. The rounded boulders are composed of Triassic diabase (commonly called ironstone) <sup>2</sup>".

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<sup>1</sup> Outstanding Scenic Geological Features of Pennsylvania, Pennsylvania Geological Survey, (1979) pg. 422.

<sup>2</sup> Ibid.

Next, four caves are identified within Conoy Township by Caves of Southeastern Pennsylvania (PA DER, Bureau of Topographic and Geologic Survey). The following excerpts describe these caves.

#### Billmyer East Cave

The cave consists of a mere crawlway, 15 feet long, which developed in the upper beds of dolomite of the Ledger Formation. It was revealed by the stripping of overburden in the J.E. Baker and Co. quarries at Billmyer.

The cave can be found 0.25 mile east of the railroad grade crossing at Billmyer and 200 feet northwest of the dirt access road to Billmyer. Permission to enter the quarry should be obtained from William Rhoads in Bainbridge.

Large milky calcite crystals and clear crystals of dolomite were collected outside the entrance to the cave. Two hundred feet to the south, a typical karst landscape consisting of lapis and grikes was exposed by the stripping operation.<sup>3</sup>

#### Stackstown Cave

Stackstown Cave is a 20 foot long solution cave in limestone of the Conococheague Group, located 700 feet north of the bridge at Stackstown. It is at the base of a low cliff, 12 feet northwest of the road which parallels the Conoy Creek. Recently the entrance has been completely buried under an accumulation of trash, earth and fill.

The cave consists of low crawlway which leads to a space, 5 feet wide and 4 feet high. Here two parallel crawlways continue southwest for only 6 feet. The passages are developed along the strike in beds dipping steeply to the north. Some flowstone and stalactites are present. Do not disturb the cave minerals.<sup>4</sup>

#### Red Hill Cave

This historic cave is situated on the north side of Red Hill, a little over half a mile northeast of the square in Bainbridge. From Pa. Route 441, drive east on the Stackstown Road. After taking the right fork, continue to 130 yards to the highway shack, which sets off to the left. Park here and follow the foot path down through a shady glen for about 100 yards. There, at the base of a large outcropping you will see what is perhaps the most picturesque cave entrance in the county.

Several Indian artifacts were recovered by Red Hill Cave by various person during the last century. These archaeological investigations were performed by Colonel Henry Haldeman in 1857, by Dr. Tarleton H. Bean of the Smithsonian Institution in 1877, and finally by Mr. F. G. Galbraith in 1877 and 1883 (anon., 1877). The artifacts collected by Bean and Galbraith were donated by them to the Smithsonian Institution in Washington, D.C. These consist of projectile points, animal bone, pottery shards, shall pendants, and a beautifully preserved bannerstone (spear-thrower weight).

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<sup>3</sup> Caves of Southeastern Pennsylvania, PA DER, Bureau of Topographic and Geologic Survey, (1974) pg.19.

<sup>4</sup> Ibid, pg. 76.

The entrance to Red Hill Cave is 25 feet wide and has an arched ceiling 5 feet high (Figure 27). A tall poplar tree and a large block of limestone conglomerate partially obstruct the entrance.

A short, steep slope leads downward to a passage 60 feet long. This corridor gradually decreased in both height and width except at the extreme end of the cave where excavations have created a small head-high chamber. Along the base of the southeast wall at three separate intervals there are low crawlways, which range from 2 to 12 feet long.

In April 1877, the Marietta Register correspondent, Tom, reports that the exploring party found the washed-shut mouth of a second, inner chamber “on the south” of the “outer cave” and “only after digging to the depth of 5 feet did...(they) discover the top of the arched opening leading to it.” He also mentions in his second article that “we have frequent glimpses of corridors and halls beyond, into which we hope soon to carry our torch of investigation.” (Anon., 1877).

At present the floor of the cave is a stratified deposit consisting of red, sticky clay near the top and grading downward for an estimated ten feet through layers of progressively large cobbles. It is probably that sometime within the last 80 years, as had happened once before in interval between Haldeman and Bean explorations, a large quantity of dirt and stone has washed into the cave from the elevated fields north of the entrance. Thus the fabled inner room and further reaches of the cave are now sealed and numerous, unsuccessful attempts have been made to reopen them.

Red Hill Cave is developed in basal beds of the new Oxford Formation of Triassic age these beds, also known as Potomac marble, are a red limestone conglomerate composed largely of limestone pebbles (Stose and Jonas, 1933). The singular red color of the marble and residual soil is responsible for the naming of the hill and the cave.

A Marietta Register article records in glowing terms that, in 1877, the cave contained “ hundreds of beautifully formed stalactites... Many are large, being connected to the ceiling and sides of the cave and have been ages in the forming, which formations continue the whole distance of the outer cave (seventy feet)”(Anon., 1877). Unfortunately, the persevering vandals and curio-hunters have since succeeded in stripping the cave of all, including the very smallest stalactites. All that remain is a small, dried-up flowstone cascade and a few clusters of “popcorn” or calcite beads.

In the winter there is often a profusion of ice stalactites, stalagmites and columns that form in the east half of the entrance area, and remain until spring.

### Governors Stables

This boulder cave may be reached from Falmouth by traveling one mile northeast on the Falmouth-Elizabethtown road. Turn south onto a dirt road and proceed 0.3 mile, then turn off to the southwest and park outside the gate. Follow the road and the trail southwest for an additional 1,000 feet until it terminates at a large boulder-strewn slope. The cave is at the base of this slope, 250 feet north of Stony Run.

There are two well-substantiated legends connected with this cave. One states that sometime prior to 1800 a notorious horse thief, known as “The Governor,” established his headquarters here (Beck, 1953). The other legend contends that the cave once had a famous visitor in the person of Andrew Curtin, Governor of Pennsylvania from 1861 to 1867. He and his aides reportedly stopped and took shelter here during a violent storm while traveling the Falmouth-Elizabethtown Pike on their way from Lancaster to Harrisburg.

This boulder cave is a rectangular room, 29 feet by 7 feet and up to 15 feet high, formed by two huge boulders capped by a third boulder. Additionally boulders serve to partially enclose the room at either end.

It is quite apparent from the matching contours of the opposing walls that the two supporting blocks were once joined. A split in the capping block, perpendicular to the axis of the room, has formed a convenient natural chimney.

A broad intrusive sheet of Triassic diabase (commonly called ironstone) appears along the northwestern boundary of the county. At Governor’s Stables large diabase masses have been displaced and grouped in such a manner as to leave a large boulder-roofed chamber. The boulders have become rounded due to the exfoliation of thin surficial layers (Stose and Jonas, 1933). The same process was operative in the formation of the famous “Devil’s Den” diabase boulder cave on the Gettysburg Battlefield. ”<sup>5</sup>

## Soils

Historically, the nature and quality of soil has had a very important effect on how land was used, especially in agricultural areas. It is therefore important to review the nature and qualities of Conoy Township’s soils, because land use activities are frequently reflections of soil type.

In terms of efficient use of resources, a common-sense goal would be to arrange land uses so that the best soils for agricultural uses (i.e. well-drained, deep, and fertile) are left undisturbed, while residential development would be focused towards soil areas that are less productive or are not easily worked. Construction costs can be minimized if development is steered towards areas that do not have a high water table, are relatively free of shallow bedrock but have adequate soil for an on-lot sewage disposal system.

Intensive land uses, such as industrial, commercial or activities that require large parking areas, should also be directed towards soils that can support heavy loads or paved areas.

While virtually any structure can be safely built on almost any soil type (or slope), such developments may require unreasonable amounts of engineering, site preparation, and cost. Therefore, while this analysis will not predict the appropriate location for any land use with one hundred percent certainty, it is a reasonable set of guidelines for future development or areas of constraint.

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<sup>5</sup> Caves of Southeastern Pennsylvania, PA DER, Bureau of Topographic and Geologic Survey, (1974) pgs. 27 & 28.

One of the most useful components of the soil analysis is the list of types of constraints imposed by different soil types. For example, a soil type may be subject to flooding, or be too wet for use for an on-lot sewage disposal system site. Constraints can affect construction, such as the ability of soil to support loads, on its frost action, shrink-swell potential, etc. This information is necessary to identify areas that are not appropriate for extensive development.

### General Soils Characteristics

The soils of Conoy Township are largely related to the underlying geology. Over a long period of time, the wearing effects of running water, wind, freezing and thawing temperatures, and biological organisms have formed the overlying soils. For the most part, these soils are “residual,” having remained in the place where they were formed. Some of these residual soils have been washed from the higher areas into the stream valleys, forming the flood plain soils.

For classification purposes, soils are separated into major units (called soil associations), which are then subdivided into individual soil series (Soil Survey of Lancaster County, Pennsylvania).

The Soil Survey of Lancaster County, Pennsylvania (1985) depicts Conoy Township within two general soil associations. The northwestern section of the Township lies within the Ungers-Bucks-Lansdale group. This soil group forms a narrow band that generally straddles the northern boundary of Lancaster County. The landscape created by these soils consists of dissected rolling hills with moderately wide foot slopes. Slopes range from nearly level to very steep. These soils are formed from Triassic siltstone, conglomerate, shale and sandstone materials.

The southeastern half of the Township is comprised of the Duffield-Hagerstown general soils group. These soils form a band of flat and fertile lands that are commonly known as the Lancaster Plain. These soils are formed from limestone residuum and have a high potential for sinkholes and groundwater contamination.

The Soil Survey provides detailed information for individual mapping units within the general soil association described above.

Table N-4 lists all the of the specific soil units mapped within Conoy Township.

### Agricultural Productivity

The productivity of the soils of Conoy Township varies considerably. Where the soils are deep and surface drainage is good, the soils are productive. These soils are easily worked and usually have a high moisture holding capacity. If the soils are poorly drained, have a low moisture-holding capacity, or tend to be shallow due to steep slopes or severe erosion conditions, then the productivity is reduced.

Agriculture plays an important role in the economy of Conoy Township. It is essential that the prime agricultural land be delineated and, wherever possible and feasible, preserved for agricultural use.

**TABLE N-4  
SOIL SERIES MAPPED  
IN CONOY TOWNSHIP**

<b>Soil Symbol</b>	<b>Soil Name</b>	<b>Slope (%)</b>	<b>Soil Class</b>	<b>Approximate Acres</b>
AbB	Abbottstown silt loam	3-8%	III	34.9
Bo	Bowmansville silt loam	0-5%	III	31.9
BrB	Brecknock gravelly silt loam	3-8%	II	151.9
BrC	Brecknock gravelly silt loam	8-15%	III	285.6
BuB	Bucks silt loam	3-8%	II	14.7
BuC	Bucks silt loam	8-15%	III	1.7
BuD	Bucks silt loam	15-25%	IV	134.8
CkA	Clarksburg silt Loam	0-5%	II	43.8
DbA	Duffield silt loam	0-3%	I	241.8
DbB	Duffield silt loam	3-8%	II	1271.4
EcA	Elk silt loam	0-3%	I	201.6
EcB	Elk silt loam	3-8%	II	561.6
EcC	Elk silt loam	8-15%	III	180.0
Eu	Elk-Urban land complex	0-8%	-	59.3
Ff	Fluvaquents and Udifluvents, loamy	0-3%	-	130.6
HaB	Hagerstown silt loam	3-8%	II	189.0
HbC	Hagerstown silty clay loam	8-15%	III	316.2
HbD	Hagerstown silty clay loam	15-30%	IV	101.7
Hg	Holly silt loam	0-3%	III	213.3
LaB	Lansdale loam	3-8%	II	741.6
LaC	Lansdale loam	8-15%	III	907.7
LaD	Lansdale loam	15-25%	IV	362.5
LbB	Lehigh silt loam	3-8%	II	130.7
LbC	Lehigh silt loam	8-15%	III	54.8
Ln	Lindside silt loam	0-3%	ii	152.4
MdB	Mount Lucas silt loam	3-8%	II	52.0
MeB	Mount Lucas very stony silt loam	3-12%	VI	251.3
Nc	Newark silt loam	0-3%	II	189.0
Ne	Nolin silt loam	0-3%	I	203.6
RaB	Readington silt loam	3-10%	II	366.8
Rd	Rowland silt loam	0-3%	II	136.6
UaB	Ungers loam	3-8%	II	397.5
UaC	Ungers loam	8-15%	III	539.0
UaD	Ungers loam	15-25%	IV	48.6
UbB	Ungers extremely stony loam	3-8%	VII	69.8
UbD	Ungers extremely stony loam	8-25%	VII	481.9
Uc	Urban land	-	-	29.8
Ud	Urdothents, loamy	0-25%	-	97.8
W	Water	-	-	2,381.3
Source: USDA/NRCS; Lancaster County GIS Landbase; and Consultant's calculations				

The best lands for farming are based on categories defined by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). The agricultural capability classification is a grouping of soils that indicates how suitable soils are for most kinds of farming. These groupings are based on limitations of the soils, the risk of damage when used and the way they respond to treatment. There are seven classes in the capability system, with Class I being the soils that have the fewest limitations restricting their use.

The lands good for rotational farming are deep to moderate deep, well-drained soils. They have a wide range in natural fertility and moderate to high moisture holding capacity. The "good" soils are generally well adapted to intensive agricultural use but moderate natural limitations or risks exist in many cases. When they are farmed, a moderately intensive crop rotation should be used, protected by contour strip cropping on slopes over two percent. Diversion terraces are needed on the longer and steeper slopes. The productivity of the moderately, well-drained soils can be improved by installing surface and subsurface drains.

The areas termed "fair" in agricultural capability consist of gently to moderately sloping soils. The fair soils are deep, moderately deep, shallow, stony and non-stony with a wide range in natural limitations or hazards produced by soil properties, slopes or erosion. Fair soils are rather well adapted to rotational cropland. However, to conserve soil and water, a low intensity rotation protected by contour strips and diversion terraces should be used.

The "poor" soils for farming purposes are found primarily along the steeper slopes adjacent to the stream valleys and drainage channels. The area classified as poor includes deep, moderately deep, shallow, stony and non-stony soils with a wide range in natural fertility and moisture holding capacity. These soils, however, are not suited to cultivation because of very severe natural limitations. The poor soils are best suited for use as hay, pasture, woodland, recreation or scenic areas. The grassland areas should be limed and fertilized adequately. Diversion terraces may be needed to protect the steeper slopes. In these poor soils, small areas of poorly drained soils may be found and also stony soils that are too rocky to cultivate.

#### Prime Farmland Soils

In an effort to protect the County's best farmland, the Soil Conservation Service in cooperation with other interested agencies at the national, state and local levels of government has developed an inventory of prime farmland soils. Prime farmland, as defined by the USDA-NRCS, is the land that is best suited for producing food, feed, forage, fiber and oilseed crops. It has the soil quality, growing season, and water supply needed to economically produce a sustained high yield of crops when it is treated and managed using acceptable farming methods. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment. According to the NRCS, qualities which characterize prime agricultural soils include high permeability to water and air, few or no rocks, optimum levels of acidity and alkalinity, 0 to 8 percent slopes and the absence of flooding during the growing season. These soils may now be utilized for crops, pasture, woodland, or land covers other than urban land or water areas.

The soil series identified as Prime Farmland by the USDA found in the Township are listed in Table N-5 and shown on the Farmland Soils Map. All of the Prime Farmland soils designated by the USDA are Class I or II soils.

In addition to those soils listed as Prime Farmland by the USDA, other soils qualify as Prime Agricultural Land (Classes I, II and III) under the PA Municipalities Planning Code. They are



identified in Table N-6. As can be seen from the Farmland Soils Map, a significant majority of Conoy Township's land area is classified as either Prime Farmland Soil by the USDA or as Prime Agricultural Land (according to the MPC).

**TABLE N-5  
PRIME FARMLAND SOILS (NRCS)  
IN CONOY TOWNSHIP**

<b>Name</b>	<b>Slope</b>
Brecknock gravelly silt loam	3-8%
Bucks silt loam	3-8%
Clarksburg silt loam	0-5%
Duffield silt loam	0-8%
Elk silt loam	0-8%
Hagerstown silt loam	3-8%
Lansdale silt loam	3-8%
Lehigh silt loam	0-8%
Lindside silt loam	0-3%
Mount Lucas silt loam	3-8%
Newark silt loam	0-3%
Nolin silt loam	0-3%
Rowland silt loam	0-3%
Ungers loam	3-8%
Source: USDA/NRCS; Lancaster County GIS Landbase; and Consultant's calculations	

**TABLE N-6  
PRIME FARMLAND SOILS (MPC)  
IN CONOY TOWNSHIP**

<b>Name</b>	<b>Slope</b>
Abbottstown silt loam	3-8%
Bowmansville silt loam	0-5%
Brecknock gravelly silt loam	8-15%
Bucks silt loam	8-15%
Elk Silt Loam	8-15%
Hagerstown silty clay loam	8-15%
Holly silt loam	0-3%
Lansdale loam	8-15%
Lehigh silt loam	8-15%
Readington silt loam	3-10%
Ungers loam	8-15%
Source: USDA/NRCS; Lancaster County GIS Landbase; and Consultant's calculations	

Of the total land (non-water) area in the Township, approximately 4,679.2 acres (or 50 %) are classified as Prime Farmland by the NRCS. An additional 2,991.2 acres (or 32%) are classified as prime farmland under the MPC guidelines. Thus, more than four out of every five acres of land in the Township are classified as some type of "prime" farmland.

In the case of Conoy Township, which has a considerable acreage in prime agricultural soils, there will always be a conflict between land preservation for agriculture and use of such land for development.

### **Soil Suitability for On-Site Disposal of Sewage Effluent**

Knowledge concerning the ability of soils to handle effluent from septic systems is vital, for residents of Conoy Township are almost entirely dependent upon such facilities for liquid waste disposal. Since the Pennsylvania Sewage Facilities Act No. 537 became effective in 1968, increased attention has been given to the problems caused by improperly installed on-lot sewage disposal systems. With the aid of the Lancaster County Soil Survey and the Township's Act 537 Sewage Facilities Plan, it is possible to identify general areas where the installation of on-lot systems may create problems.

The main limiting features of the soils for drainage fields for septic tanks are restricted permeability, steepness of slope, shallowness over bedrock, and the presence of a seasonal high water table. In addition, where soils are underlain by cavernous limestone, the underground water can be contaminated by seepage through crevices in the rocks or through solution channels.

Soil permeability is the rate of water movement through the soil. Too rapid percolation rates can result in pollution of ground water reserves due to inadequate filtration, while too slow rates mean that the soil has a limited capacity to absorb septic tank effluent. Soils that have high groundwater levels become saturated with septic tank effluent and later turn into foul-smelling, unhealthy bogs. On-site disposal systems should not be located in close proximity to any stream, open ditch or other watercourse into which unfiltered and contaminated effluent could escape and spread. On-site systems should never be located in floodplains. Rock formations and other impervious layers should also be far enough below the trenches or seepage bed of a filter field to allow for the adequate filtration and purification of septic tank effluent. Slopes of less than 10 percent usually do not create serious problems in either the construction or maintenance of filter fields when the soils are otherwise satisfactory. On steep slopes, trench filter fields are more difficult to lay out and construct, while seepage beds become impractical. In addition, it may be difficult to control the lateral flow of effluent to the downhill soil surface. Any one of the above factors can make an area unsuitable for on-lot sewage disposal systems. If negative conditions exist but are not critical, lots of a larger than normal size will be required to provide an adequate layout of filter fields.

The Lancaster County Soil Survey includes a general classification of soil suitability for on-site disposal of sewage effluent. It must be noted that the classifications are generalized for the soil types. While the classifications are useful for planning purposes they are not intended to supplant the actual field analysis required to have an on-lot sewage disposal system permitted in the Township.

Soils identified as having "severe" restrictions (or variable conditions with the potential for restrictions) related to the placement of on-lot sewage disposal systems are listed in the following table and are depicted on the Soil Suitability Map. Approximately 35 percent of the soils in the Township have "severe" limitations for the placement of on-lot sewage disposal systems. All proposed developments should use sound engineering and construction methods to overcome these potential constraints. All of the remaining soils possess "moderate" limitations for on-lot sewage disposal systems.

### Soil Suitability for Development

Soil characteristics and slope are important in selecting sites for future development. Level areas (less than five percent) lend themselves to residential, commercial and industrial development. Many of the soils in these level areas have good permeability and are deep and well drained. As a result, foundation conditions are usually good in these areas.

**TABLE N-7  
SEVERE SOIL SUITABILITY FOR  
ON-LOT SEWAGE DISPOSAL AND BUILDING DEVELOPMENT  
IN CONOY TOWNSHIP**

Soil Symbol	Severe Soil Suitability for On-Lot Sewage Disposal	Severe Soil Suitability for Building Development	Approximate Acres
AbB	Wetness & Percs slow	Wetness	34.9
Bo	Flooding, Wetness & Percs slow	Flooding, Wetness & Stability	31.9
BuB	Percs slow	--	14.7
BuC	Percs slow	--	1.7
BuD	Slope & Percs slow	Slope	134.8
CkA	Wetness & Percs slow	Wetness	43.8
Eu	Variable	Variable	59.3
Ff	Variable	Variable	130.6
HbD	Slope	Slope	101.7
Hg	Flooding, Wetness & Percs slow	Flooding, Wetness & Stability	213.3
LaD	Slope	Slope	362.5
LbB	Wetness & Percs slow	Wetness	130.7
LbC	Wetness & Percs slow	Wetness	54.8
Ln	Flooding & Wetness	Flooding & Wetness	152.4
MdB	Wetness & Percs slow	Wetness	52.0
MeB	Wetness & Percs slow	Wetness	251.3
Nc	Flooding & Wetness	Flooding & Wetness	189.0
Ne	Flooding	Flooding	203.6
RaB	Wetness & Percs slow	Wetness	366.8
Rd	Flooding, Wetness & Percs slow	Flooding & Wetness	136.6
UaD	Slope	Slope	48.6
UbD	Slope	Slope	481.9
Uc	Variable	Variable	29.8
Ud	Variable	Variable	97.8
<b>Total Approximate Acreage with Severe Limitations for On-Lot Disposal Systems</b>			<b>3,324.7</b>
<b>Total Approximate Acreage with Severe Limitations for Building Development</b>			<b>3,308.4</b>
Source: USDA/NRCS; Lancaster County GIS Landbase; and Consultant's calculations			

In addition, the level land helps keep grading costs to a minimum. Site exploration, however, is necessary in the limestone areas of the Township to make sure there are no caverns which can render foundation conditions unstable under large structures.

Foundation conditions are also usually good in areas that are level, well drained, and have shallow soils. Unfortunately, these areas usually lack good permeability for proper functioning of on-lot septic tank systems. Thinness of the soils is also conducive to the pollution of ground

water supplies. A further complication in development of these shallow soils is in need to excavate bedrock, which increases development costs.

Table N-7 also lists those soils that have “severe” limitations for building development. Again, approximately 35 percent of the Township’s land area falls into the “severe” category.

### **Woodland**

Wooded areas are scenic amenities and habitats for wildlife. They also provide visual relief from developed land areas and fields. Wooded areas increase capacity for absorption of storm run-off, diminishing flood potentials and decreasing erosion. Wooded areas are especially valuable when on steep slopes because erosion and sedimentation are diminished by absorption of run-off and binding of soil. Maintenance of wooded areas on steep slopes in turn is of even more importance when the steep slopes are found bordering streams that could be greatly disturbed through sedimentation and experience greater flood peaks if they are swelled by increased surface run-off. When eroded soil is washed off the land and into the streams, it fills the channels, cuts the banks, smothers animal life and muddies the water. Wooded areas also have a recreational potential, whether for hunting, fishing, hiking or similar activities. When areas are left wooded the quantity and quality of ground water can be better maintained than if the woods are removed because the natural cover allows for infiltration of rainfall into the ground water system.

According to data from the Lancaster County GIS Landbase, in 2005, approximately 23 percent of the Township’s land area was in some form of forest cover. (See the Topography and Woodlands Map).

### **Vegetation and Wildlife**

Man has cleared a majority of the original woodland tracts in Conoy Township and those remaining have been cut over at least once or twice. Woodlands remaining in the Township cover the steeper sloped areas, primarily along the major drainageways. These areas have historically been avoided by development, largely because they were not suitable for farming. Vegetation in the Township consists primarily of those characteristics of rural farmland environments. The majority of the Township is rural and farming is a very important part of its heritage. The extent of wooded areas in the Township can be seen on the Topography and Woodlands Map. Efforts should be made to limit future development that would severely impact the wooded areas of the Township.

Wildlife in Conoy Township consists primarily of mammal and bird species characteristics of rural farmland environments. Mourning dove is plentiful, as are, fox, rabbit, squirrel and white-tail deer. In addition, the numerous islands in the Susquehanna River are among the few places in Pennsylvania where the Bald Eagle, African Cattle Egret and Glossy Ibis nest. These islands also provide habitat for many species of migratory waterfowl. These areas should be preserved at all costs.

## Ecological Resources

In the past, attitudes toward preservation, protection and conservation of our ecological resources have not been a driving issue in comprehensive planning. As a result of education, and in response to the growing perception of the negative impacts of certain land use forms and practices, the preservation of wildlife and wild habitats has become a priority conservation objective.

The Department of Conservation and Natural Resources maintains a data system known as the Pennsylvania Natural Diversity Inventory (PNDI) which identifies plant and animal species which are either endangered or threatened. The PNDI records were consulted during the preparation of the Natural Areas Inventory of Lancaster County, Pennsylvania conducted by the Lancaster County Planning Commission and the Pennsylvania Science Office of The Nature Conservancy in 1989 and 1990. This study, which is part of the Lancaster County Natural Heritage Project, identified four areas of concern, associated with rare, threatened, endangered or tentatively unknown plant species. It is the policy of PNDI not to release detailed, site specific information about significant natural features for general exposure to the public. This protects the features from persons who become curious and attempt to locate and collect such features. Instead, PNDI provides only generalized locations of known features.

## DEVELOPMENT CONSTRAINTS

Several major constraints to development can be derived from the analysis of the Township's soils and other physical characteristics. Constraint categories include the following:

- **Floodplains** – as identified by the Federal Emergency Management Agency (FEMA) – prohibits virtually all forms of development but allows many forms of agricultural activity
- **Hydric soils or soils with possible hydric inclusions** - indicators of potential wetlands – which have strict State/Federal protections against development
- **Prime agricultural soils** - as identified by the Soil Conservation Service and Municipalities Planning Code – which should be “protected and preserved”
- **Karst geology** – development in limestone bedrock areas (predominantly the southern portion of the Township) must consider additional engineering and groundwater contamination-related impacts
- **Slopes 15 percent or greater** - limits the ability to develop some uses
- **Suitability for on-site sewage disposal** - The vast majority of the Township is classified as having limitations for on-site sewage disposal – and is not proposed to be served by public sewers

## HISTORIC AND ARCHAEOLOGICAL RESOURCES

### Historic Resources

Conoy Township, like much of southeastern Pennsylvania, is fortunate to possess a rich cultural heritage. Today, this heritage is apparent from the older individual structures that are scattered throughout the Township. Local officials and residents recognize the value in conservation and rehabilitation, plus, restoration or adaptive reuse of these historic features as a means of providing a glimpse into the areas important past. Additionally, historic preservation can provide education opportunities regarding historic lifestyles and architectural styles. Well-maintained historic areas can create a sense of unique identity that stimulates civic pride and economic vitality, and can become a basis for tourism.

