

Preliminary Land Use Service (PLUS) Application
Municipal Comprehensive Plans
Pre-Update Review Request

Delaware State Planning Coordination

122 Martin Luther King, Jr. Blvd. • Dover, DE 19901 • Phone: 302-739-3090 • Fax: 302-739-5661

Please complete this “PLUS application in its entirety. **All questions must be answered. If a question is unknown at this time or not applicable, please explain.** Unanswered questions on this form could lead to delays in scheduling your review. This form will enable the state staff to review the project before the scheduled meeting and to have beneficial information available for the applicant and/or developer at the time of review. If you need assistance or clarification, please call the State Planning Office at (302) 739-3090. Possible resources for completing the required information are as follows:

www.state.de.us/planning
www.dnrec.state.de.us/dnrec2000/
www.dnrec.state.de.us/DNRECeis/
datamil.delaware.gov
www.state.de.us/deptagri/

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Name of Municipality:	
Address:	Contact Person: Rob Pierce
	Phone Number:
	Fax Number:
	E-mail Address:

Plan certification date: _____

The municipality requests that the enclosed plan be reviewed to provide suggestions for revisions and improvements. The review is also to notify the municipality of any code changes since the certification of this plan that should be included in the scheduled update.

Information prepared by:	
Address:	Contact Person: Rob Pierce
	Phone Number:
	Fax Number:
	E-mail Address:

Maps Prepared by:	
Address:	Contact Person: Rob Pierce
	Phone Number:
	Fax Number:
	E-mail Address:

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General Plan Approval Process

- Step 1:** Draft prepared by local government.
- Step 2:** Planning Commission and/or Legislative Body approves draft plan to send to PLUS.
- Step 3:** PLUS meeting, application submitted by 1st business day of the month for that month's meeting.
- Step 4:** State comments submitted to local government within 20 business days of meeting.
- Step 5:** Local government replies to state comments in writing and submits revised plan (if necessary) to the Office of State Planning Coordination (O S P C) for review.
- Step 6:** OSPC requires 20 working days to reply to revised plan. State sends a letter accepting changes or noting discussion items or if no changes are necessary see step 7.
- Step 7:** Certification letter will be sent within 10 business days of final submission to OSPC.
- Step 8:** The local jurisdiction shall adopt the plan as final following certification. Plan is effective on the date of adoption.
- Step 9:** A copy of the final document and written notification of adoption is to be sent to OSPC.

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Comprehensive Plan / Amendment Checklist¹

Please check yes or no as to whether the following information has or has not been included in the comprehensive plan and indicate page numbers where information may be found.

Public Participation	Yes	No	Page # / Section
Public Participation Summary and Results			

Population Data and Analysis	Yes	No	Page #
Past Population Trends			
Population Projections			
Demographics			
Position on Population Growth			

Housing	Yes	No	Page #
Housing Stock Inventory			
Housing Pipeline			
Housing Needs Analysis			
Position on Housing Growth			
Affordable Housing Plan			

Annexation	Yes	No	Page #
Analysis of Surrounding Land Uses			
Annexation Plan			

Redevelopment Potential	Yes	No	Page #
Identification of Redevelopment Areas and Issues			
Redevelopment Strategy			
Community Development Strategy			

¹ Please go to the following website for detailed checklist information:
<http://www.state.de.us/planning/services/circuit.shtml>.

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Community Character	Yes	No	Page #
History of the Town or City			
Physical Conditions			
Significant Natural Features			
Community Character			
Historic and Cultural Resources Plan			
Community Design Plan			
Environmental Protection Plan			

Land Use Plan	Yes	No	Page #
Existing Land Use			
Land Use Plan			

Critical Community Development and Infrastructure Issues	Yes	No	Page #
Review of Community Conditions			
Inventory of Community Infrastructure			
Inventory and Analysis of Community Services			
Water and Wastewater Plan			
Transportation Plan			
Community Development Plan			
Community Facilities Plan			

Intergovernmental Coordination	Yes	No	Page #
Description of Intergovernmental Relationships			
Intergovernmental Coordination Strategy			
Analysis and Comparison of Other Relevant Planning Documents			

Economic Conditions	Yes	No	Page #
Economic Base / Major Employers			
Labor Market			
Income and Poverty			
Economic Development Plan			

Open Space and Recreation	Yes	No	Page #
Inventory of Open Space and Recreation Facilities			
Open Space and Recreation Plan			

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Implementation Strategies	Yes	No	Page #
Evaluation of Current Codes and Ordinances			
Zoning Map Revisions			
Zoning and Subdivision Code Revisions			
Implementation Plan			
Coordination with Other Government Agencies			

Other State Programs, Policies, and Issues	Yes	No	Page #
Total Maximum Daily Loads			
Corridor Capacity Preservation Program			
Agricultural Preservation Program			
Sourcewater Protection			

Additional Comments:

Summary:

CITY OF MILFORD

River Town, Art Town, Home Town

2016 COMPREHENSIVE PLAN

DRAFT AS OF 04-28-16

DRAFT

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APPENDIX C - PUBLIC PARTICIPATION

CHAPTER 1 INTRODUCTION

Comprehensive planning is a continuous process. Formulation of this text and maps is not the ultimate objective; the use of the plan is what is important, and a Comprehensive Plan is only as good as the measures used to implement the plan. No single document can pose solutions to all community needs, and the Comprehensive Plan must be a flexible, continuous and a changing activity that is periodically updated based on changing conditions, the shifting of resources, and the alteration of goals.

In addition to providing a general organization of the local community interests, the Comprehensive Plan serves the following purposes and functions:

The Comprehensive Plan represents a focusing of planning thought and effort - an attempt to identify and analyze the complex forces, relationships, and dynamics of growth in order that they can be shaped and directed in accordance with recognized community goals and objectives. It is a realistic appraisal of what the community is now, a normative and futuristic blueprint of what the community wants to be, and a specific set of implementation strategies for achieving community desires.

The plan is based on the foundation that if a community knows where it wants to go, it possesses better prospects of getting there. The plan attempts to recognize the relationships between diverse development goals and objectives and establishes a meaningful basis for the resolution of conflicts. A comprehensive plan functions as a master yardstick for evaluating all significant future development proposals. The plan is intended to provide the essential background and perspective for decision-making in respect to regulations, land subdivisions, public investments, and capital improvement programs. The comprehensive plan also provides guidance to businessmen, investors and developers regarding the development of policies and the future direction and intensity of growth. For the community at large, the plan (if properly implemented) assures that land use conflicts will be resolved if not avoided, that misuses of land will not occur, that traffic congestion will be minimized or averted, that community facilities will be located in areas where people can best use them, and that the community's growth will take place in an orderly, rational manner.

CHAPTER 2 PLANNING PURPOSE



The City of Milford currently serves over an estimated 8,200 residents within a rapidly growing corridor along US Route 113/DE Route 1 in Kent and Sussex Counties. The City has developed this Comprehensive Plan in recognition of the goals and objectives outlined in conformance with the Comprehensive Planning Checklist and Title 22.

The City of Milford has a history of steady, sustainable growth. It has successfully portrayed a vision for land use through its Comprehensive Plan, and has implemented projects which moved that vision to reality. The amended 2003 Update and 2008 Comprehensive Plan builds on Milford's plan which was adopted in January 1990, and was revised in 1995.

The Plan was amended in June 2004 to expand the Annexation Plan to the southwest of the City along US Route 113, and again in May 2005 to modify the Land Use Plan and expand the Annexation Plan in both Kent and Sussex Counties. This plan revises and amends the 2003 Comprehensive Plan.

The Comprehensive Plan incorporates significant data from Census 2000 and City-specific growth forecasts based on current conditions, as well as new mapping and geographic data sets available through the City's Geographic Information System (GIS) and various federal and state agencies. Public participation through the appointed Planning Commission, citizen groups, and a citizen survey provided information about how the community views itself as it grows. Under Delaware Code, Title 22, Chapter 7, §702 (e), the City is required to review its adopted plan every five (5) years and to amend the Comprehensive Plan as necessary.

Authority to Plan



City of Milford, 2016 Comprehensive Plan Draft

The City has vested the authority to plan with the Planning Commission, the City Planner and the City Manager, through its Charter. The Charter dictates there shall be a City Planning Commission consisting of nine (9) members appointed by the City Council. The Commission's responsibilities include the formulation of, and recommendation to, the City Manager a comprehensive plan and any

amendments or updates. After receipt of the recommendations of the Planning Commission, City Planner and City Manager, the Council will hold a public hearing on the proposed plan and recommend it be approved with or without amendment. Once the plan is recommended by the Planning Commission and City Council and certified by the Office of State Planning Coordination, the Commission may also review and make recommendations regarding proposed Council action dealing with the implementation of the Comprehensive Plan.

The Charter provides that the City Council will adopt and modify the Comprehensive Plan (a document of text, maps and other graphics) at least every five years. Under Title 29, Chapter 91 the proposed plan will also be submitted to the Office of State Planning Coordination for the Preliminary Land Use Service (PLUS) review process and certification. The adopted Plan may be



certified by the State, and will serve as a guide for future Council actions concerning land use and development regulations, such as annexations, zoning and conditional use permits, as well as long-term budget issues, infrastructure expansions and capital expenses. The Plan will be amended as necessary to remain pertinent to the City's changing population and economic opportunities.

Planning Process

In the mid-1980's, the City of Milford appointed a "Milford Task Force," which oversaw the development of a local census of Milford's demographics and economic activities. The data gathered by the project was used by the Task Force and consultants from the University of Delaware to generate an Action Plan for Milford, Delaware. The Action Plan was adopted by the City Council in 1987 and The Comprehensive Land Use Plan of 1990 was produced in response to the Action Plan. The University revised the maps, "Recommended Future Land Use" and "Major Community Facilities," in 1995.

Public Involvement

In July 2002, the City, through the Planning Department and Planning Commission, initiated the 2003 Update to the plan to incorporate the latest census data and utilize Geographic Information Systems (GIS) to produce data sets for mapping and analysis. In January 2004 the City began, through regularly scheduled meetings with the Planning Commission, to develop necessary revisions to the 2003 Update. In September of 2007 a new process began to update the Comprehensive Plan for the City of Milford with a "Vision" meeting of the Planning Commission. This was followed with a series of meetings with invitees of the Planning Commission to inform the Commission of the proposed future activities of various public and private organizations. These groups included the utility departments of the City of Milford, the Milford Parks and Recreation Department, the Milford School District, the Carlisle Fire Company,

the Milford Chamber of Commerce, Downtown Milford Inc., various local colleges and universities, the Delaware Department of Transportation, and BayHealth.

Throughout the year, (both 2007 and 2008) the Milford Chronicle and the Milford Beacon reported on the planning process through coverage of Planning Commission and Council meetings, as well as in special news items.

Community input included maintaining neighborhood consistency, support for the Mispillion Riverwalk and Downtown redevelopment efforts.

Further efforts to include public comment include a "Residential Survey" 100 of which were distributed to the citizens of Milford, 25 from each of the four wards, through a variety of measures to solicit their input regarding various Land Use and Planning issues. Forty responses were returned and the results of this survey and a copy of this survey are found in Book Four of this plan.

The City of Milford has met with both Planning Departments of Kent and Sussex Counties in order to plan adjacent land uses, to coordinate various concerns and to explain the proposed "Urban Growth Boundary Line" to these representatives as well as representatives of the State.

In addition there have been several workshops and public meetings explaining the Comprehensive Plan and the Visions, Goals, Objectives, Implementation Strategies, and Time Frames.

Essentially, there was one vision meeting of the Planning Commission, three Planning Commission Workshops, five public hearing of the Planning Commission, two public hearings of the City Council and one workshop for residents east of Rt 1.

2004 and 2005 Amendments

The City Council passed a resolution to amend the Plan in February 2004, and representatives of the Office of State Planning met with the City on March 24, 2004 to discuss the scope of the amendments. A public workshop was held on March 30, 2004 to review a number of land use and annexation requests with the public and the Planning Commission. The proposed amendments were reviewed through the PLUS process in April 2004 and March 2005.

During 2004 the City and its citizen's were active in a series of meetings and workshops that investigated options to improve north-south traffic flow along US Route 113. The process of eliminating the suggested western by-pass has significant implications for the location and nature of new development being attracted to the Milford area.

Amendments to the Plan have been advertised as part of the regularly scheduled Planning Commission meetings, and for the Public Workshop, as well as through the PLUS schedule posted on the Office of State Planning Coordination web site. Agendas and newspaper references are included in the Appendices.

State Planning Assistance

The City received a Livable Delaware planning grant in August 2002 and again in May 2004 to assist in the development of plan updates and amendments. The Office of State Planning Coordination assisted through providing a number of guidance documents, participation in public meetings and through the coordination of a pre-submission meeting where many of the plan elements were presented to representatives of Sussex County and Kent County and various state agencies for informal comment.

Implementation

To implement the elements of this Comprehensive Plan, the Council will adopt or amend its land use and development regulations by ordinance, including but not limited to updating its charter, maintaining its official zoning map, and adding to or revising its zoning, subdivision and other land use regulations.

The City of Milford maintains the position that “directed growth” is necessary for the health and well being of the community. Milford’s centralized location, transportation system and water and wastewater infrastructure permit a wide variety of economic activities and housing options which can be protected and optimized through municipal ordinances, transportation planning, and coordination with other agencies with planning mandates for the City and its environs. Through this Plan the City presents its vision of a possible future; however, *the plan is not intended to promote accelerated growth or to coerce annexation.*

The State of Delaware outlined its goals in the December 1999 Strategies for State Policies, and March 2001 Livable Delaware initiatives, to...“help manage new growth. . . while revitalizing towns and cities and protecting the state’s environment and unique quality of life.” In March 2001, Governor Minner proposed and the General Assembly passed legislative initiatives which were directed at implementing the Strategies’ goals. The City of Milford recognizes the strengths of the Livable Delaware goals, while maintaining the City’s right to consider annexation requests, per the City’s Charter, and to develop its own unique zoning ordinance.

The adopted plan “shall have the force of Law and no development shall be permitted except as consistent with the plan.” The finalized plan will be submitted to the Governor and the Governor’s Advisory Council on Planning Coordination for review, possible public hearing, and ultimately, recommendations regarding certification. The City of Milford has the right to reject or accept any or all recommendations regarding its plan.

The City of Milford has the right to expand its boundaries through annexation under Delaware Title 22 Municipal Corporations, Chapter 1. General Provisions §101 Annexation by city or town. As of July 2001, all annexations must be consistent with the most recently adopted comprehensive plan meeting the requirements of Title 22, Chapter 7. The municipality shall not approve any annexations until the comprehensive plan or plan amendment is adopted.



The scope of work that produced this Plan included:

- Updating the City's planning area (referred to as "The Urban Growth Boundary Area"), to show the City boundary, 5-year planning area, and available records on City zoning.
- Holding public meetings, through Planning Commission and Council for discussion and approval of a comprehensive development and annexation plan.
- Initiating discussions between the City (Planning Commission, Council and City Departments) and representatives of the County and various State or local agencies (OSPC, DNREC, Milford School District, for example) to form the basis of a draft document.
- Developing an assessment of infrastructure and security needs for the planning area (including commonalities and/or physical interconnections with other systems), capacities, and expansion potential.
- A review of the Plan through the State Preliminary Land Use Service (PLUS) process.

CHAPTER 3 LOCATION

The City of Milford is located on the Mispillion River, within both Kent and Sussex Counties. The historic center of the town lies on the River, bracketed between US Route 113 on the west side of town and Delaware Business Route 1 on the east. The City is approximately 95 miles from Philadelphia, Pennsylvania, 85 miles from Baltimore, Maryland and 100 miles from Washington, D.C. At a more local level, the City lies 19 miles south of Dover, the Kent County seat and State Capitol, and 17 miles north of Georgetown, the Sussex County seat.



Jurisdictions

The City's motto, "Garden City of the Twin Counties," well describes a town which is dedicated to its green space and which operates within a multitude of districts and jurisdictions. At the State level, elected officials of the General Assembly Senate Districts 16 and 18, and House Districts 33 and 36 represent Milford's citizens.

Kent County is divided into six Levy Court districts, which elect the County's governing commissioners. The Kent County portion of Milford is located within the 4th District. Sussex County is divided into six Council districts. To the west of Herring Branch/Deep Branch the City is included in Council District 2. East of the Branch, District 3 represents City residents.

The City is included within the Milford School District, which also lies on both banks of the Mispillion River. Milford is home to the District's High School, two Elementary schools (Lulu M. Ross and Benjamin Banneker), a Middle school and an administrative headquarters. A proposed Milford Academy will be constructed near the existing High School beginning in 2008, comprising eighth and ninth grades.

Because of its location within the Delaware Bay drainage, Milford's water use planning is overseen by the interstate Delaware River Basin Commission.

The City is located in the Milford Hundred (Kent County) and Cedar Creek Hundred (Sussex County) geopolitical divisions for property ownership location.

Physiography

The City's physiographic location is described as the Atlantic Coastal Plain, and the Delmarva Peninsula. The significant feature of the province is its flat to rolling ground surface that lies at less than 50 feet above sea level and falls steadily to the Delaware Bay shore to the east. Milford is at the center of the Mispillion River Watershed, which is in turn a tributary basin to the Delaware Bay drainage. The bay coastline is dominated by tidal wetlands, and is an area marked for preservation through National Wildlife Refuges, state and private reserves, enrollment in Delaware's agricultural preservation programs, and wetland regulations. A map showing the location of the City and the greater Milford area is shown as Map No 3. The 2004 study modified the Greater Milford Area based on transportation and commuting trends, provision of medical, financial and library services, the evaluation of the school and fire district boundaries and information from retailers regarding store siting criteria. Within a radius of approximately 6 ½ miles (or 10 minutes drive), people will look to Milford for employment, employees, shopping and a wide variety of services.

This Comprehensive Plan developed a much smaller area of study to include the existing corporate boundary and a reasonable area of growth potential during the next five to ten years. While the Greater Milford Area may be defined as a regional "shopping shed area", this Plan takes a greater in-depth approach to the existing "area of concern and potential development". Development proposed and constructed within the Greater Milford Area will affect the City and place additional demands on its transportation system, educational facilities (both public and private), and environmental assets over the next five years. Therefore, the City and its staff are available and agreeable to coordinate with the public, surrounding towns, both adjacent counties and any other governmental agencies.

The steadiest residential growth has been to the southeast, along DE Route 1. Perhaps the most important factor for Milford's increased popularity as a full-time residential community is its proximity - less than 25 miles - to the popular Delaware Atlantic Coast, with its beaches, discount shopping and entertainment. New transportation plans to enhance the traffic flow on US Route 113 to the south will increase the interest in Milford as an attractive place to live, work and shop while enjoying ease of access to the Delaware and Maryland beaches.

The City lies at the dividing point between two major north-south transportation corridors. DE Route 1, also known as the Coastal Highway, runs southeast from Milford parallel to the Delaware Bay shoreline to Rehoboth Beach, where the highway swings south along the Atlantic Coast. US Route 113 runs south through Milford, which is located approximately midway between Dover and Georgetown. Also radiating out from Milford are: DE Route 36 east to Slaughter Beach, and west to Greenwood; DE Route 14 west to Harrington; DE Route 15 northwest to Camden and DE Route 30 south-southeast to the Milton area and onto Millsboro. Growth trends and pressures across central and eastern Sussex County will have significant impacts at Milford's location as an economic and employment designation.

CHAPTER 4 HISTORY OF MILFORD

While the Milford Hundred in eastern Kent County and the Cedar Creek Hundred in northeastern Sussex County were settled in colonial times as farming districts, the site of Milford was selected as a small, riverside manufacturing and shipping community organized by the Reverend Sydenham Thorne and Joseph Oliver in 1787. Oliver subdivided his farm into town lots and Thorne erected wharves and a sawmill. The town grew rapidly on the north bank of the river and spread north and east, from the mill site that was located at Mill Street on the River. This mill was followed by a number of additional mills in the same area. The industries that first prospered in Milford, either supplied goods needed by the local farming community or processed products of the farms and forests. In 1807, the town on the north bank of the Mispillion was incorporated and a Board of Commissioners was established.

With a good supply of different varieties of wood in the area, shipbuilding became an important industry in the 1820's and it expanded to its height between 1850 and 1890, when over 150 ships of 100 to 600 gross tons were built. Most of these were two masted wooden schooners. However, with the advent of the steel hull, the steamboat and the railroad, shipbuilding in Milford declined until the last yard, the Vinyard Shipyard, remained during the first half of the 20th century. During World War I, this yard built three submarine chasers and four Navy tugboats. During World War II, the shipyard launched 14 submarine chasers and 12 Navy leave boats.



Fortunately, other enterprises formed a diversified economy in Milford. In 1815, P.F. Causey and his family moved to Milford, and he and his son managed a variety of mercantile businesses and industries. The Causey's engaged in the mining of bog ore, operated two saw mills, a tannery and two flour mills. They made good use of the Mispillion River by shipping products to Philadelphia and New York. Eventually, the junior partner Peter F. Causey became sole owner of the business and in 1854 was elected Governor of Delaware.

The middle of the 19th century also saw Milford's economy participate in the industrial revolution. The City's industries included machine shops to support the surrounding agricultural businesses with the repair of steam engines, fruit evaporators and corn shellers.

In 1856 the town's population was 2000, according to one of Milford's newspapers, *The Gleaner*. The town had 25 stores, 2 hotels, and 12 schooners and sloops running to Philadelphia. Export items shipped to the major east coast ports included grains and other farm

products, wood products and holly. As the economy grew, so did the need for financial services and in 1876, the First National Bank was established. At this time period, the First National Bank and most of Milford's businesses were headquartered in Kent County.

Milford continued to thrive into the 20th century. In 1887, the town re-incorporated to include the developed areas to the south, in Sussex County, and with the new charter, the City gave women the right to vote. Also in 1887, the first electric light plant built south of Wilmington was started as a private enterprise in Milford. Until the 1920's, electricity was provided only during nighttime hours. The construction of Delaware's first highways in the early 1900's assured continued transportation options for produce and manufactured goods from Milford. In 1925, the fire company raised funds to support a community building. Throughout the 1930's Milford's conservative business habits assisted in insulating the local economy from the more serious impacts of the Great Depression. In 1936, a new sewage treatment plant began operations that began the slow recovery of the polluted Mispillion River.

The City's geographic heart and its many public services are still centered on the River. The City has been actively expanding a greenway network of walkways and bridges to link the downtown area with historic landmarks, schools, public parks and shopping areas.



Historic Structures and Districts

Most prominent of the historic structures preserved in Milford is the Parson Thorne Mansion located on NW Front Street. Surrounded by a spacious lawn and ancient linden trees, the building's beginnings date back to the early 1730's.

During the subsequent 200 years, varied owners of the home added their own architectural imprints with additions in the Georgian and Victorian styles.

Three other notable historic homes include the Banking House (two brick buildings built in 1787 and 1811) and The Towers, a "Steamboat Gothic" inn, originally built in 1793, on NW Front Street and Causey Mansion, a Greek Revival-style home.



Three separate historic districts are found in the City of Milford. The *North Milford Historic District* is located north of the Mispillion River in Kent County. South of the Mispillion River in *City of Milford, 2016 Comprehensive Plan Draft*

Sussex County are the *Shipyards* and the *Victorian Historic Districts*. These Districts are shown on Map 6.



The *North Milford Historic District* encompasses the area of Milford's earliest beginnings as a small riverside community. Its significance is defined by its development as an economic center, bringing craftsmen, farmers, carpenters and coopers to the area. These craftsmen relied on the local resources and also the river for transporting goods and materials. The District contains approximately 21.5 acres, extending from an easterly boundary of N Walnut Street, a westerly boundary near Silver Lake and a northerly boundary as far as NW Third Street. NW Front Street runs through the District and

contains early nineteenth century structures. Federal, Greek and Gothic Revival structures are other examples of architecture also represented in this District.

The *Shipyards Historic District* is the smallest district, containing only 4 acres. It is found along a portion of the Mispillion River in Sussex County and is bordered by a portion of the south side of Mispillion Street, and on the easterly side it extends to the intersection of Franklin Street and Cedar Alley. While small in size, this District contains Milford's only surviving shipyard and examples of worker's housing. Shipyards were established in Milford in the late eighteenth century. The river economy was of great importance to the area and to the movement of goods and materials, and eventually passenger traffic. Milford became second to Wilmington in the size and number of shipyards in the State of Delaware by 1859.



The *Victorian Historic District* represents a building period during the prosperous decades of Milford's history when the south side of the River became integrated into Milford's society. It is also considered the last stage of Milford's early development as a community, with building in this area beginning after 1870. It consists of 28 acres, starting at the southern bank of the Mispillion River and following a stretch of S Walnut Street to the railroad tracks and a part of S Washington Street. This District also extends along a portion of Causey

Avenue. This District contains examples of the variety of decorative and ornamental elements used, as well as a breakaway from the traditional domestic floor plans.

Today, the City of Milford, with a population of approximately 8200, serves as a major employment and business center for southern Delaware. Milford prides itself on the quality and variety of its neighborhoods as well as its historical, cultural, educational and recreational resources that have grown from the banks of the Mispillion River.

Cultural Resources Plan

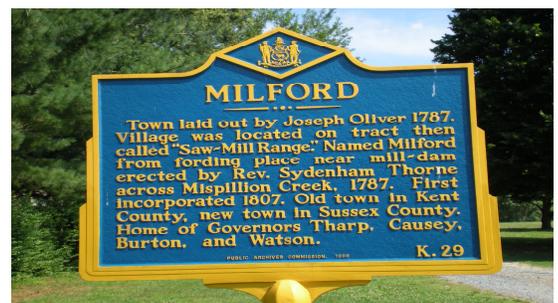
Milford has a rich history that contributes to its community character and the quality of life within the City. Preservation of the physical artifacts that relate to this history, as well as protection of the environment of the Mispillion River, the heart of so much of that history, will maintain and enhance the appearance and ambience of the City and will continuously remind its citizens of their community's past.

Milford is fortunate to have the Milford Historical Society and the Milford Commission of Landmarks and Museum, two community-based organizations dedicated to history and its preservation. In addition, Milford has three designated Historic Districts, which include residential and historic industrial properties in both Kent and Sussex County. The City will continue to support these organizations through recognition, provision of City services to support their events and functions.

Markers have been placed to indicate the Historic Districts, through partnership with private interest groups. Promotion of the City's historic and cultural resources is one key to the success of Milford's integration of the Mispillion Riverwalk master plan and economic redevelopment of the Central Business District.

At present the City has developed a Historical Preservation Ordinance, further public meetings and hearings with all parties will be held to refine and improve this regulation which will add additional regulations to improvements which will be made for all buildings in the three Historical Districts. A draft of this proposed ordinance is attached in Book Four. In addition, the City of Milford through Downtown Milford Inc. was designated as a "Main Street" municipality which would further enhance the Downtown area and the three adjoining Historical Districts. Under this Update, the municipal departments and commissions will continue to work with private groups to recognize properties which are of significance to the Nation, to the State of Delaware or to the community. If requested to assist private preservation efforts, the City will support property owners' requests for federal funding for historic preservation.

Finally, in conjunction with its Transportation Plan the City will encourage DelDOT to develop an alternate route for heavy truck traffic currently moving through the North Milford Historic District. The Historical Society and Downtown Milford, Inc. have expressed concern over the vibration due to heavy vehicle traffic moving through the Historic District on NW and NE Front Streets.



CHAPTER 5 ECONOMICS

Although initially settled as a farming community, Milford's location on the navigable Mispillion River allowed an important manufacturing center to develop. In the late 19th Century, the City was a shipbuilding center, producing nearly 300 vessels, including threemasted schooners that sailed both the Delaware Bay and Atlantic Ocean.

Today, Milford's economic base is strong through diversification. The business community is a mix of small and mid-sized local businesses, as well as important facilities of national firms such as Perdue, Inc. and Dentsply/Caulk. The business base includes manufacturing and industrial enterprises, a rapidly expanding medical arts sector, professional, educational and government services, as well as retail businesses. Milford's employers are balanced between both Kent and Sussex County portions of the City. Information provided by the 2000 Census showed Milford with a labor force of 3,152 persons, and an unemployment rate within the population ages 16 and older (5,246 persons) of 4.6 percent.

Milford's residents find work both within the City and throughout Kent and Sussex Counties. The 2000 Census reported that 24 Milford residents serve in the Armed Forces, while approximately half of Milford's civilian labor force is employed in three business sectors, tabulated below.

TABLE 5A: Labor Force Employment

BUSINESS SECTOR	PERSONS	PERCENT OF TOTAL LABOR FORCE
EDUCATIONAL, HEALTH AND SOCIAL SERVICES	649	22.5%
MANUFACTURING	464	16.1%
RETAIL TRADE	336	11.6%

Source: 2000 Census

These figures reflect, in part, the employment opportunities within the City offered by the Milford School District and within the growing medical arts sector.

The largest employers within the City include agribusiness and related food processing facilities, manufacturing firms and medical service providers. The City's largest employers are tabulated below. Recent inquiries have shown a continuing improvement in the employment picture for the City of Milford as indicated by the increase in the total number of jobs from 2004 to late 2007.

TABLE 5B: Largest Employers

	EMPLOYER	TYPE OF BUSINESS	NO. OF EMPLOYEES 02/28/03	NO. OF EMPLOYEES 12/07/07
1.	PERDUE, INC	POULTRY PROCESSING	1000	1350
2.	BAYHEALTH	HOSPITAL HEALTH CARE	650	810
3.	DENTSPLY/CAULK, INC	DENTAL SUPPLY MANUFACTURE	469	436
4.	MILFORD SCHOOL DISTRICT	EDUCATION	350	502
5.	SEAWATCH INTERNATIONAL, INC	SEAFOD PROCESSING	300	300
6.	DE DEPT OF HEALTH AND SOCIAL SERVICE	HEALTH CARE	232	250
7.	WAL-MART	RETAIL	165	447
8.	KENT-SUSSEX INDUSTRIES	SHELTERED WORKSHOP	130	100
9.	MILFORD FERTILIZER	AGRICULTURAL PRODUCTS	120	319
10	CITY OF MILFORD	GOVERNMENT	80	115
	TOTAL		3496	4629



These organizations employ over 4,600 persons, and together with many other smaller businesses, contribute to a healthy demand for employees and derivative demands for transportation options and housing within the City.

Perdue, Inc. operates a poultry processing plant within the City. The plant provides employment opportunities for unskilled labor and is a significant employer for Milford's growing Hispanic

and Black populations. In addition, Dentsply/Caulk, Inc. has received approval for a 12,000 square foot addition to their facility at Masten Circle, with the expectation of an additional 10-20 employees working at this facility.



The City of Milford has developed an Industrial Park, located northwest of the intersection of US Route 113 and DE Route 14. This development is mostly occupied, with one 20+/- acre parcel remaining. The Greater Milford Business Park is located in the northwest area of the City. Phase 1 is located on the south side of Airport Road, and all the utilities have been installed. Phase 2 called **Independence Commons** is on the north side of

Airport Road and is targeting sales to health and social service providers and other interested employers. Current occupants include the Delaware Veterans Home, Delaware Hospice and the Boys and Girls Club which is currently under construction. **Independence Commons** has a variety of available lots. The Greater Milford Business Park and Independence Commons are shown on Map 7.



Additional information provided by the State of Delaware shows continued growth in employment and a decreasing unemployment rate as evident by the following table.

TABLE 5C: Area Unemployment Rates (not seasonally adjusted)

	SEPT. 2007	AUGUST 2007	SEPT. 2006
NEW CASTLE COUNTY	3.1	3.1	4.3
KENT COUNTY	2.9	3.1	3.0
SUSSEX COUNTY	2.5	2.6	2.9

Income

The median household income in Milford has been reported as \$32,525 and the median family income as \$40,333, based on the 2000 Census. Recent statistics provided by the Delaware Economic Development Office for 2007 shows an Average Household Income at \$51,216 and Median Household Income at \$40,768 (an increase of 25% since 2000) and per capita income at \$20,760.

Information provided by the 2000 census showed Milford with a labor force of 3,152 persons, and an unemployment rate within the population ages 16 and older (5,246 persons) of 4.6 percent. Approximately 10 percent of the population had incomes below the poverty level.

The values reported for unemployment, median income and poverty reflect Milford’s position as an urban center, with available low-cost housing, and employment opportunities for unskilled labor.

Travel To Work

Traveling to and from the work place is an expense of time and money for the worker. In Milford, the average commute time to the work place is 20 minutes, which is lower than either the Kent County or Sussex County averages. Milford's work force is located close to employment opportunities and this is reflected in the lower commute time, as well as in the level of walking, biking and use of shared transit options, which provides a place to live, work, shop, and play.

Poverty

According to the 2000 US Census there were 184 families below the poverty level or 10.4%. This is somewhat higher than the U.S. percentage of 9.4%. In addition there were 950 individuals below the poverty level or 14.4% which again is above the U.S. percentage of 9.2%.

Redevelopment

The most successful redevelopment program has been through the public/private partnership with Downtown Milford, Inc., (DMI) a non-profit organization. The group has assisted in implementation of Milford's streetscape projects, as well as working with private developers on the conversion or renovation of existing buildings in the center of the city. An example of successful renovation was the conversion of the Kent Sussex Inn, a three-story hotel that had been closed for over 10 years, to office space with parking. The State of Delaware Department of Health and Social Services now occupies the building.

Downtown Milford, Inc. is organized to stimulate economic development: 1) by encouraging cooperation and building leadership in the business community, 2) by creating a positive image for the downtown area by promoting it as an exciting place to live, shop and invest, 3) through the improvement of the downtown appearance, and 4) by rebuilding and diversifying the downtown economy.

Grant funding for redevelopment projects are administered by Downtown Milford, Inc., and supplied through the State of Delaware Community Redevelopment Fund program. A revolving loan fund is also administered by DMI, using seed money from the US Department of Agriculture.

The objectives of Downtown Milford, Inc. are promoted by the City through the Central Business District zoning classification and through the Mispillion Riverwalk master plan.

New joint efforts with DMI include a new provision to the Historical District Ordinance to improve and protect buildings in the three established Historical Districts and working jointly with the DMI which has culminated in its efforts to be designated as a "Main Street" city. This will further improve the Downtown Area of the City of Milford.

Beyond the downtown area, other redevelopment challenges include under-utilized industrial space located in Sussex County on South Washington, McColley and Marshall Streets. From 2005 to 2008, the shopping center on NE Front Street is being refurbished, and other potential

sites are found in Kent County along Rehoboth Boulevard. The City's policy is to coordinate with Delaware Economic Development Office to find interested parties for utilization of these and other properties that may become suitable business opportunities.

Housing

Based on the 2000 Census data, Milford included 2,918 housing units with a variety of structure and density options. Housing was re-surveyed in early 2004, as part of a water and wastewater planning study and are included in this discussion. Total numbers of housing units were recalculated in early 2008 using the Permits Issued Report for the various years. This method showed 492 single family permits being issued, 72 permits for villa units and 100 condominium units being constructed between 2003 and 2008 for a subtotal of 664 units. Residential permits issued between 2000 and 2003 are estimated at approximately 50 units for a total of 714 residential units. This would then give the City of Milford approximately 3650 residential units. In addition the number of residential accounts from the Water Department shows 4,011 units with approximately 160 water customers outside the corporate boundary line of the City of Milford for an estimated count of 3850 residential customers. Approximately 74% of the units are single family units and the remaining 26% are multi-family. According to the DEDO report approximately 3240 would be occupied, or 90%.

TABLE 5D: Housing Types From the 2000 Census

HOUSING OPTION	UNITS	PERCENT
SINGLE FAMILY	3540	66%
MOBILE HOMES	26	1%
MULTI-FAMILY/APARTMENTS	1804	33%
TOTAL	5370	100%
OCCUPIED	3900	72%

The 2000 census reports that slightly less than half (1,308 of 2,753) of the occupied housing is owner-occupied, with many units available through rental agreements. Based on the development plans for the currently building projects and additional projects in the annexation/site review pipeline, the level of owner-occupied housing is anticipated to rise.

Housing trends in Milford are in transition from being typical of Kent County, where residence is full-time and most homes are the primary residence. In contrast, Sussex County homes are reported as only 67% occupied. The Sussex County figure does not represent a housing glut at this time, but rather reflects the demand for vacation and second-home properties near the beaches. The Milford area was experiencing demand for up-scale condominium and summer home units until the downturn in the housing market. Recent trends show a 35% drop in housing units constructed from 2006 to 2007 for the City of Milford, with the tendency to continue in 2008.

The age of the housing stock reflects Milford's long history on the banks of the Mispillion, as well as variations in the City's economic climate as the service sector grows and manufacturing declines. New units have been added at a rate of over 10% per decade since the 70's. This rate was significantly higher (approximately 19%) during the 1990's and early 2000's when interest and mortgage rates were at very low levels and the US economy was strong. During that same

time, Milford's downtown revitalization program, organized under the nonprofit Downtown Milford, Inc. also began. Renovation of many of Milford's larger turn-of 20th century homes is a popular alternative to new housing.

Since 2000 the housing industry has been on a "roller coaster". Between 2000 and 2005 the price of housing was increasing at a rapid rate, forcing many potential home buyers to get into homes based on creative financing at "sub prime" rates. This housing boom was based on the premise of substantial increases of housing beyond the normal rate of return of 4% per year.

Since 2005 this "housing boom" has burst with many existing homeowners finding it difficult to meet their monthly mortgage payment, with many filing for bankruptcy or abandoning their property. A resulting consequence of this creative financing has been the substantial decrease in the availability of homeowners being able to sell their property and moving to the Milford Area. This has also affected the future development plans of residential units coming on the market, with many developers delaying or postponing construction of their plans until the "financial crisis" is stabilized.

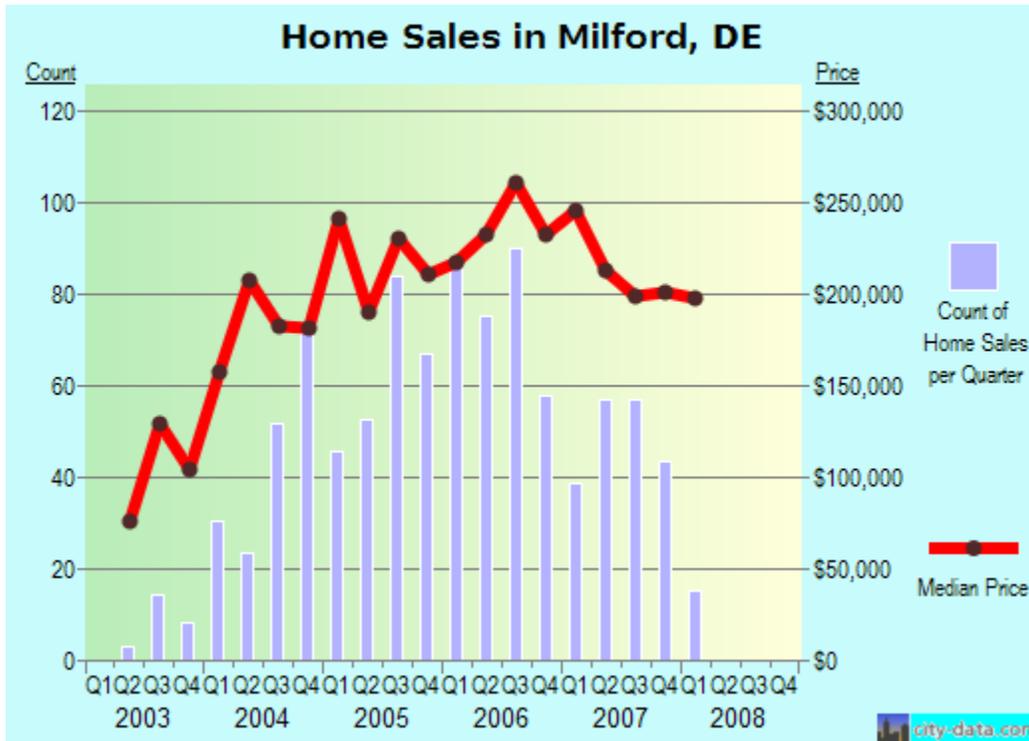
While a range of housing options are available in Milford, including apartment units located with walking or a bike ride to public transportation, shopping and work places. Housing values reported by the US Census in 2000 were generally under \$120,000. This value has fluctuated over the past eight years, peaking in the 2003-04 and then retreating beginning in 2005-08. Checking the Real Estate prices of homes available for sale, show a variety of options and price ranges. Moreover, new subdivisions within the City had lots available for construction of larger, more expensive homes, as well as ranch-style starter-home models of fewer than 2,000 sq. ft.

Milford's existing housing stock has been affordable, according to the 2000 Census with a median value of \$93,000. Kent County's median was somewhat higher at \$114,100. Sussex County values are \$122,400.

A recent publication by the Delaware State Housing Authority entitled Delaware: Statewide Housing Needs Assessment 2008-2012 shows that the 2007 median home price in Kent County is \$195,000, while the median home price in Sussex County is \$260,000. This represents a 110% increase in seven years for Kent County and 112% increase for Sussex County. This substantial increase will place additional demands on first time home buyers who will be entering the housing market. Additional information will need to be analyzed in the foreseeable future to see if this trend continues. If it does it will place excessive financial demands on first time home buyers. This is further emphasized by the above statistics showing the average household income at approximately \$51,000 but the average home in the \$200,000 to \$250,000, price range.

Table 5E shows the Home Sales for the City of Milford from 2003 to the first quarter of 2008. This graph show a slight down turn in the average sale price of housing reflecting in national trend regarding the price of housing.

TABLE 5E: Home Sales in Milford



In March 2004, Milford had approved approximately 1,470 lots for new housing. The vast majority of these lots were located at the periphery of the City in four existing developments and one proposed subdivision.

In 2006, the Planning Commission recommended and City Council approved an additional 4415 proposed dwelling units. Approximately half of these dwelling units received Final approval by City Council and were to begin construction. Several of these proposed developments have had their approvals expire, while other developments remain in limbo, awaiting the next positive signs regarding the housing financial market.

Maintaining a wide variety of housing options provides consumers with many choices and increases the probability that families will find housing that suits their needs and budgets. Just as important, the supply of lots and housing helps limit upward pressure on housing costs in Milford.

Undeveloped acreage within each of the City’s three residential zoning classifications is available for both Kent and Sussex Counties. Prior estimates of the Total Acres by County and by Vacant Acres were evaluated in 2002 and are compiled in the following Table:

TABLE 5F: Residential Areas

ZONING		TOTAL ACRES	VACANT ACRES	PERCENT
	KENT COUNTY			
R-1	SINGLE FAMILY	148	122	82%
R-2	SINGLE FAMILY, RESIDENTIAL OFFICE, LOW TO MEDIUM DENSITY	449	145	32%
R-3	GARDEN APARTMENT AND TOWNHOUSES, MEDIUM TO HIGH DENSITY	292	149	51%
	TOTAL	889	416	47%
	SUSSEX COUNTY			
R-1	SINGLE FAMILY	1108	465	42%
R-2	SINGLE FAMILY, RESIDENTIAL OFFICE, LOW TO MEDIUM DENSITY	396	78	18%
R-3	GARDEN APARTMENT AND TOWNHOUSE, MEDIUM TO HIGH DENSITY	118	53	45%
	TOTAL	1622	596	37%
	TOTAL	2511	1012	40%

Economic Development Plan

The fundamental principle to providing economic opportunity to the citizens of Milford is to encourage employment opportunities within the City. The City is committed to continuing its policy of providing suitable zoning categories and land areas within the City to accommodate the variety of business sectors that promote a diversified and stable economy.

The Milford Industrial Park and Greater Milford Business Park, including Independence Commons will be promoted through the City's own initiatives as well as in concert with the Greater Milford Area Chamber of Commerce.



The City will continue to promote Milford as an employment center through the use of adequate water and sewer, availability of natural gas, low electric rates and state-of-the-art telecommunications. Expansion of Milford's fiber optic data lines is a significant part of attracting new enterprises, as well as assisting existing businesses to utilize the latest technologies. The City will continue to accommodate the growing medical services, such as the Delaware Veterans Home, Hospice of Delaware and complementary institutional uses that are locating along US Route 113, in Sussex County, as well as in the Business Park in Kent County. Additional institutional uses are planned in the Institutional Service District east of Rt 1.



Redevelopment of under-utilized properties will continue to be promoted through the City's Planning Department. The City will coordinate with Downtown Milford, Inc., to integrate downtown redevelopment efforts with the Parks, Cultural Resources and Economic Development Plans included in this Comprehensive Plan. The City will also coordinate with the Delaware Economic Development Office to widen its opportunities to keep constructed facilities fully utilized.

The City maintains the policy to minimize commuting times and optimize alternative modes of travel. The City is a participating jurisdiction in the "Live Near Your Work" program spearheaded by the Delaware State Housing Authority (DHSA). The program is a cooperative partnership between local government, businesses and the State to provide financial

City of Milford, 2016 Comprehensive Plan Draft



assistance to workers who purchase housing within walking or bicycling distance to their work place. The City's participation in the program takes action on the principle of maintaining a diversified economy while discouraging sprawl. This program provides incentives for current employees to remain in the area, as well as for recruiting new employees.

Currently there are two areas being considered for a "sub-regional" shopping center in the City of Milford. These locations include an area south on Route 113, designated as the Cypress Hall Development. A preliminary subdivision, conditional use, and site plan have been submitted to the City for their approval. This "sub-regional" shopping area or "Community Commercial" is to include a Home Improvement store, a grocery store, and a strip mall, and seven out parcels for a variety of uses. The other area for consideration is near the intersection of Route 30 and Route 1. A meeting was held by the developer showcasing the proposed uses and types of development in mid 2005 with the expectation of signing tenants for this commercial venture. This "Community Commercial" development preliminary phase concept included a pseudo "Main Street" approach with several out parcels for the above mention commercial model. This area is also being considered for the same uses. In either case the City of Milford will work jointly with the Department of Transportation to provide the safest means of ingress and egress to these commercial facilities.

Housing Plan

Adequate, affordable housing which appeals to the employees of Milford's businesses is a natural objective, supporting the Economic Development Plan. Based on the data collected from the Census, the existing land use survey, activities of various developers and the Milford Housing Authority, and on the information from public input (generally through the Planning Commission's regularly scheduled meetings) Milford's housing options are currently adequate to support the City's population. However, there are several areas that should be addressed under this Update to keep up with anticipated growth for the City of Milford.

First, the City will continue to work with the Community Development Block Grant Program to assist low-income property owners to rehabilitate their structures. The City is dedicated to keeping the older residential neighborhoods attractive places to live for young persons and families, and to maintain affordable housing central to work places, shopping, and recreation.

Second, the City will continue to apply a variety of zoning classifications for residential use to assure diversity in the new housing stock, from apartment blocks to upscale residences throughout the City. The use of mixed residential within local commercial provides attractive housing and reduces trips and vehicle exhaust emissions. This type of land use is now shown on the Future Land Use maps and designated as either area for PUD's or areas for Traditional Neighborhood Development areas. Similarly the "Live Near Your Work" initiative may provide financial incentives to locate in the City, close to schools, cultural and recreational attractions, following the "Livable Delaware" concept. The City will actively work with non-profits to locate and provide services to residential projects targeting low-cost housing. This was further stated by the approval of approximately 45 units added to the Brightway Commons development and the preliminary approval for 149 units for the Milford Housing Inc. project.

The third element in the Housing Plan is directed at neighborhood preservation. With the growth in Milford's medical sector, which includes the Milford Hospital at its center, a growing



pressure is to include commercial medical offices within Milford's established neighborhoods. Citizens participating at the Planning Commission's meetings have expressed their concern over conditional use applications and re-zoning requests for this type of development. This conditional use needs additional study to allow these essential uses and services while protecting the existing neighborhoods.

The City believes that mixed uses can be accommodated, provided new regulations are developed to protect the character of those neighborhoods. The City is currently studying such an overlay zone for the area

in Sussex County between the Mispillion River to the north, and Seabury Avenue to the south, and bound by Old Shawnee Road to the west and South Walnut Street to the east, which could impose additional restrictions on commercial uses, such as building height, and impose additional requirements such as architectural review as part of the site plan review process.

Fourth, the City of Milford will work with existing and future developers to explain the housing needs of the community and the need for affordable housing for the future residents and employees of the City.

Fifth, City Council is keenly aware of this concern as well as existing employers located in the City of Milford. With the formation of an Economic Development Committee, this concern has been brought to the Committee's attention and will be discussed in the future. We realize that in order to keep and attract employment to the City, there is a need for affordable housing to be located in the City of Milford.



Housing Need Analysis

Based on a projected population growth of 2% per year, the number of units that would need to be constructed would be in the 60 to 70 range. It is anticipated that a variety of units would need to be constructed in the future to provide a diversity of options for impending homeowners. As mentioned previously, there are existing approved subdivisions, plus several subdivisions in the preliminary phase as well as proposed subdivisions which will and can meet this expected population growth. The existing national financial picture has trickled down to small communities such as Milford and this quandary will have a sufficient effect on the population and housing projections as well as the anticipated construction of the essential housing units for the future.

As the statistics have pointed out, there is a large disparity between the Average Household Income and the cost of an average single family detached dwelling, approaching four to five times the average Household Income. The City of Milford is not the only community facing this dilemma. Approaches such as Land Banks and other innovative measures need to be developed and cooperation with developers and the real estate community necessitate a joint effort in resolving this important concern in order for the community to move in a positive direction.

CHAPTER 6 DEMOGRAPHICS

Population

According to the Census 2000, the City of Milford's population is 6,732 people, who live in 2,665 households. The population change since the 1990 census is more reflective of the growth experienced by Kent County, through population shifts toward employment centers, rather than the boom in retirees migrating to Sussex County, although in the early part of this decade the City of Milford did experience some influx of retirees to the community.

Development of business, commercial, and residential projects accelerated in the Milford area during 2001-2006 time frame. The City estimated a new population range for 2008 from a low of 7,852 persons to a high of 8,685 persons, which is based on a variety of independent, user-driven parameters, including: the number of certificates of occupancy issued, new water flow meters installed, population projections for both Kent and Sussex counties and a range of persons per housing unit. A population estimate was prepared in early 2004 and a current population range is shown below in the following table.

TABLE 6A: Population 1980-2000 and Population Estimates 2004 and 2007 for the City of Milford

	1980	1990	2000	2004 EST.	2008 EST.	PERCENT CHANGE SINCE 2000
POPULATION	5,356	6,040	6,732	7,637	7,852-8,685	16.6%-29.0%
HOUSING UNITS			2,920		3,580	30.5%

Population in Milford has increased as individuals and families have moved into the city and established young families. In the last few years a trend has developed which shows an inclination of "retirees" and the first generation of "Baby Boomers" locating to Milford from states to the north, including New Jersey and New York. Various new housing options such as condominiums and a considerable supply of available lots have given individuals and families numerous choices.

The City's increase in area was through annexation of largely agricultural parcels that were re-zoned for different land uses. Residential development is generally designed as a mix of single-family homes and multi-family units. Lots sizes are dependent on the zoning; however the City also offers a Planned Unit Development Conditional Use option and a density bonus in the R-1 zoning district that permits a density of up to 8 units per acre provided the developer includes acceptable design criteria, additional open space and other amenities.

In the 2000's annexations occurred to the southeast for residential and institutional use. Rapid residential growth in the southeast has been attracted by access to the Delaware Route 1 by-pass and the Coastal Highway.

Race and Ethnicity

The City's racial and ethnic makeup is tabulated below:

TABLE 6B: Census 1990, 2000 and 2007 Population Diversity

POPULATION							
	WHITE	BLACK	AMERICAN INDIAN	ASIAN	HISPANIC	OTHER	TOTAL
1990	4763	1130	22	42	225	83	6265
2000	4576	1639	56	107	594	354	7326
2007	5336	1469	15	76	825	401	7569

Table 6A: shows the population diversity from the 1990 and 2000 Census. In addition information for 2007 is from a Demographic Detailed Comparison Report. The White, Black and Hispanic persons compose most of Milford's population. The White and Black populations, long established in Milford, occupy a full range of economic and occupational positions. The Hispanic population is more likely to work within the City as laborers and factory workers, and they occupy the less-expensive rental units. While the White and Black populations are represented on City Council and the Planning Commission, the Hispanic community has not moved into the mainstream of the community government, because many have not applied for US citizenship. Of the 422 foreign-born Residents of Milford, 325 (77%) are from Latin American.

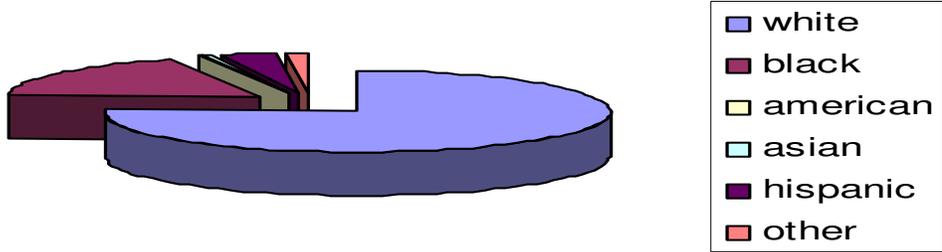
Age

Milford's population is somewhat younger than the rest of the two counties. Median age in Milford is 34.4 years according to the 2000 Census, and has increased from 31.0 years. This increase was not as pronounced as in Kent and Sussex County. The trend in age distribution in Milford is a reflection of Milford's affordable housing for younger families and the job opportunities which are available in the area.

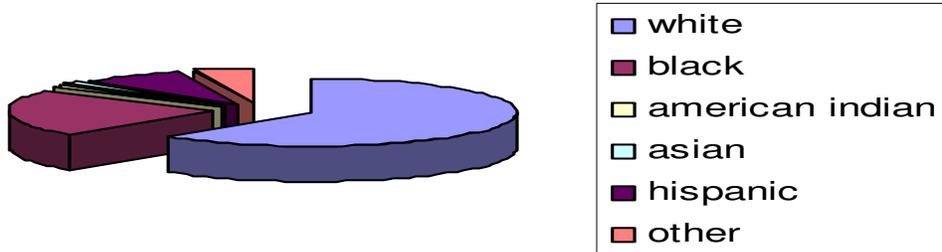
Median Age

An interesting statistic shows that the median age of Milford residents has increased from 35.1 years (2000 Census) to 37.0 years (DEDO Report) reflecting the influx of retirees from other states. (By increasing the number people who retire to Milford increases the average age of the residents).

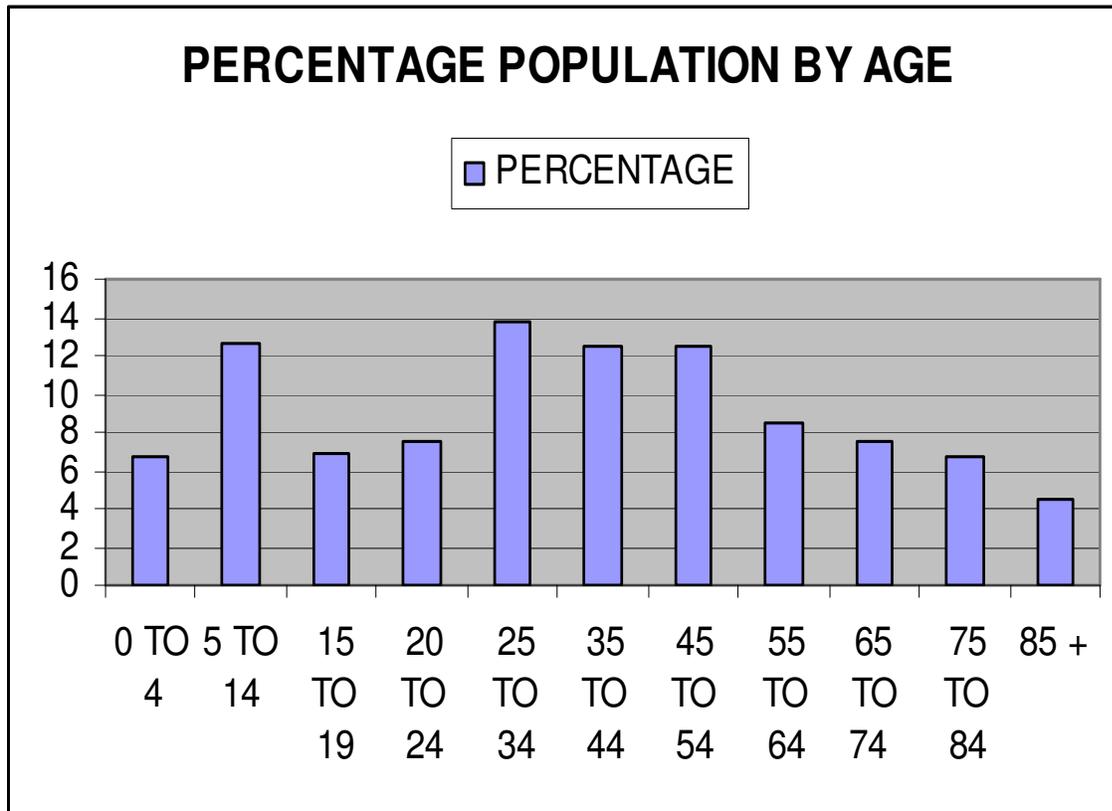
1990 POPULATION DIVERSITY



2000 POPULATION DIVERSITY



Comparison of Population Age by Percentage for 2007



Education

Milford is home to 1,682 children enrolled in pre-school through collegiate institutions. The percentage of this segment of the population enrolled in High School is 30%, compared to 20.7% in Kent County, even though Milford and the County are very similar in age distribution for children. This statistic reflects the general satisfaction with the Milford School District system, as it is operating at this time, as well as economic opportunities which keep students motivated through Grade 12. This may be due to a variety of factors, such as being an urban school district. The School District currently has a 75.5 million dollar major capital improvement program underway which includes the construction of two new schools.

Educational Attainment

According to recent statistics provided by DEDC, for 2007, 33.7% of the population has attained a High School Diploma, 6.6% have attained an Associate’s degree, 14.2% have a Bachelor’s degree and 9.2% have a Graduate degree. This shows a slight increase from the Census 2000 which denoted that 30.4% of the population had attained a High School Diploma, 6.4% had attained an Associate’s Degree, 12.0% had attained a Bachelor’s degree, and 7.3% had attained a Graduate Degree.

Population Forecast

The City of Milford's growth continues, at increasing rates due to the combination of economic and housing opportunities. The steady increase depends on the capacity of the City to provide services, as well as maintenance of Milford's "quality of life," that is, preserving its historic charm, increasing recreational activities, supporting quality schools, and providing pedestrian-friendly neighborhoods and destinations.

Areas slated for future annexation in the 2008 Comprehensive Plan are currently farmed and will be developed in a mix of small town-style residential units, local businesses and institutions. New developments which have been permitted since 2003 are now growing into established neighborhoods. Milford's residential expansion will continue to be the result of positive net migration to job opportunities in the area; however, the City is also receiving increased interest from retirees and second-home buyers looking for upscale housing at more attractive pricing as opposed to the Sussex County beach communities.

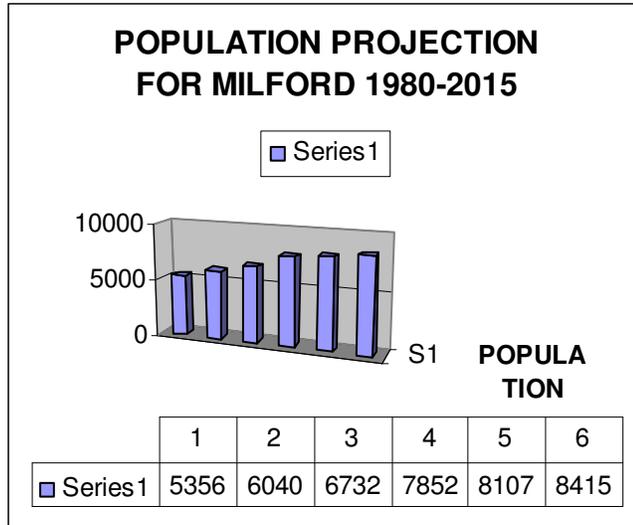
Local governments have been mandated by the State of Delaware to use the Delaware Population Consortium (DPC) projections as part of their long-range planning. The annual update from the DPC has reflected the increasing pace of new residents in Delaware. Based on growth exceeding the original estimates provided in the 2003 Update, and trends identified by the DPC, the population projection for Milford has been revised. This revision and population projection is compiled using the Modified Grid, and illustrates the updated forecasts from the DPC using the existing corporate boundaries for the City of Milford. The projections would be elevated if additional lands are annexed and incorporated into the City limits during this planning period.

From the following Chart 6C, according to the U.S. Census, the population of the City of Milford as of July 1, 2007 was 8288 which exceeds the 2010 estimate computed by the DPC by 2.2%. However, this approximation is within the bounds of the estimation provided by the City Planning Staff found in TABLE 6A. Based on available building lots and anticipated construction the population estimation for the City of Milford in 2010 should be in the 8800 – 9100 range.

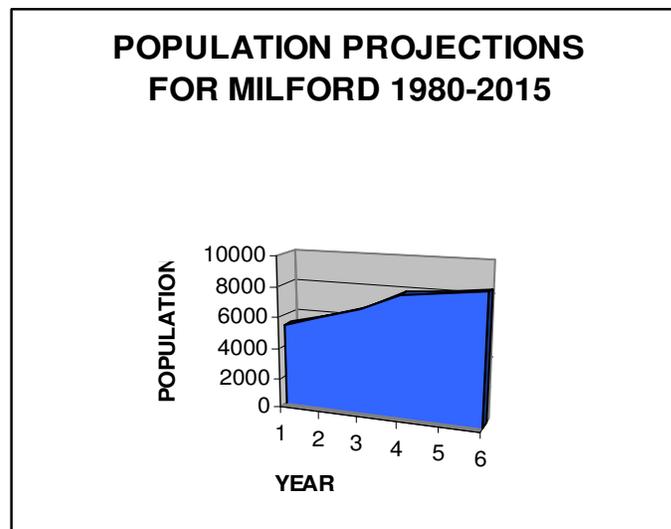
CHART 6C: Population Projections

	1980	1990	2000	2006 EST.	2007 EST.	2010 EST.	2015 EST.
POPULATION OF MILFORD	5356	6040	6732	7852*	8288*	8107	8415
AVERAGE ANNUAL GROWTH RATE		1.3%	1.1%	2.8%	3.3%	2.0% est.	1.7% est.

*2006 Census estimate and 2007 Census estimate



1=1980, 2=1990, 3=2000, 4=2006, 5=2010, 6=2015



1=1980, 2=1990, 3=2000, 4=2006, 5=2010, 6=2015

The current problems with the existing interest rate structure and the national problem of increasing foreclosures have slowed the growth rate in population and the construction of housing. This national performance and other economic factors will affect the actual population growth rate, and the population projections presented should be used for planning guidance only.

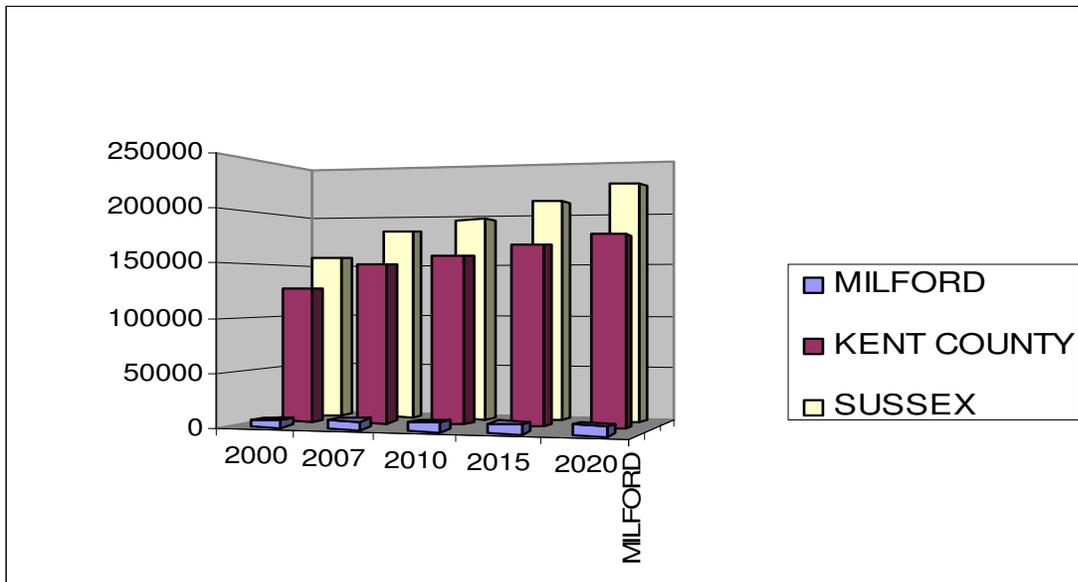
Milford's population is expected to continue to grow at approximately 3.0% every year during the planning period. This rate of growth is a hybrid of the rapid population migration into eastern Sussex County and the steady growth anticipated for Kent County. Livable Delaware initiatives, the State Strategies, DNREC's proposed changes to large on-site wastewater disposal

regulations and a host of other anti-sprawl initiatives will direct growth to municipalities such as Milford.

Population growth for the City of Milford will be the primary factor in increasing demand on City services and infrastructure. Equivalent Dwelling Units (EDU's) are used to relate water and sewer demand in gallons/day (gpd) to population and land use. For planning purposes, one (1) EDU is allocated to each household. Average population per household in Milford is 2.44 persons, based on the 2000 Census.

Most of the increase in population will be the result of continued positive net migration to the job and housing opportunities in the area. Another source of population expansion in Milford will be retirees and second-home buyers looking for upscale housing at more attractive pricing than the available housing units in the Sussex County beach communities.

Population Projections for Kent County, Sussex County and Milford 2000-2020



CHAPTER 7 PUBLIC SERVICES

City Government

The City of Milford Charter was consolidated, amended and revised significantly in 1993, and further revised in 1999. The citizens of the City are represented by a Mayor, elected by citywide election, and by 8 councilmen, elected from within four council districts delineated as Wards. For each of the four wards, one council position is open for election every year. Councilmen and the Mayor serve two-year terms. Under the City Charter, the ward boundaries will be reviewed every ten years, in conjunction with the release of Census data, to assure a nearly equal population within each ward. The wards were updated in 2004, and when the 2010 Census is available the wards will be redistributed to ensure an equal population of each ward.

A City Manager provides full-time management of the City departments and reports to the Mayor and council. A staffing review was completed in 2004, and in conjunction with the expanding demands on the City's management and public services a City Engineer and an Assistant Manager was hired.

The City also includes a Planning Commission consisting of members representing the wards and are appointed by the Council, as well as a Board of Adjustment.

Under the Charter, the City has the right to annex any contiguous territory to its City limits where the property owner has petitioned for annexation, or where a vote among the affected property owners results in a majority in favor of annexation. Currently, the City still maintains a policy of accepting only petitions for annexation from property owners which meet the requirements for annexation.

