

Bucks County, Pennsylvania

Lower Makefield Township

OPEN SPACE PLAN UPDATE

Adopted August 19, 2009

TOWNSHIP OF LOWER MAKEFIELD

1100 Edgewood Road ▪ Yardley, PA 19067

Phone: 215-493-3646 ▪ F: 215-493-3053

www.lmt.org

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INTRODUCTION AND PLAN SUMMARY

Lower Makefield Township has prepared this updated Open Space Plan as a statement of its vision for open space preservation. In developing the vision, the township examined the current state of development, the areas that are under threat from development, past actions that have resulted in open space preservation, opportunities for preservation in the future, and action steps that will be taken to implement the open space vision.

The plan has been prepared to meet the requirements of the Municipal Open Space Program (MOSP) component of the Bucks County Open Space Program. Under the County open space program, \$26 million has been newly allocated to the MOSP, which provides financial assistance to municipalities for open space planning, acquisition, and improvements. To become eligible to receive MOSP funding, municipalities are required to re-examine and where necessary, update existing open space plans. Lower Makefield Township is eligible to receive \$824,605 in municipal funding (with a 25 percent match).

In addition to the municipal open space component, the County open space program includes a Farmland Preservation component, Bucks County Park and Recreation component, Bucks County Natural Area component, Delaware River component, and Historic Preservation component.

The Natural Areas component has been allotted \$11 million to assist municipalities and nonprofit organizations in permanently preserving important examples of Bucks County natural heritage. The Natural Areas Program is a competitive grant program in which municipal governments and private land trusts are eligible to apply. Applicants may receive funding up to 50 percent of a property's appraised value or \$500,000, whichever is less. Grants may be used to purchase land fee simple or to acquire conservation easements that would ensure protection of the property's significant natural area. There are several Natural Areas properties in the township, but only one has not been permanently preserved and would be eligible to receive preservation funding.

In particular interest to Lower Makefield Township, however, is the newly designated Delaware River component. Among 17 communities that border the Delaware River, the township is eligible to participate in this competitive grant program, which has a total allocation of \$7 million. Consistent with the overriding guidelines of the Municipal Open Space Program, funds available under the Delaware Riverfront component would be eligible to acquire land or conservation easements for recreation, natural resource, and farmland conservation purposes. The Delaware Riverfront component would fund projects that implement the goals and recommendations of the municipality's adopted open space plan.

The Lower Makefield Township Open Space Plan update is organized in the following way:

- Community background, including township demographics and land use.
- Natural Resources in the township that have shaped development trends and township ordinances.

- Policies and methods used by the township to protect open space and important natural features.
- Open Space Goals supported by the township.
- Inventory of protected resources and open space.
- A walkway and trail plan, which details the township's open space linkages and pedestrian and bicycle connections.
- Evaluation of remaining developable land and value of open areas in meeting township open space goals (Appendix 1. Open Space Inventory of Lower Makefield Township).
- Non-acquisition tools and techniques which assist the township in protecting open space resources.
- Government organization and financing to ensure sufficient staffing and financial resources to implement the plan's goals and recommendations.
- Action steps and implementation methods necessary to protect vulnerable open space resources and to achieve our open space vision.

COMMUNITY BACKGROUND

Regional Location

Lower Makefield Township is located along the Delaware River in the lower portion of Bucks County. Its land area is approximately 18 square miles or about 11,500 acres. The township surrounds the Borough of Yardley and is adjacent to the Borough of Morrisville, both more densely developed communities with commercial core areas.

The township has developed as a residential community and has grown rapidly since the 1970s. Moderate density suburban-type development has occurred around the boroughs of Yardley and Morrisville and in the center of the township, and higher density residential uses and nonresidential uses have developed along Interstate Route 95 and in the areas closest to Route 1.

The area along the Delaware River has been protected from intense development by restricting this area to low density uses and by controlling development in floodplain and wetland areas. Land use policies and ordinances have sought to protect the northern section of the township, which is the most rural section, by encouraging low density residential uses, by preserving farmland through zoning options, and by preserving open space through acquisition.

Land Use Patterns

The township has developed primarily as a suburban residential community. In 2003 the township updated its survey of developable lands to determine how much land is available for future development in various zoning districts. The results are summarized in Table 1.

Table 1
Developable Land in Lower Makefield by Zoning District, 2003

Zoning District	Developable Land (acres)
Resource Protection - RRP	60
Residential low density - R-1	685
Residential medium density - R-2	177
High density – R-3	6
High density modified - R-3M	54
High density – R-4	9
Office Research - OR	132
Commercial - C-1 and C-2	0
Commercial – C-3	160
Historic Commercial - HC	9
TOTAL	1,292*

* This includes lands within the agricultural security district that are presently farmed but available for future development, and the Octagon Center proposed development site.