The Lancaster County Historic Resource Survey compiled by the Historic Preservation Trust of Lancaster County was used to identify historic sites for the 1990 Conoy Township Comprehensive Plan. In all, 33 sites were listed. These sites are plotted on Cultural Features Map; their numbers correspond to the ID numbers contained on the Historic Resource Survey form on file for each site. Listed resources include a variety of houses, mills, bridges, a town-marker, a mansion and a canal lock. Probably the most widely known historic site is the restored Locust Grove - more commonly known as the Haldeman Mansion. This facility is maintained by the Haldeman Mansion Society and is known to be the birthplace of Simon S. Haldeman, a famed naturalist and author. This structure is also listed on the National Register of Historic Places.

In addition, two other sites in the Township have been listed by the Pennsylvania Historical Museum Commission, Bureau for Historic Preservation, as being eligible for listing on the National Register. They are the following:

- Engle (Christian and Maria) Farm – Shumaker Road, southeast of Stackstown
- Haldeman/Fitzkee House – Race Street (in Bainbridge) , between Front and 2<sup>nd</sup> Streets

The Mays-Lang Farm (built c. 1798) is also listed in the PHMC's Cultural Resources Database. This site is located on Donegal Springs Road at the Conoy/East Donegal Township line.

In the 1990's, the Historic Preservation Trust of Lancaster County began an extensive survey of the County's municipalities in an effort to locate all possible historically and architecturally significant resources

The Historic Preservation Trust has established four levels of significance corresponding to the overall importance of the site. These levels are defined as follows.

Level 1: Exceptional - Examples of the highest quality architectural design and/or historical importance. Of countywide, regional, state, or national significance. To be preserved and protected at all costs.

Level 2, Significant - Examples of high style regional architecture and/or structures of particular historical importance to Lancaster County. Of principally local, countywide, or regional significance. To be preserved and protected.

Level 3, Contributory - Sites of good architectural quality, vernacular structures, or those of less sophistication than those deemed “significant.” Preservation of these structures is encouraged.

Level 4, Altered - Sites where the historical or architectural value has been comprised by later, non-historic alterations. Restoration to original or historic appearance is encouraged.

Table HR-1 lists and categorizes all the sites identified in the 1990s inventory by the Historic Preservation Trust.

There probably are also other sites of lesser historical significance located in the Township. At a minimum, it should be recognized that the Township has many historic resources that have never been surveyed.

### **Archaeological Resources**

Like historic sites, archaeological resources provide a glimpse into an area’s distant past. In the case of archaeology, this past refers to times before local historic records were kept, or prehistoric times. Archaeological resources can provide valuable artifacts and remains, or simply information that can assist the identification dating and understanding of prehistoric cultures. Many times archaeological sites are surveyed merely to verify the presence of a prehistoric culture at that location. Once this information is known, the actual evidence of such culture (artifacts and other objects) becomes less important. Such sites might then provide interesting themes for local conservation-recreation areas. To identify important archaeological resources, information was obtained from the PA Historical and Museum Commission (PHMC) during the preparation of the 1990 Comprehensive Plan.

According to the Chief of the State Division of Archaeology and Protection, Kurt W. Carr, Conoy Township possesses rather diverse archaeological resources which shed light on the historic activities which have occurred on the land within the Township’s boundaries. The following is a general description provided by Mr. Carr regarding the methodology and findings concerning archaeological research within Conoy Township.

“The determination of areas of high probability for the presence of prehistoric archaeological sites in Conoy Township was based on a comparison of the topographic setting of the recorded archaeological sites to the general topography of the Township. Extensive research has shown that the location of prehistoric sites is closely related to a number of environmental variables. Relatively flat ground, converging streams, springheads, saddles, floodplains, swamps and water in general (including streams that are extinct today) are the most important factors.

The topography of Conoy Township is dominated by the presence of the Susquehanna River and its islands, floodplain, terraces, and feeder streams. In this area we would expect to find sites ranging from the earliest time periods in the area, the Paleoindian Period (before 8000 B.C.) through historic times. There is also a high potential for the presence of stratified sites containing several of these periods in the areas with deep soil deposits. These types of sites are extremely important to our understanding of changing cultural adaptations and are usually determined eligible to the National Register of Historic Places.

11 -	1.00	<b>Nissley's Mill Covered Bridge [GONE]</b> Creek Rd. @ Covered Bridge Rd.	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	2.00	<b>Bayley-Hollinger Site</b> Amosite Road, E of PA Route 441	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	3.00	<b>Canal Lock [?]</b> Keeper Rd.	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	4.00	<b>Collins Mill (Haldeman Mill)</b> Route 441, N of Governor's Stable Road typical mid 19c dwelling	Significance: 0	Integrity: P	Condition: F
			Year Built: 1840c	Designated:	
11 -	4.00	<b>Collins Mill (Haldeman Mill)</b> PA Route 441, N of Governor's Stable Road	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	5.00	<b>House, Not Named [GONE]</b> Second St. @ Race St.	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	6.00	<b>Locust Grove</b> Locust Grove Road, S of Bainbridge	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	7.00	<b>Conoy Indiantown Marker</b> PA Route 441 at Conoy Creek	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	8.00	<b>Brenneman Mill</b> Shoemaker Road at Conoy Creek	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	8.00	<b>Brenneman Mill House</b> Shoemaker Road, at Conoy Creek fine 18c stone dwelling	Significance: 2	Integrity: G	Condition: G
			Year Built: 1790c	Designated:	
11 -	9.00	<b>(Brenneman Mill Bridge)</b> Shoemaker Road at Conoy Creek	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	10.00	<b>Stone Arch Bridge [GONE]</b> Maytown Rd. @ Conoy Creek	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	11.00	<b>House, Not Named</b> Locust Grove Road, S of Bainbridge	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	12.00	<b>The Old Blacksmith Shop</b> Second Stret, S of Race Street, Bainbridge	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	13.00	<b>House, Not Named</b> Front Street and Market Street, Bainbridge	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	14.00	<b>House, Not Named</b> Front Street and Market Street, Bainbridge	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	15.00	<b>House, Not Named</b> Front Street and Market Street, Bainbridge	Significance:	Integrity:	Condition:
			Year Built:	Designated:	
11 -	16.00	<b>House, Not Named</b> Bair Road and Black Swamp Road	Significance:	Integrity:	Condition:
			Year Built:	Designated:	



# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 17.00	<b>SURVEY CARD NOT LOCATED</b> SURVEY CARD NOT LOCATED	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 18.00	<b>A House, Not Named</b> Bair Road, N side at Black Swamp Road	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 19.00	<b>A House, Not Named</b> Bainbridge Road, N side, E of Wickersham Road	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 20.00	<b>A House, Not Named</b> Bainbridge Road, N side, E of Wickersham Road	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 21.00	<b>A House, Not Named</b> Black Swamp Road, W side, N of Amosite Road	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 22.00	<b>SURVEY CARD NOT LOCATED</b> SURVEY CARD NOT LOCATED	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 23.00	<b>A Village of Falmouth</b>	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 24.00	<b>A House, Not Named</b> Race Street at Front Street, SE corner, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 25.00	<b>A House, Not Named</b> Keener Road, N side, E of PA Route 441	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 26.00	<b>A House, Not Named</b> PA Route 441, E side, N of Arch Street	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 27.00	<b>A House, Not Named</b> Race Street, N side, E of Second Street, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 28.00	<b>A House, Not Named</b> Race Street, S side, E of Second Street, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 29.00	<b>A House, Not Named</b> Race Street, N side, E of Second Street, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 30.00	<b>A House, Not Named</b> Race Street, N side, W of Second Street, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 31.00	<b>A House, Not Named</b> Race Street, S side, W of Second Street, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 32.00	<b>A United Methodist Church</b> Race Street, S side, W of Second Street, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 33.00	<b>A House, Not Named</b> Second Street, NE corner at Arch Street, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 34.00	<b>A House, Not Named</b> Second Street, SE corner at Arch Street, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 35.00	<b>A Store, Not Named</b> Second Street, SW corner at Arch Street, Bainbridge	Significance:	Integrity:	Condition:
		Year Built:	Designated:	

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 36.00	No survey card located	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 37.00	<b>A Tobacco Shed</b> Stone Mill Road, N side, E of Bainbridge Road	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 38.00	<b>A Unidentified one-story stone structure</b> Stone Mill Road, E of Shoemaker Road	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 39.00	<b>A Farm, Not Named</b> Stone Mill Road, S side, E of Miller Road  typical early 19c dwelling	Significance: 2	Integrity: F	Condition: G
		Year Built: 1840c	Designated:	
11 - 39.10	<b>A Barn (frame)</b> Stone Mill Road, S side, E of Miller Road	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 40.00	<b>Stevens Hill School</b> Turnpike Road, N side, E of Covered Bridge Road	Significance:	Integrity:	Condition:
		Year Built:	Designated:	
11 - 41.00	<b>Engle, Jacob &amp; Magdalena House</b> Sagerville Rd., Rd 1, Box 87, Bbdg., W side, 2 mile N of ST Rd.  meeting house of River Brethren, named after Jacob Engle's daughter Magdalena	Significance: 1	Integrity: G	Condition: F
		Year Built: 1773c	Designated:	
11 - 41.00	<b>Engle, Jacob, House &amp; Magdalena House</b> Sagerville Rd., Rd 1, Box 87, Bbdg., W side, 2 mile N of ST Rd.  meeting house of River Brethren, named after Jacob Engle's daughter Magdalena	Significance: 1	Integrity: G	Condition: F
		Year Built: 1773c	Designated:	
11 - 41.10	<b>Engle, Jacob, Farm</b> Sagerville Rd., Rd 1, Box 87, Bbdg., W side, 2 mile N of ST Rd.  Fine mid 19c dwelling; related to River Brethren; Built by Jacob Engle	Significance: 3	Integrity: G	Condition: G
		Year Built: 1868	Designated:	
11 - 42.00	<b>House, Not Named</b> Engle Road, on farm lane, W of E. R., .5 mile S of Stackstown Rd.  typical middle 19c dwelling	Significance: 3	Integrity: F	Condition: G
		Year Built: 1860c.	Designated:	
11 - 43.00	<b>Farm, Not Named</b> Stackstown Road, S side, .1 mile W of Engle Rd.  typical middle 19c dwelling	Significance: 3	Integrity: F	Condition: G
		Year Built: 1850c.	Designated:	
11 - 43.10	<b>Farm, Not Named</b> Stackstown Road, S side, .1 mile W of Engle Rd.  typical middle 19c dwelling	Significance: 4	Integrity: F	Condition: G
		Year Built: 1850c.	Designated:	
11 - 44.00	<b>Farm, Not Named</b> Stackstown Road, S side, 2 mile W of Engle Road  typical middle 19c dwelling	Significance: 3	Integrity: F	Condition: G
		Year Built: 1850c	Designated:	
11 - 45.00	<b>Farm, Not Named</b> Stackstown Road, N side, .1 mile W of Donegal Springs Rd.  typical middle 19c dwelling	Significance: 4	Integrity: F	Condition: G
		Year Built: 1860c	Designated:	
11 - 46.00	<b>House, Not Named</b> Donegal Springs Road, N side, .5 mile N of Stackstown Rd.  typical early 20c dwelling	Significance: 4	Integrity: G	Condition: G
		Year Built: 1915c	Designated:	

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 47.00	<b>Farm, Not Named</b> Bainbridge Road, on farm lane, W of Bainbridge Rd., N of 441 typical early 19c log dwelling	Significance: 4 Year Built: 1830c	Integrity: F Designated:	Condition: G
11 - 48.00	<b>Farm, Not Named</b> Bainbridge Road, E side, .1 mile N of Rt. 441 typical middle 19c brick dwelling	Significance: 4 Year Built: 1850c	Integrity: F Designated:	Condition: F
11 - 49.00	<b>House, Not Named</b> Bainbridge Road, W side, .7 mile S of Miller Road typical late 19c frame dwelling	Significance: 4 Year Built: 1870c	Integrity: F Designated:	Condition: G
11 - 50.00	<b>House, Not Named</b> Stone Mill Road, W side, S of Bossler Rd. typical late 19c frame dwelling	Significance: 4 Year Built: 1870c	Integrity: F Designated:	Condition: F
11 - 51.00	<b>Farm, Not Named</b> Miller Road, S side, .2 miles W of Stone Mill Road typical early 20c frame dwelling	Significance: 0 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 52.00	<b>Farm, Not Named</b> Miller Road, N side, .2 miles W of Stone Mill Rd. typical early 20c frame dwelling	Significance: 0 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 53.00	<b>Farm, Not Named</b> Miller Road, W side, S of Bainbridge typical late 19c- early 20c frame dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 54.00	<b>House, Not Named</b> Miller Road, at SE corner with Bainbridge typical late 19c- early 20c frame dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 55.00	<b>Cemetery, Not Named</b> Miller Road, W side, S of Bainbridge many Smiths buried here	Significance: 3 Year Built: 19c	Integrity: G Designated:	Condition: G
11 - 56.00	<b>Farm, Not Named</b> Miller Road, on lane W of Miller Rd., S of Bainbridge typical late 19c- early 20c dwelling	Significance: 0 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 57.00	<b>Farm, Not Named</b> Miller Road, E side, S of Bainbridge typical late 19c- early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 58.00	<b>House, Not Named</b> Miller Road, E side, S of Bainbridge typical middle 20c dwelling	Significance: 0 Year Built: 1940c	Integrity: P Designated:	Condition: G
11 - 59.00	<b>Culvert, Not Named</b> Stackstown Road, W side, N of Conoy Creek typical late 19c- early 20c culvert	Significance: 4 Year Built: 1900c	Integrity: G Designated:	Condition: G
11 - 60.00	<b>House, Not Named</b> Stackstown Road, W side, N of Conoy Creek typical late 19c- early 20c dwelling	Significance: 4 Year Built: 1890c	Integrity: P Designated:	Condition: F

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 61.00	<b>Farm, Not Named</b> Wickersham Road, on lane E of Wickersham Rd., S of Bbrdg. Rd. typical late 19c- early 20c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1900c    Designated:
11 - 62.00	<b>Farm, Not Named</b> Wickersham Road, W side, S of Bainbridge Rd. typical middle 19c dwelling	Significance: 3    Integrity: F    Condition: G Year Built: 1850c    Designated:
11 - 63.00	<b>Farm, Not Named</b> Stackstown Road, S side, E of village of Stackstown typical late 19c dwelling	Significance: 0    Integrity: P    Condition: F Year Built: 1890c    Designated:
11 - 64.00	<b>House, Not Named</b> Stackstown Road, at SW intersection with Wickersham Rd. typical late 19c dwelling	Significance: 0    Integrity: P    Condition: G Year Built: 1890c    Designated:
11 - 65.00	<b>House, Not Named</b> Stackstown Road, S side, E of Shuman Rd. typical early 20c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1900c    Designated:
11 - 66.00	<b>House, Not Named</b> Stackstown Road, S side, E of Shuman Rd. typical early 20c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1900c    Designated:
11 - 67.00	<b>House, Not Named</b> Shumaker Rd., at intersection with Stackstown Rd. typical early 20c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1900c    Designated:
11 - 68.00	<b>Farm, Not Named</b> Shumaker Road, S side, E of Shuman Rd. typical late 19c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1880c    Designated:
11 - 69.00	<b>House, Not Named</b> Stackstown Rd., N side, E of Shuman Rd. typical mid- late 19c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1890c    Designated:
11 - 70.00	<b>Farm, Not Named</b> Stackstown Rd., S side, W of Shuman Rd. typical mid- late 19c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1870c    Designated:
11 - 71.00	<b>Barn, Not Named</b> Stackstown Rd., S side, W of Conoy Creek typical late 19c barn	Significance: 4    Integrity: F    Condition: G Year Built: 1890c    Designated:
11 - 72.00	<b>Farm, Not Named</b> Sagersville Rd., W of Conoy Creek fine mid 19c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1850c    Designated:
11 - 72.10	<b>Barn, Not Named</b> Segersville Rd., W of Conoy Creek typical mid 19c barn	Significance: 4    Integrity: F    Condition: G Year Built: 1850c    Designated:
11 - 73.00	<b>House, Not Named</b> Stackstown Rd., N side, E of Conoy Creek typical late 19c early 20c dwelling	Significance: 0    Integrity: F    Condition: G Year Built: 1900c    Designated:

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 74.00	<b>Farm, Not Named</b> Stackstown Rd., N side, E of Conoy Creek typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 75.00	<b>House, Not Named</b> Stackstown Rd., N side, E of Conoy Creek typical late 19c early 20c dwelling	Significance: 0 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 76.00	<b>House, Not Named</b> Stackstown Rd., N side, E of Conoy Creek typical early 20c dwelling	Significance: 0 Year Built: 1920c	Integrity: F Designated:	Condition: G
11 - 77.00	<b>Farm, Not Named</b> River Rd., S side, 2 miles W of E Donegal border typical mid 19c dwelling	Significance: 4 Year Built: 1850c	Integrity: F Designated:	Condition: G
11 - 77.10	<b>Farm, Not Named</b> River Rd., S side, 2 miles W of E Donegal border Typical mid 19c stone end barn	Significance: 4 Year Built: 1850c	Integrity: F Designated:	Condition: G
11 - 78.00	<b>Farm, Not Named</b> River Rd., 1856, N side, 4 miles W of E Donegal border typical mid 19c dwelling	Significance: 4 Year Built: 1830c	Integrity: F Designated:	Condition: G
11 - 79.00	<b>Farm, Not Named</b> River Rd., on farm lane S of River Rd., 5 miles W of E Donegal border fine late 18c dwelling	Significance: 3 Year Built: 1790	Integrity: F Designated:	Condition: G
11 - 80.00	<b>Farm, Not Named</b> River Rd., 1897, S side typical mid - late 19c dwelling	Significance: 4 Year Built: 1860c	Integrity: F Designated:	Condition: G
11 - 81.00	<b>Haldeman Graveyard</b> River Road, S side, opposite Wickersham Rd.  Plaques (2): "Haldeman Graveyard removed in 1934 from original location N 88 degrees 32 min. W 1154 feet from this site"; "Here rest the bodies of John Haldeman 1753- 1832 and Mary Breneman his wife 1760-1835 and many of their descendants"	Significance: 3 Year Built: 1920c	Integrity: P Designated:	Condition: G
11 - 82.00	<b>House, Not Named</b> Wickersham Rd., W side, .1 mile N of River Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 83.00	<b>House, Not Named</b> Wickersham Rd., W side, .1 mile N of River Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 84.00	<b>House, Not Named</b> Wickersham Rd., N side, 2 miles N of River Rd. typical early 20c dwelling	Significance: 4 Year Built: 1910c	Integrity: P Designated:	Condition: G
11 - 85.00	<b>Farm, Not Named</b> Wickersham Rd., on lane 3 miles E of Wickersham Rd., N of River Rd. fine late 18c dwelling	Significance: 3 Year Built: 1790c	Integrity: F Designated:	Condition: G

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 86.00	<b>House, Not Named</b> Wickersham Rd., W side, .5 miles S of Stackstown Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 87.00	<b>House, Not Named</b> Wickersham Rd., W side, .5 miles S of Stackstown Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 88.00	<b>House, Not Named</b> Wickersham Rd., W side, .4 miles S of Stackstown Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 89.00	<b>Farm, Not Named</b> Stackstown Rd., on farm lane, .5 miles S of Stackstown Rd. typical late 19c farmhouse	Significance: 3 Year Built: 1890c	Integrity: F Designated:	Condition: G
11 - 90.00	<b>Engle, Christian &amp; Maria Farm</b> Shumaker Road, on lane off of road, SW of Stacktown fine example of an early 19c dwelling, datestone: This Building was erected by Christian & Maria Engle 1839	Significance: 2 Year Built: 1839	Integrity: G Designated:	Condition: G
11 - 90.10	<b>Engle, Christian &amp; Maria Farm</b> Shumaker Road, on lane off of road, SW of Stacktown fine example of an early 19c spring house	Significance: 2 Year Built: 1839	Integrity: G Designated:	Condition: G
11 - 91.00	<b>House, Not Named</b> Shumaker Road, N side, 1 mile W of Stackstown Rd. typical late 19c farm house	Significance: 4 Year Built: 1870	Integrity: F Designated:	Condition: F
11 - 92.00	<b>Farm, Not Named</b> Maytown Road, S side, 4 miles E of Stone Mill Rd. typical late 19c early 20c barn	Significance: 4 Year Built: 1880c	Integrity: F Designated:	Condition: G
11 - 92.10	<b>Farm, Not Named</b> Maytown Road, S side, 4 miles E of Stone Mill Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1880c	Integrity: F Designated:	Condition: G
11 - 93.00	<b>Farm, Not Named</b> Maytown Road, S side, 3 miles E of Stone Mill Rd. typical late 19c early 20c dwelling	Significance: 0 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 94.00	<b>Farm, Not Named</b> Maytown Road, S side, 2 miles E of Stone Mill Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 95.00	<b>House, Not Named</b> Locust Grove Road, 236, S side, E of Conoy Creek typical mid 19c dwelling	Significance: 4 Year Built: 1850	Integrity: F Designated:	Condition: G
11 - 95.10	<b>Barn, Not Named</b> Locust Grove Road, 236, S side, E of Conoy Creek typical mid 19c barn	Significance: 4 Year Built: 1850	Integrity: F Designated:	Condition: G

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 96.00	<b>House, Not Named</b> Locust Grove Road, W side, W of Conoy Creek typical late 19c early 20c dwelling	Significance: 4 Integrity: P Condition: G Year Built: 1860c Designated:
11 - 97.00	<b>House, Not Named</b> Locust Grove Road, N side, E of Conoy Creek typical mid 19c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1860c Designated:
11 - 98.00	<b>House, Not Named</b> Locust Grove Road, on lane N of Locust Grove Road, E of Conoy typical mid- late 19c dwelling	Significance: 4 Integrity: G Condition: G Year Built: 1860c Designated:
11 - 99.00	<b>House, Not Named</b> River Road, N side, opposite Rd. to Billmeyer typical mid to late 19c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1870c Designated:
11 - 100.00	<b>House, Not Named</b> River Road, N side, opposite Rd. to Billmeyer typical late 19c - early 20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1900c Designated:
11 - 101.00	<b>Farm, Not Named</b> River Road, on farm lane N of RR, opposite rd. to Billmeyer typical mid to late 19c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1860 Designated:
11 - 102.00	<b>House, Not Named</b> River Road, N side, W of Wickersham Rd. typical late 19c - early 20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1900c Designated:
11 - 103.00	<b>House, Not Named</b> River Road, N side, W of Wickersham Rd typical late 19c - early 20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1900c Designated:
11 - 104.00	<b>House, Not Named</b> River Road, N side, W of Wickersham Rd. typical late 19c - early 20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1900c Designated:
11 - 105.00	<b>Farm, Not Named</b> River Road, N side, on farm lane N of RR, W of Bainbridge Rd. typical late 19c - early 20c dwelling	Significance: 4 Integrity: P Condition: F Year Built: 1900c Designated:
11 - 106.00	<b>Good's Cemetery (Stoner Cemetery)</b> River Road, N side, on farm lane N of River Rd., W of Bainbridge Rd. Stoner family moved graves	Significance: 3 Integrity: P Condition: F Year Built: 1900c Designated:
11 - 107.00	<b>House, Not Named</b> River Road, on farm lane 2 miles N of RR, opposite inter. of RR & 2nd typical late 19c early 20c dwelling	Significance: 0 Integrity: P Condition: G Year Built: 1900c Designated:
11 - 108.00	<b>Farm, Not Named</b> Bainbridge Road, S side, .1 mile west of Risser Rd. typical mid 19c dwelling with alterations	Significance: 4 Integrity: P Condition: G Year Built: 1860c Designated:
11 - 109.00	<b>House, Not Named</b> Bainbridge Road, at SW corner with Miller Rd. typical early 20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1915c Designated:

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 110.00	<b>Farm, Not Named</b> Bainbridge Road, N side, .2 miles E of Miller Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 111.00	<b>Farm, Not Named</b> Bainbridge Road, N side, .2 miles W of Bossler Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 112.00	<b>Farm, Not Named</b> Risser Road, at NW corner with Bainbridge Rd. typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 113.00	<b>Stauffer, Christian E. Farm</b> Risser Road, Box 118, W side datestone: "C E S. 1851"	Significance: 2 Year Built: 1851	Integrity: F Designated:	Condition: G
11 - 114.00	<b>Cemetery, Not Named</b>  typical 19c cemetery	Significance: 3 Year Built: 1900c	Integrity: G Designated:	Condition: P
11 - 115.00	<b>Farm, Not Named</b> Nissley Road, on farm lane N of road, .3 miles E of Risser Rd. typical mid 19c dwelling	Significance: 4 Year Built: 1860c	Integrity: F Designated:	Condition: G
11 - 116.00	<b>Farm, Not Named</b> Amosite Road, N side, W of W Donegal Twp. border typical early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 117.00	<b>Cemetery, Not Named</b> Amosite Road, N side, W of W Donegal Twp. border typical 19c cemetery	Significance: 3 Year Built: 19c	Integrity: F Designated:	Condition: F
11 - 118.00	<b>Farm, Not Named</b> Amosite Road, on farm lane S of Am. Rd., E of Yoder Rd. typical mid 19c dwelling	Significance: 3 Year Built: 1850c	Integrity: G Designated:	Condition: G
11 - 119.00	<b>House, Not Named</b> Amosite Road, S side, 2 mile E of Yoder Rd typical late 19c, early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: P
11 - 120.00	<b>Farm, Not Named</b> Amosite Road, at NW corner with Yoder Rd. typical late 19c, early 20c dwelling	Significance: 4 Year Built: 1880c	Integrity: F Designated:	Condition: G
11 - 121.00	<b>House, Not Named</b> Amosite Road, at NW corner with Yoder Rd. typical late 19c, early 20c dwelling	Significance: 4 Year Built: 1890c	Integrity: P Designated:	Condition: G
11 - 122.00	<b>Farm, Not Named</b> Yoder Rd, W side, .2 mile N of Amosite Rd typical mid 19c bankhouse	Significance: 3 Year Built: 1850c	Integrity: F Designated:	Condition: G
11 - 123.00	<b>Nissley, Michael &amp; Barbara Farm</b> Yoder Road, on farm lane W of Yoder Rd., N of Amosite Rd. fine late 18c dwelling, datestone: "M78N5"	Significance: 2 Year Built: 1785	Integrity: F Designated:	Condition: G



# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 124.00	<b>Farm, Not Named</b> Yoder Road, E side, N of Amosite Rd.  fine mid 19c dwelling; datestone: "P.E.S. 1853 M.S. M.A. G.E. C.A."	Significance: 2 Year Built: 1853	Integrity: G Designated:	Condition: G
11 - 125.00	<b>Farm, Not Named</b> Yoder Road, on lane .3 mile E of Yoder Rd.  typical late 19c early 20c dwelling	Significance: 0 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 126.00	<b>Farm, Not Named</b> Yoder Road, S side, at right angle in Rd.  typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: F
11 - 127.00	<b>Farm, Not Named</b> Black Swamp Road, E side, S of Keener Rd.  typical late 19c early 20c dwelling	Significance: 4 Year Built: 1880c	Integrity: F Designated:	Condition: G
11 - 128.00	<b>House, Not Named</b> Amosite Road, N side, .1 mile E of Black Swamp Rd.  typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 129.00	<b>Farm, Not Named</b> Risser Road, E side, .25 mile S of Amosite Rd.  typical late 19c early 20c dwelling	Significance: 4 Year Built: 1890c	Integrity: F Designated:	Condition: G
11 - 130.00	<b>Farm, Not Named</b> Risser Road, on farm lane W of Risser Rd., .3 mile S of Amosite Rd.  typical mid 19c dwelling	Significance: 4 Year Built: 1860c	Integrity: F Designated:	Condition: G
11 - 131.00	<b>Farm, Not Named</b> River Road, W side, S of Prescott Rd.  typical late 19c dwelling	Significance: 4 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 132.00	<b>House, Not Named</b> River Road, E side, .1 mile N of Prescott Rd.  typical early 20c structure	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 133.00	<b>Farm, Not Named</b> River Road, N side  typical mid 19c dwelling with late 19c alterations	Significance: 4 Year Built: 1850c	Integrity: G Designated:	Condition: P
11 - 134.00	<b>Farm, Not Named</b> River Road, N side  typical late 19c early 20c dwelling	Significance: 0 Year Built: 1900c	Integrity: P Designated:	Condition: G
11 - 135.00	<b>School, Not Named</b> River Road, N side, E of Amosite Rd.  typical late 19c structure	Significance: 3 Year Built: 1880c	Integrity: F Designated:	Condition: G
11 - 136.00	<b>Farm, Not Named</b> River Road, S side, E of Amosite Rd.  typical late 19c dwelling	Significance: 4 Year Built: 1880c	Integrity: F Designated:	Condition: G
11 - 137.00	<b>House, Not Named</b> River Road, S side, .3 mile E of River Rd.  typical late 19c early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 138.00	<b>Farm, Not Named</b> Amosite Road, W side, .4 mile east of River Rd typical 19c dwelling	Significance: 0    Integrity: P    Condition: G Year Built: 1890c    Designated:
11 - 139.00	<b>Farm, Not Named</b> Amosite Road, S side, at SE corner with River Rd. typical late 19c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1890c    Designated:
11 - 140.00	<b>Farm, Not Named</b> Amosite Road, N side, at NE corner with River Rd. typical late 19c dwelling	Significance: 0    Integrity: F    Condition: G Year Built: 1890c    Designated:
11 - 141.00	<b>Farm, Not Named</b> Amosite Road, N side, E of River Rd. typical late 19c early 20c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1880c    Designated:
11 - 142.00	<b>Farm, Not Named</b> Amosite Road, on lane .4 mile S of Amosite Rd , W of Risser Rd. typical late 19c early 20c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1880c    Designated:
11 - 143.00	<b>House, Not Named</b> Bair Road, S side, .15 mile W of Black Swamp Rd. typical late 19c farm house	Significance: 4    Integrity: F    Condition: G Year Built: 1890c    Designated:
11 - 144.00	<b>Farm, Not Named</b> Bair Road, on lane S of Bair Rd , W of Black Swamp Rd. typical mid 19c dwelling	Significance: 4    Integrity: F    Condition: F Year Built: 1860c    Designated:
11 - 145.00	<b>Farm, Not Named</b> Governors Stable Road, W side, opposite Bair Rd. typical early 19c dwelling	Significance: 4    Integrity: F    Condition: F Year Built: 1840c    Designated:
11 - 146.00	<b>Farm, Not Named</b> Governors Stable Road, E side, S Bair Rd typical mid 19c dwelling with alterations	Significance: 0    Integrity: P    Condition: F Year Built: 1850c    Designated:
11 - 147.00	<b>Farm, Not Named</b> Kings Road, S side, W of Rt. 441 typical late 19c early 20c dwelling	Significance: 4    Integrity: F    Condition: F Year Built: 1890    Designated:
11 - 148.00	<b>Brubaker Cemetery</b> Kings Road, S side, W of Rt. 441 Typical 19c cemetery; Brubaker 1806-81, German graves 1797-1830	Significance: 3    Integrity: G    Condition: F Year Built: 19c    Designated:
11 - 149.00	<b>Farm, Not Named</b> Route 441, S side, E of Keener Rd. typical late 19c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1870c    Designated:
11 - 150.00	<b>Farm, Not Named</b> Route 441, at SE corner with Keener Rd. typical late 19c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1890c    Designated:
11 - 151.00	<b>Farm, Not Named</b> Keener Road, at NW corner with Governor's Stable Rd. typical mid 19c dwelling	Significance: 4    Integrity: F    Condition: G Year Built: 1850c    Designated:

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 152.00	<b>House, Not Named</b> Governor's Stable Road, W side, N of Bair Rd. typical late 19c early 20c dwelling with alterations	Significance: 4 Integrity: P Condition: G Year Built: 1900c Designated:
11 - 153.00	<b>Farm, Not Named</b> Keener Road, N side, W of Black Swamp Rd. typical late 19c early 20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1890c Designated:
11 - 154.00	<b>Farm, Not Named</b> Keener Road, N side, W of Black Swamp Rd. typical mid 19c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1860c Designated:
11 - 155.00	<b>Farm, Not Named</b> Keener Road, S side, W of Black Swamp Rd. typical mid 19c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1860c Designated:
11 - 156.00	<b>House, Not Named</b> Black Swamp Road, on lane .3 mile west of Rd., S of Yoder Rd. typical early 20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1900c Designated:
11 - 157.00	<b>Farm, Not Named</b> Turnpike Road, S side, .2 miles W of W Donegal Twp. border typical late 19c early 20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1900c Designated:
11 - 158.00	<b>Farm, Not Named</b> Black Swamp Road, W side, .2 mile S of Turnpike Rd. typical late 19c early 20c farm house	Significance: 0 Integrity: F Condition: F Year Built: 1900c Designated:
11 - 159.00	<b>Farm, Not Named</b> Hill Road, N side, 2 mile W of Hess Rd. typical late 19c early 20c farm house	Significance: 3 Integrity: F Condition: G Year Built: 1900c Designated:
11 - 160.00	<b>House, Not Named</b> Turnpike Road, at NE corner with Hillsdale Drive typical late 19c early 20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1900c Designated:
11 - 161.00	<b>House, Not Named</b> Turnpike Road, N side, W of Black Swamp Road typical late 19c dwelling	Significance: 3 Integrity: F Condition: G Year Built: 1890c Designated:
11 - 162.00	<b>Farm, Not Named</b> Hillsdale Drive, N side, 4 mile S of Conewago Creek typical early 20c farmstead	Significance: 4 Integrity: F Condition: G Year Built: 1900c Designated:
11 - 163.00	<b>House, Not Named</b> Turnpike Road, at SW corner with Hillsdale Drive typical mid-20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1940c Designated:
11 - 164.00	<b>House, Not Named</b> Turnpike Road, 224, S side, W of Hillsdale Drive typical mid-20c dwelling	Significance: 4 Integrity: F Condition: G Year Built: 1940c Designated:
11 - 165.00	<b>House, Not Named</b> Turnpike Road, S side, W of Hillsdale Drive typical mid-to late 19c dwelling	Significance: 3 Integrity: F Condition: F Year Built: 1870c Designated:

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 166.00	<b>Farm, Not Named</b> Turnpike Road, N side, W of Hillsdale Drive typical early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 167.00	<b>Stevens Hill Community Church of the Brethren</b> Turnpike Road, W side, W of Hillsdale Drive typical early 20c church, datestone: Church of the Brethren AD 1911	Significance: 4 Year Built: 1911	Integrity: F Designated:	Condition: G
11 - 168.10	<b>Farm, Not Named</b> Turnpike Road, S side, W of Hillsdale Drive typical late 19, early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 168.20	<b>Farm, Not Named</b> Turnpike Road, S side, W of Hillsdale Drive typical 19c barn	Significance: 4 Year Built: 19c	Integrity: F Designated:	Condition: G
11 - 169.00	<b>Farm, Not Named</b> Turnpike Road, on farm lane N of road, W of Hillsdale Drive typical late 19, early 20c dwelling	Significance: 4 Year Built: 1890c	Integrity: G Designated:	Condition: F
11 - 170.00	<b>Farm, Not Named</b> Turnpike Road, N side, E of Covered Bridge Road typical late 19, early 20c dwelling	Significance: 4 Year Built: 1890c	Integrity: F Designated:	Condition: G
11 - 171.00	<b>Farm, Not Named</b> Turnpike Road, S side, E of Covered Bridge Road typical mid-to late 19c dwelling with alterations	Significance: 4 Year Built: 1870c	Integrity: F Designated:	Condition: G
11 - 172.00	<b>Farm, Not Named</b> Covered Bridge Road, on lane .6 mile E of rd , directly S of Conewago typical late 19, early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 173.00	<b>House, Not Named</b> Covered Bridge Road, W side, N of Turnpike Road typical early 20c dwelling	Significance: 4 Year Built: 1910c	Integrity: F Designated:	Condition: G
11 - 174.00	<b>Farm, Not Named</b> Turnpike Road, S side, 3 mile E of Brecker Road good example of a late 18, early 19c dwelling with late 19c addition	Significance: 2 Year Built: 1820c	Integrity: F Designated:	Condition: G
11 - 175.00	<b>House, Not Named</b> Turnpike Road, N side, E of Becker Road typical early 19c dwelling	Significance: 4 Year Built: 1810c	Integrity: F Designated:	Condition: F
11 - 176.00	<b>House, Not Named</b> Turnpike Road, N side, E of Becker Road typical late 19c dwelling	Significance: 4 Year Built: 1890c	Integrity: F Designated:	Condition: G
11 - 177.00	<b>House, Not Named</b> Turnpike Road, N side, .1 mile W of Governors Stable Road typical mid-19c dwelling	Significance: 4 Year Built: 1860c	Integrity: F Designated:	Condition: G
11 - 178.00	<b>Farm, Not Named</b> Turnpike Road, at NW corner with Governors Stable Road typical mid-19c dwelling	Significance: 4 Year Built: 1860c	Integrity: F Designated:	Condition: G

# Lancaster County HISTORIC SITES INVENTORY

Conoy Twp.

11 - 179.00	<b>House, Not Named</b> Turnpike Road, at SW corner with Governors Stable Road typical late 19, early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 180.00	<b>Farm, Not Named</b> Turnpike Road, S side, W of Governors Stable Road typical late 19, early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 181.00	<b>House, Not Named</b> Turnpike Road, at NE corner with Covered Bridge Road typical early 20c dwelling	Significance: 4 Year Built: 1915c	Integrity: F Designated:	Condition: G
11 - 182.00	<b>Farm, Not Named</b> Turnpike Road, N side, E of Covered Bridge Road typical early 20c dwelling	Significance: 4 Year Built: 1900c	Integrity: F Designated:	Condition: G
11 - 183.00	<b>Farm, Not Named</b> Turnpike Road, S side, W of Covered Bridge Road typical late 19c dwelling with alterations	Significance: 4 Year Built: 1890c	Integrity: P Designated:	Condition: G
11 - 184.00	<b>Farm, Not Named</b> Becker Road, E side DBS may have more information on this site, 3/17/93	Significance: Year Built:	Integrity: Designated:	Condition:
11 - 185.00	<b>Barn, Not Named</b> DBS may have more information on this site, 3/17/93	Significance: Year Built:	Integrity: Designated:	Condition:

Most of the recorded sites in the Township are located near the river. This is more a product of the sampling done to date than an accurate reflection of prehistoric settlement patterns. Surveys in other parts of Lancaster County have shown that sites are present in many topographic settings.

Statistically, sites already recorded in Conoy Township cover the Archaic (8000-1000 B.C.) through historic periods, including every size site from small camps to large complex towns. Almost one quarter of the recorded sites are multi-component, covering more than one time period. These later provide opportunities to see how man's adaptation to the environment has changed over time.

The Archaic period, lasting in this area from about 8000 B.C. to 1000 B.C., is a period of population increase and diversification in response to changing environmental conditions. This period tends to be represented by small sites associated with short-term occupation or specific activities. They are often found along the smaller streams, near springheads, or as one component of multi-component sites in any setting. The knowledge of the distribution and form of Archaic sites in this heavily populated area is very important to an understanding of changing adaptations.

Sites from the following Woodland period (1000 B.C. – A.D. 1550) are more often confined to settings that provide more open ground, such as floodplains, terraces, and some hilltops. They represent the presence of villages that were used for extended periods of time by larger numbers of people. Conoy Township includes the locations of villages from the Late Woodland Shenks Ferry Culture, the Protohistoric Susquehannock Culture and the one historic Indian settlement known as Conoy Town. These sites contain a wide variety of archaeological remains and are the most useful type of site for examining prehistoric social organization. For this reason they are usually determined eligible to the National Register. In fact, the site bearing the Haldeman Mansion, also known as Locust Grove, contains the archaeological remains of the Shenks Ferry Indian Village of Conoy Town and the Indian burial ground bearing the same name. Because these three sites are within such close proximity and because the Haldeman mansion is listed on the National Register of Historic Places the archaeologically significant areas are well protected and individual as a part of the National Register. We also have the opportunity in Conoy Township to see the development and results of contact between the aboriginal populations of the area and the developing European colonial community.

Historic archaeological sites are also expected to be present in the Township and should be considered in development planning.”

Based upon this information the PHMC also rendered a map of the Township to depict areas of known and/or suspected archaeological significance. These areas are highlighted on the Cultural Features Map. The mapped areas should be referred to and used as a “triggering mechanisms” for some archaeological investigation prior to development in these identified areas.

Due to the confidential nature of its inventory of archaeologically sensitive areas, the PHMC is unable to produce township-wide sensitivity maps of known archaeological sites. However, substantial protection of these resources is provided within the subdivision and land development process. Applicants are typically required to obtain approval by the Township and the

Pennsylvania Department of Environmental Protection (DEP) for a "Planning Module for Land Development." These Planning Modules generally require review by the PHMC to determine if any archaeological or historical resources are present in or near the project area. Known sites are required to do additional archaeological or historical studies.

If in the future the Township determines that significant archaeological resources remain unprotected from development, additional requirements could be established within the Zoning Ordinance or through the adoption of a special protection ordinance.

## **DEMOGRAPHIC ANALYSIS**

In order to prepare and follow guidelines for future land use, as well as goals involving the physical, economic and social environment of the Township, it is crucial to have an understanding of Conoy Township's population as well as its population characteristics. For example, future residential, industrial, commercial, recreational and other developments require different amounts and types of land. Each of these developments is related to the level and type of population it must serve.

The most important Township resource is its people. The population of the Township is growing, but the particular characteristics of the population may be changing also. The character of the population should be evaluated and reflected in the Township's Comprehensive Plan.

This section includes historical data as well as current information. This information will be used in forming and evaluating strategies to implement the Township's goals and objectives, and will be used to more efficiently allocate the resources identified in the Background Studies. Additionally, this information can be used to provide objective support for land use goals, and ensure that policies are rationally related to needs.

### **Population Trends**

An essential phase of the planning process is an analysis of population trends, existing characteristics and anticipated future growth. Population composition is the result of socioeconomic trends. Future population can be expected to result from current trends. To determine the quantitative characteristics of a population, reliance is placed on statistics such as U.S. Census data; while to determine the current and future needs of a community's population, analysis of qualitative characteristics such as age distribution, social composition, educational attainment and income is important. Only by a determination of the number, distribution and characteristics of the population can plans be formulated to insure the orderly provision of public services such as school, parks, water and sewer facilities and highways and to determine the most equitable disposition of future land use patterns.

As can be seen in Table D-1, Conoy Township's population fluctuated but was fairly constant during the early portion of the 20<sup>th</sup> Century (1900 through 1940). Since 1940, however, the total population has increased steadily – from 1,646 in 1940 to 3,067 in the year 2000.

**TABLE D-1  
HISTORIC POPULATION  
CONOY TOWNSHIP**

<b>Year</b>	<b>Total Population</b>	<b>Net Change</b>	<b>Percent Change</b>
1900	1,787	-	-
1910	1,684	- 103	- 5.8
1920	1,806	133	7.2
1930	1,769	- 37	- 2.0
1940	1,646	- 123	- 7.0
1950	1,742	96	5.8
1960	1,867	125	7.2
1970	1,977	110	5.9
1980	2,309	332	16.8
1990	2,687	378	16.4
2000	3,067	380	14.1
Source: U.S. Census of Population, 1900 through 2000			

Table D-2 highlights the fact that the overall population density of the Township (in persons per square mile) is low in comparison to neighboring townships and the more urban/suburban portions of the County.

**TABLE D-2  
REGIONAL POPULATION DENSITIES  
2000**

<b>Municipality</b>	<b>Population Density Persons/Square Mile</b>
PENNSYLVANIA	274.1
LANCASTER COUNTY	495.9
DAUPHIN COUNTY	479.4
<b>Conoy Township</b>	<b>206.6</b>
Londonderry Township	229.4
West Donegal Township	420.1
East Donegal Township	247.7
Mount Joy Township	284.1
Elizabethtown Borough	4,567.4
Mount Joy Borough	2,884.7
Marietta Borough	3,587.0
Columbia Borough	4,227.8
Source: U.S. Department of Commerce, Bureau of Census	

The pattern of population growth reflects the influences of many factors. Large areas, such as Lancaster County, maintain growth rates that are less likely to be influenced by changing economic conditions than are smaller areas such as Conoy Township. Table D-3 provides a comparison of recent growth in Conoy Township with that of neighboring municipalities, Lancaster and Dauphin Counties, and the State overall.



**TABLE D-3**  
**REGIONAL POPULATION GROWTH COMPARISONS**  
*1970 THROUGH 2000*

Municipality	Population				Change			
					1970 to 1980	1980 to 1990	1990 to 2000	
	1970	1980	1990	2000	%	%	%	Numerical
PENNSYLVANIA	11,800,766	11,864,751	11,881,643	12,281,054	0.54	0.14	3.36	399,411
LANCASTER COUNTY	320,079	362,346	422,822	470,658	13.2	16.7	11.3	47,836
DAUPHIN COUNTY	223,834	232,317	237,813	251,798	3.8	2.4	5.9	13,985
Conoy Township	1,977	2,309	2,687	3,067	16.8	16.4	14.1	380
Londonderry Township	3,453	5,138	4,926	5,224	48.8	(-) 4.1	6.0	298
West Donegal Township	3,719	4,862	5,605	6,539	30.7	15.3	16.7	934
East Donegal Township	3,003	4,063	4,484	5,405	35.3	10.4	20.5	921
Mount Joy Township	4,228	5,128	6,227	7,944	21.3	21.4	27.6	1,717
Elizabethtown Borough	8,072	8,233	9,952	11,887	2.0	20.9	19.4	1,935
Mount Joy Borough	5,041	5,680	6,398	6,765	12.7	12.6	5.7	367
Marietta Borough	2,838	2,740	2,778	2,689	(-) 3.5	1.4	(-) 3.2	(-) 89
Columbia Borough	11,237	10,466	10,701	10,311	(-) 6.9	2.3	(-) 3.6	(-) 390
Source: U.S. Department of Commerce, Bureau of Census								

Table D-4 summarizes Year 2000 population data for the Township at the census tract level. The entirety of Conoy Township lies in one (1) census tract - Census Tract 108.02. This census tract is comprised of two (2) census "block groups." Block Group 1 includes the portions of the Township generally south of Bainbridge Road. Block Group 2 includes the remaining portions of the Township to the north. Except for a very small area along Sagerville Road (adjacent to West Donegal Township), which is included in the Elizabethtown "Urban Area", the remainder of the Township is classified as "rural" by the U.S. Bureau of the Census.

**TABLE D-4**  
**CONOY TOWNSHIP**  
**2000 CENSUS OF POPULATION AND HOUSING**  
**SUMMARY BY CENSUS TRACT/BLOCK GROUP**

	<b>Total Persons</b>
Total - Census Tract 108.02	3,067
Block Group 1	1,417
Block Group 2	1,650
Source: 2000 U.S. Census of Population and Housing.	

#### Population Characteristics

Increases in the Township's population during recent decades have brought about some important changes in its characteristics. These may indicate not only trends of future growth, but may also point to some specific conditions and requirements for the development of Conoy Township. Table D-5, 2000 Characteristics of Persons by Census Tracts, lists the following selected population characteristics for the Township as a whole, as well as each of the constituent census tracts: (1) total population, (2) male and female population, (3) persons per household and (4) median age.

**TABLE D-5**  
**2000 CHARACTERISTICS OF PERSONS BY CENSUS BLOCK GROUPS**

	<b>Township Total</b>	<b>Census Block Group 1</b>	<b>Census Block Group 2</b>
Total Population	3,067	1,417	1,650
Male	1,565	711	854
Female	1,502	706	796
Households	1,103	521	582
Persons per Household	2.78	2.72	2.84
Median Age	36.6	36.3	36.9
Male	36.6	36.3	37.1
Female	36.5	36.4	36.6
Source: 2000 U.S. Census of Population and Housing.			

## Age and Sex Characteristics

Age and sex characteristics not only provide indicators of fertility ratios, birth rates and the like, but also help to determine the need for specific types of facilities to serve the community audits region. Schools are one of the best examples of how population composition affects the need for public services.

An aging population leads for fewer children, while an increasing proportion of young married couples will contribute to an expanding load on the area's schools. An increasing proportion of elderly may point to the need for special housing facilities (convalescent homes, etc.), special recreation facilities or other such facilities.

Age-sex population distribution within a community is an important factor for estimating economic as well as population growth in the future. The interaction of jobs and population will have a dynamic influence on land use proposals. For example, the departure of the 25-44 age group from a community implies a lack of employment opportunities and a need for planning in that direction.

Changes in the age and sex composition of the Township's population for 1990 and 2000 are shown in Table D-6.

**TABLE D-6  
POPULATION CHANGE BY AGE AND SEX GROUPS  
1990 TO 2000**

	1990	Percent of Total	2000	Percent of Total
<b>Sex</b>				
Male	1,154	49.6	1,565	51.0
Female	1,164	50.4	1,502	49.0
<b>Age Group</b>				
Under 5	220	8.2	186	6.1
5 to 17	564	21.0	682	22.2
18 to 24	220	8.2	203	6.6
25 to 34	545	20.3	358	11.7
35 to 44	427	15.9	673	21.9
45 to 54	282	10.5	441	14.4
55 to 64	200	7.4	251	8.2
65 to 74	157	5.8	1250	4.9
75 & Over	72	2.7	123	4.0
<b>TOTAL</b>		100.0		100.0
Source: U.S. Census of Population, 1990 and 2000				

## Age

All age groups have undergone some change from 1980 to 2000. During that period, the population of the Township increased by 758 persons, or nearly 33 percent. This increase in population is reflected in numerical increases in all age groups.

In 1980, nearly 33 percent of the total Township population was under 18 years of age - in 2000 this segment of population represented slightly more than 29 percent of the total. Conversely, the 45 and over age groups represented only approximately 28 percent of the population in 1980 - in 2000; persons 45 and over comprised over 31 percent. The overall aging of the Township's population can be seen in the increase in the median age for the Township. In 1990, the median age of the population was 31.4 years; this had increased to 36.6 years by 2000. As can be seen from Table D-7, between 1990 and 2000, the median ages Countywide and Statewide increased by around three years while the median age in the Township increased by over five years.

**TABLE D-7  
PERCENT OF POPULATION BY AGE GROUP**

1990				
	Conoy Township		Lancaster County	Pennsylvania
Year	Number	Percentage	Percentage	Percentage
0-4	220	8.2	7.9%	6.7%
5-17	564	21.0	18.4%	14.2%
18-24	220	8.2	10.6%	12.9%
25-34	545	20.3	16.7%	16.4%
35-44	427	15.9	14.8%	14.6%
45-54	282	10.5	9.9%	10.3%
55-64	200	7.4	8.6%	9.8%
65-74	157	5.8	7.5%	9.1%
75+	72	2.7	5.7%	6.3%
Median Age	31.4		32.8	35.0
2000				
	Conoy Township		Lancaster County	Pennsylvania
Year	Number	Percentage	Percentage	Percentage
0-4	186	6.1	6.9%	5.9%
5-17	682	22.2	19.7%	17.9%
18-24	203	6.6	9.2%	8.9%
25-34	358	11.7	12.6%	12.7%
35-44	673	21.9	15.7%	15.9%
45-54	441	14.4	13.2%	13.9%
55-64	251	8.2	8.7%	9.2%
65-74	150	4.9	6.9%	7.9%
75+	123	4.0	7.1%	7.7%
Median Age	36.6		36.1	38.0
Source: U.S. Department of Commerce, Bureau of Census, 1990 and 2000				

The number of persons 65 years and older increased from 194 to 229 between 1980 and 1990 (18 percent) and from 229 to 273 between 1990 and 2000 (19 percent). The increasing number of senior citizens living in the Township points to the need for special consideration in the planning for their future needs. When considering the needs of the elderly, special care should be made to ensure development to serve the elderly is near existing transportation, health and urban services.

### Racial and Ethnic Minorities

As can be seen in Table D-8, only a small portion of the total Township population in 2000 was comprised of non-white (32 persons, or approximately 1.0 percent).

**TABLE D-8  
GENDER AND RACE CHARACTERISTICS, 2000**

	Conoy Township		Lancaster County	Pennsylvania
	Number	Percentage	Percentage	Percentage
<b>Sex</b>				
Male	1,565	51.0%	48.8%	48.3%
Female	1,502	49.0%	51.2%	51.7%
<b>Race</b>				
<b>One Race</b>	3,055	99.6%	98.7%	98.8%
White	3,035	99.0%	91.5%	85.4%
Black	1	-	2.8%	10.0%
American Indian, Alaska Native, etc.	4	0.1%	0.1%	0.1%
Asian	5	0.2%	1.4%	1.8%
Hawaiian, Pacific Islander	1	-	-	-
Other Race	9	0.3%	2.9%	1.5%
<b>Two or More Races</b>	12	0.4%	1.3%	1.2%
<b>Hispanic Origin</b>	26	0.8%	5.7%	3.2%
Source: U.S. Department of Commerce, Bureau of Census, 2000				

The non-white minorities were fairly evenly distributed among the Township's four census tracts, but most were located in the urbanized portion of the Township. Of the 32 non-whites, 1 was black, 5 were Asian and the remaining 26 persons were comprised of various other races (or combinations of more than one race).