The City may enter into an annexation agreement with the affected property owner(s) prior to the election which "...may address any matters which would be relevant to the subject lands, if annexed. By way of example and not in limitation, such agreement may address zoning subdivision approval, tax relief, public utilities and public improvements."

Police Service

The City of Milford maintains a full-time police force of 30 officers. The Department works with the Delaware State Police, through Troop 4 located in Georgetown, Sussex County and Troop 3 located south of Camden in Kent County.

The Police Department's activities include a wide range of security activities, including investigating citizens' complaints, initiating criminal and traffic arrests, responding to accident situations, and performing crime prevention checks. While specifically organized to serve the citizens within the City limits, the Department is dispatched to calls beyond the City, and the security of persons living within the Greater Milford area does impact the operations of the Department.

The Department supports a variety of equipment and policing methods, including bike patrols and a dive team. The Department periodically partners with other City departments to expand

its community policing activities, such as advertising youth programs through the Parks and Recreation Department newsletter.

The Department is housed in the Richard D. Carmean Building, at 400 NE Front Street, approximately 100 feet from the north bank of the Mispillion River in Kent County. The location of is shown on Map 2.



The current location is centralized with good access to the main street system, as well as Business Route 1, to provide rapid response times. The Police Department building is located within the 100-year floodplain and the Station is surrounded by low-lying areas, and has been impacted by severe flooding in the past. The Emergency Contingency Policy of the Milford Police Department is to relocate operations to the Ronnie Vickers Complex located at 180 Vickers Drive, Milford, DE, should the Milford Police Station be inoperable due to storm or other disaster.

The City facilities include the Public Works Center in the Greater Milford Business Park (180 Vickers Drive). The main building of the Public Works Center is located on property elevated above the 100-year flood, and is designed to accommodate emergency operations and communications. The Public Works center includes a large conference room that has been designed for conversion to emergency operations, if necessary, warehousing for materials for roadway, pipe and electrical maintenance, garage facilities, a fueling station and security enhancements.

As the City continues to grow, both in area and in population, the staffing needs and the adequacy of the current Police Station will need to be addressed. The timing of this review will depend on the actual build-out of many of the new subdivisions within the City; however, it is anticipated that this review of service will be accomplished within the five year period under this Update. The review of staffing and deployment should include consideration of the City's police policies and practices, the composition of the population, particularly age structures and the number and nature of calls for service.

Fire Protection

The Carlisle Fire Company provides fire and emergency response for Milford and the surrounding area. The Fire Company is located at 615 NW Front Street, in Kent County, with approximately 100 members and full-time Emergency Medical Services staffing.

Trash Collection/Solid Waste

The City of Milford provides trash pickup once a week, by the City Streets Department. The cost of providing trash service has been maintained through effective personnel management and use of City-owned trash receptacles. As the City's area continues to expand, service demands will increase on both equipment and personnel.

The City has a contract with the Delaware Solid Waste Authority (DSWA) to provide weekly curbside recycling; this is available to all residents. This service is provided for at no additional cost. However there is a requirement that the resident must sign up for this service. Currently over 1600 residential customers are enrolled in this program out of approximately 3100 total residential waste customers.

In the fall of each year, a waste diversion program for leaves is available to residents of the City of Milford. Residents may rake or blow leaves to the curb where city waste crews collect them with a vacuum/shredder. The shredded leaves are utilized by the Parks and Recreation Department as mulch for various projects throughout the City.

The DSWA has a transfer station within the City of Milford, on US Route 113. The transfer station cuts travel time and provides savings in operation and maintenance costs.

DSWA operates three Recycle Delaware Centers in the Milford area, located at Milford Plaza Shopping Center on US 113, off of Marshall Street on Industrial Blvd, and at Calhoun's Country Store, at the intersection of Old Shawnee Road and Route 36. The Centers accept various papers, glass, plastic and metal recyclables as well as batteries and aerosol cans.

Other Public Works

The City employs 6 full-time staff members for the Streets and Solid Waste Department. This department provides for street maintenance, trash pickup, and snow removal on the municipal roadway network. Money received from the State for road maintenance is collected into a Street Funds Account and accumulated to provide funding for road maintenance and rehabilitation projects. The City Engineer develops a priority list for roadwork, which is updated when funding becomes sufficient to cost-effectively proceed with projects. Contractors perform most of the larger roadway projects and contracts are awarded by competitive bids.

The Streets and Solid Waste Department also provides maintenance services on the storm water collection system. The City sweeps streets and gutters on a weekly basis, which keeps catch basin grates open and available to receive runoff and also regularly cleans debris from catch basins. Finally, City ordinance prohibits curbside dumping of grass cuttings and leaf piles which can readily flow and clog the storm sewer systems during normal rainfall events.

All of these activities lead to reduction of sediments and debris entering the Mispillion River through the storm water system.

The Department also works with the Parks and Recreation and Electric Departments to prepare temporary facilities for the City's festivals and parades, and in placing decorations for various holidays.

Public Services Plan

The City of Milford operates on a policy of providing a complete suite of public services to its citizen's that support the principal of sustainable growth. A City Engineer was added to the staff in 2004 and an Assistant City Manager in 2007 respectively.

Building on the mapping technology used to produce this Comprehensive Plan, a number of initiatives will be completed as part of the Public Services Plan. The City will continue to maintain its zoning map and will continue to work with Kent County to share GIS data regarding zoning and tax parcels.

As annexation agreements are being negotiated, the City will refer to this Plan Update to identify items which landowners, joining the City through annexation, can provide to further the City's overall Community Development Plan (compiled in Chapter10). The Land Use and Annexation Plans (Chapter 11) should be used to assess the City's interest and ability to support annexation requests. Annexation agreements will be required to address water; sewer and transportation-related improvements needed to accommodate the EDU and traffic impacts of the proposed projects, and may include improvements in advance of any anticipated bypass, any proposed intersection improvements and Route 1/Route 30 intersection improvements.

It is recommended that population distribution maps and/or GIS data sets used to generate the maps (which will be generated for the redrawing of the Wards) be made available to the Police Department, along with the Future Land Use plans, for a manpower and deployment review. Similarly, the Carlisle Fire Company, recognizing the recent growth to the southeast, has indicated that a substation to the south or east, with easy access to DE Route 1 may be desirable in the future. A potential site is shown on Map No. 10. The City's Land Use Plan map will be made available to the Company to assist them in their planning process.

When the City completed construction of the Public Works Center, located in the Greater Milford Business Park, it consolidated many of the City's departmental facilities. As part of the project, the Water & Wastewater Department moved from the banks of the Mispillion River, fulfilling a recommendation of the Milford Hazard Vulnerability Assessment, completed under a grant from the Delaware Emergency Management Agency in 2000. The new Public Works Center was designed to accommodate emergency operations for the Police Department, in the event of severe flooding at the Police Station.

Parks and Recreation

Milford is indeed a Garden City, thanks in no small measure to the efforts of the Parks and Recreation Department. The City of Milford supports a Parks and Recreation Department of 5

full-time employees and 8 part-time, seasonal staffers for landscape/cemetery maintenance. The Department also relies on numerous volunteers to coach and chaperon its many activities, as well as soliciting sponsors for athletic leagues to keep costs to a minimum.

The City owns approximately 120 acres of open space managed by the Parks and Recreation Department, in five park sites shown on Map No. 12, Existing Land Use. In addition to the larger parks, landscaped islands of colorful flowerbeds grace roadway medians at the entry points into the City.

Near the center of the City, Bicentennial Park includes flower gardens, walkways and a veterans' memorial. Silver Lake Park, Memorial Park, the NE Front Street Recreation Area and the Mispillion Riverwalk are adjacent to the river and take advantage of the Mispillion River as a recreational, as well as scenic resource. Most of the City's green space projects are grant funded. The Department actively supports the regional Greenways initiative through project coordination, river clean-up and educational programs.

The Department also provides for a wide variety of recreational programs to meet the needs of Milford residents, young and old. Soccer leagues, youth basketball, gymnastics and tumbling for younger children, aerobics for adults, scrap booking and trips to professional league sporting events or big-city



theatrical productions are available throughout the year. The Department also works with other athletic leagues to host youth baseball, football, and softball at City of Milford playing fields.

The Milford Parks and Recreation Department annually sponsors the Mispillion Riverwalk Festival, showcasing the Mispillion Riverwalk and greenway initiatives. The Department also partners with local non-profits for events like the spring "Bug and Bud Festival."

Other Recreational Plans

The Greater Milford Boys and Girls Club recently obtained a lease for approximately eight (8) acres in the north portion of Independence Commons. The new facility serves as a community center and provides indoor recreation and mentoring activities for Milford's expanding teenage population group.

CHAPTER 8 ELEMENTS OF COMMUNITY DEVELOPMENT

Existing Land Use

Existing land uses were mapped via a “windshield survey” in November 2002, in October 2004, and again in February 2008 in support of this plan Map No. 9 shows the land use within the City of Milford in March 2008.

Through the efforts of the Milford Planning Department and Milford Planning Commission, land use within the City is generally in conformance with the zoning classifications. The Existing Zoning Map is presented on Map No. 8.

The identified land use patterns are not unreasonably out of step with the originally published land use plan of 1995. The existing pattern reflects the City’s commercial history and growth at the River’s edge, and along US Route 113 and the railroad. Redevelopment efforts have preserved the central business district’s character. Beyond the center of the City, regular grids of small, residential blocks radiate from the center of downtown. Neighborhoods, constructed as subdivisions, fringe the outer limits of the City.

A comparison of residential zoning classifications and the acreage that is undeveloped within each category are presented in Chapter 4 as Table 4F. New residential development has emerged on the perimeter of the City, in subdivisions. Re-development of older commercial properties has retained the commercial use, assisting in the City’s policy of maintaining diversification. Land use in the Counties surrounding Milford are mainly single-family residential and agricultural.

East of DE Route 1, the land in both Sussex and Kent County lies within the Delaware Coastal Zone, an environmentally important area where industrial uses are discouraged. Within the Coastal Zone designation, the State has significant holdings of Agricultural Easements and Agricultural Preservation Districts (see Map No. 3, Natural Features).

Flood plains and wetlands are also widespread east of DE Route 1, as shown on Map No. 3, Natural Features. Development trends for the area east of the highway are for residential, proposed institutional uses and limited commercial development with access to DE Route 1. Between the existing subdivisions, land continues to be farmed for crops.

To the west, in Kent County along the railroad at Holly Hill Road is an existing industrial plant, Baltimore Air Coil. Milford through zoning and economic development projects have directed industrial, commercial and institutional uses such as the Delaware Veterans Home and Hospice of Delaware to the northwestern quadrant of the City. The Milford Industrial Park, the Greater Milford Business Complex and the newly completed Independence Commons are located in this area, and are shown on Map No. 7.

Physical Condition

A strong local economy, active code enforcement and community-based redevelopment efforts have maintained the physical condition of Milford's built environment. During the review of land use, it was observed that residential property owners had been continuously maintaining properties through modest projects, such as roof replacements, re-siding and window upgrades. Age and value of the housing stock is discussed in Chapter 4, and graphically represented in Chart 4E6 and Chart 7.

Funding to assist property owners in renovation projects is available through Community Block Grants, Community Redevelopment Funds, and grants administered by Downtown Milford, Inc. The City Planning Department regularly assists property owners in evaluating opportunities for redevelopment of under-utilized properties.

Privately owned facilities, such as the Bayhealth Hospital, properties of the Dentsply/Caulk Division, and Perdue Farms Incorporated, are operated under business plans which incorporate scheduled maintenance and good business practices.

The City can monitor and correct deficiencies at private properties through the Code Enforcement Department. The Code includes chapters in *Part II: General Legislation* to provide for the up-keep of properties including: Building Construction, Electrical Standards, Grass, Weeds & Vegetation, Housing Standards, and Property Maintenance, among others. The City's designation as a Tree City has involved tree management and invasive species management programs.

The City maintains large networks of roads, electric service, water production, treatment and distribution mains, wastewater sewer, and storm water sewers. The infrastructure is in good operating condition and meets the needs of the community. Each Department develops prioritized projects to be incorporated into the City budget. This organizational plan has permitted the City to grow, and upgrade its systems through reasonably sized projects.

Open Space

The City of Milford occupies an area of greater than 7.5 square miles. Most of this area is developed; however, the City limits include 200 acres of dedicated open space, which does not include the open water of the River or the local lakes, and over 2 square miles of land inventoried as undeveloped (generally farmed or fallow fields and wood lots). The open and undeveloped space is distributed throughout the City, but the narrow Greenway along the River forms a significant band of open area through the heart of the developed Downtown district. The Greenway is linked to other City parks by sidewalks or footbridges crossing the river. It is anticipated that as residential development is added to the City that these developments will add to the open space of the City and any development in close proximity to the Mispillion River will provide additional open space and continuation of the Riverwalk and greenway through construction of the Riverwalk or through additional land dedications.

Parking

Parking within Milford is a combination of both on street and a limited amount of off-street parking within the older residential sections of the City. On street parking is mostly associated with older homes. In new subdivisions and residential neighborhoods, off-street parking is required. The various zoning classifications determine the parking requirements.

An area of special concern is the historic, downtown business district, which has been successfully revitalized. A specific zoning district, the Central Business District was successfully used to preserve and redevelop the center of the City, by encouraging a mix of apartments, retail and office space, while removing the normal setback and off-street parking requirements.



Off street parking is provided at five municipal lots, under the governance of the Milford Parking Authority. The Authority is an independent corporation with members appointed by the City Council from a pool of local property owners in the Downtown area. Approximately 220 parking spaces are available and many of the lots are regularly near capacity during office hours. Revenue for the Authority comes from a tax paid by owners of properties in the Downtown district.

Further growth of businesses and retail establishments in the Downtown district is limited by parking constraints. Parking limitations also impact other entities, such as the Farmers Market and the Second Street Players Theater group. New additions of land to the Mispillion Riverwalk at the Mill Street Peninsula Oil site and near Memorial Park are being proposed, under the Parks Plan, which includes additional parking. These additional parking areas will expand capacity as well as encourage foot traffic through the Downtown business district via attractive boardwalks, landscaped sidewalks and footbridges along the river.

Zoning Ordinance

The City's zoning ordinance was last updated in 2007. Currently, the City classifies land use through 4 residential zones, 3 commercial zones, 2 industrial zones and 3 business office zones. In addition, the City has an Institutional Development Zone for the medical services sector and included an R-8 residential zoning district and a density bonus in the R-1 which would allow a residential development of up to 8 dwelling units per acre provided the developer provided additional amenities such as more open space.

Community Design Plan and Zoning Ordinance Modifications

The City utilizes a policy of meeting the challenges of the Livable Delaware initiatives by being prepared to accept compact, attractive and functional development within the City limits. Under this policy, the City endeavors to provide its services in efficient and cost effective ways through proper management and innovation.

Under this 2008 Comprehensive Plan, the City has added a Traditional Neighborhood Development to the land use plan. The purpose of the Traditional Neighborhood Development (TND) designation is to indicate the City's preference for new projects that reflect Milford's traditional neighborhoods, provide connectivity with existing neighborhoods while providing limited commercial areas that serve the expected population. The City also has a policy of encouraging a growing diversified economy through commercial and residential development options. The City's 15 zoning districts and the Planned Unit Development conditional use provide the flexibility to implement a wide variety of projects under this land use concept in addition to the above mentioned Traditional Neighborhood Development. The City encourages developers considering projects in the Traditional Neighborhood Development land use area to peruse the Better Models for Development in Delaware idea book (available from the Delaware Office of State Planning Coordination) for design concepts that may go into these areas.

Projects within the Traditional Neighborhood Development land use designation can utilize a clustered or other mode of moderate density residential development which is based on the underlying zoning classification, the use of mixed density layouts for variety in housing types and costs, and/or the inclusion of commercial that is integrated into the development through design concepts, or conveniently linked by roadways or alternative transportation modes such as bike routes and/or pedestrian paths. Where feasible, interconnection with the surrounding City streets are a typical component of the Traditional Neighborhood Development concept. On state roads, the Traditional Neighborhood development project should utilize a common highway entrance and shared access ways to neighborhoods, shopping areas or office/business areas.

The Zoning Ordinance is periodically updated to reflect the objectives of the City's Comprehensive Plan. Under the 2008 Comprehensive Plan, the current Zoning and Subdivision ordinances will first be reviewed for consistency with the Land Use Plan. Properties with zoning classifications that are not consistent with the Land Use Plan will be re-zoned. This process must be accomplished within 18 months of certification. As part of the ordinance revisions, it is recommended that the code continue to allow school facilities as a conditional use in all residential zoning classifications.

The Code chapter, Subdivision of Land, includes requirements for the proper relation and connection of new subdivision streets with the existing roadway network. Sidewalks are required in all subdivision plans, and have been reaffirmed in 2007 by making revision to the Sidewalk Ordinance and to continue the City's efforts in promoting transportation alternatives. The subdivision chapter includes numerous provisions for design conditions to be imposed by the Planning Commission as part of the site plan review process. This chapter will be reviewed for consistency with this Update, in particular those sections included under; Parks, open spaces, school sites and natural features.

The Flood Plain Management ordinance was reviewed as part of the City's flood mitigation planning efforts. (Drainage and flooding is discussed in detail in Chapter 9, Environmental Issues.) To protect both property owners and the Mispillion environment, the existing Floodplain Management ordinance will be clarified and updated. The elevation of the first finished floor within a 100-year floodplain will be made consistent at 1 foot above base flood elevation. Additional impedance within a floodway will be prohibited.

A persistent concern of citizens is the pressure to re-zone or obtain conditional use permits for medical offices within residential neighborhoods. Under this Update, the City will consider revising the Zoning Ordinance to add additional requirements to this desirable mixed-use pattern, but impose supplementary architectural, lighting, landscaping, and site plan regulations, in order to preserve the neighborhood consistency.

Finally, the City has developed a new Resource Conservation Ordinance, which will provide the tools to implement many of the initiatives within the Environmental Plan. The ordinance addressed wellhead protection, groundwater recharge area protection and will describe preservation corridor setbacks and buffer requirements. The current Tree Ordinance will compliment this initiative and may be refined in the future to address nuisance plant species.

Health and Medical

The City of Milford is the location of Bayhealth/Milford Memorial Hospital and specialty practices. The City has an independent laboratory center, dentists and ophthalmologists, as well as orthopedic specialists, among many others. The medical services sector is a rapidly growing part of the Milford economy. The City has a specific zoning district, Institutional Medical/Service, to address the needs of medical and other institutional enterprises.



Senior Citizens Services

The Milford Senior Center is a non-profit organization which provides free services Monday through Friday, during business hours. Services include nutrition, counseling and recreational activities. Milford is also home to a number of nursing homes and senior care facilities. The City also includes housing specifically designated for seniors, including a private assisted living facility.

Library Services

The Milford Public Library was founded in 1882 with the organization of the Milford Library Association. The Grange Hall acted as Milford's first library with one room dedicated to the cause, and a librarian was hired who earned a salary of \$30 per year. As the library grew in size, a children's library was added around 1912 making children's books and storytelling available.

The current Milford Public Library location, overlooking the Mispillion Riverwalk, opened in 1993 and in 2011 underwent a 10,000 square foot addition including two stories which houses a new Children’s Library, computers with English and bilingual educational programs, a Teen Area, 24 station computer lab, the Delaware and Research Room that houses the Milford Chronicles from 1883-present digitized and indexed, and meeting rooms to accommodate small to large groups.

As of 2012 the library housed a diverse collection of DVDs and musical CDs and more than 45,000 books for children, adults, and young adults that include current fiction and nonfiction, research materials, and literature on CDs and cassettes. In addition, a variety of current and archived newspapers and periodicals are available for perusal. Other services include access to personal computers that provide free Internet and Microsoft™ products. Computer printing and photocopying are also available for a modest fee. Special programs will be provided throughout the year for community members of all ages.



Higher Education

Milford is located within an hour’s drive of eight college campuses:

INSTITUTION	LOCATION	DISTANCE (MILES)
WESLEY COLLEGE	DOVER	17
DELAWARE STATE UNIVERSITY	DOVER	18
WILLMINGTON UNIVERSITY	DOVER	19
DELAWARE TECHNICAL & COMMUNITY COLLEGE	GEORGETOWN	23
UNIVERSITY OF DELAWARE-COLLEGE OF MARINE STUDIES	LEWES	26
UNIVERSITY OF DELAWARE	NEWARK	54
WILMINGTON UNIVERSITY	WILMINGTON	60

Delaware Technical and Community College offers associate degrees, diplomas, and certificates in a variety of specialized areas at campuses in both Sussex and Kent County. Wesley is a private, fully accredited, coeducational liberal arts institution offering associate and

baccalaureate degrees, as well as a Master of Science in nursing degree. Wilmington University offers baccalaureate and master's degrees in a variety of disciplines and also has a campus in Dover.

Delaware State University is a fully accredited, four-year college that offers Bachelor of Arts, Bachelor of Science, and Master's degrees in a variety of disciplines. Finally, the University of Delaware offers parallel programs with Delaware Technical and Community College for students to pursue degrees in criminal justice, engineering technology, and technology management. All of these institutions provide Milford residents with a wide variety of higher education options, and contributes to the City's attractiveness to families and young workers looking for part-time educational opportunities.

Public Education

The availability of quality public education is an important component in attracting residents and businesses to the community. Milford has a long history of providing and valuing education as a public service.

When Milford was first laid out in 1787, William Johnson took up a lot on the northwest corner of Walnut and Park Avenue and built a home and conducted a day school. The Methodist Church also received land at the same time and conducted a school, as did the Quaker Meeting. The most famous of Milford schools was the Milford Academy (later North Milford High School) that was in operation as early as 1803. Sometime after 1810, the Academy moved to a one story brick building on the corner of NW Second Street and North Street. It was enlarged sometime around 1818 to two stories. This was a private school until 1846, when it was purchased for a public school. Other private schools in town were the Classical Academy, as well as a number of small schools conducted in people's homes.

The Milford School District covers an area of 166 square miles in central Delaware including areas of both Kent and Sussex County. The district serves approximately 4100 students including those living in the City of Milford and the Towns of Lincoln, Ellendale, Houston, and Slaughter Beach. The school district is one of Milford's largest landowners, employers and traffic generators. District operating costs are financed by the State of Delaware General Fund, land and capitalization taxes.

Six of the Milford School District's seven schools are located within city limits: Milford Senior High School, Milford Central Academy, Milford Middle School, Lulu M. Ross Elementary School, and Benjamin Banneker Elementary School, and Mispillion Elementary School. Close by, in Lincoln, is the Evelyn I. Morris Early Childhood Center.

Milford Senior High School, located at 1019 N Walnut Street, was built in 1963 and serves grades 10 through 12 for the entire Milford School District. The school contains 75 classrooms and the last remodeling project was completed in 2001. The 2012 enrollment was 1150 students. The teacher/student ratio for the 2011-2012 school years was one teacher per 14.6 students. Students served by Milford Senior High School are required to choose one of four Career Pathways in their freshman year. In addition to core curriculum classes, they must choose "pathway" courses from Arts and Sciences, Business Technology, Technology, or Visual and Performing Arts. The High School's performance ratings are: 2010 – 2011 "Superior" and 2011-2012 "Met AYP" (considered Superior status under the old rating system.)

The Milford Central Academy serves students in grades 8 and 9. It was built in 2010 and is located at 1021 North Walnut Street. The 2012 enrollment was 634 students. The teacher/student ratio is approximately 16 students per teacher. Students at Milford Central Academy have the opportunity to learn the expectations they will face at Milford High School in terms of rigor and accountability while receiving the support found in a smaller setting. Eighth grade students experience Agricultural Technology, Computer Skills, Chorus/Band and Art. This exposure allows them to narrow their focus during their 9th grade year as they choose one of the following pathways: Business; Agricultural-Technical; Visual and Performing Arts; and Arts and Sciences. Both eighth grade and freshman students at MCA utilize a Career Cruising web-based program. Through this program, students have access to career inventories and exemplary strategies for choosing a college that suits their needs and interests. Additionally, MCA students have access to exemplary, state of the art technology throughout the newly built "green" school. 2010 – 2011 "Superior" and 2011-2012 "Met AYP" (considered Superior status under the old rating system.)

Milford Middle School, located at 612 Lakeview Avenue, was built in 1928 and now serves grades 6 and 7. The Middle School building, though approximately 84 years old, was last remodeled in 2002 and contains 80 classrooms. The 2011 enrollment was 608 students. The teacher/student ratio for 2010-2011 was 16 students per teacher. The Middle School's performance ratings are: 2010 – 2011 "Superior" and 2011-2012 "Met AYP" (considered Superior status under the old rating system.) The MMS schedule consists of four 90-minute blocks. Students receive 90 minutes daily of language arts and math and participate in social studies and science on a quarterly rotation for 90 minute blocks. Expressive arts classes enhance the educational experience and include physical and health education, art, keyboarding, business technology. Our expressive offerings also include band and chorus as an elective. Extracurricular activities offered include math league, solar car club and drama club. Sports include football, girls and boys soccer, field hockey, girls and boys basketball, wrestling, competition and seasonal cheerleading, girls and boys track, baseball, softball and cross country. Student Council sponsors school-wide events. MMS recognizes students for excellence in academics and community involvement. We have an active National Junior Honor Society. Students meeting the criteria are invited to join NJHS in the spring of their 6th grade year.

The original Benjamin Banneker Elementary School, located at 449 North Street, was built in 1918. The old building was last remodeled in 1970 and contained 27 classrooms. The School District completed construction on the new Banneker Elementary school in 2003. The old school was demolished when the new facility opened and serves grades 1 through 5. The 2012 enrollment was 395 514 students. The teacher/student ratio for the 2012 school year was 16 students per teacher. The School's performance ratings are: 2010 – 2011 "Superior" and 2011-2012 "Met AYP" (considered Superior status under the old rating system.)

Banneker focuses on Differentiated Instruction as an instructional method for teaching. DI fosters the teacher's ability to plan instruction to meet a variety of learning styles and academic levels during a lesson. We also implement RtI, Response to Intervention. RtI provides intervention or enrichment to all of our students based on their individual needs in reading and math.

The Lulu M. Ross Elementary School is located at 310 Lovers Lane and was built in 1957. The school serves grades 3 1 through 5. The building, which originally contained 12 classrooms, doubled that number in 1959. The school continued to expand in 1992 with the addition of 6

more classrooms, and during the 2000-2001 school years 4 more classrooms were added in addition to the renovation of the existing building. The 2012 enrollment was 559 students. The teacher/student ratio for the 2011-2012 school years was 15.1 17 students per teacher. The school's performance ratings are: 2010 – 2011 "Superior" and 2011-2012 "Met AYP" (considered Superior status under the old rating system.) Lulu M. Ross Elementary School was recently honored with the Superstars in Education award applauding our utilization of the school day. This great honor recognized our school's ability to meet Response to Intervention (RTI) Federal mandates, maintain the integrity of the Milford School District selected curriculum, allow Instructional Support Time for all teachers during the school day to attain ongoing professional development, as well as foster the creative abilities of all of our students through a daily expressive arts class.

The Evelyn I. Morris Early Childhood Center is located at 8609 Third Street in the neighboring town of Lincoln and serves grades Pre-K and K. When it was built in 1931 it contained 4 classrooms. The building was later enlarged in 1958-59. Due to declining enrollment in 1979 the school was closed. In 1992 the school was renovated and additions were added and the school reopened in September 1993. It's most recent remodeling was completed in 2001. The 2012 enrollment was 351 students. The teacher/student ratio for 2011-2012 school year was 17 students per teacher. The school's performance ratings are: 2010 – 2011 "Superior" and 2011-2012 "Met AYP" (considered Superior status under the old rating system).

Mispillion Elementary School is located at 311 Lover's Lane in Milford, DE and serves students in grades 1 through 5. The school was built in 2011 and contains 36 classrooms. The 74,300 sq. ft. elementary school includes a geothermal HVAC system and 100 KW solar panels to help control energy costs. The 2012 enrollment for Mispillion Elementary was 551 students. The teacher/student ratio for the 2011-2012 school year was 17 students per teacher. The school's performance rating for the 2011-2012 school year was "Met AYP" (considered Superior status under the old rating system).

Some of the Milford School District's facilities are available for use on a rental basis to public groups in the community. Rentals may be contingent upon the date, time and type of use desired. Athletic facilities that can be rented include running tracks, open spaces for field play and indoor basketball courts. These facilities are located at the High School, Central Academy, Middle School, Ross and Banneker Schools. Though these facilities are available, the usage may be limited as deemed necessary by the District for security reasons and to control expenses incurred by usage.

The Milford High School (Kent County) and Milford Middle School (Sussex County) serve as Red Cross Emergency Shelters. Banneker Elementary School serves as the Kent County Emergency Medical Needs Shelter and is one of two for the county.

The City zoning ordinance currently recognizes schools as a suitable conditional use within two of its three residential districts. It is recommended that the ordinance be amended to include school facilities as suitable conditional uses within all residential districts. The placement of schools within neighborhoods, where school children live, can assist in traffic management and the opportunities to use walking as a transportation mode.

The City of Milford will continue to participate with the School District in planning to accommodate potential enrollment growth in all seven schools. School facilities should continue to be available to the adult and school age population for social, educational, and recreational opportunities during after-school hours.

CHAPTER 9 CITY INFRASTRUCTURE

Water System

The City of Milford operates a water system to serve the entire city, and a number of residential and commercial properties beyond the City limits. The system is interconnected across the Mispillion River at a number of points and performs as a unified system which is among the ten largest systems of Kent and Sussex Counties.

The City manages water use through a Water Ordinance defining the City's services and fees. Connection to the system is required for any developed property abutting the system. Public drinking water supplies independent of the City are not permitted. Wells however are permitted for local irrigation. A number of industrial facilities within the City have wells to supply their process water. The City's rate structure is regularly reviewed and water rates are currently in line with operations and maintenance needs for the system.

Milford utilizes 10 DNREC-permitted public water supply wells, operates 4 water treatment plants, and owns two 250,000-gallon water towers and one 500,000-gallon tower. Water usage varies seasonally, and on average ranged from 2.3 million to 3.4 million gallons per day during 2006. As the City steadily grows, the water demand has increased.

The Sussex County Comprehensive Plan does not acknowledge Milford's public water system within its Water/Wastewater chapter, although Milford includes over 1000 connections in Sussex County. Sussex County's "Public Water Systems" map accurately shows the existing Milford system area, and includes an area listed as "Potential Future Public Water System" that implies extension of the system to areas to the east and west of the City.

Water Supply

The City presently has 10 wells with pumping capacities ranging from 80 to 530 gpm. An 11th well, No. 4R went into production in February 2008. If all wells were activated, a maximum discharge of 2769 gpm could be utilized. Table 8A lists the city's production wells and general information about current capacities.



TABLE 9A: City of Milford Public Water Supply Wells

WELL ID	DNREC PERMIT	CURRENT CAPACITY (GMP)	AQUIFER TYPE	SCREEN INTERVAL	PUMP CAPACITY (GPD)
WELL NO 1	10250	317	CONFINED	220-236	456,480
WELL NO 2	10187	131	CONFINED	220-236	188,640
WELL NO 3	102338	82	CONFINED	312-342	118,080
WATER PLANT TOTAL		530			763,200
WELL NO 4R					
WELL NO 5R	208591	LESS 100	CONFINED	293-328	432,000
KENTON PLANT TOTAL					432,000
WELL NO 9	10192	250	UN-CONFINED	39-59	360,000
WELL NO 10	69356	151	CONFINED	444-466	217,440
WELL NO 11	69357	99	CONFINED	317-335	142,560
WELL NO 12	69355	450	CONFINED	215-254	648,000
SEABURY PLANT TOTAL		950			1,368,000
WELL NO 13	69344	533	CONFINED	401-441	767,520
WELL NO 14	69343	456	CONFINED	284-309	656,640
10TH STREET PLANT TOTAL		989			1,424,160
CITY TOTAL		2769			3,987,360

The City regularly compares water sales with metered water production to monitor leaks and malfunction. The Department is also a member of the Delaware Rural Water Association, and utilizes their equipment for specific leak detection programs. It is the City's intent to meter all water users.

The average daily water usage for 2006 was 2,510,042 gpd. Assuming the largest production well could not be utilized, the City has the capability to produce 3,219,840 gpd or 128% of the average daily demand. With all wells in service the production capability rises to 3,987,360 gpd or 159% of the average.

The "Ten State Standards", a widely-used water system standard developed by a coalition of states in the Great Lakes Region, requires that the total developed ground water source capacity exceed the average day demand with the largest producing well out of service. The City exceeds this capability by 709,798 gallons. This correlates to an availability of 2535 EDU's based upon estimated peak usage at 280 gpd/EDU.

Water Treatment

Treatment facilities include iron removal and aeration at the Seabury Avenue and 10th Street Treatment Plants. Other wells are of sufficient water quality and only require chlorination for disinfection.

Finished Water Storage

The City has three elevated water tanks. The locations and sizes of the tanks are as follows:

<i>Location</i>	<i>Size</i>
Pearl Alley & Washington Streets	250,000 gallon
School Lane (Behind Dentsply/Caulk)	250,000 gallon
Tenth Street	500,000 gallon

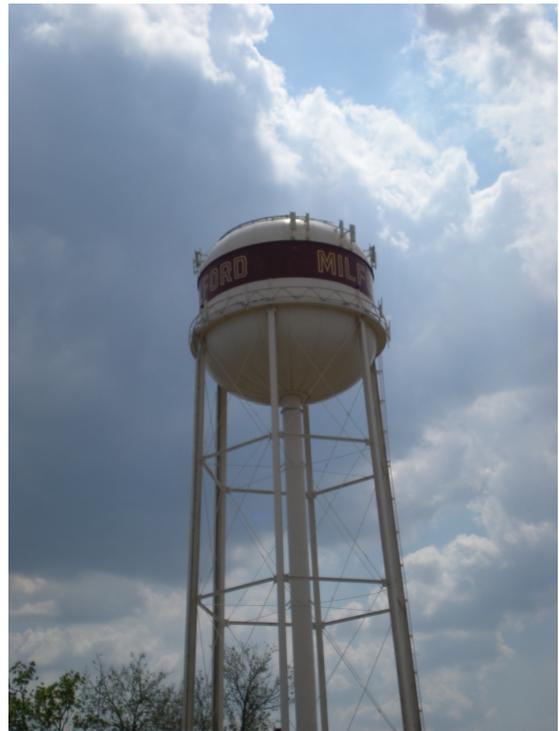
The total storage capacity of the elevated tanks is approximately 1,000,000 gallons. In addition the City has approximately 100,000 gallons of ground level storage in clear wells at the treatment facilities.

The "Ten State Standards" requires storage facilities to have sufficient capacity to meet domestic demands and fire flow demands. The City currently has 1,000,000 gallons of storage versus an average daily demand of 2,510,042 gallons. Hence, the City has storage capacity for approximately 9.5 hours of usage. This storage capacity is adequate to meet peak demand fluctuations. Storage for emergency use is less critical in Milford because the production and treatment facilities are equipped with standby power to operate during electrical outages.

Water System Proposed Improvements

Proposed annexation areas can be served by extension of the existing water distribution network. An additional well with chlorination to the south is recommended to provide additional raw water supply and maintain chlorine residual levels in areas which have new subdivision approval, but minimal water usage. As development continues to the south, an additional water tower is recommended, to maintain system pressure and meet fire flow demands. Elevated storage between 500,000 gallons to 1,000,000 gallons should be constructed within a 5 to 10 year time frame, depending on the progress of build-out within the subdivisions and proposed annexation areas. Meetings with land owners in this area are scheduled, regarding water; sewer extensions and storage are scheduled for late 2008.

There are two major industrial users within the City, the Perdue Plant and Sea Watch International, both operating in the food processing business. Perdue operates its own industrial wells to supply process water to the plant. In addition,



Bayhealth's Milford Hospital and the associated medical services are a major component of commercial water use.

The City's water distribution system has been maintained continuously and has no major problems within the current service area; however, expansion to the southeast is beginning to extend the system to the point where new production, treatment and storage facilities should be investigated.

Sanitary Sewer System

The City owns and maintains a wastewater collection system that is interconnected across the River, to serve both Kent and Sussex County residents. No Sussex County regional facility is available to Milford. The Sussex County Comprehensive Plan shows a "wastewater study area" for an area similar in area (although the outlines do not match exactly) to the Milford Annexation Plan area; however, there are no plans for Sussex County to develop wastewater collection or treatment service within this Update timeframe (2008-2013).

Milford contracts with Kent County for wastewater treatment of all flows collected by the City system. The Kent County Regional Wastewater System, which was created in the early 1970's, has its central treatment plant located 5 miles north of Milford. The treatment plant had a NPDES discharge permit of 15.0 million gallons per day in 2001. The Kent County wastewater treatment plant is located within the Murderkill River watershed. According to the Long-Range Wastewater Master Plan, November 2001, the Frederica plant can be both upgraded and expanded to accommodate future flows.

Kent County owns and operates a major pump station in Milford, PS No. 7. The Station discharges to a 24 inch force main which runs north along Rehoboth Boulevard to DE Route 1 and hence to the Frederica plant. Other pump stations within the Milford collection system are owned and operated by the City of Milford.

The City's wastewater collection system has been upgraded since 1990 to separate the storm water collection from wastewater. In 1993, a comprehensive Infiltration and Inflow study of the system was conducted, and problem areas were identified and corrected. As the wastewater system continues to age, additional project areas will be identified for upgrade or replacement to preserve capacity through reduction of inflow.

In 1995, odor problems associated with an industrial user at the Fischer Avenue Pump Station were corrected. In general, the sanitary sewer system is operating well and no major capital improvements are needed for the current level of service.

Sewer mains continue to have capacity to accept additional flows from within the City center; however future areas of annexation will require new pump stations and new routing arrangements.

The Sussex County Comprehensive Plan shows a halo of "Study Area" around the City. This area is the same as what is shown on Figure 4, Public Water Systems, for future service, and it is assumed that Sussex County's growth projections show Milford's growth in these areas.

Kent County's Comprehensive Plan places the current City of Milford and most of its Annexation Plan area within the Growth Overlay Zone, which is the County's proposed wastewater service district. Milford's plan differs from Kent County's plan by designating the wedge of land surrounding Woodshaven (Growth Area 4-North, Map No 14A) as "Area of Concern." Although this "Area of Concern" is not included in the Annexation Plan, it should be noted that Milford already has water service facilities in this area.

The City has agreed to follow the County's policy of discouraging large subdivisions utilizing individual wells and on-site wastewater disposal in this area bound by Swan Creek and the Mispillion River. Any significant residential development that might be proposed to Kent County should be encouraged to utilize water and wastewater services available through the City.

Wastewater System Operations

The City of Milford owns and operates its own wastewater collection and pump station facilities, which are tied at PS 7 to the Kent County Wastewater Treatment facility east of Frederica.

The City of Milford maintains a Sewer Ordinance assuring that all properties within the City or annexed to the City which generate wastewater are connected to the municipal sanitary sewer system. No privately owned systems are permitted within the City, unless grandfathered per the ordinance. No existing individual system may be replaced after failure; rather, the property owner is required to tie into the City's collection system. Wastewater collection service to users beyond the City limits is permitted. Under the Ordinance, fees are reviewed periodically to assure adequate receivables for operations and maintenance, debt service, and to prepare for replacement of equipment. The current ordinance and the review procedures contained within the ordinance are appropriate and adequate to support the City's wastewater facility and its anticipated growth.

Recent adoption of new Total Maximum Daily Load (TMDL) environmental regulations for wastewater discharges into the Murderkill watershed in central Kent County, will affect Kent County's wastewater discharge (NPDES) permit. The County is currently reviewing a variety of options to comply with the new regulations, with one objective being to limit the anticipated rate increases associated with compliance. The City of Milford supports the County's efforts to identify a sustainable, least-cost alternative.

Sewer Facilities Upgrades Required for Growth Areas

In order to visualize this Sewer Facilities Upgrade, please refer to the Future Land Use and Neighborhood Maps.

Growth Area - North

This area is divided by significant physical features and would be served in several separate sub-areas. The first sub-area is north of the existing railroad tracks in Kent County. Currently, one industry, Baltimore Air Coil, is served by the City in this area. In 2004, the City constructed a sewage pump station and force main to service this facility. Undeveloped areas near the plant are not significantly subdivided. Currently there has been one preliminary subdivision submitted near the Baltimore Air Coil facility, however, should subdivision take place, it could be served by

a combination of gravity sewer service with an additional pump station as the site grading requires.

The second sub-area, north of Haven Lake and south of the railroad crossings, would be further divided into two service areas based on the contributing drainage area surrounding Haven Lake Estates and North Shores. A pump station for each drainage area would be required with a gravity collection system. The Haven Lake Estates force main would then discharge to the North Shores system, which would be discharged to the existing gravity collection and pump station located near Route 113.

Additional flows from the above areas will require upgrades to the Truitt Avenue pump station which are in design, and are to be paid for through utility agreements with developers.

Sub Area One

A portion of this area would be served by gravity sewer extending either through the next phase of the Greater Milford Business Park or the Knott's Landing subdivision. An additional regional pump station which would be located near Bowman Road or Church Hill Road, possibly within the proposed Dogwood Meadows subdivision, would serve the majority of this area. This pump station would then convey the discharge via a force main to the north to a direct connection to the County's force main. For individual developments that may occur south of Church Hill Road, local lift stations in combination with gravity sewer may be required to direct flow to the regional pump station.

Sub Area Two

Existing sewer service is provided through the County for Colony West Apartments. A county-owned pump station currently provides service for this area. Extension of the existing gravity service is proposed through expansion of Kent County Sewer District No. 1 and would provide additional service west of Route 1.

Existing businesses located on the east side of DE Route 1 utilize on-site disposal systems. Effluent from these systems flows via the groundwater to the Swan Creek drainage. Elimination of these systems is desired by the City. A gravity collection system with a pump station and force main tie-in to the County would be required to provide service for existing commercial properties and proposed development located on the east side of Route 1. The east side of Route 1 could either remain part of the City's system or be an additional expansion of Kent County's sewer district.

Sub Area Three

The subdivision of Woodshaven is located within this area. This Plan prefers elimination of individual septic systems and use of public wastewater collection and treatment for any residential land use within the drainage of Swan Creek and the Mispillion.

To extend wastewater service to this area, a gravity collection system with a pump station would be required, located south of New Wharf Road and east of Route 1. A gravity sewer extension will be necessary east and west of Route 1 for areas not currently sewered, but within existing city limits to the north of this area and also for properties east of Route 1, but

west of the existing city sewer system. The gravity sewer would convey sewage to the pump station, then be pumped via a force main crossing Route 1 and extending to the existing gravity collection system near Rehoboth Boulevard (Business Route 1).

Growth Area - Southeast

The recently completed southeast sewer system improvements extended sewer service to accommodate much of this growth area. A sewage pump station at Shawnee Acres serves as the point of collection for the Shawnee Acres development along with new subdivisions of Orchard Hill, Hearthstone Manor, and the Meadows at Shawnee.

Sections of Eastman Heights and the proposed Isaac Farm subdivision would also be capable of gravity flow to this pump station. Areas south and east of Hearthstone Manor, including Matlinds Estates would require additional pumping facilities. The properties fronting along Beaver Dam Road would be serviceable by a gravity collection system extending to a proposed pump station at the intersection with Cedar Beach Road. The properties fronting along Business Route 1 would require an additional pump station with force main discharge to the existing gravity collection system along SE Second Street. The growth in the southeast will eventually require upgrades to the Fisher Avenue Pump Station and Kent County Pump Station No. 7. Additional discussion is contained in Growth Area Southwest, below.

Growth Area – Southwest

This area consists of several properties which have had preliminary subdivision plans reviewed and approved by Planning Commission and City Council, namely Central Parke, Simpson Farm, and Walnut Village. In addition, several additional properties (the Ruby Vale Farm and the Potter Farm) have made preliminary contact with the City regarding the availability of water and sewer. These areas will be served by a mix of gravity sewer mains and pump stations all of which will eventually drain into the Washington Street Pump Station. Washington Street Pump Station presently conveys flows via a force main to the existing gravity interceptor main in NE Front Street. The flow then continues to Kent County PS No. 7.

The City completed a General Wastewater Facility Planning Study in 2004. The study identified redirecting flows from Growth Area 6 as the least cost alternative for meeting the wastewater transmission demands of this area as it develops. It is proposed that the existing Washington Street P.S. be abandoned, with flows conveyed via gravity to the Fisher Avenue Pump Station which will be expanded in order to accommodate the relocated Washington Street Pump Station flows and the proposed developments/areas contained in Growth Areas 5 and 6. The removal of the flows from the Washington Street Pump Station to the gravity interceptor along NW/NE Front Street will result in additional available capacity in the interceptor to accommodate the potential flow increases from Area North.

Electric Service

The City has had an electric system since 1887. Unlike many Delaware municipalities, the City continues to serve as a power retailer to the residents. The City of Milford is also partners with

Delaware Municipal Electric Corporation in a peak load management system. The DEMEC plant is located in Smyrna, Kent County.

The electric system operates throughout the City on a variety of circuits. Electric service is also provided to customers outside the City limits in both Kent and Sussex County. In addition to power, the City is also upgrading the City's service with fiber optic cable for high-speed data transmission.

In 1994 a severe ice storm knocked out power to most of the City for three days or more. Today, most of the City's power lines remain above ground, and the City has adopted a regular tree trimming and line protection program. Whenever possible new service is installed underground as part of the City's hazard mitigation efforts.

In 2001 the City implemented an Electric Systems Planning Study (completed by Progressive Engineering, Inc.). The City is currently extending a fourth circuit from the substation to the US Route 113/Walnut Street quadrant that will include the properties being proposed for annexation. Further electric service extensions will be required to interior facilities when constructed. Any interior service extensions are at the expense of the developer, and constructed to the City of Milford Standards.

Transportation

Milford lies at the dividing point between two major north-south transportation corridors through Sussex County. Delaware Route 1, also known as the Coastal Highway, runs southeast from Milford, parallel to the Delaware Bay shoreline to Rehoboth Beach, where the highway swings south along the Atlantic Coast. DE Route 1 is a major hurricane evacuation route away from the Atlantic coast. US Route 113 runs through Milford, at a point approximately midway between Dover and Georgetown. Also radiating out from Milford are: DE Route 36 east to Slaughter Beach, and west to Greenwood; DE Route 14 west to Harrington; DE Route 15 northwest to Camden and DE Route 30 south-southeast to the Milton area and on to Millsboro. Map No. 13 shows the Functional Classification of roadways in the Milford area.

Local Issues

Growth trends and pressures across central and eastern Sussex County will have significant impacts at Milford's location as a meeting of many ways. Local interior streets reflect Milford's growth on both sides of the river, which has produced a road layout radiating in systematic blocks from a meandering center along the Mispillion River. Within town, DelDOT studies have shown that most of Milford's intersections function with acceptable levels of service, but along many older streets the sidewalk and curb conditions are deteriorating.

Pedestrian and/or bike access to work sites, shopping and schools are important elements supporting the of the City's Economic Development Plan, DelDOT's 2002 Statewide Long-Range Transportation Plan (SLRTP) and the 2004 State. Principle 1 of the 2002 SLRTP is to target investments into designated growth areas, such as the State Strategy levels 1, 2 and 3 that overlay the City (see Map No. 5). In the center of the City, multimodal investment, such as public transit, walkways, and bikeways should be promoted as providing the greatest number of transportation options.



Milford fits well into the State's public transit system. The City's location at the junction of Route 1 and US Route 113, as well as Routes 14, 15, 30 and 36, make Milford a good choice for bus transfer points and express routes. As the City grows, additional bus service should be considered by DART.

DE Route 14 includes NE to NW Front Street within Milford, and is the site of portions of Milford's Transportation Enhancement projects.

In addition, part of DE Route 14 lies within the North Milford Historic District. Heavy vehicle traffic is perceived to be significant. Trucks originating at various industrial businesses on the northeast side of the City pass through the Downtown district on North Front Streets to get to US Route 113. Civic groups have raised concerns that truck traffic may damage the historic structures within the North Milford Historic District. There is concern that the heavy vehicles add extra stress to the brick cross walks and landscaping constructed as part of the various phases of the Transportation Enhancement project which is promoted by Downtown Milford, Inc. NW Front Street is posted with signs indicating a weight limit of 27 tons.

Greater Milford Area Issues

DelDOT has identified US Route 113 and DE Route 1 as Principal Arterial roads which move significant volumes of traffic around the historic center of Milford. It is at the city limits of Milford that two intersections with problems have been identified by DelDOT.

On the west in Kent County, at the intersection of Canterbury Road (DE Route 15) and Milford-Harrington Highway (DE Route 14), is targeted for improvement.

On the east in Sussex County, the intersection of Wilkins Road and DE Route 1 is a source of concern, as documented by the Sussex County Comprehensive Plan and by the intersection's inclusion on the DelDOT Capital Improvement Plan listing. This intersection is commonly noted as "difficult to cross" by residents of the Milford area who use the local Road 206. The intersection is currently a flashing yellow light for through traffic on Route 1 and flashing red for the cross street traffic. Although identified for improvement, the intersection is in the design phase.

The US 113 N/S Study focused on both corridor preservation and a bypass alignment in the vicinity of Milford. The City has been an active participant in the working group, as well as working with DelDOT directly to development access management strategies for the future.

Transportation Plan

The transportation plan is divided into a local component, which the City has some control over, and a regional component, which the City hopes will continue the dialog with DelDOT and both Kent and Sussex County regarding future transportation projects.

The local plan focuses on transportation alternatives that dovetail with the Economic Development and Parks elements. Most of Milford's streets are bound by sidewalks and the City has a long-term commitment to improve pedestrian safety and convenience. Transportation Enhancement funding has been used to complete sidewalks in both Sussex and Kent County in the vicinity of the Milford Middle School, Banneker Elementary School and from the Milford Crossing apartments to Buccaneer Boulevard. Prioritization of sidewalk projects has generally considered the pedestrian traffic, moving to and from the primary schools within the City. Future sidewalk improvement projects are being developed for the streets in Sussex County in the vicinity of Lulu M. Ross Elementary School.

The Mispillion Riverwalk is a major component in linking the municipal parking lots in the downtown area to businesses and services located there. As park elements are added, new parking is also planned, linked to the downtown by brick walks and footbridges over the river and its tributaries.

Minor street rehabilitation is planned for various areas within the City.

On a larger scale, the City is preparing the scope for a bridge repair project for the bridge over the Mispillion River at Washington Street. In addition to safety considerations, the City will integrate the bridge into the Greenways design and with the previous Downtown streetscape

projects. The streetscape component ideally would extend to the corner of Washington and SE Second Street, along the Milford Public Library property. This project has been put forward both through the Transportation Enhancement, and through the Kent/Dover MPO.

The City would like to address the concerns of civic groups regarding truck traffic on NW Front Street, as indicated on Map No. 13. The City has initiated discussions with the Dover/Kent MPO regarding how best to determine whether the perceived vibrations are a significant problem. With the assistance of DelDOT and the MPO, the City would like to evaluate alternative routes for trucks. Heavy vehicles detract from and damage the streetscape elements along NW Front Street. Such a study would fit within Strategy 1 of the Long-Range Transportation Plan.

In addition to the areas designated for multimodal investment, DelDOT also focuses its 2002 SLRTP on balancing the principles of providing transportation opportunities for economic growth with cost-effectiveness – this balance can satisfy moderate growth with sustainable solutions.

The regional section of Milford's transportation element is a policy promoting capacity preservation on roadways serving Milford's commercial and employment centers by supporting DelDOT's efforts to identify routes for through traffic. Locally, the City is promoting the use of service roads to link businesses and commercial clusters and to limit the need for frequent highway entrances onto US Route 113 and Delaware Rt 1.

Originally, the City advocated for a limited access by-pass to the west of Milford, extending from the Thompsonville Road area, southwest to Canterbury Road, and south utilizing an improved Canterbury Road, and hence south and east to rejoin US Route 113 in the Lincoln area. The objective of the western improvements included: 1) more rapid travel to Georgetown and south, 2) a reduction of through traffic on US 113 within the City, and 3) diversion of beach traffic bound for points south of Dewey Beach from DE Route 1.

A proposed western by-pass was suggested for consideration which would have made the Milford section of the US Route 113 evacuation route more effective. This alternative, among others, was the focus of an intensive DelDOT planning study entitled "US Route 113 N/S Study."

The City's policy is to continue to work closely with DelDOT regarding the N/S study goals. During 2004, the City voluntarily differed infrastructure work and annexation proposals in order to participate in, and to accommodate this process.

Under any circumstance, the City of Milford will not issue a final site or subdivision approval without prior DelDOT permits and approvals for a project. While the US Route 113 N/S Study is in an undetermined state, the City will provide information regarding the DelDOT study, and contacts at DelDOT regarding the need for and/or location (if known) of ROW to all parties requesting annexation. A Map is available which shows the general areas of the N/S Study. Specific route alternatives may be requested from DelDOT.

Under the federal Surface Transportation and Uniform Relocation Assistance Act of 1987, parcel-specific negotiations for ROW must be between the property owner(s) and DelDOT. Such negotiations will be needed, regardless of whether or not a landowners requests annexation into the City of Milford.

"Beach traffic" demands on Delaware Route 1 are well documented in DelDOT studies and in the Sussex County Comprehensive Plan. Diverting traffic from DE Route 1 to a point south of Milford on US Route 113 can provide relief on the Coastal Highway, and shorten travel time to Delaware and Maryland beaches south of the Indian River inland bay according to DelDot studies.

Map No. 14 includes four areas, identified as Neighborhoods, which are included in Milford's annexation plan. These areas are not included so much to express a desire on the part of the City to encourage growth, but in acknowledgment of current growth trends, annexation inquiries and subdivision activities. The Office of State Planning, through the State Strategies has identified these areas for rural rather than urban development and DelDOT has indicated that additional access or access expansions onto DE Route 1 will not be funded. The City has no issue with these policies except where transportation, water and sewer infrastructure are already available and could be utilized. In these places, the City should be permitted to improve or extend its services.

DelDOT has no implementation schedule for access modifications on Milford's eastern section of DE Route 1, however preliminary designs have been put forward as follows. At NE Tenth Street, DelDOT will eventually close the median off DE Route 1, limiting the turning movement from NE Tenth Street to right turns (south-bound) only.

At NE Front Street/New Wharf Road, an overpass and ramps will be constructed. This overpass will permit a safer, more convenient crossing of DE Rt 1. The overpass and ramp intersection may have the unintended consequence of encouraging development in an area which DelDOT and the Department of Agriculture have specifically indicated as sensitive; however, this plan has positive access improvements for the Milford Police Department.

Milford supports the design of DE Route 1 as a limited access highway. DelDOT's plans for the highway, under the Corridor Capacity Preservation Program, do not conflict with the Annexation and Land Use Plans presented in this Update. No new access is being requested under this plan.

DelDOT has plans for a grade-separated interchange at Thompsonville Road, north of Milford, including a bridge over Route 1 and ramps connecting the two roads. This robust interchange could be incorporated into a western routing of traffic destined to Harrington or local traffic to residential areas.

Proposed Borrowing for Water, Sewer and Electric Improvements

On January 28, 2008 a proposal was submitted by City Staff to improve the Electric Service, Water Service and Sewer Service to the residents of the City of Milford. The proposed projects include the following:

Water System improvements (estimated cost)	\$5,000,000.
Sewer System Improvements (estimated cost)	\$4,500,000.
Electric Improvements (estimated cost)	\$5,500,000.

Current Conditions

Under current conditions the Water System cannot meet the peak demands with one well and or treatment facility out of service. Maintenance is needed on the Water towers, wells and treatment facilities. Significant inflow and infiltration of groundwater and storm water into the Sewer system that unnecessarily increases the costs of users' payments to the Kent County Sewer Authority. An aging Sewer System infrastructure is in need of maintenance and rehabilitation and the electric system is operating above optimum capacity. The electric load from 2 of the 4 circuits cannot be shifted to other circuits.

Water System Improvements

The proposed projects include the following: Construction of Production Wells, Treatment Facility, and Water Tower.

The Current daily capacity is approximately 4.00 MGD with an average daily flow from 2002-2007 is 2.37 MGD with peaks of 4.00 MGD. The city has a 1.0 MG of storage capacity (36.3% of average daily flow and 25% of peak flow). Industry standards recommend one day's storage. The City does not have the ability to meet the current peak demands with one well and/or treatment facility out of service. In addition repair work is needed on existing water towers and water plants that will require taking them out of service for a period of time. The City is required to comply with Source Water Protection requirements as mandated by the Safe Drinking Water Act of 1996.

Estimated Project Costs: (Construction and Engineering)

Water Tower	\$3,000,000.
Wells and Treatment	\$1,500,000
System Mapping	\$500,000.
Total	\$5,000,000.

Projected Costs to Users:

There is debt capacity available within the current rate structure and no rate increase is needed to support the projected costs. Under this arrangement new connections are subject to an impact fee of \$1,845. Per EDU.

Sewer System Improvements

Additional sewer system improvements include the following:

1. Pumping Station Upgrades
These include repairs and improvements to the Fisher Avenue and Washington Street pumping stations. These repairs and improvements will modernize older equipment at the stations and reduce odors emitted from the stations.
2. Extensions to Areas not served by sewer
This will allow the City to work with areas within the City and areas identified for annexation that are currently not served by public sewer. This also eliminates existing or failing septic systems in Milford that could have an adverse impact on the waterways and the City's drinking water sources.

A major item to address under the Sewer System projects is the Infiltration and Inflow(I&I) study and removal projects. These projects include the replacement of the Sewer main at N.E. Front Street The study of other areas of the system for high concentrations of I&I. The removal of a percentage of groundwater and storm water from the existing system would reduce unnecessary operations problems and associated costs. These existing concerns/problems increase treatment costs paid to Kent County. The estimated cost not to remove I & I in FY06-07 was \$615,000. The City of Milford's goal is to reduce I & I by a minimum of 25% and create an annual cost savings of \$153,750.

Estimated Project Costs: (Construction and Engineering)

Infiltration & Inflow Study & Projects	\$ 200,000.
N.E. Front Street I & I Project	\$2,100,000.
Pumping Station Improvements	\$1,900,000.
Extensions to Areas not served	\$ 300,000.
Total	\$4,500,000.

Projected Costs to Users

The final year of the three year phase in for sewer rates will increase the monthly base fee by \$1.50 and the usage rate by \$0.10/1,000 gallons. New connections are subject to an impact fee of \$975. Per EDU.

Electric System Improvements

Electric system project include a new electric substation, and transmission and distribution system improvements.

The current substation on the SE side of the City was constructed in 1988 with four circuits and is the only point of service for the City of Milford. Each circuit is designed for optimum performance at 10 MW, however, the demand on each circuit is 12 MW (48 MW total) The demand over 10 MW results in lower system efficiencies, reduced service quality, and reduced reliability that ultimately equate to higher costs. An additional circuit could be constructed out of the existing substation; however, it is not economically feasible or practical.

Current demand trends since 1993 project that the system demand will increase to 56 KW by 2010 and 68 KW by 2015 an 4.5% annual increase. Therefore a proposed second substation on the NW side of the City will provide a second service point and a distribution system that will parallel the existing system.

Estimated Project Costs: (Construction and Engineering)

Substation	\$2,750,000.
Transmission & Distribution	\$2,750,000.

Projected Costs to Users:

The projected cost to the users is as follows; there is debt capacity available within the current rate structure and no rate increase is needed to support the projected costs. New connections are subject to a minimum impact fee of \$600 for a 200 amp service and \$1,200 for a 400 amp service.

Consideration of the Alternatives:

There may be a potential reduction of economic activity in the City of Milford for existing and new businesses if these improvements are not made. The maintenance of the systems becomes more difficult and results in an increased costs and aging infrastructure. The service reliability is reduced and jeopardized. Projects are delayed to a time when construction and financing costs are higher. The delay of these projects results in adverse environmental impacts. There are associated costs and loss of potential revenues and no new utility customer's results in higher increase in user rates.

Timeline for City Council and the public:

A Public Hearing was held on January 14, 2008. A Special Election was voted on and approved on February 23, 2008 by a vote of 135 to 28. The Design and Construction is anticipated to start in 2008-2011.

CHAPTER 10 ENVIRONMENTAL ISSUES

Water Quality of the Mispillion River

The City of Milford is located on the Atlantic Coastal Plain, within the drainage to the Delaware Bay. The City is less than 10 miles from the Bay, which generates a mild climate year-round. Average monthly temperatures range from 76o to 32o F. The average annual rainfall is 45 inches. Rainfall runoff flows to ditches, small streams and rivers dependent on the ground surface topography. A geographic area that directs surface waters to a common drainage network is called a watershed, and the Delaware Bay Basin has been divided into 16 watersheds. The Mispillion River Watershed includes Milford and much of the Greater Milford area. To the north of Milford, surface water flows to the Murderkill River Watershed.

Milford is located within the Mispillion River watershed, which is an impaired watershed according to Section 303(d) of the Clean Water Act. Under Section 303(d) of the 1972 Federal Clean Water Act (CWA), states are required to identify all impaired waters and establish total maximum daily loads to restore their beneficial uses (e.g. swimming, fishing, and drinking water). A TMDL defines the amount of a given pollutant that may be discharged to a water body from point, nonpoint, and natural background sources and still allows attainment of maintenance of the applicable narrative and numerical water quality standards. A TMDL is the sum of the individual Waste Load Applications (WLAs) for point sources and Load Allocations (Las) for nonpoint sources and natural background sources of pollution. A TMDL may include a reasonable margin of safety (MOS) to account for uncertainties regarding the relationship between mass loading and resulting water quality. In simplistic terms, A TMDL matches the strength, location and timing of pollution sources within a watershed with the inherent ability of the receiving water to assimilate the pollutant without adverse impact. A Pollution Control Strategy (PCS) specifies actions necessary to systematically achieve pollutant load reductions specified by a Total Maximum Daily Load for a given water body, and must reduce pollutants to levels specified by State Water Quality Standards.

The City of Milford is located within the Mispillion Watershed of the greater Delaware River and Bay drainage. This watershed is assigned a range of nutrient (nitrogen and phosphorus) and bacterial TMDL load reduction requirements that, as mentioned previously, must be met in order to meet the State Water Quality Standards (See table 1).

Delaware River and Bay Drainage	N- reduction requirements	P- reduction requirements	Bacteria- reduction requirements
Mispillion	57%, 88% in Kings Causeway Branch	57%, 88% in Kings Causeway Branch	87%

Table 1: TMDL Nutrient (Nitrogen and Phosphorus) and Bacteria reduction requirements for the Mispillion watershed.

The Mispillion River, from the mill ponds of Haven Lake and Silver Lake, to the tidal reach from Silver Lake spillway to the Delaware Bay, was first listed in 1996 for elevated levels of bacteria, nutrients as well as low dissolved oxygen. The probable sources of the contamination are primarily non-point sources.



DNREC has completed and published a TMDL Study for the Mispillion River watershed and it is available on their webpage. The City will participate in any "Mispillion Tributary Action Team" to assure that the City's interest in improving the River's environment will benefit both its citizens and its businesses.

Groundwater Resources

The City's groundwater resource options are many and varied. Water sources are: unconfined aquifer, Milford aquifer, Frederica aquifer, Federalsburg aquifer and Cheswold aquifer. Water is produced from 11 wells screened in 4 aquifers. Production from the unconfined aquifer is limited to one well, because the shallow water requires filtration for iron removal. Approximately 89% of the City's water production is from the deeper, confined aquifers: the Milford, Frederica and Federalsburg. The Cheswold is not used at this time. Confinement in aquifers naturally protects the City's supply from surface contamination and reduces the City's exposure to reduced productivity during drought conditions.

Groundwater is recharged through infiltration of rainfall and surface waters through the soil systems on the earth's surface. The ability of soils to recharge groundwater resources has been approximated and mapped by the Delaware Geological Survey. Areas of excellent recharge are shown on Map No. 13. In general, large areas of excellent recharge have been mapped to the west of US Route 13, in both Kent and Sussex County. In 2007, new DNREC regulations required the City to protect excellent recharge areas, through limitations on the percent of impervious area permitted by new development. These regulations have been promulgated and have been approved by City Council.

The City's wellhead protection areas have been delineated by DNREC and are shown on Map 13 in combination with the Excellent Groundwater Recharge zones as "Water Resource Protection Zone."

Waterways and Drainage

Milford is divided by the Mispillion River, which has been dammed into a series of lakes to the west of Mill Street. East of Mill Street the river is channelized to Washington Street, where a tidal gate structure restricts normal tidal flows. East of Washington Street the River is unrestricted to the influence of tides and storm surges from the Delaware Bay.

In November 2000, the City of Milford completed a Hazard Vulnerability Study, under a grant from the Delaware Emergency Management Agency. The study's scope was directed at the City's critical facilities and included a survey of fire, hazardous materials, winter storms, and wind and flood risk. Flood hazards were identified as the hazard most likely to affect the citizens and businesses of Milford on a frequent basis.

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program, which evaluates the height of floodwaters, and their probability of occurring. A flood which has 1-in-100-chance of occurring (1 percent chance) in any year is popularly referred to as the "100-year flood". FEMA publishes a Flood Insurance Rate Map (FIRM) illustrating the Special Flood Hazard Area (Zone A or the 100-year floodplain) as 400 to 800 feet wide on the Kent County side of the Mispillion, and 200 to 1000 feet wide on the Sussex County side. The 100-year flood elevations range from 9 feet on the tidal reaches of the River to 16 feet on Haven Lake, with 0 feet being mean sea level.

The City includes a floodway along the River through the historic downtown, from Washington Street up river to the Silver Lake spillway at Maple Street. A floodway is the channel of a stream plus any adjacent land areas that must be kept free of encroachment so that the 1% annual change flood can be carried without substantial increases in flood heights. If a floodway is restricted by new structures, flood elevations may be increased, upstream of the restriction. The floodway in downtown Milford has been heavily developed throughout most of the 20th century; however, revitalization efforts should avoid encouraging additional impediments to flow within the floodplain fringe and floodway itself. Floodplains and drainage ways are shown on Map 3, Natural Areas.

Flood History

Milford is a Delaware Bay community, located less than 10 miles from the coast. Ground elevations range from just above mean sea level in the east along the River, to approximately 45 feet at the north and west boundary of the City. Significant flooding was caused by a hurricane in September, 1935, as 10 inches of rain fell on the City in one day. The original dam and spillway at Maple Street, impounding Silver Lake failed, and the river flooded the original office buildings and manufacturing plants of the L.D. Caulk Company. Today, most of Milford's manufacturing and critical public facilities are beyond the 100-year floodplain of the River.