Source: LMT, 2003

Most of the developable lands lie in the area that is designated as R-1 zoning in the township zoning ordinance. The other zoning districts—R-3, R-3M, and R-4, which allow for higher

density single-family and multifamily residences—are largely built up or committed for development.

Commercial and industrial development has been planned in the portion of the township along the I-95 corridor. This area had been selected for office/research uses because of the proximity to the highway and because of similar uses existing in or proposed for the surrounding area, including neighboring townships.

Population and Housing

Township population and housing increased steadily during the 30-year period, 1970-2000. The population more than doubled between 1970 and 2000. The 2000 census population was 32,681.

The growth rate, while still high, has tapered off from its peak in the 1980s, as has new housing construction. The rate of population growth climbed from 17.2 percent in the 1970s to a peak of 44.6 percent between 1980 and 1990. It slowed to 30.3 percent in the following decade, but that was nearly three times the countywide rate of growth for 1990 to 2000.

Only nine other Bucks County municipalities—most of them in the center of the county—exceeded the township’s 1990–2000 growth rate. Of the municipalities surrounding Lower Makefield, only Newtown Township registered a higher rate. But Lower Makefield recorded the largest absolute population gain in Bucks County, at 7,598.

Growth in housing units for many years has outpaced the rate of population increase, fueled not only by new construction but also by declining household size. Today, the imbalance is far less than in the past, as the rate of new residential construction has been slowing while household size has been stabilizing.

Table 2 lists changes in population and housing units for Lower Makefield. Table 3 compares population change for Lower Makefield, its neighboring municipalities, and Bucks County.

**Table 2
Population and Housing in Lower Makefield, 1970–2000**

Year	Total Population	Percent Change	Housing Units	Percent Change
1970	14,804		3,982	
1980	17,351	17.2%	5,542	39.2%
1990	25,083	44.6%	8,861	59.9%
2000	32,681	30.3%	11,931	34.6%

Source: U.S. Census, 1990–2000

Table 3
Population Growth in Lower Makefield,
Surrounding Municipalities, and Bucks County, 1990-2000

Municipality	1990 Population	2000 Population	Percent Change
Lower Makefield	25,083	32,681	30.3%
Newtown Township	13,685	18,206	33.0%
Upper Makefield	5,949	7,180	20.7%
Falls	34,997	34,865	-0.4%
Middletown	43,063	44,141	2.5%
Yardley Borough	2,288	2,498	9.2%
Morrisville Borough	9,765	10,023	2.6%
Bucks County	541,224	597,635	10.4%

Source: U.S. Census, 1990 and 2000

Households

Household size has been declining nationwide in recent years due to a number of factors: later family formation, declining birth rates, rising divorce rates, and more young people and older people living alone. There are signs that this trend has begun to abate.

The average household size and family size in Lower Makefield continued to drop, but only slightly. (A household is one or more persons occupying a housing unit. The occupants be related, or not. A family household consists of two or more individuals related by marriage, birth, or adoption.) The average household size in 2000 was 2.77, down from 2.83 in 1990. In 1970, the average household size was 3.7.

The number of households in the township totaled 11,706 in 2000. That is a 36.8 percent increase from the 8,552 households counted in 1990. Households in the township were somewhat larger and more likely to have children than the countywide average.

Nearly 42 percent of Lower Makefield households had at least one child under age 18. Nineteen percent had at least one member age 65 or older.

The corresponding numbers for Bucks County were 37.7 percent and 23.3 percent, respectively. The average household size in the county was 2.69.

As in past years, most township residents lived in traditional family situations. The overwhelming majority of Lower Makefield households—about 80 percent—were family households in 2000. That exceeded the countywide rate of 75 percent. Most of the township’s family households were married couples, with or without children.

The share of nonfamily households, which consist of unrelated individuals or a person living alone, held steady at about 19 percent between 1990 and 2000. Singles accounted for 80 percent of all nonfamily households in Lower Makefield. Table 4 lists characteristics of township households.

Table 4
Characteristics of Lower Makefield Households, 1990-2000

Characteristic	1990	2000
Number of Households	8,552	11,706
Average Household Size	2.83	2.77
Average Family Size	3.21	3.13
Family household	7,195	9,390
Married Couple Families	6,559	8,482
Nonfamily Households	1,381	2,316
Householders Living Alone	1,104	1,891

Sources: U.S. Census, 1990 and 2000

Population Characteristics

Age

The township’s population has been aging, and this trend can be expected to continue. The median age in the township has been edging steadily upward, rising from 33.7 years in 1980 to 36.5 years in 1990, to 39.1 years in 2000. The median age in Bucks County was somewhat lower, at 37.7 years in 2000. As the township’s population continues to age, the demand for specialized services, facilities, and housing for the elderly will likely heighten.