The population in Conoy Township of Hispanic origin numbered 10 in 1990. This number increased to 26 in 2000.

### Population Projections

A population projection is an estimate of future population, based on historical trends (including births, deaths and rates of migration) and generally prepared using a mathematical model. Population projections (estimates) are used to plan for, among other things, housing, water and sewer expansion, school facility planning, transportation systems, employment needs, and the acquisition of adequate recreational areas and programs.

Closely related to population projections are "target populations." As defined by the Lancaster County Planning Commission in its Growth Management Plan (adopted October 29, 1997), a target population is "population growth projected ... based on historical trend projections, as adjusted for the municipality's responsibility and ability to accommodate growth." The only published "target" population figures for Conoy Township are those that were drafted by the Lancaster County Planning Commission for the Growth Management Plan, 1997.

Table D-9 provides a comparison of Conoy Township's "target" population (from the Growth Management Plan, 1997) to that of the County and neighboring municipalities. As can be seen from this table, the Township population was anticipated by the County to increase by 37 percent between 1990 and 2010.

**TABLE D-9  
YEAR 2010 TARGET POPULATIONS  
FOR CONOY TOWNSHIP AND SIMILAR MUNICIPALITIES**

Municipality	1990 (Actual)	2010 (Target)	Number Increase	Percent Change
Lancaster County	422,822	544,011	121,189	29
<b>Conoy Township</b>	<b>2,687</b>	<b>3,431</b>	<b>744</b>	<b>28</b>
West Donegal Township	5,605	7,054	1,449	26
East Donegal Township	4,484	5,297	813	18
Mount Joy Township	6,227	11,370	5,143	83
Elizabethtown Borough	9,952	10,931	979	10
Mount Joy Borough	6,398	7,584	1,186	19
Marietta Borough	2,778	2,506	(-) 272	(-) 10
Columbia Borough	10,701	9,213	(-) 1,488	(-) 14
Source: Lancaster County Planning Commission, <u>Growth Management Plan</u> , 1997				

The actual numerical increase in the Township's population between 1990 and 2000 was 378. This represented 50.8 percent of the County's 20-year targeted increase over 50 percent of the 20-year projection period between 1990 and 2010.

The Lancaster County Planning Commission has recently prepared new (preliminary) population projections for the County and each local municipality. The preliminary projections were prepared using a Cohort-Component Methodology, which included factors such as age, gender, birth rates, death rates and migration rates. These preliminary projections are detailed in Table D-10.

**TABLE D-10  
YEAR 2010-2030 POPULATION PROJECTIONS  
FOR CONOY TOWNSHIP AND SIMILAR MUNICIPALITIES**

<b>Municipality</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>Number Increase</b>	<b>Percent Change</b>
Lancaster County	509,726	548,980	585,487	75,761	14.9
<b>Conoy Township</b>	<b>3,334</b>	<b>3,595</b>	<b>3,829</b>	<b>495</b>	<b>14.8</b>
West Donegal Township	7,233	7,927	8,570	1,337	18.5
East Donegal Township	5,996	6,592	7,149	1,153	19.2
Mount Joy Township	8,941	9,946	10,896	1,955	21.9
Elizabethtown Borough	12,923	13,924	14,816	1,893	14.6
Mount Joy Borough	7,152	7,522	7,835	683	9.5
Marietta Borough	2,652	2,617	2,575	(-) 77	(-) 2.9
Columbia Borough	10,123	9,943	9,746	(-) 377	(-) 3.7
Source: Lancaster County Planning Commission					

The next steps in the process as they relate specifically to Conoy Township are (1) to refine the preliminary projections with input from the Township; (2) to establish a target, or desirable future, population – based on the Township's growth policies and goals; and (3) to analyze the zoning within the Township to determine if adjustments to zoning are required. This analysis is intended to determine if the current zoning over-accommodates or under-accommodates the Township's targeted growth.

## HOUSING

Residential areas are historically the largest users of developed land and serve as the catalyst for population growth. The home is the largest single investment for most families, and the home and its surroundings probably have the greatest single influence on the happiness of most people.

The pressures of a growing population, and corresponding urbanization, have resulted in increased conflicts in the predominantly rural agricultural areas of Conoy Township. The availability of affordable, decent housing for all types of family and household units must also be addressed in light of the anticipated future increases in Township population.

The growth in the number of Conoy Township's housing units has paralleled the rise in population during the last two decades. Table D-11 shows the number of units, both vacant and

occupied, for the years 1980, 1990 and 2000. This table reveals that while the total population of the Township increased by over 14 percent in the last 10 years the total number of housing units in the Township only increased by approximately 12 percent.

**TABLE D-11  
HOUSING TRENDS, 1980, 1990 AND 2000**

	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>Percent Increase (1990 – 2000)</b>
Total Housing Units	792	953	1,130	11.9
Total Occupied Housing Units	753	932	1,103	18.3
Total Vacant Housing Facilities	39	21	27	28.6
Source: U.S. Census of Population and Housing, 1980, 1990 and 2000				

During this same time period, the Township experienced a continuing decrease in the average household size - from 3.07 persons per household in 1980 to 2.88 persons per household in 1990 and 2.78 persons per household in 2000. Nonetheless the Township's average household size is still larger than that of Lancaster County and the State overall.

**TABLE D-12  
HOUSING TYPES IN THE TOWNSHIP, COUNTY AND STATE IN 2000**

	<b>Conoy Township</b>	<b>Lancaster County</b>	<b>Pennsylvania</b>
Number of Persons per Household	2.78	2.64	2.48
Number of Persons per Family	3.14	3.14	3.04
Percentage of Family Households	79.2 %	71.9 %	67.2 %
Percentage of Family Households that are Married Couple Households	85.8 %	83.2 %	76.9 %
Source: U.S. Department of Commerce, Bureau of Census, 2000			

### Housing Characteristics

Conoy Township's pattern of residential development is quite similar to other rural areas that are feeling the impact of urbanization/suburbanization. This type of development is characterized by scattered subdivisions and scattered individual homes consisting predominantly of single family dwellings.

Table D-13 reveals only minor changes in the makeup of the Township housing stock since the 1980 Census. As can be seen from the table, the dominant percentage of single family dwelling types of residential units has continued to increase, while the percentage of townhouse and multifamily units has remained fairly constant. The number and percentage of mobile homes has declined significantly in the most recent 10-year period.



**TABLE D-13  
PERCENTAGE OF RESIDENTIAL UNITS BY STRUCTURE TYPE**

Type of Structure	1980		1990		2000	
	Total Units	% of Total	Total Units	% of Total	Total Units	% of Total
One Unit	553	69.8	679	71.2	861	76.6
Two or More Units*	126	15.9	115	12.1	144	12.8
Mobile home or Other	113	14.3	159	16.7	119	10.6
Total	792	100.0	953	100.00	1,124	100.0
* includes townhouses						
Source: U.S. Department of Commerce, Bureau of Census						

**TABLE D-14  
2000 STRUCTURAL AND VACANCY CHARACTERISTICS**

	Conoy Township		Lancaster County	Pennsylvania
	Number	( % )	( % )	( % )
Total Housing Units	1,124	100.0	100.0	100.0
1 Unit Detached	861	76.6	56.1	55.9
1 Unit Attached	57	5.1	18.9	17.9
2 - 4 Units in Structure	66	5.8	9.3	9.8
5 - 9 Units in Structure	21	1.9	4.8	3.4
10 or More Units in Structure	0	0	6.2	7.9
Mobile Home/Other	119	10.6	4.7	5.0
% Owner Occupied	81.3		70.8	71.3
% Renter Occupied	16.3		29.2	28.7
% Vacant	24.		4.1	9.0
Source: U.S. Department of Commerce, Bureau of Census, 2000				

Table D-15 shows a breakdown of types of units in each of the Township's component Census Block Groups. The higher percentage of one family attached dwellings is located in Census Block Group 1, which includes the Village of Bainbridge. The bulk of the mobile homes are located in the River Haven and two other mobile home parks.

**TABLE D-15  
RESIDENTIAL UNITS BY STRUCTURE TYPE  
AND BY CENSUS BLOCK GROUP - 2000**

<b>Type of Structure</b>	<b>Census Block Group 1</b>	<b>Census Block Group 2</b>
One Family, detached	402	459
One Family, attached	40	17
Two Family	21	11
3 or 4 Families	22	12
5 or more	12	9
Mobile Home or Trailer	51	68
Total	548	576

The time period in which Conoy Township's housing facilities were constructed is presented in Table D-16.

**TABLE D-16  
YEAR STRUCTURE BUILT**

	<b>Conoy Township</b>		<b>Lancaster County</b>	<b>Pennsylvania</b>
	<b>Number</b>	<b>( % )</b>	<b>( % )</b>	<b>( % )</b>
Total Units	1,124	100.0	100.0	100.0
1990 - March 2000	160	14.3	16.7	10.5
1980 - 1989	180	16.0	15.8	10.1
1970 - 1979	213	19.0	15.1	13.5
1960 - 1969	90	8.0	10.5	11.4
1959 or earlier	481	42.8	42.0	54.6
Source: U.S. Department of Commerce, Bureau of Census, 2000				

Of the 1,124 housing units tabulated in the 2000 Census, approximately 49 percent were constructed since 1960, and less than 15 percent in the last 10-year period. This recent rate of housing construction is slower than that being witnessed in the Townships that are located within the County's Urban Growth and Village Growth Areas.

### Tenure and Vacancy

The changes in tenure and vacancy from 1980 to 2000 are shown in Table D-17. During this period, there was a trend toward increased occupancy by owners and few renter occupied dwelling in the Township. This increase can be attributed to the construction of several suburban, single family dwelling developments in the several locations in the Township during this time period catering to middle and higher income residents who are in a position to purchase their homes.

**TABLE D-17  
TENURE AND VACANCY**

	1980		1990		2000	
<b>Tenure and Vacancy</b>	<b>Number of Units</b>	<b>Percent of Total</b>	<b>Number of Units</b>	<b>Percent of Total</b>	<b>Number of Units</b>	<b>Percent of Total</b>
Owner Occupied	595	75.1	763	80.1	919	81.3
Renter Occupied	158	20.0	169	17.7	184	16.3
Vacant	39	4.9	21	2.2	27	2.4
Total	792	100.0	953	100.0	1,130	100.0
Source: U.S. Census of Population, 1980, 1990 and 2000						

The percentage of owner occupied to total units has steadily increased throughout the last two decades, while the vacancy rate has remained fairly low.

Table D-18 shows that of the Township residents five years or older in 2000, nearly 68 percent had lived in the same house in 1995. An additional 24 percent lived elsewhere in Lancaster County.

**TABLE D-18  
RESIDENCE IN 1985 AND 1995  
(PERSONS 5 YEARS AND OLDER)**

	Conoy Township		Lancaster County	Pennsylvania
	Number	( % )	( % )	( % )
<b>1985</b>				
Total Persons	2,467	100.0	100.0	100.0
Lived in Same House	1,743	70.7	55.3	63.4
Lived in Different House				
In Lancaster County	441	17.9	28.9	22.1
Elsewhere in PA	187	7.6	8.2	7.4
Another State	83	3.4	6.3	6.3
Lived Abroad	13	0.5	1.2	0.9
<b>1995</b>				
Total Persons	2,917	100.0	100.0	100.0
Lived in Same House	1,978	67.8	60.2	63.5
Lived in Different House				
In Lancaster County	697	23.9	27.2	21.7
Elsewhere in PA	127	4.4	6.4	7.6
Another State	106	3.6	4.9	5.8
Lived Elsewhere	9	0.3	1.3	1.4
Source: U.S. Department of Commerce, Bureau of Census, 1990 and 2000				

## Housing Value

Table D-19 provides information on the value of owner occupied housing units in 1990 and 2000. As can be seen in the Table, housing values and contract rents are comparable to the overall Lancaster County averages.

**TABLE D-19  
HOUSING INFORMATION, 1990 AND 2000**

	Conoy Township	Lancaster County	Pennsylvania
<b>1990</b>			
1990 Median Value of Owner Occupied Housing Units	\$ 75,800	\$ 89,400	\$ 69,700
1990 Median Contract Rent of Renter Occupied Units	\$ 301	\$ 363	\$ 322
Percentage of Owner Occupied Housing Units	81.9 %	69.4 %	70.6 %
Percentage of Renter Occupied Housing Units	18.1 %	30.6 %	29.4 %
<b>2000</b>			
2000 Median Value of Owner Occupied Housing Units	\$ 125,500	\$ 119,300	\$ 97,000
2000 Median Contract Rent of Renter Occupied Units	\$ 530	\$ 572	\$ 531
Percentage of Owner Occupied Housing Units	83.3 %	70.8 %	71.3 %
Percentage of Renter Occupied Housing Units	16.7 %	29.2 %	28.7 %
Source: U.S. Department of Commerce, Bureau of Census, 1990 and 2000			

Occupied housing units that have a ratio of more than 1.00 persons per room may be an indication of overcrowding conditions. While statewide and countywide percentages of housing stock were approximately two percent of the total in the Year 2000 (1.9% and 2.2% respectively), no occupied housing units in Conoy Township were identified as having a ratio of more than 1.00 persons per room in 2000.

## Future Housing Needs

As the population of Conoy Township increases, additional housing will be needed. The type of housing that may be built depends greatly on the values and desires of the population. While the number of additional dwellings that may be needed can be estimated based on a projection of

overall Township population, the types of dwelling units that may be constructed cannot be estimated.

The population of the Township is projected to continue to increase into the foreseeable future. The Lancaster County Planning Commission's forecast for Conoy Township anticipates that the total population will increase from an actual population of 3,067 in 2000 to a population of 3,829 by the Year 2030 (an increase of 762 people). In order to accommodate this increased population, additional housing units will need to be provided. Based on an additional population of 762 and a Year 2000 average of 2.78 persons per household, an additional 274 dwelling units may be required by the Year 2030. There will be a need for a mix of types of housing units so that individuals of all age groups, family size and economic level have equal opportunities to reside in Conoy Township.

## **ECONOMIC CHARACTERISTICS**

The economic well being of the Township relies not only on the productive capacity of local industry and commerce, but also on the income the residents receive regardless of where they work.

### **Employment Characteristics**

Employment is one of the most common units for measuring economic activity, and is a useful measurement for determining land development requirements. Economic variables are reliable indicators of the size and scope of a given area's economy. They can be correlated with income characteristics to give a picture of the economic base of a community.

### **Labor Force**

Table D-20 presents the percentage of Township residents 16 years and over who were employed in 2000, and the class of work in which they were employed. As can be seen in the table, nearly 78 percent of Township males were employed and over two-thirds of Township females. These percentages are higher than both the Countywide percentages and those of the state overall.

Table D-21 provides statistics on Place of Work in 2000. As can be seen from the table, an extremely low percentage (0.2%) of Township workers were employed outside of Pennsylvania. While 74 percent of employed Township residents worked within Lancaster County, this percentage is considerably lower than that of the County overall. However, it could be anticipated, due to Conoy Township's proximity to Dauphin County and the greater Harrisburg area.

Only approximately 14 percent of Township workers were employed within Conoy Township. This is much lower than both the Countywide and statewide averages, and reinforces the Township's status as a rural/suburban "bedroom community."

**TABLE D-20**  
**PERCENTAGE OF EMPLOYED PERSONS 16 YEARS AND OVER**  
**BY CLASS OF WORKER, 1990 AND 2000**

	Conoy Township	Lancaster County	Pennsylvania
1989			
Percent Who Worked in 1989 by Gender			
Male	83.6 %	84.5 %	76.4 %
Female	61.6 %	64.7 %	57.8 %
Class of Worker			
Private Industry	85.9 %	84.0 %	81.7 %
Government	5.0 %	7.4 %	11.7 %
Self Employed	8.4 %	7.7 %	6.2 %
Unpaid Family Workers	0.7 %	0.9 %	0.5 %
1999			
Percent Who Worked in 1999 by Gender			
Male	77.7 %	74.7 %	69.2 %
Female	68.9 %	57.5 %	55.3 %
Class of Worker			
Private Industry	86.6 %	84.1 %	82.4 %
Government	6.9 %	7.2 %	11.3 %
Self Employed	6.5 %	8.1 %	6.0 %
Unpaid Family Workers	0 %	0.5 %	0.3 %
Source: U.S. Department of Commerce, Bureau of Census, 1990 and 2000			

**TABLE D-21**  
**PLACE OF WORK IN 2000**

	<b>Conoy Township</b>		<b>Lancaster County</b>	<b>Pennsylvania</b>
WORKED IN PENNSYLVANIA	1,679	99.8 %	98.9 %	95.4 %
- Worked in County of Residence	1,246	74.0 %	87.0 %	72.4 %
- Worked in Home Municipality	242	14.4 %	23.4 %	26.7 %
- Worked outside of Home Municipality	1,004	59.7 %	63.6 %	45.7 %
- Worked elsewhere in Pennsylvania	433	25.7 %	11.9 %	23.0 %
WORKED OUTSIDE OF PA	4	0.2 %	1.1 5 %	4.6 %
Source: U.S. Department of Commerce, Bureau of Census				

### Employment Distribution by Industry

In 1990, a review of employment by industrial groups showed that manufacturing and service industries were the two largest employers of Conoy Township's active labor force. Each accounted for about one-fourth of the Township's employed labor force. However, by 2000, manufacturing had fallen to second place behind professional and related services, which increased to nearly 33 percent of employment, while manufacturing only increased to approximately 27 percent. The other significant industrial group in 2000 was retail/wholesale trade, which accounted for nearly 17 percent of the total (See Table D-22).

While a significant number of Township residents are employed in manufacturing, few such jobs are located within the Township. Most of the Township residents must travel outside of the Township for their jobs in industry.

**TABLE D-22  
EMPLOYED PERSONS 16 YEARS AND OVER  
BY TYPE OF INDUSTRY, 1990 AND 2000**

Industry Type	Conoy Township	Lancaster County	Pennsylvania
<b>1990</b>			
Agriculture, etc.	5.6 %	4.5 %	1.8 %
Construction, mining	8.8 %	8.1 %	6.7 %
Manufacturing	25.5 %	26.4 %	20.0 %
Transportation, communications	12.7 %	5.8 %	6.9 %
Retail and wholesale trade	17.9 %	22.0 %	21.5 %
Finance, etc.	2.3 %	4.6 %	6.5 %
Services	25.4 %	26.8 %	32.6 %
Public administration	1.8 %	1.7 %	4.0 %
<b>2000</b>			
Agriculture, mining, etc.	1.7 %	2.9 %	1.3 %
Construction	8.9 %	7.7 %	6.0 %
Manufacturing	26.8 %	22.5 %	16.0 %
Transportation, warehousing, utilities	6.6 %	4.3 %	5.4 %
Information	0.8 %	1.9 %	2.6 %
Retail and wholesale trade	16.4 %	17.6 %	15.7 %
Finance, etc.	4.7 %	4.4 %	6.6 %
Services*	32.6 %	36.8 %	42.2 %
Public administration	1.6 %	2.0 %	4.2 %
* Includes professional, scientific, management, administrative, educational, health. Social services, arts, entertainment, recreation, accommodations, food services, and others Source: U.S. Department of Commerce, Bureau of Census, 1990 and 2000			

### Income Characteristics

Median income figures in 1999 for Pennsylvania, Lancaster County and Conoy Township are presented in Table D-23. As can be seen from Table D-23, while the 1999 per capita incomes are compatible with those of the County and the state, both the median family income and median household incomes for Conoy Township residents are in excess of 7 percent higher than that of the County as a whole.

**TABLE D-23  
INCOME AND POVERTY LEVELS, 1999**

	<b>Conoy Township</b>	<b>Lancaster County</b>	<b>Pennsylvania</b>
1999 Per Capita Income	\$ 20,157	\$ 20,398	\$ 20,880
1999 Median Household Income	\$ 48,775	\$ 45,507	\$ 40,106
1999 Median Family Income	\$ 56,632	\$ 52,513	\$ 49,184
Percentage of Families below 1999 Poverty Level	3.0 %	5.3 %	7.8 %
Source: U.S. Department of Commerce, Bureau of Census, 2000			

Another significant income characteristic is that of number of families below the Poverty Level. As is shown in Table D-23, 5.3 percent of the County's population is classified as falling below the poverty level - but only 3.0 percent of the Township population fell into that category.

### Educational Characteristics

Table D-24 shows a breakdown of the education attainment of all Township residents 25 years old or over in 1990 and in 2000. In 1990 only approximately 75 percent of the Township population had completed four years of high school. By 2000, this percentage had increased to more than 81 percent.

**TABLE D-24  
COMPARATIVE EDUCATIONAL LEVELS, 1990 AND 2000<sup>1</sup>**

	<b>Conoy Township</b>	<b>Lancaster County</b>	<b>Pennsylvania</b>
<b>1990</b>			
High School Graduate	74.4 %	70.5 %	74.7 %
College Graduate	10.0 %	16.7 %	17.9 %
<b>2000</b>			
High School Graduate	81.5 %	77.4 %	81.9 %
College Graduate	10.6 %	20.5 %	22.4 %
<sup>1</sup> Note: Percentages reflect persons 25 years and older. Source: U.S. Department of Commerce, Bureau of Census			



The number of Township residents completing four years or more of college was 10.6 percent of the 2000 Township population. This is approximately one-half of the statistics for both the County and the State overall.

## **TRANSPORTATION FACILITIES**

Over its history, Conoy Township and nearby areas have been served by many forms of transportation from horse-drawn buggies and wagons to automobiles. In time, as newer and more efficient forms of transportation became available, older modes and facilities fell into disuse or were abandoned. Today, the family automobile is the primary form of transportation for the movement of goods and people over an extensive network of State and Township roads and highways. Trucks move freight and mail.

The transportation routes within Conoy Township consist of State, Township and private roads. The State roads and some Township roads connect the Township with adjacent townships and boroughs. The Township roads provide the majority of the access to areas within the Township. Maintenance of the roads within the Township is generally the responsibility of the State and the Township. The State usually maintains the roads between centers of population

State Routes 441 and 241 are the two major roads in Conoy Township. Route 441 (River Road) generally runs through the Township in a northwest to southeast direction, paralleling the Susquehanna River. Route 241 (Bainbridge Road) runs East / West and divides the Township.

The availability of transportation systems has been a major factor in community development. Mobility is one of the most important characteristics of 20th-Century lifestyle. The automobile has been one of the most important means of transportation. The automobile allows mankind to reside further away from their employment and increases the need for better and safer roads. The location and character of transportation systems have determined the extent and direction of urban growth and frequently decide the allocation of commercial and industrial uses. In Conoy Township, one of the important determinants of the timing and location of development is the roadway system.

Increased traffic due to development causes additional wear and damage to existing roads. Many of these roads may not have been designed to handle this increase in demand. As development continues on local roads there may also be a conflict between agricultural and residential use of these roads.

## **Road Classifications**

Historically, Conoy Township's roads have been subject to the regulations of the State. Standards for new street design are found in the Lancaster County Subdivision and Land Development Ordinance. Roads are commonly classified according to a system based on their ability to carry volumes of traffic. Roads typically have two important functions. First, they permit physical mobility and the ability to go from one place to another place. Secondly, roadways provide access to individual properties. Although both these two characteristics are found to some extent in every roadway, different types of roadways provide relatively different amounts of access and mobility. For example, major highways (e.g. the PA Turnpike, the Interstates, U.S. 30 and PA 283) provide a high measure of mobility, by linking different states and regions. However, a road such as PA 283

provides relatively little access, because access points are often miles apart. By further analogy, Evergreen Street in Bainbridge provides a high level of access because it connects with a number of similar roads as well as driveways. However, it provides relatively little mobility because it serves a small geographic area. The functional classification of a road is an important planning principle.

Roads are commonly categorized by mobility and accessibility. Each characteristic affects the other. Larger roads with several lanes are able to provide greater mobility, but as road size increases, ability to access it decreases. Either larger roads are restricted with traffic lights, (which slow down mobility) or they are accessed by on/off ramps. In comparison, a small road within a subdivision is easily accessible, but mobility on it is restricted to a greater degree.

Land use planning must ensure that growth occurs in a manner that accounts for the capacities and characteristics of local roadway systems with particular regard for the volume of traffic on the road, the type of trip provided, the destination, and the speed of the trip. The following are the four typical functional classifications of roadways:

#### **TABLE T-1 FUNCTIONAL CLASSIFICATIONS OF ROADWAYS**

Interstate/Other Expressways - These highways are designed to provide for the movement of the greatest number of vehicles over the longest distance in the fastest allowable time. Access to expressways is restricted to grade-separated interchanges and the flow of traffic is uninterrupted. These highways generally serve either inter-state and inter-regional traffic or cross-town traffic in densely developed areas.

Arterials - Arterials also provide for the movement of large volumes of traffic over longer distances; however, these highways generally operate at lower speeds due to the presence of traffic control devices and access points. They can be subclassified as Principal Arterials, which serve inter-city traffic, and Minor Arterials, which link smaller developed areas within areas of the County.

Collectors - Collector highways serve moderate traffic volumes and act to move traffic from local areas to the arterials. Collectors, too, can be subdivided into sub-categories. Major Collectors provide for a higher level of movement between neighborhoods within a larger area. Minor Collectors serve to collect traffic within an identifiable area and serve primarily short distance travel.

Local - Local roads and streets are, by far, the most numerous of the various highway types. These highways provide access to individual properties and serve short distance, low speed trips.

A general description of the design characteristics of these four classifications is presented in Table T-2 below.

Regardless of the classification, the adequacy of the circulation system is determined by the ability of roads and highways to perform certain assigned functions of traffic movement. For example, the function of an arterial road is generally to move vehicles from one point to another in an efficient, safe and rapid manner. More than any other type, the arterial road illustrates the conflict between the movement of traffic and the land access function. The two functions are incompatible. When volumes of traffic are low and the density of the abutting development is low, the conflict is not

serious. However, when traffic volumes are high and the adjoining land is intensely used, the number of points of conflict increases rapidly. It is therefore important to understand the appropriate functions of different roads in order to prevent misuse and failure of the system.