Milford has been fortunate in the past 60 years to have been missed by tracking hurricanes moving along the eastern Atlantic Coast. Although hurricanes have affected Milford, flooding is more frequently caused by northeaster storm systems and high intensity thunderstorms. Storm surges increase the height and duration of flooding along the tidal reaches of the Mispillion and its tidal tributaries (Swan Creek in Kent County and Deep Branch in Sussex County). Storm surge effects drove several historic flood events in Milford. The Delaware Coast and Delaware Bay area has the highest expected surge elevations in the nation -- 5 feet or higher with a 10-year recurrence interval (FEMA, 1997).

In February 1998, a northeaster storm bottled high tides in the Mispillion flood plain and the downtown bridges on Walnut and Washington Streets were impassable. The flooding did not extend to the 100-year delineation; however the flooding revealed the vulnerability of some public buildings and a parking lot for the State of Delaware fleet vehicles. Although located on high ground above the flood elevation, flooding affected the roadways leading to the Milford Police Station. A fertilizer warehouse located on the riverbank was also flooded and significant product was destroyed.

Intense rain events can cause localized street flooding in many areas around the City. In August, 2000, a severe thunderstorm caused localized road flooding near the Milford High School (one of Milford's emergency shelters) as well as at the level crossing of the Norfolk Southern railroad at South Walnut Street. During the event, rail traffic was stopped, over the concerns derailment and adjacent bank instability of flood-induced derailment and adjacent bank instability.

Mispillion River

Historically, the Mispillion River and its tributaries powered the commercial and industrial enterprises, which generated the wealth of Milford. Numerous mills, including sawmills used to supply the wood for Milford's shipyards were located on dams which have shaped the "waterscape" of Milford today. Both working and pleasure boats use the Mispillion in Milford as a homeport. The river is tidal up to the Washington Street Bridge. The normal tide range is 2 feet from high to low tide, but wind conditions influence the river with "blow out" tides which expose the river bottom and northeasters which produce flooding of the rivers banks. Historically, the river had a wider flood plain and wetlands system, but the banks have been filled in and channelized for control of malaria and to support industrial and commercial enterprises.

From the eastern city limits along DE Route 1, the River is sparsely developed and widely flanked by tidal wetlands. At the moveable bridge on Rehoboth Boulevard, the riverbank and flood plain is move heavily developed and a bank stabilization project has been in progress through the Kent and Sussex Conservation Districts/DNREC Soil and Water Conservation since 1998. The project generally consists of riprap placement along the riverbank from the movable bridge at Rehoboth Boulevard to the dam at Washington Street.

The Washington Street dam is a concrete and steel arc with two sluice gates located at the Washington Street Bridge. It is the eastern-most dam within the City. When closed, the dam limits normal tidal flows further up river and provides very limited storage. The structure is submerged at high tide. The bridge at Washington Street was constructed in 1933 and the dam appears to have been constructed at about the same time.

About a ½ mile upstream, a second dam impounds Silver Lake near the intersection of Maple and Lakeview Avenue. The dam is part of the railroad embankment and was built in 1964. The Silver Lake spillway normally impounds 60 acre-feet and consists of a 6-foot high, 90- foot long arc weir made of steel and concrete. The maximum discharge through the spillway is 5,040 cubic feet per second (37,700 gps). A small culvert to the north of the weir provides additional discharge under the railroad and Maple Street along the original river diversion for the nineteenth century Milford Mill, located on Mill Street. Flow from the culvert under the railroad and Maple Street returns to the Mispillion along the remnants of the mill's tailrace.

Kent County Drainages

Swan Creek is on the northeastern quadrant of the Milford area. It flows east for 1-½ miles to the Mispillion River from the outlet of Tub Mill pond. There is limited residential development along the north side of the flood plain, and the community of Woods Haven lies to the south on a sandy ridge above the flood plain. The 100-year flood elevation is evaluated to be 9 feet.

Sections of New Wharf Road which run at elevations less than 15 feet (at the northwest intersection with US Route 113 and at the eastern-most road way crossing the creek) are prone to flooding due to spring tides and combined tidal and runoff events.

Tub Mill Branch in the immediate vicinity of Tub Mill Pond is the most northern of Milford's flood plains. Land use within the drainage of Tub Mill Branch is evolving from agricultural to residential and this change will extend the periods of high discharge from storm water runoff. The 100-year flood elevation is mapped as 9 feet. A low-lying section of Tub Mill Pond Road (north of the pond and just west of US Route 113) is within the flood plain.

Mullet Run drains the northwestern section of the City, flowing from the center of Phase I of Greater Milford Business Complex, southeast into the North Historic District and discharging into the Mispillion through a narrow ditch along the back property lines of properties on Church Street. Development pressures along Airport Road and within the 91 acre Business Complex will extend periods of high discharge from storm water runoff. Elevation of the 100-year flood range is listed as 24 feet west of US Route 113, and ranges from 18 feet just east of the US Route 113 culvert to 10 feet at the Mispillion. A narrow floodway is delineated through the channel from the highway to the Mispillion.

Sussex County Drainages

Deep Branch flows from south to north through Milford's recently annexed residential areas in the southeast quadrant of the City. Its flood plain is mapped from slightly west of the intersection of Marshall and McCoy Streets to the stream's junction with the Mispillion. The flood plain also extends approximately 1/3 mile to the east on an unnamed tributary to Deep Branch. The tributary drains an area which includes over 1,000 recently subdivided residential lots which are currently for sale and being improved for development and other residential projects within the drainage are in the permitting stages.

Flow on Deep Branch is impounded at Marshall Mill Pond, on the southeast side of Rehoboth Avenue at SW 2nd Street. Flood elevation at the pond is 14 feet, while the elevation after the outfall structure is 9 feet. The Branch is tidally influenced below this structure. Cedar Beach Road crosses Deep Branch by a narrow bridge with an elevation of approximately 7 feet. The bridge may be prone to flooding during spring tides or combined high tide and storm runoff events. The continued change in land use from agricultural to residential within the drainage will extend the periods of high discharge from storm water runoff.

Presbyterian Branch flows north from the west side of US Route 113 and Lakeview Avenue through a developed residential neighborhood to discharge into Silver Lake. The narrow flood zone includes a floodway along the channel. The flood elevation ranges from 21 feet to 11 feet at Silver Lake. Bowman Branch roughly parallels Presbyterian Branch ½ mile to the west, and flows north to Haven Lake through neighborhoods which are not currently within the City limits. Further west, Johnson Branch flows northeast through a wooded valley from Abbott's Mill Pond and nature preserve to Haven Lake.

Land Use Changes

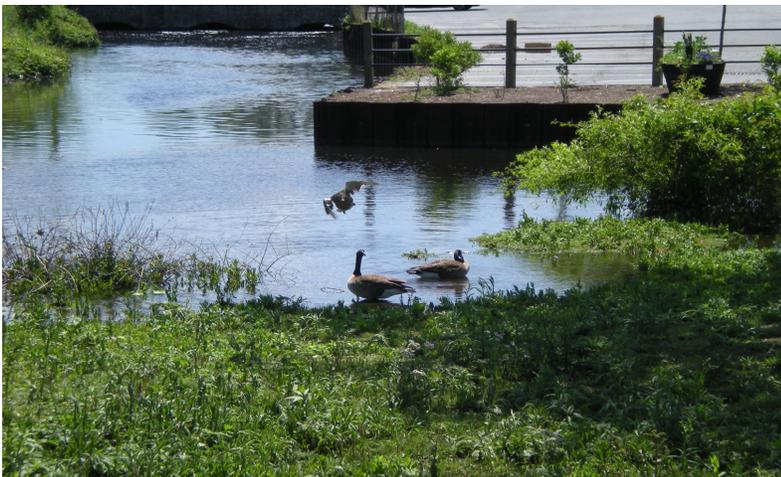
How easily surface water can flow through an area, and the volume of water which constitutes that flow are the chief physical elements which define the probability and violence of flooding. What land use is impacted by a flood event determines the cost of flood damages. Milford grew up on the banks of the Mispillion, but as the cost of flood damage increased – as the City’s factories, mills and warehouses obstructed the floodplain and elevated the floodwaters – businesses moved off the river. Today, the lowest locations along the River have been utilized for parking areas, or the City’s Greenway - a corridor of open space extending wherever possible along both sides of the River.

The flood problems of tomorrow are developing today along the tributaries to the Mispillion, as agricultural and forested areas are being converted to residential use. Land that previously absorbed rainfall and snowmelt becomes impervious. Current regulations address this issue by requiring water from impervious areas be stored in management ponds, and released at pre-development rates. However, the fact remains that more water is on the surface or directed to the City’s storm water pipe system to be moved by the Mispillion and its tributaries. As more rainfall is diverted from infiltrating to flowing over land, flood elevations and the Special Flood Hazard Areas will increase.

Wetlands

Wetlands are prevalent within the City on some shores and islands of the River, along the margins of tributaries and along the banks of the mill ponds impounded on the upper reaches of the River. Much of the River has been diverted, channelized or impounded as part of the historic development of Milford. The Mispillion Riverwalk has sections of boardwalk, which elevate the system above the banks, and new wetlands landscaping has been introduced. The Parks Plan includes an extension of the Riverwalk system to the east, to a wooded wetland area called Goat Island. The area is also targeted for a perimeter boardwalk system, with educational guideposts highlighting the wetland environment.

The Code of the City of Milford, Part II, Chapter 200, § 200-5 requires that wetlands delineation including jurisdictional determination is required as part of the subdivision approval process. In addition, for cluster-type development wetlands are excluded from gross area calculations.



Source-Water Protection Areas

Source-water protection areas are wellhead-protection areas and excellent-recharge areas.

Wellhead-Protection Areas

A wellhead-protection area is the surface and subsurface area surrounding a water well that supplies a public water system through which contaminants are likely to reach the well.

All such areas are as depicted on Source Water Protection Area maps located in City Hall as adopted as part of the update and implementation of the 2008 Comprehensive Land Use Plan. These maps are also available in GIS overlays from Delaware Department of Natural Resources and Environmental Control, Division of Water Resources, Source Water Assessment, and Protection Program.

As there are eleven wellhead-protection areas in Milford that provide the town's drinking water supply. In addition, there are two large wellhead-protection areas serving properties outside of Milford whose boundaries stretch on to properties within Milford's corporate limits.

Excellent-Recharge Areas

A recharge area is land on top of an aquifer. Precipitation falling on the land surface provides all the water that recharges aquifers. Recharge areas are classified as excellent, good, fair, and poor according to how rapidly rain water filters through the ground to the underlying aquifer. Aquifers are layers of gravel and sand within which water is stored and moves underground. Maintaining good water quality in local aquifers is especially important, because Milford obtains drinking water from wells drilled into aquifers. Care must be taken when developing recharge areas to ensure that precipitation does not pick up and carry contaminants downward to aquifers and that sufficient open area is preserved so that precipitation can recharge the aquifers beneath it. There are three excellent-recharge areas within the City's limits. Excellent-recharge areas consist of predominantly sandy soils that allow precipitation to most rapidly infiltrate to the underlying aquifer. Good-, fair-, and-poor recharge areas have respectively slower infiltration rates.

Source-Water Protection

The Safe Drinking Water Act Amendments of 1996 mandated that each state develop a Source Water Assessment and Protection (SWAP) Program to protect public drinking water sources. There are three basic components of all SWAP Programs.

- Delineation of the boundaries of the land areas most important to public water sources
- Identification of potential sources of contamination within those boundaries
- Assessment of susceptibility of the public water source to these contaminants

Title 7, Section 6082 of the *Delaware Code* requires each local jurisdiction with a population greater than 2,000, as determined by the most-recent census, to implement measures to protect sources of public drinking water within its boundaries. Local governments with fewer than 2,000 residents are not required to implement source-water protection measures, but are strongly encouraged to do so. A variety of tools are available to assist jurisdictions in their efforts to better protect sources of public drinking water, including ordinances, best management practices, and public education. These measures are provided in the *Source-Water Protection Guidance Manual for the Local Governments in Delaware* developed for DNREC by the Institute for Public Administration's Water Resources Agency at the University of Delaware.

Environmental Plan

The City's Environmental Plan is developed to support other elements of the Community Development Plan. The Environmental Plan's place within the City's suite of policies is to assure that economic development can occur while recreational and natural assets are sustainably utilized.

Milford is committed, through its Parks and Economic Development Plan to preserve the Mispillion River as a cultural and economic asset. The regulatory process has continued and an actual TMDL development study has been completed; In addition a "Mispillion Tributary Action Team" will be established to include stakeholders (municipalities, farmers, concerned citizens and industries). The City of Milford will participate on the team to assure that the City's interest in improving the River's environment is met to the benefit of Milford's citizens and businesses.

A number of specific initiatives will be pursued by Milford which will support the objectives of the Clean Water Act and the TMDL program. To protect the Mispillion River corridor, the City will develop preservation corridor setback requirements for new development. The City will also develop a riparian buffer standard which would be offered as an alternative to setback or other screening requirements currently in the zoning and subdivision codes. These elements would be presented under a new Environmental Preservation ordinance.

To enhance the River's water quality, the City will promote the elimination of individual septic systems where feasible. The City's Annexation and Land Use Plans include existing subdivisions where property owners may wish to tie-in to available public water and sewer.

The City will continue to provide regular maintenance, and participate in sanitary surveys to provide protection at the wellheads.

Regulatory Protection of wetlands is mandated under Section 404 provisions of the Federal Clean Water Act. Certain other wetlands (mainly in tidal areas) are accorded additional regulatory protection under provisions of Title 7, Delaware Code, Chapter 66. Compliance with these statutes may require an Army Corps of Engineers approved field wetlands delineation and/or an official DNREC wetland jurisdictional determination.

To assure adequate water supplies, the City developed a land use ordinance, for areas designated "Water Resource Protection Zone" per new DNREC regulations (in conformance with the Source Water Protection Law, Title 7, Delaware Code, Chapter 60, Subchapter VI.) These

regulations required the City to protect excellent recharge areas and recharge areas for wells in the unconfined aquifer. By placing limitations on the percent of impervious area permitted by new development the City hopes to protect these designated areas.

To protect both property owners and the Mispillion environment, the existing Floodplain Management ordinance will be updated per DNREC recommendations. The elevation of the first finished floor within a 100-year floodplain will be made consistent at 1 foot above base flood elevation. Additional impedance within a floodway will be prohibited.

The City's Land Use Plan, Economic Development and Transportation Plans emphasize placing workplaces and shopping close to residential neighborhoods. The City's residential zoning districts will be updated to include the most recent planning options. Milford will continue to promote the advantages of shorter commuting times and distances, and fewer vehicle trips as an important element of the Community Development Plan. An environmental consequence of these policies is better air quality through lower automobile emissions.



CHAPTER 11 COMMUNITY DEVELOPMENT PLAN

The Community Development Plan is the combination of plan elements developed in detail in the previous chapters. It unifies the elements by placing them in the context of the City's goals. The Community Development Plan, the Land Use Plan and Annexation Plan together constitute the 2008 Update to the Milford Comprehensive Plan and subsequent amendments.

Identified Goals

Based on the evidence provided by the 2000 census data, investigations of current land use and the inputs from the community, Milford's Comprehensive plan should address the following goals:

- 1) To encourage a growing, diversified economy using "smart growth" policies discouraging sprawl, placing employment opportunities near transportation alternatives, and supporting Milford's cultural and environmental assets, rather than degrading them.
- 2) To encourage appealing, affordable housing through a variety of Residential Zoning options. Housing options should be capable of maintaining the character of Milford's established neighborhoods, while providing a transition from City living to the rural setting of Kent and Sussex County. The housing stock should provide a variety of income levels with suitable residences.
- 3) To recognize the Mispillion River, its tributaries and floodplain as valuable environmental and economic assets. The surface and groundwater systems should be both protected and utilized for the public benefit.
- 4) To promote Milford's unique look and cultural assets as important components of the City's quality of life.

Economic Development

One of Milford's strengths is the variety of business sectors and business sizes which operate within the City. This is the key to providing economic opportunity to all the citizens of Milford and the Greater Milford Area. Beyond the City limits, the City recognizes that agriculture and associated businesses are intimately tied to many of the City's large employers and product producers. State and County programs that keep farming profitable, such as agricultural preservation and transferable development rights are supported by the City.

The City is committed to continuing its policy of providing a variety of suitable zoning categories and targeted land use areas within the City to accommodate the assortment of business sectors. Diversification is important for a sustainable and stable economy.

Independence Commons and the Greater Milford Business Complex will be promoted through the City's own initiatives as well as in concert with the Greater Milford Area Chamber of Commerce. Manufacturing, retailing and other commercial enterprises, and profit and non-profit

providers of educational and medical arts all have a place within Milford's city limits – as directed by the land use plan – as sources of quality employment.

The City will continue to advocate Milford as an employment center by providing adequate water and sewer facilities, and by promoting the availability of natural gas and state-of-the-art telecommunications infrastructure. Expansion of Milford's fiber optic data lines is a significant part of attracting new enterprises, as well as assisting existing businesses to utilize the latest technologies.

The City will continue to accommodate the growing number of medical services businesses that relocating along US Route 113, in Sussex County, as well as in the Business Complex in Kent County. This sector provides the double benefit of employment opportunities for Milford's residents, and convenient access to important services. The City will also continue to work with the development of a large tract of land east of Rt 1 designed for medical.

Milford recognizes that maintaining the appearance and functionality of the existing developed properties is an important adjunct to the goal of providing employment, housing and shopping within convenient distances to people living and working in the City. Redevelopment of under-utilized properties will continue to be promoted through the City's Planning Department. The City will coordinate with Downtown Milford, Inc., to integrate downtown redevelopment efforts with the Parks, Cultural Resources and Economic Development Plans included in this Comprehensive Plan. The City will also coordinate with the Delaware Economic Development Office to expand opportunities to keep constructed facilities fully utilized.

Housing

Providing employers with a suitable workforce is a natural objective in support of economic development. When employees live close to work as well as to shopping and social/medical services, they can be more productive. Milford's Community Development Plan is based on a policy of active participation in programs and initiatives that forward the concept of residents having access to work, recreation and shopping. The City is participating in the "Live Near Your Work" program to provide economic incentives for people to locate their homes near Milford's employers.

Under Milford's current residential zoning districts, vacant lands are available for additional development of many housing options. Thus, Milford's housing options are currently adequate to support the City's population; however, three areas should be addressed under this Comprehensive Plan to keep up with anticipated growth.

First, the City will continue to work with the Community Development Block Grant Program and other federal and state housing programs to assist low-income property owners to rehabilitate their structures. The City is dedicated to keeping the older residential neighborhoods attractive places for young persons and families, and to maintain affordable housing central to work places, shopping, community and recreational facilities.

Second, the City will continue to apply a variety of zoning classifications for residential uses to assure diversity in the new housing stock, from apartment blocks to upscale residences throughout the City and to provide a transition from the City to the rural lands of Kent and Sussex Counties. The City will encourage lower density, single family residential uses and

Traditional Neighborhood developments (through the Planned Unit Development in the City of Milford ordinance) to provide transition and buffer to the surrounding agricultural lands. In many cases, the City has utilized natural drainage features to provide logical margins to its potential growth areas.

The third element in the Housing Plan is directed at neighborhood preservation. With the growth in Milford's medical sector, which includes the Bayhealth Hospital at its center, a growing pressure to include commercial medical offices within Milford's established neighborhoods is occurring. Citizens participating in Planning Commission meetings have expressed their concern over conditional use applications and re-zoning requests.

The City believes that this mixed use of commercial medical services and residential neighborhoods can be accommodated, if new regulations are developed to protect the character of those neighborhoods. The City will develop additional new conditional use regulations such as low level lighting, shared parking, building height limitations, architectural review and additional landscaping requirements as part of the site plan review process.

Transportation

As Delaware's population grows, additional stresses are occurring on the State's roadway system. Overall trip reduction and reduction of the length of trips extends the useful life of the roadway infrastructure and has positive environmental and economic benefits. The Community Development Plan works toward trip reduction in the Milford area. The goal of encouraging both employment and residence is advanced when the internal City transportation is in good repair and offers walking and bicycle options. The local component of the City's transportation plan focuses on transportation alternatives. New focus has been placed on encouraging service roads to link commercial areas while limiting intersections on the City's principle arterial roadways.

Most of Milford's streets are bound by sidewalks and the City has a long-term commitment to improved pedestrian safety and convenience. Transportation Enhancement funding has been used to complete sidewalks in both Sussex and Kent Counties in the vicinity of the Milford Middle School, Banneker Elementary School and from the Milford Crossing apartments to the new Buccaneer Boulevard at the Milford High School. Prioritization of sidewalk projects has generally considered the pedestrian traffic moving to and from the primary schools and to commercial centers within the City.

Future sidewalk improvement projects are being developed for the streets in Sussex County in the vicinity of Lulu M. Ross Elementary School. The Truitt Avenue Pedestrian Connector, which provides sidewalk and bridge link from various residential neighborhoods to the Milford Plaza Shopping Center, will be expanded with sidewalk extensions from a potential residential development located near NW Front Street.

The Mispillion Riverwalk links the downtown business district on both sides of the River with pleasant sidewalks, boardwalk and footbridges. The Riverwalk Masterplan includes expansion of the greenway across the City's historic center. The Riverwalk and Streetscape projects are also central to linking the municipal parking lots with shopping, office use and cultural activities in the downtown district. Proposed additions include linking the Riverwalk with the two elementary schools through a system of pedestrian and bicycle trails and with future residential development.

Minor street rehabilitation projects are also proposed for various areas within the City, for both municipally maintained streets and for NW Front Street, under DelDOT's maintenance jurisdiction.

Milford also fits well into the State's transit system. The City's location at the junction of Route 1 and US Route 113, as well as Routes 14, 15, 30 and 36 make it a good choice for bus transfer points and express routes. As the City grows, additional bus service should be considered by DART.

A regional component to the transportation plan proposes a study of potential roadway improvements, intersection improvements and a potential, limited access by-pass around the built-up segments of US Route 113, depending on DelDot recommendations. The benefits of such a by-pass would include more rapid travel to Georgetown and south, and a reduction of through traffic on US 113 within the City.

The City supports the existing Corridor Capacity Preservation Program for DE Route 1 bypass and will work with DelDOT as the intersection modification plans mature, to evaluate the full impact on City services, public safety and development pressures.

Environment

Livable Delaware strategies emphasize concentrating investment and development in cohesive communities. This effort encourages preservation of agricultural and environmental resources beyond the community. However, development concentration can also have the unintentional consequence of stressing natural resources within the strategy area.

As Milford extends its water service to new users within the City and to areas requesting annexation, water production will increase. To assure adequate water supplies, the City has completed a General Water Facility Plan, approved bonding to improve the water and sewer service to the residents of Milford and is completing a series of test wells and groundwater evaluations. The City has developed and approved a wellhead protection ordinance. The City will develop preservation corridor setback requirements for new development in the future and the City will also develop a riparian buffer standard as an alternative to setback or other screening requirements. These elements would be presented under a new Environmental Preservation ordinance.

To protect the Mispillion River corridor, a central cultural and recreational asset, the City will participate in the Mispillion Tributary Action Team and assist in the development of pollution control strategies for the River. To enhance the River's water quality, the City will promote the elimination of individual septic systems, where feasible.

To protect both property owners and the Mispillion environment, the existing Floodplain Management ordinance will be clarified and updated per DNREC and FEMA recommendations. The elevation of the first finished floor within a 100-year floodplain will be made consistent at 1 foot above base flood elevation. Additional impedance within a floodway will be prohibited. Additional training by the Building Officer and City Planner will take place to keep current with these regulations.

The City's Community Development Plan elements emphasize placing workplaces and shopping close to residential neighborhoods. Milford will continue to promote the advantages of shorter commuting times and distances, and fewer vehicle trips through the Comprehensive Plan process. A consequence of this element is better air quality through lower automobile emissions.

Parks and Open Space

The City's Parks and Recreation Department has taken the lead in developing Milford's local system of parks and streetscape projects into a Riverwalk master plan. The program has been recognized throughout the state as a model for urban greenways development. The Mispillion Riverwalk plays a significant role in economic development in the downtown area, and in improving access to parking, recreation, and shopping via travel options which are healthy, enjoyable and picturesque. The Parks element focuses on continuing the Mispillion Greenways expansion to Goat Island on the east and Mill Street to the west side of the City.

The Greenway development is currently in Phase 21, and the City is actively pursuing easements or land purchases to expand the riverside walkways to the west with the goal of developing an interpretive center and parking at the property obtained through Peninsula Oil, on Mill Street at the riverside. The Peninsula Oil site will allow the Greenway to tie into the North Milford Historic District, and holds the potential for walking tours which could include the Parson Thorne property managed by the Milford Historical Society, the redeveloped Downtown commercial area, the Milford Library and the City's Bicentennial Park. New entry points onto the Greenway also include parking, which further assists the economic development plan for the downtown area.

Recreation

Recreation plan elements include the River as a resource, in conjunction with economic development and parks proposals. The City will actively support a regional Blueway canoe and kayak trail from Abbott's Mill Nature Center through Haven Lake and Silver Lake to Goat Island.

In anticipation of the larger Blueway, the boat dock located at the Police Station will be reconstructed and expanded as part of the DNREC Boat Launch project. The Boat Launch has been designed to be handicapped-accessible and to include use by kayak enthusiasts. In addition, kayak trails are being investigated in the tidal reaches of the River, from Bicentennial Park to Goat Island and hence northeast to the mouth of the Mispillion. Deep Creek, which flows from Sussex County to the River near Beaver Dam Road, is also being considered at this time. The City's environmental component of the Community Development Plan incorporates preservation areas along these drainages supporting recreational use of the larger waterways.

Cultural Resources

Using the Mispillion Riverwalk and the larger promise of a regional Blueway, additional pedestrian and bike ways, the City continues to connect the community with its past. Presentation to the public of the physical artifacts that relate to Milford's history, as well as

protection of the environment of the Mispillion River, the heart of so much of that history, will maintain and enhance the appearance and ambience of the City and will continuously remind its citizens of their community's past.

Milford is fortunate to have the Milford Historical Society and the Milford Commission of Landmarks and Museum, two community-based organizations dedicated to history and its preservation. The City will continue to support these organizations through civic recognition and the provision of City services to support their events and functions.

The City desires **additional** informational markers placed indicating the three Historic Districts, and **additional** signage which would direct travelers on Route 1, US Route 113 and Route 14 to the Districts. Specifically, the City will work to have markers placed to indicate the Historic Districts, through either partnership with the State of Delaware or with private interest groups. Promotion of the City's historic and cultural resources is one key to the success of Milford's integration of the Mispillion Riverwalk master plan and economic re-development of the Central Business District.

Although the City does not intend to impose historic preservation by ordinance under this Update, the City of Milford has prepared a draft Historical Preservation Ordinance which will be further reviewed by City Council and the public in the future. In addition, the municipal departments and commissions will continue to work with private groups to recognize properties which are of significance to the nation, to the State of Delaware or to the community within the City limits and within the Urban Growth Boundary Area. If requested to assist private preservation efforts, the City will support property owners' requests for federal funding for historic preservation.

The Transportation and Parks elements of the Community Development Plan emphasize alternative transportation options to link the City's historic structures, museum, theaters and library, including pedestrian and bike trails.

The City would also like to address concerns of civic groups regarding truck traffic on NW Front Street. The route is currently posted for a weight limit of 27 tons, which should be enforced, if necessary. Civic groups such as the Historical Society and Downtown Milford, Inc. have expressed concern over the vibration due to heavy vehicle traffic moving through the Historic District on NW and NE Front Streets.

The City will initiate discussions with the Dover/Kent MPO regarding how best to determine whether the perceived vibrations are a significant problem. With the assistance of DelDOT and the MPO, the City would like to evaluate alternative routes for trucks.

Public Services

The City has long held a commitment to cost-effective provision of public services for its citizens. Water, sewer and electric service are continuously maintained, and periodically expanded to meet the needs of a growing population. Long-range plans put forward by both Kent County and Sussex Counties acknowledge and compliment Milford's role for the future.

The City will continue to use a series of long-range facility management plans for expansion evaluation and implementation.

In addition to utility services, the City also plays a role in protecting the value of property and public safety. The City will continue to maintain its zoning map and will continue to work with Kent County and the Office of State Planning Coordination to share GIS data regarding annexations, zoning and tax parcels. The GIS data collected from the Census for this Plan Update will be utilized to review the Council Ward boundaries and update them as necessary.

The Zoning Ordinance will be updated to reflect the objectives, goals, and implementation strategies of the City's Comprehensive Plan. The current Zoning and Subdivision ordinances will first be reviewed for consistency with the Land Use Plan. Properties with zoning classifications that is not consistent with the Land Use Plan will be re-zoned. This process must be accomplished within 18 months of certification.

As re-zoning, conditional use and annexation agreements are being negotiated, the City will refer to this Plan Update to identify items which property owners and developers can provide to further the City's overall Community Development Plan. For inquiries in the south, the City will provide information regarding the DelDOT N/S study, including the possibility that right-of-way will be needed for the future road way and the contacts at DelDOT regarding the location of ROW. Parcel-specific negotiations for ROW must be between the property owner(s) and DelDOT. The Annexation and Land Use Plan presented in the Update document will be used to assess the City's interest and ability to support annexation requests.

It is recommended that population distribution map(s) which are generated for the Ward redistricting be made available to the Police Department, along with the Land Use Plan, for a manpower and deployment review. Similarly, the Carlisle Fire Company, recognizing the residential growth to the southeast in and beyond the City, has indicated that a substation to the south or east, with easy access to DE Route 1 may be desirable in the future. The City's Land Use Plan map will be made available to the Company to assist them in their planning.

Finally, it is recommended that the City review the Annexation and Future Land Use Plan with the Delaware Solid Waste Authority, to evaluate additional recycling locations to serve growth areas as they develop.

State Goals and Policies

The State of Delaware outlined its goals in the December 1999 Strategies for State Policies, and March 2001 Livable Delaware initiatives, to... "help manage new growth... while revitalizing town and cities and protecting the state's environment and unique quality of life." In March 2001, Governor Minner proposed and passed legislative initiatives which were directed at implementing the Strategies' goals. The maps delineating four strategy levels and sites identified as out-of-play for future development were adopted in mid 2004. Representatives of the City of Milford's staff, Planning Commission and City Council participated in the public workshop process and submitted a detailed comment letter. While none of the City's concerns were addressed directly, the State did provide for an overlay and a Memorandum of Understanding for planning this southeast section of the City called "Area of Study" that tied modification of the Strategy levels in this area only to refinement of DelDOT's plans for a limited access bypass to link DE Route 1 to US Route 113.

The Department of Agriculture has significant acreage under Agricultural Preservation to the east of Milford in Kent and Sussex Counties, as well as tracts along the Mispillion River of Purchased Development Rights.

The City of Milford agrees with the concept of limited access on DE Route 1 as it by-passes Milford, and with the goal of preservation of farm land, particularly along the tidal reach of the Mispillion River to the east of the City on both the Kent and Sussex sides of the river, however this should be paired with directing growth to the areas west of Route 1 adjacent to the City.

Similarly, the City is proposing to annex existing commercial properties east of DE Route 1 and west of Big Stone Beach Road (Kent County) as part of the reduction of cross-overs and access points on the highway in that area. Addition of a service road and elimination of onsite septic system in the area will promote a number of the City's transportation and environmental policies.

CHAPTER 12 LAND USE PLAN/ANNEXATION PLAN

Existing land use within the City is discussed in Chapter 8, Elements of Community Development. The existing land use is mapped on Figure 9, Existing Land Use, and the current Zoning Districts are illustrated on Figure 8. Using local zoning ordinances and infrastructure enhancements, the City of Milford will direct commercial and industrial/ business/ professional office development to the northwestern quadrant of the City. The existing residential demand in the southeast quadrant will be addressed through the annexations under lower density residential classifications as well as consideration of Traditional Neighborhood Development and through the City's Planned Unit Development Conditional Use regulations.

In the southwestern quadrant of the City, existing residential neighborhoods are under pressure to accommodate medical service offices. One recommendation is to develop an overlay zone, which will continued the desirable mixed-use pattern, but impose additional architectural and site plan regulations, in order to preserve the neighborhood consistency. Another recommendation is to consider additional requirements under again under the Conditional Use regulations.

Potential Expansion

Annexation into Milford is an attractive option, and the City's infrastructure and organization can support the addition of acreage, population and new business activities.

Annexations will be considered as the property owners make application to the City. The City of Milford can support additional expansion under the plan of service and infrastructure maintenance and improvements as outlined in Chapter 8. Annexation agreements will be required to assign and guarantee developer responsibility for expansion and/or upgrades to water, sewer, electric and transportation facilities. The annexation agreements will also reference potential regional transportation projects, such as the potential US Route 113 bypass and the DE Route 1/DE Route 30 intersection improvements, which will require additional agreements with DelDOT and the developers of land in proximity of this intersection.

Within the Urban Growth Boundary Area, a number of existing residential subdivisions in the southwest have been included in the Annexation Plan. These lots may require emergency connection for failed on site water or sewer service and the City has the potential of supporting those needs.

The Urban Growth Boundary represents a potential future corporate boundary for the City of Milford. Within the Urban Growth Boundary, the City of Milford would entertain annexation requests from property owners on a case by case basis during the five year planning period and coordination with both Kent and Sussex Counties regarding the desired land use.

Future Land Use in 5-Year Expansion Areas

Figure 10 includes the Urban Growth Boundary and the Future Land Use map illustrates the desired land use in the proposed annexation area.

Neighborhood Area – North and Southeast

This area is approximately 758 acres situated in both Kent and Sussex Counties. The area includes undeveloped acreage north of Williamsville Road in Kent County, as well as eight, existing single-family subdivisions south of Williamsville Road and an existing industrial plant located between the railroad right-of-way and Holly Hill Road.

As described under the Environmental Plan, the developed properties are included to allow extension of City water and sewer service to these sites currently utilizing on-site septic systems on an as-requested basis if systems should fail. On Holly Hill Road, the Baltimore Air Coil plant has been connected to City sewer service to relieve a failing septic system. A few residences on East Lane of the North Shores subdivision are currently connected to the City's wastewater collection system. Approximately 300 on-site systems are operating within 2000 feet of the banks of Haven Lake in this area. Inclusion of the subdivisions in this area supports the long-term objective of reducing on-site wastewater disposal and its attendant nutrient loads on the Mispillion watershed.

Future land use within this area will remain substantially low density residential as described in the 2008 Land Use Plan, and maintains the usage pattern of the existing development. Expansion of residential development is anticipated north of Haven Lake, and south of DE Route 14. The Baltimore Air Coil properties would remain as industrial use. North of DE Route 14, the City continues to encourage business, commercial development, and professional office development continuing the trend in place at the Milford Industrial Park to the east, Independence Commons to the northeast and the existing commercial/business development along DE Route 14.

A subarea of this Neighborhood Area is an area located to the north of Airport Road and the current City limits, and west of Bowman and Warner Roads, in Kent County. This area is already subdivided into single-family lots, including a number of large lots designated as "farmettes." A number of existing land enclaves and boundary irregularities with the City boundary are included. The area is experiencing renewed interest in mixed-use and multifamily residential in response to proposed transportation improvements at the Thompsonville Road intersection with DE Route 1 and the intersection of DE Route 14 and 15. This area is approximately 600 acres and the future land use within Northwest Milford is envisioned as residential with a mix of housing options and limited commercial along the arterial highways.

The area to the extreme northern existing corporate boundary line contains Milford's water system and the County's wastewater collection system which currently serve a number of developed properties in this area north of the DE Route 1 and the US Route 113 split. Landowners have requested to be included in the Urban Growth Boundary Area to receive additional City services and relief from out-of-town rates. Future control of this area will permit

the City to implement additional water main looping and transportation improvements as described in the long-range infrastructure plan. This area is approximately 250 acres.

The City is working with DeIDOT to implement corridor capacity preservation through the combination of service roads on the east and west side of the highway, and strategic closure or limitations for cross-overs. The area will be connected to the City of Milford with the extension of Carpenters Pit Road to New Wharf Road. Continuation of the current mix of commercial and residential development with affordable housing is favored for this area.

The other subarea in the northeastern section of the Urban Growth Boundary Area includes infill within the current City limits to the west of DE Route 1 and properties to the east of DE Route 1. The Urban Growth Boundary area includes approximately 182 acres. The Urban Growth Boundary area includes the existing community of Woodshaven. The City has a water main which loops through Woodshaven and a limited number of homes are currently served.

Future land use for this area would ideally be a combination of low-density residential, and preservation of a riparian buffer along both the Swan and Mispillion waterways. This preservation area of approximately 150 acres, is a proposal under Milford's Flood Mitigation Plan, and also enhances Milford's integration into the significant Mispillion greenway and Milford Neck agricultural and wildlife preservation efforts. The City's largest water production and treatment plant is located on the east side of DE Route 1 in this area, which adds to the City's interest in environmentally responsible development in the area.

Neighborhood Area - Southeast

Southeast Milford continues to be the area of greatest activity for new residential projects (both multifamily and single family). In addition, the increasing population of the area is generating the consumer base for commercial projects as well. Due to the nature of previous annexations, the City has grown adjacent to six existing subdivisions. A recent water and sewer expansion has permitted approximately 80 homeowners in the Shawnee Acres subdivision to eliminate their septic systems and individual shallow wells, and this trend is expected to continue as additional water and sewer extensions are completed to new subdivisions under construction.

Future land use is primarily residential housing in standard block-oriented subdivisions or mixed use/density residential development. Commercial use is anticipated at the intersection of DE Route 30 and south of Wilkins Road. The large acreage and location between Milford and Milton will allow the property to be considered for a consolidated commercial use that will provide another shopping choice for people who live or work in Milford, but also residents of Slaughter Beach, Argos Corner, Lincoln and the large number of subdivisions that have been permitted and that are anticipated in Sussex County to the east, south and west. Various concepts have been discussed that are generalized as Commercial Use. The area is being proposed for consolidated commercial use, and the City will be looking for shared service or access roadways, pedestrian walkways, bicycle paths or internal walks that link stores. The City's regulations and standards, in conjunction with responsibilities retained by the State, for example DeIDOT, State Fire Marshal's office and Conservation Districts are relied upon to assure that design and construction are functional and safe. Milford has zoning districts that will suit the desired commercial uses.

Approximately 33 acres of preserved land are envisioned in this area, to extend the City's existing Greenway concept from the Mispillion to Marshall's Pond.

In 2004 the City amended its Comprehensive Plan with Appendix 8 South Annexation Area. Land use for some of this area was amended in April 2005 with the "urban mix" designation, as described in Chapter 7. This designation has been changed to a "Traditional Neighborhood Development" to avoid any confusion and to be aligned with the "Livable Delaware" concept. The Future Land Use Plan is presented as Figure 10.

URBAN GROWTH BOUNDARY

The Urban Growth Boundary (UGB) or an urban service district is a planning tool that promotes more efficient, orderly, and compact development. The UGB for the City of Milford is part of a growth management program that is designed to uphold the character of the City, protect the water supply and other natural resources, promote efficient development and use of public infrastructure, stimulate community and economic development, and impart long term, comprehensive thinking about the community's future.

The UGB for the City of Milford is a line on a map showing the demarcation between land that has or may receive concentrated development and land that has or may receive less development. On the outside of the UGB are predominantly low-density land uses, such as farms and large residential lots, and natural or protected lands. On the inside of the UGB are more intensive land uses and densely developed lands, such as commercial and industrial uses, multi-family and small lot residential, schools, government facilities, and transit services. For the City of Milford we have designated a large part of the area east of Del 1 which is inside of the UGB as Open Space. The explanation for this area is that the City would like to maintain the existing uses in this area and consider this designated an area of Open Space as a sending area for future development under a proposed Transfer of Development Rights program to ensure that property owners receive fair compensation for their land or purchase of the land for future open space uses and opportunities.

The UGB or urban service district is an area in which urban services will be provided and outside the UGB services will not be extended thus hopefully discouraging development sprawl. Within the UGB, the City of Milford will plan for, coordinate and provide and maintain municipal services and facilities such as sewer, water, and public services such as fire, police and coordination with the school district. The area within the UGB will hopefully stimulate infill development and provide more efficient use of land, preserve more usable open space, recreation areas and expand the opportunities for the development of affordable housing and housing that is close to employment opportunities.

The area within UGB contains the primary retail shopping area, the location of a majority of the public school facilities, and the location of the greater part of the churches and other service organizations as well as the major employers.

The development of the UGB boundary is a product of City Council, the Planning Commission and various land owners. The initial development of this concept was that both City Council and members of the Planning Commission were given blank base maps and instructed to draw what

they thought would be the Urban Growth Boundary for the City of Milford. After this exercise various surrounding land owners expressed an interest in being included within the UGB for reasons such as the availability of public utilities and public services. Thus a map was developed showing the Urban Growth Boundary for the City of Milford.

In summary, an UGB is an officially adopted and mapped line beyond which the City of Milford does not support development for a specified period of time, Growth is supported inside the boundary with utilities and development-friendly policies. Growth is discouraged outside the boundary. The UGB for the City of Milford hopefully will include enough land for development over a twenty (20) year period and will be reviewed every five (5) years to ensure that adequate land remains within the boundary.

NEIGHBORHOODS

Characteristics of a Neighborhood

In an effort to further identify development and characteristics of the City, the City of Milford was sectioned into four neighborhoods. These neighborhoods include the following: the Town Center, the Southeast Section, the Northwest Section, and the Southwest Section. It should be pointed out that this is the opinion of the Planning Department and is based on some geographical and some physical barriers or restrictions. Discussion remains open on the validity and the options regarding the selection of these neighborhoods, but this is intended to be a starting point for further inquiry and dialogue regarding the selection of these neighborhoods as well as providing a more in depth study of these particular study areas.

Some characteristics of neighborhoods in general include reference to a small group of houses in the immediate vicinity of one's house or to a larger area with similar housing types and market values. Neighborhood is also used to describe an area surrounding a local institution patronized by residents, such as a church, school, business district, or social agency. It can also be defined by a political ward or precinct. The concept of neighborhood includes both geographic (place-oriented) and social (people-oriented) components. Another characteristic of neighborhoods is based on a low-tech idea: a neighborhood is only about a 15-minute walk wide. It's everywhere we can get to and bring stuff home, before our feet get too tired. It's roughly a quarter to half a mile in radius depending on the change in elevation and the availability of pedestrian walkways and direct connectivity with a variety of neighborhood commercial and residential opportunities. The potential exists that this 15 minute walk may be expanded in the future due to the rising cost of energy, as more people hopefully abandon local short trips in their automobiles and opt to walk.

Town Center

The Town Center is roughly comprised of approximately seventy-five city blocks. The heart and soul of this neighborhood is the Riverwalk, along the Mispillion River. It combines the water experience in an urban environment, with its wide pedestrian pathways and closeness to the retail shopping opportunities in the downtown. Other major characteristics of this neighborhood include the three Historical Districts which give this neighborhood added character and charm. It includes the two Elementary Schools, the City of Milford's city park, Bayhealth Medical

Hospital and ancillary medical facilities located adjacent to this medical facility. The Town Center also has major employers consisting of the Dentspy/Caulk Company and additional employment and commercial development. The focal point of this neighborhood is the Riverwalk along the Mispillion River. Following are Opportunities and Challenges for this neighborhood.

Opportunities and Challenges

- ~ Expansion of the Riverwalk and additional proposed residential development along the Mispillion River
- ~ Reuse of the existing Bayhealth Medical facility if it is ever vacated
- ~ Expansion of the existing three Historical Districts
- ~ Development of pedestrian/bicycle connection with the existing Riverwalk connecting other neighborhoods with this valuable resource
- ~ Maintaining the existing residential neighborhoods in stable condition

Southwest Neighborhood

The Southwest neighborhood consists of Route 113 acting as the spine of the neighborhood. To the south and east of Route 113 there is a large master planned community called Central Parke at Milford Ponds which has received both preliminary and final approval for various sections and the developers expect to start construction on several housing types in the future. A major housing development called Simpson Crossing to the north of Central Parke is still unresolved which would have provided additional housing to residents of Milford. On the west side of Route 113 is a proposed commercial and residential development called Cypress Hall. Additional facilities include the Milford Middle School, several smaller residential developments, and the transfer station. The focal point at this time seems to consist of the Middle School, which provides the needed recreational space and the proposed commercial/residential development which will provide shopping and business opportunities to residents in the southwest section of the City instead of driving further north along Route 113. Following are the Opportunities and Challenges of this neighborhood.

Opportunities and Challenges

- ~ The reuse of the Bayhealth Medical facility
- ~ The development of the Simpson Crossing parcel
- ~ Additional development to the south and west placing transportation demands on the existing roads
- ~ Additional commercial and residential development along Route 113

North Neighborhood

The North section is primarily an employment and commercial neighborhood with several residential areas. These residential areas include Knotts Landing, a planned residential community near the intersection of Route 113 and Route 1, a proposed traditional neighborhood just north of Route 14 and a proposed residential development on Holly Hill Road. Major employers in this district include Growmark, Southern States, the Greater Milford Business Park, Independence Commons which has the Delaware Veterans Home, Hospice of Delaware, and under construction the Boys and Girls Club of Milford. It supports a large commercial area with the Wal Mart shopping complex, several out parcels accommodating a

variety of eating establishments and small commercial enterprises. Major employers occupy the Masten Circle compound. An additional employer and provider of open space is the Milford High School. The outstanding parcel to the west commonly referred to the Fry property like the Simpson property remains undeveloped at this time.

Challenges and Opportunities

- ~ The development of the Fry property for additional small industries similar to what was developed in the Greater Milford Business Park and Independence Commons
- ~ Future residential development to the west and north
- ~ Commercial development along the west side of Route 113
- ~ Commercial development along the west side of Route 1

Southeast Neighborhood

The Southeast Neighborhood is the newest neighborhood with several areas recently being annexed into the City of Milford within the last two years. This neighborhood has unique gerrymandering appendages in several directions. The area is comprised of several residential areas including Hearthstone Manor, which provides a variety of housing options consisting of single family detached dwellings, villas, and condos and the proposed Hearthstone II as well as single family developments called Orchard Hill and Meadows at Shawnee. Other developments include Wickersham to the south along Route 1 and the former Emory property which was granted preliminary approval. The major open space includes the Shawnee Country Club. Areas undeveloped include the Red Cedar Farms area which is zoned for single family and duplexes, the Isaacs Farm which is zoned Institutional Service and the Mills property which is zoned for single family residential. A major commercial and retail area is planned near the intersection of Route 1 and Route 30. At this time the focal point appears to be the proposed large commercial development which would provide the needed retail outlets for this part of the City. The State and the City are engaged in a Memorandum of Agreement (MOA) regarding master planning for the development of the "Milford East Planning Area". The MOA was finalized in March of 2008. The MOA describes the ongoing planning for this sub area with the Office of State Planning and Sussex County. The City and the OSP support this effort and the City looks forward to working with Sussex County and the OSP regarding this important planning venture. A copy of the MOA is found in Book Four.

Challenges and Opportunities

- ~ The intersection improvements to Route 1 and Route 30 by the construction of an overpass at this intersection
- ~ Future residential development to the south and east of Route 1
- ~ The need for additional public utilities to serve this neighborhood
- ~ The need for additional public services such as police and fire protection to serve this neighborhood
- ~ The need to provide additional recreational opportunities in this neighborhood

FUTURE LAND USE CATEGORIES AND THE FUTURE LAND USE MAP

Contained in Book Three, Chapter Three is the Future Land Use Map. The Future Land Use Map and recommendations form a key framework component for the Comprehensive Plan for the City of Milford. The Future Land Use Map contains various categories and it is necessary to

explain these categories in more detail. The Future Land Use Map is comprised of fourteen (14) categories.

1. Business Park
2. Government
3. Employment
4. Highway Commercial
5. Proposed Highway Commercial
6. Industrial
7. Institutional
8. Low Density Residential
9. Proposed Low Density Residential
10. Moderate Density Residential
11. Proposed Moderate Density Residential
12. Open Space
13. Proposed Institutional
14. Proposed Open Space
15. Transfer Station

The Future Land Use Map represents an approximation of how the City will develop over the next twenty (20) years with a summary estimate being prepared every five (5) years.

Business Park

The Business Park category allows light manufacturing, research and development, office/warehouse, medical facilities, and similar uses that would make the Business Park for potential corporate offices and corporate campus uses. Good access, in particular for truck traffic would be an important location factor for this type of use. Large distribution warehouses, truck terminals and exposed storage would not be considered appropriate for the Business Park category. This land use category is similar to the BP, OC-1, and OB-1 zoning districts found in the Milford Zoning Ordinance.

Government

The Government classification includes uses such as public schools, fire stations, libraries, water-system facilities and other city-used and owned properties.

Employment

The employment category is intended to serve as a primary location for non-retail employment, providing flexibility for the location of such diverse uses as offices, manufacturing, processing, food processing, and storage, assembling, and, limited medical facilities. This land use category is similar to the I-1 and I-2 zoning districts found in the Milford Zoning Ordinance.

Highway Commercial

The commercial category allows two levels of commercial development intensity, Neighborhood and Community Commercial. The Future Land Use Map designates "Highway Commercial sites only. Individual characteristics of each site would be considered before identifying the level of commercial development. Each level of commercial use differs by the size of the site and use intensity. This land use is similar to the C-1, C-2 (Downtown area) and C-3 zoning districts found in the Milford Zoning Ordinance.

Neighborhood Commercial contains a variety of small retail and services including convenience stores and sit-down restaurants. These facilities can fit into almost any type of development as complimentary uses. Neighborhood Commercial would uses that generate low volumes of customer traffic or delivery traffic. The scale of the buildings is neighborhood residential character both in terms of size and bulk.

Regular Highway Commercial for the City of Milford is located along Major State Transportation Routes, including DEL 1, Route 113, Route 14 and Business 1.

Institutional

The Institutional category includes government, civic, and community facilities such as libraries, schools, colleges, hospitals, medical facilities, community centers, places of worship, nursing homes, assisted living facilities and other similar uses. This land use is similar to the IS, IM and H-1 zoning districts found in the Milford Zoning Ordinance.

Low Density Residential and Proposed Low Density Residential

The Low Density Residential District represents typical single family detached dwellings and duplex development with a density range between 1 and 6 dwelling units per gross acre. These units receive full urban services. Other dwelling types and densities may be allowed as part of a Density Bonus by providing additional Open Space and amenities of development or through a conditional use of a Planned Urban Development by City Council. This land use is similar to the R-1 and R-2 zoning districts found in the Milford Zoning Ordinance.

Moderate Density Residential / Proposed Moderate Residential and TND's

The Moderate Density Residential District represents a category that allows a density range between 5 and 16 dwelling units per gross acre. Typical residential types would include single family detached dwellings, attached single family dwelling units, patio homes, duplexes, triplexes, quadplexes, townhomes/row houses, condominiums, apartments and loft style units. Regarding the Traditional Neighborhood Developments (TND), a variety of housing types are found in this type of development and some of key features include small front setbacks bringing structures closer to the street, as well as access from rear alleys to allow for the placement of granges in the rear of the houses. Availability of open space and walkable sidewalks are also key components. This land use is similar to the R-3 and R-8 zoning districts and the PUD conditional use for residential development found in the Milford Zoning Ordinance.

Open Space and Proposed Open Space

The Open Space category includes both existing open space located at the Milford High School the Milford Middle School both Elementary Schools, the City of Milford Recreational facilities, the proposed multi-recreational facility located in the Independence Commons Business Park and the City of Milford's River walk as well as the large area of Open Space located east of DEL 1.

One of the recommendations of the Comprehensive Plan is to prepare an Open Space Preservation Plan. This task will take several years to complete. Local governments and conservation groups offer many tools to preserve farmland and other open space. Some rely on the donation or sale of property development rights by a property owner, while other tools may include marketing assistance or protective planning and zoning. The primary goals of the Open Space designation east of DEL 1 are the following:

- **Promote the Transfer of Development Rights (TDR)** – A TDR is a legal agreement that allows a developer who wants to build at a higher density that is permitted to purchase or trade for additional development rights from a willing seller who owns land in an area designated for preservation. The goal of the Open Space designation for this area is to use this area as a sending area either into designated areas of the City of Milford or designated areas of Sussex County, thus protecting the open space area.
- **Promote a Conservation Easement/s** – A conservation easement is a legal agreement between a landowner and a land trust or government agency whereby a landowner sells or donates the rights to develop his or her property to a conservation organization.
- **Protective Rural Zoning** – this type of zoning allows a very low density per acre. This is one of the most effective ways to protect rural and agricultural land and to maintain a mass of land required to support agriculture economies without buying conservation easements.
- **Purchase of Land** – The City of Milford has in its 08-09 budget \$100,000. for the purchase of open space. In the interest of City Council to protect our recharge areas this funding could be used to protect our recharge areas and preserve open space

CHAPTER 13 GOALS, OBJECTIVES AND IMPLEMENTATION STRATEGIES

THE VISION FOR MILFORD

This Section of the Comprehensive Plan is meant to be a working document that results in concrete changes to the way the City of Milford manages itself – as well as creates a stronger climate for encouraging redevelopment and reinvestment in the City. This section of the Comprehensive Plan represents a blueprint for action that provides direction and assists decision makers, over the next 5 years. The intent is to fulfill the goals, objectives and strategies that embody the civic contract that is a result of this effort. Implementation will involve a host of City departments, boards and commissions, other local public entities, state agencies, non-profits, businesses and citizens.

The Comprehensive Plan is intended to be used on a daily basis as public and private decisions are made concerning development, redevelopment, capital improvements and other matters affecting the City's environment – built and natural – and Milford's outstanding quality of life. In addition, the Plan provides guidance to City departments regarding public services and programs.

The following section of the City of Milford's Comprehensive Plan represents how Milford will achieve its Comprehensive Plan. This section is comprised of various visions, goals, and objectives. It is important that we define these terms in order to understand how the City of Milford will accomplish the Comprehensive Plan.

A Vision defines where the organization such as the City of Milford wants to be in the future. It reflects the optimistic view of the City's future.

Goals are statements that provide the overall context for what the City is trying to accomplish in the next five years. The achievement of goals helps the City move closer to its Vision.

Objectives are specific statements describing what the City is trying to achieve and when it will be achieved.

Strategies are the action plans that help the City achieves the objectives.

The State of Delaware requires that the Comprehensive Plan be updated every five years. The last terms in the Vision section are Participants and Time Frame for Completion. The major Participants are listed to show that in order to achieve the strategy, objective, goal, and vision it takes more than just the City of Milford, but a multiplicity of organizations.

The Time Frame Section has been broken down into Short Term which hopefully will be achieved in the next year, Mid Term which involves a time frame of approximately two to three years, Long Term which may take the full five years to accomplish, and Ongoing which means the activity in continuing throughout the five year period.

1. ECONOMIC DEVELOPMENT

VISION: The City of Milford is dedicated to providing a quality living and working environment that will ensure a balanced mix of commercial development and employment opportunities, that serve its residents, and promotes its image as a desirable and economically stable community.

OBJECTIVES	IMPLEMENTATION STRATEGIES	PARTICIPANTS	TIME FRAME FOR COMPLETION
<i>GOAL 1: Make the City of Milford an attractive environment for economic development by maintaining and improving the quality of life in the City.</i>			
<u>Objective 1.1</u> Recognize that agricultural and associated business are intimately tied to many of the City’s large employers and product producers.	<u>Strategy 1.1.1</u> Develop policies and/or programs to encourage this arrangement.	City Council Planning Commission Delaware Dept of Agriculture	Mid Term
<u>Objective 1.2</u> Support state and county programs that keep farming profitable such as agricultural preservation and transfer of development rights.	<u>Strategy 1.2.1</u> Review and revise existing zoning and land development requirements.	City Council Office of State Planning Planning Commission Delaware Dept of Agriculture	Mid Term

<p><u>Objective 1.3</u> Create a variety of suitable zoning categories and targeted land use areas within the City to accommodate the assortment of business sectors.</p>	<p><u>Strategy 1.3.1</u> Review and revise the zoning ordinance to ensure that there are suitable zoning districts.</p>	<p>City Council Planning Commission</p>	<p>Short Term</p>
<p><u>Objective 1.4</u> Promote the Milford Industrial Park and Greater Milford Business Park through its own initiatives and in concert with the Greater Milford Chamber of Commerce.</p>	<p><u>Strategy 1.4.1</u> Encourage bi-monthly progress meetings regarding the status of these parks and their development.</p>	<p>City Council Chamber of Commerce</p>	<p>Ongoing</p>
<p><u>Objective 1.5</u> Recognize that manufacturing, retailing and other commercial enterprises and profit and non-profit providers of education and medical and institutional medical arts services are a valuable asset to the economic vitality of the City of Milford.</p>	<p><u>Strategy 1.5.1</u> Create a collaborative process among the City, Chamber of Commerce and local educational institutions to provide access to business opportunities for all people through education and technical assistance.</p>	<p>City Council Chamber of Commerce Planning Commission University of Delaware Delaware State University</p>	<p>Mid Term</p>

	<u>Strategy 1.5.2</u> Continue to diversify, revitalize and promote the Downtown and the City of Milford as the cultural, commercial, educational district.	Chamber of Commerce City Council Downtown Milford, Inc.	Ongoing
<u>Objective 1.6</u> The City will continue to advocate Milford as an employment center by providing adequate water and sewer facilities and by promoting the availability of natural gas and state-of-the-art telecommunications infrastructure.	<u>Strategy 1.6.1</u> Preserve and protect the quality of surface and subsurface water resources from impacts of development.	City Council Engineering DNREC	Ongoing
	<u>Strategy 1.6.2</u> Promote water conservation through public education.	Administration DNREC	Ongoing

<p><u>Objective 1.7</u> Accommodate the growing number of medical service businesses that preferred to locate along US Rt 113 and in the business complex.</p>	<p><u>Strategy 1.7.1</u> Review options for the location of these medical service businesses.</p>	<p>City Council Chamber of Commerce Planning Commission Planning Department</p>	<p>Mid Term</p>
	<p><u>Strategy 1.7.2</u> Conduct a community assessment needs to determine the sizes of types of facility appropriate for the City of Milford.</p>	<p>Administration Area Medical Organizations City Council Planning Department</p>	<p>Mid Term</p>
<p><u>Objective 1.8</u> Maintain the appearance and functionality of the existing developed properties.</p>	<p><u>Strategy 1.8.1</u> Conduct an Annual Clean-up Day to maintain the existing quality of these residential and commercial properties.</p>	<p>Civic Organization Administration Downtown Milford Inc Chamber of Commerce</p>	<p>Ongoing</p>

	<p><u>Strategy 1.8.2</u> Establish a Community Beautification Program which recognizes residents, developers, and business persons who improve properties within the City.</p>	<p>Planning Commission Chamber of Commerce City Council</p>	<p>Mid Term</p>
<p><u>Objective 1.9</u> Provide employment, housing, shopping, and recreational opportunities within convenient distances to people living and working in the City of Milford.</p>	<p><u>Strategy 1.9.1</u> Develop standards that promote mixed-use development and alternative housing options.</p>	<p>City Council Administration Planning Commission</p>	<p>Short Term</p>
	<p><u>Strategy 1.9.2</u> Revise the PUD Conditional Use regulations to promote mixed-use development and “smart growth” concepts.</p>	<p>City Council Administration Planning Commission Planning Department</p>	<p>Short Term</p>

<p><u>Objective 1.10</u> Coordinate with Downtown Milford Inc. to integrate downtown redevelopment efforts with the parks, cultural resources and economic development plans of the City of Milford.</p>	<p><u>Strategy 1.10.1</u> Develop policies to promote redevelopment efforts with the DMI and Parks and Recreation.</p>	<p>City Council Administration Planning Commission Parks and Recreation</p>	<p>Ongoing</p>
	<p><u>Strategy 1.10.2</u> Research how other communities are addressing this coordination of downtown property owners with recreational opportunities and economic development/redevelopment.</p>	<p>Planning Department Downtown Milford Inc Chamber of Commerce</p>	<p>Long Term</p>
<p><u>Objective 1.11</u> Coordinate with the Delaware Economic Development Office to expand employment opportunities and facilities.</p>	<p><u>Strategy 1.11.1</u> Meet with DEDO on a bi-monthly basis to review new opportunities.</p>	<p>Administration Delaware Economic Development Office Milford Economic Development Study Group</p>	<p>Ongoing</p>

	<u>Strategy 1.11.2</u> Establish economic development priorities.	City Council Delaware Economic Development Office Planning Department Planning Commission	Ongoing
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2. HOUSING

VISION: The City of Milford will preserve and protect the neighborhood character and quality of life in residential neighborhoods; encourage balanced range of housing type and opportunities; promote opportunities for clean, safe, and affordable housing; and maintain safety; appearance, and harmony within neighborhoods.

OBJECTIVES	IMPLEMENTATION STRATEGIES	PARTICIPANTS	TIME FRAME FOR COMPLETION
<i>GOAL 1: Preserve and improve the character and quality of life in traditional single family neighborhoods.</i>			
<u>Objective 2.1</u> Create incentives and programs to encourage the purchase and development of owner-occupied single-family homes.	<u>Strategy 2.1.1</u> Strengthen the Rental Housing and Zoning Ordinances.	Planning Department Planning Commission City Council	Short Term
	<u>Strategy 2.1.2</u> Develop a local group to facilitate the sale, purchase, renovation and occupancy of single-family homes specifically for owner-occupancy to local residents who meet set income criteria.	City Council Community Development Organizations Real Estate Community Financial Institutions Civic Organizations	Mid Term

<p><u>Objective 2.2</u> Participate in programs and initiatives that forward the concept of having residents live, work, shop and recreate such as “Live Near Work” program.</p>	<p><u>Strategy 2.2.1</u> Work with developers to see the benefits of “Live Near Work” developments.</p>	<p>Local Developers Planning Commission City Council</p>	<p>Ongoing</p>
	<p><u>Strategy 2.2.2</u> Survey newcomers, retirees, and regional development agencies to explain the benefits of this type of development.</p>	<p>Developers Real Estate Community Planning Department City Council</p>	<p>Long Term</p>
<p><u>Objective 2.3</u> Provide economic incentives for people to locate their homes near Milford’s employers.</p>	<p><u>Strategy 2.3.1</u> Review Federal, State, and Local Housing Programs that encourage this type of development.</p>	<p>Federal Housing Agencies State Housing Agencies Local Housing Agencies Administration</p>	<p>Ongoing</p>

	<u>Strategy 2.3.2</u> Survey City residents to determine housing preferences, needs, and future plans.	Planning Department Real Estate Community	Long Term
<u>Objective 2.4</u> Provide current residential zoning districts and new options for residential opportunities for Milford’s anticipated population growth.	<u>Strategy 2.4.1</u> Review the existing Zoning Ordinance to determine the sections that need to be revised.	Planning Commission Administration	Ongoing
	<u>Strategy 2.4.2</u> Meet with local developers to establish a dialogue to review their opinions on proposed revisions regarding mixed use developments.	Local Developers Real Estate Community Planning Commission Administration	Ongoing

<p><u>Objective 2.5</u> Work with Community Development Block Grant Program to assist low income property owners to rehabilitate their structures.</p>	<p><u>Strategy 2.5.1</u> Identify Target Areas to utilize the CDBG Program.</p>	<p>City Council County CDBG Staff Planning Commission</p>	<p>Long Term</p>
	<p><u>Strategy 2.5.2</u> Identify new Federal and State programs that assist low income property owners.</p>	<p>State Housing Agency Local Developers</p>	<p>Long Term</p>
<p><u>Objective 2.6</u> Promote the advantages of a shorter commute by placing workplaces and shopping close to residential neighborhoods.</p>	<p><u>Strategy 2.6.1</u> Revise the Zoning Ordinance to encourage mixed use developments.</p>	<p>Planning Commission Local Developers Planning Department City Council</p>	<p>Short Term</p>

	<p><u>Strategy 2.6.2</u> Revise PUD district regulations to promote mixed-use development and “smart growth” designs and create standards to encourage transit oriented development.</p>	<p>Planning Commission Planning Department City Council</p>	<p>Long Term</p>
<p><u>Objective 2.7</u> Develop a strategy for providing affordable housing options.</p>	<p><u>Strategy 2.7.1</u> Identify all options including federal, state and local programs to assist in the development of affordable housing.</p>	<p>State Housing Authority Local Developers Real Estate Community City Council</p>	<p>Ongoing</p>

3. ENVIRONMENT

VISION: *The vision of the City of Milford is to preserve and improve a living environment for all residents of the City that maximizes the enjoyment of all the natural resources contained in the City.*

OBJECTIVES	IMPLEMENTATION STRATEGIES	PARTICIPANTS	TIME FRAME FOR COMPLETION
GOAL 1: Protect the physical environment and enhance the character, quality and livability of the city by preserving its natural environment.			
<u>Objective 3.1</u> Promote preservation of agricultural and environmental resources beyond the city limits of Milford.	<u>Strategy 3.1.1</u> Identify the valuable agricultural and environmental resources beyond the city limits of Milford.	City Council Planning Commission Delaware Department of Agriculture DNREC	Ongoing
	<u>Strategy 3.1.2</u> Investigate various options such as purchase of development rights, open space easements, and open space trust fund, as may be appropriate to help preserve agricultural and environmental resources beyond the city limits of Milford.	Department of Agriculture State Planning Office Planning Commission	Long Term

<p><u>Objective 3.2</u> Assure adequate water supplies for the City of Milford by completing and updating the general water facility plan.</p>	<p><u>Strategy 3.2.1</u> Review on a semi-annual basis the existing water supply and future water supply needs/demands for the City of Milford.</p>	<p>City Council DNREC Engineering Department</p>	<p>Ongoing</p>
	<p><u>Strategy 3.2.2</u> Complete water system upgrades and extensions to the City of Milford.</p>	<p>Engineering Department Utility Departments</p>	<p>Ongoing</p>
<p><u>Objective 3.3</u> Develop a Water Source Protection Ordinance for the City of Milford.</p>	<p><u>Strategy 3.3.1</u> A Water Source Protection Ordinance was completed and approved by City Council.</p>	<p>City Council DNREC</p>	<p>Short Term</p>

	<u>Strategy 3.3.2</u> Meet with developers to explain this ordinance and the need to protect these areas.	Local Developers City Staff	Ongoing
<u>Objective 3.4</u> Develop a Preservation Corridor Ordinance for new development and a riparian buffer standard as an alternative to a screening requirement.	<u>Strategy 3.4.1</u> Consider amending the subdivision ordinance to require developers provide additional buffers along the water courses within the City of Milford.	Planning Commission Administration Parks and Recreation DNREC	Long Term
	<u>Strategy 3.4.2</u> Adopt a comprehensive greenways and open space corridor which identifies critical preservation areas and implementation strategies.	Planning Commission DNREC	Long Term

<p><u>Objective 3.5</u> Participate in the Mispillion River Tributary Action Team to assist in the development of pollution control strategies for the river.</p>	<p><u>Strategy 3.5.1</u> Once a MRTAT has been formed, Council will name the appropriate members to this team.</p>	<p>DNREC Administration Planning Commission City Council</p>	<p>Ongoing</p>
<p><u>Objective 3.6</u> Promote the elimination of individual septic systems, where feasible near and adjacent to the Mispillion River.</p>	<p><u>Strategy 3.6.1</u> Identify and record these failed septic systems and develop strategies to eliminate these failed systems.</p>	<p>DNREC Administration</p>	<p>Ongoing</p>
<p><u>Objective 3.7</u> Review and update the existing floodplain management ordinance.</p>	<p><u>Strategy 3.7.1</u> Consult with DNREC regarding revisions to the existing floodplain ordinance.</p>	<p>DNREC Administration Planning Department</p>	<p>Short Term</p>

	<p><u>Strategy 3.7.2</u> Review Federal and State regulations concerning proposed development in the Floodplain. Attend seminars and conferences to so that staff is up-to-date regarding these regulations.</p>	<p>DNREC Planning Department Building Department</p>	<p>Ongoing</p>
<p><u>Objective 3.8</u> Promote the advantages of a shorter commute by placing workplaces and shopping close to residential neighborhoods.</p>	<p><u>Strategy 3.8.1</u> Revise the Zoning Ordinance to encourage mixed use developments.</p>	<p>Planning Commission Local Developers Planning Department City Council</p>	<p>Short Term</p>
	<p><u>Strategy 3.8.2</u> Revise PUD regulations to promote mixed-use development and “smart-growth” designs and create standards to encourage transit oriented development.</p>	<p>Planning Commission Planning Department City Council</p>	<p>Long Term</p>

	<p><u>Strategy 3.8.3</u> Meet with developers and County Planning Commissioners to consider developing a TDR program to discourage sprawl.</p>	<p>Planning Department County Planning Department Administration State Planning Office Local Developers</p>	<p>Mid Term</p>
	<p><u>Strategy 3.8.4</u> Revise the ordinance to promote a smart code development for Milford.</p>	<p>Planning Department State Planning Office</p>	<p>Ongoing</p>

4. PARKS AND OPEN SPACE

VISION: The City is committed to providing high quality public open space facilities and services. The City recognizes that public open space and recreational activities are an integral part in the development of the City.