The upward momentum in the township’s age distribution reflects the number of baby boomers, members of the massive post-war generation born between 1946 and 1964, along with moderate gains in the 65-and-older population. At the same time, the share of young adults has been diminishing. Boomers’ children, the so-called “baby boom echo,” also compose a large segment of the population.

Baby boomers in the 35-to-44 age bracket formed the largest segment of the township’s adult population—19.2 percent—in 2000. Children 19 and under accounted for 27.5 percent of the population. Seniors age 65 and up accounted for 10.4 percent of the population.

Between 1990 and 2000, the township’s young adult population decreased as a percentage of total population, although not in absolute numbers. The two groups covering the age range from 20 to 34 decreased the most in relative share. Table 5 shows changes in the age distribution in the township from 1990 to 2000.

Table 5
Change in Age Distribution in Lower Makefield, 1990-2000

Age	1990		2000	
	Number	Percent	Number	Percent
Under 5	1,785	7.1%	2,457	7.5%
5 to 9	1,956	7.8%	2,644	8.1%
10 to 14	1,885	7.5%	2,505	7.7%
15 to 19	1,626	6.5%	1,898	5.8%
20 to 24	1,259	5.0%	889	2.7%
25 to 34	3,302	13.2%	3,553	10.9%
35 to 44	5,213	20.8%	6,262	19.2%
45 to 54	3,488	13.9%	5,798	17.7%
55 to 59	1,259	5.0%	1,972	6.0%
60 to 64	1,214	4.8%	1,320	4.0%
65 to 74	1,437	5.7%	2,017	6.2%
75 to 84	530	2.1%	1,099	3.4%
85 and older	129	0.5%	267	0.8%
TOTAL	25,083	100.0%	32,681	100.0%

Source: U.S. Census, 1990 and 2000

Race, Ethnicity and Gender

The population of Lower Makefield was mostly white and native-born as of the 2000 census. The share of white township residents was 93.3 percent, and native-born residents numbered 92.8 percent. The population was 51.2 percent female and 48.8 percent male.

The largest single minority group was Asians, who represented 3.7 percent of the population. Blacks represented 1.8 percent of the population, and Hispanics (of any race), 1.4 percent. The percentages of minorities were little changed from 1990.

Social and Economic Characteristics

Township residents had incomes and levels of educational attainment that were among the highest in the county, according to the 2000 census. The median (half are higher, half lower) household income was \$98,090. Just over 96 percent of residents were at least high school graduates, and 61.2 percent held bachelor's degrees or higher. Compared with other municipalities in the county, Lower Makefield continued to have the largest proportion of people employed in white-collar management, professional, sales, and office occupations, at nearly 87 percent.

Among adults age to 21 to 64, nearly 10 percent had a disability in 2000. Of those 65 and older, 27.3 percent were disabled.

Population Characteristics

Population projections are useful in helping a municipality plan for future needs, such as park and recreation facilities, emergency services, and senior services. Population projections developed for the township comprehensive plan use an age cohort survival method. This model simulates the process by which population actually changes by applying birth, death, and migration rates to a starting population, in this case the 1990 census number.

The model also takes into account growth in the number of housing units linked to how much land is available for residential construction. It anticipates that the township will become “built out”—fully developed—by 2010, and that the population will stabilize near current levels during that 10-year span. The estimated build-out year and population are based on population growth trends and on the capacity of the township to accommodate additional development under current zoning regulations.

The projections anticipate that the township’s population will peak at 33,274 in 2010, an increase of 1.9 percent over the 2000 census figure of 32,681. The population is expected to decline by 3.4 percent during the following decade. Thus, the township’s population in 2020 is projected to be nearly the same as it was in 2000. By comparison, the township experienced cumulative growth of just under 75 percent between 1980 and 2000.

The projections reflect a number of factors that will continue to contain population growth. They include growth management and open space preservation measures taken by township officials, as well as broader trends resulting in an aging population and regional population loss.

Table 6 contains population projections for Lower Makefield for 2010 and 2020.

Table 6
Lower Makefield Population Projections,
2010 and 2020

Year	Projected Population	Percent Change
2000	32,681	
2010	33,301	1.9%
2020	32,159	-3.4%

Source: Bucks County Planning Commission

OPEN SPACE GOALS

Open space goals reflect the ideals and values of the community for the conservation of agricultural, natural, and park and recreation resources. Lower Makefield Township has the following goals for its program of open space preservation:

- Continue to protect important natural features and preserve environmentally sensitive areas to protect the natural character and landscape of the township.
- Preserve area along the Delaware River as a low density resource-protected area in order to protect scenic views, floodplains, woods, the Delaware Canal and park area, and wetlands.
- Preserve farmland within the township.
- Acquire open space that will enhance, augment, or connect existing parks and open space areas. Preserve open space to establish greenways.
- Preserve land that will support and reinforce land use and planning goals for the township.
- Preserve land that is important to the community for its scenic, open space, environmental, or other values.
- Work with land owners in pursuing the best method of preservation for the township and the land owner, taking into account available funding, landowner needs, and township goals.
- Preserve land that can be used for recreational purposes.