**TABLE T-2  
ROADWAY DESIGN CHARACTERISTICS**

<b>Classification</b>	<b>General Provisions</b>	<b>Right-of-Way Width</b>	<b>Cartway Width</b>
<u>Expressway</u>	<ul style="list-style-type: none"> <li>- 55 + MPH</li> <li>- Limited Access</li> <li>- No Parking</li> <li>- Noise Barrier/Buffer (where required)</li> </ul>	Minimum 120 feet; however, may be wider based on local conditions and design	- Minimum four 12' wide travel lanes with 10' wide shoulders capable of supporting heavy vehicles
<u>Arterial</u>	<ul style="list-style-type: none"> <li>- 35-55 MPH</li> <li>- Some access controls to and from adjacent development</li> <li>- Encourage use of reverse and side street frontage and parallel access roads to limit private individual access.</li> <li>- No Parking</li> </ul>	60 feet	- 12' wide travel lanes with shoulders in rural area and curbing in urban areas
<u>Collector</u>	<ul style="list-style-type: none"> <li>- 25-35 MPH</li> <li>- Some access controls to and from adjacent development more control on major collectors; less on minor collectors</li> <li>- Parking permitted on one or both sides</li> </ul>	50 feet	<ul style="list-style-type: none"> <li>- 11' to 12' wide travel lanes with stabilized shoulders or curbing</li> <li>- 8' wide lanes provided for parking if necessary</li> </ul>
<u>Local</u>	<ul style="list-style-type: none"> <li>- 15-35 MPH</li> <li>- No access control to and from adjacent development</li> <li>- Parking permitted on one or both sides</li> </ul>	40	- 11' wide travel lanes with stabilized shoulders minimum 4' recommended

The Pennsylvania Department of Transportation has classified both urban and rural highways. The rural category applies to the non-urbanized areas of Lancaster County, including all of Conoy Township. The streets in the rural category were classified into four groups: (1) Rural Principal Arterials; (2) Rural Minor Arterials; (3) Rural Collectors; and (4) Rural Locals. The following list defines the function of each of these groups:

**TABLE T-3  
FUNCTIONAL CLASSIFICATIONS – RURAL SYSTEM**

<b>Classification</b>	<b>Function</b>
Rural Principal Arterial	Serves corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel.
Rural Minor Arterial	Links cities and larger towns, and forms an integrated network providing interstate and intercounty service.
Rural Collector	Generally serves travel of primarily intra-county rather than statewide importance and constitutes the route on which predominate travel distances are shorter than on arterial routes. Rural collectors are subclassified into two categories - major and minor.
Rural Local	Serves primarily to provide access to adjacent land, and provides service to travel over relatively short distances as compared to collectors or other higher systems.

The Transportation Map identifies the major system of highways and streets in Conoy Township based on the above classifications.

There are no roadways in the Township that can be classified as limited access rural principal arterials or rural principal arterials. The closest limited access rural principal arterials to the Township are PA Route 283 and US Route 30. The closest rural principal arterial to the Township is PA Route 230.

The only road in the Township classified as a rural minor arterial is the following:

- River Road (SR 441) from the Dauphin County line at Conewago Creek to the East Donegal Township line.

The following road is classified as a rural major collector:

- Bainbridge Road (SR 241) between Bainbridge and the West Donegal Township Line.

The following roads are classified as rural minor collectors:

- SR 4002 (Donegal Springs Road) from Stacktown Road (SR 4004) to the East Donegal Township line.

- SR 4004 (Stacktown Road) from River Road (SR 441) in Bainbridge to the East Donegal Township line.
- SR 4008 (Turnpike Road) from River Road (SR 441) in Falmouth east to the West Donegal Township line.

The remaining State road, SR 4006 (Stone Mill Road), as well as all Township owned and maintained streets and roadways in the Township are classified as rural locals.

The following table includes additional data on the state roads in the Township.

**TABLE T-4  
STATE ROADWAY CHARACTERISTICS**

Road Name	Route No.	Functional Classification	AADT (Year)	No. of Lanes	Paved Width	Right-of-Way Width
Bainbridge Road	SR 241	Major Collector	5,080 (2004)	2	14' to 24'	33' to 80'
River Road	SR 441	Minor Arterial	3,556 <sup>1</sup> (2001) 4,906 <sup>2</sup> (2004) 5,997 <sup>3</sup> (2003)	2	24'	65' to 110'
Donegal Springs Road	SR 4002	Minor Collector	712 (2004)	2	16'	33'
Stacktown Road	SR 4004	Minor Collector	505 (2004)	2	16' to 18'	33'
Stone Mill Road	SR 4006	Local Road	227 (2001)	2	14'	33'
Turnpike Road	SR 4008	Minor Collector	890 (2001)	2	16'	33'
<sup>1</sup> North of Amosite Road (T-857) <sup>2</sup> South of Bainbridge Road (SR 241) <sup>3</sup> South of Village of Bainbridge  Source: PA Dept. of Transportation						

#### **Traffic Volumes**

The ability of highways to carry large volumes of traffic is controlled by several factors. The number of traffic lanes, grades, sight distances, proportion of trucks, operating speeds and roadway clearance are some of the more important elements that affect capacity.

The volume of traffic on the principal traffic routes in the Township is also shown on the Transportation Map. Annual average daily traffic counts (AADT) obtained from the Pennsylvania Department of Transportation are shown on State routes. The AADT is determined by counting

the number of vehicles passing a specific point for one week and averaging the results for each 24-hour period during the week. These counts aid the Department of Transportation in determining which roads should have priority for repairs and/or improvements.

Since Conoy Township contains traffic generators such as businesses, shopping areas, tourist attractions, industry, etc., there are areas of traffic congestion. The highest volumes of traffic are witnessed on PA Route 441 (River Road) and PA Route 241 (Bainbridge Road), which are the two major traffic routes through the Township.

### **Traffic Accidents**

The utilization of the private automobile as the major mode of transportation within Conoy Township contributes greatly to the occurrence of traffic accidents within the municipal boundaries. According to the 2000 U.S. Census, over ninety (90) percent of the labor force in the Township used the private automobile as the means of transportation to work. This high percentage, accompanied by additional volume created by through-traffic, shopping trips, etc., increases the potential for traffic accidents.

### **Air Transportation**

Lancaster Airport is the only airport facility in Lancaster County with regularly scheduled air service. The airport is the only publicly owned airport (controlled by the Lancaster Airport Authority) and is located north of Lancaster City, in Manheim Township. Facilities and services at Lancaster Airport include an FAA control tower, terminal building, snack bar, hangars, flight instruction, charter service, sales and repair of aircraft, sale of fuel, and other services.

Township residents can also travel to Harrisburg International Airport (HIA) in Middletown for passenger service.

The Donegal Springs Airport, is located south of the Township in East Donegal Township. It is privately-owned and has a 3,250 feet paved runway.

### **Bus Transportation**

The Red Rose Transit Authority (RRTA) provides public transit in Lancaster County and currently operates 17 fixed routes. Presently, Conoy Township possesses no public transportation from the RRTA. The nearest RRTA routes are located in Elizabethtown (Route 18) and Marietta Boroughs (Route 17). If future development becomes such that public transportation is warranted then Township officials should solicit RRTA to extend a route alignment into the Township via the Elizabethtown and/or Columbia Routes.

In addition to its fixed route bus service, RRTA operates a demand responsive service for transportation-disadvantaged persons. This service, called Red Rose Access, provides county-wide specialized transportation services that address and meet the requirements of the Americans with Disabilities Act of 1990 (ADA). RRTA contracts with three private operators.

## **Rail Transportation**

### **Freight Rail**

The main line of the Norfolk Southern Railroad runs along the western boundary of Conoy Township, paralleling the Susquehanna River, and carries rail freight traffic through the Township and Lancaster County. It is referred to as the Port Road and connects the Enola Yard just outside of Harrisburg with Perryville, Maryland. The Delaware & Hudson/Canadian Pacific has operating rights to this line for its freight trains traveling from Canada and New York to Maryland and Virginia. This railroad is an industrial railway serving industries along its routes and transporting goods between industries and communities up-and-down the Susquehanna River.

### **Passenger Rail**

The primary passenger rail service available to Township residents is Amtrak, which operates passenger rail service between Philadelphia and Harrisburg via the Keystone Corridor. Keystone service runs daily and stops at the Lancaster City, Mount Joy Borough and Elizabethtown Borough stations. The Pennsylvanian runs daily and stops at the Lancaster and Elizabethtown Borough stations.

## **Transportation Projects**

The State's Twelve-Year Program targets the Commonwealth's improvement efforts in all modes of transportation: highways, bridges, aviation, rail and transit over a twelve-year period. The TIP - Transportation Improvement Program - is a staged, four-year, intermodal program of transportation projects, which is consistent with the Long-Range Transportation Plan. The Lancaster County Planning Commission prepares and adopts TIP annually. A project to be funded has to be included in the Lancaster County Long-Range Transportation Plan. The current twelve-year improvement program has no listed projects related to Conoy Township.

The Township road system is supported in part by the Pennsylvania Department of Transportation through Liquid Fuels Allocations. These monies are for construction, repair and maintenance of Township roads. The funding of major highway projects by the State is usually reflected in the State's twelve-year improvement program.

## **EXISTING LAND USE**

Realizing what uses currently occupy the land area of a community is essential for planning for the future. The term "land use" refers to the spatial distribution of existing land functions; that is, the residential or living areas, the industrial or working areas, the support functions offered by commerce, institutions, and utilities, and agricultural and open space uses. A tabulation of existing land use helps reveal the nature of an area by showing what uses exist and how much area is devoted to the use. A mapping of land use offers an indispensable visual aid to realizing what the essential activity system of an area is. In this way, the interrelationship of all the land uses can be noted; it is then possible to see how these land uses ultimately affect the population of the area.

When the original Conoy Township Comprehensive Plan was prepared in 1990, the 1988 Lancaster County tax records were researched and mapped, yielding a lot-by-lot land use inventory. This was followed by a windshield survey conducted in August 1989 to verify the findings revealed by the tax records. The Existing Land Use Plan prepared for the 1990 Plan included a tabulation (in acres) broken down into the following land use categories:

- Open Space/Conservation/Recreation
- Agriculture/Single Family Dwellings on 10 +/- Acre Lots
- Single Family Dwellings on less than 10-Acre lots
- Multi-Family Units
- Miscellaneous Mixed Uses
- Commercial
- Industrial
- Public/Civic
- Vacant Land

As part of the current Plan update, existing land use records were obtained through the use of Land Use and Land Cover information provided as part of the Lancaster County GIS System. The Lancaster County GIS Landbase data was mapped and a detailed windshield survey was conducted in January 2005 to field verify that information. Eight major categories were established: (1) residential, (2) commercial, (3) industrial, (4) public and civic, (5) agriculture, (7) woodland, (8) vacant, and (9) water. These categories for the most part correspond to the breakdown of uses surveyed and analyzed in 1989. Several of these categories have been further subdivided to allow for a more detailed and informative database. The eight land uses are defined as follows:

<b><u>Classification</u></b>	<b><u>Description</u></b>
<b><u>Residential</u></b>	All residential land uses are classified by type of enclosed dwelling unit - one, two, multiple, etc. For this purpose, one dwelling unit represents a household having the customary facilities necessary to accommodate one family.
Single Family	One detached dwelling unit.
Multi-Family	Two or more dwelling units - row housing, two or more dwellings over or attached to other use, multi-story apartments.
Mobile Homes	Prefabricated housing fixed as non-transient living unit - either single units or placed in courts, camps or parks.



## Commercial

Any building or floor use whose economic function involves engaging in the sale of goods (retail or wholesale), food and drink (restaurants, bars, etc.), services of a business, personal, or professional nature or for entertainment (theaters, amusement parks, etc.). Subcategories mapped include the following:

Commercial Retail

Commercial Services

Restaurants and Bars

Other Commercial

## Industrial

Establishments engaged in the production of goods or nonmanufactured products or services (e.g., construction, mining, warehousing, etc.), and the grounds used by these companies. Subcategories mapped include the following:

Light Industrial

Heavy Industrial

Storage/Distribution Facilities

## Public and Civic

Any building or floor area devoted to the use of public administration, health, safety, welfare and education as listed in the accompanying categories. This classification includes school buildings and the grounds associated with the school, churches and associated grounds, municipal buildings, fire company buildings, fraternal organizations, nursing homes, areas used exclusively for recreational purposes, such as golf courses, park, camping area, etc. Subcategories mapped include the following:

Governmental Facilities

Community Facilities

Recreational Facilities

Transportation, Communication and Utilities

## Agricultural

Land occupied by farms and farming related uses, including farmsteads. This category includes small woodlots when they are part of the farm property. Also included are orchards, nurseries, greenhouses, etc.

<u>Forestry</u>	Wooded areas, excluding small woodlots that are a part of farm holdings.
<u>Vacant Land</u>	Open land areas not being used for any specific purposes, including land being occupied by abandoned buildings.
<u>Water</u>	Areas covered by water, including rivers, streams, ponds, and impoundments.

Year 2005 land use acreages are provided in the following table. They are compared to the land use acreages calculated for the 1990 Plan. "Developed" land increased from 1,175.3 acres in 1990 to 2,075.4 acres in 2005 - a 76% increase. The increase in developed acreage obviously resulted in a corresponding decrease in agricultural and forested land in the Township. "Undeveloped" land decreased from 8,076 acres in 1990 to 7,108.6 acres in 2005 - a 12% decrease.

**TABLE E-1  
EXISTING LAND USE – 1989 AND 2005**

	<b>1989 Survey</b>			<b>2005 Survey</b>		
	<b>Acres</b>	<b>% of Township</b>	<b>% of Developed</b>	<b>Acres</b>	<b>% of Township</b>	<b>% of Developed</b>
<b>Residential</b>	<b>906.0</b>	<b>9.8</b>	<b>77.1</b>	<b>1334.6</b>	<b>14.5</b>	<b>64.3</b>
Single Family	870.0	9.4	74.0	1131.6	12.3	54.5
Multi-Family	33.5	0.4	2.9	11.8	0.1	0.6
Mobile Home	*			63.7	0.7	3.1
..Other Residential	*			18.5	0.2	0.9
Residential under Construction	*			103.8	1.1	5.0
Mixed Residential/Commercial	2.5	0.0	0.2	5.3	0.1	0.3
<b>Commercial</b>	<b>25.3</b>	<b>0.3</b>	<b>2.2</b>	<b>256.8</b>	<b>2.8</b>	<b>12.4</b>
Retail	*			109.8	1.2	5.3
Services	*			6.8	0.1	0.3
Restaurants and Bars	*			4.6	0.0	0.2
Other Commercial	*			135.7	1.5	6.5
<b>Industrial</b>	<b>135.0</b>	<b>1.5</b>	<b>11.5</b>	<b>123.1</b>	<b>1.3</b>	<b>5.9</b>
Light Industry	*			111.5	1.2	5.4
Heavy Industry	*			5.4	0.1	0.3
Storage/Distribution	*			6.3	0.1	0.3
<b>Public &amp; Civic</b>	<b>109</b>	<b>1.2</b>	<b>9.3</b>	<b>360.9</b>	<b>3.9</b>	<b>17.4</b>
Government Facilities	*			13.6	0.1	0.7
Community Facilities	*			23.3	0.3	1.1
Recreational	*			60.8	0.7	2.9
Transportation/Communication/Utilities	*			263.2	2.9	12.7
<b>Subtotal “Developed” Uses</b>	<b>1175.3</b>	<b>12.7</b>	<b>100.0</b>	<b>2075.4</b>	<b>22.6</b>	<b>100.0</b>
<b>Agriculture</b>	<b>7,217</b>	<b>78.0</b>		<b>6331.0</b>	<b>68.4</b>	
<b>Forestry (Open Space/Conservation)</b>	<b>565</b>	<b>6.1</b>		<b>418.6</b>	<b>4.6</b>	
<b>Vacant</b>	<b>294</b>	<b>3.2</b>		<b>359.0</b>	<b>3.9</b>	
<b>Subtotal “Undeveloped” Uses</b>	<b>8076.0</b>	<b>87.3</b>		<b>7108.6</b>	<b>77.4</b>	
<b>TOTAL</b>	<b>9,251</b>	<b>100.0</b>		<b>9184.0</b>	<b>100.0</b>	

\*Included in above category

## **COMMUNITY FACILITIES AND SERVICES**

Community facilities are an important component of a developing area and add immeasurably to the quality of life. They encompass not only those facilities owned by the public but also those owned and operated by private enterprise for the benefit of the community as well. Community facilities and services include schools, parks and recreation, police and fire protection, ambulance service, municipal administrative functions, and utilities. Deficiencies in the present levels of services, expansion possibilities and future requirements should be evaluated and related to potential demand so that Conoy Township can be prepared to provide these services as the need arises.

### **Educational Facilities**

The entire area of Conoy Township is served by the Elizabethtown Area School District, which serves school-age children from kindergarten (K) through grade 12. The Bainbridge Elementary School is located on Second Street in the Village of Bainbridge. Meeting the educational needs of the Township falls under the sole jurisdiction of the School District.

### **Libraries**

The Elizabethtown Public Library, located in Elizabethtown Borough, provides service to the Borough as well as the surrounding municipalities.

### **Municipal Facilities**

Municipal facilities are those buildings and structures that allow the Township's government to function and serve the public. The headquarters for these services is the Township Municipal Building located in the Village of Falmouth. As the population of the Township continues to grow, and as additional municipal services are made available to Township residents, additional space may be required for administration and equipment.

### **Emergency Services**

Emergency services provide a valuable service for the safety and welfare of Conoy Township residents and businesses. Police, fire and ambulance squads provide life and property saving services that are vital to the community's quality of life. Fire and police protection and emergency medical services are identified and discussed below.

### **Police Services**

The Township is one of the member municipalities, along with Marietta Borough and East Donegal Township, which comprise the Susquehanna Regional Police Department.

### Emergency Medical Services

Northwest EMS from Elizabethtown provides emergency medical services to Conoy Township. The 24 hour/7 days a week agency can provide both basic and advanced life support. As is the case with fire protection, emergency medical services provided by the Northwest EMS also appear adequate to meet the Township's existing and future needs into the foreseeable future.

### Fire Services

Based on current fire protection standards, the fire protection facilities provided by the Bainbridge Fire Company, supported by various fire companies located outside the Township, appear adequate for existing as well as expected needs during the planning period. All fire calls are dispatched by Lancaster County-Wide Communications to appropriate fire departments when needed.

### Open Space, Parks and Recreation

Conoy Township residents have access to a variety of facilities owned by public and private agencies in and around the Township, facilities that are owned and/or operated directly by the Township, with support from the Township's Parks and Recreation Board. In addition, recreational programs are provided through the Greater Elizabethtown Area Recreation Services (GEARS). The GEARS Board consists of members from Conoy Township, Elizabethtown Borough, Mount Joy Township, West Donegal Township and Elizabethtown Area School District. Limited recreational facilities are also located at the Bainbridge Elementary School.

The Township-owned and operated parks include Governors Stable Park in the northern portion of the Township and Conoy Park East and Conoy Park West in Bainbridge. The Township also has the Kreider Tract Park, as well as the Conoy Canal Trail/Park, which runs along the Susquehanna River from Conewago Falls in Falmouth to Race Street in Bainbridge. The Township is continually upgrading and improving its park facilities. The Township also has been cooperating with East Donegal Township in the development of the Northwest Lancaster County River Trail.

Other recreational and related facilities located in the Township include the PA Fish Commission's Public Boat Access at Falmouth, as well as private facilities such as the Bainbridge Island Gun Club, American Legion Post #197 and the Bainbridge Sportsman Club. As additional residential areas are developed, neighborhood and sub-neighborhood recreation areas/facilities should be required to be provided as part of the subdivision/land development approval process. An example of such a facility is the land provided to the Township for a playing field as part of the recently constructed Townsedge Development (on Second Street).

## UTILITIES AND SERVICES

The availability of the various utilities in Conoy Township is important both in terms of its present development and its future growth. As in most areas of recent suburban growth, Conoy Township is faced with a growing need for public water and public sewerage facilities. These facilities should be sufficient not only for present needs but also should be designed to facilitate future expansion. In the rural areas of the Township care should be taken to assure a continued supply of pure ground water and proper functioning of on-lot sewage disposal methods.

### Water Supply

All water supplied in Conoy Township comes from groundwater resources. Well water is supplied to the majority of residential and commercial uses through individual well supplies. In Conoy Township, the geologic formations that underlay it typically supply enough groundwater to accommodate domestic uses. Only one geological formation (the Vintage Formation) is reported to have expected yields of less than 5 gallons per minute (gpm). The location of this formation is in the extreme southwestern portion of the Township, in the vicinity of the LCSWMA Solid Waste Incinerator, and does not pose a problem for future ground water use.

A preliminary hydrogeologic analysis of groundwater quality in the Conoy Township was performed in February 1989 as part of the preparation of an updated Act 537 Sewage Facilities Plan for the Township. Groundwater samples from 138 locations were collected and tested for nitrogen, total coliform and total fecal coliform. In general the results of groundwater testing have indicated the evidence of ground water degradation. Wells with elevated nitrate-nitrogen values were evenly distributed throughout the Township, reflecting the dominant agricultural activities and the decentralized pattern of development. Elevated nitrate levels (i.e., over 10 ppm) were found in every area of Conoy Township that depends upon groundwater.

Because of the widespread distribution of elevated nitrate levels in the groundwater, the 1990 Comprehensive Plan recommended that new developments relying upon on-lot sewage disposal and/or water supply be discouraged, and that future land use planning policies target future residential growth in those areas of the Township that are, or will be, served by public water.

The Bainbridge Water Authority operates and maintains the primary public water supply system in Conoy Township. The system was originally constructed in the late 1960's. This system only serves the Village of Bainbridge in a service area that extends from Spruce Street to Conoy Creek and Front Street to the Stackstown and Stone Mill Roads split. The system is supplied by two wells located east of S.R. 441, across from Spruce Street. The only treatment required is (1) chlorination and (2) the addition of phosphates for corrosion protection. The wells are 6 inches in diameter and drilled to a depth of 182 to 242 feet in red shale and sandstone. The pumps are each rated for 60 gallons per minute. With a combined capacity of 172,800 gallons per day (gpd) and a current average daily usage of approximately 55,000 gpd, which equates 375 EDU's, the system is at 32% of capacity. Water pressure is maintained by a 200,000 gallon ground storage welded steel tank located on the hill behind the Commodore's Landing development.

In addition to water supply the Bainbridge water distribution system is designed to provide fire protection. A system of hydrants and large diameter distribution piping provide capacity for fire protection in the village Bainbridge.

The water system is in very good condition. The storage tank was recently inspected and repainted on both the interior and exterior. Both well pumps were also replaced within the last 10 years. The water system is debt free.

In 1992, the Authority performed a Wellhead Protection Study to identify potential ground water contamination sources and evaluate implementation of a well head protection area. Agricultural nutrients, underground storage tanks, utility rights-of-way, on-lot septic systems and fill areas. Agricultural nutrients were considered the greatest threat due to the introduction of nitrates into the ground water supply. The study provided recommendations for implementation of a Wellhead Protection Plan including mapping of the contributing areas to the well supply and proposed well head protection zoning ordinance.

The community water system in the Kings River Haven Mobile Home Park is also designated as a public water supply. This system only serves the mobile home park and campground.

### **Wastewater Treatment**

At the present time there are two municipally-owned wastewater treatment facilities and two private wastewater treatment facilities in Conoy Township.

### **Municipal Wastewater Facilities**

The two municipally-owned facilities were constructed in 1994 and are located in the Villages of Falmouth and Bainbridge. Both facilities are owned and operated by Conoy Township. The facilities were constructed in order to address long term existing failing individual on-lot systems in the two Villages. Limited additional capacity was provided for infill development of lots that were unable to be constructed on due to the inability to install a permittable on-lot sewer system. The Bainbridge facility was to generally serve limited growth along the S.R. 441 corridor and the area between S.R. 441 and the Susquehanna River.

The Falmouth Treatment Facility is located south of S.R. 441 near the intersection of Falmouth Road and S.R. 441. The facility's service area extends from S.R. 441 to Deer Lane and from Conewago Creek to the above intersection. Approximately 12,100 lineal feet (LF) of gravity sewer, 1,900 LF of force main and two pump stations serve 136 Equivalent Dwelling Units (EDU's). The two pumping stations are located on Deer Lane and on Falmouth Road (north of Turnpike Road).

The Falmouth Treatment Facility uses extended aeration treatment and has a design capacity of 25,000 gallons per day (gpd). Currently the average daily flow is 10,600 gpd. Based on this flow, there is approximately 14,400 gpd for future development, and, using 275 gpd per EDU, this equates to 52 additional EDU's of capacity. The Falmouth Treatment Facility discharges to a small stream, just upstream of the railroad tracks paralleling the Susquehanna River.

The Bainbridge Treatment Facility is located south of S.R. 441 (and south of Bainbridge) near the Conoy Creek. The facility's service area extends from the railroad tracks to S.R. 441 and from the Bainbridge Elementary School on Walnut Street to just north of Conoy Creek on Third Street. Approximately 29,500 LF of gravity sewer, 600 LF of force main and two pump stations serve 383 EDU's. The pump stations are located at the treatment facility and off of Race Street (to serve the lots along the river).

The Bainbridge Treatment Facility also uses extended aeration treatment and has a design capacity of 80,000 gpd. Currently the average daily flow is 46,300 gpd. 33,700 gpd are available for future development. Based on a planning number of 275 gpd per EDU, this would allow for 122 additional EDU's. Approximately 20 of these EDU's are reserved for the Commodore's Landing Development, which is currently under construction. Another development planned for wastewater capacity is the proposed Towns' Edge development near the Bainbridge Elementary School.

The Bainbridge Treatment Facility capacity is designed to be able to be expanded by an additional 80,000 gallons of capacity with the addition of more tanks. The Bainbridge Treatment Facility discharges into the Conoy Creek just upstream from its confluence with the Susquehanna River.

Solids from the treatment facilities are applied to on-site planting beds, where reed grass breaks down organics and dewateres the solids. Periodically, the beds are emptied and the material is landfilled.

Both treatment facilities have had excellent operating histories.

#### Private Wastewater Facilities

There are two private wastewater facilities of note as they relate to their discharge and permit requirements. Neither of these systems serves properties other than the owner(s) of the system.

The King's River Haven Mobile Home Park currently is a large on-lot sewage disposal system serving 37 mobile homes, a bath-house and a 40 space/lot recreational vehicle/tent campground. In December 2004, the park submitted a Planning Module to DEP to install a stream discharge wastewater facility to serve the same facilities plus 10 additional connections.

The wastewater treatment facility would discharge into Snitz Creek at a point just upstream of it's confluence with the Susquehanna River. The proposed plant would have a capacity of 10,000 gpd.

The only other private wastewater treatment facility is the one located in the County's Solid Waste Incinerator located south of Bainbridge on S.R. 441. This DEP-regulated facility treats its own wastewater and discharges into the Susquehanna River.



## **Storm Water Management Facilities**

Storm drainage is a concern of any developing area. Man's encroachment upon the natural drainage system with residential, commercial and industrial development has served to create drainage problems with accompanying flooding potential of the developed areas. As more intensive development is created or expanded, former forests and natural open areas are regraded and replaced by buildings, sidewalks, parking lots and paved streets. Hence, the once porous surfaces are sealed off and the hydrologic cycle as it once operated is altered substantially. Much of the water that would normally be absorbed into the ground must flow over the impervious surface. Therefore, curbs and gutters, storm drains, retention basins and other facilities must be planned and subsequently constructed.