OBJECTIVES	IMPLEMENTATION STRATEGIES	PARTICIPANTS	TIME FRAME FOR COMPLETION
<i>GOAL 1: Improve the living environment for families and residents in order to maximize the natural resources and open spaces provide in the City of Milford.</i>			
<u>Objective 4.1</u> Continue the Mispillion Greenway expansion to Goat Island on the East and to the old Peninsula Oil site on Mill Street to the West.	<u>Strategy 4.1.1</u> Partner with State, Local, and Civic organizations to continue this valuable resource.	DNREC City Council Planning Commission Parks and Recreation	Ongoing
	<u>Strategy 4.1.2</u> Continue to implement open space/greenway acquisition objectives adopted by City Council.	Administration DNREC Parks and Recreation	Ongoing

<p><u>Objective 4.2</u> Actively pursue easements or land purchases to expand the Riverwalk to the West with the goal of developing an interpretive center.</p>	<p><u>Strategy 4.2.1</u> Revise the Subdivision Ordinance to require developers to donate easements or construct walkways.</p>	<p>Developers City Council Planning Department Parks and Recreation</p>	<p>Ongoing</p>
	<p><u>Strategy 4.2.2</u> Preserve and enhance buffer areas around water bodies to mitigate environmental and visual impact from adjacent uses and activities.</p>	<p>Planning Department Engineering Department Administration</p>	<p>Long Term</p>

5. RECREATION

VISION: *To provide the maximum recreational opportunities for all residents of the City of Milford.*

OBJECTIVES	IMPLEMENTATION STRATEGIES	PARTICIPANTS	TIME FRAME FOR COMPLETION
GOAL 1: <i>To provide additional Recreational opportunities for the present and future residents of the City of Milford.</i>			
<p><u>Objective 5.1</u> Actively support a regional blueway canoe and kayak trail from Abbott’s Mill Nature Center through Haven Lake and Silver Lake to Goat Island. Extend to all of Mispillion to the new nature center at Slaughter Beach.</p>	<p><u>Strategy 5.1.1</u> Develop and adopt a comprehensive trail plan which identifies critical preservation areas and implementation strategies.</p>	<p>Planning Department Planning Commission City Council DNREC Parks and Recreation</p>	<p>Long Term</p>
	<p><u>Strategy 5.1.2</u> Continue to implement open space and greenway acquisition objective adopted by City Council.</p>	<p>Planning Commission City Council Parks and Recreation DNREC</p>	<p>Long Term</p>

<p><u>Objective 5.2</u> Encourage the preservation of areas along all streams, lakes and ponds as recreational uses.</p>	<p><u>Strategy 5.2.1</u> Develop Neighborhood Area plans which include delineated open space and recreational needs and potential, and encourage and assist neighborhoods in setting aside recreational and open space.</p>	<p>Planning Department Planning Commission City Council</p>	<p>Long Term</p>
<p><u>Objective 5.3</u> Incorporate recreational opportunities into redevelopment plans and programs.</p>	<p><u>Strategy 5.3.1</u> Support and involve community and neighborhood organizations in voluntary efforts to enhance redevelopment and recreational opportunities.</p>	<p>Planning Commission Community Development</p>	<p>Mid Term</p>
<p><u>Objective 5.4</u> Actively support the development of a committee for the development of a skateboard park.</p>	<p><u>Strategy 5.4.1</u> Survey other municipalities on how a facility was constructed and maintained.</p>	<p>Parks and Recreation</p>	<p>Long Term</p>

6. CULTURAL RESOURCES

VISION: The City is committed to providing and protecting its cultural resources and its public facilities and services. The City strongly encourages and will lead in establishing partnerships with local community groups, other agencies, and businesses for providing quality cultural resources and facilities.

OBJECTIVES	IMPLEMENTATION STRATEGIES	PARTICIPANTS	TIME FRAME FOR COMPLETION
<i>GOAL 1: Develop a role for the City of Milford in the cultural growth of the City.</i>			
<p><u>Objective 6.1</u> Actively use the Mispillion Riverwalk to connect this recreational use with the Historical Districts and central core area of the City of Milford.</p>	<p><u>Strategy 6.1.1</u> Identify the necessary resources to make this a reality.</p>	<p>Planning Commission Downtown Milford Inc DNREC State Historical Preservation Milford Historical Society Milford Museum</p>	<p>Mid Term</p>
<p><u>Objective 6.2</u> Continue to support the Milford Historical Society and the Milford Commission of Landmarks and Museum through civic recognition and support for their events and functions.</p>	<p><u>Strategy 6.2.1</u> Review on an annual basis the activities of these organizations and recognize them for their achievements.</p>	<p>Administration Downtown Milford Inc State Historical Preservation Office</p>	<p>Ongoing</p>

<p><u>Objective 6.3</u> Place informational markers indicating the three Historical Districts and signage along Rt 1, Rt 113 and Rt 13 identifying the districts.</p>	<p><u>Strategy 6.3.1</u> Conduct a city-wide survey to document and identify those resources that meet the criteria for listing at the national, state, and local criteria for historic preservation.</p>	<p>State Historical Preservation Office Administration</p>	<p>Ongoing</p>
<p><u>Objective 6.4</u> Promote the City’s Historical Districts and cultural resources as a component of the Mispillion Riverwalk master plan and as an economic redevelopment tool for the central business district.</p>	<p><u>Strategy 6.4.1</u> Revise the district boundary for the Downtown area to better define and highlight the economic potential for the central business district.</p>	<p>Downtown Milford Inc Planning Department</p>	<p>Ongoing</p>
<p><u>Objective 6.5</u> Assist in the development of a historical district ordinance which will enhance the rehabilitation of all buildings located in the three historical districts.</p>	<p><u>Strategy 6.5.1</u> Council has been furnished with a Draft Copy of a proposed Ordinance.</p>	<p>Planning Department City Council Downtown Milford Inc</p>	<p>Short Term</p>

<p><u>Objective 6.6</u> Provide and promote alternative transportation options to link the City’s historical structures, museum, theaters, and library together.</p>	<p><u>Strategy 6.6.1</u> Investigate all options and activities to promote additional transportation options to these cultural resources.</p>	<p>Administration Planning Department Planning Commission Parks & Recreation Department Downtown Milford Inc</p>	<p>Ongoing</p>
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7. PUBLIC SERVICE

VISION: The City of Milford will promote a vision to build a healthy, engaged and vibrant community utilizing all available resources.

OBJECTIVES	IMPLEMENTATION STRATEGIES	PARTICIPANTS	TIME FRAME FOR COMPLETION
<i>GOAL 1: Protect and improve the existing public services in the City of Milford.</i>			
<u>Objective 7.1</u> Continue the commitment for cost-effective provisions of public service for its citizens.	<u>Strategy 7.1.1</u> Develop outreach programs to evaluate existing programs within the community regarding public service for the citizens of Milford.	City Council Administration	Ongoing
<u>Objective 7.2</u> Continue the maintenance and expansion of the utilities of the City of Milford to meet the needs of a growing population.	<u>Strategy 7.2.1</u> Develop a five (5) year Capital Improvement Budget for the City of Milford.	City Council Utility Departments	Ongoing

<p><u>Objective 7.3</u> Continue to use a series of long-range facility management plans for expansion, evaluation, and implementation of the utility services.</p>	<p><u>Strategy 7.3.1</u> Develop a long range Capital Improvement Budget for the next ten (10) years.</p>	<p>City Council Administration</p>	<p>Ongoing</p>
<p><u>Objective 7.4</u> Maintain and update the zoning map as well as work with Kent and Sussex Planning Offices and the Office of State Planning in coordinating GIS Data, annexations, zoning, rezoning, and tax parcel numbering.</p>	<p><u>Strategy 7.4.1</u> Meet at least four times a year with both Kent County and Sussex County Planning Departments to discuss options for partnerships between these governmental organizations, as well as annexations, zonings, rezoning, and other issues of concerns.</p>	<p>Kent County Sussex County Planning Department Planning Commissions</p>	<p>Ongoing</p>
<p><u>Objective 7.5</u> Update the zoning ordinance to reflect the objectives of the City’s Comprehensive Plan.</p>	<p><u>Strategy 7.5.1</u> Develop a procedure to update the Zoning Ordinance to reflect the City’s Comprehensive Plan.</p>	<p>Planning Department Planning Commission City Council</p>	<p>Mid Term</p>

<p><u>Objective 7.6</u> Refer to the Comprehensive Plan for rezoning and annexation agreements.</p>	<p><u>Strategy 7.6.1</u> Develop a procedure regarding a rezoning or annexation that the Comprehensive Plan should be reviewed and consulted prior to approval.</p>	<p>Planning Department Planning Commission City Council</p>	<p>Ongoing</p>
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8. STATE GOALS AND POLICIES

VISION: *Develop Delaware using strategies for State Policies*

OBJECTIVES	IMPLEMENTATION STRATEGIES	PARTICIPANTS	TIME FRAME FOR COMPLETION
GOAL 1: Develop Delaware using Livable Delaware as a guide.			
<u>Objective 8.1</u> To help manage new growth while revitalizing town and cities and protecting the State’s environment.	<u>Strategy 8.1.1</u> Use the State strategy mapping to guide growth.	State Planning Office	Ongoing
<u>Objective 8.2</u> Preservation of farmland along the tidal reaches of the Mispillion River.	<u>Strategy 8.2.1</u> Develop strategies to preserve and protect these critical areas.	State Planning Office DNREC	Ongoing

9. ADDITIONAL MAJOR OBJECTIVES

VISION: To further improve the opportunities and challenges in order to make the city a better place to play, shop and work.

OBJECTIVES	IMPLEMENTATION STRATEGIES	PARTICIPANTS	TIME FRAME FOR COMPLETION
<i>GOAL 1: To improve the City of Milford by recognizing these major Goals.</i>			
<u>Objective 9.1</u> Establish a unified open space and greenways network that connects with city parks, areas adjacent to the Riverwalk, and bicycle and pedestrian ways.	<u>Strategy 9.1.1</u> Develop or revise the Open Space Plan to provide for a greenway network that will connect all parts of the City.	Parks and Recreation Planning Department City Council	Ongoing
<u>Objective 9.2</u> Ensure that the design of new developments complements and enhances the City’s unique character.	<u>Strategy 9.2.1</u> Develop and adopt architectural review standards for major residential and commercial developments.	Planning Department Planning Commission Downtown Milford Inc City Council	Long Term

<p><u>Objective 9.3</u> Promote and designate Downtown Milford as an arts and entertainment district, creating a sense of Downtown Milford as a distinct district.</p>	<p><u>Strategy 9.3.1</u> Encourage the improvement of privately owned and underused areas in downtown as outdoor sitting/eating areas.</p>	<p>Downtown Milford Inc Parks and Recreation Planning Commission</p>	<p>Ongoing</p>
<p><u>Objective 9.4</u> Participate in area transportation planning efforts.</p>	<p><u>Strategy 9.4.1</u> Revisit study options for a bypass from Rt 1 to Rt 113 that would serve both future annexation/ growth corridors and reduce congestion on Rt 113 if warranted by City Council.</p>	<p>City Council DeIDOT Local Developers</p>	<p>Mid Term</p>
	<p><u>Strategy 9.4.2</u> Participate in regional studies to explore transportation alternatives that best serve the residents of the City of Milford.</p>	<p>City Council Planning Commission DeIDOT</p>	<p>Ongoing</p>

<p><u>Objective 9.5</u> Improve traffic options as well as any access roads in the vicinity of Rt 1 and Rt 30.</p>	<p><u>Strategy 9.5.1</u> Participate in studies with DelDOT to improve not only these intersections but any future development and access roads in this area.</p>	<p>DelDOT Local Developers City Council</p>	<p>Ongoing</p>
<p><u>Objective 9.6</u> Improve traffic flow in the area of 10th Street and NE Front Street and Rt 1.</p>	<p><u>Strategy 9.6.1</u> Construct an access road to facilitate the development of this area as part of the proposed grade-separated intersection at SR1 and NE Front St.</p>	<p>Administration Local Developers DelDOT City Council</p>	<p>Short Term</p>
<p><u>Objective 9.7</u> Establish and assist in the development and recruitment of an institution of higher education.</p>	<p><u>Strategy 9.7.1</u> Develop a strategy plan to attract an institution of higher education.</p>	<p>Planning Commission City Council University of Delaware Delaware State University Delaware Technical & Community College</p>	<p>Ongoing</p>

APPENDIX A

SOUTHEAST MASTER PLAN

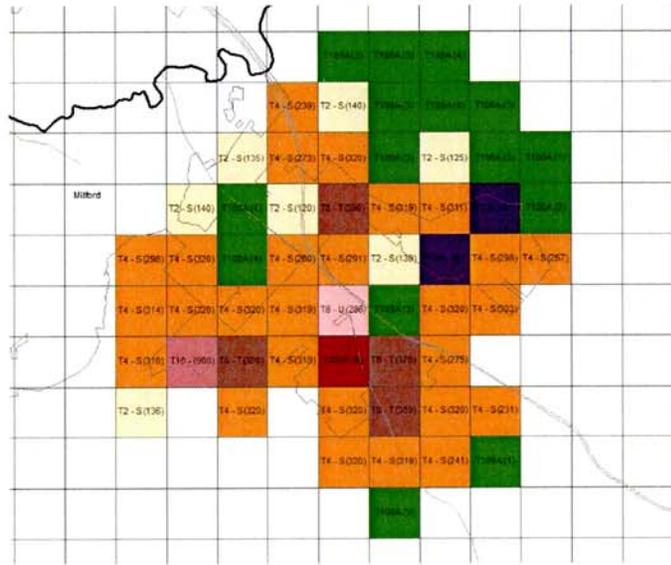
2016 COMPREHENSIVE PLAN

DRAFT AS OF 04-28-16

DRAFT

Milford Southeast Neighborhood Master Plan

July 25, 2011



Adopted and Certified as an Amendment to the
City of Milford Comprehensive Plan
July 25, 2011

Prepared by

The City of Milford, Delaware

In conjunction with

The State of Delaware

With assistance from the

University of Delaware
Sustainable Coastal Communities Initiative

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The Milford Southeast Neighborhood Master Plan was developed as a partnership between the City of Milford and the State of Delaware and its Agencies. The University of Delaware's Sustainable Coastal Communities Initiative provided invaluable support during the public participation workshops and through the use of their UD-SCC Model for land use modeling throughout the project.

City of Milford, Delaware

Joseph Ronnie Rogers, Mayor

Council

Steven L. Johnson

Garrett L. Grier, III

S. Allen Pikus

Dirk G. Gleysteen

Owen S. Brooks, Jr.

Douglas E. Morrow

Katrina E.J. Wilson

James O. Starling, Sr.

Planning Commission

Charles M. Rini, Chairman

Kim S. Hoey-Stevenson, Vice Chair

Marvin C. Sharp

George R. Pilla

James F. Burk, Secretary

Karen K. McColley

Archie J. Campbell

William J. Lane

David W. Baird, City Manager

Gary Norris, AICP, City Planner

Terri Hudson, City Clerk

Richard Carmean, Economic Development

Christine Crouch, Administrative Assistant

State of Delaware

Constance C. Holland, AICP, Director

Office of State Planning Coordination

Acknowledgements, continued

Key State Agency Staff

Office of State Planning Coordination	David Edgell, AICP Bryan Hall, AICP Dorothy Morris Laura Simmons
Department of Agriculture	Michael McGrath, AICP (retired) Scott Blair
Department of Transportation	Bruce Allen Jay Gerner Roberta Geier
Department of Natural Resources and Environmental Control	Kevin Coyle Lee Ann Walling
Delaware State Housing Authority	Karen Horton
State Historic Preservation Office	Alice Guerrant Terrance Burns

University of Delaware Sustainable Coastal Communities Initiative

Bill McGowan
Carol Bason
Tom Bason
Nicole Minni
Richard Kautz

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Chapter 1

Overview of the Master Plan

Milford's Comprehensive Plans

The City of Milford has a long history of comprehensive planning. In the early 1990s the City developed a comprehensive plan that included land use, growth, and annexation recommendations for an area that surrounded the existing city. Despite a rather large growth area, annexations were slow during this time. In 2003 Milford updated that plan with a new comprehensive plan designed to comply with the State's new planning statutes. That plan was eventually reviewed and certified by the State of Delaware in accordance with the new requirements in the Delaware Code.

During the mid-2000s, the national economy experienced what was then thought of as a "housing boom." Milford was not immune to this economic force and experienced a rapid increase in annexation and subdivision requests during this time period. The development community aggressively sought to take advantage of new market opportunities, eventually subdividing over 8,000 lots in the city alone. Some of these lots were in projects that were not recorded or otherwise did not move forward, so the current estimate is that approximately 4,500 lots were created in Milford during this period. Several of the annexations requested required amendments to Milford's plan. Milford amended its plan in 2004, 2005 and 2006 to address new annexation opportunities, among other changes to its plan document.

Annexation in the Southeast Neighborhood

Prior to 2005, the land to the east of State Route 1 (SR 1) Southeast of Milford was farmland interspersed with a few large-lot subdivisions and various rural homes on large lots. In 2005 a developer proposed a major subdivision consisting of approximately 780 single-family homes in this area. The developer's intention was to develop this subdivision under existing Sussex County regulations. This property was not adjacent to the City of Milford but was very close to property that was already within the City limits. The City became concerned that if this subdivision were to be constructed, it would be the *de facto* provider of services (fire, police, library, parks, and eventually even sewer and water) without the benefit of a tax base to support those services.

Milford engaged in discussions with the developer, other adjacent property owners, and the Office of State Planning Coordination to explore the annexation of this area. The City was neutral on whether or not this area should be developed. However, if the area was to be

developed the City's position was that they would rather have it in the municipal jurisdiction in order to provide necessary public services and infrastructure in a cost-effective manner. The State and its agencies were concerned about "urban sprawl" in this area compromising active, productive farmland, some of which had been permanently protected using State tax dollars. There are also many environmentally sensitive resources in this area associated with Cedar Creek and its tributaries. And finally, the location east of SR1 was difficult and dangerous to access due to an at-grade cross over and heavy traffic, especially during the summer months.

After much discussion, a consensus was reached. The State supported a comprehensive plan amendment that would allow for annexation and development of this area. The caveat was that the development must occur in accordance with a Master Plan to be developed collaboratively by the city and the state. This Master Plan would address detailed strategies to protect farmland and open space, provide needed transportation and utility infrastructure, and prevent further development activities to the east of this area. This document is the Master Plan that was envisioned during these discussions.

Milford's comprehensive plan was amended in 2006 to include this area as an annexation area, subject to the Master Plan. Annexations of some of these parcels began shortly thereafter.

The Memorandum of Agreement

The process of developing this Master Plan began in earnest with the signing of a Memorandum of Agreement (MOA) by the City and the State in March 2008. The MOA set out the general parameters that formed the consensus of all parties for working together on development in this area. These parameters included a commitment to work collaboratively, include other stakeholders, address utility and road infrastructure in a comprehensive manner, protect the agricultural economy through farmland preservation and limits on further utility expansions, protect natural resources, and ensure an appropriate mix of land uses in the developed area.

The original signatories of the MOA included the city, the Office of State Planning Coordination, the Delaware Department of Transportation (DelDOT) and the Delaware Department of Agriculture (DDA). As the development of this document has progressed, the Delaware Department of Natural Resources and Environmental Control (DNREC), the Delaware State Housing Authority (DSHA), and the State Historic Preservation Office (SHPO) have all contributed materials and have become partners in this endeavor.

The project area covered by the MOA was originally limited to areas east of SR1. In 2008 the City engaged in a complete re-write of its comprehensive plan which culminated in an entirely

new document that was adopted in early 2009. The new plan separated the city into several “neighborhoods” for planning purposes. The area covered by the MOA was located in the Southeast Neighborhood, which also included lands west of SR1, including a number of existing and developing subdivisions. By mutual consent, all parties agreed that it made sense to adopt the entire Southeast Neighborhood as the project boundary for this Master Plan. The City’s new 2009 comprehensive plan included other planning concepts that have been integrated into the Master Plan, including an urban-growth boundary and a greenbelt with open space and farmland within and adjacent to the eastern edge of the project area.

What is a Master Plan?

Definition of a Master Plan

A land use plan focused on one or more sites within an area that identifies access and general improvements, and is intended to guide growth and development over a number of years or in phases.

From the Planners Dictionary, American Planning Association

While the City’s comprehensive plan forms the foundation for the Master Plan, the Master Plan differs from a local government’s comprehensive plan in a number of ways:

- A more detailed plan for land use, including build-out calculations
- Detailed planning for the provision of infrastructure and services, including timing, phasing, and funding
- Partnerships and collaborative planning between and among various levels of government
- A more predictable plan that addresses items necessary for implementation
- Commitments, agreements and timeframes for implementation coordinated among the various partners in the planning process.

The Master Plan Process

The development of the Master Plan has proceeded from 2008 until today. The City and the Office of State Planning Coordination have been the co-chairs of this planning effort. The process was kicked off with a series of three public meetings to consider ideas and public opinions about the future of this area. The University of Delaware’s Sustainable Coastal

Communities Initiative provided support for these workshops and has continued to work with the city to assist with land use modeling and phasing of development.

After gathering public input, Milford's City Planner developed a consensus land use plan that reflected a composite of the public's input. That land use plan has continued to be revised based on input from the other stakeholder agencies and the City's plans for utilities in the area. All of the stakeholder agencies have worked with the co-chairs to develop chapters for this Master Plan. The stakeholders have included the city itself, DDA, DNREC, and DelDOT. In addition, DSHA and SHPO have provided valuable input.

The Result: Predictable, Shovel-Ready Development Along with Proactive Preservation

This process has resulted in the achievement of two complementary goals for this Master Plan Area.

Ready for Economic Development

The detail of this Master Plan has addressed many of the infrastructure issues that would have been managed in an ad-hoc manner through conventional development practices. As such, in the areas that are identified for future development, developers will know in advance how utilities will be provided and what their other contributions and requirements would be. Notably, the City and State have designed the following "package" of infrastructure improvements for the area:

- DelDOT will be constructing a new grade-separated intersection at SR1 and SR30. Construction is currently scheduled for 2012 and 2013, with completion due in late 2013. This improvement will allow safe, efficient movement of traffic between the east and west sides of the Master Plan Area and enable the development of the area east of SR 1. See Chapter 8 for more details.
- The City will be constructing a new water system in the Master Plan Area that will include a water tower and distribution lines. Depending on the acquisition of easements and other siting factors, this infrastructure may extend east of SR 1. Funding is in place to construct this system in the immediate-term future. See Chapter 9 for more details.
- The City has commissioned its engineering consultant to design the sewer transmission system for the Master Plan Area. The basics of the design are described further in Chapter 9. The City's commitment extends to actually completing the engineering necessary to have the system installed and permitted so that it is ready to be constructed as soon as there is a user ready to build a new project and tie in to it. The City will work with interested developers to identify financing options that will enable development to occur in accordance with the Master Plan.

The impact of these infrastructure commitments is that virtually any parcel within the Master Plan Area will be ready for development and occupancy. Areas to the west of SR 1 could be constructed at any time, pending completion of the water system. Areas to the east of SR 1 could be ready for occupancy in late 2013, which is when the road access is projected to be completed by DeIDOT.

Poised for Preservation

The Master Plan is not only about preparing land for development. Much of the detailed work that has gone into preparing this Master Plan has been done to assure that any new development is completed in a way that does not negatively impact the natural environment or the viability of the agricultural lands located in the Master Plan Area.

- The Delaware Department of Agriculture has developed an innovative Transfer of Development Rights (TDR) program that provides land owners incentives and options to preserve the lands that are identified as Open Space Agriculture in this plan. This program is but one of many options land owners have to remain in farming and protect their land. The Land Use Plan clearly identifies where land is to be protected and where development is to be promoted so that issues of fragmentation and encroachment are minimized. See Chapter 4 for more details.
- DNREC has identified significant natural resources in the Master Plan Area and promoted design guidelines to protect these areas. Most of the critical resources are located along the tributaries of Cedar Creek and include wooded areas, rare species, excellent wildlife habitat, wetlands, and sensitive watercourses. The Master Plan directs dense development away from these areas. When parcels that contain sensitive resources are subject to future development, DNREC has offered design guidelines that will enable development that does not degrade or encroach on these important natural features. See Chapter 5 for more details.

Chapter 2

Public Workshop Sessions

To kick off the Master Plan process, the City held three public workshops at the Carlyle Fire Hall in September and October of 2009. The goal was to engage citizens and property owners in the Master Plan area in a discussion about the future of the neighborhood. Over 1,000 invitations were mailed to those who lived or owned property in this area. Only a portion of this land is currently in the city limits, so both city and county residents were included in this mailing. The meetings were also widely advertised through newspapers and on the city's website.

The University of Delaware's Sustainable Coastal Communities Initiative was engaged to help structure and run the workshops to maximize public participation and ensure that productive input was received. UD devised the three workshops as a series: the expectation was for residents to attend all three in sequence as each built upon the last. More than 70 individuals attended the first workshop, and of those more than 30 remained with the process for all three.

The UD project team used CommunityViz® (an ArcGIS software extension from Placeways, LLC) geographic information system software to develop the "University of Delaware SCC Land Use Model (UD-SCC Model)." This model was developed for use throughout Sussex County and was immediately useful for this process because the entire Southeast Neighborhood is in Sussex County. The model uses 100-acre tiles in a grid across Sussex County to illustrate potential development patterns. A palette of colors ("crayons") represents 13 typical land use types (4 rural, 6 suburban/urban mixed, and 3 non-residential), each with its associated residential and non-residential densities, population, employment, tax, water and wastewater usage, and traffic-generation characteristics. To help people visualize the land uses, the team used computer graphics programs including CommunityViz® Scenario 3D and Google Earth to create three-dimensional models for each of the 13 land use types.

At Meeting One, citizens reviewed current plans for the neighborhood, learned about constraints to development, and identified their values. They viewed and deliberated about three potential long-range growth scenarios based on 3D representations of land use types and their associated demographics.

At Meeting Two, citizens used a table exercise to plan the Southeast Neighborhood, using colored tile "crayons" placed on an aerial map. The attendees produced seven plans that were

merged into three scenarios: “Current Trends,” “New Community,” and “Suburban.” Build-outs of each scenario were analyzed in numeric terms, mapped, and visualized in 3D, and had their associated demographic impacts estimated.

At Meeting Three, citizens viewed the results of the analyses and discussed the benefits, challenges, and cost implications of each. They used keypads to vote on preferred scenarios. A resulting Composite Scenario was developed by Milford’s City Planner and has become the basis for this Master Plan for the neighborhood.

The project modeled an expanded public process combining scenario development and deliberation, analysis, and decision-making. According to UD project leaders, citizens were astounded to be able to significantly influence the resulting plan. The County Plan had envisioned approximately 18,000 dwelling units for the area, and the City Plan showed approximately 15,000 dwelling units. The agreed-upon Composite Scenario (labeled Preferred – Alt) results in only 8,500 dwelling units, incorporates open space, consolidates commercial areas, and retains areas of farmland. Map 2.1 shows the Preferred-Alt Scenario developed at the workshops.

UD has continued to assist the partners as they have developed detailed plan elements. UD-SCC Model has been very helpful to estimate build-out potential for the area and phasing for infrastructure improvements. The final version of the land use plan (known as Preferred – Revised) contains the potential for approximately 11,700 dwelling units and corresponding increases in commercial space and jobs. The increases over the Preferred-Alt scenario are due to a more accurate accounting of existing units and approved and recorded subdivisions, as well as a reflection that the base density in the city is approximately 3 du/acre corresponding to the least dense zoning district available. The Preferred-Revised Scenario is more fully described in the Land Use Plan, Chapter 3.

Portions of this chapter have been adapted from a CommunityViz® case study titled “Community Planning with Digital Crayons and Real-Time 3D” written by Carol Bason and Bill McGowan of the University of Delaware Sustainable Coastal Communities Initiative. This document has been used with permission. The software vendor, Placeways LLC, has this case study on their website. To view the full case study, please visit:

<http://placeways.com/communityviz/gallery/casestudies.php>

Chapter 3

Land Use Plan

The standard way of thinking about land use for the Southeast Neighborhood was that it would continue as it had in the past, in a rather haphazard way, commonly referred to as “urban sprawl.” As a result of public input at the workshop series and through many meetings and with input from state agencies including the Office of State Planning Coordination, DelDOT, DNREC, and DDA, as well as the University of Delaware, and the City of Milford, a new planning concept has emerged. As proposed, this new “planning model” protects and preserves valuable farm land from development through a program called Transfer of Development Rights, conserving approximately over 500 acres of agricultural lands for future generations. This plan shields the environment through recommendations from DNREC concerning encroachment of the flood plain, storm water management in designated water-recharge areas, and the protection of aquifer areas. With the cooperation of DelDOT, a Transportation Element has been developed for the Southeast Neighborhood Planning Area that identified and analyzed the transportation improvements that will be required to accommodate the expected changes in land use and increases in traffic volumes for this area. The City of Milford’s part in this program was the preparation of a master plan for the construction of water and sewer utilities to serve this neighborhood in a cost-efficient manner, ensuring that development would be served adequately and that this new development would pay its fair share through a variety of options. The second contribution from the City was the preparation of a Land-Use Plan for this area, which would reflect the actual development presently occurring in this neighborhood and guide future development in accordance with this Master Plan.

Public Input: The “Preferred – Alt” Plan

The public input received at the three public meetings described in Chapter 2 formed the basis for this Land-Use Plan. The final result of these three meetings was the development, by the public, of three (3) Future Land-Use Map Scenarios. The first was labeled “Current Trends” because it reflected a business-as-usual approach to development. The second was called “New Community” because it consolidated growth, particularly non-residential uses, around the grade separated intersection that was to be built at SR30 and SR1. The third was labeled “Suburban.” This scenario drastically reduced density and removed most commercial or employment uses. At the last civic meeting the participants voted on the three Scenarios. After the vote was tallied, there was no clear-cut preference for the most representative Future Land Use Map. Milford’s City Planner took the three scenarios and consolidated them into the “best choice” Future Land Use Map. This version of the map was titled Preferred – Alt (see Map 2.1).

All of the partners agreed that this map reflected the goals of the public during the public workshops, while also reflecting existing conditions, approved subdivisions, and known infrastructure improvements occurring in the neighborhood. Density and commercial development were reduced from the current comprehensive plan, development was concentrated around the interchange, and open space and agricultural lands were protected around the periphery of the planning area.

Refining the Public's Vision: The "Preferred – Revised" Plan

The City and the partner agencies worked over the next year and a half to refine the Preferred – Alt Land Use Plan into the plan that has become the Future Land Use Plan for this Master Plan. The important components of the revision process are described below.

Moving from 100-Acre Grids to Parcels

The UD-SCC model was designed using 100-acre grids as a unit of measure. This makes it easy for planners and members of the public to visualize various land use and neighborhood types. It is easy to move the grids around to create various land use scenarios, even in public meeting settings such as those held at the fire hall. The relative simplicity of this model allows the software to "recalculate" the impact of new land use scenarios quickly, even when using a standard laptop computer.

While this model is perfect for working with the public to visualize various land use scenarios, it is not accurate enough to plan for new infrastructure such as sewer, water, and roads. DelDOT, a partner in this project, offered its staff expertise to provide detailed mapping of the Master Plan Area using its geographic information system (GIS) software. Very early on in the process, the project team worked with DelDOT GIS and planning staff to develop a version of the preferred scenario at the parcel level. This map has continued to be refined and is now known as the Land Use Map, Map 1.

Accurately Reflecting Existing Units and Approved Subdivisions

The Master Plan Area currently contains many existing houses, subdivisions, and approved subdivisions. Moving to a parcel-based map allowed the project team to accurately count those units. Although the area is quite large and has a lot of land left to develop, the team quickly realized that many of the parcels already had approved and recorded subdivisions located on them. Some of those subdivisions had already started to be constructed, although construction had slowed by this time due to economic conditions. The decision was made to assume that these subdivisions would eventually be built as they are currently designed. This

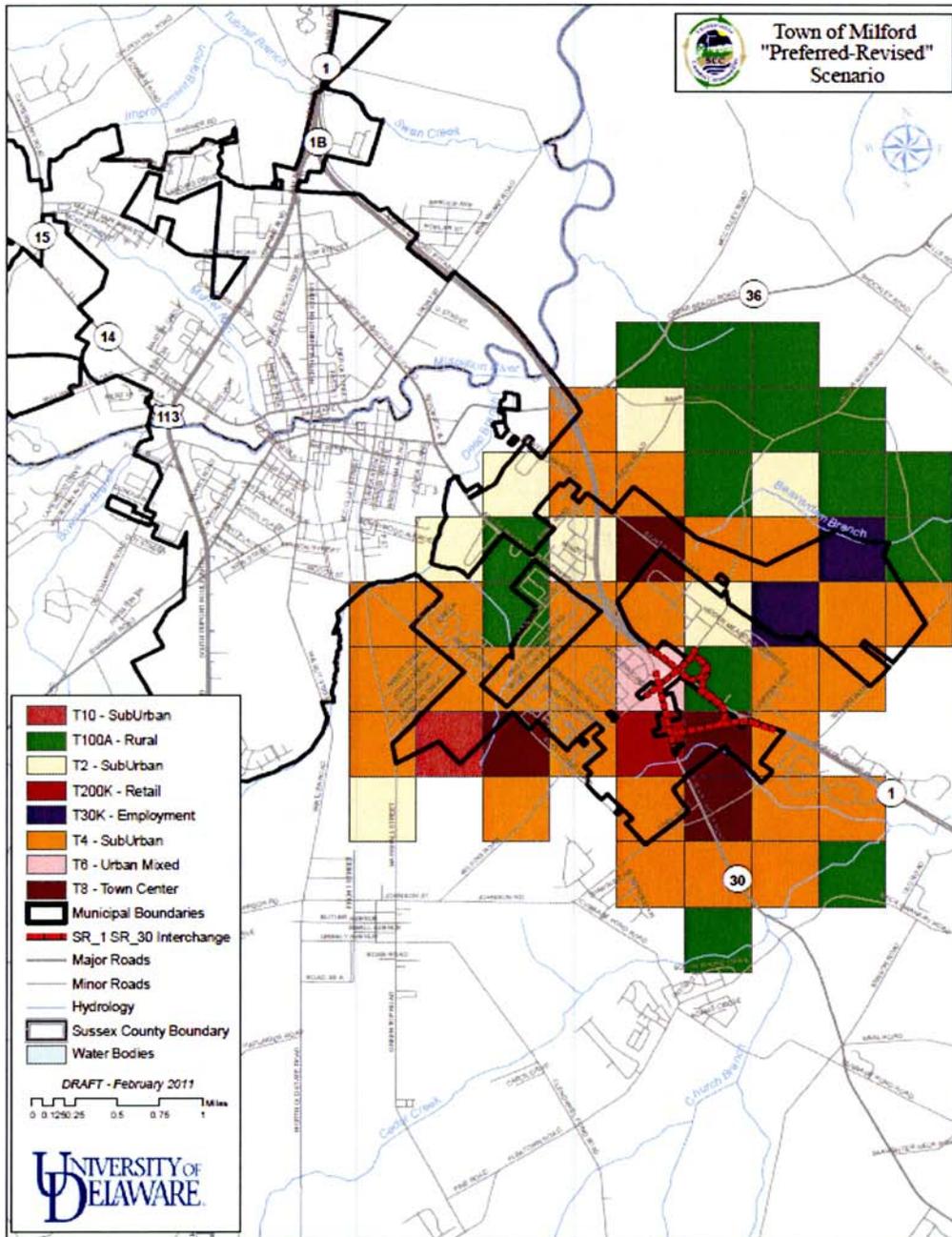
left a smaller subset of parcels that would be the focus of new residential, commercial, and employment land uses. This information is reflected on the Future Land Use Map (Map 1), and eventually was fed back in to the UD-SCC Model to become the Preferred – Revised Scenario (Map 3.1).

Coordinate Land Use Plan with Agricultural Preservation

As a partner in this project, the Delaware Department of Agriculture (DDA) worked to develop a strategy to preserve the agricultural lands along the eastern portion of the Master Plan Area. A number of large farms have already been preserved in this area, and they developed a program to encourage land owners of nearby farms to preserve their land as well. This program is called Transfer of Development Rights (TDRs) and is fully described in Chapter 4.

DDA evaluated the lands within the Master Plan Area in detail and determined which farms had the characteristics and suitability to remain productive. These were identified for future preservation and have been shown as Open Space Agriculture on Map 1. Should the land owners choose to preserve their land using the TDR program, they would be compensated for their “development rights,” and those rights would be transferred to another area. Those areas would be called “receiving areas,” where higher densities would be permitted only by redeeming rights purchased from landowners willing to sell them and protect their land. The land use plan identified three receiving areas where up to eight units per acre would be permitted. These areas are shown as hatch marks on Map 1.

Map 3.1. The Preferred – Revised Scenario



The Land Use and Transportation Connection

As DelDOT was developing its transportation plan for the Master Plan Area (see Chapter 8), it identified the concept of transit loops that would link residential, employment, and commercial uses in the developing area with the existing downtown. Transit service is not viable at the low densities that are present in the area today. In order for transit to be efficient and cost effective, there must be “nodes” or locations of activity where people or jobs are clustered together, so that they might take advantage of bus service or other transit.

The Master Plan initially provided two important nodes of activity. The first is a commercial center or district that is planned west of SR 1 in the vicinity of the planned grade-separated intersection at SR1 and SR30. The other is the proposed employment center located to the east of the same interchange. Both areas will provide a concentration of jobs and services that make them ideal locations for future bus stops. The TDR receiving areas conceived by DDA would also be ideal locations because they would allow for higher-density residential uses, up to 8 du/acre. The project team carefully planned the location of the TDR receiving areas so that they would be along the bus routes, providing bus stop locations to ensure the future viability of transit service for the Master Plan Area.

Base Density in Milford

The Preferred – Alt land use scenario developed as a composite of the public input received at the workshops identified a large portion of the land area to be for single family housing at a density of 2 du/acre. This is consistent with the density permitted by-right under Sussex County’s regulations with access to sewer and water. The City’s position is that any lands that will receive sewer and water must annex into the City limits. Milford’s zoning ordinance allows for a minimum base density of approximately 3 du/acre through their R-1 Zoning District. The City finds that sewer and water utilities are not cost effective with densities of less than this. This information was loaded back into the Community Viz model as a part of the Preferred – Revised scenario.

Milford Southeast Neighborhood Master Plan - Land Use Plan

The final map that will guide future land use in the Master Plan Area is the Land Use Plan, included as Map 1. The land uses identified on this are described as follows:

Residential – Low Density. The majority of the residential land uses in the Master Plan Area are low density, which includes many existing homes and subdivisions, some of which are unbuilt. It

is assumed that undeveloped lands would be built as mostly single-family homes at a density of about 3 units per acre if annexed into Milford.

Residential – High Density. This land use category is reserved for two approved subdivisions that are planned for up to 12 units per acre. One of these subdivisions, Hearthstone I, has been under construction for many years. The other is currently unbuilt.

Open Space Agriculture. The eastern portion of the Master Plan Area is identified for open space and agriculture. This will protect the viability of the agricultural industry in this area, protect the environment, and create a “greenbelt” to prevent future development from encroaching to the east toward Slaughter Beach and the sensitive coastal environment near the Delaware Bay. This land use category is also used for the golf course at Shawnee Country Club, as the assumption was made that this land would stay as open space of some type.

Employment Center. This land use category is identified with a large employer to bring jobs and economic development to the Master Plan Area. The current concept is for a medical campus and / or educational institution that would provide many jobs and services for the region.

Commercial. This land use category is used to identify a future commercial use or district in the vicinity of the proposed interchange at SR 1 and SR 30. It is expected and encouraged that this commercial district may include some mixed uses, such as residential condos or apartments over stores, to provide a vibrant community center that will serve the entire Master Plan Area with needed services and recreation.

TDR Receiving Areas. In these areas the City will allow residential development of up to 3 du/acre “by-right.” In addition to this, developers will be given the opportunity to purchase TDR credits through the program described in Chapter 4 and build at a density of up to 8 du/acre. The areas are hatch-marked to indicate that the boundaries are subject to change based on design review at the time of development. The only criterion is that all of the higher-density units must be within ¼ mile of a current or future transit stop. Mixed uses, such as small scale commercial to serve the residents, may be considered at the time of development.

DeIDOT-Owned Property. Lands in this category are owned by DeIDOT to allow for the construction of the grade-separated intersection at SR 1 and SR 30.

Table 3.1 shows a comparison of the land use categories used on Map 1 with the land use categories used by the UD-SCC Model. This table will allow the reader to compare the

Preferred-Revised Scenario (Map 3.1) to Map 1. Keep in mind that the Preferred-Revised Scenario shown as Map 3.1 is the result of UD’s modeling work. Map 3.1 was completed using 100 acre grids, not parcels, so it is not possible to directly compare the two maps. Although Map 3.1 was important in developing the land use concept for the Southeast Neighborhood, please be aware that Map 1 is the final map which guides future land use in the Southeast Neighborhood governed by this plan.

Table 3.1 Land Use Categories in Map 1 Compared to Land Use Categories in Map 3.1

Land Use Category on Map 1, Land Use	Land Use Category in Preferred Revised Scenario, Map 3.1
Residential – Low Density	T2 Suburban; T4 Suburban
Residential – High Density	T10 Suburban
Open Space Agriculture	T100 Rural
Employment Center	T30 Employment
Commercial	T6 Urban Mixed; T8 Town Center; T200 Retail
TDR Receiving	T8 Town Center
DeIDOT-Owned Property	T100 Rural

Sources: Map 1 created by City of Milford with assistance from the Office of State Planning Coordination and DeIDOT. Map 3.1 created by the City of Milford with assistance from the Office of State Planning Coordination and the University of Delaware Sustainable Coastal Communities Initiative. Map 3.1 developed using the UD-SCC Model.

By the Numbers: Build-Out Timing and Phasing

The land use details included in Map 1 were loaded back into the UD-SCC Model in order to generate build-out calculations for the area. This allowed the project team to compare the Land Use Plan with the Preferred – Alt scenario developed as a composite from the workshops. It also allowed comparisons to the current Milford Comprehensive Plan. See Table 3.2 for a summary of the differences and Appendix 1 for a more detailed review of the model output.

Build-Out: How Much Could be Built Some Day?

Planners use the term “build-out” to describe how much development could be achieved in a given plan or planning area. This is a very effective and necessary exercise for this Master Plan, as it has allowed the project team to properly design and size infrastructure improvements such as roads, water, and sewer.

The current Milford Comprehensive Plan would allow for up to 15,000 new dwelling units and approximately 39,700 new residents. The Preferred – Alt scenario yielded approximately 7,600 new homes and 19,500 residents. The Land Use Plan, reflected by the Preferred – Revised scenario on Table 3.1, has room for about 11,800 homes and 30,700 residents. This is less than

the current comprehensive plan but more than the Preferred – Alt scenario. The increases are due to Milford’s base density for low-density development and the higher accuracy in accounting for existing homes as well as approved subdivisions.

In terms of jobs and non-residential space, the relationship is similar. The current comprehensive plan would allow for a massive amount of commercial space, almost 8 million square feet and 10,200 jobs. In the workshops, the public drastically reduced this amount of commercial to just less than 1 million square feet and about 2,500 jobs. Perhaps more importantly, the commercial activities and employment land uses were clustered around the new grade separated intersection to allow for safe road access. Other positive effects of this choice were that these areas can be served by transit and have the potential to serve as a commercial district for the new community. The project team revised the amount of building square footage up to about 3 million and 4,800 jobs to account for developer’s plans for these areas, but it did not increase the overall amount of land devoted to commercial and employment uses. In fact, the team realized that some of the commercial lands identified in the current comprehensive plan were not able to be safely accessed from the roadways and were thus changed to low-density residential future land use.

Timing and Phasing: How Long Will This Take?

While the “build-out” exercise is important for planners and engineers, the question that most people want to know the answer to is, “When will all of this development be built?” The answer to this question is very important to planners as well because it is necessary to develop timing and phasing plans to ensure that infrastructure is in place when it is needed by new residents and businesses. It is not a cost effective use of tax dollars to build infrastructure before it is needed, either. So timing is critical.

The project team developed some realistic assumptions about the pace and timing of development based on regional and statewide data about population growth and data specific to Milford in the form of building and development permits. Many people can remember the frantic pace of building and land-development activity just a few short years ago in the mid-2000s. We all know now that this was what economists call a “bubble” and was an unusual and short term phenomenon that does not reflect what might happen in the future over a longer period of time. Actual growth and development rates will be much more modest and sustainable based on economic realities, not market “bubbles.”

The team selected a growth rate of approximately 2% per year for Milford, including the Master Plan Area. This averages out to about 40 new houses and 80 new residents per year, which is similar to the historic average experienced in Milford. Using the UD-SCC Model, two future scenarios were developed to reflect what is expected in future years. In 2020 it is expected that an additional 491 houses and 1,251 residents would be in the Master Plan Area. This scenario also assumes that a small amount of new commercial is constructed, only 160,000 square feet employing 462 people. The second scenario assumes the same rate for residential growth, with an additional 525 houses and 1,330 people. However, by 2030 the team assumed that some of the larger commercial and employment uses would be constructed and operational (perhaps a new shopping center, or even a medical campus at the Innovation Park site). As such, more than 1 million non-residential square feet of building space and over 1,100 new employees would be expected by 2030.

Table 3.2. Summary of Alternative Plan Scenarios from Community Viz

	Existing Land Use	Preferred Alt (at buildout)	Preferred Revised (at buildout)	Growth 2020	Growth 2030	Milford Comp Plan as adopted (at buildout)
Dwelling Units	1,943	7,626	11,769	2,434	2,959	15,083
Number of Residents	4,709	19,459	30,739	5,960	7,290	39,659
Commercial Floor Area	0	995,000	2,985,000	160,000	1,185,000	7,970,000
Employees	262	2,519	4,875	724	1,854	10,275
Date Created	Oct. 2009	Oct. 2009	Dec. 2010	Apr. 2011	Apr 2011	Jan. 2009

Sources: University of Delaware Sustainable Coastal Communities Initiative. Growth 2020 and 2030 scenarios developed by City of Milford, Office of State Planning Coordination, and UD based on Delaware Population Consortium growth rates and City of Milford building permit information.

Milford South East Neighborhood Master Plan

Map #1 Land Use

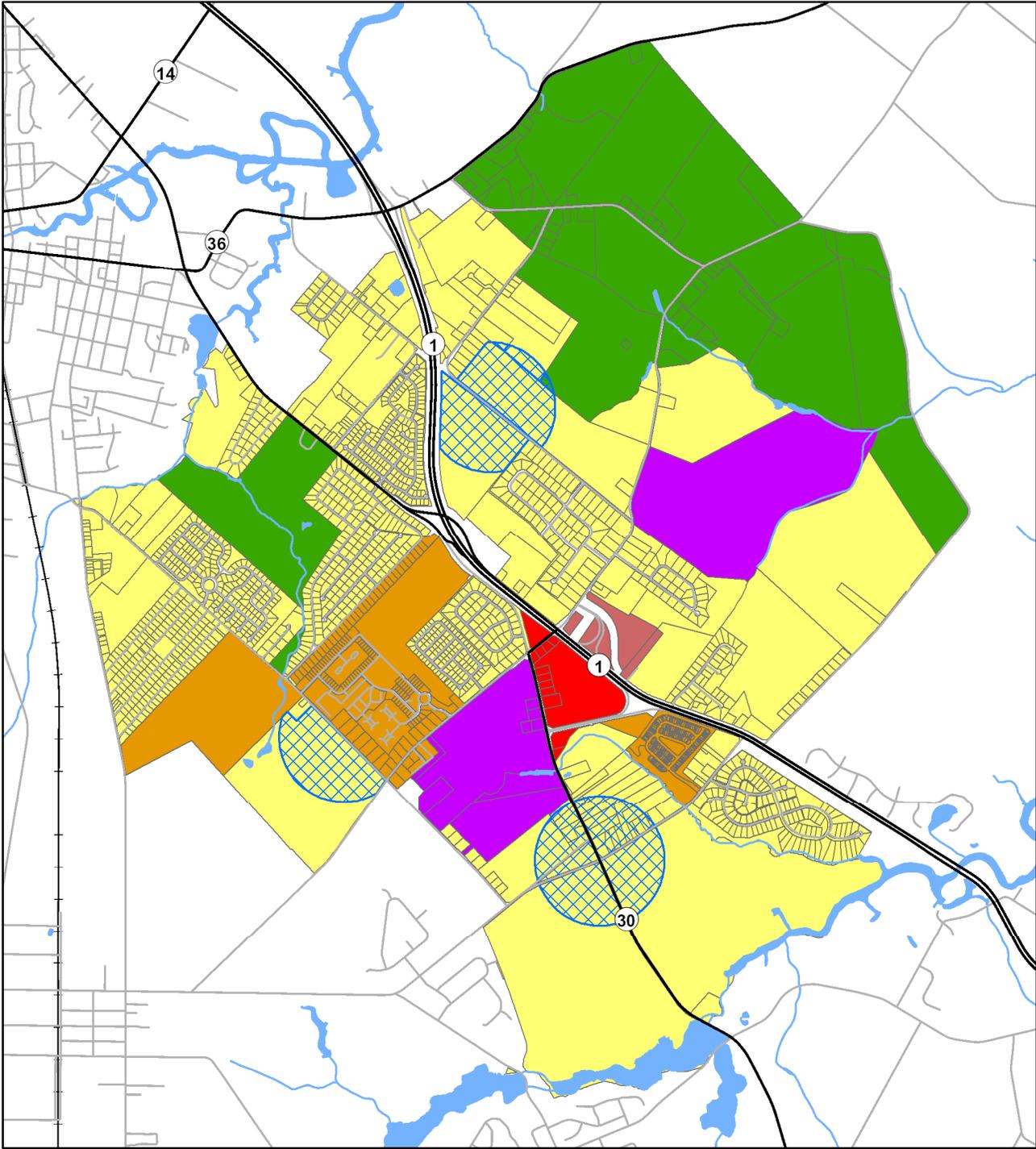
Revised May 2015

Legend

- Residential - Low Density
- Residential - High Density
- Open Space Agriculture
- Employment Center
- Commercial
- DeIDOT Owned
- TDR Receiving Areas



0 0.25 0.5 1 Miles



Chapter 4

Agricultural Preservation

The Delaware Department of Agriculture (DDA) supports and endorses the City of Milford Southeast Neighborhood Master Plan. The Department is especially encouraged to see the large area of farmland to southeast designated as continued agricultural use. The state has already made a significant investment of taxpayer's money to permanently preserve a number of farms in this area through the Delaware Agricultural Lands Preservation Foundation (DALPF). In addition, the Department has performed a Land Evaluation/Site Assessment (LESA) analysis of the parcels designated as Open Space-Agricultural in the plan. The LESA model was developed by the United State Department of Agriculture (USDA) to evaluate a parcel of land's suitability to remain in agriculture for the foreseeable future. The analysis showed all of the parcels are well-suited, and best used, for agricultural in the future. The DDA will continue to work with land owners in this area to preserve their farms permanently, and build on the investment the state has already made.

Simply preserving farmland is not enough to encourage and support farming in the state. State government and municipalities must make the occupation of farming a viable and rewarding living for the farmer and their family. The Department offers some suggestions below that are mutually beneficial to both the city and the surrounding farms. In addition, the Department has outlined a plan for a transfer of development rights (TDR) program whereby the city and DALPF can partner to permanently preserve the farmland identified in the master plan.

In addition to providing a living to farmers, farmland provides a number of intangible benefits to the cities and people who live around them. In the case of Milford, preserving the farmland to the southeast will create a predictable city limit, with no threat that the land can be developed into residential developments through Sussex County. This would ensure that city's services and infrastructure will not be stressed and overextended without additional tax base to support it.

The farmland will also provide a visual amenity of open green space to city residents along the southeast boundary of the city. There are also environmental benefits such as cleansing precipitation before it recharges the underlying aquifers that feed the city's well fields. The surrounding farm businesses will also be a source of income for the city's businesses, when farm families shop in city. Nearby farms also present the possibility of providing fresh local fruits and vegetables to city residents via roadside produce stands or "u-picks."

Milford Southeast Neighborhood Master Plan

Transfer of Development Rights Program

The Delaware Agricultural Lands Preservation Foundation (DALPF) will partner with the City to develop a Transfer of Development Rights (TDR) program. The Department suggests a program whereby the city selects which farms it wants to permanently preserve, and which properties within the city would be allowed to use the TDR credits to build additional dwelling units.

Although the city would have discretion in choosing which farms to preserve, the Department recommends the farms be enrolled in the DALPF program first in order to be eligible. The DALPF is a voluntary program whereby the landowner initially agrees not to develop the land for 10 years. During that 10-year period, the landowner is eligible to sell his/her development rights to the state and receive money in exchange for permanently preserving the property in agriculture. In this area, the landowner will also have the option to sell Transfer of Development Rights through the program that will be described in this chapter. Landowners will have at least two options for preservation from which to choose.

The DALPF is a well-established program for preserving farmland. It has been in operation for nearly 20 years and has permanently preserved over 100,000 acres in Delaware. This 100,000 acres represents nearly 20% of the state's available farmland and approximately 8% of the state's total land area.

By partnering with DALPF, the City will avoid the initial financial expenditures required to preserve a parcel of land. These expenditures include paying to survey the property, paying the legal costs of a real estate settlement, and other associated administrative costs. DALPF would bear those costs. In addition, the City would avoid the future obligation of monitoring the preserved farms to make sure they remain in compliance with the preservation agreement (easement). DALPF would assume that responsibility and would add any properties preserved by Milford to the hundreds of permanently preserved farms it already monitors. In addition, should any future litigation be required to uphold the preservation easement, the City would not have to incur any legal costs.

How a Transfer of Development Rights (TDR) Program Works:

In order for a TDR program to work, a viable market has to be created through a number of steps, including ordinances.

The first step in the process is for the City of Milford to identify “sending areas” and “receiving areas.” TDR sending areas are defined as the areas, and properties, from which TDR credits will come. The goal is to permanently preserve these areas as farmland and open space through deed restriction/easement. In return for agreeing to permanently preserve a farm, the landowner would be compensated monetarily. The number of dwelling units (DUs) that could have been built on the property would then be “sent,” or “transferred,” to a previously designated receiving area where the City is prepared for development at higher densities. In addition to sending areas, the City would also have to identify “receiving areas” within its municipal boundary. These areas would have to have the available infrastructure to accept higher density. The City would also need strong ordinances in place that would only allow additional density if the developer participated in the city’s TDR program. In addition, the ordinance must make the addition of more DUs (higher density) through the TDR program “by right.”

Milford’s TDR Program

Selecting the Sending Areas

In order to identify suitable sending areas, DDA performed a GIS analysis of properties just outside, or straddling, the city’s future projected growth boundary to the southeast. In order to determine which farm parcels would be most suitable for preservation, the department applied the same qualifying criteria used by the state’s Agricultural Lands Preservation Program. The analysis identified 11 farm parcels encompassing 720 acres. These properties are shown in Table 4.1 and on the Agriculture Map, Map 2. This area is ideal because a number of farms have already been permanently preserved by the Delaware Agricultural Lands Preservation Program. In addition, there are several other farms in the area that are currently enrolled in the DALPF program, waiting to be permanently preserved. The farms in the sending area are currently zoned for two (2) units to the acre under the Sussex County zoning code. Therefore, approximately 1,452 dwelling units could be transferred into the City of Milford and used on properties designated as receiving areas. The proposed sending areas are shown as “Open Space Agriculture” (green color on legend) on the land use map (Map 1).

Selecting the Receiving Areas

Finding eligible farms willing to sell their development rights is only one side of the equation. The City must also identify areas prepared to accept additional dwelling units above the maximum number allowed by the underlying zoning. The additional DUs would only be allowed if the developer participated in the city’s TDR program. Receiving areas have been identified based on a number of enabling factors, including sewer and water availability, road and traffic

considerations, availability of public transportation, existing density in the area, proximity to public services, environmental considerations, and other factors.

After considering and weighing all the factors previously discussed, DDA supports the city using the three (3) areas defined by the hatch-marked areas on the Land Use Map (Map 1). These areas are centered on future public transportation locations, or nodes. These areas are in proximity to future employment centers and commercial services and are not located on environmentally sensitive lands as identified by DNREC. See Table 4.2 for more details.

Some the land in the receiving areas is already within Milford's municipal boundaries. In order for the other lands to participate as receiving areas through this program, they will have to be annexed into the City of Milford. Upon annexation, these lands will be zoned at the base density, currently known as R-1 under Milford's existing zoning ordinance. This ordinance currently allows development at up to approximately 3 du/acre. Property owners/developers would be allowed to develop at that density under the current regulations. However, if the property owner/developer choose to participate in the TDR program, the land could be developed at up to 8 du/acre if there is a transfer of units from the sending area. This transfer would be "by-right," meaning that there is no special approval needed to complete the transfer as long as the parameters and requirements of the program are met. The developer's plan would still have to go through the standard subdivision review process through the Planning Commission and City Council, to ensure it meets city code requirements. The area encompassed by the hatch-marked areas equals approximately 280 acres. Therefore, multiplying that area by five (5) additional units per acre would allow up to 1,400 units to be transferred, potentially preserving 720 acres of farmland in the receiving area.

Table 4.1. TDR Sending Area Analysis

Parcel Number	LESA Score	Acres	Zoning Yield ¹
330-12.00-10.00	185.08	60	120
330-08.00-47.00	220.19	14.7	28
330-12.00-08.00	222.51	117.4	235
330-08.00-28.00	172.61	46.2	92
330-08.00-24.00	189.26	41.29	101
330-12.00-01.03 ²	210.7	118.18	236
330-12.00-01.02 ²	Part of 330-12.00		
330-12.00-01.02 ² (Unit 21805)	Part of 330-12.00		
330-12.00-01.00	181.54	66.8	132
330-08.00-19.00	192.19	85.5	170
330-08.00-19.02	192.19	16.3	32
330-08.00-20.00	232.5	105.6	210
330-07.00-75.00	184.27	48.4	96
Totals		720.37	1,452

Source: Delaware Department of Agriculture

¹ Zoning Yield reflects 2 dwelling units per acre, which is currently allowed in the Sussex County AR-1 Zoning District

² Shaded parcels are currently enrolled in an existing Agricultural District.

Table 4.2. TDR Receiving Area Analysis

Milford TDR Receiving Areas: Located within ¼ Mile of Public Transportation Nodes				
Node	Acres	Base Zoning at 3 DU / Acre	TDR Zoning at 8 DU / Acre	Additional DUs through TDR Use
1	58	174	696	522
2	118	354	1,416	1,062
3	104	312	1,248	936
Totals	280	840	2,240	1,400

Source: Delaware Department of Agriculture, City of Milford, and Office of State Planning Coordination

Purchasing Development Rights Using a TDR Bank Concept

Some traditional TDR programs require the developer to find a suitable farm to preserve and a landowner willing to sell his/her development rights. The developer would have to negotiate a price with the owner and handle all of the legal and administrative requirements to permanently preserve a parcel of land from future development. This process typically requires a lot of time and money from the developer. This is generally not in the developer's best interest if they are trying to take advantage of prevailing real estate market conditions favoring building at higher densities.

DDA will assist the city in the creation and administration of a TDR bank in lieu of the aforementioned process. In a TDR bank concept, the City would begin with either seed money or TDR credits from lands already preserved. Developers would purchase TDR units to allow them to build at higher density from the bank. An administrative fee may also be assessed to account for legal and other costs that may be necessary to complete the transfer. The City (aka “the bank”) would aggregate all the funds it collects from developers who purchase these rights and use that money to purchase the development rights on properties enrolled in the DALPF program and located in the city’s designated sending area. These units would then be available to be re-sold to future developers. The City would choose which farms it wanted to purchase based on predetermined criteria they establish.

In addition to the funds the City would have, the City would also be eligible for state-matching funds from DALPF, as well as any federal matching funds from United States Department of Agriculture (USDA) Farm and Ranch Lands Protection Program (FRPP). As allowed by law, these matching funds would be awarded to the city based on availability. If the City were able to capture state and federal matching funds, it could significantly leverage funds with additional money and preserve additional farm land.

Setting the Cost of TDR Credits or Units

DALPF recommends that the value/cost of a unit of development rights for transfer be based on the most recent real estate appraisals done on properties near the designated sending areas. If there are insufficient real estate appraisals to determine a value, DALPF could undertake a sample appraisal process to establish a fair value. The value could be established for a given calendar year, or on any other schedule the City deems appropriate. Pricing could be done by land classification if the rights were variable in the city’s system, again based on recent appraisal information. As another option, the City could set values based on the presumed value of the rights, with a deduction for the developer’s profit. Studies have shown that a developer needs to realize a 35 percent profit margin when buying TDR credits in order to have an incentive to buy them.

Summary of Benefits of this Program

- The TDR bank allows developers to purchase rights at pre-set prices. No need to locate willing land owners and negotiate prices.
- Farmers and landowners can sell directly to the TDR bank at pre-set prices, determined through fair appraisal methods. No need to negotiate with developers.

- TDRs can be sold and purchased in appropriate increments based on needs and market conditions at the time. No need to match a farmer/landowner with a developer who needs exactly the number of TDRs they wish to sell.
- Additional density would be allowed “by right,” and the developer will not have to go through a separate public approval process to use the credits.
- As a part of this program, the use of TDRs will entitle the builder/developer to all of the benefits of expedited review and processing that accrue to those who adhere to the recommendations and requirements in the Master Plan area.
- The City and the State will also dedicate a permanent plaque or marker in the development, and the farmland that was preserved, that memorializes and recognizes the developer’s contribution.

Additional Recommendations for Implementation of Agricultural Preservation:

1) DDA recommends that the City require any property developed adjacent to land designated as Open Space Agriculture to include a forested buffer between the property and adjacent farmland. This is already required by Sussex County. As a courtesy to Sussex County, DDA’s Forest Service reviews the effectiveness of the buffer and makes a recommendation to the county on whether or not to accept the buffer as is, or require modifications. The Department would offer the same service to the city.

2) In addition to a forested-buffer requirement, DDA also asks that the City work with developers on where they “mass” their houses or buildings. Whenever practical the Department requests that the City require developers to cluster their approved building lots and place as much of the residual community open space near adjacent farm parcels. This would further help eliminate or mitigate any conflict that may arise from dissimilar land uses.

3) DDA asks that the city review its zoning ordinances for compatibility with future agricultural business or agriculture related uses. It is important to provide provisions and flexibility in the zoning code to accommodate future agriculture related activities.

4) DDA would note that all properties enrolled in the state’s farmland preservation program are afforded the protections listed in Appendix 3. In addition, Sussex County adopted a “mirror” ordinance to provide these protections to all farms located in Sussex County. These protections should be considered during the city’s planning process in an attempt to place more compatible land uses next to properties engaged in agriculture. In addition, there is a restriction on the location of water wells in DNREC’s regulations that should be considered.