Municipal officials in Lancaster County are well aware of the problems associated with inadequate storm drainage facilities. For the better part of the last three decades, Lancaster County, through the Lancaster County Subdivision and Land Development Ordinance, has required the control of storm water runoff in all new land development in those municipalities over which the County regulations have jurisdiction. Conoy Township has not adopted its own storm water management ordinance, and therefore relies on the County regulations. The Lancaster County Subdivision and Land Development Ordinance includes performance standards for stormwater runoff and serves to encourage the use of innovative measures for the control of stormwater runoff.

The enactment of Act 167, the Storm Water Management Act, has resulted in additional requirements for provision of stormwater and floodplain management facilities in new land developments. When Act 167 Watershed Storm Water Management Plans are prepared and adopted for the watersheds located in Conoy Township, subdivision, land development and other selected earth disturbance activities will need to reflect the design requirements of those studies.

Conoy Township is one of the numerous municipalities within Lancaster County which have partial, fragmented storm drainage systems. The developed portions of the Township are served by minor storm drainage systems that were not necessarily connected to each other. These systems are part of State highway projects or residential subdivisions and generally were designed only to relieve specific local drainage problems.

## **Solid Waste Disposal**

The General Assembly of the Commonwealth of Pennsylvania enacted the Pennsylvania Solid Waste Management Act (Act 241) in August 1968. The objective of this act was to provide for the establishment and maintenance of a cooperative state and local program of planning and technical and financial assistance for comprehensive solid waste management. Under Section 5, Paragraph (a), of the Act, each municipality with a population of 300 inhabitants per square mile is required to submit to the Department of Environmental Resources an officially adopted plan for a solid waste management system or systems. Every plan is to provide for the orderly extension of solid waste management systems consistent with the needs and plans of the whole area and in a manner that will not create pollution of the water or air of the Commonwealth and not constitute a public nuisance. The plan shall also provide for the safe and sanitary disposal of

solid waste. The Solid Waste Management Plan for Lancaster County was prepared for the Lancaster County Planning Commission in 1971, and was amended in 1986, 1990 and 1999.

In 1991, the Lancaster County Solid Waste Management Authority (LCSWMA) completed construction of its Resource Recovery Facility (RRF) on a 55.8 acre property located west of SR 441 in the southern portion of the Township. The Resource Recovery Facility is part of an integrated county-wide solid waste handling process, which includes the transfer station in Lancaster City (where solid waste is collected), the Resource Recovery Facility (where materials are separated and the combustible materials incinerated) and the Frey Farm Landfill (where incinerator ash and some local solid waste is landfilled).

The Resource Recovery Facility is owned by the Authority and operated by the plant's designer, Covanta Lancaster, Inc. It has the capacity to process up to 1,200 tons of waste every day. One by-product of the incineration process is the production of steam, which powers a turbine generator, which in turn, produces approximately 36 megawatts of electricity. Four to five megawatts are used to power the plant, and the remainder is sold to GPU Energy for distribution to local homes and businesses.

The source of water for every day for cooling, emissions control, ash quenching and other uses is secondary effluent (wastewater) from the Elizabethtown Borough Wastewater Treatment Plant that was previously discharged directly into the Susquehanna River. Since 1991, the RRF has removed nearly 1,688 tons of solids from the effluent it has received from the Elizabethtown Wastewater Treatment Plant.

Two ponds at the Resource Recovery Facility store treated water for use during peak demand periods and for fire protection. The plant itself is a zero-discharge facility - all the wastewater is treated on site and recycled within the system.

According to a recent press release by the LCSWMA, as of the end of January 2005, will have converted its five millionth ton of waste into clean, renewable energy.

#### 5 MILLION TONS

- 5 million tons of waste processed – this waste would have filled a volume equivalent to 140 acres of farmland, 50 feet deep
- 83,500 tons of ferrous metal recovered and recycled
- Generated 2.94 billion kilowatt-hours of electricity enough to supply 265,000 homes with power for one year
- Produced over \$178 million in electric revenue
- Produced 709,645 tons of ash beneficially used as daily cover at Frey Farm Landfill

There is currently no public solid waste collection provided in the Township. Township residents must rely on private collectors or remove their own refuse from their homes. Local solid waste is hauled directly to the Resource Recovery Facility.

## Electric Power

First Energy - GPU Energy supplies electricity to Conoy Township residents and businesses. GPU also operates and maintains five (5) overhead electric transmission lines in Conoy Township. The following lists and briefly describes those ROW found in the Township. These ROW are also shown on the Other Utilities Map).

ROW Name	Voltage Transmitted	ROW Width
TMI Substation to Juniata Substation	500,000 volts	200 feet
TMI Substation to Clay Substation	230,000 volts	varies
Middletown Junction Substation to Roundtop Substation	115,000 volts	varies
Middletown Junction Substation to Smith Street Substation	115,000 volts	varies
Middletown Junction Substation to LCSWMA Substation	69,000 volts	60 – 100 feet

The Pennsylvania Power and Light Company (PP&L) maintains five (5) separate ROW that traverse the Township as well. Each of these ROW prohibits the placement of buildings, but generally permits roads and parking lots to be constructed, subject to individual design review. The transmission ROW in Conoy Township are considerably more varied, due to their proximity to the Brunner Island Power Station, which is located on the west bank of the Susquehanna River in York County. Some ROW are fee owned by PP&L and, together with their adjacent easements, total widths vary from 100 to 350 feet, generally increasing as the line voltage and number of circuits increases. The following lists those ROW found in Conoy Township (see the Other Utilities Map).

ROW Name	Voltage Transmitted
Brunner Island – South Manheim	230,000 volts
Brunner Island – West Hempfield	230,000 volts
Three Mile Island – Peach Bottom	500,000 volts
Brunner Island – Middletown Jct. #1 & #2	230,000 volts
Brunner Island - Hummelstown	230,000 volts

## Natural Gas Service

UGI Corporation operates and maintains an 8-inch welded steel transmission main from Bainbridge Road to Steelton, PA. This main carries natural gas from the Columbia Gas Company metering station to Steelton, at approximately 380 psig (pounds per square inch gauge). The ROW agreement for the first property between Bainbridge Road and Donegal Spring Road specifies a 35-foot ROW. The ROW agreement for the two properties situated northwest of Donegal Springs Road to the West Donegal Township line does not specify an exact width, but UGI Corporation requires a minimum width of 35 feet.

### **Other Utilities**

Heating fuel sources for Conoy Township residents also includes fuel oil from commercial fuel oil suppliers. Telephone service is provided by Embarq (formerly Sprint). Cable TV service throughout the Township is provided by Comcast Cable. The Public Utilities Commission of the Commonwealth of Pennsylvania provides supervision of all public utilities.

# CONOY TOWNSHIP COMPREHENSIVE PLAN



***MAPS***



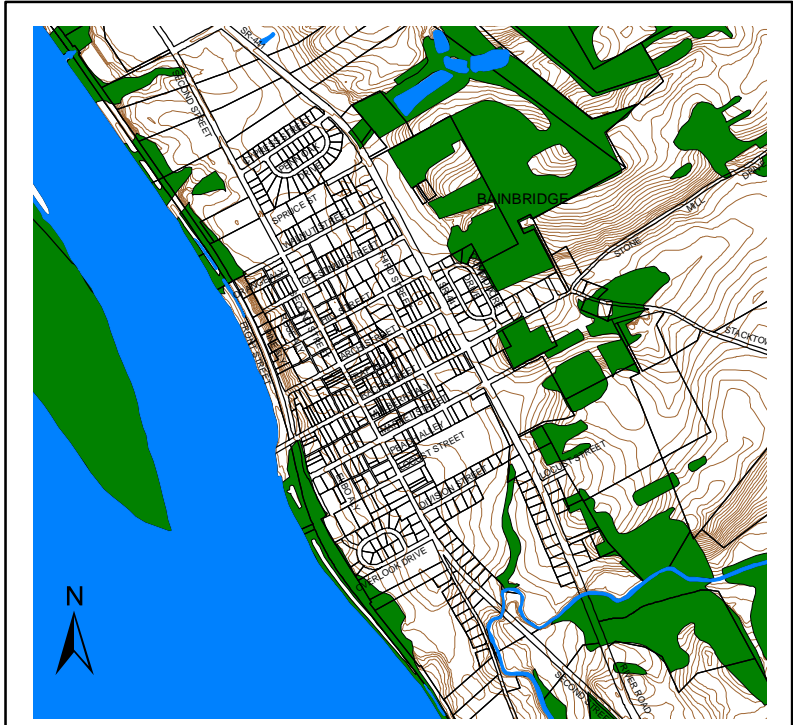
# TOPOGRAPHY & WOODLANDS MAP

## CONOY TOWNSHIP



- LEGEND**
- WOODLANDS
  - 5-FOOT CONTOURS

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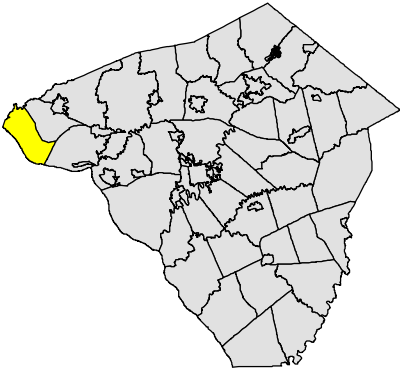
**BAINBRIDGE**

0 2,000 4,000 6,000 Feet

SCALE: 1" = 2000'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'



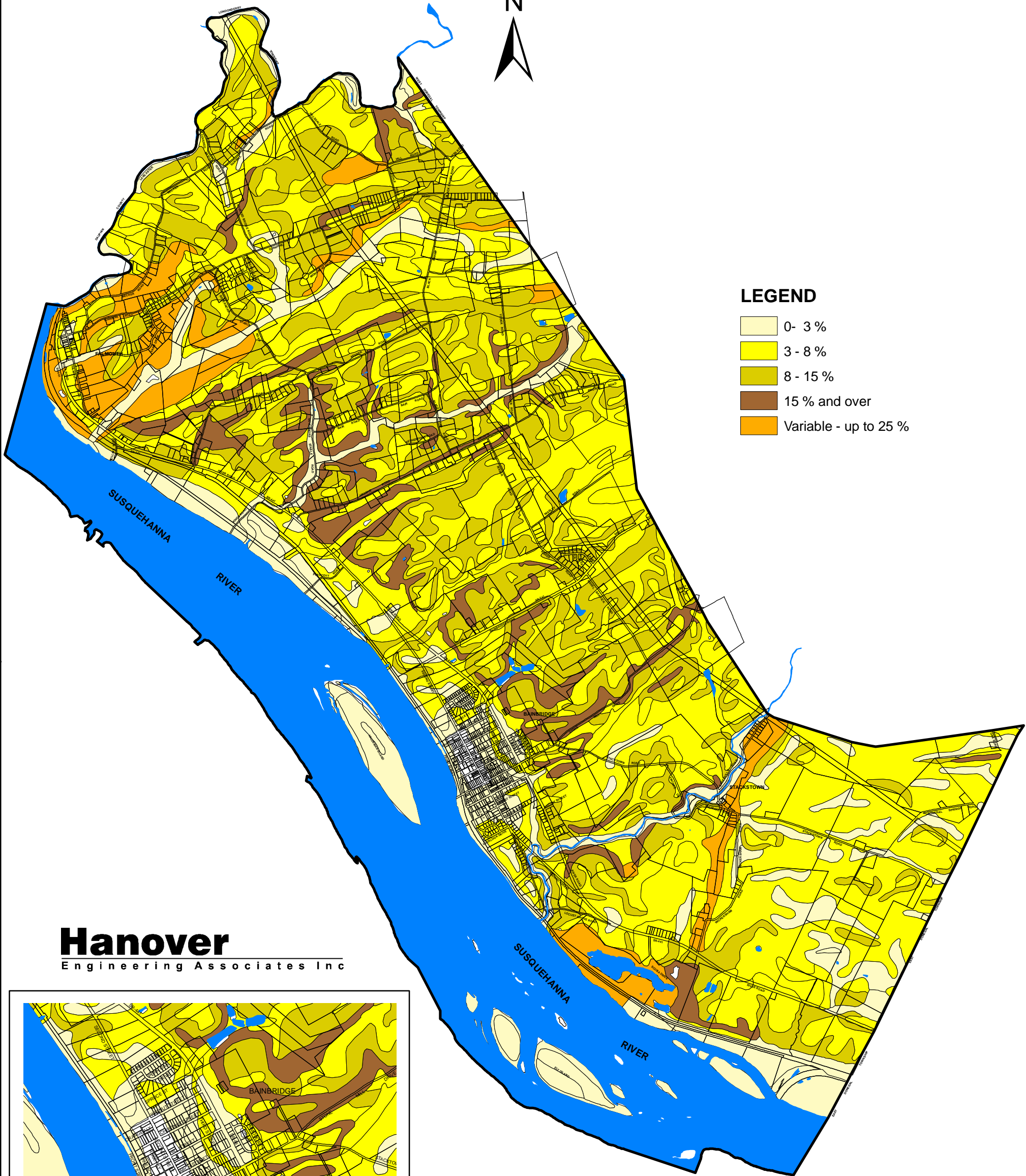
LOCATION MAP

REVISED: MAY 2009



# STEEP SLOPES MAP

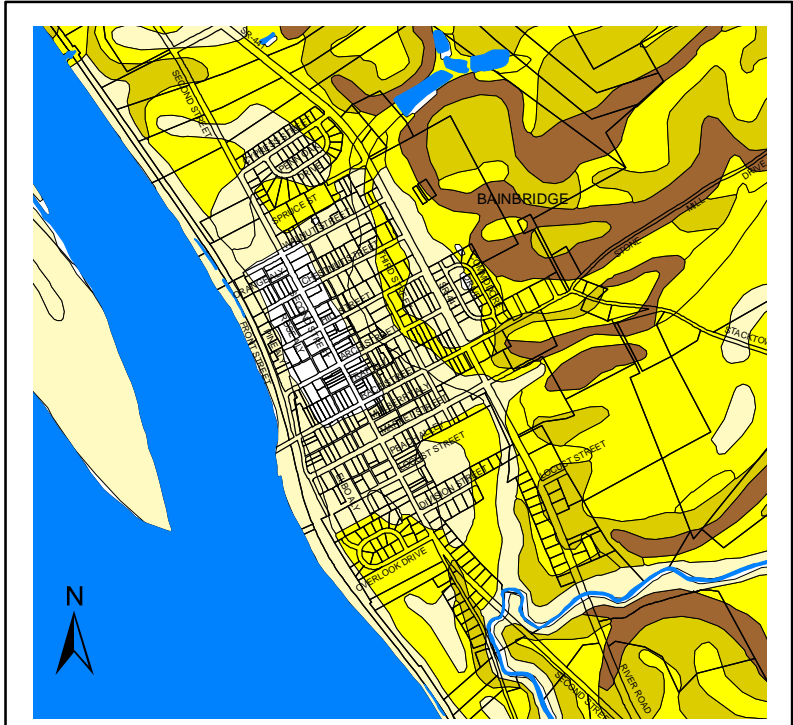
## CONOY TOWNSHIP



### LEGEND

- 0- 3 %
- 3 - 8 %
- 8 - 15 %
- 15 % and over
- Variable - up to 25 %

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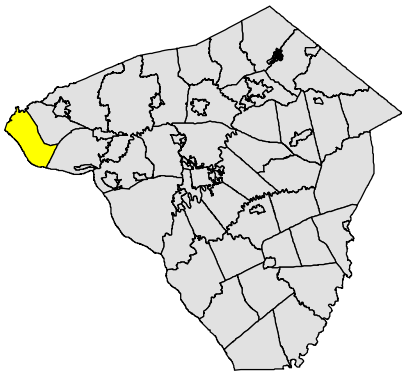
BAINBRIDGE

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0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'

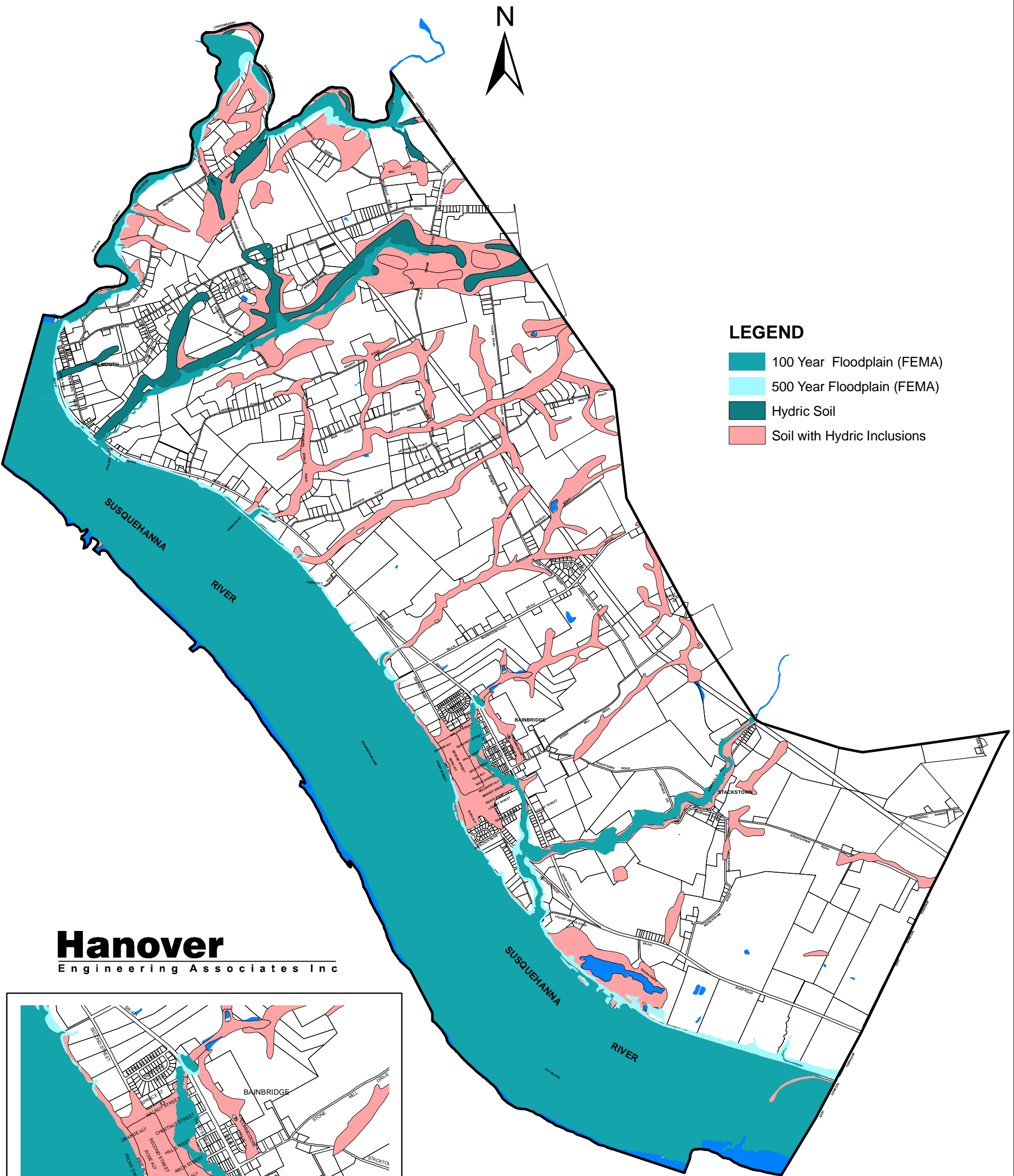


LOCATION MAP

REVISED: MAY 2009

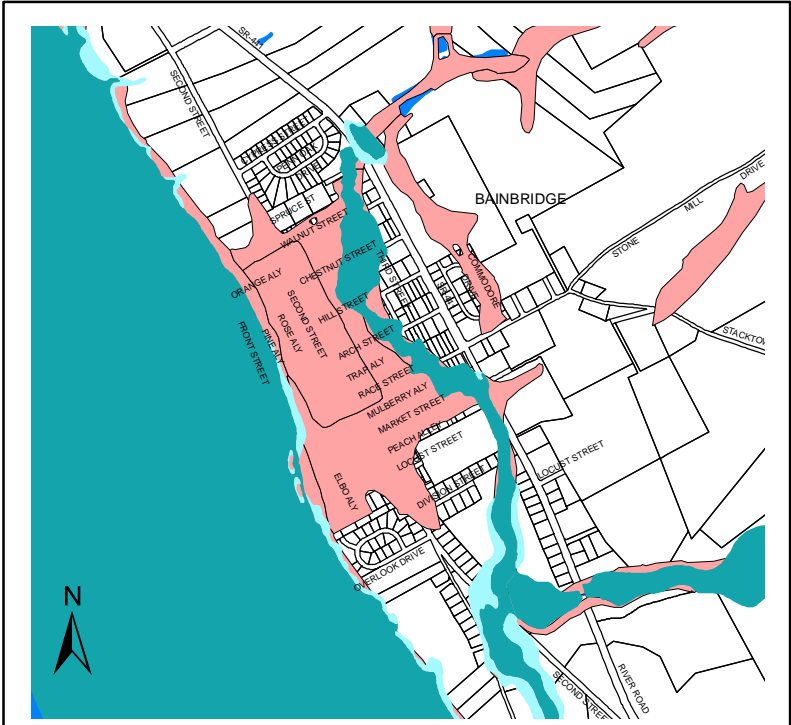
# FLOODPLAINS AND WETLANDS MAP

## CONOY TOWNSHIP



- LEGEND**
- 100 Year Floodplain (FEMA)
  - 500 Year Floodplain (FEMA)
  - Hydric Soil
  - Soil with Hydric Inclusions

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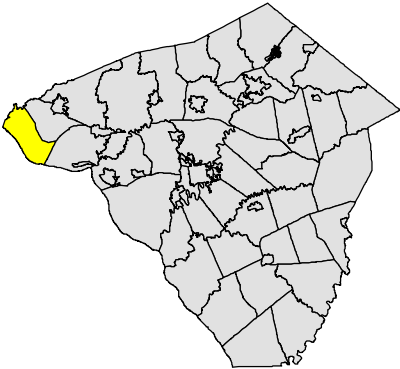
**BAINBRIDGE**

0 2,000 4,000 6,000 Feet

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0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'



LOCATION MAP

REVISED: MAY 2009



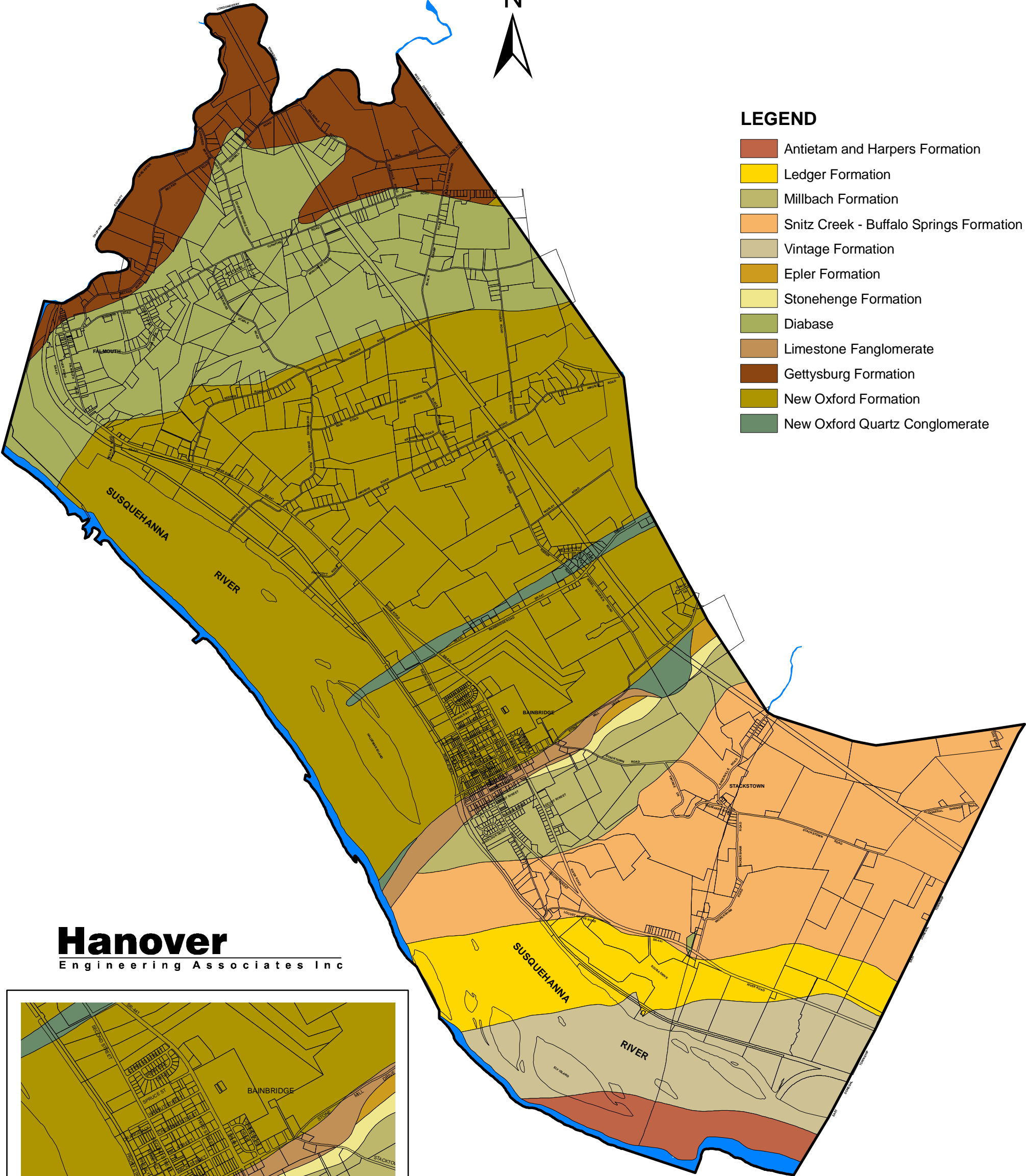
# GEOLOGY MAP

## CONOY TOWNSHIP



### LEGEND

- Antietam and Harpers Formation
- Ledger Formation
- Millbach Formation
- Snitz Creek - Buffalo Springs Formation
- Vintage Formation
- Epler Formation
- Stonehenge Formation
- Diabase
- Limestone Fanglomerate
- Gettysburg Formation
- New Oxford Formation
- New Oxford Quartz Conglomerate



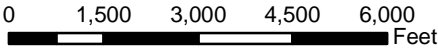
**Hanover**  
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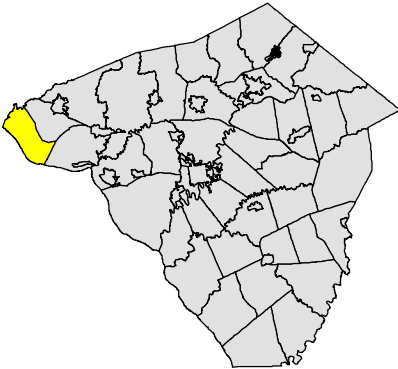
### BAINBRIDGE



SCALE: 1" = 2000'



SCALE: 1" = 3000'

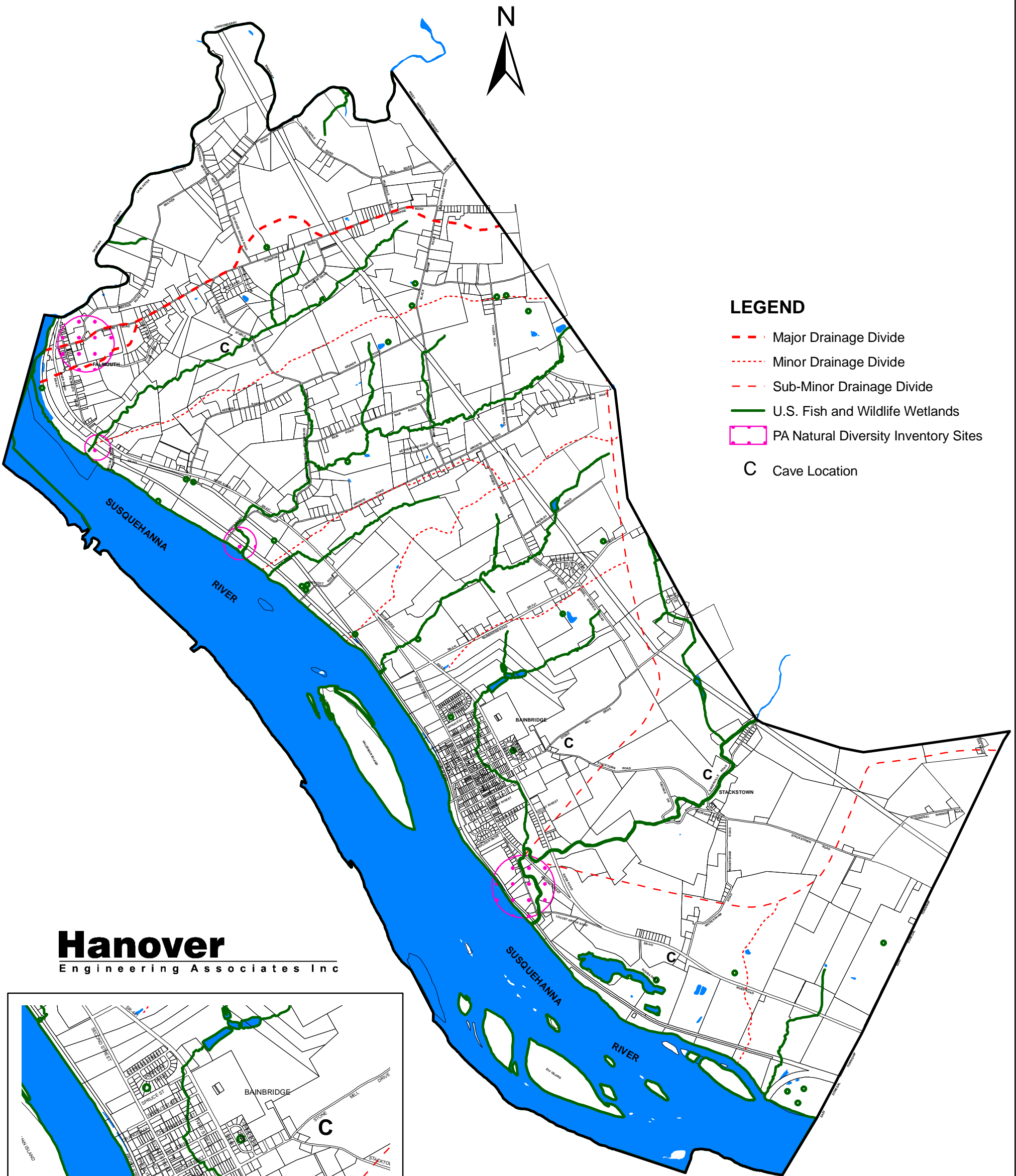


LOCATION MAP

REVISED: MAY 2009

# NATURAL FEATURES MAP

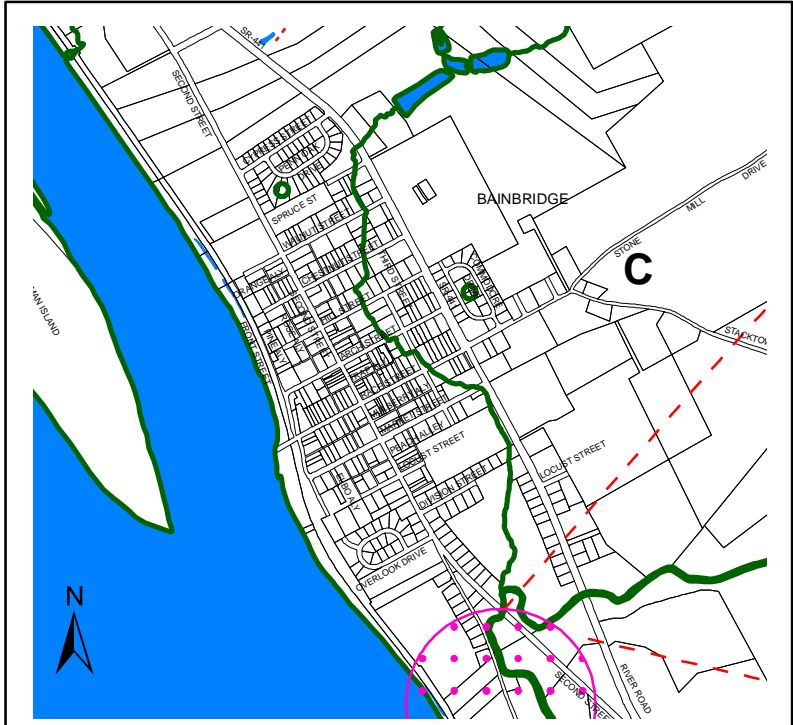
## CONOY TOWNSHIP



### LEGEND

- Major Drainage Divide
- Minor Drainage Divide
- Sub-Minor Drainage Divide
- U.S. Fish and Wildlife Wetlands
- PA Natural Diversity Inventory Sites
- C Cave Location

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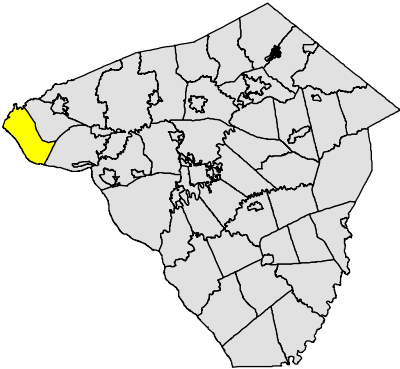
BAINBRIDGE

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SCALE: 1" = 3000'



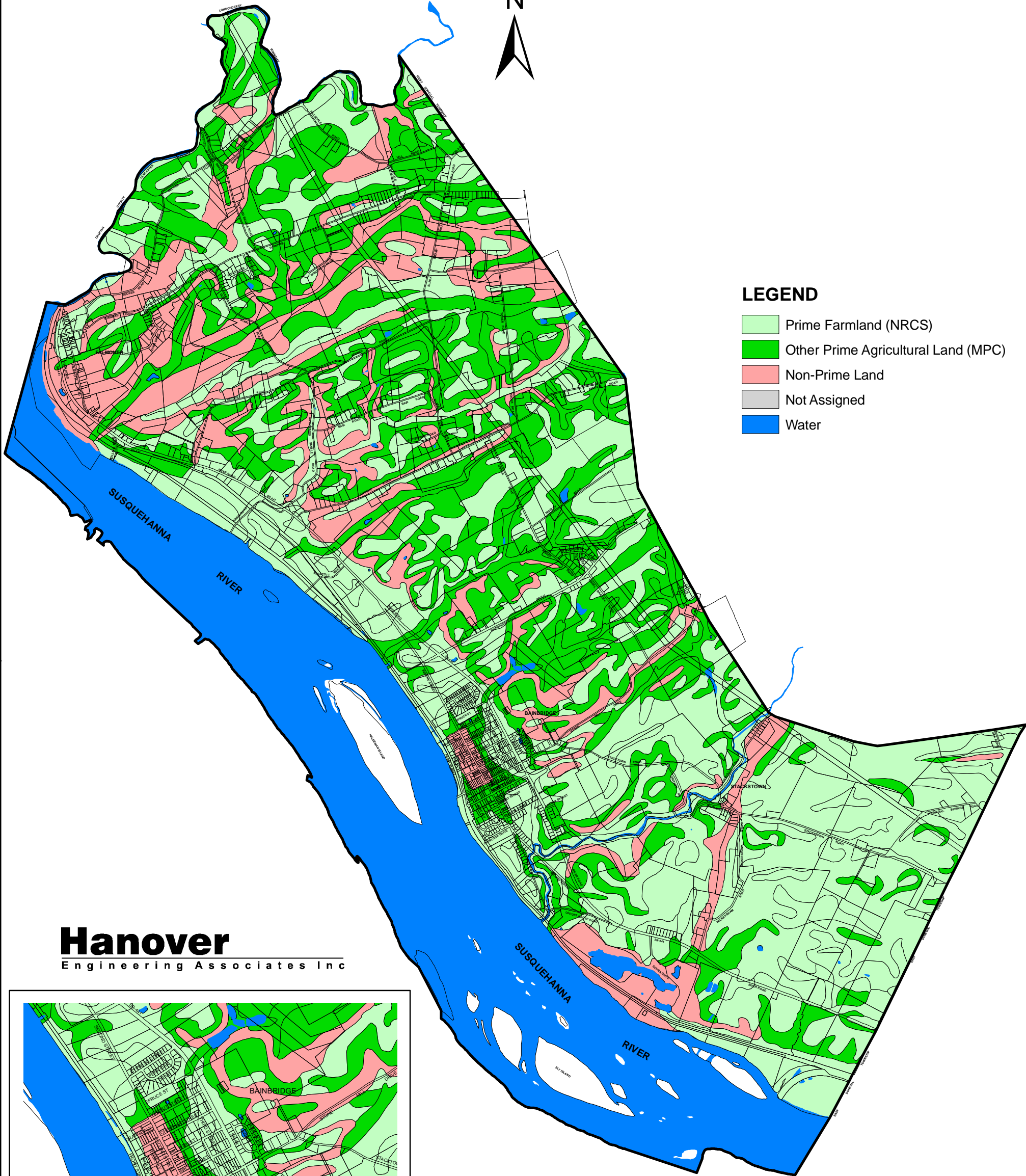
LOCATION MAP

REVISED: MAY 2009



# PRIME FARMLAND

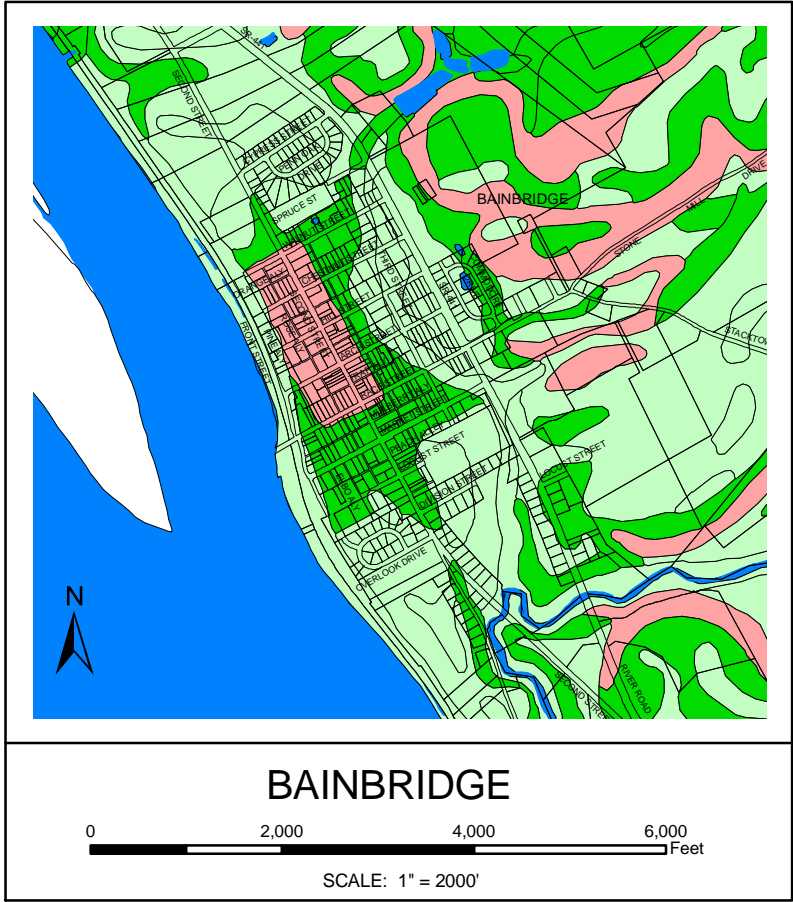
## CONOY TOWNSHIP



### LEGEND

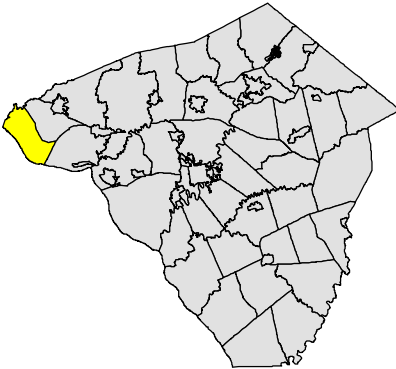
- Prime Farmland (NRCS)
- Other Prime Agricultural Land (MPC)
- Non-Prime Land
- Not Assigned
- Water

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0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'

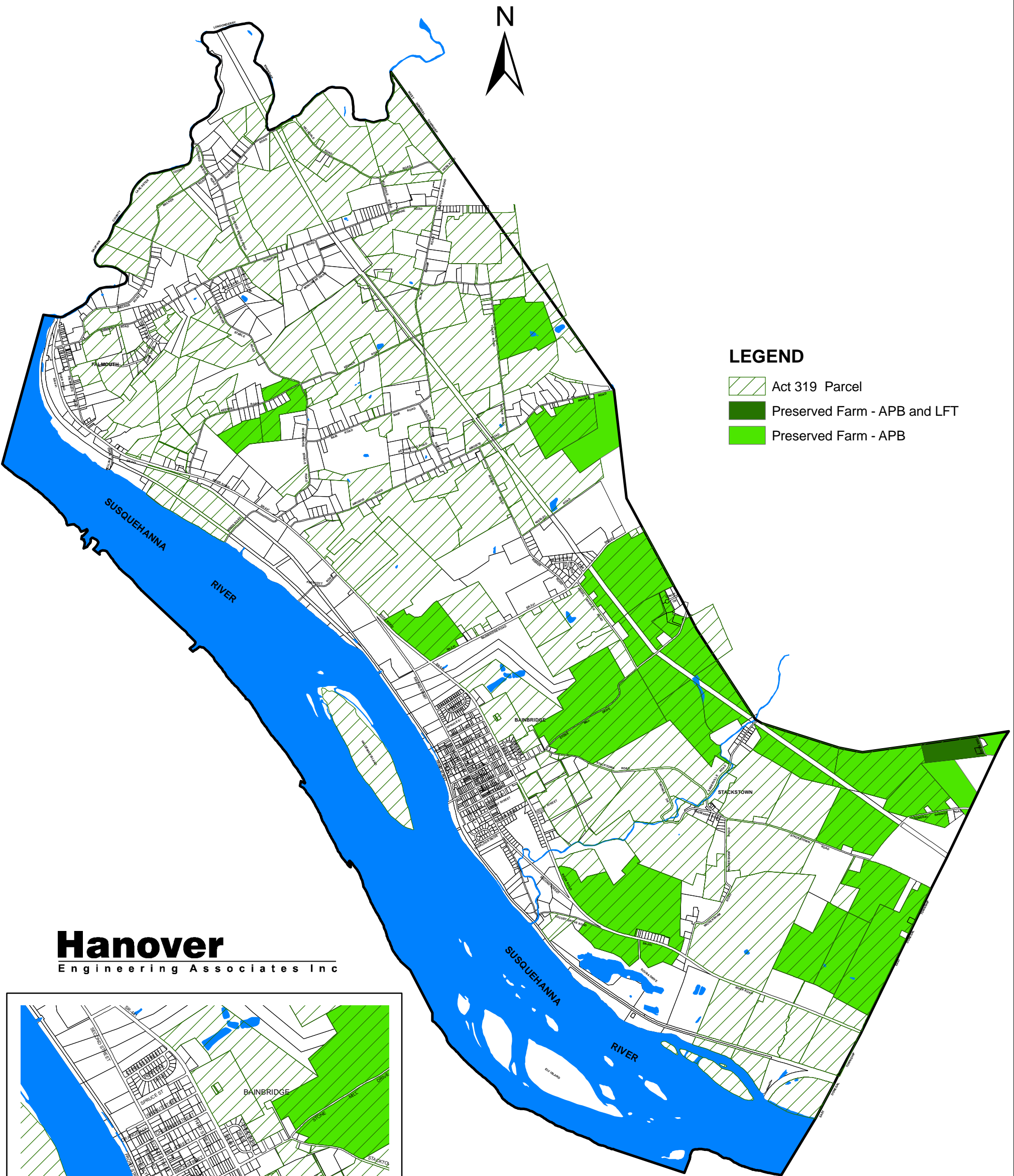


LOCATION MAP




REVISED: MAY 2009

# ACT 319 AND PRESERVED FARMS

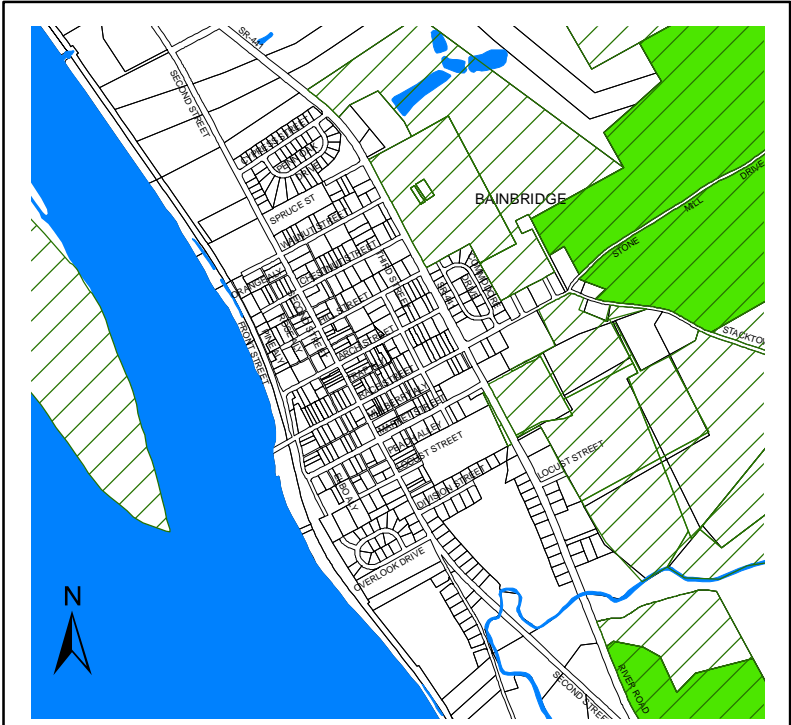
## CONOY TOWNSHIP



**LEGEND**

-  Act 319 Parcel
-  Preserved Farm - APB and LFT
-  Preserved Farm - APB

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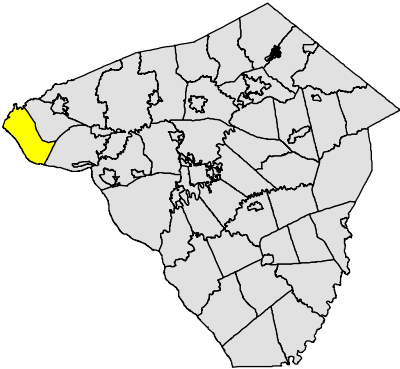
**BAINBRIDGE**

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SCALE: 1" = 2000'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'



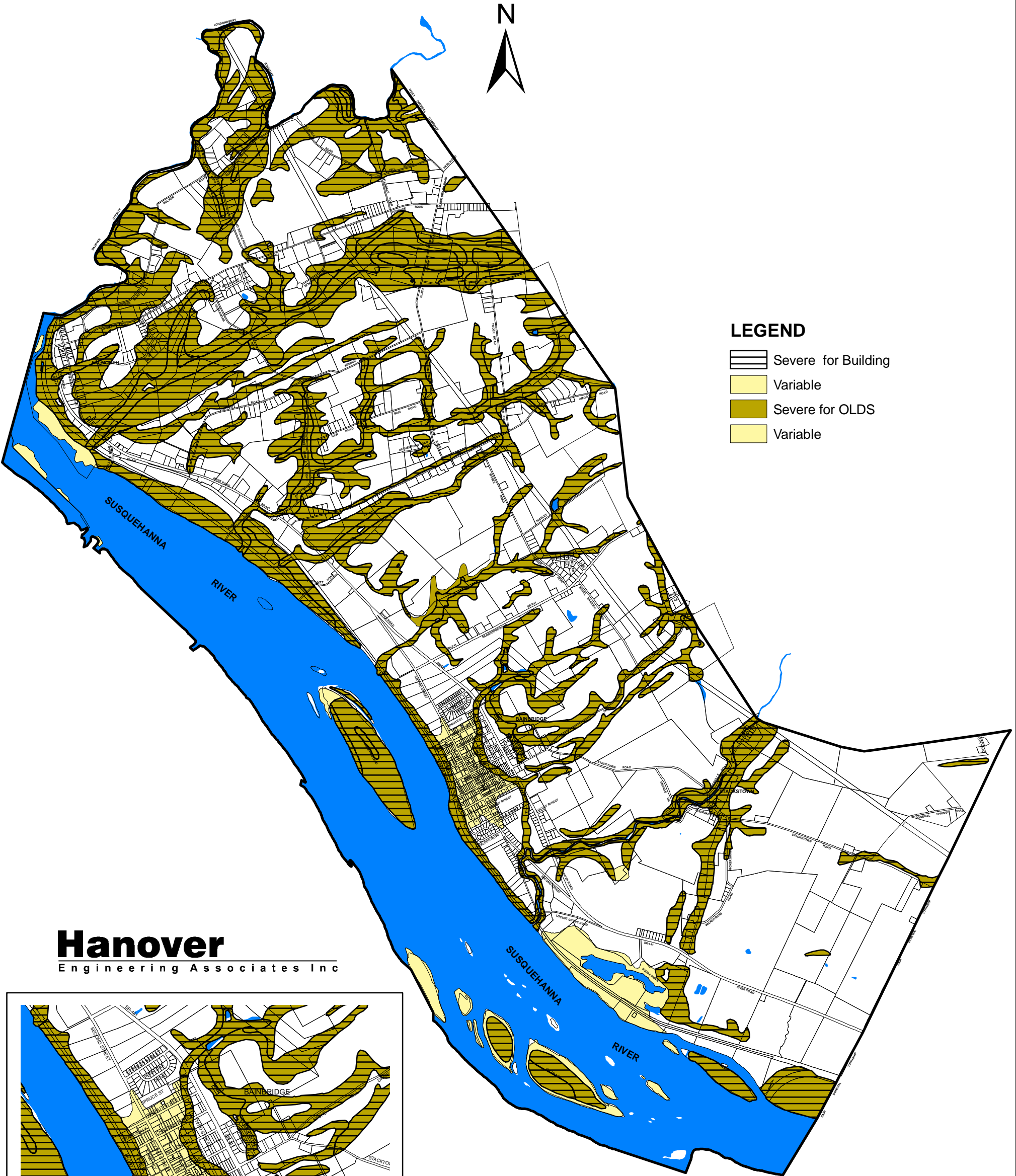
LOCATION MAP

REVISED: MAY 2009



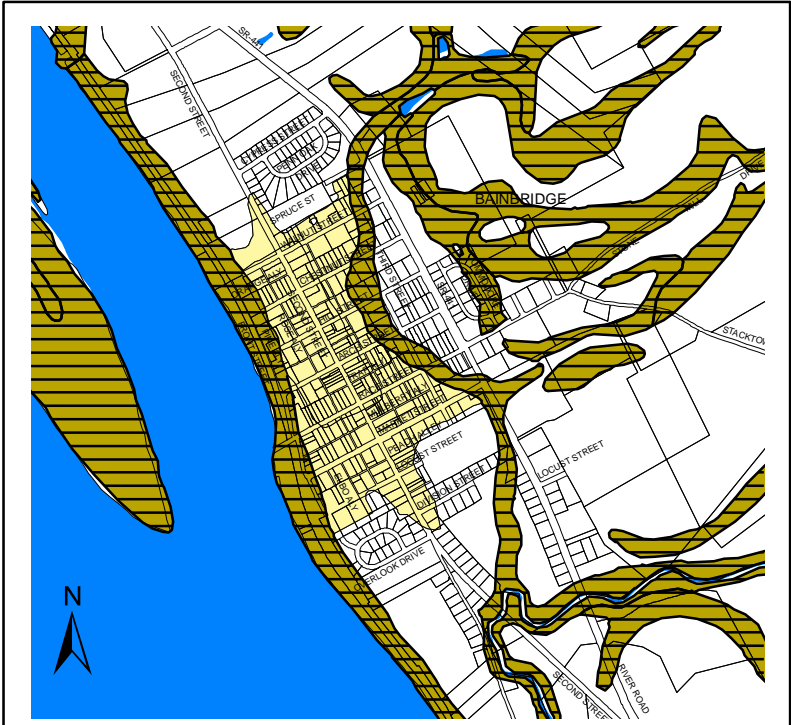
# SOIL SUITABILITY MAP

## CONOY TOWNSHIP



- LEGEND**
- Severe for Building
  - Variable
  - Severe for OLDS
  - Variable

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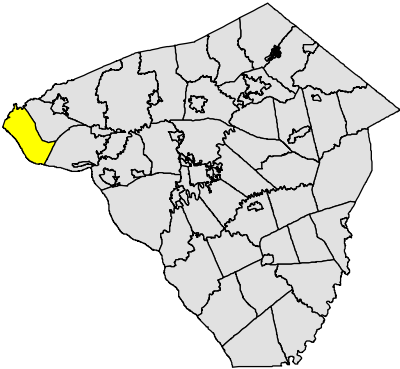
**BAINBRIDGE**

0 2,000 4,000 6,000 Feet

SCALE: 1" = 2000'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'