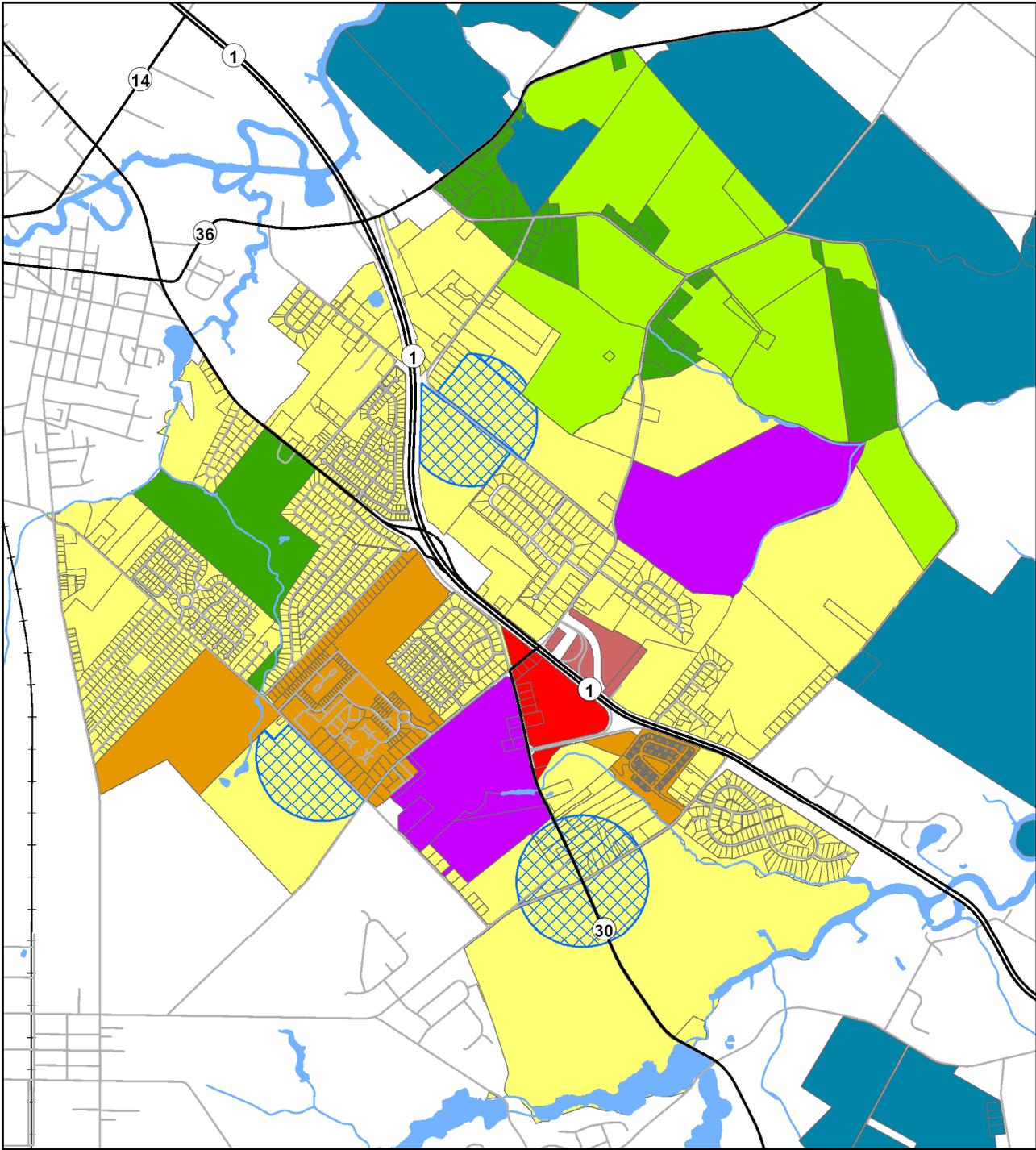
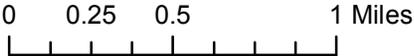
Milford South East Neighborhood Master Plan

Map #2 Land Use & Agriculture

Revised May 2015

Legend

- Residential - Low Density
- Residential - High Density
- Open Space Agriculture
- Employment Center
- Commercial
- DelDOT Owned
- TDR Receiving Areas
- Agricultural Easement
- TDR Sending Areas



Chapter 5

Environmental Protection

The Delaware Department and Natural Resources and Environmental Control (DNREC) has evaluated Milford's Southeast Neighborhood in order to develop a proactive environmental protection strategy to be a part of this plan. This plan will allow the development of the master plan area to proceed while protecting key resources and creating more livable and connected communities in that area. DNREC utilized GIS resources and a collaborative planning process involving several programs within the Department to identify three opportunity areas for preservation and environmental protection. The first area is the medical/commercial area east of SR1 (Area 1). The second is the mixed-use shopping area at the intersection of SR30 and Johnson Road (Area 2). The third area is the southernmost boundary of the Southeast Neighborhood along Swiggetts Pond and Cedar Creek (Area 3).

Environmental Overview of the Master Plan Area

Delaware's natural life-support system (often referred to as green infrastructure) is a network of natural areas, parks, conservation areas, and working lands all with conservation value. Many of these areas are carefully planned and managed by federal, state, or local governments, not-for-profit organizations and individual landowners. These components support native species, maintain natural ecological processes, sustain air and water resources and agricultural enterprises, and contribute to the health and quality of life for Delaware's communities and people.

DNREC has embraced as its core policy for natural-resource protection, the following eight Ecological Guidelines:

- 1) Maintain large areas of contiguous habitat and avoid fragmenting these areas.
- 2) Maintain meaningful wildlife corridors and potential non-consumptive bicycle and pedestrian connections between habitat areas and adjacent land uses.
- 3) Protect rare landscape elements, sensitive areas, and associated species.
- 4) Allow natural patterns of disturbance to continue to maintain diversity and resilience of habitat types.
- 5) Minimize direct and indirect human disturbances and the introduction and spread of non-native species and favor native plants and animals.
- 6) Minimize human introduction of nutrients, chemicals, and pollutants.

- 7) Avoid land uses that deplete natural resources over a broad area and allocating such land uses to areas of minimal natural resource impacts.
- 8) Compensate for adverse effects of development on natural processes.

Excellent Recharge Areas

There are several excellent recharge areas within the Southeast Neighborhood, notably in the vicinity of the employment center proposed east of SR 1 (Area One). The protection of excellent-recharge areas offers multiple long-term environmental benefits. These benefits include water quantity, water quality, and the preservation of stream/wetland ecological functions. An estimated one-third of Milford's total drinking water supply is withdrawn from a shallow unconfined aquifer known as the Columbia aquifer. The Columbia aquifer's major source of water recharge is from those areas delineated as areas of excellent recharge. Therefore, using this area of excellent recharge to site building structures and/or water-infiltration structures may reduce the quality and quantity of water available to existing and future residents from wells that obtain drinking water from this aquifer. Moreover, the impact to water quality and quantity is likely to extend to those residents who live far beyond the proposed project site, as the Columbia aquifer is a major drinking water source for a significant portion of the population who reside in Kent and Sussex counties. The upshot to development in the area of excellent water recharge is to pass those water-quality and water-quantity impacts in the form of increased water utility rates to existing and future residents as the waters of the Columbia aquifer are depleted and/or contaminated.

Regional Stormwater Management

Originally DNREC had urged the City to consider regional approaches to stormwater management for new development in the planning area. A GIS review of the terrain and natural features indicated that a regional stormwater-management approach is not practical at this time. In order to obtain sufficient drainage area for a regional system to work, existing subdivisions would need to be retrofitted and stormwater from DeIDOT roads and road improvements would have to be included. Neither is likely to happen in the short term, or on a regional scale in this area. This is due to both the topography as well as the fact that there are numerous existing developments that are not likely to re-develop in the foreseeable future.

However, there is an opportunity for greater communication and coordination between DNREC and DeIDOT with regard to stormwater management and road improvements. This coordination will be ongoing throughout the development of this master-plan area.

Opportunities to share facilities and streamline the review process will be continually evaluated and implemented as individual properties within the master plan area develop and re-develop.

A stormwater utility is a legal and financial structure to allow stormwater facilities to be constructed, managed, and maintained in common by a local government or other entity that functions as a public utility. A stormwater utility would be modeled after a sewer or water utility, only the infrastructure would be stormwater ponds, pipes, outfalls, ditches, drainage ways and the like. Stormwater-management facilities rarely impact only one property, which is what makes the utility approach a logical tool for managing drainage. This master-plan area is well suited to such a utility, although there are many ways to structure such an entity. Both the City and DNREC agree to explore this option in more detail as this area develops in accordance with this master plan.

Cedar Creek Natural Area.

Sections of the wooded areas of the Milford Southeast Master Plan Area are part of the Cedar Creek Natural Area (see Map 5.1). Natural Areas contain lands of statewide significance identified by the Natural Areas Advisory Council as the highest quality and most important natural lands remaining in Delaware. The Milford Southeast Area Master Plan acknowledges and provides protection for the Cedar Creek Natural Area.

Natural Area protection recommendations are listed below. These protections are included as Design Guidelines in Chapter 10:

1. Prohibit/limit the removal of trees within the Natural Area.
2. Provide buffers to the Natural Area. Prohibit additional development within 300 ft. of the existing Natural Area.
3. Prohibit storm water structures in the Natural Area.
4. Require green technologies to manage stormwater in the master-plan area, and particularly in the vicinity of the Natural Area. These best management practices use the natural processes of vegetation to filter stormwater, take up harmful pollutants, and improve groundwater recharge without expensive infrastructure.

Cedar Creek Nature Preserve

Cedar Creek Nature Preserve is adjacent to the south end of the Southeast Planning Area (see Map 5.1). A number of rare species can be found in association with this habitat type. To protect the rest of this contiguous forest area, it should be preserved as a Nature Preserve. A Nature Preserve is a special designation that provides additional protection for this important natural-resource area. Such a designation would be achieved with the assistance of the State Office of Nature Preserves within DNREC. Should these areas be annexed as envisioned by the Master Plan, Milford will work with private landowners and the State Office of Nature Preserves to promote the dedication of the Natural Area as a Nature Preserve.

Wildlife Habitat

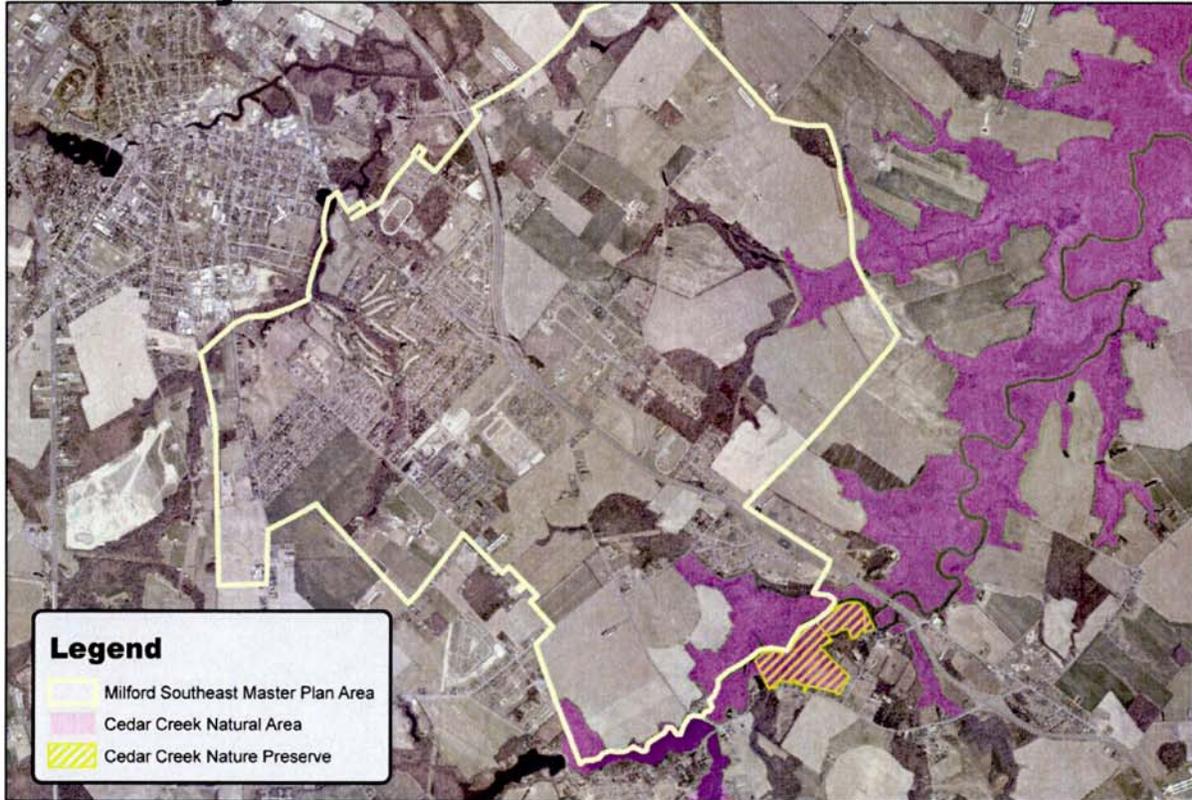
There are several significant natural features in the Southeast Master Plan Area, including the aforementioned Cedar Creek Natural Area and Cedar Creek Nature Preserve, which provide habitat for a wide variety of plant and animal species. Key Wildlife Habitats (KWH), a designation found within the Delaware Wildlife Action Plan (DEWAP) are rare, have special significance in Delaware, are particularly sensitive to disturbance, and/or have a high diversity of rare plants. Large blocks of unfragmented forests and wetlands are also considered to be KWH because of their importance to area-sensitive species, particularly vertebrates.

Priority areas include riparian buffers, contiguous forest blocks, and forested corridors. In order to retain the ecological function of the forests within the Southeast Master Plan Area, fragmentation of existing forest blocks would need to be minimized. Preserving larger, connected areas of forest as open space will provide wildlife with needed food, water, shelter, and places to raise young.

A 300-foot minimum upland buffer is recommended in all areas that support State-rare Atlantic White Cedar Wetlands (AWCW), specifically in Area One and Area Three. Swamp pink, a federally threatened plant, occurs within the AWCW and is very sensitive to changes in hydrology, especially increases in pH and sediment. To protect water quality for other wetlands, water courses, and water bodies, and to provide wildlife habitat for wetland dependent species, upland buffers of at least 100 feet are recommended within the planning area.

Map 5.1. Cedar Creek Natural Area and Nature Preserve

Cedar Creek Nature Preserve City of Milford SE Area Master Plan



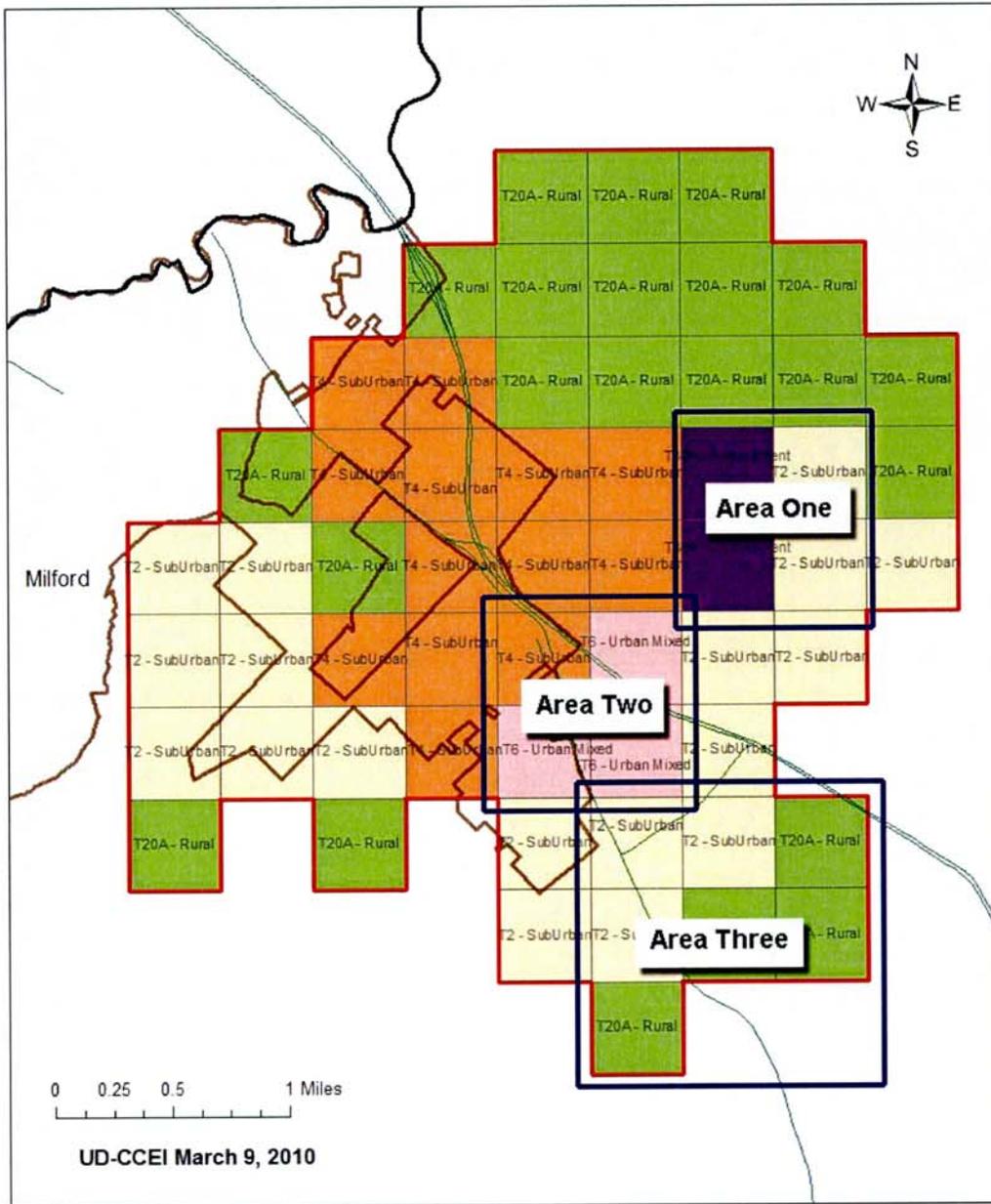
Parks and Recreation

The City of Milford has been awarded a grant through the Delaware Land and Water Conservation Trust Fund (DTF) to develop a Pedestrian/Multi-Modal Master Plan. The purpose of this plan will be to identify new routes within the City of Milford that need to be designated for bicycle facilities and multi-modal paths as well as gaps in the existing connectivity system and links to other modes of transportation. The plan will expand the existing transportation system and will support economic activity and growth by integrating land use and transportation planning through coordinated bike and multi-modal routes. The recommendations and findings of this plan will be implemented in the Master Plan area in coordination with Chapter 8, Transportation.

The 2008 - 2011 Statewide Comprehensive Outdoor Recreation Plan (SCORP) provides guidance for investments in needed outdoor recreation facilities. Citizens surveyed in Milford and eastern Sussex County list the following as high priorities for recreation: walking/jogging paths, bicycle paths, public swimming pools, playgrounds, open space/passive recreation, picnic areas, hiking trails, and fishing areas. In the Master Plan area, these outdoor recreation priorities will be implemented through the development of complete streets and a multi-modal transportation network as described in Chapter 8, Transportation. They will also be addressed through the design of new communities in accordance with Chapter 10, Design Guidelines, and the other ordinances found within the City of Milford Subdivision Ordinance.

Map 5.2. Specific Conservation Areas in the Master Plan

SE Neighborhood - Milford "Preferred" Scenario Map by Land Use



Specific Conservation Areas

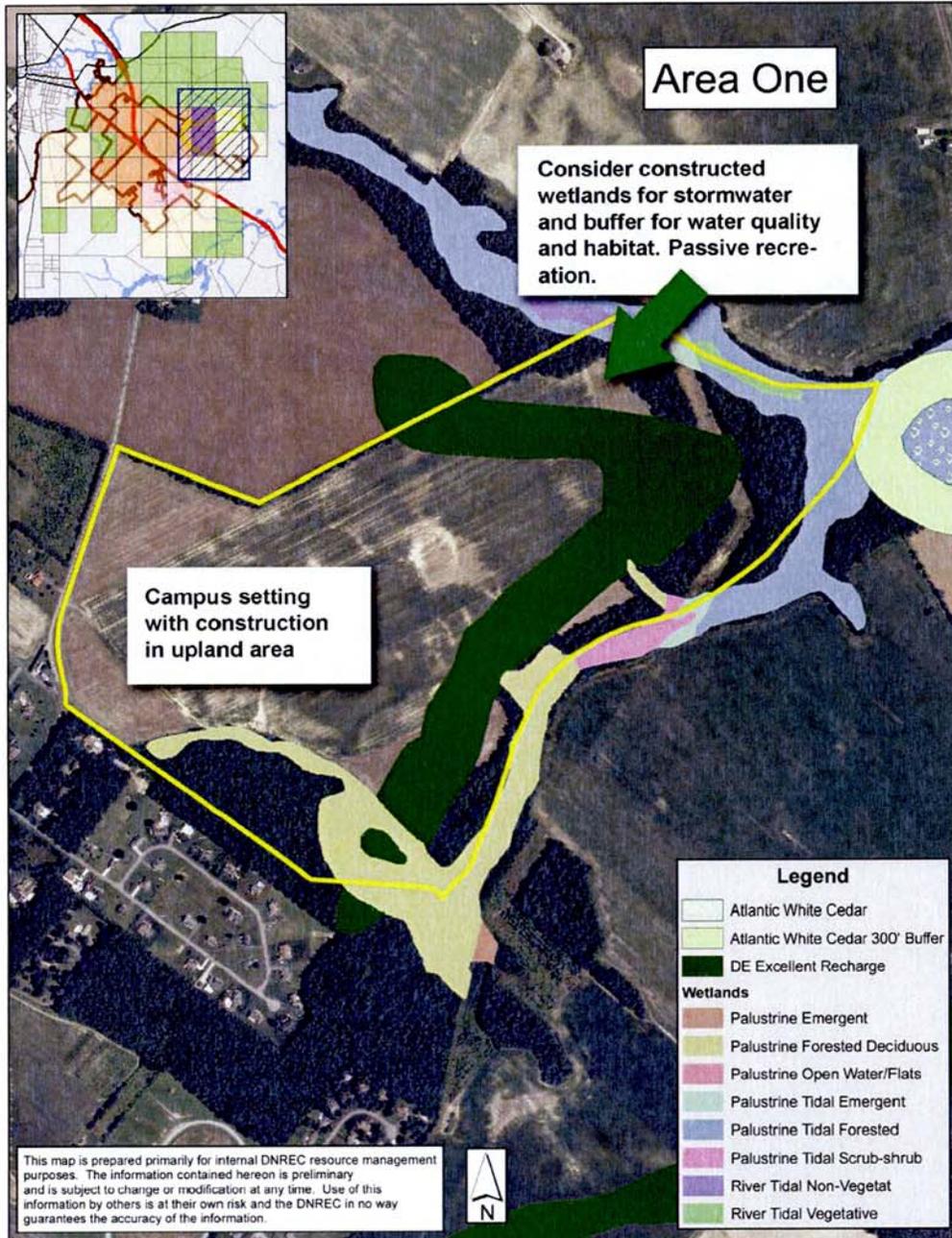
Area One - Employment Center

Area One consists of the lands proposed for an employment center in the master plan. The current proposal for the development of this area contains a commercial and medical campus. This area contains a large excellent-recharge area (see Map 5.3, Area One) and forested tidal wetlands on its easternmost edge.

The current developers have said they intend for this complex to be developed as a campus, with the likelihood of multiple stories and even structured parking. Such an approach is necessary to limit impervious cover and protect these key resources. Intense development should be clustered on the upland portion of the parcel, and the eastern portion would be used for passive recreation and open space.

The Downer and Ingleside soils in Area One are the preferred location for stormwater infiltration. The excellent-recharge areas should be protected so that they may function for the maximum benefit possible to limit the generation of stormwater runoff. When these areas are to be utilized for any stormwater runoff-management practices, the pretreatment of stormwater may be necessary prior to infiltration. Another possibility is to construct wetlands between the excellent-recharge area and the forested tidal wetlands to manage stormwater and strengthen the buffer between the tidal areas and the developed portion of the property. This is one area that could benefit from a stormwater utility approach. Revenues from a stormwater utility could be used to purchase easements and/or construct and maintain those wetlands as stormwater facilities by the city or other management entity identified in the design of the utility.

Map 5.3. Area One

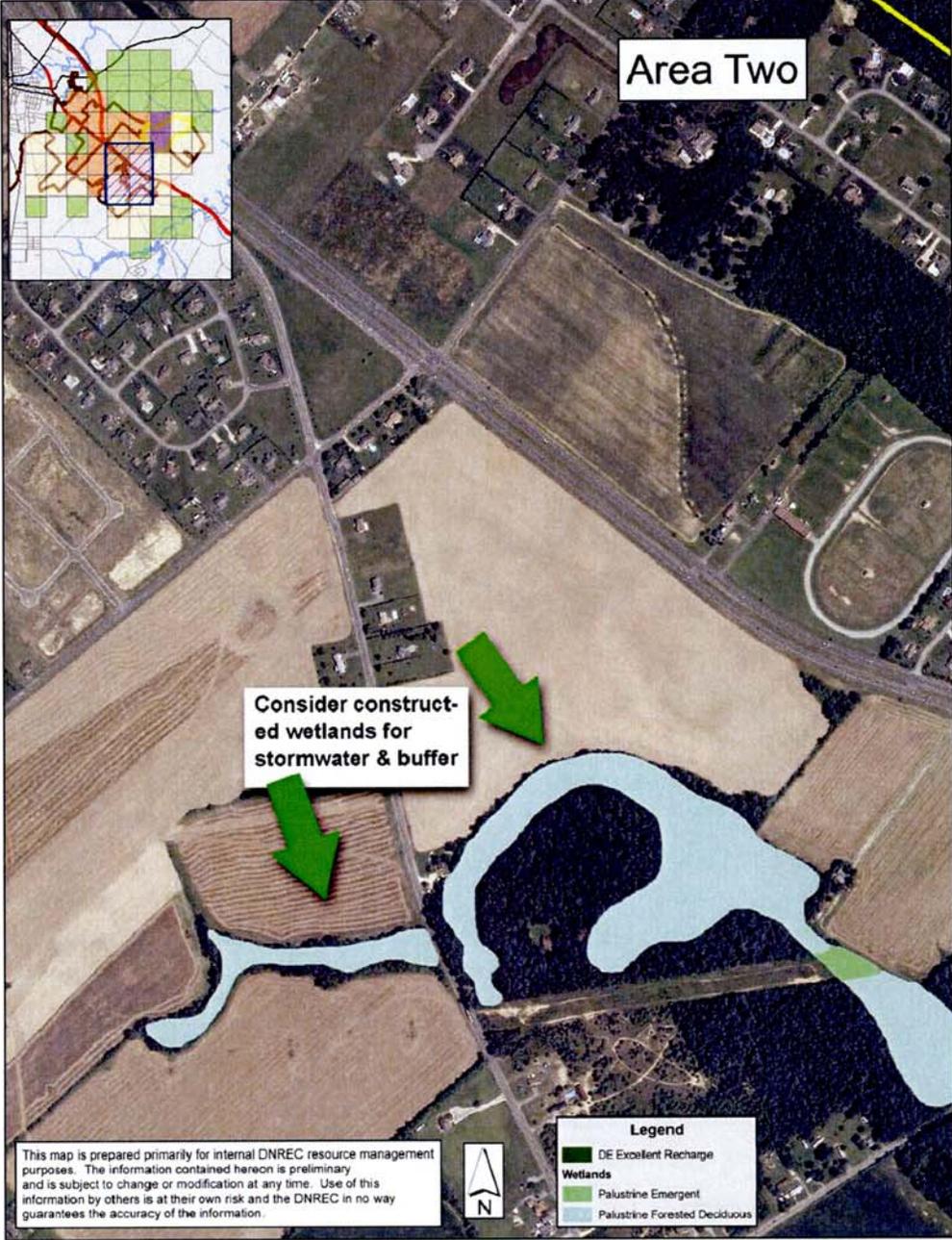


Area Two- Commercial/Mixed-Use Area

A large mixed-use residential and retail development is planned for Area Two (see Map 5.4, Area Two). Our chief area of concern here is protecting the forested wetlands that are mapped in the southern end of this area, on both sides of SR 30. Because of the falling elevations from the north end of this area toward the mapped wetlands, optimal stormwater management would be constructed wetlands or other green-technology best management practices in the area immediately north of the forested wetlands, on either side of SR 30. They would help buffer the wooded wetlands from development.

The wooded section in this area also supports Key Wildlife Habitat. Generous riparian buffers (300 feet or greater) are important to protect water quality and preserve forested areas surrounding the tributaries of Cedar Creek to enable these rare species to thrive.

Map 5.4. Area Two



Area Three – Southern Master Plan Area

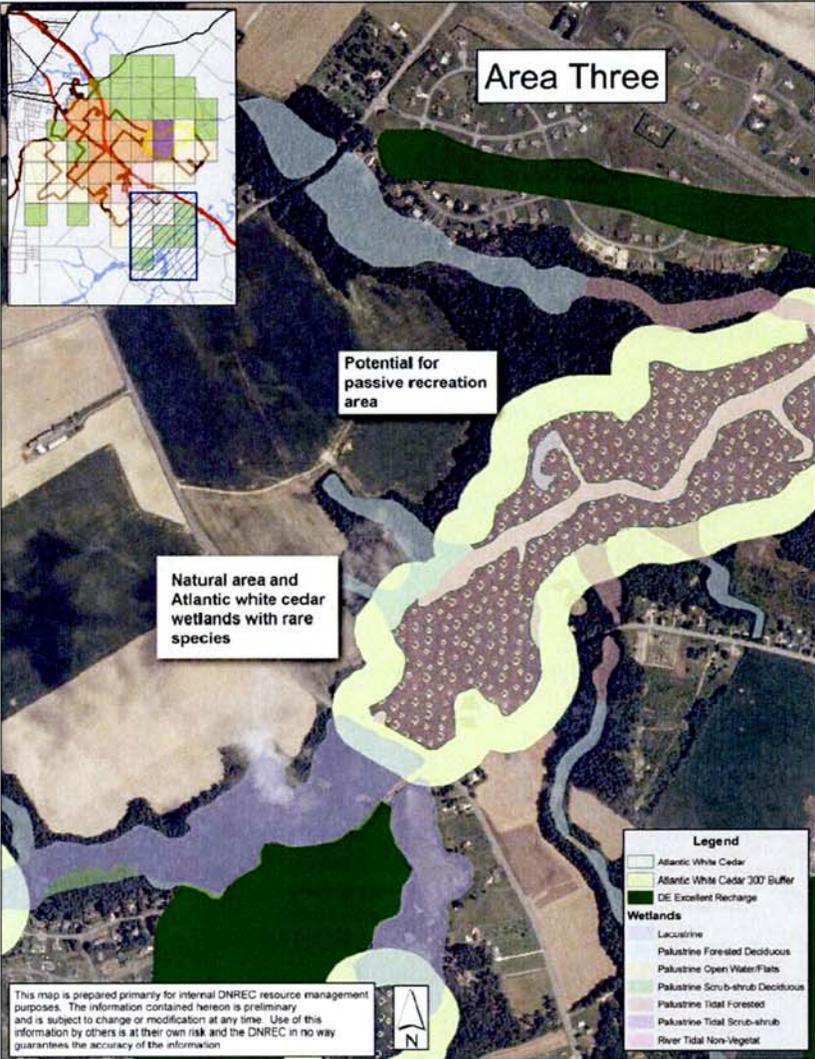
Area Three (see Map 5.5, Area Three) contains Atlantic White Cedar Wetlands, which are considered very rare within the state and support rare species. This vegetative community grows under unique conditions and is sensitive to changes in water quality, especially pH. Adequate upland buffers are extremely important to the persistence of these wetlands and the species it supports.

Rare plant, insect, mussel, fish, and birds occur within the forest and wetland areas associated with the Cedar Creek drainage, as well as impoundments such as Swiggetts Pond and Cabbage Pond. Known occurrences of the federally threatened plant swamp pink (*Hellonias bullata*) have been documented within wetlands associated with Beaverdam Branch and Cedar Creek.

In most cases, a 300 foot minimum upland buffer is recommended primarily due to the presence of or potential for swamp pink. The buffer would also be instrumental in achieving the Total Maximum Daily Load (TMDL) pollution limits for this portion of the Mispillion watershed.

It is believed that the recommended buffer also provides an opportunity for Milford to work with landowners, DNREC, and other partners to establish a passive-recreation resource that could include a kayak launch and allow for birding and hiking on unpaved trails in and around the Cedar Creek Natural Area.

Map 5.5. Area Three



Chapter 6

Housing

The Delaware State Housing Authority (DSHA) supports the inclusion of affordable housing in the Master Plan area. The Master Plan area includes all of the elements of a complete community, including employment, transit, commercial services, and opportunities for the construction of a variety of housing types, especially in Transfer of Development Rights (TDR) receiving areas. Consider these factors:

- Moderate-income working families benefit the most from having access to transit, employment, retail, and services. They are also the most likely to use transit. Typically, well-designed developments on transit and nearby community amenities become desirable places to live. As a result, if left unchecked, prices quickly rise beyond the reach of the families that would most benefit.
- Even though there is a surplus of housing on the market, most of the surplus are large homes for move-up buyers. As a result, there is a significant mismatch between product available and housing demand. To better meet demand, these master-planned areas should provide various types of housing in more compact configurations to create more housing choices, which often means more affordable options.

How DSHA can contribute to the current master planning efforts

Low Income Housing Tax Credit Program

DSHA administers the Low Income Housing Tax Credit program, which provides direct federal income tax credit to qualified owners and investors to build, acquire, or rehabilitate rental housing units. DSHA has just revised its Qualified Allocation Plan (QAP), which is the selection criteria to be used to determine housing priorities, to ensure developments facilitated through the LIHTC program are well integrated into communities.

Up to fifteen (15) points can now be awarded to developments that demonstrate overall quality of location, access to services and transit, community design and compatibility, connectivity to surrounding communities (via Complete Streets), and protection of environmental resources. DSHA is exploring other incentives to include in the QAP to prioritize affordable housing in areas that are considered “strategically important” by the state. Master Plan areas such as this

one in Milford may be considered as we work with the Office of State Planning Coordination to define “strategically important” and integrate those areas into our criteria.

Affordable Housing Resource Center

DSHA has developed an online Affordable Housing Resource Center that communities can access to learn about various strategies that can be used to encourage affordable housing. In addition, DSHA has a range of homeownership, rental, and rehabilitation programs, as well as relationships with nonprofits, that are familiar with DSHA’s programs that we can bring into these master planning efforts.

Design Assistance

DSHA finds value in Form-Based Codes (FBCs) in that they emphasize the physical character of development and de-emphasize the regulation of land use. FBCs provide greater predictability about the look and feel of development and offer developers a clearer understanding of what the community seeks. More importantly, they emphasize site design and building form over density and land uses and, therefore, encourage a mix of uses and housing types. As this master plan area develops, DSHA would be willing to work with the City of Milford, the Office of State Planning Coordination and others to develop a FBC or something similar to ensure good design in the master plan area.

Future Grant Opportunities

The Partnership for Sustainable Communities is a national effort to coordinate the activities of the Department of Housing and Urban Development (HUD), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA) to help communities become economically strong and environmentally sustainable. Through the Partnership and guided by six Livability Principles, the three agencies are coordinating investments and aligning policies to support communities that want to give Americans more housing choices, make transportation systems more efficient and reliable, reinforce existing investments, and support vibrant and healthy neighborhoods that attract businesses. Last year, this Partnership provided several grant opportunities that supported activities similar to those being considered in the Milford and Georgetown master plan areas.

While we realize that the federal government is going through severe budget cuts and that these initiatives may suffer as a result, DSHA would be interested in participating on a working group to do some of the pre-planning work that would be needed if another grant opportunity is available, either from the Sustainable Communities effort or some other effort, that the master planning efforts would be competitive.

Chapter 7

Historic and Cultural Preservation

The Division of Historical and Cultural Affairs/State Historic Preservation Office (DHCA/ SHPO) is the state agency responsible for promoting and protecting Delaware's historic identity through its leadership in museums, collections, historic preservation, and stewardship of historic properties. The DE SHPO Research Center manages information collected statewide about historic buildings and structures, archaeological sites, and cultural landscapes. SHPO provides project developers, interested parties, and agencies with information on historic buildings and sites that may be affected by their projects and makes recommendations on how to avoid or reduce any adverse effects.

In general, SHPO performs the following services:

- Reviews federally funded, permitted, or licensed undertakings/projects and advises the sponsors of the effects on cultural resources that include historic properties and sites
- Reviews and comments on land use and development proposals under the state Preliminary Land Use Service
- Leads efforts in securing and accepting nominations of significant properties and sites to the National Register of Historic Places in conjunction with the Delaware State Review Board for Historic Preservation
- Encourages and assists local governments in securing Certified Local Government designation for potential awarding of federal grants for historic-preservation activities
- Administers federal and state historic preservation tax incentive programs for the rehabilitation of properties listed in the National Register of Historic Places
- Monitors and enforces the terms of maintenance and public benefit covenants and easements under the stewardship of the Division of Historical and Cultural Affairs
- Provides guidance upon the discovery of historical unmarked human remains and for the identification, treatment, and disposition of non-Native-American historical unmarked human burials and/or skeletal remains

- Conducts, or supports others in conducting, statewide cultural-resource surveys of historic properties
- Maintains a central research repository of historical and cultural-resource information related to historic properties and sites in Delaware
- Provides technical assistance to the public regarding historic-preservation topics
- Provides and participates in educational programs about Delaware history, archaeology, and historic architecture
- Drafts every five years and maintains a commitment to Delaware's State Historic Preservation Plan
- Disseminates historic-preservation information via the latest information technology

DHCA is responsible for overseeing the requirements of three major preservation laws in Delaware: the National Historic Preservation Act of 1966 (as amended), the State Antiquities Act of 1933 (last amended 2005), and the Unmarked Human Remains Act of 1987. All of these laws are applicable to future preservation and development activities in the Milford Master Plan Area.

National Historic Preservation Act

The National Historic Preservation Act established a federal-state partnership approach to the identification, study, and preservation of historic properties, creating the National Register of Historic Places as the standard for determining if a property is worthy of preservation. Section 106 of the Act mandates a review process for all federally funded, permitted, or licensed projects that may impact properties listed or eligible for listing, in the National Register. The main purpose of the Section 106-review process is to minimize potential harm to historic properties and sites. A federal agency whose project (undertaking) may harm a historic property must consider alternative plans for its project. If it is believed that such a project would not have an adverse effect, the federal agency is required to document this finding. If an adverse effect is expected, the agency is required to work with SHPO to ensure that all interested parties are given an opportunity to review the proposed work and provide comments. SHPO staff members assist planners, developers, research consultants, agencies,

and interested parties in planning for projects while maintaining compliance with applicable laws and regulations and protecting important resources from adverse effects. This federal review often requires that an agency or its client conduct architectural and/or archaeological surveys and mitigations prior to any construction. Much of the information and reports in the Research Center has been generated by these reviews.

Delaware State Antiquities Act

The State Antiquities Act requires that archaeological excavations on state-owned or controlled lands must be done under a permit from the Director of DHCA. Recent amendments also give the Director authority to close or restrict access to state lands, including sections of public beaches and shorelines, if needed, to protect an archaeological resource from damage.

Delaware Unmarked Human Remains Act

SHPO administers provisions under Delaware's Unmarked Human Burials and Human Skeletal Remains law, 7 Delaware Code, Chapter 54. The law is generally triggered when, in the course of construction or archaeological activities, human remains are discovered. The law assigns certain duties to the Division of Historical and Cultural Affairs to investigate, attempt to identify, protect, and ensure the proper treatment of historical unmarked human remains that do not fall under the jurisdiction of the State Medical Examiner.

SHPO staff carries out procedures under this law relating to public notification, assisting in the development of treatment and disposition plans, and, where indicated, conducting the dignified reburial of disturbed remains.

Discovery of Forgotten Burials and Cemeteries

On occasion, historical human remains (that is, remains that were interred a long time ago) are accidentally discovered in Delaware. These discoveries are often made during construction and other earth-moving activities. In such cases, state law protects the historical remains from further damage, first by requiring that the actions that uncovered the remains stop immediately, and then that the Division of Historical and Cultural Affairs and the state Medical Examiner's Office be notified.

Within 24 hours of notification, a SHPO archaeologist will visit the discovery site to determine if the remains are human and to ascertain the approximate time period in which the remains were interred. Any time that remains are determined to be of human origin, the Division of Historical and Cultural Affairs is required to notify the state Medical Examiner's Office of the

discovery. The Medical Examiner's Office then determines whether or not the case is under its jurisdiction.

The preferred approach for managing historical human remains that have been discovered is to leave them *in situ*—that is, to keep them where they have been found—until a treatment and disposition plan can be developed. In the event that historical remains need to be removed for safekeeping, they will be transported to SHPO's curation facility. SHPO holds any recovered remains for appropriate study and storage until they can be respectfully re-interred. Generally, the project, developer, or agency that inadvertently disturbed the remains pays for historical research and an archaeological survey of the area to determine the extent of possible other burials or remains that could be damaged by the project, and the approximate date and origin of the remains. (Because this process is costly in both money and time, SHPO often advises developers to hire an archaeological consultant prior to any construction and have the project area investigated for the presence of a small family cemetery or Native American site with burials.)

If the remains are determined to be from a historical period cemetery or burial, SHPO advertises for next-of-kin, based on the date of the burials and the ownership history of the property. If the remains are determined to be Native American, a committee defined by law convenes to develop a treatment and disposition plan.

In both cases, SHPO writes the plan for the treatment and ultimate disposition of the remains in consultation with the next-of-kin (if any come forward), or the committee, the land owner, and the project developer, or other representative. Once agreement is reached, the plan is put into action.

The preferred option for reburial is always in the original location. If this is possible, a preservation covenant recorded with the deed is usually placed on the area to prevent any disturbance of the remains in the future. If removal and re-interment in another location is the decision, any associated archaeological, acreage, reburial, and marking costs are borne by the project, developer, or agency requiring the removal. Next-of-kin have the option of claiming their kin and paying for re-interment in a cemetery and plot of their choice.

What if one uncovers or sees remains that may be human?

First, the finder should leave them in place if at all possible. If he/she thinks the remains are recent in origin, perhaps due to accident or criminal action, he/she should notify the police (911) immediately. If not, call SHPO at 302-736-7400.

Historic Properties Research and Assistance

DHCA staff members are available to assist agencies and developers with questions about any of these processes and with information on historic properties. The SHPO Research Center is open Monday through Friday, 8:30 a.m. to 4:00 p.m., except for state holidays; an appointment is recommended to use the Center. DHCA also has an on-line web portal, the Cultural and Historical Resource Information System (CHRIS). While the public has some access, full access to archaeological site location information and other features requires a password. Information on this system and an application form for a password can be found at <http://history.delaware.gov/preservation/research/gis.shtml>.

Historical and Cultural Resources in the Milford Master Plan Area

This area falls within Cedar Creek Hundred. Native Americans began populating this area thousands of years ago. European settlement began in Cedar Creek as early as the 1670s. Milford was an early crossing point, and the area around it quickly became farmland.

The first historic-architecture survey of Cedar Creek Hundred was in 1983. The located buildings and structures included 19th- and 20th-century farms with dwellings, barns, and other outbuildings; a school; and bridges. These have not been evaluated for their importance to Delaware's history at this point, but these probably would contribute to our understanding of farming, settlement, education, and transportation in this area.

More recently, DelDOT hired consultants to perform further historic-architecture survey of this area in preparation for the U.S. Route 113 project. This survey added a number of early- to mid-20th-century dwellings and commercial buildings to DHCA's inventory. Much of this area, however, is now outside of the narrowed project area under consideration, and these properties will not be evaluated further. They, too, probably contribute to our understanding of changes in settlement in this area during the 20th century.

The area has not been comprehensively surveyed for archaeological sites. Two small projects have been done, with reports on file at DHCA. There are several areas of high probability for the location of prehistoric, colonial, and 19th-century sites. Such sites have the potential to contain significant information to our understanding of prehistoric and historic settlement and ways of life in Delaware.

Because many family farms included family cemeteries, this area also has a high potential for containing unmarked human burials. Two cemeteries are recorded in the area. Unmarked human remains are protected in state law (see 7 Del. Code Ch. 57).

A table describing known historic properties and sites and some aerial pictures showing their locations is included as Appendix 4.

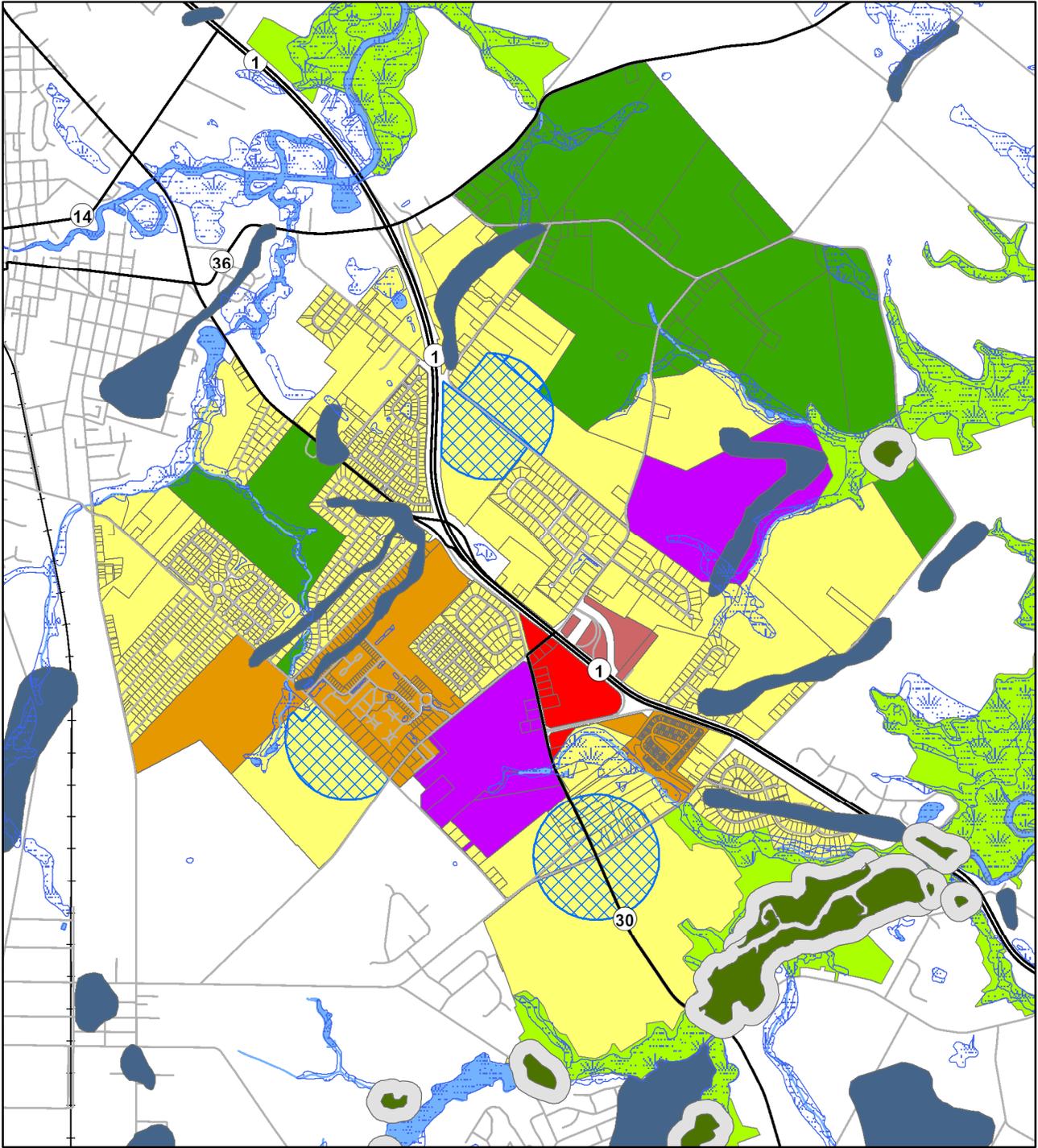
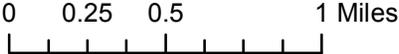
Milford South East Neighborhood Master Plan

Map #3 Land Use & Environment

Revised May 2015

Legend

-  Residential - Low Density
-  Residential - High Density
-  Open Space Agriculture
-  Employment Center
-  Commercial
-  DelDOT Owned
-  TDR Receiving Areas
-  Wetlands
-  Excellent Recharge Area
-  Atlantic White Cedar
-  Atlantic White Cedar - 300' Buffer
-  Nature Preserve
-  Natural Areas



Chapter 8

Transportation Plan

This chapter documents transportation recommendations developed by the Delaware Department of Transportation (DelDOT) Division of Planning that are required to support the implementation of the Milford Southeast Neighborhood Master Plan (the Master Plan). The Master Plan was developed by the city (with assistance from the Office of State Planning Coordination, State agencies including DelDOT, and the University of Delaware) to provide the community with a plan that will be used to oversee the orderly development of southeast Milford, including those areas identified in the City's Comprehensive Plan Urban Growth Boundary.

The Master Plan also seeks to ensure that new residential and commercial growth within the study area encompasses the goals and objectives of good planning practice, including:

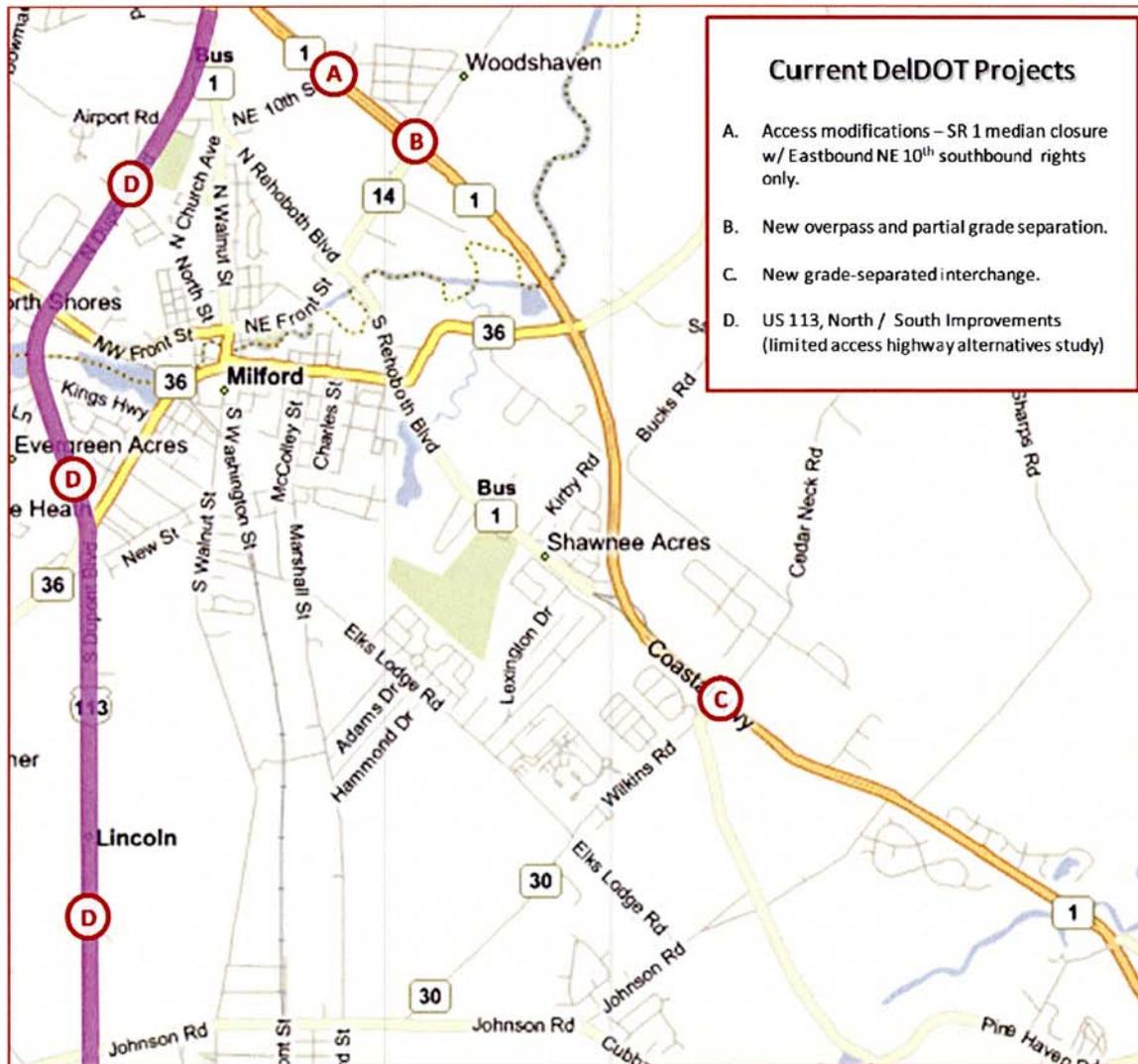
- More efficient land use
- Farmland preservation
- Greater variety in housing types and affordability
- More bicycle and pedestrian facilities and connections
- Transit Opportunities
- Natural Resource Preservation

Current DelDOT Projects

DelDOT currently has several capital projects (see Map 8.1) within or near the study area that are either in the planning, design, or construction stages. The DelDOT Capital Transportation Program (FY 2010-2015) contains the following major projects:

- (a) SR 1 / NE 10th Street – access modifications
- (b) SR 1 / NE Front Street – new overpass and partial grade separation
- (c) SR 1 / SR 10 – new grade-separated intersection
- (d) U.S. 113 – limited access highway study

Map 8.1. Current DelDOT Projects



Master Plan – Transportation Element

The primary role of DeIDOT in the development and implementation of the Master Plan is to identify and analyze transportation improvements that will be required to accommodate projected traffic volume associated with the Plan’s land use designations and demographic projections. Many of the transportation project recommendations found in this report will be implemented in conjunction with private and/or public land use development as it occurs. This document provides a framework by which those future projects will be identified and implemented and includes the following goals and objectives:

- Establish the Master Plan study area as a DeIDOT Transportation Investment District (TID).
- Increase the mode share of non-vehicle trips by supporting and proposing transportation projects that enhance the expansion of pedestrian, bicycle, and transit facilities within the study area.
- Formally partner with the development community and the public to ensure that transportation improvements are constructed and sequenced in a proper order that supports the quality of life goals and objectives of the Master Plan.
- Ensure that traffic studies associated with DeIDOT projects or new development are coordinated in a manner that improves efficiency and reduces costs.
- Support smart growth concepts and design in all future proposed land use development and implement the DeIDOT Complete Streets program when designing and constructing any transportation projects deemed necessary to support the Master Plan.

Similar to other Master Plan agreements within the state, DeIDOT will work with the city, development community, and the public to forge an agreement that encompasses the following responsibilities:

1. DeIDOT – Conduct traffic analysis for the purposes of identifying needed roadway improvements, rights-of-way, and funding requirements by the public and private sectors.
2. City – Plan and identify and funding mechanisms for needed electrical, water, and sewer service.

3. Development Community – contribute equitable funding to roadway projects, donate rights-of-way where necessary, and work with the city and DelDOT to maximize the most efficient vehicle, transit, bicycle, and pedestrian connections and services.

Master Plan Preferred Land Use Scenario

The Master Plan preferred land use scenario was developed by the city with assistance from the Office of State Planning Coordination and the University of Delaware. Community VIZ software was utilized at several public workshops to gather input from the public regarding what type of land uses they desired for the study area. Land use preferences derived from the public workshops were at the grid level and did not follow any natural or man-made boundaries. A final land use map produced at the tax parcel level that also included three transfer-of-development right (TDR) receiving areas was created and adopted by the technical working group in October, 2010 (see Map 1 and Map 4).

Outputs from the UD-SCC Model included daily residential and commercial vehicle trips for each grid within the study area. The Preferred Land Use Scenario is considered a build-out plan.

Projected demographic changes (Table 8.1) associated with the scenario, as compared to existing land use, are as follows:

- * +5,581 dwelling units (+272%)
- * +14,503 population (+292%)
- * +2,268 employment (+903%)
- * +76,260 daily residential vehicle trips (+272%)
- * +24,875 daily commercial vehicle trips (n/a)

Editor’s Note: DelDOT model runs are based upon the first UD SCC Model future land use scenario, labeled “Preferred Alt” in Table 8.1 below. The City of Milford and the University of Delaware continued to refine this scenario from October 2009 through December 2010. The resulting final scenario, labeled “Preferred Revised,” reflects a more accurate count of existing dwelling units, approved and recorded subdivisions, and a based density of approximately 3 du/acre in Milford’s R-1 zoning district, the least dense available. This resulted in +9,826 dwelling units and corresponding increases in population and employment as well. At time of publication we consider these model runs adequate to address growth for the foreseeable future. Growth projections indicate that only +1,016 dwelling units are expected through 2030 (see Chapter 3). Additional model runs can be considered in the future if the pace and timing of growth changes.

Table 8.1. Summary of Alternative Plan Scenarios from UD-SCC Model

	Existing Land Use	Preferred Alt (at buildout)	Preferred Revised (at buildout)	Growth 2020	Growth 2040	Milford Comp Plan as adopted (at buildout)
Dwelling Units	1,943	7,626	11,769	2,434	2,959	15,083
Number of Residents	4,709	19,459	30,739	5,960	7,290	39,659
Commercial Floor Area	0	995,000	2,985,000	160,000	1,185,000	7,970,000
Employees	262	2,519	4,875	724	1,854	10,275
Date Created	Oct. 2009	Oct. 2009	Dec. 2010	Apr. 2011	Apr 2011	Jan. 2009

Source: University of Delaware's Sustainable Coastal Communities Initiative, UD-SCC Model

Methodology

DeIDOT utilized the following methodology for incorporating and analyzing the daily vehicle trip outputs from Community VIZ into the DeIDOT Travel Demand Model (CUBE 5):

1. Create new traffic analysis zones (TAZs) in CUBE 5 model to match UD-SCC Model grids.
2. Create additional road network detail in CUBE 5 model to match the study area.
3. Import UD-SCC Model daily trip data into CUBE 5 model.
4. Run CUBE 5 model.
5. Analyze outputs (Level of Service and Volume/Capacity ratio) from model to compare existing conditions with Preferred Scenario.
6. Create and analyze additional road network improvements as necessary.
7. Develop recommendations.

Recommendations

Project recommendations contained in this chapter are broken into the following categories and are reflective of both quantitative results from the travel demand model and qualitative goals aimed at improving transportation choices for residents and employees within the study area:

- Bicycle facilities
- Pedestrian facilities
- Transit facilities
- Park-and-ride facilities
- Intersection upgrades or modification

- Road upgrades
- Smart growth
- Policy

The project and policy recommendations contained in this report are also reflective of the DelDOT Complete Streets policy, which was adopted in 2009. This policy mandates that any new transportation projects in the state right-of-way (road reconstruction and/or widening) take into consideration all transportation modes and accommodate accordingly. This includes public transit users, bicyclists, pedestrians and motorists.

Please note that a summary listing of this report's transportation recommendations can be found in Table 8.2 at the end of this chapter.

Bicycle Facilities

Currently, there are no DelDOT designated bicycle routes within the study area. While bicycle use is allowed by law on all of the study area roads (with the exception of SR 1) many of these roads do not include shoulders, which enhance rider safety (see Map 8.2). Approximately 28% of the study area roadways have hard surface shoulders with a width of three feet or greater. Similarly, there are few sidewalks or other pedestrian facilities within the study area.

Recommendations:

On-road bicycle facilities should be included as part of any new roadway construction, entrance plans, widening and rehabilitation of existing roadway facilities. Implement specific bicycle recommendations as per Table 8.2.

Pedestrian Facilities

Currently, there are limited pedestrian facilities within the study area (see Map 8.2). The City of Milford does now require, however, the construction of sidewalk facilities for new residential streets within its municipal boundaries.

DelDOT is in the process of implementing the Delaware Statewide Pedestrian Action Plan, which includes the following elements:

- (1) Inventory of pedestrian facilities
- (2) Transition Plan identifying all gaps and facilities not in compliance with the Americans with Disabilities Act (ADA).
- (3) Complete Streets policy and implementation plan

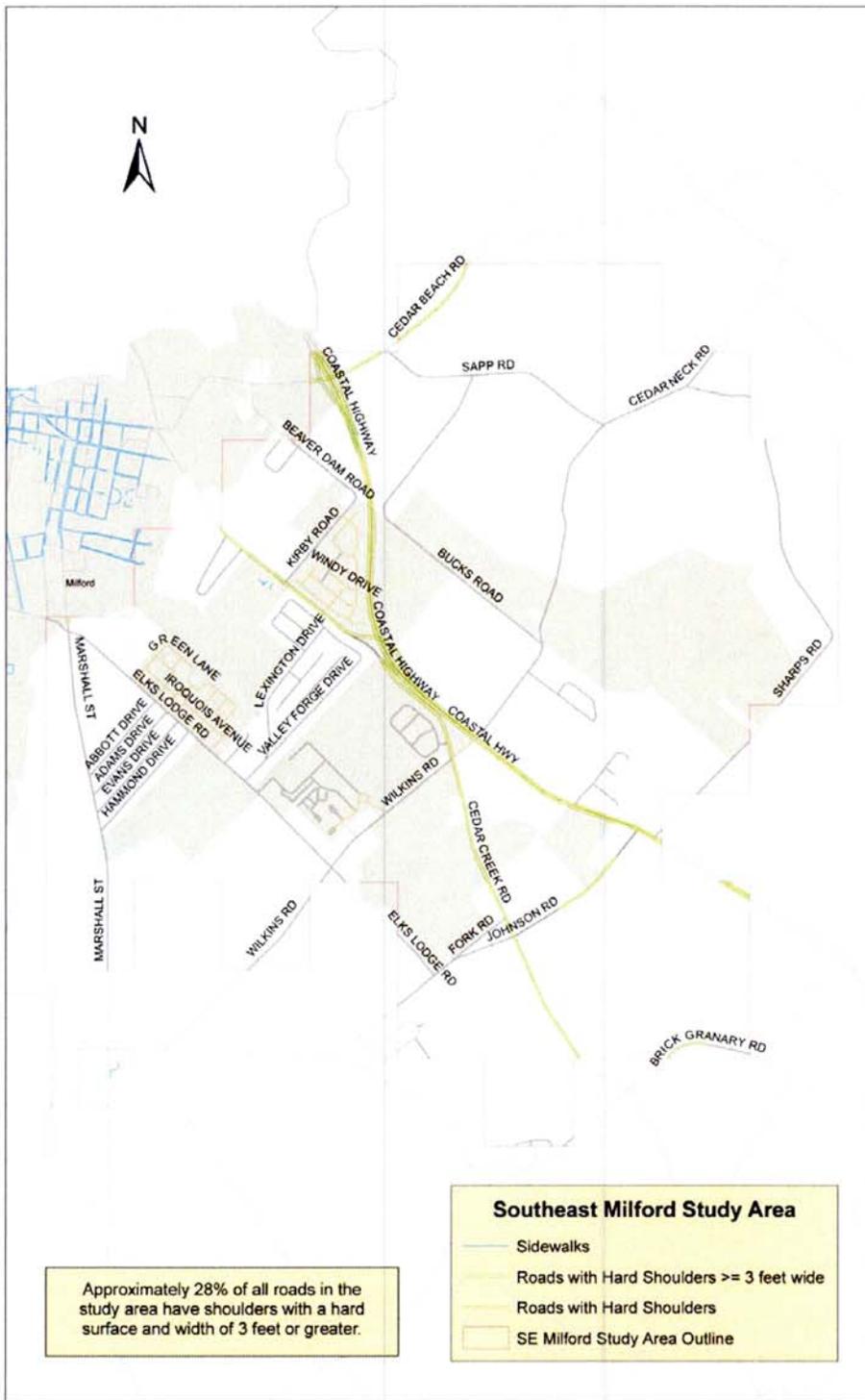
(4) Development of a transition plan

The Pedestrian Action Plan will identify gaps in the system and opportunities for enhanced pedestrian facilities for the City of Milford. It will also highlight access issues to transit locations and include recommendations for improvements.

Recommendations:

Evaluate the need for bicycle and pedestrian facilities and transit stops as part of any new roadway construction, entrance plans, widening and rehabilitation of existing roadway facilities in accordance with the Complete Streets Policy, the Statewide Bicycle Plan, and the Statewide Pedestrian Action Plan. Implement specific recommendations as per Table 8.2.

Map 8.2. Existing Pedestrian and Roadway Shoulder Facilities



Transit Facilities

Between 2,500 and 4,900 new employees are projected to be added to the City of Milford's Southeast Neighborhood under the adopted Master Plan. Many of these new employees are expected to work at a new major employment center east of SR 1 along Cedar Neck Rd. This employment center, currently known as "Innovation Park" presents DelDOT with a unique opportunity to establish a new transit loop that would service the employment center while also making a connection to currently established residential neighborhoods and businesses west of SR 1.

Recommendations:

Establish a new DART transit loop to connect existing and new development on the east and west sides of SR 1. The transit loop would consist of the following three phases and locations:

Phase I – Establish a new transit route adjacent to existing and developing residential and employment areas west of SR 1 utilizing the following road network:

- Business Route 1
- Wilkens Rd.
- SE Front St.
- State Route 36
- Marshall St.
- Elks Lodge Rd.

Phase II – Establish a new transit route east of SR 1 for the purpose of providing access between the eastern and western side of Milford and to service the proposed "Innovation Park" employment center utilizing the following road network:

- Cedar Neck Rd.
- Bucks Rd.
- Sapp Rd.
- State Route 36

Phase III – Establish a new transit route west of SR 1 in the southern portion of study area for the purpose of servicing proposed new residential and employment areas utilizing the following road network:

- Elks Lodge Rd.
- Johnson Rd.
- State Route 30

Intersection Upgrades or Modifications

A projected increase of nearly 100,000 new daily residential and commercial vehicle trips in the study area will require upgrades or modifications to several existing intersections within the study area.

The proposed adoption by the City of Milford to require traffic-impact studies for new residential and employment developments within the study area will serve to provide DeIDOT with additional analysis needed to determine the various geometric improvements required for each intersection to function in an efficient manner. It is anticipated that additional intersections will need to be improved as development of the study area progresses in the future.

Preliminary traffic-capacity analysis has identified the following intersections that would require improvements under the land use projections of the Master Plan:

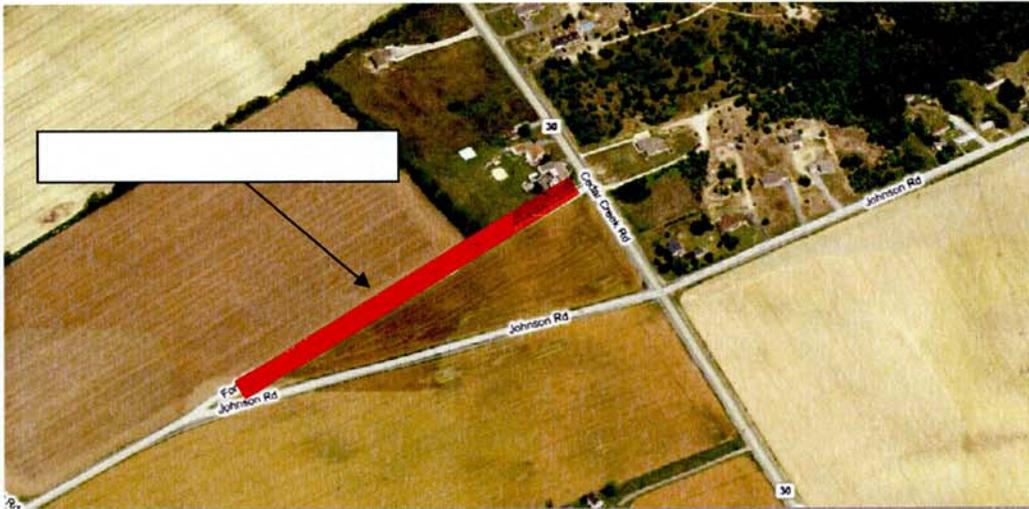
- State Route 30 and Johnson Rd.
- Elks Lodge Rd and Wilkens Rd.
- Cedar Neck Rd and Bucks Rd.

The following intersections or road segments have been identified for either removal or access modifications:

- SR 30 (Cedar Creek Rd) and Fork Rd. – the removal of Fork Rd. has inherent safety benefits that would result from the shifting of vehicles from Fork Rd. to the Johnson Rd. / SR 30 intersection.

The existing intersection approaches (Fork Rd at Johnson Rd/SR 30) are under-utilized and not necessary for area traffic-flow needs.

Map 8.3: Fork Rd and SR 30



- SR 1 and Sharps Rd / Johnson Rd

DeIDOT is aware of and actively involved in identifying and proposing solutions for potentially unsafe median crossings onto SR 1. The SR 1 / Sharps Rd. – Johnson Rd. intersections are two closely spaced (425 ft.) facilities that gain access to SR 1 via a median crossing. Due to the close proximity of the intersections it is recommended that DeIDOT investigate possible re-configuration alternatives that could enhance the safety of the intersection.

Roadway Upgrades

Much of the study area road network east of SR 1 and south of Wilkins Rd. on the west side of SR 1 has served primarily rural and/or agricultural land uses in the past. A majority of these roads do not include any shoulders. In fact, only 28% of the entire study area roadways contain hard surface shoulders with a width of three feet or greater. As the study area continues to accommodate new and projected future residents and employers much of the transportation network will require upgrades including shoulders, intersection improvements, capacity increases, and possible new connections.

Recommendations:

Improve the following roadway facilities to meet a minimum standard of two 11-ft. travel lanes and 5-ft. shoulders:

- (1) Kirby Rd. (from RD 14 to Cedar Beach Rd.)
- (2) Bucks Rd. – (from Sapp Rd to Cedar Neck Rd.)
- (3) Sapp Rd. (from Bucks Rd. to Cedar Beach Rd.)
- (4) Cedar Neck Rd. (from Sapp Rd. to SR 1)
- (5) Sharps Rd. (from 1 mile north of SR 1 to SR 1)
- (6) Business Route 1 (from Wilkins Rd. to SE Front St)
- (7) Cedar Beach Rd./SR 36 (from Sapp Rd. to Business Route 1)
- (8) Wilkens Rd.
- (9) Elks Lodge Rd. south of Wilkins Rd.

The preceding road-segment improvements also overlap proposed new transit routes, which will, in turn, support pedestrian and bicycle accessibility to future bus stop locations.

Smart Growth

DeIDOT seeks to further support the land use designations contained in the Milford Master Plan by implementing projects and policies that encourage the construction of smart growth-based residential and commercial spaces.

Smart growth is a set of principles and guidelines that attempts to create a nexus between land use and transportation in which zoning, subdivision regulations, architectural standards, and transportation design act as mutually supporting entities, leading to greater efficiencies in vehicle and person movements and an enhanced sense of quality of life.

DeIDOT supports the creation and adoption of a unified development ordinance by the City of Milford as a means for maximizing DeIDOT's transportation investments in the study area.

Map 8.4. Bucks Rd Area - Conceptual New Residential Development



Map 8.5. Bucks Rd Area - Conceptual New Residential Development



Policy

The successful adoption and implementation of several policy initiatives are necessary for the Transportation Element to function as a successful component of the overall Master Plan for southeast Milford.

Recommendations:

- Work with the City to assist in the creation of a Transportation Investment District (TID) for the purpose of allowing the City to enter into agreements with the private sector community for the development and implementation of cost-sharing mechanisms to fund transportation improvements identified in this report.
- Adoption of provision requiring traffic studies by the City of Milford to be undertaken when proposed residential or commercial development exceeds particular dwelling unit and/or commercial square footage thresholds.
- Adoption of development ordinances by the City of Milford for the purpose of providing land development standards that support transportation improvement projects.

Table 8.2. Transportation Recommendations

Improvement	Area or Location	Type	Goal
Bicycle	Statewide connector, regional, and statewide bike routes within Study Area	Install bike facilities as part of roadway improvements as per the Delaware Bicycle Facility Master Plan.	Improve multi-modal options for residents.
Pedestrian	Existing DART bus stop locations	Provide safe pedestrian access to stops.	Improve multi-modal options for residents.
	Existing bus stops in the study area	Install improvements at bus stops (bus stop signs, bus pad, benches, lighting, shelters).	Improve multi-modal options for residents.
Transit	<u>New Local Circulator Routes</u> Phase I (see Map 4) Phase II Phase III	Increase frequency of bus service to provide access to downtown and new residential development / employment centers east of SR 1.	Improve multi-modal options for residents .
Park and Rides	To be identified		Reduce congestion
Intersection Upgrades	(1) Elks Lodge Rd. / Wilkins Rd. (2) SR 30 / Johnson Rd. (3) Bucks Rd. / Cedar Neck Rd. (4) SE Front St. / Marshall St.	Add turn lanes and/or signalization to be determined by existing and projected traffic-count data and studies.	Improve safety and reduce delay.

Intersection Modifications	(1) SR 1 / Johnson Rd. (2) SR 1 / Sharps Rd.	Revise movements to rights-in and rights-out only. Remove SR 1 median crossover. Add NB SR 1 acceleration lane.	Improve safety.
Road Upgrades	(1) Kirby Rd. (from SR 14 to Cedar Beach Rd.) (2) Bucks Rd. – (from Sapp Rd. to Cedar Neck Rd.) (3) Sapp Rd. (from Bucks Rd. to Cedar Beach Rd.) (4) Cedar Neck Rd. (from Sapp Rd. to SR 1) (5) Sharps Rd. (from 1 mile north of SR 1 to SR 1) (6) Business Route 1 (from Wilkins Rd. to SE Front St.) (7) Cedar Beach Rd./SR 36 (from Sapp Rd. Business Route 1) (8) Wilkins Rd. (9) Elks Lodge Rd. south of Wilkins Rd.	Improve to a minimum of two 11 ft. travel lanes and 5 ft. shoulders	Improve safety, reduce delay, enhance multi-modes of travel.
Smart Growth	Master Plan Study Area	Assist city with integration of smart growth transportation designs and principles.	Enhance quality of life.

Table 8.2 – Transportation Recommendations (cont.)

Policy	Master Plan study area	Transportation Investment District (TID)	(1) Coordination of land use and transportation projects as per DeIDOT Complete Streets Policy (2) Private / Public partnership to identify and share costs associated with required capital transportation projects within study area
Policy	Master Plan study area	Development Ordinances	Efficient use of land use and transportation design standards
Policy	Assist City of Milford with drafting a traffic impact study requirement.	City code	Collection of existing and projected traffic data

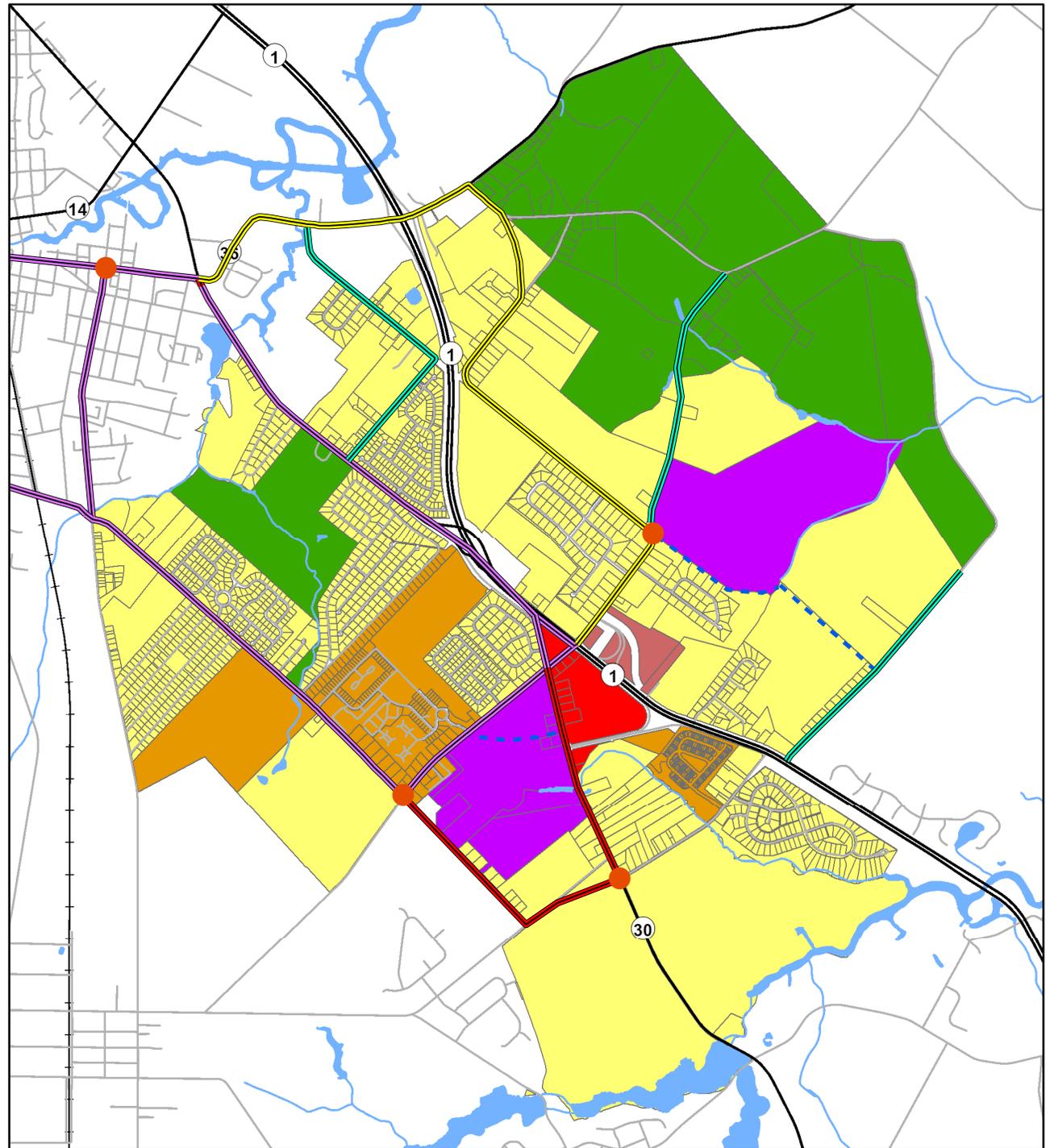
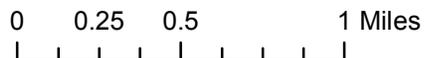
Milford South East Neighborhood Master Plan

Map #4 Land Use & Transportation Recommendations

Revised May 2015



* Conceptual alignment subject to change



Chapter 9

Water and Sewer Infrastructure

One responsibility of the City of Milford for the Southeast Neighborhood is the planning, financing, and construction of public utilities for this area. These public utilities include water, sewer and electricity.

The City of Milford has engaged the engineering firm of Davis, Bowen, & Friedel (DB&F) to prepare the water and sewer extensions east of SR 1. After reviewing proposed and existing development, DB&F has prepared cost estimates and schematic drawings showing the proposed location of these public utilities (see Map 5).

Public Water System Improvements

The water extensions include a new elevated storage facility, water treatment facility and a new proposed well either east of SR 1 or west of SR 1, depending on the availability of land and locating a sufficient water source. Additional water facilities include extension of a 12 inch water line from an existing connection near Meadows at Shawnee running southward near the three major properties east of SR 1 (Dugan Property, Isaac Property, and the Mills Property) then westward along Johnson Road until it meets Cedar Creek Road. At this intersection the water line is reduced to a 10 inch water line then continues in a westerly direction until it meets Elks Lodge Road. At Elks Lodge Road it continues in a northerly direction until it connects with an existing water line near the Orchard Hills development. This proposed extension of the water utility into the Southeast Neighborhood includes additional wells and will loop with the existing City of Milford water system to provide improved water supply and storage and fire fighting capabilities.

The estimated cost of these improvements according to DB&F is approximately \$5.25 million. Presently the City of Milford has funding in place through the U.S. Department of Agriculture for the construction of these water facilities.

Public Sewer System Improvements

Regarding the proposed sewer extensions for the Southeast Neighborhood, again DB&F has provided cost estimates and schematic drawings showing the proposed location of these public utilities. The sewer extensions include the construction of a proposed 12 inch force main from an existing 18 inch force main near the Meadows of Shawnee along Rehoboth Blvd. running eastward then southward along the Dugan property, which would serve the area east of SR 1.

Additional construction in this area would include the erection of a pump station on the Isaacs property.

Proposed sewer extension for the area west of SR1 include the construction of a 12 inch force main near the Meadows at Shawnee on Rehoboth Blvd., continuing southward along Rehoboth Blvd. then along the right-of-way of SR 1 near the Matlinds Estate housing development, then southward along Cedar Creek Road. This proposed sewer extension would serve all the proposed development west of SR 1 and south of existing development within the corporate limits of the City of Milford (see Map 6).

Costs estimates prepared by DB&F for this sewer extension amount to \$9 million.

Electric Utility

The City's electric utility currently serves a majority of the area included in the Southeast Neighborhood planning area. Areas currently not included in the City's service territory will be added once they are annexed in to the City limits.

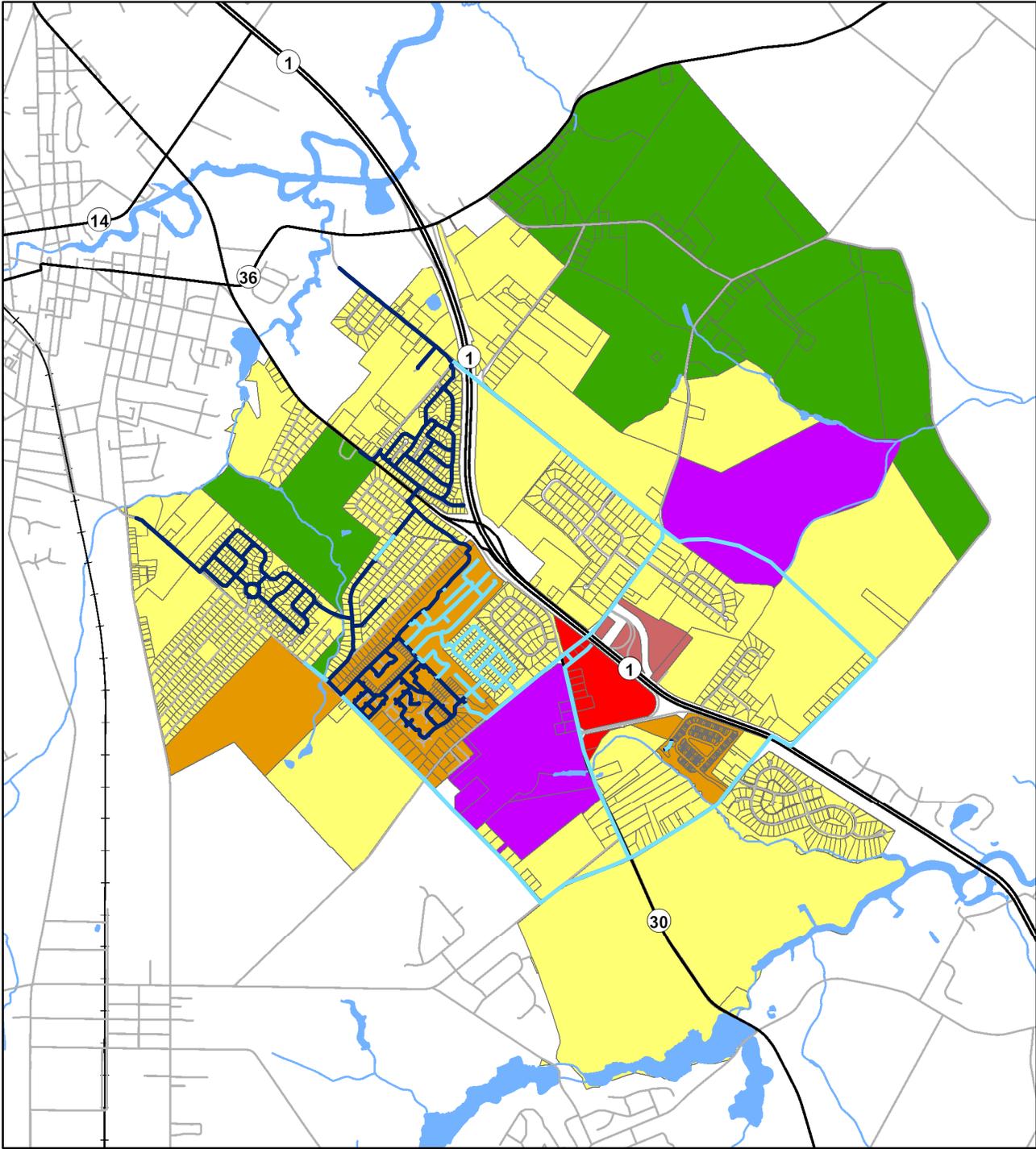
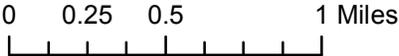
Milford South East Neighborhood Master Plan

Map #5 Land Use & Water

Revised May 2015

Legend

- Residential - Low Density
- Residential - High Density
- Open Space Agriculture
- Employment Center
- Commercial
- DelDOT Owned
- Existing Water System
- Proposed Water System



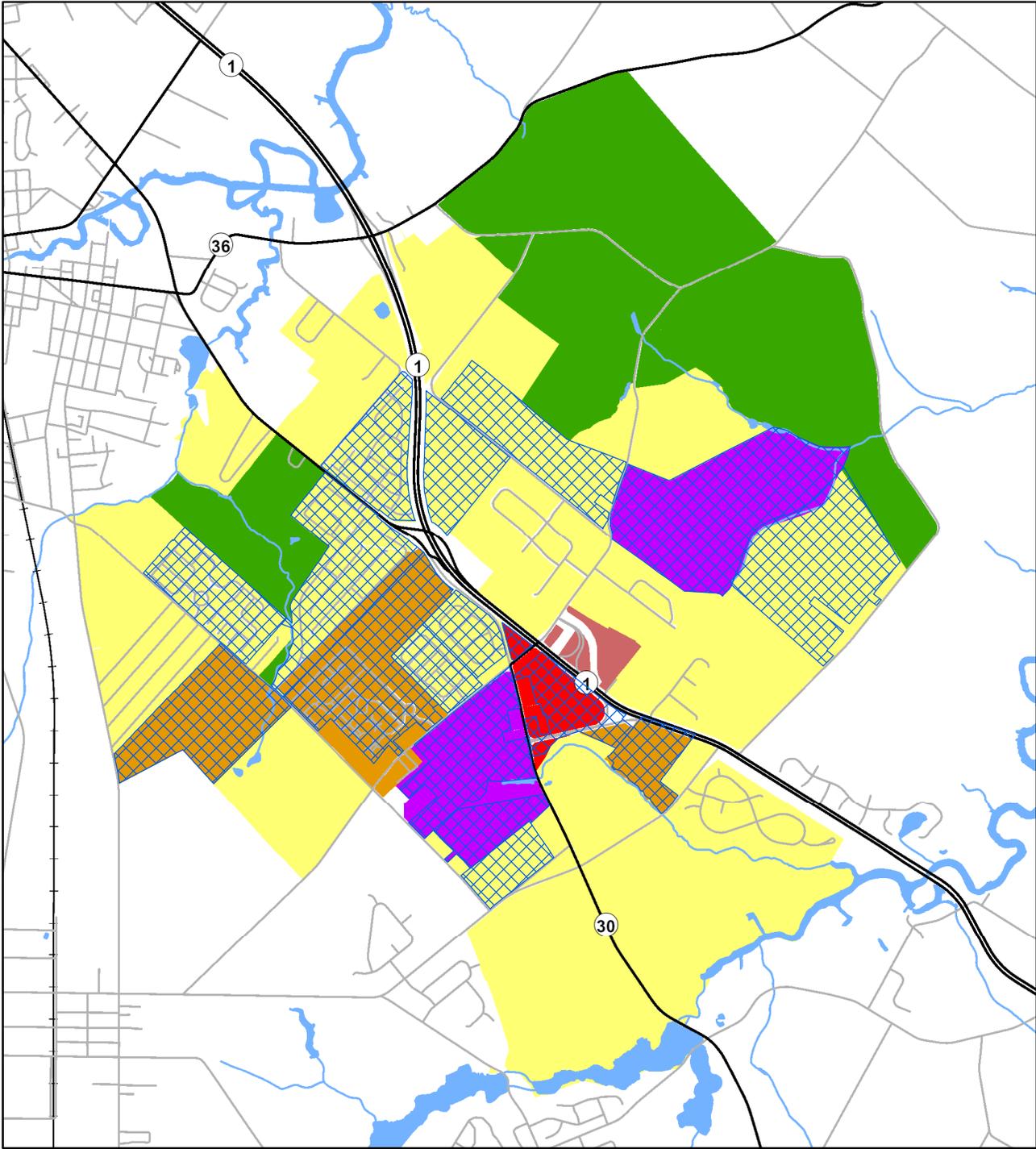
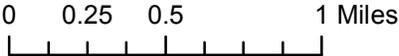
Milford South East Neighborhood Master Plan

Map #6 Land Use & Sewer

Revised May 2015

Legend

- Residential - Low Density
- Residential - High Density
- Open Space Agriculture
- Employment Center
- Commercial
- DeIDOT Owned
- Proposed Sewer Extension



Chapter 10

Design Guidelines

1. DDA recommends that the city require any property developed adjacent to land designated as Open Space Agriculture to include a forested buffer between the property and adjacent farmland. This is already required by Sussex County. As a courtesy to Sussex County, the DDA Forest Service reviews the effectiveness of the buffer and makes a recommendation to the County on whether or not to accept the buffer as is, or require modifications. DDA would offer the same service to the City.
2. In addition to a forested buffer requirement, the DDA also asks that the City work with developers on where they “mass” their houses or buildings. Whenever practical, the Department requests that the City require developers to cluster their approved building lots and place as much of the residual community open space near adjacent farm parcels. This would further help eliminate or mitigate any conflict that may arise from dissimilar land uses.
3. When considering site plan and subdivision design, the placement of active and passive open space is important. Passive open space should be located to give a priority to protecting existing natural resources on the site. Active open space (for recreational use) is better placed in a more centralized location in order to be more accessible to future residents of the subdivision.
4. As each new project is proposed, the City, DNREC, DeIDOT, and the developer should discuss opportunities to develop shared stormwater management facilities that integrate best practices for maximum flood protection and water quality protection and enhancement.
5. Utilize green technologies to manage stormwater. Green technology stormwater management is a best practice that uses the natural processes of vegetation to filter stormwater, and take up harmful pollutants, and improve groundwater recharge without expensive infrastructure.

6. Minimize the removal of trees within the Cedar Creek Natural Area to the greatest extent possible with the goal of preserving all existing trees and all contiguous forested blocks (see map 5.1).
7. Provide buffers to the Cedar Creek Natural Area and the Cedar Creek Nature Preserve. DNREC recommends prohibiting additional development within 300 ft. of the existing Natural Area (see map 5.1).
8. Do not place stormwater structures, including stormwater outfalls, in the Cedar Creek Natural Area (see map 5.1).
9. Incorporate sidewalks, bike lanes, and multi-modal paths in the Master Plan Area in accordance with Chapter 8 and the Milford Pedestrian/Multi-Modal Master Plan.
10. Specific Conservation Areas, Area One (see Chapter 5 and Map 5.3, Area One)
 - a. Avoid building and/or stormwater infiltration in the area of excellent recharge
 - b. Limit intense development to the upland portion of the parcel; the eastern portion should be used for passive recreation and open space.
 - c. The Downer and Ingleside soils in Area One should be the preferred location for stormwater infiltration.
11. Specific Conservation Areas, Area Two (see Chapter 5 and Map 5.4, Area Two)
 - a. Protect the forested wetlands that are mapped in the southern end of Area Two, on both sides of SR 30. Because of the falling elevation from the north end of this area toward the mapped wetlands, we advise that optimal stormwater management would be constructed wetlands or other green-technology best management practices in the area immediately north of the forested wetlands, on either side of SR 30.
 - b. The wooded section in this area also supports Key Wildlife Habitat. Generous riparian buffers (300 feet or greater) are recommended to protect water quality, and preserve forested areas surrounding the tributaries of Cedar Creek to enable rare species to thrive.
12. Specific Conservation Areas, Area Three (see Chapter 5 and Map 5.5, Area Three)
 - a. Provide at least a 300 ft upland buffer because of the presence of or potential for swamp pink. The buffer would also be instrumental in protecting the Atlantic

White Cedar wetlands as well as achieving the Total Maximum Daily Load (TMDL) pollution limits for this portion of the Mispillion watershed.

Chapter 11 Implementation

Commitments:

The City of Milford

1. The City will develop and adopt an ordinance to enable to use of transfer-of-development rights (TDRs) credits in receiving zones. This ordinance will enable developers build at up to eight (8) units per acre by-right through the purchase of TDR credits from farms in the sending areas.
2. A stormwater utility is a legal and financial structure to allow stormwater management facilities to be constructed, managed, and maintained in common by a local government or other entity. This master plan area is well suited to such a utility, although there are many ways to structure such an entity. Both the City and DNREC agree to explore this option in more detail as this area develops in accordance with this master plan.
3. The City will construct a public water system as described in Chapter 9 to serve the Master Plan Area. This is a funded project.
4. The City will design and permit a sewer system to serve the Master Plan Area as described in Chapter 9. Private developers will be responsible for funding and constructing this system. The City will discuss various financing and construction options with any developer.

Delaware Department of Agriculture

1. The Delaware Department of Agriculture (DDA) and the Delaware Agricultural Lands Preservation Foundation (DALPF) will partner with the City to establish a Transfer of Development Rights program as described in the Agricultural Preservation chapter of this document (Chapter 4).
2. By partnering with DALPF, the City will avoid the initial financial expenditures required to preserve a parcel of land. These expenditures include paying to survey the property, paying the legal costs of a real estate settlement, and other associated administrative costs. DALPF would bear those costs.
3. The City would avoid the future obligation of monitoring the preserved farms to make sure they remain in compliance with the preservation agreement (easement). DALPF would assume that responsibility and add any properties preserved by Milford to the hundreds of permanently preserved farms it already monitors. In addition, should any

future litigation be required to uphold the preservation easement, the City would not have to incur any legal costs.

4. DDA will assist the City in the creation and administration of a TDR bank as described in the Agricultural Preservation chapter of this document (Chapter 4). This includes assistance with appraisals to set the fair market value of TDR units.
5. In addition to any funds the City would have for agricultural preservation and the TDR bank, they would also be eligible for state matching funds from DALPF, as well as any federal matching funds from United States Department of Agriculture (USDA) Farm and Ranch Lands Protection Program (FRPP). As allowed by law, these matching funds would be awarded to the city based on availability. If the City were able to capture state and federal matching funds, it could significantly leverage its funds with additional money and preserve additional farmland.

Delaware Department of Natural Resources and Environmental Control (DNREC)

1. There is an opportunity for greater communication and coordination between DNREC and DeIDOT with regard to stormwater management and road improvements. This coordination will be ongoing throughout the development of this master plan area. Opportunities to share facilities and streamline the review process will be continually evaluated and implemented as individual properties within the master plan area develop and re-develop. Streamlined review and approval processes will only be available in return for implementing “best practice” designs.
2. DNREC will work with the city to explore and implement the concept of a stormwater utility in the master plan area as development occurs.

Delaware State Housing Authority (DSHA)

If requested, the DSHA stands ready to assist in the development of affordable housing opportunities in the Master Plan Area in the following ways:

1. Work with the Office of State Planning Coordination to further refine its criteria for tax credits, which may give more weight to Master Plan areas such as this one in the future.
2. Continue to provide developers information and resources through its Affordable Housing Resource Center and other sources.
3. Work with the City and the Office of State Planning Coordination on the development of ordinances, such as Form Based Codes, to ensure quality design in the Master Plan Area.
4. Participate with the City on future grant applications to facilitate development in the Master Plan Area.

Delaware Department of Transportation (DelDOT)

1. DelDOT will fund and construct the grade separated interchange at SR 1 and SR 30 as per the current Capital Transportation Plan (CTP). The current timeline involves construction in 2012 and 2013, with completion in late 2013. Please note that the CTP is subject to amendment annually.
2. Work with the City of Milford to adopt this master plan area as a Transportation Improvement District (TID) to enable equitable and timely funding for roadway improvements within the area in accordance with the recommendations in this Master Plan.
3. DelDOT will work with the City to ensure that the road improvements identified in this report are implemented by the public and/or private sector in a phased manner that is paced with the timing of development activities.

Requirements:

Division of Historical and Cultural Resources: Delaware State Historic Preservation Office

1. Any project that involves federal funds or permits must comply with Section 106 of the National Historic Preservation Act.
2. The State Antiquities Act requires that archaeological excavations on state-owned or controlled lands must be done under a permit from the Director of DHCA.
3. Any unmarked human remains that are disturbed during construction must be respectfully handled in conformance with the Delaware Unmarked Human Remains Act.

Recommendations:

Recommendations for Implementation of Agricultural Preservation:

1. DDA recommends that the city require any property developed adjacent to land designated Open Space Agriculture to include a forested buffer between the property and adjacent farmland. This is already required by Sussex County. As a courtesy to Sussex County, the DDA Forest Service reviews the effectiveness of the buffer and makes a recommendation to the County on whether or not to accept the buffer as is, or require modifications. The Department would offer the same service to the City.
2. In addition to a forested-buffer requirement, the Department also asks that the City work with developers on where they “mass” their houses or buildings. Whenever

practical, DDA requests that the City require developers to cluster their approved building lots, and place as much of the residual community open space near adjacent farm parcels. This would further help eliminate or mitigate any conflict that may arise from dissimilar land uses.

3. DDA asks that the city review its zoning ordinances for compatibility with future agricultural business or agriculture related uses. It is important to provide provisions and flexibility in the zoning code to accommodate future agriculture related activities.
4. DDA would note that all properties enrolled in the state's farmland preservation program are afforded the protections listed in Appendix 3. In addition, Sussex County adopted a "mirror" ordinance to provide these protections to all farms located in Sussex County. These protections should be considered during the city's planning process in an attempt to place more compatible land uses next to properties engaged in agriculture. In addition, DNREC's regulations include a restriction on the location of water wells that should be considered.

Recommendations for Protection of the Cedar Creek Natural Area

1. Sections of the wooded areas of the Milford Southeast Neighborhood Master Plan Area are part of the Cedar Creek Natural Area (see Map 5.1). All developments near or adjacent to this Natural Area are recommended to follow the design guidelines regarding protection of the Natural Area, found in Chapter 5.
2. Cedar Creek Nature Preserve is adjacent to the south end of the Southeast Planning Area (see Map 5.1). A number of rare species can be found in association with this habitat type. To protect the rest of this contiguous forest area, it should be designated as a Nature Preserve, a special designation that provides additional protection for an important natural resource area. Such a designation would be achieved with the assistance of DNREC's State Office of Nature Preserves. Should these areas be annexed as envisioned by the Master Plan, Milford will work with private landowners and the State Office of Nature Preserves to promote the dedication of the Natural Area as a Nature Preserve.

Recommendations for the Protection of Specific Conservation Areas

1. When designing development projects within Specific Conservation Areas One, Two and Three (see Chapter 5 and Maps 5.3, 5.4 and 5.5), the land developers and the City will collaborate to ensure that the specific design guidelines related to these important conservation areas are incorporated into the site designs. The design guidelines are specifically listed in Chapter 10.

Transportation Recommendations

1. Upgrade primary circulation and transit routes (see Chapter 8, and Map 4) to 11 ft. lanes and 5 ft. shoulders.
2. Along these same routes, construct bicycle and pedestrian improvements to ensure interconnectivity, multi-modal connections, and “complete streets.”
3. In order to accommodate increased traffic from new development activities, upgrade the intersections identified in Chapter 8 and shown on Map 4.
4. Encourage the use of TDR to enable higher density developments (up to 8 du/acre) at the designated TDR receiving areas. These areas are planned around bus stops to enable the transit improvements envisioned to operate smoothly.

Signatures:

The undersigned agree to honor the above stated commitments, agreements, requirements and recommendations as they relate to the development and preservation of land within the Milford Southeast Neighborhood Master Plan area. This document, including text and maps, shall guide land development, agricultural preservation, environmental protection, and infrastructure investments in the Southeast Neighborhood Master Plan Area described herein. This document shall be in full force and effect until such time as all parties reconvene and mutually consent to amend this document and the commitments, agreements, requirements, and recommendations.



Mayor, City of Milford



Director, Office of State Planning Coordination



Secretary, Delaware Department of Agriculture



Secretary, Delaware Department of Natural Resources and Environmental Control



Secretary, Delaware Department of Transportation

Appendices

Appendix 1. Southeast Neighborhood Master Plan Land Use Scenarios Comparison

Appendix 2. TDR Sending and Receiving Area Analysis

Appendix 3. Proposed Agricultural Use Protections

Appendix 4. Historic and Cultural Resources in or Near the Master Plan Area

Appendix 1. Southeast Neighborhood Master Plan Land Use Scenarios Comparison

South Milford Master Plan
SE Neighborhood Land Use Scenarios - Demographic Comparative Analysis
April 2011

Build-Out Results	Existing Land Use	Master Plan Build-Out Scenarios				Milford Comp Plan (SE Neighborhood)
		SE_Neighborhood Public Option	SE_Neighborhood Master Plan	Growth 2020 ^a	Growth 2030 ^a	
		Preferred (ALT) Scenario ² October, 2009	Preferred (Revised) Scenario ³ December, 2010	April, 2011	April, 2011	
Build-Out Numeric Dwelling Units	1,943	7,626	11,769	2,434	2,959	15,083
Build-Out Numeric Buildings	1,943	6,815	10,103	2,438	2,693	7,570
Build-Out Numeric Floor Area	0	995,000	2,985,000	160,000	1,185,000	7,970,000
RESIDENTIAL						
Dwelling Units	1,943	7,626	11,769	2,434	2,959	15,083
Residents	4,709	19,459	30,739	5,960	7,290	39,659
Children	1,360	3,885	4,692	1,608	1,884	4,414
Residential Taxes	184,295	756,930	1,153,035	234,535	287,905	1,384,985
Residential VTD	19,430	76,260	114,596	24,340	29,590	134,488
Residential Waste Water	582,900	2,287,800	3,530,700	730,200	887,700	4,524,900
Residential Water Use	582,900	2,287,800	3,530,700	730,200	887,700	4,524,900
NONRESIDENTIAL						
Commercial Floor Area (SQFT)	0	995,000	2,985,000	160,000	1,185,000	7,970,000
Employees ¹	262	2,519	4,875	724	1,854	10,275
Commercial Taxes	0	49,539	137,065	7,966	65,371	320,632
Commercial VTD	0	24,875	70,692	4,000	30,692	178,000
Commercial Waste Water	0	32,875	70,158	8,000	30,158	186,000
Commercial Water Use	0	41,094	87,698	10,000	37,698	232,500

¹ Existing Land Use Scenario employees are calculated as home-based employees, therefore no associated nonresidential space.

² SE_Neighborhood "Preferred (ALT)" Scenario - composite of scenarios developed at Public Workshop, October, 2009

³ SE_Neighborhood "Preferred (Revised)" - Public Option composite revised December 2010 by City of Milford Planning after reviewing State Agency input & PLUS project constraints

^a Growth 2020 and Growth 2030 Scenarios assume a growth rate of 2% per year

Source: UD-SCC Community Land Use Model

Analysis performed by the University of Delaware, Sustainable Coastal Communities (SCC) Program, 2011



Appendix 2.
TDR Sending and Receiving Area Analysis

TDR Sending Area Analysis for Select Parcels East of Milford

Parcel Number	Owner Name	LESA Score	Acres	Zoning Yield ¹	Build Yield ²	Septic Yield ³
330-12.CO-10.00	Ruth Williams	185.08	50	120	78	78
330-08.CO-47.00	Richard, Fay Shockley	220.19	14.7	28	19	19
330-12.CO-08.00	GW Shockley & Sons, Inc.	222.51	117.4	235	153	99
330-08.CO-28.00	Alan and Arenath Mills	172.61	46.2	92	60	60
330-08.CO-24.00	Beverly & Louis C'Day	189.26	41.29	101	66	66
330-12.CO-01.03	Howard & Katherine Webb ⁴	210.7	118.18	236	153	99
330-12.CO-01.02	Howard & Katherine Webb ⁴	Part of 330-12.00				
330-12.00-01.02 (Unit 21805)	Howard & Katherine Webb ⁴	Part of 330-12.00				
330-12.CO-01.00	BKW Farm Limited	181.54	66.8	132	86	86
330-08.CO-19.00	Alan & Arenath Mills	192.19	85.5	170	111	99
330-08.CO-19.02	Alan & Arenath Mills	192.19	16.3	32	21	21
330-08.CO-20.00	Warnock Farms, LLC	232.5	105.5	210	137	99
330-07.CO-75.00	GW Shockley & Sons, Inc.	184.27	48.4	96	63	63
Totals			720.37	1,452	947	789

¹ Sussex County AF-1 zoning provides for 2 units to the acre

² In practice, the average subdivision yields 1.3 units per acre

³ Del Code Title 7, Chapter 60 limits the number of individual on-site septic systems to 99; a community wastewater system is required to achieve the maximum dwelling units allowed by zoning.

⁴ Existing Agricultural District

Milford TDR Receiving Areas
Located within 1/4 Mile of Public Transportation Nodes

Node	Acres	Base Zoning 3 DUs/acre	TDR Zoning 8 DUs/acre	Additional DUs through TDR use
1	58	174	696	522
2	118	354	1416	1062
3	104	312	1248	936
Total	280	840	2240	1,400

Appendix 3. Proposed Agricultural Use Protections

The following is sample language that the Delaware Department of Agriculture recommends the City of Milford integrate into their review of any subdivision located adjacent to an Agricultural Preservation District:

The proposed development is near two properties currently enrolled in the State's Agricultural Lands Preservation Program (Example: N & M Burton Farm Agricultural District, (Parcel Numbers # 2.34-16.00-11.00 and 2.34-16.00-17.00). Therefore, the activities conducted on these preserved properties will be protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300 foot notification requirement affects all new deeds in a subdivision located in whole or part within 300 feet of an Agricultural District. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is

expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.). In addition, if any wells are to be installed, Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells will apply. This regulation states:

(2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

Section 1. Chapter 99, Code of Sussex Section 99-6 may also apply to this subdivision. The applicant should verify the applicability of this provision with Sussex County. This Section of the Code states:

G. Agricultural Use Protections.

(1) Normal agricultural uses and activities conducted in a lawful manner are preferred. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural

chemicals and nighttime farm operations, land uses adjacent to land used primarily for agricultural purposes shall be subject to the following restrictions:

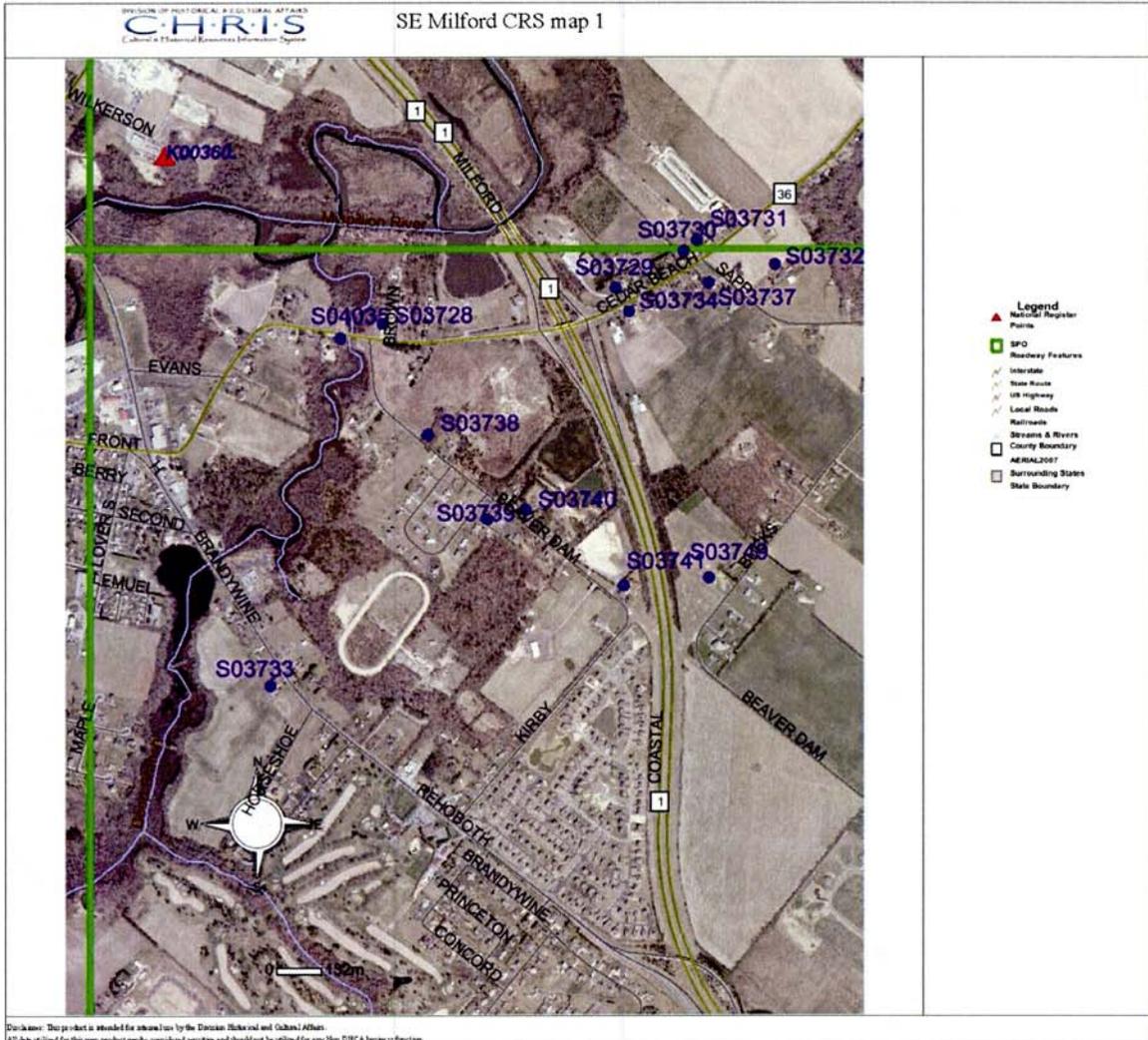
(a) For any new subdivision development located in whole or in part within three hundred (300) feet of the boundary of land used primarily for agricultural purposes, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

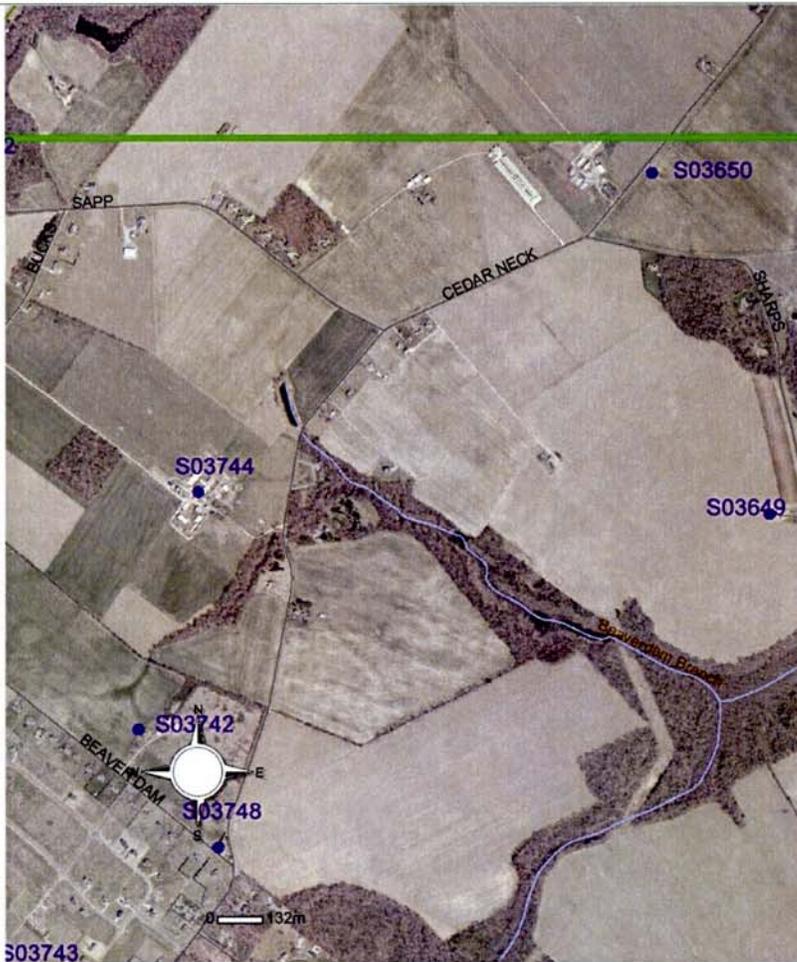
“This property is located in the vicinity of land used primarily for agricultural purposes on which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities.”

(b) For any new subdivision development located in whole or in part within fifty (50) feet of the boundary of land used primarily for agricultural purposes no improvement requiring and occupancy approval for a residential type use shall be constructed within fifty (50) feet of the boundary of land used primarily for agricultural purposes.

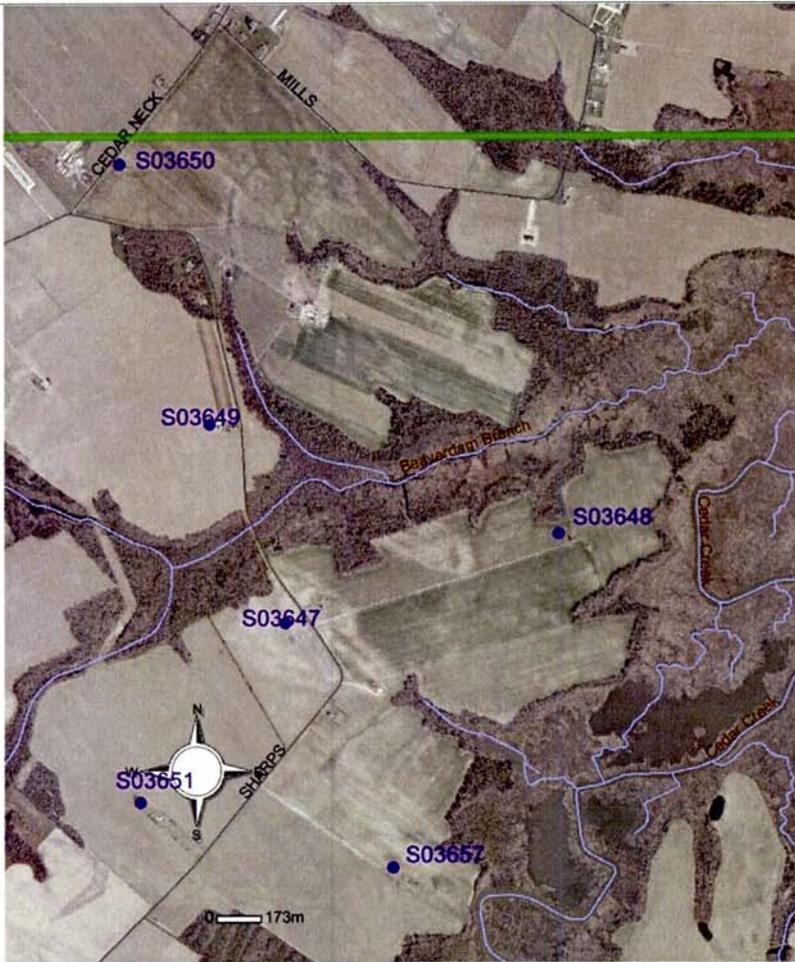
Appendix 4.

Historical and Cultural Resources in or Near the Master Plan Area



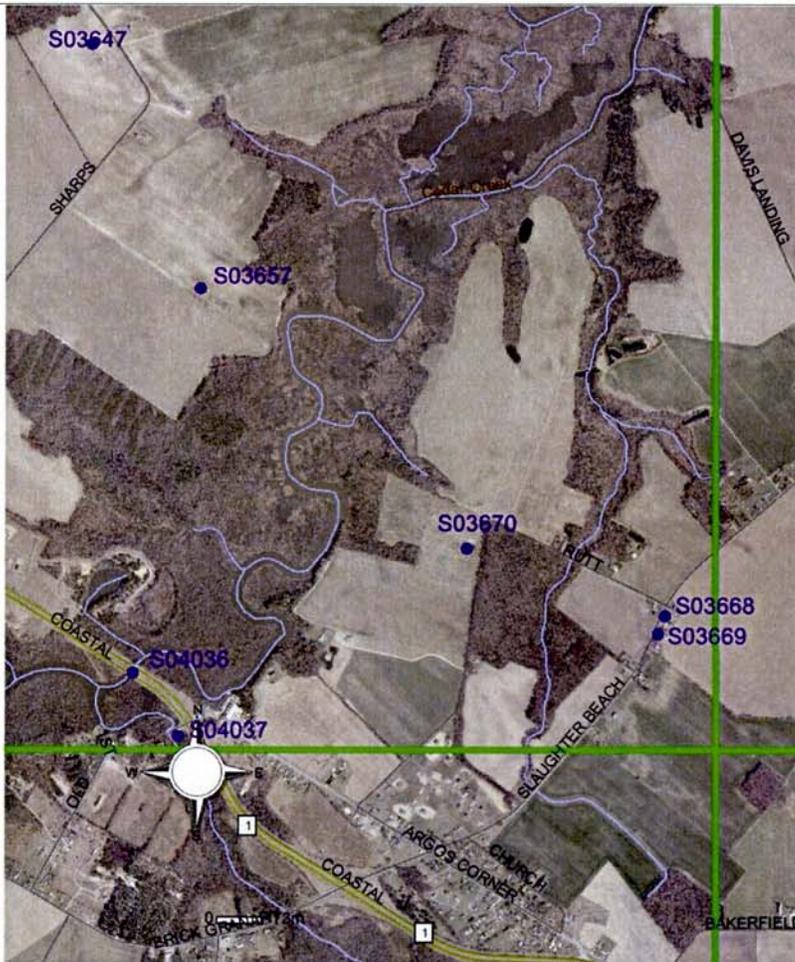


Disclaimer: This product is intended for informational use by the Division of Cultural and Historical Affairs. All data utilized for this map product may be considered outdated and should not be relied on for any other CRCA business function.



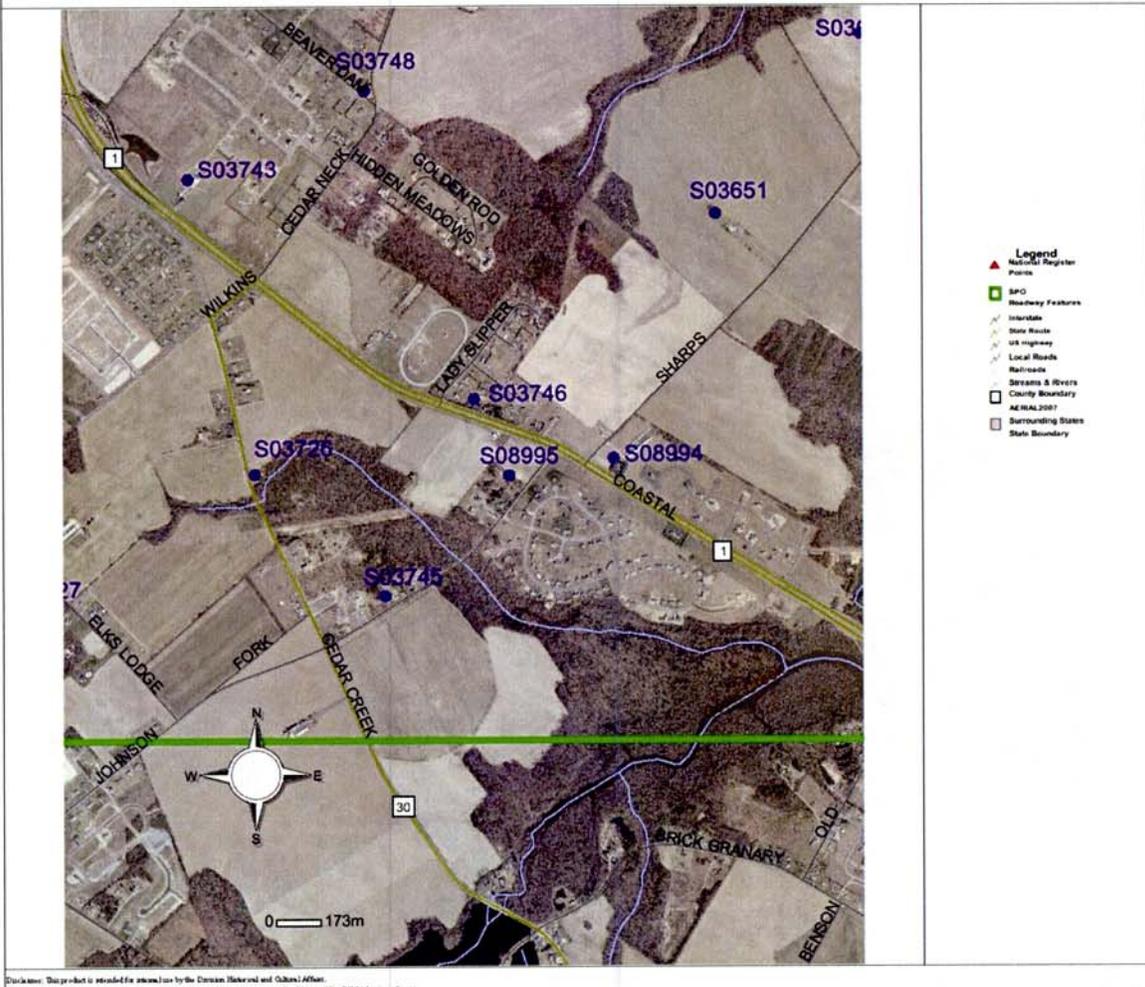
- Legend**
- National Register Points
 - SPO
 - Roadway Features**
 - Interstate
 - State Route
 - US Highway
 - Local Roads
 - Railroads
 - Streams & Rivers
 - County Boundary
 - Aerial 2007
 - Surrounding States
 - State Boundary

Disclaimer: This product is intended for informational use by the Division of Historical and Cultural Affairs.
All data utilized for this map product is georeferenced and should not be relied for any other DHCRA business function.



- Legend**
- ▲ National Register Points
 - SPO
 - Roadway Features
 - Interstate
 - State Route
 - US Highway
 - Local Road
 - Railroads
 - Streams & Rivers
 - County Boundary
 - ALR/AL2007
 - Surrounding States
 - State Boundary

Disclaimer: This product is provided for information by the Division of Historical and Cultural Affairs.
 All data utilized for this map product were considered accurate and deemed to utilize the best DCHA data collection.





- Legend**
- ▲ National Register Points
 - SPO
 - ▬ Roadway Features
 - ▬ Interstate
 - ▬ State Road
 - ▬ US Highway
 - ▬ Local Road
 - ▬ Railroad
 - ▬ Stream & River
 - ▭ County Boundary
 - ▭ Aerial 2007
 - ▭ Surrounding States
 - ▭ State Boundary

Disclaimer: This product is intended for informational use by the Division of Historical and Cultural Affairs.
 All data utilized for this map product was compiled, created and downloaded to inform the use of the CHRS in its function.

State Historic Preservation Office Map Key			
Map Number	Item	Type	Location
CRS Map 3, 4	S03647	dwelling	Sharps Rd
CRS Map 3	S03648	agricultural complex	Sharps Rd
CRS Map 2, 3	S03649	dwelling	Sharps Rd
CRS Map 2, 3	S03650	dwelling	Cedar Neck Rd
CRS Map 3, 5	S03651	agricultural complex	Sharps Rd
CRS Map 3, 4	S03657	agricultural complex	Sharps Rd
CRS Map 4	S03668	dwelling	Slaughter Beach Rd
CRS Map 4	S03669	dwelling	Slaughter Beach Rd
CRS Map 4	S03670	dwelling	Rutt Rd
CRS Map 6	S03723	agricultural complex	Wilkins Rd
CRS Map 6	S03724	agricultural complex	Wilkins Rd
CRS Map 6	S03725	dwelling	Wilkins Rd
CRS Map 5, 6	S03726	dwelling	Cedar Creek Rd
CRS Map 6	S03727	dwelling	Elks Lodge Rd
CRS Map 1	S03728	dwelling	Cedar Beach Rd
CRS Map 1	S03729	dwelling	Cedar Beach Rd
CRS Map 1	S03730	dwelling complex	Cedar Beach Rd
CRS Map 1	S03731	agricultural complex	Cedar Beach Rd
CRS Map 1	S03732	dwelling complex	Sapp Rd
CRS Map 1	S03733	agricultural complex	Rehoboth Blvd
CRS Map 1	S03734	dwelling	Cedar Beach Rd
CRS Map 1	S03737	dwelling	Sapp Rd
CRS Map 1	S03738	dwelling	Beaver Dam Rd
CRS Map 1	S03739	dwelling	Beaver Dam Rd
CRS Map 1	S03740	agricultural complex	Beaver Dam Rd
CRS Map 1	S03741	agricultural complex	Beaver Dam Rd
CRS Map 2	S03742	agricultural complex	Beaver Dam Rd
CRS Map 2, 6	S03743	agricultural complex	Coastal Hwy
CRS Map 2	S03744	agricultural complex	Cedar Neck Rd
CRS Map 5	S03745	dwelling	Johnson Rd
CRS Map 5	S03746	dwelling	Coastal Hwy
CRS Map 2, 5	S03748	school	Cedar Neck Rd
CRS Map 1	S04035	State Bridge No. 927	Cedar Beach Rd
CRS Map 4	S04036	State Bridge No. 933A	Coastal Hwy
CRS Map 4	S04037	State Bridge No. 934	Brick Granary Rd
CRS Map 5	S08994	Promise Land Farm	Coastal Hwy
CRS Map 5	S08995	dwelling	Coastal Hwy

APPENDIX B

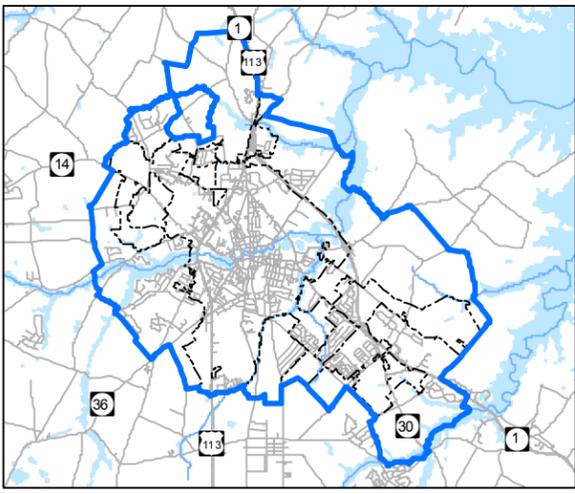
MAPS AND EXHIBITS

2016 COMPREHENSIVE PLAN

DRAFT AS OF 04-28-16

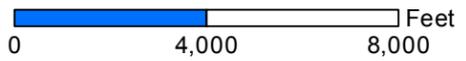
DRAFT

Unofficial Zoning Map

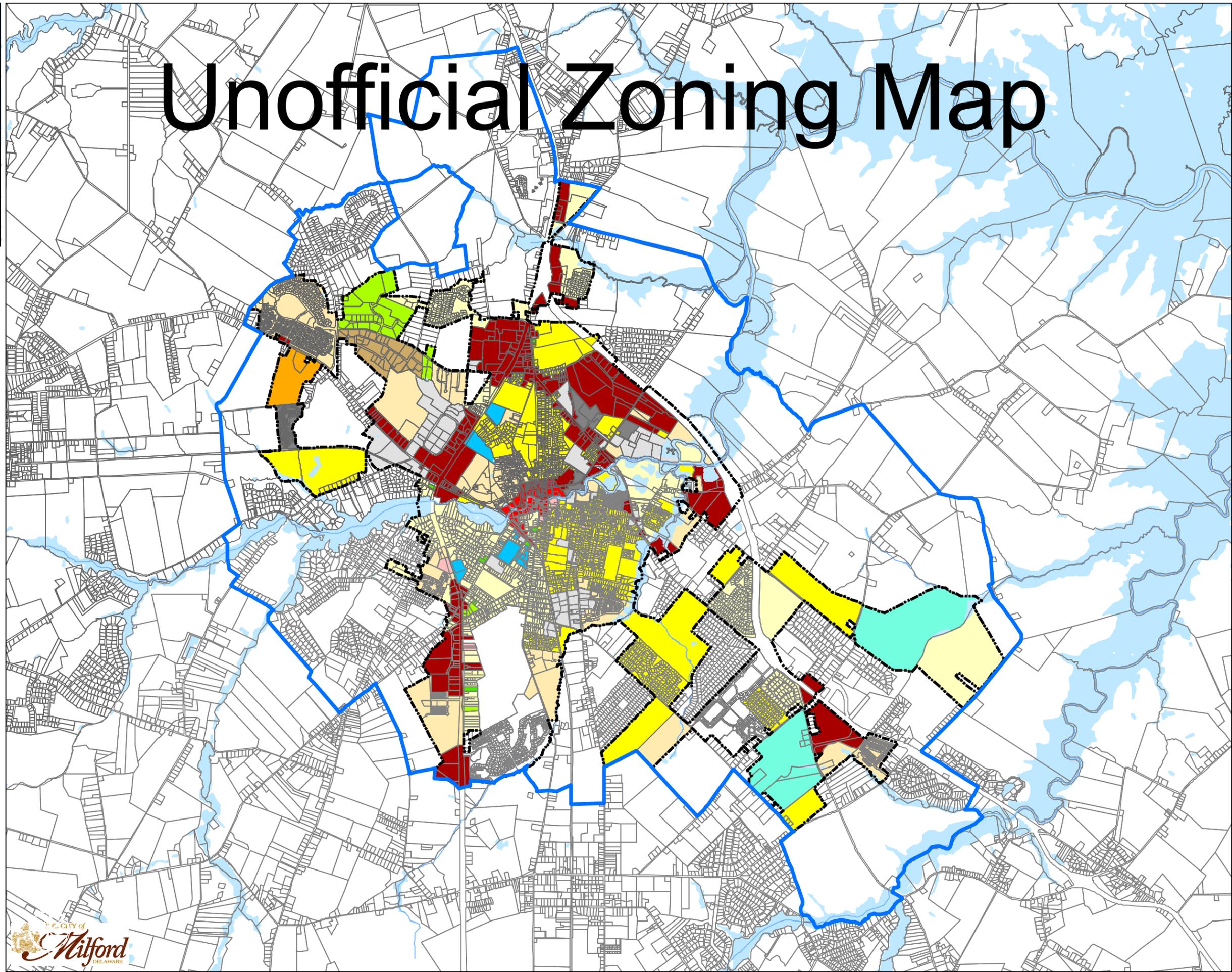


**City of Milford
Comprehensive Plan
Existing Zoning Map
Figure 8**

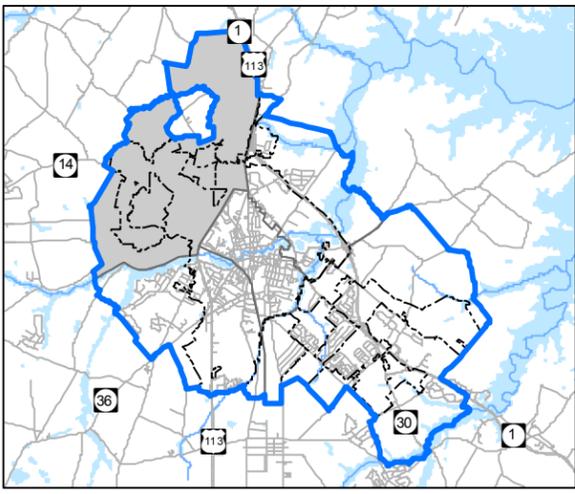
-  Urban Growth Boundary
-  Municipal Boundary
-  BP - Business Park
-  C-1 - Neighborhood Commercial
-  C-2 - Central Business District
-  C-3 - Highway Commercial District
-  H-1 - Institutional Development District
-  I-1 - Limited Industrial
-  I-2 - General Industrial
-  IS - Institutional Service District
-  OB-1 - Office Building
-  OC-1 - Office Complex
-  R-1 - Single Family Residential District
-  R-2 - Residential District
-  R-3 - Garden Apartment and Townhouse District
-  R-8 - Garden Apartment and Townhouse District