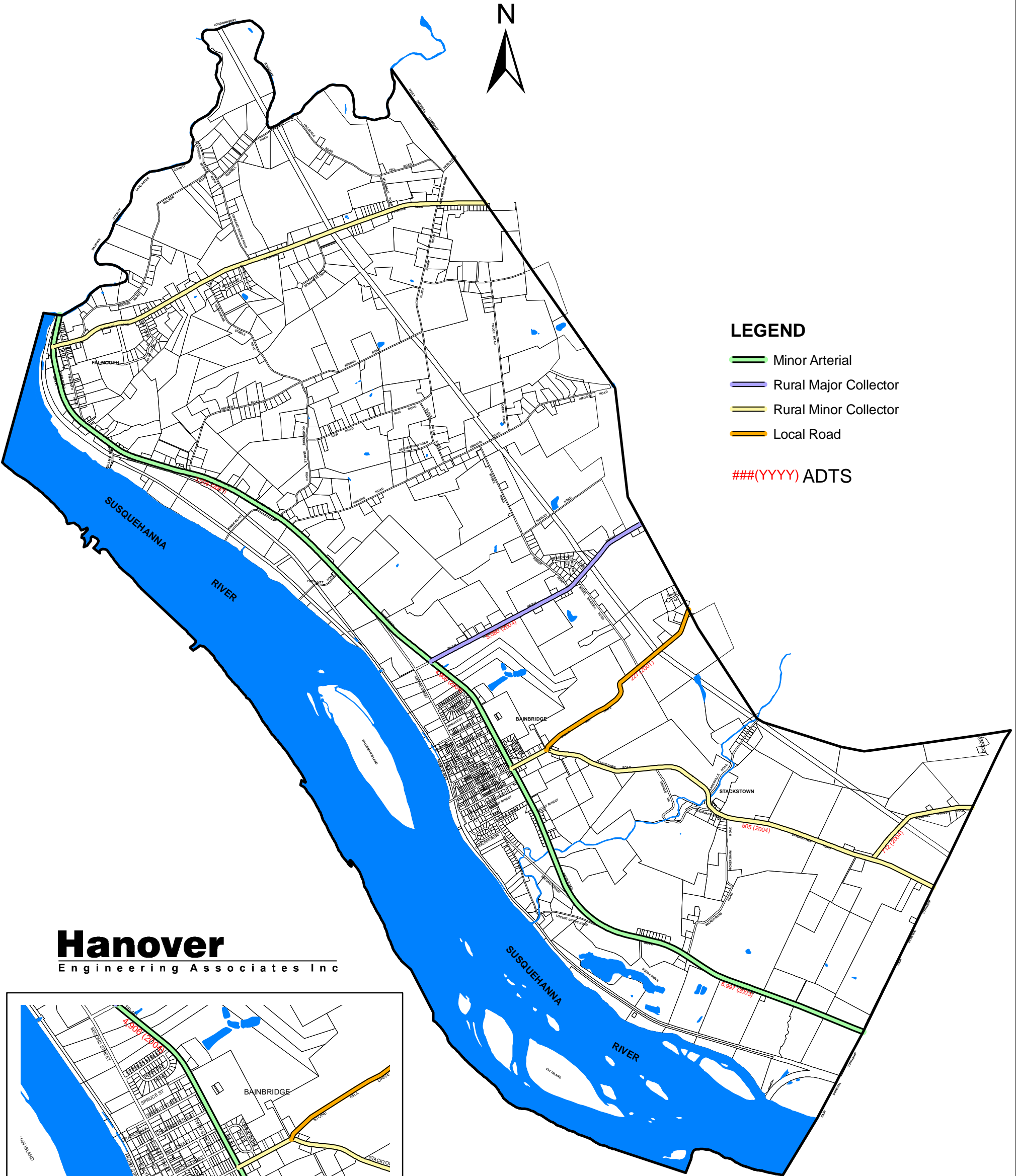


LOCATION MAP

REVISED: MAY 2009

# TRANSPORTATION FACILITIES

## CONOY TOWNSHIP

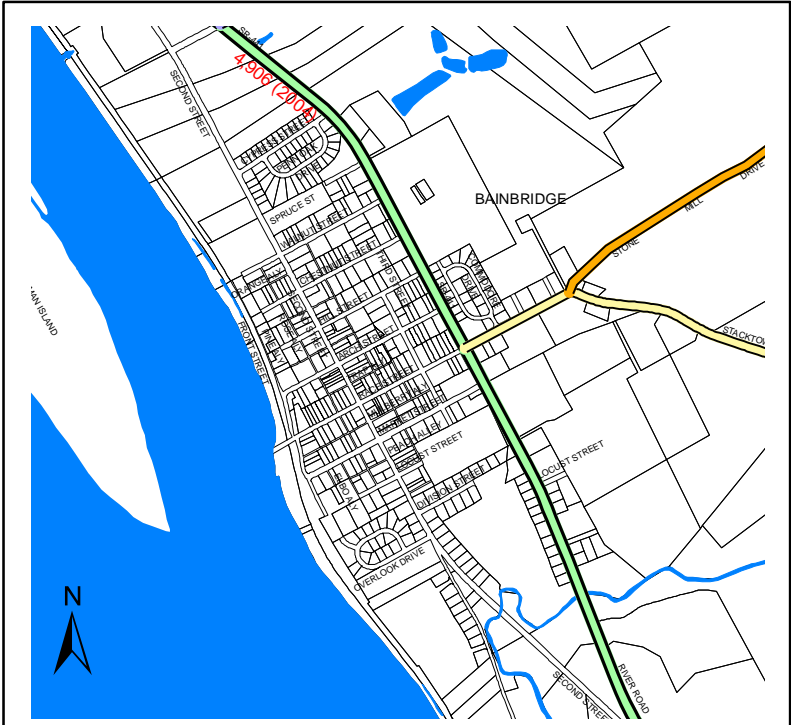


**LEGEND**

- Minor Arterial
- Rural Major Collector
- Rural Minor Collector
- Local Road

###(YYYY) ADTS

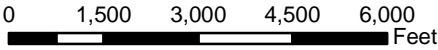
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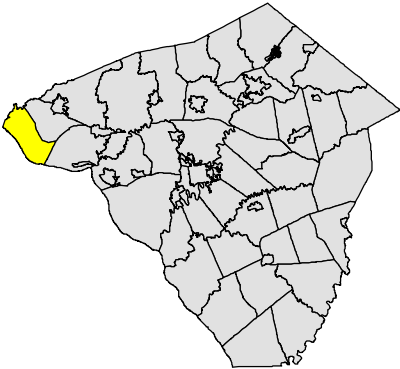
**BAINBRIDGE**



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SCALE: 1" = 3000'



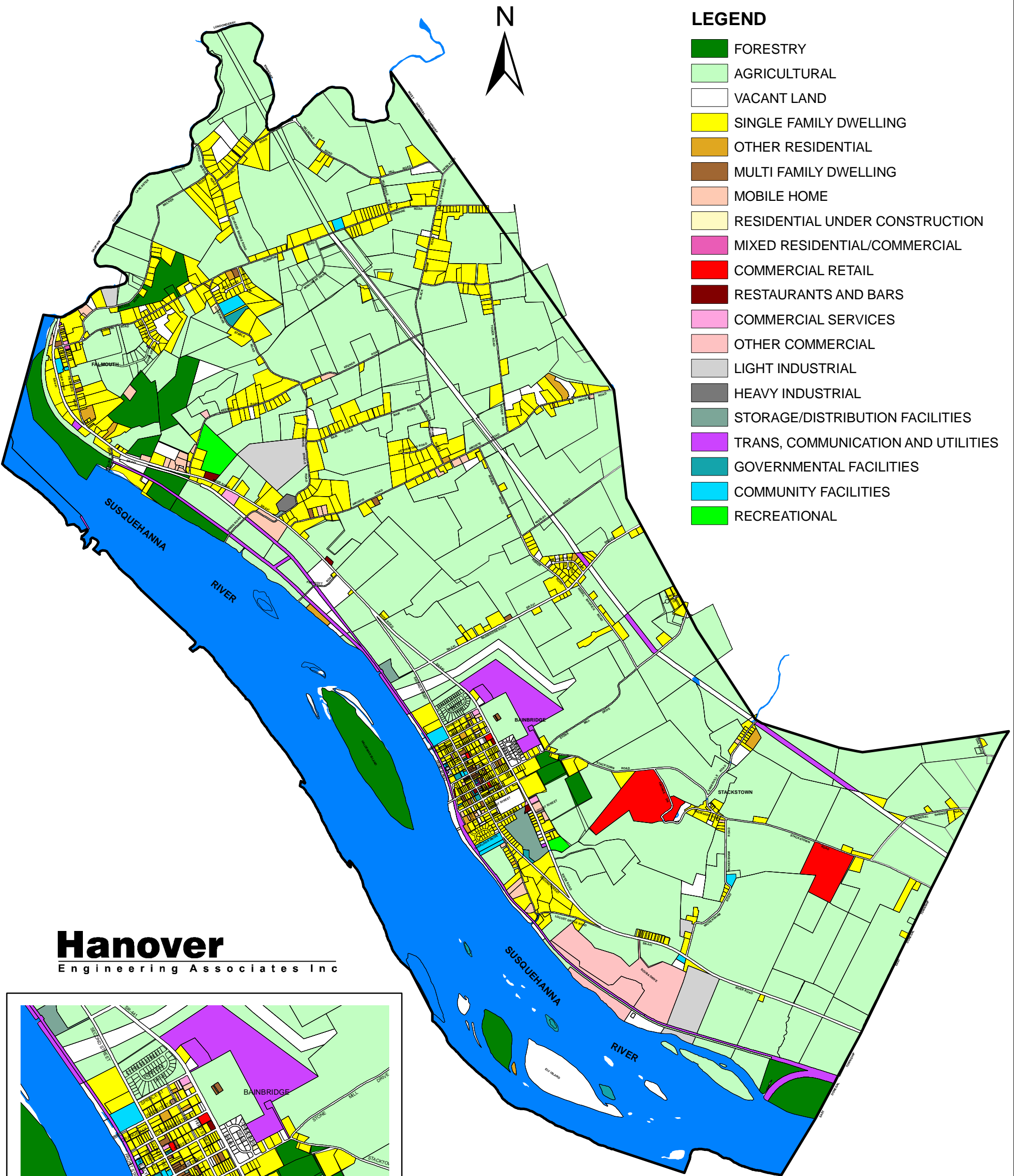
LOCATION MAP

REVISED: MAY 2009



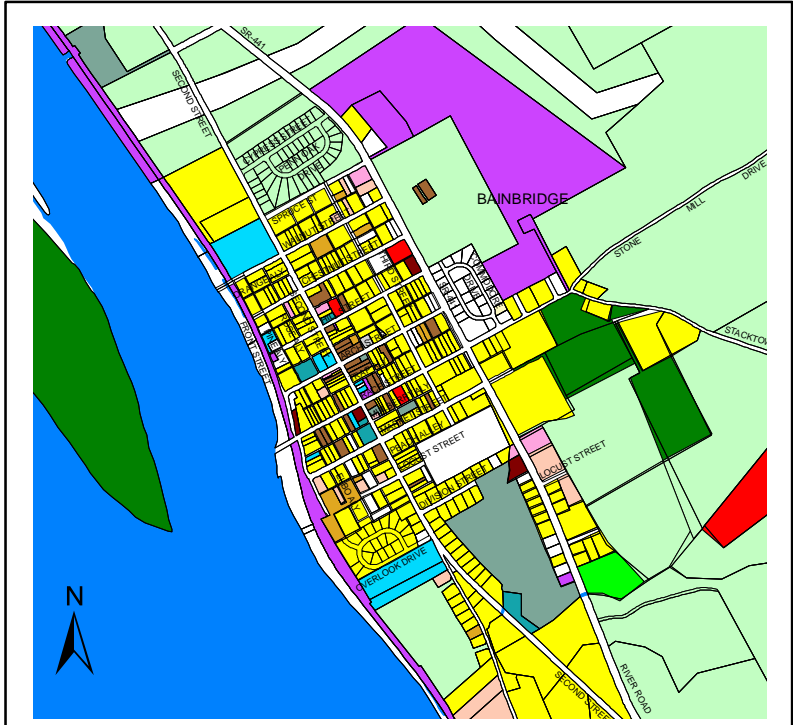
# EXISTING LAND USE MAP

## CONOY TOWNSHIP



- LEGEND**
- FORESTRY
  - AGRICULTURAL
  - VACANT LAND
  - SINGLE FAMILY DWELLING
  - OTHER RESIDENTIAL
  - MULTI FAMILY DWELLING
  - MOBILE HOME
  - RESIDENTIAL UNDER CONSTRUCTION
  - MIXED RESIDENTIAL/COMMERCIAL
  - COMMERCIAL RETAIL
  - RESTAURANTS AND BARS
  - COMMERCIAL SERVICES
  - OTHER COMMERCIAL
  - LIGHT INDUSTRIAL
  - HEAVY INDUSTRIAL
  - STORAGE/DISTRIBUTION FACILITIES
  - TRANS, COMMUNICATION AND UTILITIES
  - GOVERNMENTAL FACILITIES
  - COMMUNITY FACILITIES
  - RECREATIONAL

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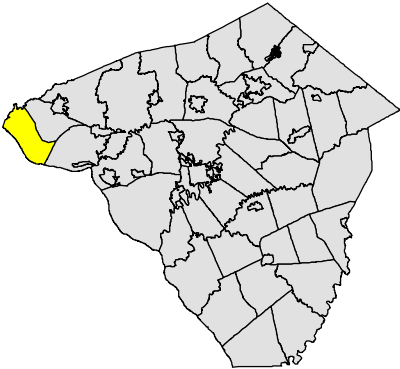


**BAINBRIDGE**

0 2,000 4,000 6,000 Feet  
SCALE: 1" = 2000'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'

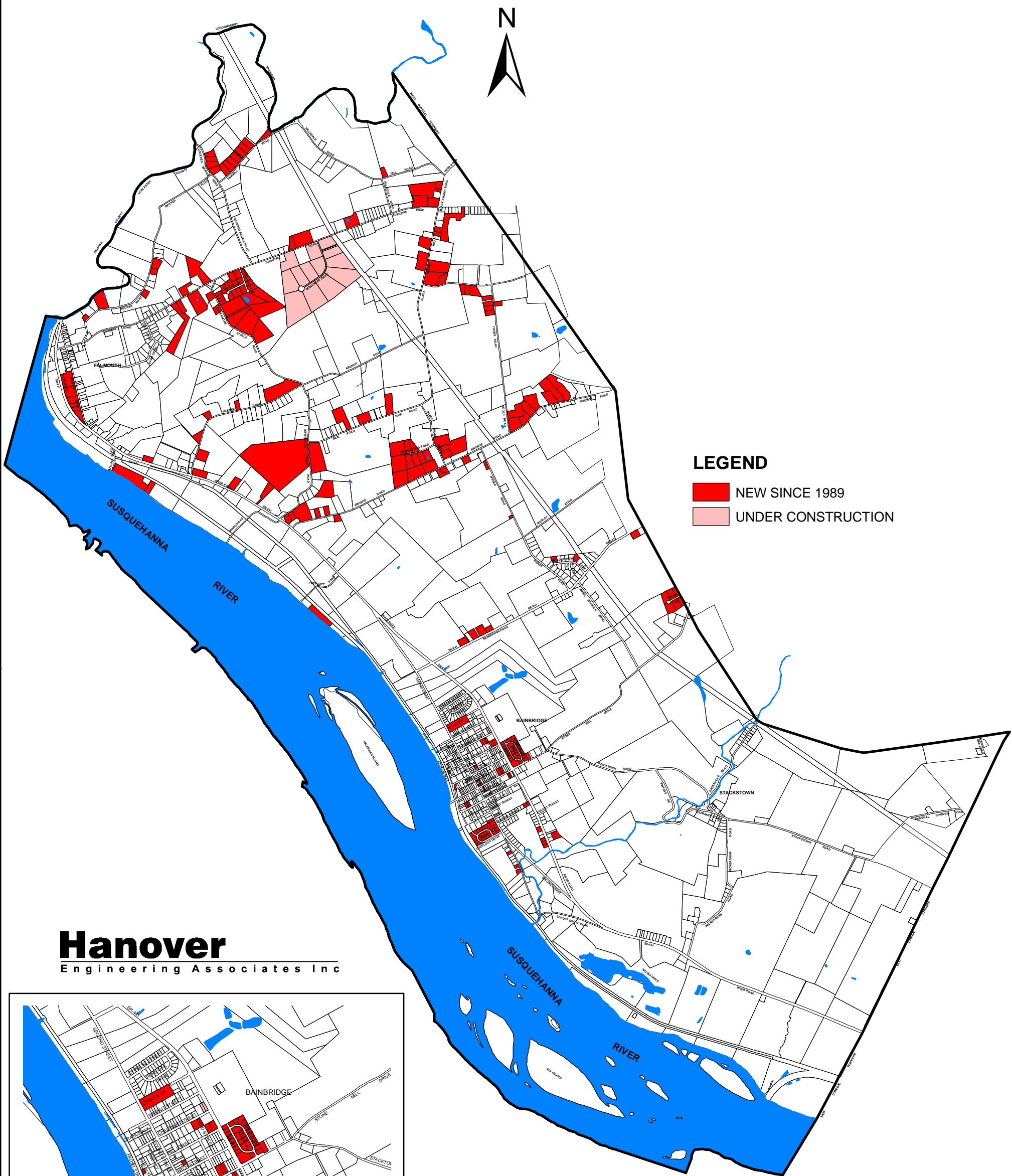


LOCATION MAP

REVISED: MAY 2009

# DEVELOPMENT SINCE 1989

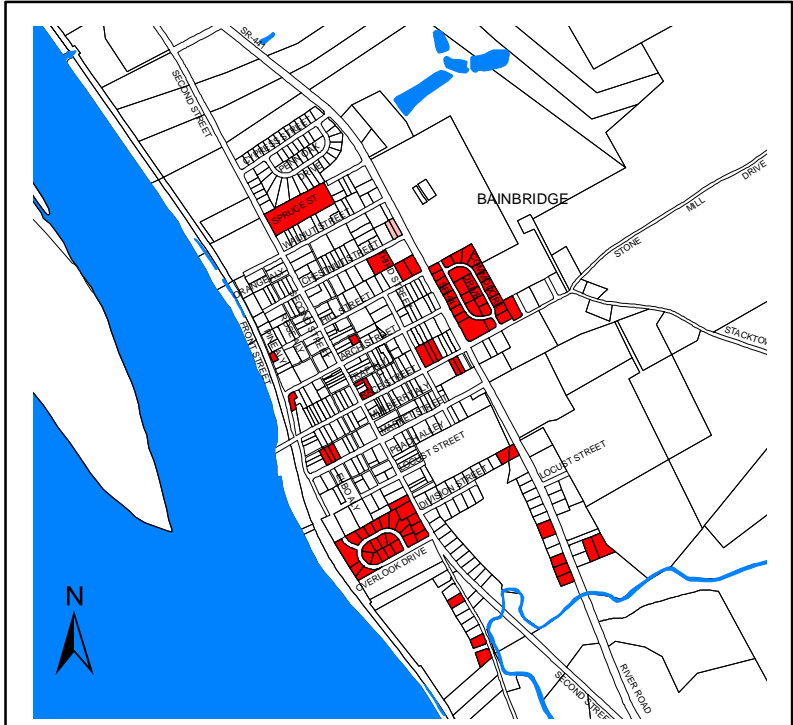
## CONOY TOWNSHIP



### LEGEND

- NEW SINCE 1989
- UNDER CONSTRUCTION

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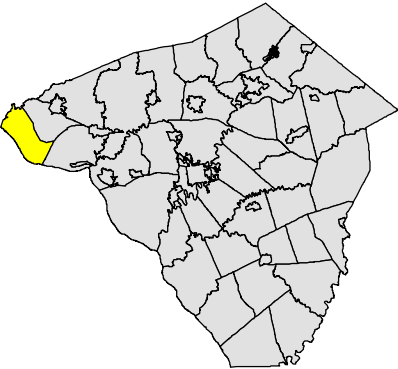
### BAINBRIDGE

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SCALE: 1" = 2000'

0 1,500 3,000 4,500 6,000 Feet

SCALE: 1" = 3000'



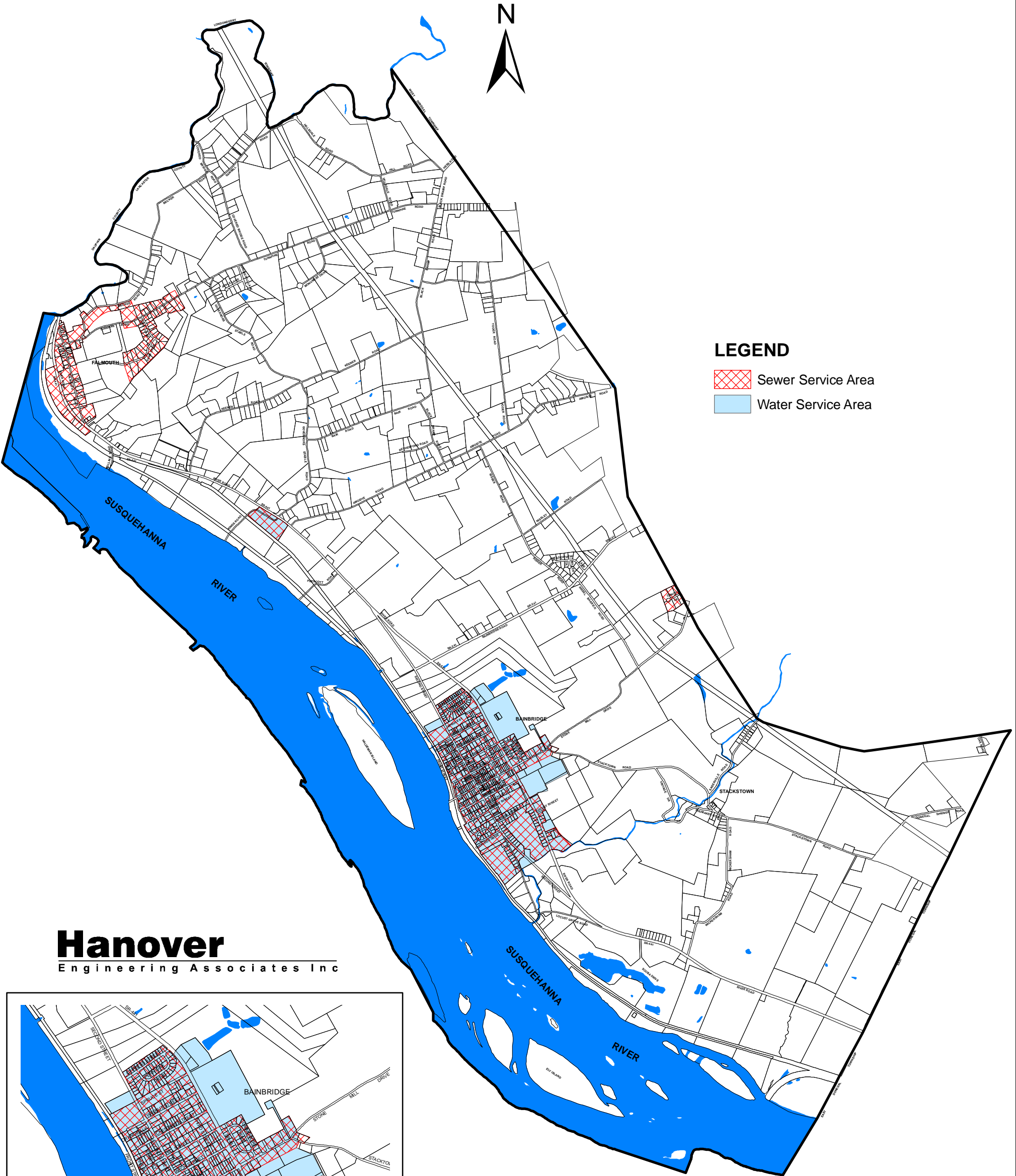
LOCATION MAP

REVISED: MAY 2009





# WATER & SEWER SERVICE MAP

## CONOY TOWNSHIP

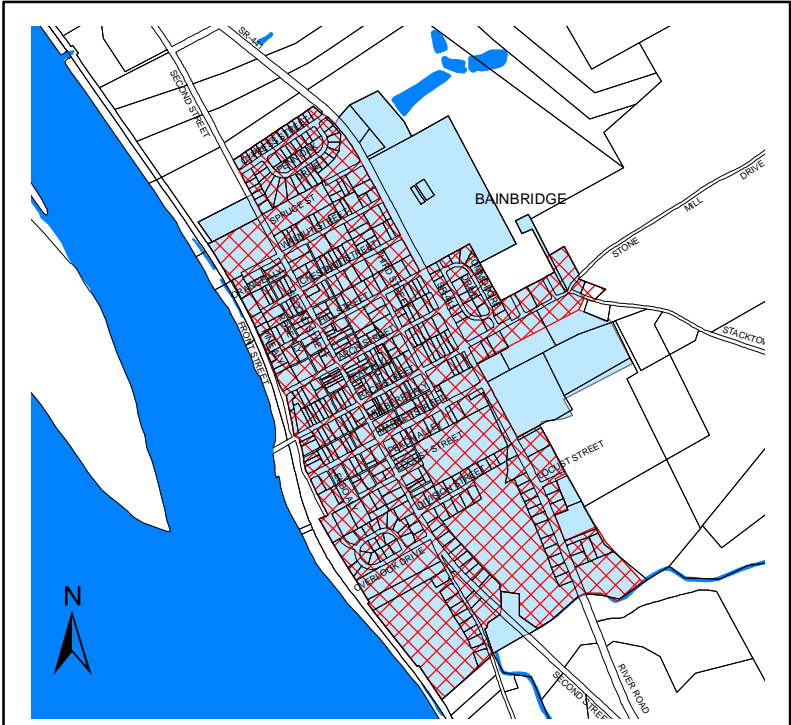


**LEGEND**

 Sewer Service Area

 Water Service Area

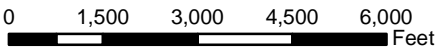
**Hanover**  
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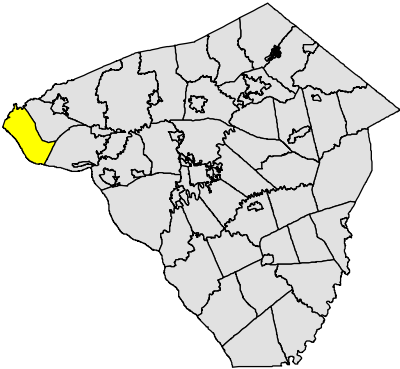
**BAINBRIDGE**

0 2,000 4,000 6,000 Feet

SCALE: 1" = 2000'



SCALE: 1" = 3000'



LOCATION MAP