Date: 4/28/2016 User Name: RPierce
2016_Existing_Zoning



Unofficial Zoning Map

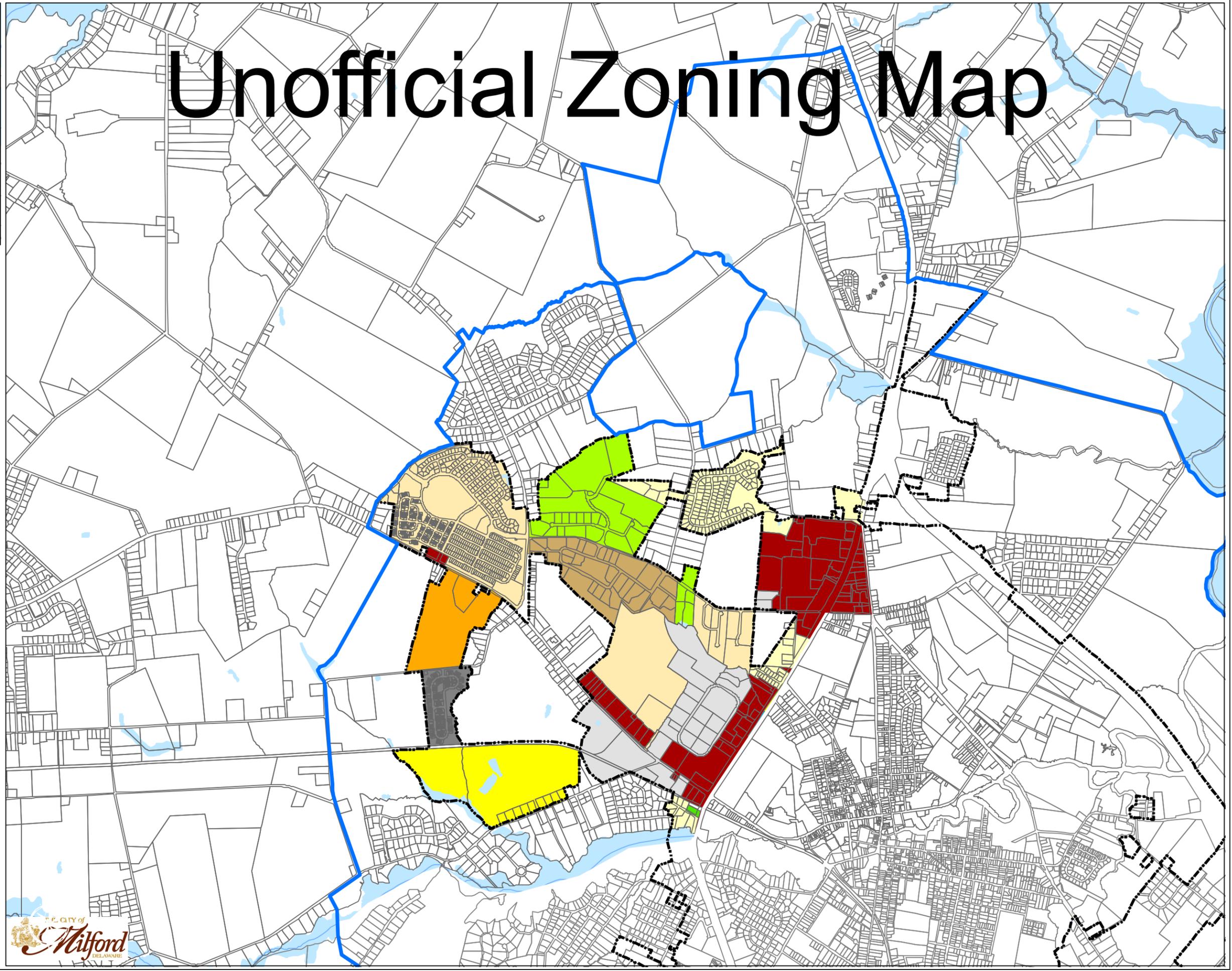


**City of Milford
Comprehensive Plan
Northwest Neighborhood Map
Figure 8A**

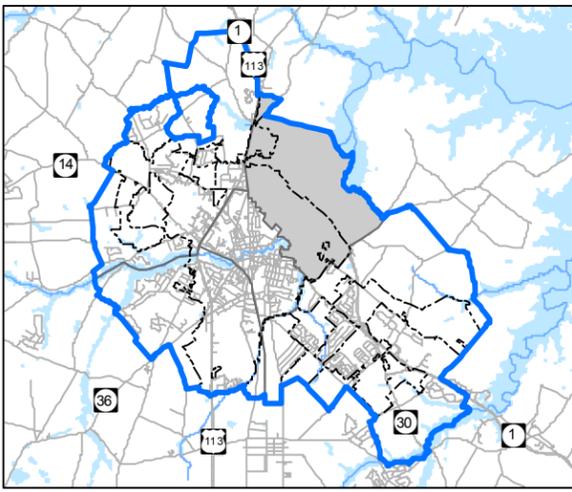
-  Urban Growth Boundary
-  Municipal Boundary
-  BP - Business Park
-  C-1 - Neighborhood Commercial
-  C-2 - Central Business District
-  C-3 - Highway Commercial District
-  H-1 - Institutional Development District
-  I-1 - Limited Industrial
-  I-2 - General Industrial
-  IS - Institutional Service District
-  OB-1 - Office Building
-  OC-1 - Office Complex
-  R-1 - Single Family Residential District
-  R-2 - Residential District
-  R-3 - Garden Apartment and Townhouse District
-  R-8 - Garden Apartment and Townhouse District

0 6001,200 Feet

Date: 4/28/2016 User Name: RPierce
2016_Northwest_Neighborhood_Zoning

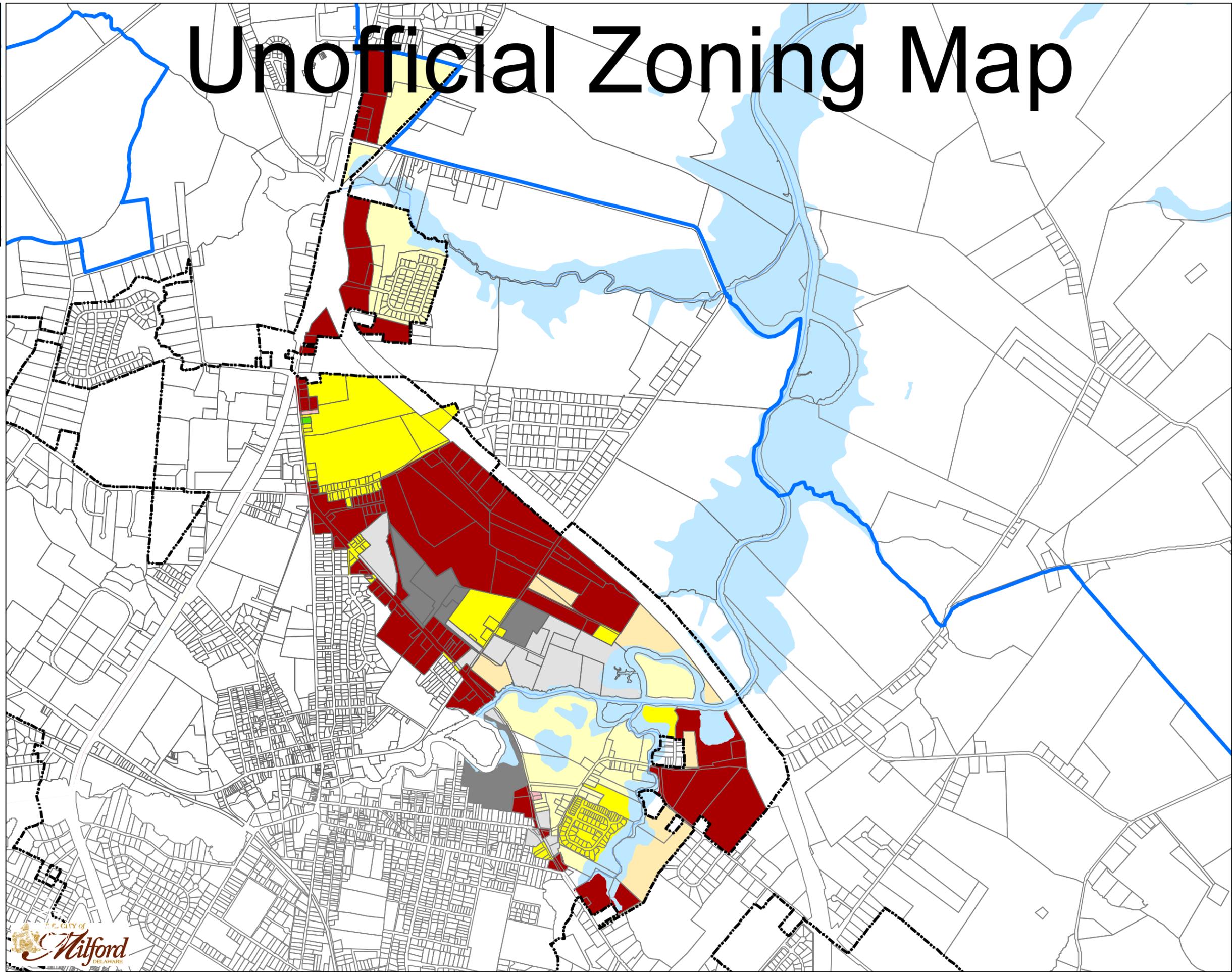


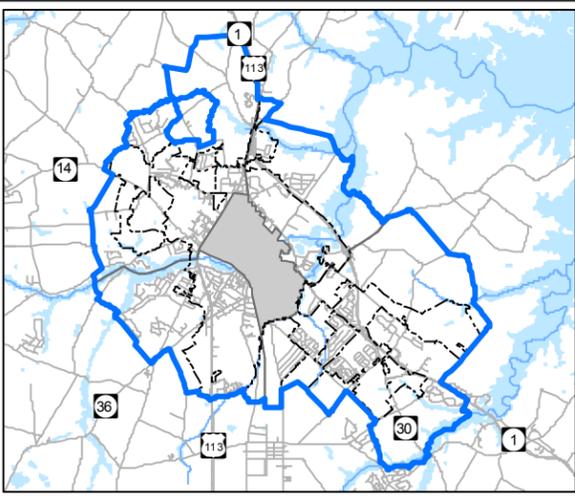
Unofficial Zoning Map



**City of Milford
Comprehensive Plan
Northeast Neighborhood Map
Figure 8B**

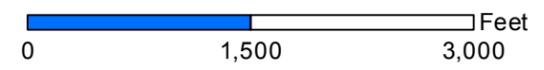
-  Urban Growth Boundary
-  Municipal Boundary
-  BP - Business Park
-  C-1 - Neighborhood Commercial
-  C-2 - Central Business District
-  C-3 - Highway Commercial District
-  H-1 - Institutional Development District
-  I-1 - Limited Industrial
-  I-2 - General Industrial
-  IS - Institutional Service District
-  OB-1 - Office Building
-  OC-1 - Office Complex
-  R-1 - Single Family Residential District
-  R-2 - Residential District
-  R-3 - Garden Apartment and Townhouse District
-  R-8 - Garden Apartment and Townhouse District



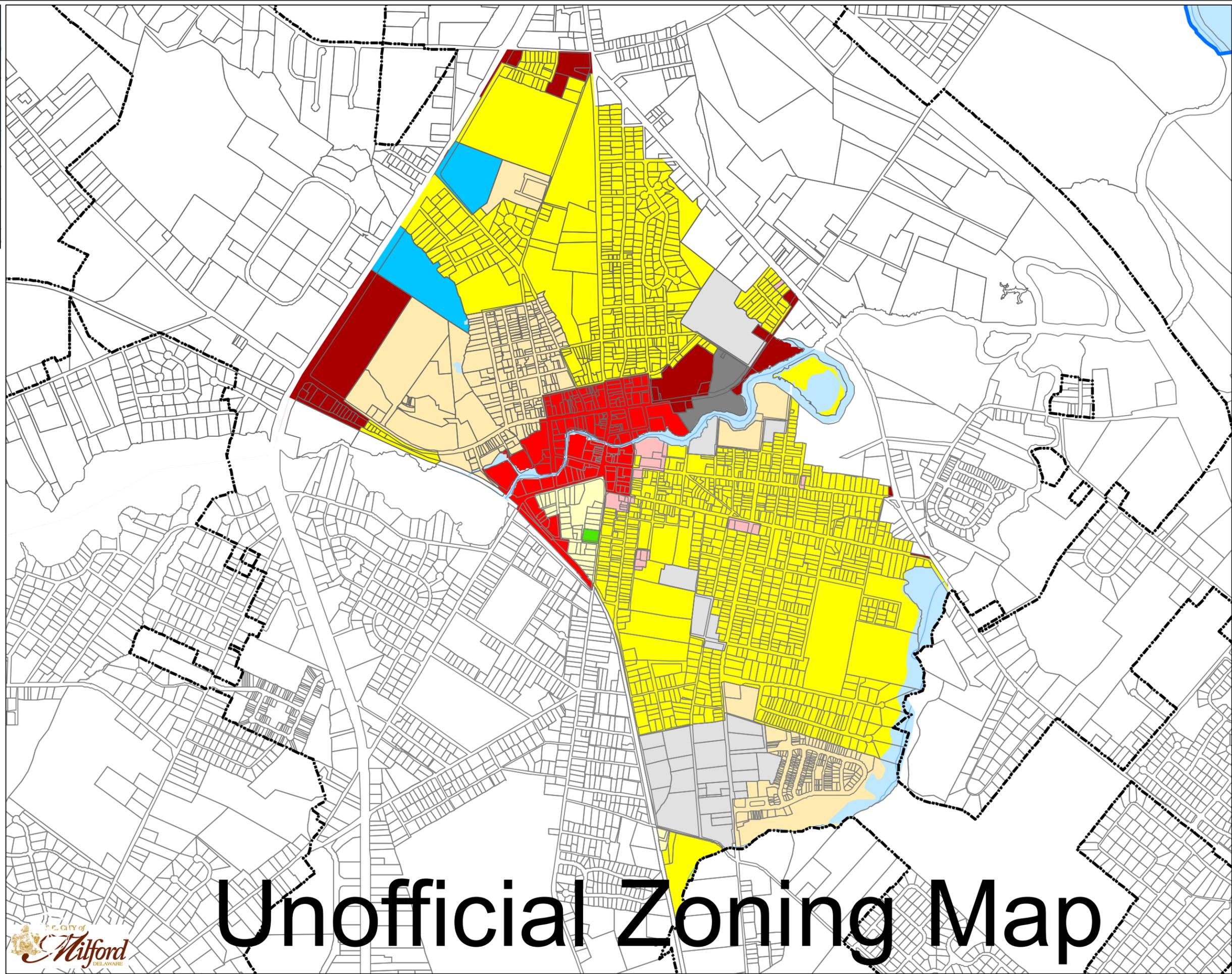


**City of Milford
Comprehensive Plan
Town Center Neighborhood Map
Figure 8C**

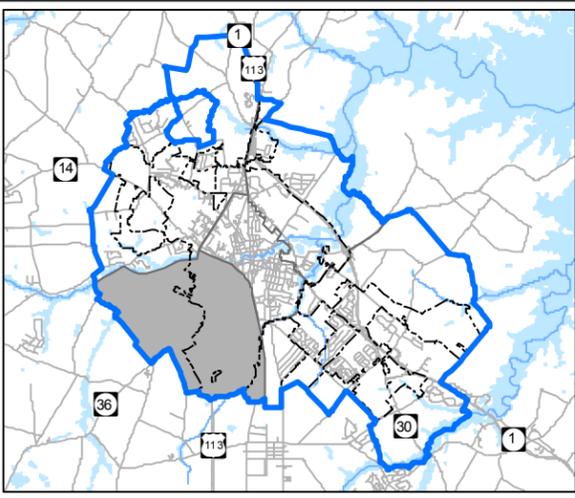
-  Urban Growth Boundary
-  Municipal Boundary
-  BP - Business Park
-  C-1 - Neighborhood Commercial
-  C-2 - Central Business District
-  C-3 - Highway Commercial District
-  H-1 - Institutional Development District
-  I-1 - Limited Industrial
-  I-2 - General Industrial
-  IS - Institutional Service District
-  OB-1 - Office Building
-  OC-1 - Office Complex
-  R-1 - Single Family Residential District
-  R-2 - Residential District
-  R-3 - Garden Apartment and Townhouse District
-  R-8 - Garden Apartment and Townhouse District



Date: 4/28/2016 User Name: RPierce
2016_TownCenter_Neighborhood_Zoning

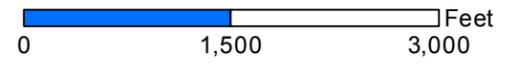


Unofficial Zoning Map

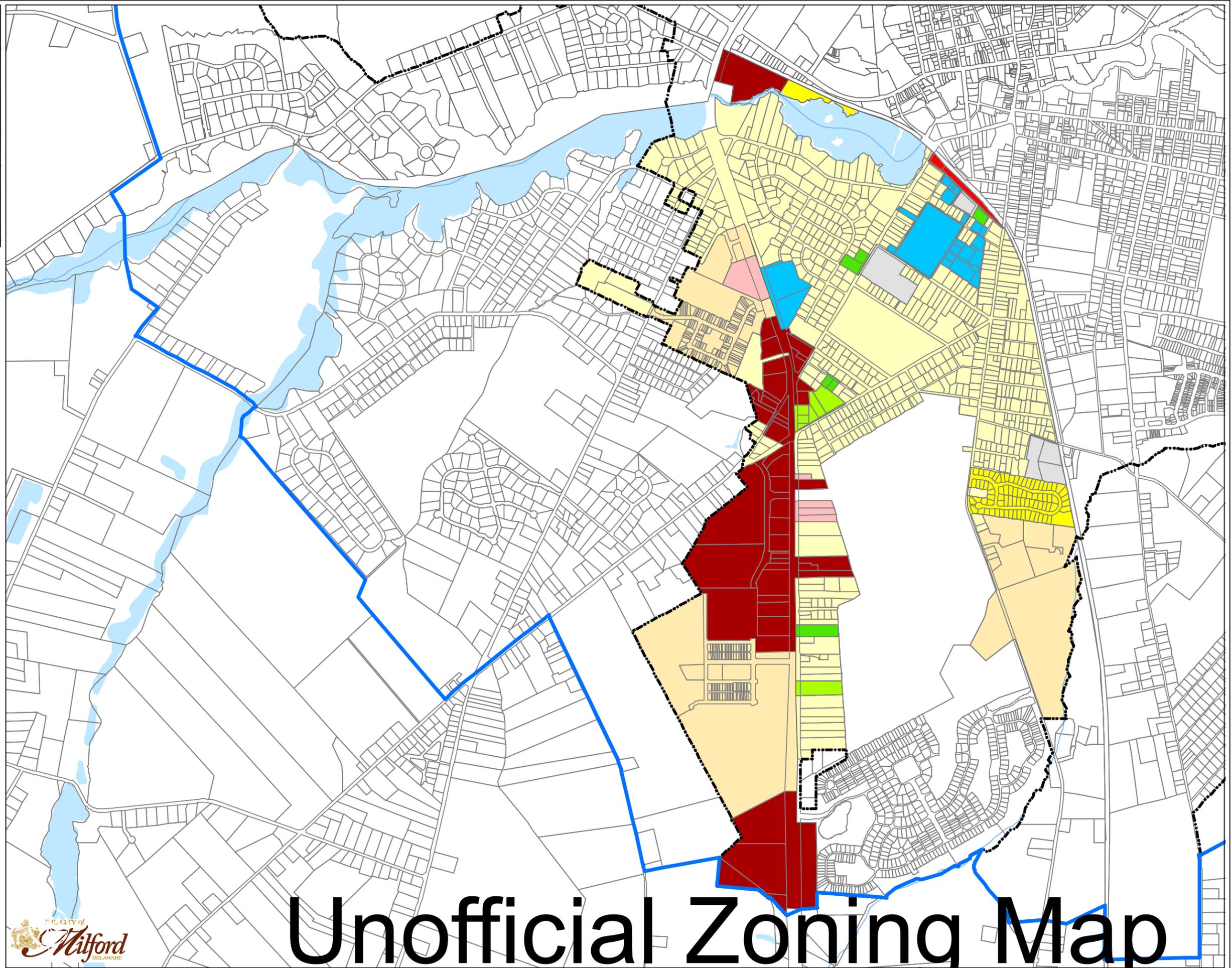


**City of Milford
Comprehensive Plan
Southwest Neighborhood Map
Figure 8D**

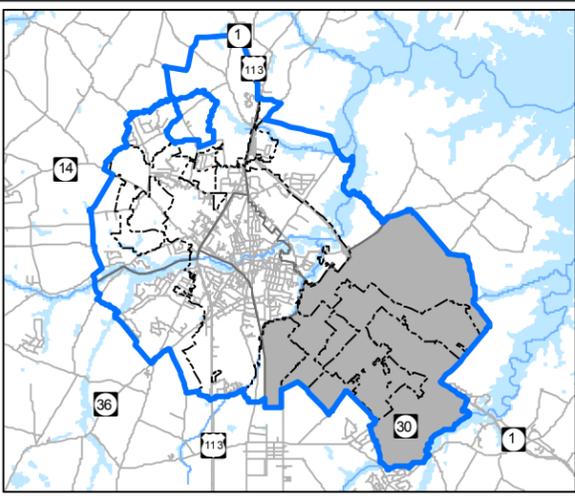
-  Urban Growth Boundary
-  Municipal Boundary
-  BP - Business Park
-  C-1 - Neighborhood Commercial
-  C-2 - Central Business District
-  C-3 - Highway Commercial District
-  H-1 - Institutional Development District
-  I-1 - Limited Industrial
-  I-2 - General Industrial
-  IS - Institutional Service District
-  OB-1 - Office Building
-  OC-1 - Office Complex
-  R-1 - Single Family Residential District
-  R-2 - Residential District
-  R-3 - Garden Apartment and Townhouse District
-  R-8 - Garden Apartment and Townhouse District



Date: 4/28/2016 User Name: RPierce
2016_Southwest_Neighborhood_Zoning

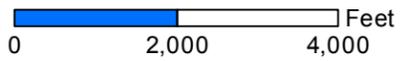


Unofficial Zoning Map

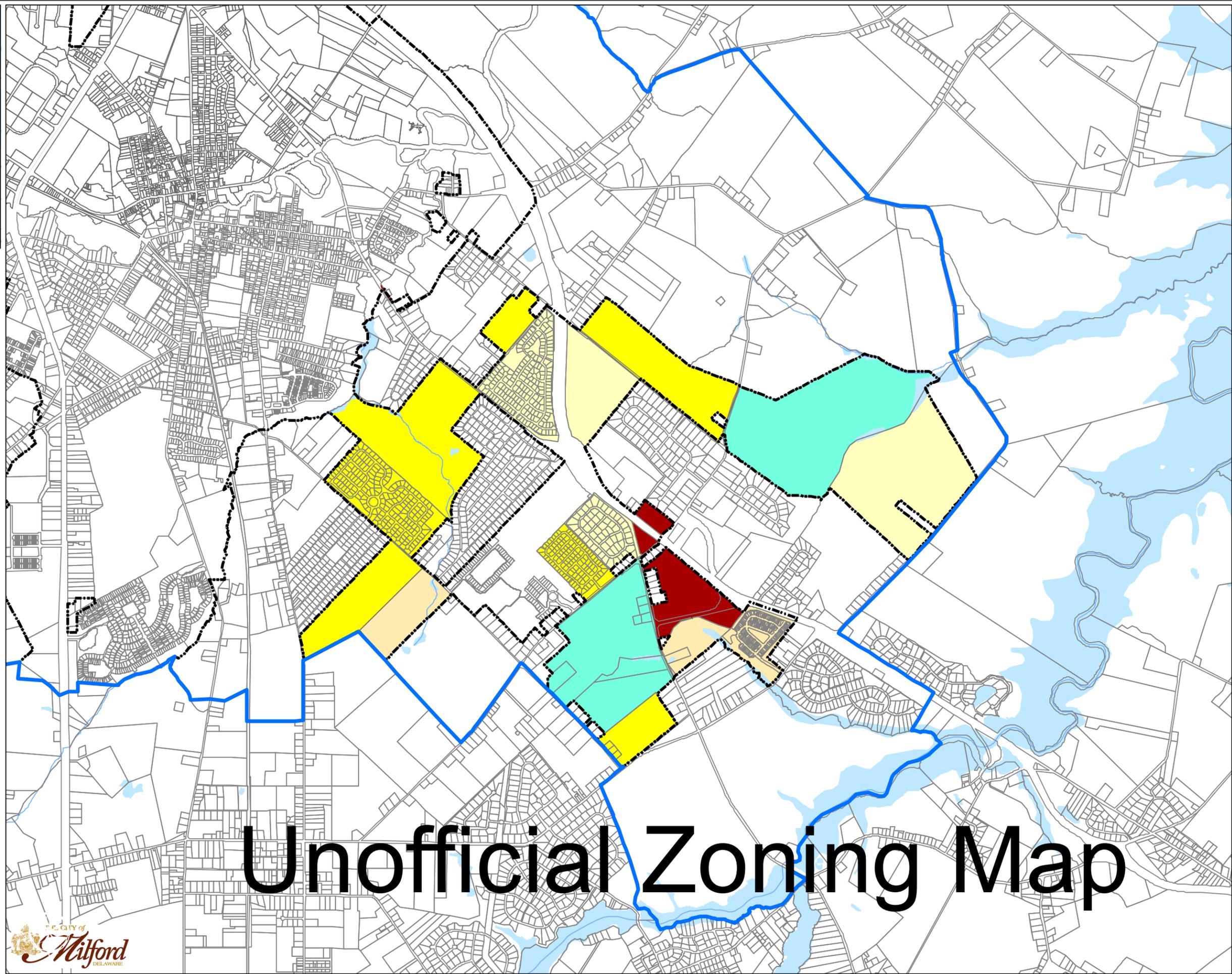


**City of Milford
Comprehensive Plan
Southeast Neighborhood Map
Figure 8E**

-  Urban Growth Boundary
-  Municipal Boundary
-  BP - Business Park
-  C-1 - Neighborhood Commercial
-  C-2 - Central Business District
-  C-3 - Highway Commercial District
-  H-1 - Institutional Development District
-  I-1 - Limited Industrial
-  I-2 - General Industrial
-  IS - Institutional Service District
-  OB-1 - Office Building
-  OC-1 - Office Complex
-  R-1 - Single Family Residential District
-  R-2 - Residential District
-  R-3 - Garden Apartment and Townhouse District
-  R-8 - Garden Apartment and Townhouse District

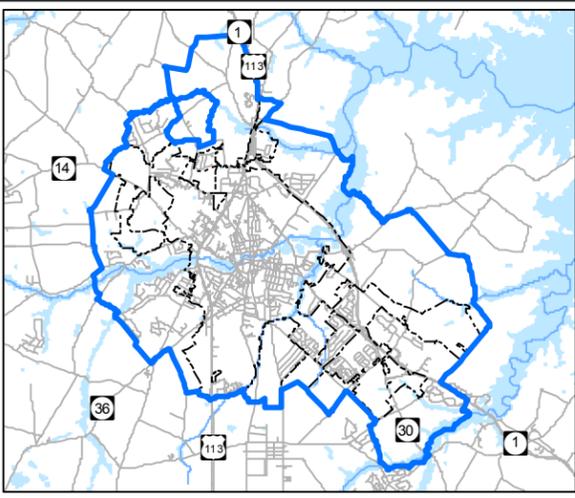


Date: 4/28/2016 User Name: RPierce
2016_Southeast_Neighborhood_Zoning



Unofficial Zoning Map



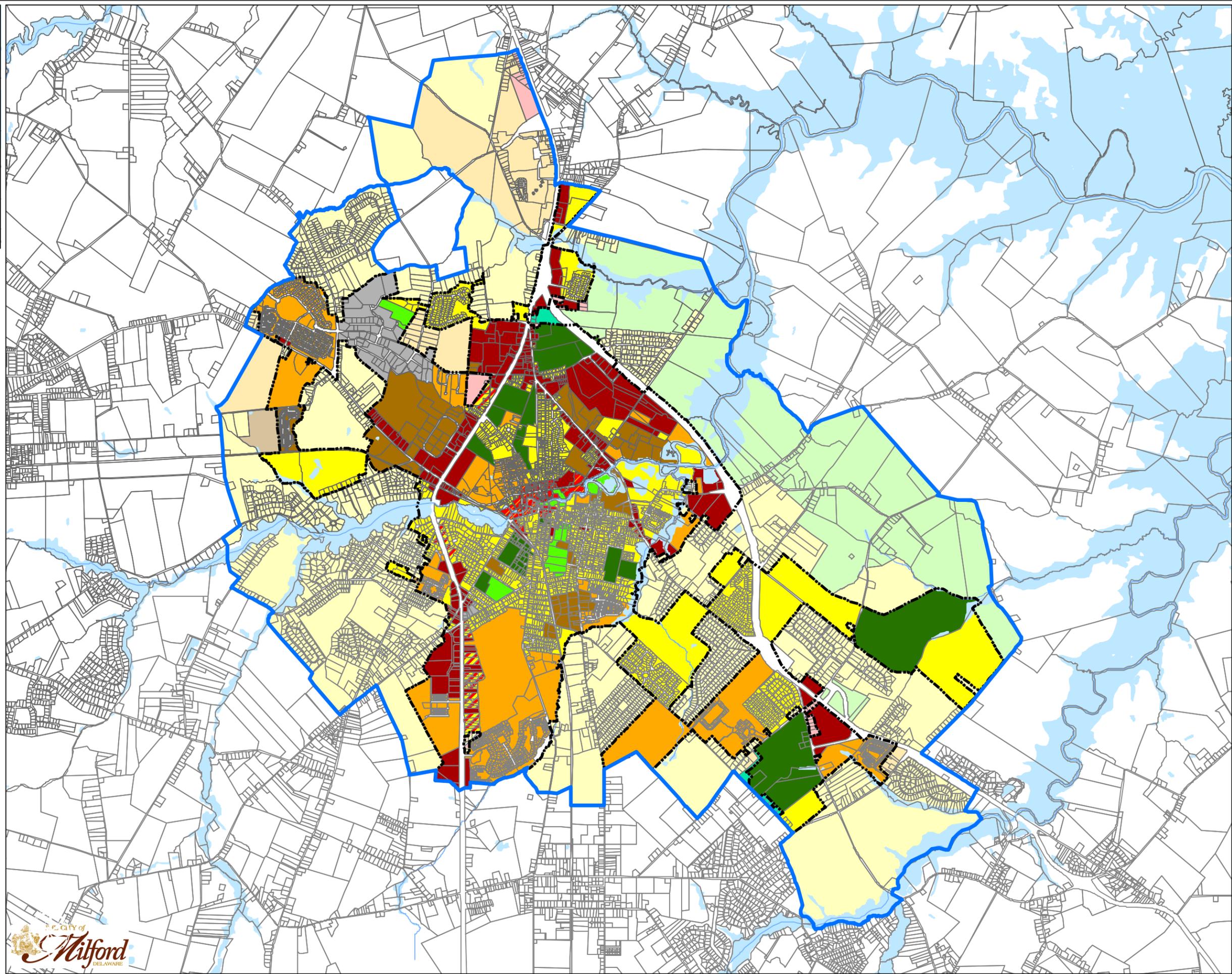


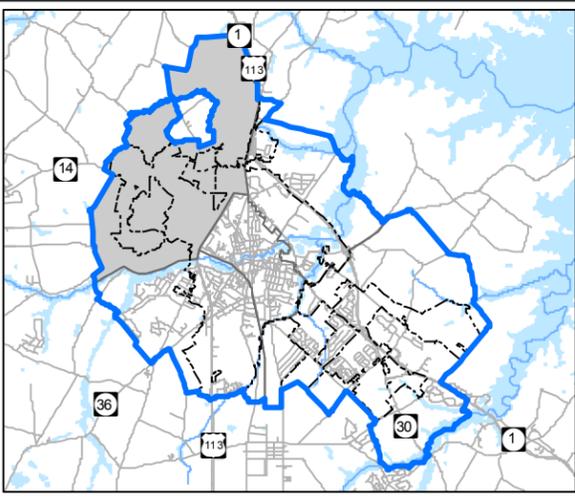
**City of Milford
Comprehensive Plan
Future Land Use
Figure 10**

-  Urban Growth Boundary
-  Municipal Boundary
-  Business Park
-  Downtown Development District
-  Highway/Commercial
-  Industrial
-  Institutional
-  Low Density Residential
-  Mixed Use Commercial/Low Density Residential
-  Moderate Density Residential
-  Open Space
-  Proposed High Density Residential
-  Proposed Highway/Commercial
-  Proposed Industrial
-  Proposed Institutional
-  Proposed Low Density Residential
-  Proposed Mixed Use Commercial/Low Density Resident
-  Proposed Moderate Density Residential
-  Proposed Open Space



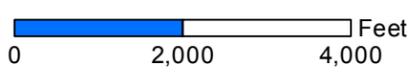
Date: 4/28/2016 User Name: RPierce
2016_Future_Land_Use



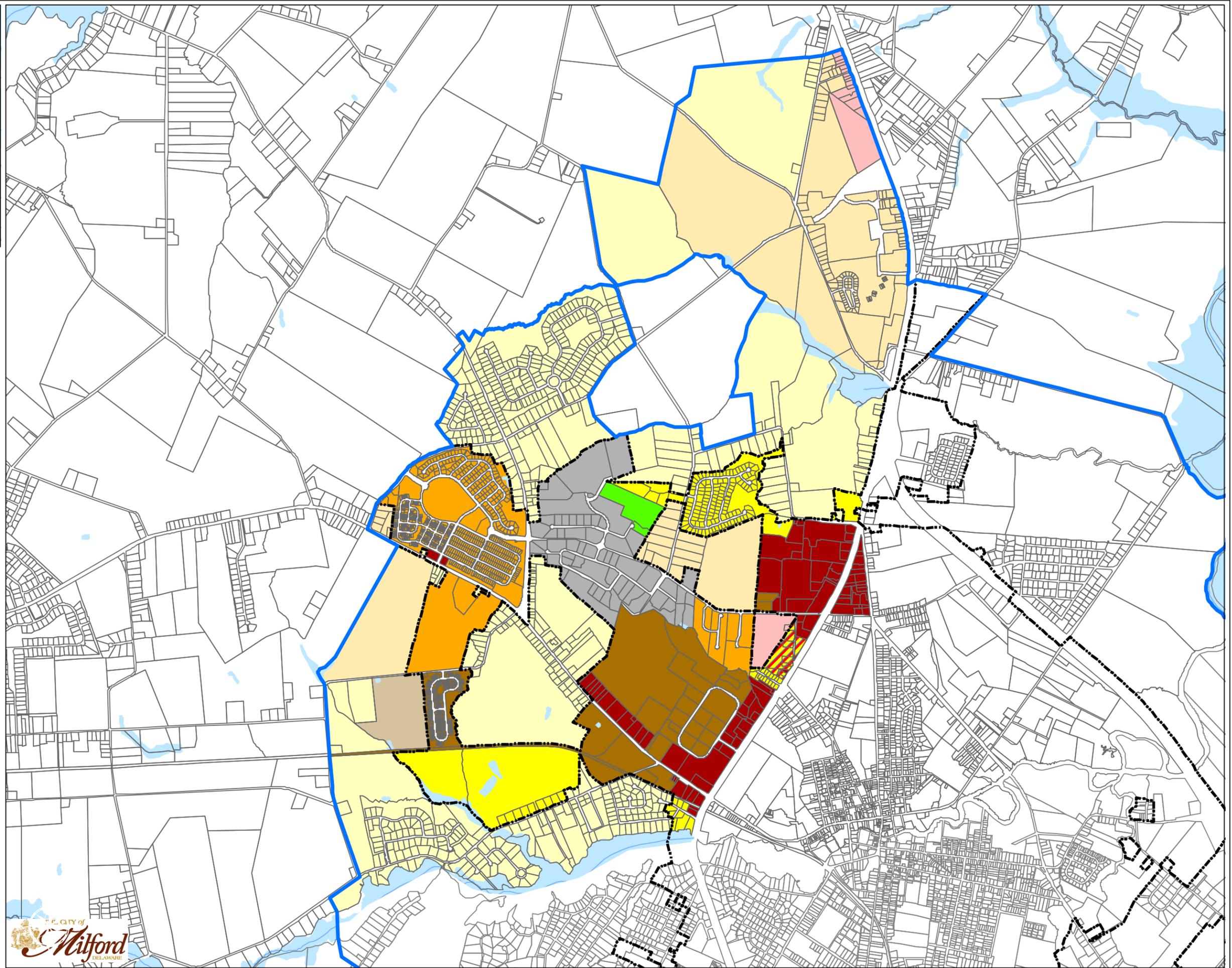


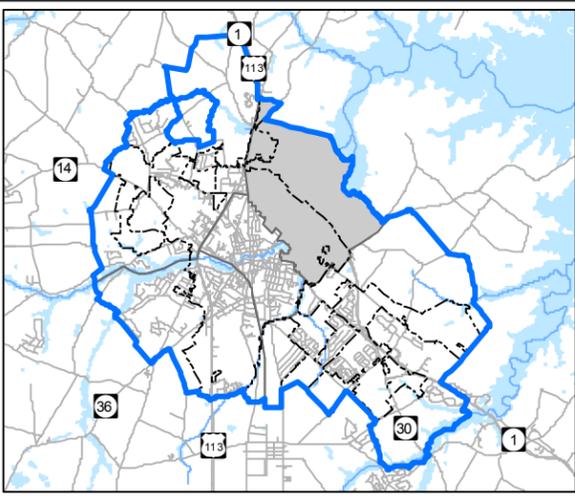
**City of Milford
Comprehensive Plan
Northwest Neighborhood Map
Figure 10A**

-  Urban Growth Boundary
-  Municipal Boundary
-  Business Park
-  Downtown Development District
-  Highway/Commercial
-  Industrial
-  Institutional
-  Low Density Residential
-  Mixed Use Commercial/Low Density Residential
-  Moderate Density Residential
-  Open Space
-  Proposed High Density Residential
-  Proposed Highway/Commercial
-  Proposed Industrial
-  Proposed Institutional
-  Proposed Low Density Residential
-  Proposed Mixed Use Commercial/Low Density Resident
-  Proposed Moderate Density Residential
-  Proposed Open Space



Date: 4/28/2016 User Name: RPierce
2016_Northwest_Neighborhood



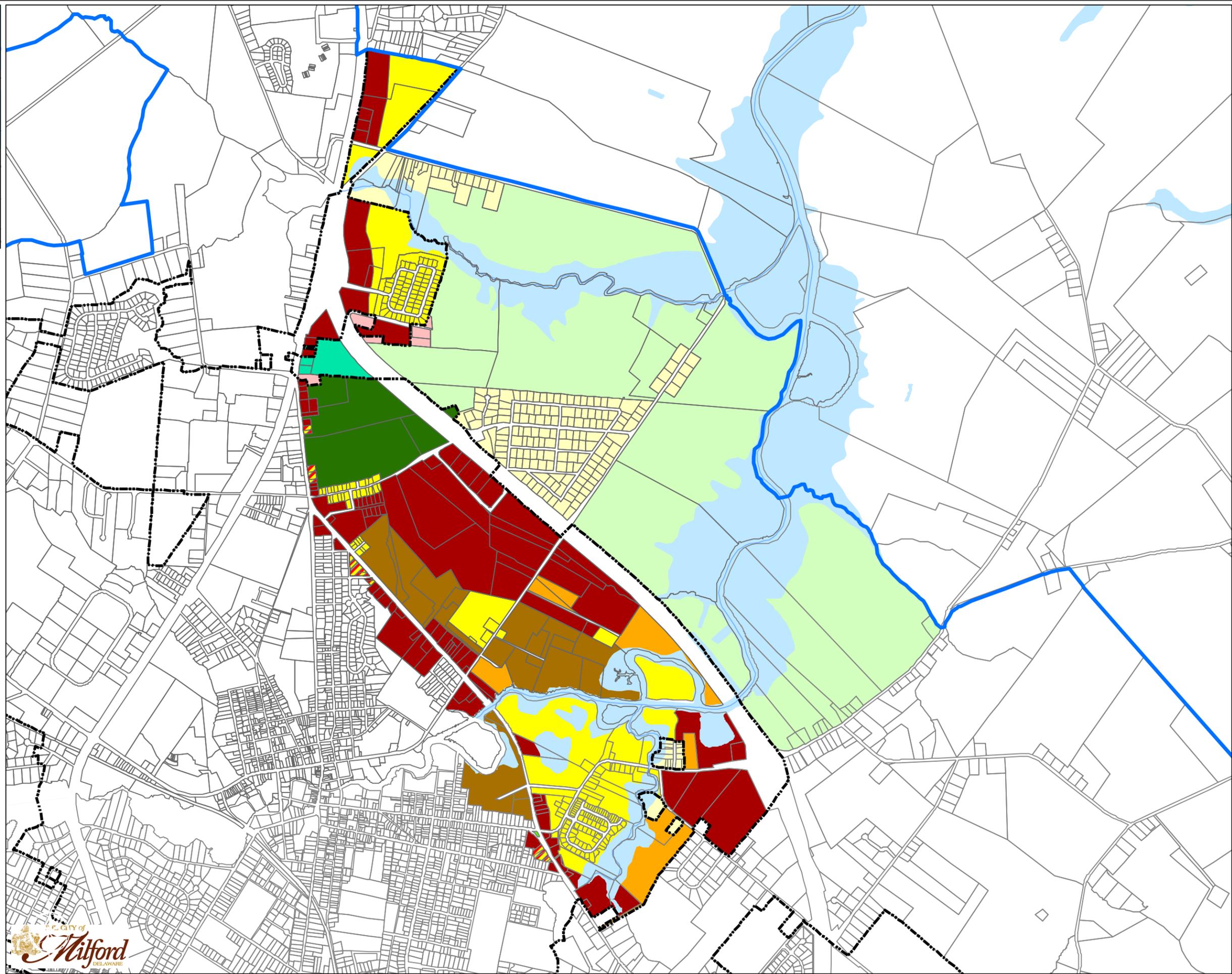


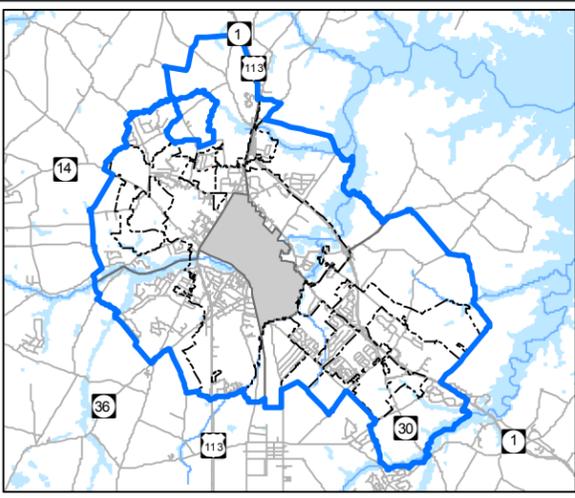
**City of Milford
Comprehensive Plan
Northeast Neighborhood Map
Figure 10B**

-  Urban Growth Boundary
-  Municipal Boundary
-  Business Park
-  Downtown Development District
-  Highway/Commercial
-  Industrial
-  Institutional
-  Low Density Residential
-  Mixed Use Commercial/Low Density Residential
-  Moderate Density Residential
-  Open Space
-  Proposed High Density Residential
-  Proposed Highway/Commercial
-  Proposed Industrial
-  Proposed Institutional
-  Proposed Low Density Residential
-  Proposed Mixed Use Commercial/Low Density Resident
-  Proposed Moderate Density Residential
-  Proposed Open Space



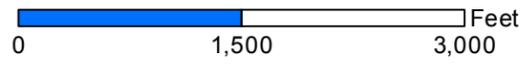
Date: 4/28/2016 User Name: RPierce
2016_Northeast_Neighborhood



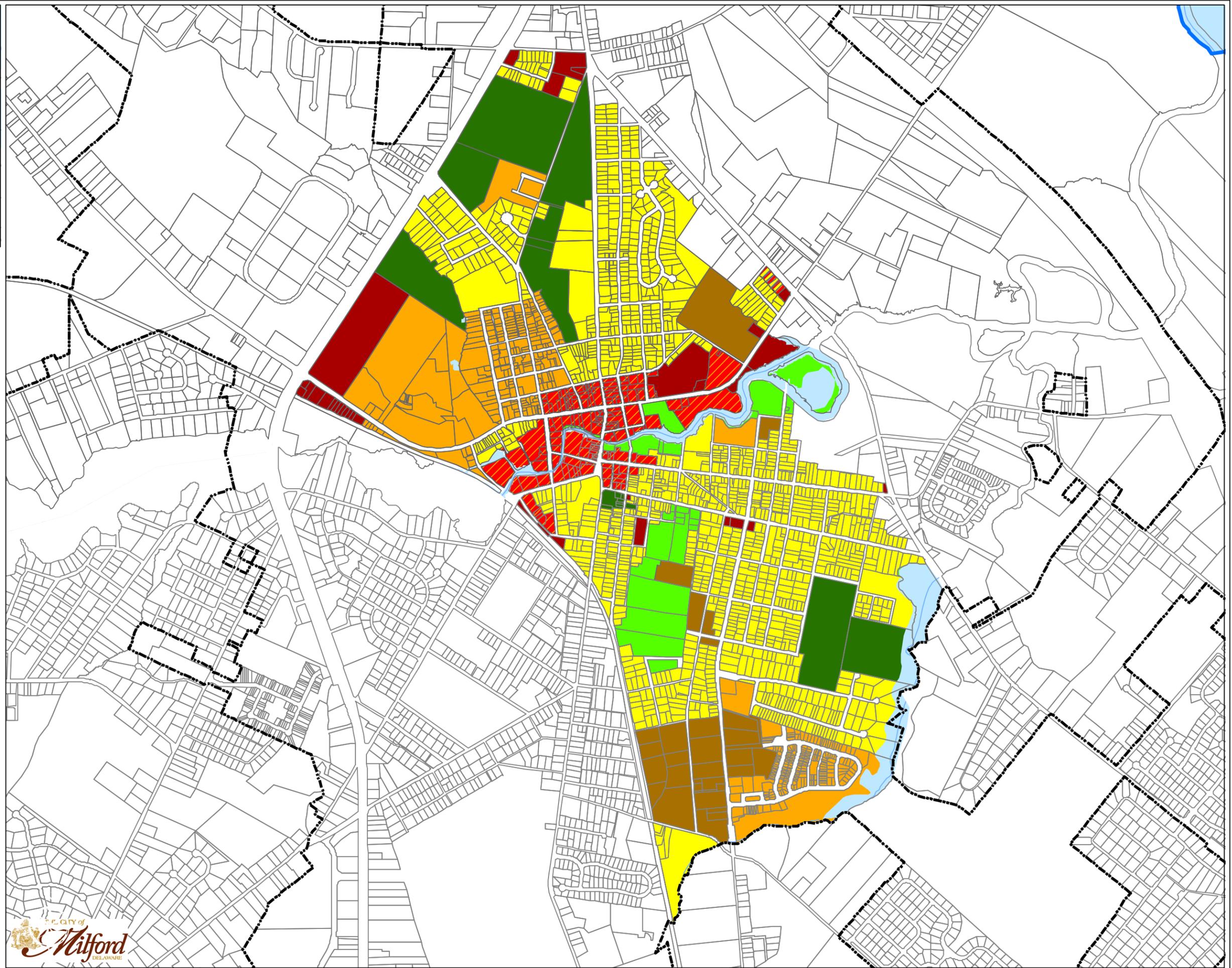


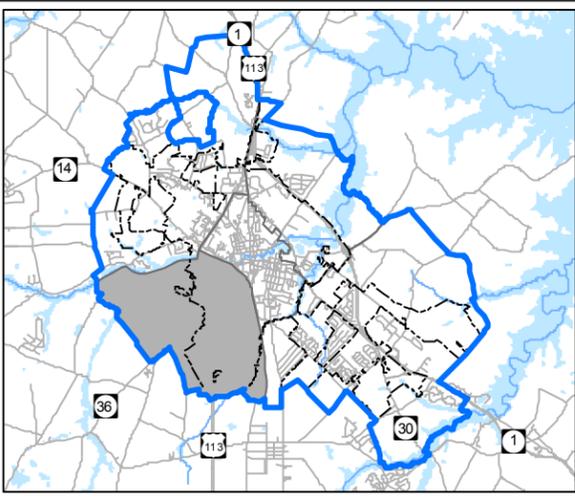
**City of Milford
Comprehensive Plan
Town Center Neighborhood Map
Figure 10C**

-  UrbanGrowthBoundary
-  MunicipalBoundary
-  Business Park
-  Downtown Development District
-  Highway/Commercial
-  Industrial
-  Institutional
-  Low Density Residential
-  Mixed Use Commercial/Low Density Residential
-  Moderate Density Residential
-  Open Space
-  Proposed High Density Residential
-  Proposed Highway/Commercial
-  Proposed Industrial
-  Proposed Institutional
-  Proposed Low Density Residential
-  Proposed Mixed Use Commercial/Low Density Resident
-  Proposed Moderate Density Residential
-  Proposed Open Space



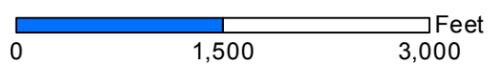
Date: 4/28/2016 User Name: RPierce
2016_TownCenter_Neighborhood



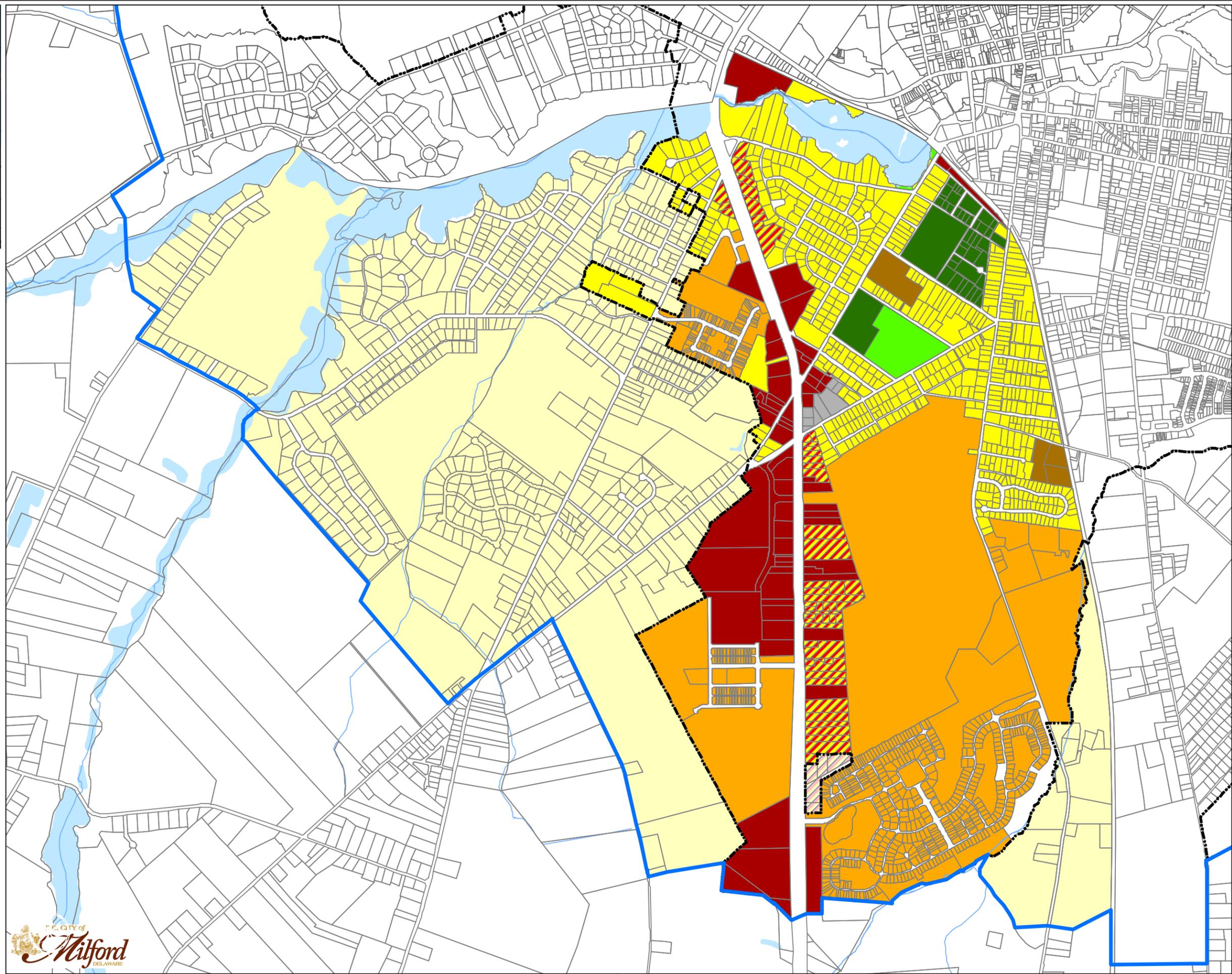


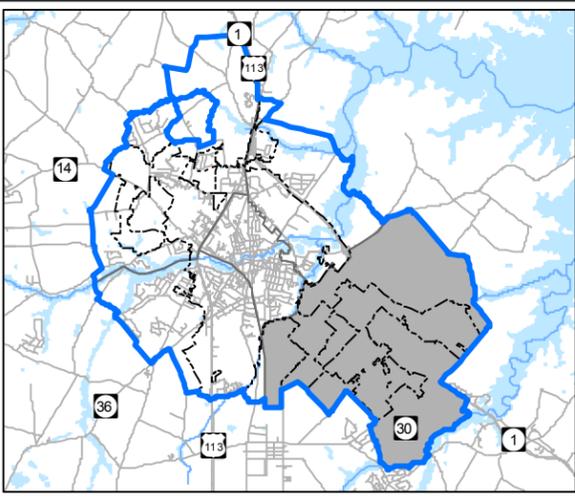
**City of Milford
Comprehensive Plan
Southwest Neighborhood Map
Figure 10D**

-  Urban Growth Boundary
-  Municipal Boundary
-  Business Park
-  Downtown Development District
-  Highway/Commercial
-  Industrial
-  Institutional
-  Low Density Residential
-  Mixed Use Commercial/Low Density Residential
-  Moderate Density Residential
-  Open Space
-  Proposed High Density Residential
-  Proposed Highway/Commercial
-  Proposed Industrial
-  Proposed Institutional
-  Proposed Low Density Residential
-  Proposed Mixed Use Commercial/Low Density Resident
-  Proposed Moderate Density Residential
-  Proposed Open Space



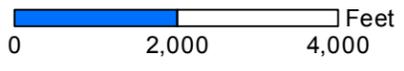
Date: 4/28/2016 User Name: RPierce
2016_Southwest_Neighborhood



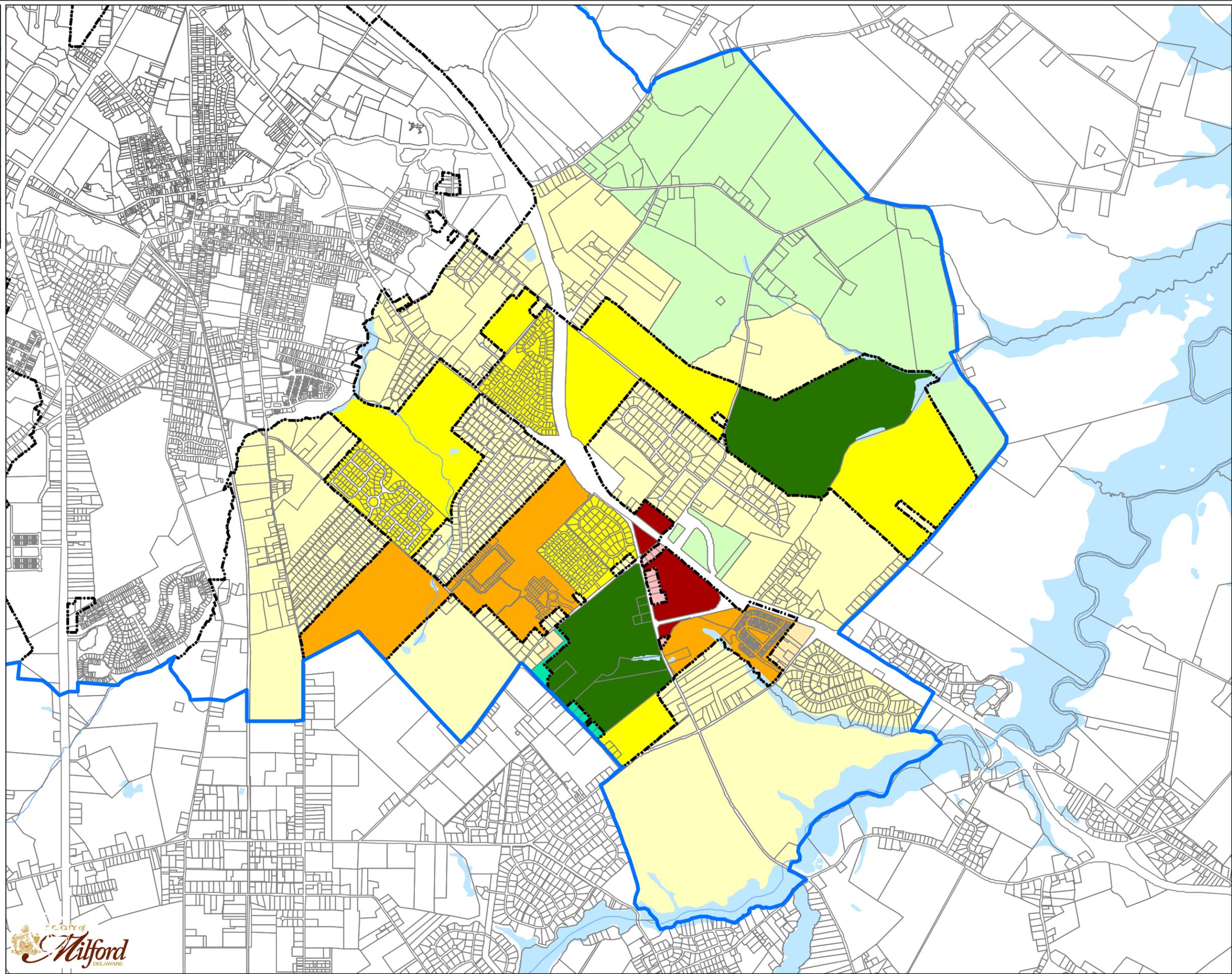


**City of Milford
Comprehensive Plan
Southeast Neighborhood Map
Figure 10E**

-  Urban Growth Boundary
-  Municipal Boundary
-  Business Park
-  Downtown Development District
-  Highway/Commercial
-  Industrial
-  Institutional
-  Low Density Residential
-  Mixed Use Commercial/Low Density Residential
-  Moderate Density Residential
-  Open Space
-  Proposed High Density Residential
-  Proposed Highway/Commercial
-  Proposed Industrial
-  Proposed Institutional
-  Proposed Low Density Residential
-  Proposed Mixed Use Commercial/Low Density Resident
-  Proposed Moderate Density Residential
-  Proposed Open Space



Date: 4/28/2016 User Name: RPierce
2016_Southeast_Neighborhood



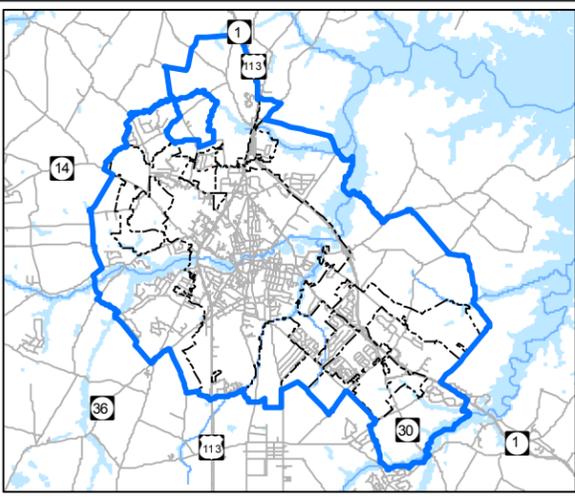
APPENDIX C

PUBLIC PARTICIPATION

2016 COMPREHENSIVE PLAN

DRAFT AS OF 04-28-16

DRAFT

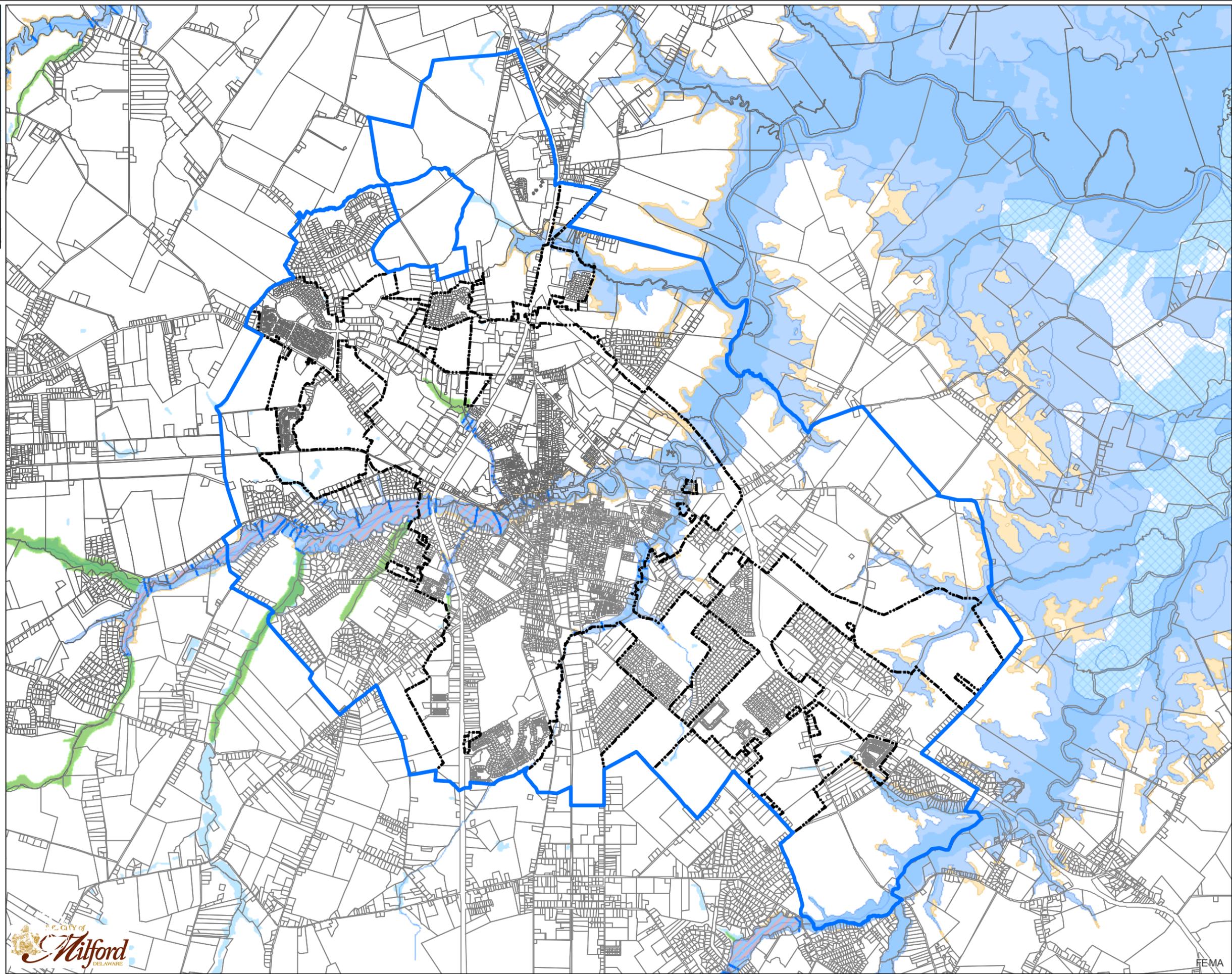


**City of Milford
Comprehensive Plan
FEMA FIRM Map
Figure 3**

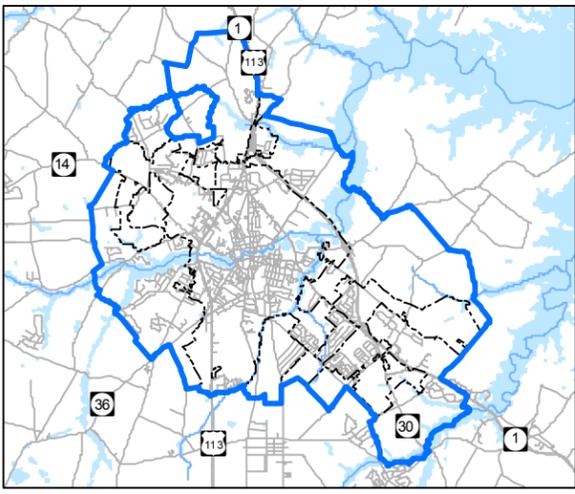
-  UrbanGrowthBoundary
-  MunicipalBoundary
-  Base Flood Elevation
-  A
-  AE
-  AE, FLOODWAY
-  VE
-  X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD



Date: 4/29/2016 User Name: RPierce
2016_FEMA_FIRM

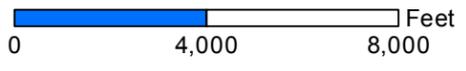


FEMA

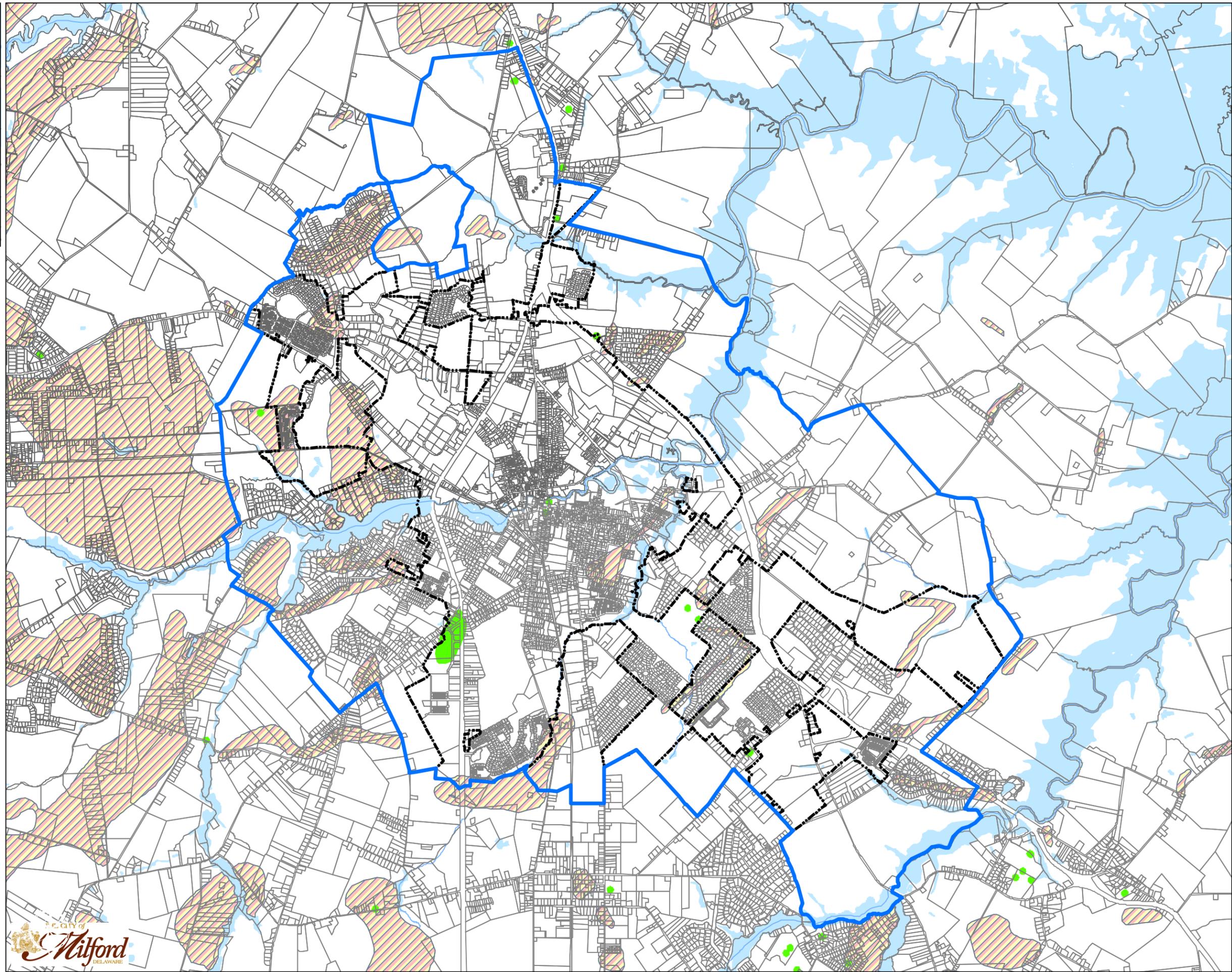


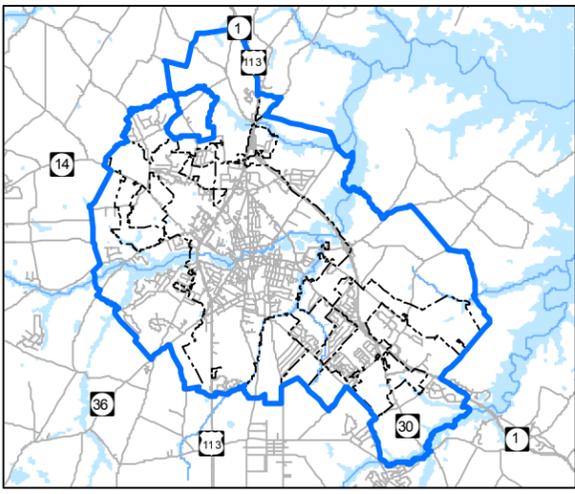
**City of Milford
Comprehensive Plan
Sourcewater Protection Plan
Figure 3A**

-  UrbanGrowthBoundary
-  MunicipalBoundary
-  Well Head Protection Areas
-  Groundwater Recharge Areas



Date: 4/29/2016 User Name: RPierce
2016_Sourcewater_Protection



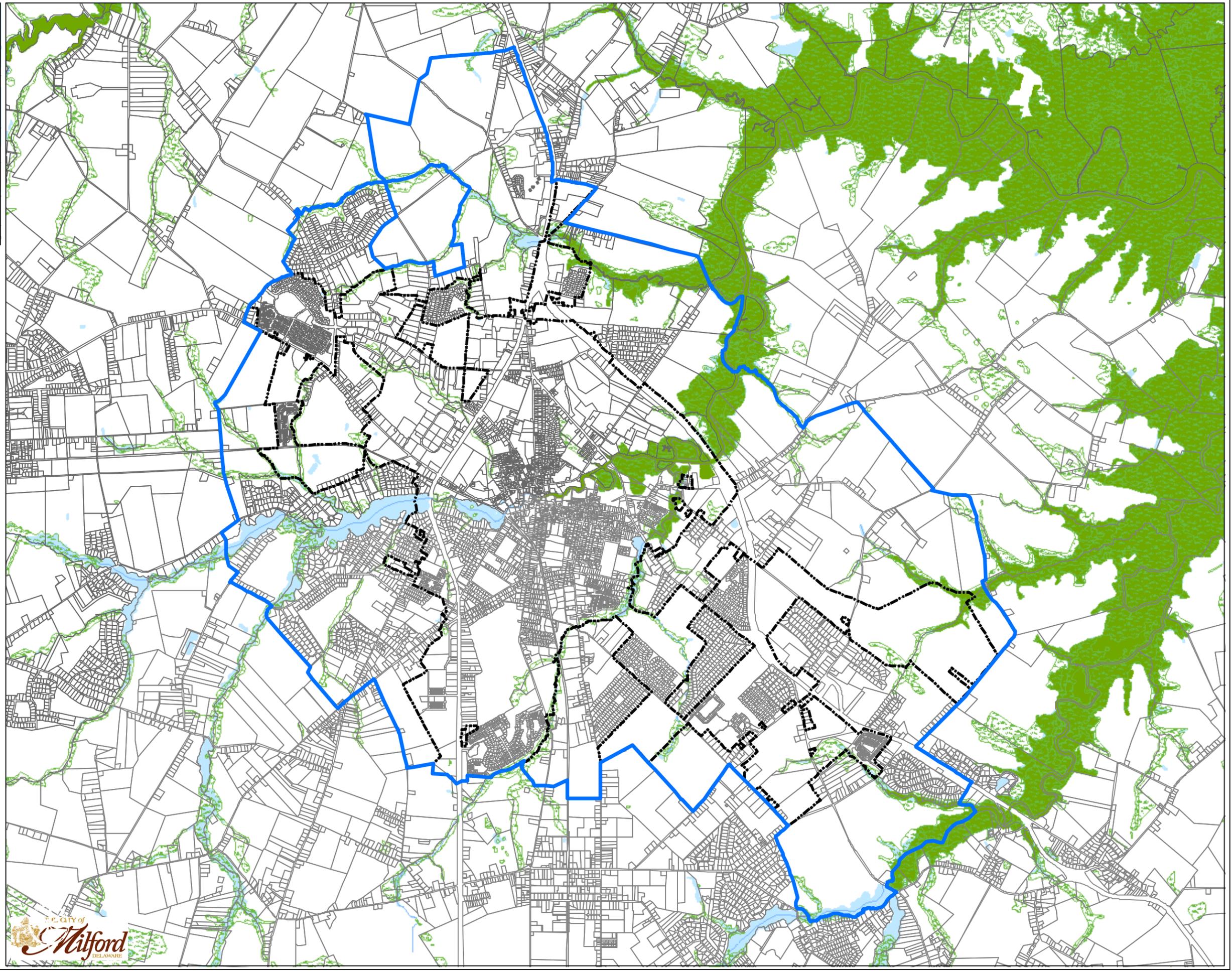


**City of Milford
Comprehensive Plan
Wetlands
Figure 3B**

-  Urban Growth Boundary
-  Municipal Boundary
-  Wetlands
-  Tidal Wetlands



Date: 4/29/2016 User Name: RPierce
2016_Wetlands



Chapter 130 - FLOODPLAIN MANAGEMENT¹¹

Footnotes:

--- (1) ---

Editor's note—Ord. No. 2014-16, §§ 1, 2, adopted Jan. 26, 2015, repealed the former ch. 130, §§ 130-1—130-27, and enacted a new chapter as set out herein. The former Ch. 130 pertained to similar subject matter and derived from an ordinance adopted Sept. 14, 1992.

Cross reference— Building construction, ch. 88; subdivision of land, ch. 200; zoning, ch. 230.

ARTICLE I - General Provisions

§ 130-1. - Findings.

The Federal Emergency Management Agency (FEMA) has identified special flood hazard areas within the boundaries of the City of Milford. Special flood hazard areas are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare. Development that is inadequately elevated, improperly floodproofed, or otherwise unprotected from flood damage also contributes to the flood loss.

The City of Milford, by resolution, agreed to meet the requirements of the National Flood Insurance Program and was accepted for participation in the program on June 1, 1977. Subsequent to that date or the initial effective date of the City of Milford Flood Insurance Rate Map, all development and new construction as defined herein, are to be compliant with the City of Milford's floodplain management regulations in effect at the time of construction, and all development, new construction, and substantial improvements subsequent to the effective date of these regulations shall be compliant with these regulations.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-2. - Statement of purpose.

It is the purpose of these regulations to promote the public health, safety and general welfare, and to:

- (A) Protect human life, health and welfare;
- (B) Encourage the utilization of appropriate construction practices in order to prevent or minimize flood damage in the future;
- (C) Minimize flooding of water supply and sanitary sewage disposal systems;
- (D) Maintain natural drainage;
- (E) Reduce financial burdens imposed on the community, its governmental units and its residents, by discouraging unwise design and construction of development in areas subject to flooding;
- (F) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (G) Minimize prolonged business interruptions;

- (H) Minimize damage to public facilities and other utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges;
- (I) Reinforce that those who build in and occupy special flood hazard areas should assume responsibility for their actions;
- (J) Minimize the impact of development on adjacent properties within and near floodprone areas;
- (K) Provide that the flood storage and conveyance functions of the floodplain are maintained;
- (L) Minimize the impact of development on the natural and beneficial functions of the floodplain;
- (M) Prevent floodplain uses that are either hazardous or environmentally incompatible; and
- (N) Meet community participation requirements of the National Flood Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R. Section 59.22.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-3. - Areas to which these regulations apply.

These regulations shall apply to all special flood hazard areas within the jurisdiction of the City of Milford, as identified in § 130-4.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-4. - Basis for establishing special flood hazard areas.

For the purposes of these regulations, the following are adopted by reference as a part of these regulations and serve as the basis for establishing special flood hazard areas:

- (A) The FEMA Flood Insurance Study for Sussex County, Delaware and Incorporated Areas dated March 16, 2015 and all subsequent amendments and/or the most recent revision thereof.
- (B) The FEMA Flood Insurance Rate Map for Sussex County, Delaware and Incorporated Areas dated March 16, 2015, and all subsequent amendments and/or the most recent revision thereof.
- (C) Other hydrologic and hydraulic engineering studies and/or maps prepared pursuant to these regulations or for other purposes, and which establish base flood elevations, delineate 100-year floodplains, floodways or other areas of special flood hazard.
- (D) The City of Milford may identify and regulate new local flood hazard or ponding areas. These areas should be delineated and adopted on a "Local Flood Hazard Map" using best available topographic data and locally derived information such as flood of record, historic high water marks or approximate study methodologies.
- (E) Where field surveyed topography indicates that ground elevations are below the closest applicable base flood elevation, even in areas not delineated as a special flood hazard area on a flood hazard map, the area shall be considered as special flood hazard area.

Maps and studies that establish special flood hazard areas are on file at 210 South Walnut Street, Milford, Delaware 19963.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-5. - Abrogation and greater restrictions.

These regulations are not intended to repeal or abrogate any existing ordinances including subdivision regulations, zoning ordinances or building codes. In the event of a conflict between these regulations and any other ordinance, the more restrictive shall govern. These regulations shall not impair any deed restriction, covenant or easement, but the land subject to such interests shall also be governed by these regulations.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-6. - Interpretation.

In the interpretation and application of these regulations, all provisions shall be:

- (A) Considered as minimum requirements;
- (B) Liberally construed in favor of the governing body;
- (C) Deemed neither to limit nor repeal any other powers granted under state statutes; and
- (D) Where a provision of these regulations may be in conflict with a state or Federal law, such state or Federal law shall take precedence, where more restrictive.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-7. - Warning and disclaimer of liability.

The degree of flood protection required by these regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. These regulations do not imply that land outside of the special flood hazard areas or uses that are permitted within such areas will be free from flooding or flood damage. These regulations shall not create liability on the part of the City of Milford, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damage that results from reliance on these regulations or any administrative decision lawfully made thereunder.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-8. - Severability.

Should any section or provision of these regulations be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the regulations as a whole, or any part thereof other than the part so declared to be unconstitutional or invalid.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

ARTICLE II - Definitions

§ 130-9. - Definitions.

Unless specifically defined below, words or phrases used in these regulations shall be interpreted so as to give them the meaning they have in common usage and to give these regulations the most reasonable application.

ACCESSORY STRUCTURE: A structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal structure.

AREA OF SHALLOW FLOODING: A designated Zone AO on a community's Flood Insurance Rate Map with a one percent annual chance or greater of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

BASE FLOOD: The flood having a one percent chance of being equaled or exceeded in any given year; the base flood also is referred to as the 100-year flood (or the 1%-annual-chance flood).

BASE FLOOD DISCHARGE: The volume of water resulting from a Base Flood as it passes a given location within a given time, usually expressed in cubic feet per second (cfs).

BASE FLOOD ELEVATION: The water surface elevation of the base flood in relation to the datum specified on the community's Flood Insurance Rate Map. In areas of shallow flooding, the base flood elevation is the natural grade elevation plus the depth number specified in feet on the Flood Insurance Rate Map, or at least 2 feet if the depth number is not specified.

BASEMENT: Any area of the building having its floor subgrade (below ground level) on all sides.

DEVELOPMENT: Any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, placement of manufactured homes, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

DRY FLOODPROOFING: Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

ELEVATION CERTIFICATE: The National Flood Insurance Program, Elevation Certificate (FEMA Form 086-0-33), used to document building elevations and other information about buildings. When required to be certified, the form shall be completed by a licensed professional land surveyor.

ENCLOSURE BELOW THE LOWEST FLOOR: An unfinished or flood resistant enclosure usable solely for parking of vehicles, building access, or storage, in an area other than a basement.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA): The federal agency with the overall responsibility for administering the National Flood Insurance Program.

FEMA TECHNICAL BULLETIN: A series of guidance documents published by FEMA to provide guidance concerning building performance standards of the National Flood Insurance Program. See sections where specific TBs are identified.

FLOOD OR FLOODING: A general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters, and/or
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

FLOOD DAMAGE-RESISTANT MATERIALS: Any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair. See FEMA Technical Bulletin #2 - Flood Damage-Resistant Materials Requirements and FEMA Technical Bulletin #8 - Corrosion Protection for Metal Connectors in Coastal Areas.

FLOOD INSURANCE RATE MAP (FIRM): An official map on which the Federal Emergency Management Agency has delineated special flood hazard areas to indicate the magnitude and nature of flood hazards, and to designate applicable flood zones.

ZONE A: Special flood hazard areas inundated by the 1% annual chance flood; base flood elevations are not determined.

ZONE AE: Special flood hazard areas subject to inundation by the 1% annual chance flood; base flood elevations are determined; floodways may or may not be determined.

ZONE AO: Areas of shallow flooding, with or without a designated average flood depth.

ZONE X (shaded): Areas subject to inundation by the 500-year flood (0.2% annual chance); areas subject to the 1% annual chance flood with average depths of less than 1 foot or with contributing drainage area less than 1 square mile; and areas protected by levees from the base flood.

ZONE X (unshaded): Areas determined to be outside the 1% annual chance flood and outside the 500-year floodplain.

ZONE VE: Special flood hazard areas subject to inundation by the 1% annual chance flood and subject to high velocity wave action (also referred to as coastal high hazard areas).

LIMIT OF MODERATE WAVE ACTION (LiMWA): The inland limit of the area affected by waves greater than 1.5 feet during the base flood. Base flood conditions between the Zone VE and the LiMWA will be similar to, but less severe than, those in the Zone VE.

FLOOD INSURANCE STUDY: The official report in which the Federal Emergency Management Agency has provided flood profiles, floodway information, and the water surface elevations.

FLOODPLAIN: Any land area susceptible to being inundated by water from any source (see "Flood" or "Flooding").

FLOODPROOFING CERTIFICATE: The National Flood Insurance Program, Floodproofing Certificate for Non-Residential Structures (FEMA Form 86-0-34), used by registered professional engineers and architects to certify dry floodproofing designs.

FLOODWAY: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to pass the base flood discharge such that the cumulative increase in the water surface elevation of the base flood discharge is no more than a designated height.

FREEBOARD: A factor of safety usually expressed in feet above a flood elevation for the purposes of floodplain management. Freeboard tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, obstructed bridge openings, debris and ice jams, and the hydrologic effect of urbanization in a watershed.

FUNCTIONALLY DEPENDENT USE: A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water; the term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

HIGHEST ADJACENT GRADE: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

HISTORIC STRUCTURE: Any structure that is:

- (1) Individually listed in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; or

- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district.

HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSIS: An analysis performed by a professional engineer, licensed in the State of Delaware, in accordance with standard engineering practices as accepted by FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

LETTER OF MAP CHANGE: A Letter of Map Change is an official FEMA determination, by letter, to amend or revise an effective Flood Insurance Rate Map, Flood Boundary and Floodway Map, and Flood Insurance Study. Letters of Map Change include:

LETTER OF MAP AMENDMENT (LOMA): An amendment based on technical data showing that a property was inadvertently included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a special flood hazard area.

LETTER OF MAP REVISION (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. One common type of LOMR, a Letter of Map Revision Based on Fill (LOMR-F), is a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood; in order to qualify for this determination, the fill must have been permitted and placed in accordance with these regulations.

CONDITIONAL LETTER OF MAP REVISION (CLOMR): A formal review and comment as to whether a proposed flood protection project complies with the minimum National Flood Insurance Program requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies; upon submission to and approval of certified as-built documentation, a Letter of Map Revision may be issued.

LOWEST FLOOR: The lowest floor of the lowest enclosed area (including basement) of a structure. This definition excludes an "enclosure below the lowest floor" which is an unfinished or flood resistant enclosure usable solely for parking of vehicles, building access or storage, in an area other than a basement area, provided that such enclosure is built in accordance with the applicable design requirements specified in these regulations for enclosures below the lowest floor.

MANUFACTURED HOME: A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

NEW CONSTRUCTION: Buildings and structures for which the "start of construction" commenced on or after June 1, 1977, including any subsequent improvements to such structures.

PERSON: An individual or group of individuals, corporation, partnership, association, or any other entity, including state and local governments and agencies.

RECREATIONAL VEHICLE: A vehicle which is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light duty truck, and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

SPECIAL FLOOD HAZARD AREA: The land in the floodplain subject to a one percent or greater chance of flooding in any given year. Special flood hazard areas are designated by the Federal Emergency Management Agency in Flood Insurance Studies and on Flood Insurance Rate Maps as Zones A, AE, AO,

and Zone VE. The term includes areas shown on other flood hazard maps that are specifically listed or otherwise described in § 130-4.

START OF CONSTRUCTION: The date of issuance of permits for new construction and substantial improvements, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory structures, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STRUCTURE (OR BUILDING): For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

SUBSTANTIAL DAMAGE: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT: Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified prior to the application for a development permit by the local code enforcement official and which are the minimum necessary to assure safe living conditions.

VIOLATION: The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the Elevation Certificate, other certifications, or other evidence of compliance required in these regulations is presumed to be in violation until such time that documentation is provided.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

ARTICLE III - Administration

§ 130-10. - Designation of the floodplain administrator.

The Building Inspector is hereby appointed to administer and implement these regulations and is referred to herein as the Floodplain Administrator. The Floodplain Administrator is authorized to: (A) Fulfill the duties and responsibilities set forth in these regulations, (B) Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees, or (C) Enter into a written agreement or written contract with another jurisdiction or agency, or private sector entity to administer specific provisions of these regulations. Administration of any part of these regulations by another entity shall not relieve the community of its responsibilities pursuant to the participation requirements of the National Flood Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R. Section 59.22, as may be hereafter amended.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-11. - Duties and responsibilities of the floodplain administrator.

The duties and responsibilities of the Floodplain Administrator shall include but are not limited to:

- (A) Review applications for permits to determine whether proposed activities will be located in special flood hazard areas.
- (B) Interpret floodplain boundaries and provide flood elevation and flood hazard information.
- (C) Review applications to determine whether proposed activities will be reasonably safe from flooding.
- (D) Review applications to determine whether all necessary permits have been obtained from those Federal, state or local agencies from which prior or concurrent approval is required.
- (E) Verify that applicants proposing to alter or relocate a watercourse have notified adjacent communities and the Delaware Department of Natural Resources and Environmental Control (Division of Watershed Stewardship), and have submitted copies of such notifications to the Federal Emergency Management Agency.
- (F) Issue permits to develop in special flood hazard areas when the provisions of these regulations have been met, or disapprove the same in the event of noncompliance.
- (G) Inspect buildings and lands to determine compliance with these regulations or to determine if noncompliance has occurred or violations have been committed.
- (H) Review submitted Elevation Certificates for completeness.
- (I) Submit to FEMA data and information necessary to maintain flood hazard maps, including hydrologic and hydraulic engineering analyses prepared by or for the City of Milford, corrections to labeling or planimetric details, etc.
- (J) Maintain and permanently keep all records for public inspection that are necessary for the administration of these regulations including Flood Insurance Rate Maps, Letters of Map Amendment and Revision, records of issuance and denial of permits, determinations of whether development is in or out of special flood hazard areas for the purpose of issuing permits, elevation certificates, other required certifications, variances, and records of enforcement actions taken for violations of these regulations.
- (K) Enforce the provisions of these regulations.
- (L) Assist with and coordinate flood hazard map maintenance activities.
- (M) Conduct determinations as to whether existing buildings and structures damaged by any cause and located in special flood hazard areas, have been substantially damaged.
- (N) Make reasonable efforts to notify owners of substantially damaged buildings and structures of the need to obtain a permit prior to repair, rehabilitation, or reconstruction, and to prohibit the non-compliant repair of substantially-damaged buildings except for temporary emergency protective measures necessary to secure a property or stabilize a structure to prevent additional damage.
- (O) Undertake, as determined appropriate by the Floodplain Administrator due to the circumstances, other actions which may include but are not limited to: issuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged structures; coordinating with other Federal, state, and local agencies to assist with substantial damage determinations; providing owners of damaged structures materials and other information related to the proper repair of damaged structures in special flood hazard areas; and assisting owners with National Flood Insurance Program claims for Increased Cost of Compliance payments.

- (P) Notify the Federal Emergency Management Agency when the corporate boundaries of the City of Milford have been modified.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-12. - Permits required.

It shall be unlawful for any person or entity to begin construction or other development which is wholly within, partially within, or in contact with any identified special flood hazard area, as established in § 130-4, including but not limited to: subdivision of land, filling, grading, or other site improvements and utility installations; construction, alteration, remodeling, improvement, replacement, reconstruction, repair, relocation, or expansion of any building or structure; placement or replacement of a manufactured home; recreational vehicles; installation or replacement of storage tanks; or alteration of any watercourse, until a permit is obtained from the City of Milford. No such permit shall be issued until the requirements of these regulations have been met.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-13. - Application required.

Application for a permit shall be made by the owner of the property or his/her authorized agent, herein referred to as the applicant, prior to the actual start of construction. The application shall be on a form furnished for that purpose.

- (A) Application Contents. At a minimum, applications shall include:
 - (1) Site plans drawn to scale showing the nature, location, dimensions, existing and proposed topography of the area in question, the limits of any portion of the site that was previously filled, and the location of existing and proposed structures, excavation, filling, storage of materials, drainage facilities, and other proposed activities.
 - (2) Elevation of the existing natural ground where structures are proposed, referenced to the datum on the Flood Insurance Rate Map, and an Elevation Certificate that shows the ground elevation and proposed building elevations (identified in Section C of the Elevation Certificate as "Construction Drawings").
 - (3) Delineation of special flood hazard areas, floodway boundaries, flood zones, and base flood elevations. Where surveyed natural ground elevations are lower than the base flood elevations, base flood elevations shall be used to delineate the boundary of special flood hazard areas. If proposed, changes in the delineation of special flood hazard areas shall be submitted to and approved by FEMA in accordance with Section § 130- 13(B). Where special flood hazard areas are not delineated or base flood elevations are not shown on the flood hazard maps, the Floodplain Administrator has the authority to require the applicant to use information provided by the Floodplain Administrator, information that is available from other sources, or to determine such information using accepted engineering practices.
 - (4) For subdivision proposals and development proposals containing at least 50 lots or at least 5 acres, whichever is the lesser, and where base flood elevations are not shown on Flood Insurance Rate Maps, hydrologic and hydraulic engineering analyses and studies as required by § 130-19(D).
 - (5) Such other material and information as may be requested by the Floodplain Administrator necessary to determine conformance with these regulations.
 - (6) For work on an existing structure, including any improvement, addition, repairs, alterations, rehabilitation, or reconstruction, sufficient information to determine if the work constitutes substantial improvement, including:

- (a) Documentation of the market value of the structure before the improvement is started or before the damage occurred.
 - (b) Documentation of the actual cash value of all proposed improvement work, or the actual cash value of all work necessary to repair and restore damage to the before damaged condition, regardless of the amount of work that will be performed.
- (7) Certifications and/or technical analyses prepared or conducted by an appropriate design professional licensed in the State of Delaware, as appropriate to the type of development activity proposed and required by these regulations:
- (a) Floodproofing Certificate for dry floodproofed non-residential structures, as required in § 130-28.
 - (b) Certification that flood openings that do not meet the minimum requirements of § 130-27(B)(3)(b) are designed to automatically equalize hydrostatic flood forces.
 - (c) Technical analyses to document that the flood carrying capacity of any watercourse alteration or relocation will not be diminished and documentation of maintenance assurances as required in § 130-30(C).
 - (d) Hydrologic and hydraulic engineering analyses demonstrating that the cumulative effect of proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood by more than one foot in special flood hazard areas where the Federal Emergency Management Agency has provided base flood elevations but has not delineated a floodway, as required by § 130-30(B).
 - (e) Hydrologic and hydraulic engineering analyses of any development proposed to be located in an identified floodway, as required by § 130-30(A).
 - (f) Hydrologic and hydraulic engineering analyses to develop base flood elevations for subdivisions and large-lot developments, as required by § 130-19(D) or otherwise required by the Floodplain Administrator.
- (B) Right to Submit New Technical Data. The applicant has the right to seek a Letter of Map Change and to submit new technical data to FEMA regarding base maps, topography, special flood hazard area boundaries, floodway boundaries, and base flood elevations. Such submissions shall be prepared in a format acceptable by FEMA and the Floodplain Administrator shall be notified of such submittal. Submittal requirements and processing fees shall be the responsibility of the applicant.
- (C) Requirement to Submit New Technical Data. The Floodplain Administrator shall notify FEMA of physical changes affecting flood hazard areas and flooding conditions by submitting technical or scientific data as soon as practicable, but not later than six months after the date such information becomes available. The Floodplain Administrator has the authority to require applicants to submit technical data to FEMA for Letters of Map Change.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-14. - Review, approval or disapproval.

(A) Review. The Floodplain Administrator shall:

- (1) Review applications for development in special flood hazard areas to determine the completeness of information submitted. The applicant shall be notified of incompleteness or additional information required to support the application.
- (2) Review applications for compliance with these regulations after all information required in § 130-13 or identified and required by the Floodplain Administrator has been received.

- (3) Review all permit applications to assure that all necessary permits have been received from those federal, state or local governmental agencies from which prior approval is required. The applicant shall be responsible for obtaining such permits, including but not limited to:
 - (a) Permits issued by the U.S. Army Corps of Engineers under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, and the Delaware Environmental Protection Agency under Section 401 of the Clean Water Act.
 - (b) Permits required by the State of Delaware.
- (B) Approval or Disapproval. The Floodplain Administrator shall approve applications that comply with the applicable requirements of these regulations. The Floodplain Administrator shall disapprove applications for proposed development that do not comply with the applicable provisions of these regulations and shall notify the applicant of such disapproval, in writing, stating the reasons for disapproval.
- (C) Expiration of Permit. A permit is valid provided the actual start of construction occurs within 180 days of the date of permit issuance. If the actual start of construction is not within 180 days of the date of permit issuance, requests for extensions shall be submitted in writing. Upon reviewing the request and the permit for continued compliance with these regulations, the Floodplain Administrator may grant, in writing, one or more extensions of time, for periods not more than 180 days each.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-15. - Inspections.

The Floodplain Administrator shall make periodic inspections of development permitted in special flood hazard areas, at appropriate times throughout the period of construction in order to monitor compliance. Such inspections may include:

- (A) Stake-out inspection, to determine location on the site relative to the special flood hazard area and floodway.
- (B) Foundation inspection, upon placement of the lowest floor and prior to further vertical construction, to collect information or certification of the elevation of the lowest floor.
- (C) Enclosure inspection, including crawlspaces, to determine compliance with applicable provisions.
- (D) Utility inspection, upon installation of specified equipment and appliances, to determine appropriate location with respect to the base flood elevation.
- (E) Storage of materials.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-16. - Submissions required prior to issuance of a certificate of occupancy.

The following certifications are required to be submitted by the permittee for development that is permitted in special flood hazard areas prior to the issuance of a Certificate of Occupancy:

- (A) For new or substantially improved residential structures or nonresidential structures that have been elevated, an Elevation Certificate that shows the ground elevation and finished elevations (identified in Section C of the Elevation Certificate as "Finished Construction").
- (B) For nonresidential structures that have been dry floodproofed, a Floodproofing Certificate based on "Finished Construction" (identified in Section II).

- (C) For all development activities subject to the requirements of § 130-13(B), a Letter of Map Revision shall be provided.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-17. - Flood insurance rate map use and interpretation.

The Floodplain Administrator shall make interpretations, where needed, as to the exact location of special flood hazard areas, floodplain boundaries, and floodway boundaries. The following shall apply to the use and interpretation of special flood hazard maps and data:

- (A) In FEMA-identified special flood hazard areas where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified special flood hazard areas, any other flood hazard data available from a federal, state, or other source shall be reviewed and reasonably used. When a Preliminary Flood Insurance Rate Map has been provided by FEMA to identify base flood elevation where such elevations were not previously shown, the base flood elevations on the Preliminary Flood Insurance Rate Map shall be used.
- (B) Special flood hazard area delineations, base flood elevations, and floodway boundaries on FEMA maps and in FEMA studies shall take precedence over delineations, base flood elevations, and floodway boundaries by any other source that reflect a reduced special flood hazard area, reduced floodway width and/or lower base flood elevations.
- (C) Other sources of data shall be reasonably used, with the approval of the Floodplain Administrator, if they show increased base flood elevations and/or larger floodway areas than are shown on FEMA flood maps and studies.
- (D) Where field surveyed topography indicates that ground elevations are below the base flood elevation, even in areas not delineated as a special flood hazard on a flood hazard map, the area shall be considered as special flood hazard area.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

ARTICLE IV - Requirements in All Special Flood Hazard Areas

§ 130-18. - Application of requirements.

The general requirements of this section apply to all development proposed within special flood hazard areas identified in § 130-4.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-19. - Subdivisions and developments.

- (A) All subdivision and development proposals shall be consistent with the need to minimize flood damage and are subject to all applicable standards in these regulations.
- (B) All subdivision and development proposals shall have utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- (C) All subdivision and developments proposals shall have adequate drainage provided to reduce exposure to flood damage.

- (D) All subdivision proposals and development proposals containing at least 50 lots or at least 5 acres, whichever is the lesser, in FEMA-delineated special flood hazard areas where base flood elevation data are not available, shall be supported by hydrologic and hydraulic engineering analyses that determine base flood elevations and floodway delineations. The analyses shall be prepared by a licensed professional engineer in a format required by FEMA for a Conditional Letter of Map Revision or Letter of Map Revision. Submittal requirements and processing fees shall be the responsibility of the applicant.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-20. - Protection of water supply and sanitary sewage systems.

- (A) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems.
- (B) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into systems and discharges from systems into floodwaters.
- (C) On-site waste disposal systems shall be located to avoid impairment to or contamination from them during conditions of flooding.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-21. - Buildings and structures.

All new construction of buildings and structures, including placement of manufactured homes and substantial improvements to existing buildings and structures, that are to be located, in whole or in part, in special flood hazard areas shall meet the following requirements.

- (A) Be designed (or modified) and constructed to safely resist flood loads. The construction shall provide a complete load path capable of transferring all loads from their point of origin through the load-resisting elements to the foundation. Buildings and structures shall be designed, connected and anchored to resist flotation, collapse or permanent lateral movement due to structural loads and stresses from flooding equal to the base flood elevation, including hydrodynamic and hydrostatic loads and the effects of buoyancy.
- (B) Be constructed by methods and practices that minimize flood damage.
- (C) Use flood damage-resistant materials below the elevation of the lowest floor. See FEMA Technical Bulletin #2 - Flood Damage-Resistant Materials Requirements and FEMA Technical Bulletin #8 - Corrosion Protection for Metal Connectors in Coastal Areas.
- (D) Have electrical systems, equipment and components, and heating, ventilating, air conditioning, and plumbing appliances, plumbing fixtures, duct systems, and other service equipment located at or above the base flood elevation. Electrical wiring systems are permitted to be located below the elevation of the lowest floor provided they conform to the provisions of the electrical part of this code for wet locations. If replaced as part of a substantial improvement, electrical systems, equipment and components, and heating, ventilation, air conditioning, and plumbing appliances, plumbing fixtures, duct systems, and other service equipment shall meet the requirements of this section. See FEMA Technical Bulletin #4 - Elevator Installation.
- (E) As an alternative to § 130-21(D), electrical systems, equipment and components, and heating, ventilating, air conditioning, and plumbing appliances, plumbing fixtures, duct systems, and other service equipment are permitted to be located below the elevation of the lowest floor provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of the base flood.

- (F) Meet the specific requirements of Article V.
- (G) In a special flood hazard area with more than one designation (Zones A, AE, and AO, floodway), meet the requirements of the most restrictive designation.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-22. - Fill.

- (A) Disposal of fill, including but not limited to rubble, construction debris, woody debris, and trash, shall not be permitted in special flood hazard areas.
- (B) Where permitted by Article V (Zones A, AE, and AO), fill placed for the purpose of raising the ground level and to support a building or structure shall meet the following requirements:
 - (1) Extend laterally from the building footprint to provide for adequate access, as a function of use; the Floodplain Administrator may seek advice from the State Fire Marshal's Office and/or the local fire services agency.
 - (2) Placed and compacted to provide for stability under conditions of rising and falling floodwaters and resistance to erosion, scour, and settling.
 - (3) Consist of soil or rock materials only.
 - (4) Sloped no steeper than one vertical on two horizontal, unless approved by the Floodplain Administrator.
 - (5) Designed with provisions for adequate drainage and no adverse effect on adjacent properties.
- (C) Fill placed for a purpose other than to support a building or structure shall meet the requirements of § 130-22(B)(2) through (B)(5).

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-23. - Historic structures.

Repair, alteration, or rehabilitation of historic structures shall be subject to the requirements of these regulations unless a determination is made that compliance with these regulations will preclude the structure's continued designation as a historic structure and a variance is granted in accordance with Article VI and such variance is the minimum necessary to preserve the historic character and design of the structure.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-24. - Recreational vehicles.

- (A) Recreational vehicles in special flood hazard areas shall be fully licensed and ready for highway use, and shall be placed on a site for less than 180 consecutive days.
- (B) Recreational vehicles that are not fully licensed and ready for highway use, or that are to be placed on a site for more than 180 consecutive days, shall meet the requirements of § 130-27(C) for manufactured homes.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-25. - Gas or liquid storage tanks.

- (A) Underground tanks in special flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.
- (B) Above-ground tanks in special flood hazard areas shall be elevated and anchored to or above the base flood elevation or shall be anchored at-grade and designed and constructed to prevent flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.
- (C) In special flood hazard areas, tank inlets, fill openings, outlets and vents shall be:
 - (1) At or above the base flood elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the base flood.
 - (2) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

ARTICLE V - Specific Requirements in Special Flood Hazard Areas

§ 130-26. - General requirements.

In addition to the general requirements of Article IV, the requirements of this section apply to all development proposed in special flood hazard areas.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-27. - Residential structures and residential portions of mixed use structures.

(A) Elevation Requirements

- (1) The lowest floor (including basement) shall be elevated to or above the base flood elevation.
- (2) In areas of shallow flooding (Zone AO), the lowest floor (including basement) shall be elevated at least as high above the highest adjacent grade as the depth number specified in feet on the Flood Insurance Rate Map or at least 2 feet if a depth number is not specified; adequate drainage paths shall be provided to guide floodwaters around and away from the structure.
- (3) Enclosures below the lowest floor shall meet the requirements of § 130-27(B).

(B) Enclosures Below the Lowest Floor

- (1) Enclosures below the lowest floor shall be used solely for parking of vehicles, building access, crawlspaces, or limited storage.
- (2) Enclosures below the lowest floor shall be constructed using flood damage-resistant materials. See FEMA Technical Bulletin #2 - Flood Damage-Resistant Materials Requirements.
- (3) Enclosures below the lowest floor (including crawlspaces) shall be provided with flood openings which shall meet the following criteria (see FEMA Technical Bulletin #1 - Openings in Foundation Walls and Walls of Enclosures):
 - (a) There shall be a minimum of two openings on different sides of each enclosed area; if a building has more than one enclosed area below the base flood elevation, each area shall have openings on exterior walls.

- (b) The total net area of all openings shall be at least 1 square inch for each square foot of enclosed area, or the openings shall be designed and certified by a registered engineer or architect to provide for equalization of hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwaters.
 - (c) The bottom of each opening shall be 1 foot or less above the adjacent ground level.
 - (d) Any louvers, screens or other opening covers shall allow the automatic flow of floodwaters into and out of the enclosed area.
 - (e) Where installed in doors and windows, openings that meet requirements of § 130-27(B)(3)(a) through (d), are acceptable; however, doors and windows without installed openings do not meet the requirements of this section.
- (4) Crawlspace shall have the finished interior ground level equal to or higher than the outside finished ground level on at least one entire side of the foundation wall.
- (C) Manufactured Homes. New or replacement manufactured homes, including substantial improvement of existing manufactured homes, shall:
- (1) Be elevated on a permanent, reinforced foundation that raises the lowest floor to or above the base flood elevation and is otherwise in accordance with § 130-27(A).
 - (2) Be installed in accordance with the anchor and tie-down requirements of the building code or the manufacturer's written installation instructions and specifications.
 - (3) Have enclosures below the elevated manufactured home, if any, meet the requirements of § 130-27(B).

For the purpose of this requirement, the lowest floor of a manufactured home is the bottom of the lowest horizontal supporting member of the lowest floor.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-28. - Nonresidential structures and nonresidential portions of mixed use structures.

(A) Elevation Requirements.

- (1) The lowest floor (including basement) shall be elevated to or above the base flood elevation or the structure shall be dry floodproofed in accordance with § 130-28(B).
- (2) In areas of shallow flooding (Zone AO), if not dry floodproofed, the lowest floor (including basement) shall be elevated at least as high above the highest adjacent grade as the depth number specified in feet on the Flood Insurance Rate Map or at least 2 feet if a depth number is not specified; adequate drainage paths shall be provided to guide floodwaters around and away from the structure.
- (3) Enclosures below the lowest floor, if not dry floodproofed, shall meet the requirements of § 130-27(B).

(B) Dry Floodproofing Requirements. Dry floodproofed structures, together with attendant utility and sanitary facilities, shall:

- (1) Be designed to be dry floodproofed such that the structure is watertight with walls and floors substantially impermeable to the passage of water to the level of the base flood elevation. In areas of shallow flooding (Zone AO), the structure shall be dry floodproofed at least as high above the highest adjacent grade as the depth number specified in feet on the Flood Insurance Rate Map or at least 2 feet if a depth number is not specified.
- (2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

- (3) Be certified by a licensed professional engineer or licensed professional architect with a Floodproofing Certificate, that the design and methods of construction meet the requirements of this section. Refer to FEMA Technical Bulletin #3 - Non-Residential Floodproofing - Requirements and Certification for guidance.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-29. - Accessory structures.

Accessory structures shall meet the requirements of these regulations. Accessory structures that have a footprint of no more than 200 square feet may be allowed without requiring elevation or floodproofing provided such structures meet all of the following requirements:

- (A) Useable only for parking or limited storage;
- (B) Constructed with flood damage-resistant materials below the base flood elevation;
- (C) Constructed and placed to offer the minimum resistance to the flow of floodwaters;
- (D) Firmly anchored to prevent flotation, collapse, and lateral movement;
- (E) Electrical service and mechanical equipment elevated to or above the level of the base flood elevation; and
- (F) Equipped with flood openings that meet the requirements of § 130-27(B).
- (G) For guidance, see FEMA Technical Bulletin #7 - Wet Floodproofing Requirements.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-30. - Protection of flood-carrying capacity.

- (A) Development in Floodways. Within any floodway area designated on the Flood Insurance Rate Map, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic engineering analysis that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Such technical data shall be submitted to the Floodplain Administrator and to FEMA. The analyses shall be prepared by a licensed professional engineer in a format required by FEMA for a Conditional Letter of Map Revision or Letter of Map Revision. Submittal requirements and processing fees shall be the responsibility of the applicant.

The proposed development activity may be permitted if the analyses demonstrate that the activity:

- (1) Will not result in any increase in the base flood elevation; or
- (2) Will result in an increase in the base flood elevation, provided a Conditional Letter of Map Revision has been issued by FEMA and the applicant completes all of the following:
 - (a) Submits technical data required in § 130-13(A)(8)(d);
 - (b) Evaluates alternatives which would not result in increased base flood elevations and an explanation why these alternatives are not feasible;
 - (c) Certifies that no structures are located in areas which would be impacted by the increased base flood elevation;
 - (d) Documents that individual legal notices have been delivered to all impacted property owners to explain the impact of the proposed action on their properties;

- (e) Requests and receives concurrence of the Mayor of the City of Milford and the Chief Executive Officer of any other community impacted by the proposed actions; and
 - (f) Notifies the Delaware Department of Natural Resources and Environmental Control (Division of Watershed Stewardship).
- (B) Development in Areas with Base Flood Elevations but No Floodways. For development activities in a special flood hazard area with base flood elevations but no designated floodways, the applicant shall develop hydrologic and hydraulic engineering analyses and technical data reflecting the proposed activity and shall submit such analyses and data to the Floodplain Administrator and to FEMA. The analyses shall be prepared by a licensed professional engineer in a format required by FEMA for a Conditional Letter of Map Revision or Letter of Map Revision. Submittal requirements and processing fees shall be the responsibility of the applicant.

The proposed development activity may be permitted if the analyses demonstrate that the cumulative effect of the proposed development activity, when combined with all other existing and potential special flood hazard area encroachments will not increase the base flood elevation more than 1.0 foot at any point.

- (C) Deliberate Alterations of a Watercourse. For the purpose of these regulations, a watercourse is deliberately altered when a person causes a change to occur within its banks. Deliberate changes to a watercourse include, but are not limited to: widening, deepening or relocating of the channel; installation of culverts; construction of bridges, and excavation or filling of the channel or watercourse banks.

For any proposed deliberate alteration of a watercourse, the applicant shall develop hydrologic and hydraulic engineering analyses and technical data reflecting such changes and submit such technical data to the Floodplain Administrator and to FEMA. The analyses shall be prepared by a licensed professional engineer in a format required by FEMA for a Conditional Letter of Map Revision or Letter of Map Revision. Submittal requirements and processing fees shall be the responsibility of the applicant.

The proposed alteration of a watercourse may be permitted upon submission, by the applicant, of the following:

- (1) Documentation of compliance with § 130-30(A) if the alteration is in a floodway or § 130-30(B) if the alteration is in a watercourse with base flood elevations but no floodway.
- (2) A description of the extent to which the watercourse will be altered or relocated as a result of the proposed development.
- (3) A certification by a licensed professional engineer that the bankful flood-carrying capacity of the watercourse will not be diminished.
- (4) Evidence that adjacent communities, the U.S. Army Corps of Engineers, and the Delaware Department of Natural Resources and Environmental Control (Division of Watershed Stewardship) have been notified of the proposal and evidence that such notifications have been submitted to the Federal Emergency Management Agency.
- (5) Evidence that the applicant shall be responsible for providing the necessary maintenance for the altered or relocated portion of the watercourse so that the flood carrying capacity will not be diminished. The Floodplain Administrator may require the permit holder to enter into an agreement with City of Milford specifying the maintenance responsibilities; if an agreement is required, the permit shall be conditioned to require that the agreement be recorded on the deed of the property which shall be binding on future owners.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

ARTICLE VI - Variances

§ 130-31. - Variances.

The City of Milford's Board of Adjustment shall have the power to authorize, in specific cases, such variances from the requirements of these regulations, not inconsistent with Federal regulations, as will not be contrary to the public interest where, owing to special conditions of the lot or parcel, a literal enforcement of the provisions of these regulations would result in unnecessary hardship.

(A) Application for a Variance.

- (1) Any owner, or agent thereof, of property for which a variance is sought shall submit an application for a variance to the Floodplain Administrator.
- (2) At a minimum, such application shall contain the following information: Name, address, and telephone number of the applicant; legal description of the property; parcel map; description of the existing use; description of the proposed use; location of the floodplain; description of the variance sought; and reason for the variance request. Each variance application shall specifically address each of the considerations in § 130-31(B) and the limitations and conditions of § 130-31(C).

(B) Considerations for Variances. In considering variance applications, the Board of Adjustment shall consider and make findings of fact on all evaluations, all relevant factors, requirements specified in other sections of these regulations, and the following factors:

- (1) The danger that materials may be swept onto other lands to the injury of others.
- (2) The danger to life and property due to flooding or erosion damage.
- (3) The susceptibility of the proposed development and its contents (if applicable) to flood damage and the effect of such damage on the individual owner.
- (4) The importance of the services provided by the proposed development to the community.
- (5) The availability of alternative locations for the proposed use which are not subject to, or are subject to less, flooding or erosion damage.
- (6) The necessity to the facility of a waterfront location, where applicable, or if the facility is a functionally dependent use.
- (7) The compatibility of the proposed use with existing and anticipated development.
- (8) The relationship of the proposed use to the comprehensive plan for that area.
- (9) The safety of access to the property in times of flood for ordinary and emergency vehicles.
- (10) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
- (11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(C) Limitations for Variances

- (1) An affirmative decision on a variance request shall only be issued upon:
 - (a) A showing of good and sufficient cause. A "good and sufficient" cause is one that deals solely with the physical characteristics of the property and cannot be based on the character of the planned construction or substantial improvement, the personal characteristics of the owner or inhabitants, or local provisions that regulate standards other than health and public safety standards.
 - (b) A determination that failure to grant the variance would result in exceptional hardship due to the physical characteristics of the property.

- (c) Increased cost or inconvenience of meeting the requirements of these regulations does not constitute an exceptional hardship to the applicant.
 - (d) A determination that the granting of a variance for development within any designated floodway, or special flood hazard area with base flood elevations but no floodway, will not result in increased flood heights beyond that which is allowed in these regulations.
 - (e) A determination that the granting of a variance will not result in additional threats to public safety; extraordinary public expense, nuisances, fraud on or victimization of the public, or conflict with existing local laws.
 - (f) A determination that the structure or other development is protected by methods to minimize flood damages.
 - (g) A determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (2) Upon consideration of the individual circumstances, the limitations and conditions, and the purposes of these regulations, the Board of Adjustment may attach such conditions to variances as it deems necessary to further the purposes of these regulations.
 - (3) The Board of Adjustment shall notify, in writing, any applicant to whom a variance is granted for a building or structure with a lowest floor elevation below the base flood elevation that the variance is to the floodplain management requirements of these regulations only, and that the cost of federal flood insurance will be commensurate with the increased risk.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

ARTICLE VII - Enforcement

§ 130-32. - Compliance required.

- (A) No structure or land development shall hereafter be located, erected, constructed, reconstructed, repaired, extended, converted, enlarged or altered without full compliance with these regulations and all other applicable regulations which apply to uses within the jurisdiction of these regulations.
- (B) Failure to obtain a permit shall be a violation of these regulations and shall be punishable in accordance with § 130-34.
- (C) Permits issued on the basis of plans and applications approved by the Floodplain Administrator authorize only the specific activities set forth in such approved plans and applications or amendments thereto. Use, arrangement, or construction of such specific activities that is contrary to that authorized shall be deemed a violation of these regulations.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-33. - Notice of violation.

Notices of violation shall be issued in accordance with the requirement of the Building Code Chapter 88.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]

§ 130-34. - Violations and penalties.

Violations and penalties shall be administered in accordance with the requirement of the Building Code Chapter 88.

[Ord. No. 2014-16, §§ 1, 2, 1-26-2015]



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY,
DOVER, DELAWARE 19901

OFFICE OF THE
DIRECTOR

(Milford file)

RECEIVED
OFFICE OF THE DIRECTOR
2009 JUN 10 PM 12 35

TELEPHONE: (302) 739-9950
FAX: (302) 739-7864

Memorandum

To: Constance Holland, Director
Office of State Planning

From: Kathy Bunting-Howarth, Director
Division of Water Resources

Subject: Milford Source Water Ordinance and Comprehensive Land Use Plan

Date: June 8, 2009

DNREC was provided with a copy of the recently modified and adopted City of Milford Source Water Protection Ordinance (SWPO). I believe these changes will improve the City's ability to protect its sources of public drinking water. These changes were accomplished over the past few months of discussion between the City and DNREC staff. I believe that the Milford SWPO, as revised on May 26, 2009, is adequately protective of the City's source water resources and should not be an impediment to the certification of its Comprehensive Land Use Plan.

I appreciate the assistance of the Office of State Planning as we worked with the City of Milford to improve its ordinance. If you have any questions regarding this matter, please let me know.

cc: Lee Ann Walling, DNREC-OTS
John T. Barndt, WSS

Delaware's good nature depends on you!

§ 230-19.5. - Source Water Protection District.

[Added 3-24-2008 by Ord. No. 2008-2]

- A. The purpose of the Source Water Protection District is to protect public health and safety in the City of Milford by minimizing contamination of aquifers, preserving, and protecting existing and potential sources of drinking water supplies. The district shall be established in delineated wellhead protection areas around all public water wells and excellent groundwater recharge potential areas located within the corporate limits of the City of Milford.
- B. Superimposed district; effect on other provisions.
 - (1) To enable the Source Water Protection District to operate in harmony with the land use component of the City's Comprehensive Plan, subdivision and zoning regulations, the Source Water Protection District is created as a special district to be superimposed on other districts contained in the City of Milford's Zoning Ordinance.
 - (2) The requirements and provisions established in this district shall prevail over conflicting requirements of the zoning and subdivision ordinances.
- C. Source water protection area maps
 - (1) Overlay maps prepared or provided by the Department of Natural Resources and Environmental Control (DNREC) delineating wellhead protection and excellent groundwater recharge potential areas in the City of Milford are included as a part of the City's Official Zoning Map and shall be designated as the Source Water Protection District.
 - (2) The maps shall be utilized by the administrative official in determining whether a lot or parcel lies within the source water protection district as described in Subsection D of this section. The lack of an indication on this map as to whether certain property is within or outside of the boundaries of this overlay district shall not be constructed as a conclusive determination that said property is within or outside the boundaries of the source water protection overlay district. Rather, the controlling factor in making such a determination shall be the description contained in Subsection E of this section.
- D. Source water protection standards.
 - (1) For a confined wellhead, the wellhead protection area shall be 150 feet from the wellhead.
 - (2) For an unconfined wellhead generating fewer than 50,000 gallons a day, the wellhead protection area shall be 150 feet from the wellhead.
 - (3) For an unconfined wellhead generating greater than 50,000 gallons a day, the wellhead protection area shall be delineated by the State of Delaware, Department of Natural Resources and Environmental Control, Division of Water Resources, Source Water Assessment and Protection Program.
 - (4) The area contained within a source water protection area shall be divided into zones:
 - (a) Zone 1: a surface area extending in a radius of 150 feet around the wellhead.
 - (b) Zone 2: the remaining surface area of a delineated wellhead protection area outside of Zone 1.
 - (c) Zone 3: excellent groundwater recharge areas.
 - (5) Zone 1 requirements.
 - (a) Permitted uses.
 - [1] Infrastructure, equipment, buildings, access and other uses associated with the well, distribution and treatment facilities of the water system and their maintenance.

- [2] Wells existing prior to December 31, 2007. No other structures or uses shall be permitted in Zone 1 unless the application, which shall demonstrate the proposed structure or use will not harm or potentially harm the public drinking water supply, is approved as a conditional use by City Council.
- (b) Prohibited uses.
 - [1] See Table 01: Land Use Restrictions and Uses Source Water Protections Areas
- (6) Zone 2 requirements.
 - (a) Permitted uses.
 - [1] Uses permitted in the underlying zoning district may be permitted under an approved conditional use that protects the public drinking water supply for the City and meets the minimum requirements for stormwater management, impervious cover, above ground and underground storage tanks.
 - (b) Prohibited uses.
 - [1] See Table 01: Land Use Restrictions and Uses Source Water Protections Areas
 - (c) Stormwater management.
 - [1] Stormwater shall be treated by an approved stormwater quality management practice in accordance with current requirements of the Delaware Sediment and Stormwater Regulations dated October 11, 2006 or as later revised.
 - [2] For all new construction, all structures shall be required to discharge roof drains into recharge systems. Recharge systems shall be in accordance with section 10.0 of the Delaware Sediment and Stormwater Regulations dated October 11, 2006 or as later revised.
 - (d) Impervious cover.
 - [1] Wellhead protection areas should not exceed 20% impervious cover. New development in this zone may exceed the 20% impervious cover threshold within wellhead protection areas, but shall be no more than 50% impervious cover, provided the applicant submits an environmental assessment impact report as provided for in Subsection 230-19.5F indicating the additional impervious area will not have an adverse impact on the drinking water supply.
 - (e) Underground storage tanks (UST).
 - [1] Underground storage tanks with a capacity greater than 110 gallons containing petroleum, and residential and agricultural USTs with a capacity greater than 1,100 gallons containing heating fuel or motor fuel shall be permitted in a designated wellhead area if the USTs are designed, constructed, maintained, and operated in accordance with the Delaware Regulations Governing Underground Storage Tank Systems, or as later revised. (NOTE: Regulated USTs must be constructed with secondary containment of the tanks and piping and must have continuous monitoring for releases.) The property owner shall be required to submit an annual report, prepared by a licensed tank inspector, certifying the UST meets the criteria established herein.
 - [2] Underground storage tanks with a capacity greater than 110 gallons containing a hazardous substance as defined in CERCLA § 101(14) shall be permitted in a designated wellhead area if the USTs are designed, constructed, maintained and operated in accordance with the Delaware Regulations Governing Underground Storage Tank Systems. (NOTE: Regulated USTs must be constructed with secondary containment of the tanks and piping and must have continuous monitoring for releases.) The property owner shall be required to submit an annual report, prepared by a licensed tank inspector, certifying the UST meets the criteria established herein.

- (f) Above ground storage tanks.
 - [1] Aboveground storage tanks with a capacity greater than 12,499 gallons containing petroleum or hazardous substances, and ASTs with a storage capacity greater than 39,999 gallons containing diesel, heating fuel or kerosene shall be permitted in a delineated wellhead area if the ASTs are designed, constructed, operated and maintained with the applicable requirements in the Delaware Regulations Governing Aboveground Storage Tanks.
- (7) Zone 3 requirements.
 - (a) Permitted uses.
 - [1] Uses permitted within the underlying zoning district unless prohibited by this section.
 - [2] Hazardous waste storage, treatment, and disposal facilities, hazardous waste generators, sanitary and industrial facilities as defined in the Delaware Regulations Governing hazardous waste, vehicle repair, salvage operations, waste sludge storage or application, solid waste landfills, tire piles and dredge spoil sites shall not be permitted in Zone 3.
 - (b) Prohibited uses.
 - [1] See Table 01: Land Use Restrictions and Uses Source Water Protections Areas
 - (c) Stormwater management and impervious cover.
 - [1] There are no requirements contained in this section in order for the development to occur provided the impervious cover of that portion of the parcel within the excellent recharge area is 35% or less.
 - [2] Impervious cover of that portion of the parcel within the excellent recharge area that is greater than 35% but no more than 60% is allowed provided the applicant demonstrates through a report prepared by a registered professional geologist or registered professional engineer familiar with the hydro geologic characteristics of the City of Milford and the surrounding areas using climatic water budget that post-development recharge quantity will meet or exceed the existing (pre-development) recharge quantity. Efforts to mitigate discharges to pervious surfaces shall count towards the formula used to compute post-development mitigation of any discharges. These practices shall address water quality as well as overall water quantity.
 - [3] For all new construction, infill, and redevelopment within the town center as defined in Figure 14D, Neighborhood Map-Town Center, as it is delineated in the 2008 Comprehensive Plan impervious cover may exceed 60%. All structures are required to discharge roof drains into underground recharge systems or permeable surfaces that allow discharges to infiltrate into the ground. The site plan is to consist of BMPs that include such items as pervious pavers, pervious concrete and infiltration practices designed to assure that recharge is maximized. The practices shall address water quality as well as overall water quantity.
 - [4] Discharge from roof drains, containment areas or impoundments that have run-off from an area that may contain contaminants from mechanical systems shall be segregated and treated prior to discharge.
 - (d) Underground storage tanks (UST).
 - [1] Underground storage tanks with a capacity greater than 110 gallons containing petroleum, and residential and agricultural USTs with a capacity greater than 1,100 gallons containing heating fuel or motor fuel shall be permitted in a designated wellhead area if the USTs are designed, constructed, maintained, and operated in accordance with the Delaware Regulations Governing Underground Storage Tank Systems, or as later revised. (NOTE: Regulated USTs must be constructed with secondary

containment of the tanks and piping and must have continuous monitoring for releases.) The property owner shall be required to submit an annual report, prepared by a licensed tank inspector, certifying the UST meets the criteria established herein.

- [2] Underground storage tanks with a capacity greater than 110 gallons containing a hazardous substance as defined in CERCLA §101(14) shall be permitted in Zone 3 if the USTs are designed, constructed, maintained and operated in accordance with the Delaware Regulations Governing Underground Storage Tank Systems. (NOTE: Regulated USTs must be constructed with secondary containment of the tanks and piping and must have continuous monitoring for releases.) The property owner shall be required to submit an annual report, prepared by a licensed tank inspector, certifying the UST meets the criteria established herein.

(e) Above ground storage tanks.

- [1] Aboveground storage tanks with a capacity greater than 12,499 gallons containing petroleum or hazardous substances, and ASTs with a storage capacity greater than 39,999 gallons containing diesel, heating fuel or kerosene shall be permitted in Zone 3 if the ASTs are designed, constructed, operated and maintained with the applicable requirements in the Delaware Regulations Governing Aboveground Storage Tanks.

Table 01: Land Use Restrictions and Uses Source Water Protections Areas.

Activities shall be subject to the land use restrictions contained within this [article] that will protect the quality and quantity of ground water supplies. All uses not permitted in the underlying zone district are prohibited.

No - Prohibited

Yes - Allowed

C - Conditional

Land Use	Well Head Protection Area		
	Zone 1	Zone 2	Excellent Ground-Water Recharge Potential Area Zone 3
Aboveground Storage Tanks	NO	C	C
Automobile body/repair shop	NO	NO	C
Chemical processing/storage facilities	NO	NO	C
Dredge Spoil Sites	NO	NO	C
Dry cleaner	NO	NO	NO

Electrical/electronic manufacturing facility	NO	NO	C
Equipment maintenance/fueling areas	NO	NO	C
Fleet/trucking/bus terminal	NO	NO	C
Gas station	NO	C	C
Hazardous Waste: Treatment, Storage & Disposal Facilities	NO	NO	C
† Dry Wells/sumps	NO	C	YES
†† Injection wells	NO	C	C
Junk/scrap/salvage yard	NO	NO	NO
Machine shop	NO	NO	C
Metal plating/finishing/fabricating facility	NO	NO	C
Mines/gravel pits	NO	NO	C
On-Site wastewater treatment and disposal systems	NO	NO	C
Salvage operations	NO	NO	NO
Sanitary and Industrial Landfills	NO	NO	NO
Tire Piles	NO	NO	NO
Underground storage tanks	NO	C	C
Vehicle repair	NO	NO	C
Vessel storage	NO	NO	C
Waste sludge storage or application	NO	NO	C
Wood preserving/treating facility	NO	NO	NO

† Dry wells/sumps, except for single-family residences directing gutter downspouts to a drywell

†† Injection wells other than those used in the remediation of ground water contamination that inject oxygen-releasing compounds

E. Boundary determination for source water protection areas.

- (1) All subdivision and land development plans depicting development or land disturbance submitted for City review shall be evaluated for the existence of source water protection areas. All such areas are as depicted on source water protection area maps maps/overlays are available from Delaware Department of Natural Resources and Environmental Control (DNREC), Division of Water Resources, Source Water Assessment and Protection Program (SWAPP). If a SWPA exists within a proposed development site, the boundaries of these areas shall be delineated on the plan by the applicant's State of Delaware professional engineer or professional geologist.
- (2) DNREC SWAPP may, when based on sound science and information, revise and update the overlay maps of wellhead protection areas.
- (3) The Delaware Geological Survey (DGS) may, when based on sound science and information, revise and update the overlay maps of good or excellent groundwater recharge potential areas.
- (4) When there appears to be a conflict between the mapped boundary and actual site conditions, the applicant may engage the services of professional geologist to prepare a report intended to determine more accurately the precise boundary of the source water protection area. The Report shall include:
 - (a) A detailed topographic layout of the subdivision and/or area to be developed and prepared by a state-registered professional land surveyor or professional geologist;
 - (b) Evidence derived from a site-specific investigation that may include aquifer testing, test borings, test pits, observation wells, groundwater elevations, and topography surveys as appropriate for the type of source water protection area that clearly demonstrates that the area in question does not meet the definition of a source water protection area as defined.
 - (c) Any challenges to the delineations of the good or excellent groundwater recharge potential areas must follow the methods used in the Delaware Geological Survey publication: Report of Investigations No. 66, Groundwater Recharge Potential Mapping in Kent and Sussex Counties, Delaware. The challenge must be approved by DGS and DNREC SWAPP.
 - (d) Notwithstanding any other section of this chapter, if an owner initiates a precise boundary delineation pursuant to this section, any and all time review limitations shall be stayed pending the submission of the complete report contemplated by this section. Following submission of the report and all supporting documents, DNREC shall have 90 days to finally approve or disapprove the exploratory sketch plan submission or such further time as deemed necessary by the Department, but not to exceed an additional 90 days.

F. Environmental impact assessment report.

- (1) New development may exceed the 20% impervious cover threshold within the Source Water Protection Area Zone 2, but be no more than 50% impervious, provided the applicant submits an environmental assessment report including a climatic water budget and systems to augment recharge that assure water quality as well as quantity. The environmental impact assessment must document that postdevelopment recharge will be no less than predevelopment recharge when computed on an annual basis.
- (2) Commonly, the applicant offsets the loss of recharge due to impervious cover by constructing recharge basins that convey pretreated rooftop runoff for infiltration to groundwater. Refer to Supplement 1, entitled Groundwater Recharge Design Methodology, for the details of how to design recharge facilities in Delaware source water protection areas.

- (3) A Delaware registered professional engineer and/or professional geologist prepares an environmental assessment report, usually containing the following elements of planning, design, construction, and maintenance of groundwater recharge facilities:
 - (a) Site description of proposed development within the water resource protection area.
 - (b) Climatic water balance comparing predevelopment and postdevelopment recharge potential.
 - (c) Subsurface exploration, including borings, test pits, and infiltration tests.
 - (d) Design of groundwater recharge facilities that assure water quality as well as quantity.
 - (e) Construction and maintenance considerations.
 - (f) Recommended groundwater monitoring plan.
 - (g) Water management agreement between the applicant and the town, city, or county providing for monitoring and maintenance of the recharge system. The applicant will abide by the Groundwater Management Agreement as written in DNREC Supplement 1 to the Source Water Protection Guidance Manual for the Local Governments of Delaware: Groundwater Recharge Design Methodology, dated May 2005 or as later revised.
- G. Nonconforming uses. Nonconforming uses may continue in a source water protection area in the form in which they existed at the time of the adoption of this section, unless they pose a direct hazard to the City's water supply, as determined by the Water and Wastewater Department upon advice from the Delaware Division of Public Health, or are causing some foreign substances (oil, salts, chemicals, or other substances) to be introduced into the City's water supply, as determined by the Water and Wastewater Department upon advice from DNREC's Division of Air and Waste Management and/or Division of Water Resources. In the latter case, the Building Department shall issue a mandatory cease and desist to stop the offending activity within the area. Nonconforming existing underground or aboveground storage of oil, petroleum, and petroleum products shall require secondary containment pursuant to the State of Delaware regulations governing underground storage tanks or for aboveground storage of petroleum products secondary containment facilities capable of capturing the material stored on the site, for existing facilities that are proposed either to be upgraded or replaced.
- H. Replacement and new wells.
 - (1) The replacement of any existing public water supply well that was not required to meet this wellhead protection requirement at the date of its original installation and that has failed shall be exempt from meeting this wellhead protection requirement.
 - (2) All public water supply wells within a housing development, subdivision, or strip development recorded on or after the implementation of the Delaware Regulations Governing the Construction and Use of Wells, dated April 6, 1997, or as later revised, shall be located at least 150 feet within the subdivision's or development's outermost property lines.

[Ord. No. 2009-7, § 1, 5-26-2009]

§ 230-45.2 - Wetland areas.

- A. A wetlands investigation shall be performed by a qualified wetlands specialist at the expense of the applicant in preparation for any activity on real property, which requires conditional use, site plan or subdivision plan approval by the Planning Commission and/or City Council as set forth in this chapter and Chapter 200 Subdivision of Land.
- B. The limits of all wetlands determined to be present on the subject property shall be flagged by the wetlands specialist and identified on the subject property by customary survey markers and shall be delineated on the plan. Wetlands areas shall be tabulated on the plan in acres.
- C. No portions of wetlands areas shall be subdivided, filled, developed, or cleared of vegetation unless granted permission to fill and/or eliminate the wetlands area under state and/or federal permit, including nationwide permits authorized by the United States Army Corps of Engineers; they shall remain as essentially undisturbed natural areas.
- D. No buildings, structures, impervious surface, fill, obstructions to drainage, or land disturbance shall be situated nearer than 25 feet to a delineated wetlands area. The placement of fill, regrading, or other obstructions to surface sheet flow, or the clearing or removal of natural vegetation within this setback area, shall be prohibited. Notwithstanding all of the foregoing, limited cuts into the surface area of this twenty-five-foot setback area in conjunction with the placement of outfall stabilization facilities therein (such as stone rip-rap, turf stabilization, or other geosynthetic materials) may be permitted for the purpose of stabilizing and/or installing stormwater management outfalls, thus providing for a non-erosive flow condition at the outfall, provided that such encroachments into the twenty-five-foot setback area shall be limited to a maximum distance into the wetland buffer of 15 feet measured from the twenty-five-foot wetland buffer line, and shall be limited to a maximum width of 20 feet.

[Ord. No. 2015-03, § 2, 6-22-2015]

§ 230-45.3 - Water bodies, streams and other watercourses; riparian buffers.

- A. Lakes, ponds, rivers, and streams shall be left as permanent open space. No filling, piping or diverting of water bodies, lakes, ponds, or streams shall be permitted except for required roads, to be approved by the U.S. Army Corps of Engineers, DeIDOT, and/or DNREC as appropriate.
- B. No buildings, structures, or paved surfaces, except stairs and ramps, fences, open decks, patios or docks shall be permitted to be constructed under naturally occurring riparian buffer conditions nearer than:
 - (1) Twenty-five feet to the shoreline, as defined by the mean high-water line, of any tidal water body, tidal stream, or tidal marsh; or
 - (2) Fifty feet to the shoreline, as defined by the mean high-water line of any non-tidal freshwater water body, lake, pond, or blue-line stream as depicted on the most recent revision of the United States Geological Survey Topographic Quadrangle Maps.
- C. No buildings, structures, or paved surfaces, except stairs and ramps, fences, open decks, patios or docks with a combined area of 200 square feet or less, shall be permitted to be constructed under redevelopment conditions in previously disturbed or removed riparian buffers nearer than:
 - (1) Ten feet to the shoreline, as defined by the mean high-water line, of any tidal water body, tidal stream, or tidal marsh; or
 - (2) Ten feet to the shoreline, as defined by the mean high-water line of any non-tidal freshwater water body, lake, pond, or blue-line stream as depicted on the most recent revision of the United States Geological Survey Topographic Quadrangle Maps.
- D. For projects located within a promulgated total maximum daily load basin, the preservation or reestablishment of riparian buffers facilitating the reduction of nutrients and other pollutants to the level

necessary to ensure compliance with promulgated load reductions shall be required. The clearing or removal of natural vegetation within this setback area shall be prohibited. Existing riparian buffers shall either be preserved or planted to the limits as provided above under paragraphs B. or C. respectively.

[Ord. No. 2015-03, § 3, 6-22-2015]