INVENTORY OF VULNERABLE RESOURCES

Natural Features

Natural resources are not only aesthetically pleasing, but play an important role in the ecology of the township. Natural resources include the geology, topography, soils, watersheds, floodplains, wetlands, riparian corridors, and woodlands. The natural areas present in Lower Makefield support a rich diversity of native vegetation and wildlife, indicating a healthy living environment for people, plants, and wildlife.

Together, these landscape features are a critical component of the open space planning process. This section describes these open space resources, providing a location and value for conservation.

Geology

The geology of the township has been documented in a 1955 U.S. Geological Survey of Bucks County and can be described as follows. Map 1 illustrates the geologic formations.

1. Quaternary deposits, located in the area along the Delaware River and west of the Canal in the southern part of the township, include two types of formations: the Wisconsin (Pleistocene) and the Pre-Wisconsin Pleistocene. These unconsolidated formations are composed of sand and gravel, giving them good water-bearing qualities. Precipitation and drainage from higher areas help to recharge the water held in these deposits.
2. Triassic rock formations underlie most of the township. These include the two most common rock formations in Bucks County: the Locketong Lithofacies and the Stockton Lithofacies. The Stockton formation, one of the best sources of groundwater in Bucks County, is composed of sandstone and red shale. The quality of the groundwater is generally good, and wells rarely exceed 500 feet in the Stockton areas.

The Locketong Lithofacies, which run across the northernmost portion of the township, consist of argillite, sandstone, and shale, but have water-bearing capacities inferior to the Stockton formation. Recharge of the water supply in the Locketong areas depends on how permeable the soil conditions are.

3. A Cambrian formation, known as the Chickees Quartzite, is found in a thin band in the southern end of the township. Within the Quartzite areas, there is a moderate to low water supply, but groundwater, when not affected by drought, is generally available within 150 feet of the surface.
4. Baltimore Gneiss, part of the Pre-Cambrian system of rocks, is found in the southern portion of the township. This is a medium-grained crystalline rock that yields moderate water supplies of good quality.

Topography

The township has gently sloping topography with slopes of less than 15 percent, except in the areas along streambeds and along the western bank of the Delaware Canal. The elevation in the township ranges from 20 feet above sea level to 300 feet, with the lowest areas located along the Delaware River and the highest in the northwest corner near Newtown Township.

Topography is a concern in land-use planning because of the effects of development on the steep slopes. The disruption of steep slopes can cause excessive amounts of soil to be lost through erosion when the vegetative cover is disturbed. Erosion can cause diminished water quality and siltation of streams.

Removal of vegetation and the construction of impervious surfaces diminish groundwater recharge and cause greater erosion and sedimentation in streams. This ultimately affects the quality of the water in the community by affecting the quality of surface waters and may diminish the capacity of streams to carry water, leading to flooding.

The Lower Makefield Township zoning ordinance requires 50 percent protection of 8 to 15 percent slopes, 70 percent protection of 16 to 25 percent slopes, and 100 percent protection of slopes greater than 25 percent.

Soils

Soils have historically determined how land has been used in the township. Land good for farming, due to soil or slope conditions, has been farmed. Land too wet or too steep or of poor composition has been left in woods or used for grazing areas. Often the soils that are good for farming are also good for development because of topographic and drainage patterns.

The role played by soils in controlling development patterns has weakened in recent years. Public sewerage has eliminated the limitations imposed on septic systems by soil conditions. Alternative types of sewage treatment have also changed the picture by opening up new areas for development that a decade ago would have been incapable of sustaining building with on-lot septic systems.

Soils in the township fall into two broad groups. The Urban Land-Howell Association of soils is located in the southeastern portion of the township and is associated with gently sloping, well-drained land. Urban land is built up and the soils have been disturbed and altered by development. Howell soils are found on the coastal plain and are deep with limited permeability.

The other main soil group is the Lansdale-Lawrenceville soils, which are found both in valleys and in uplands. Lansdale soils are common in higher elevations and are usually deep and well drained. Lawrenceville soils are found in the lower elevations and in valleys.







The delineation between the two main soil associations in the township follows the fall line that runs through the southern corner of the township. The fall line divides the Coastal Plain from the Piedmont Region. These two physiographic regions have distinct patterns of vegetation, soil characteristics, drainage, topography, and climate. The level ground in the coastal plain results in

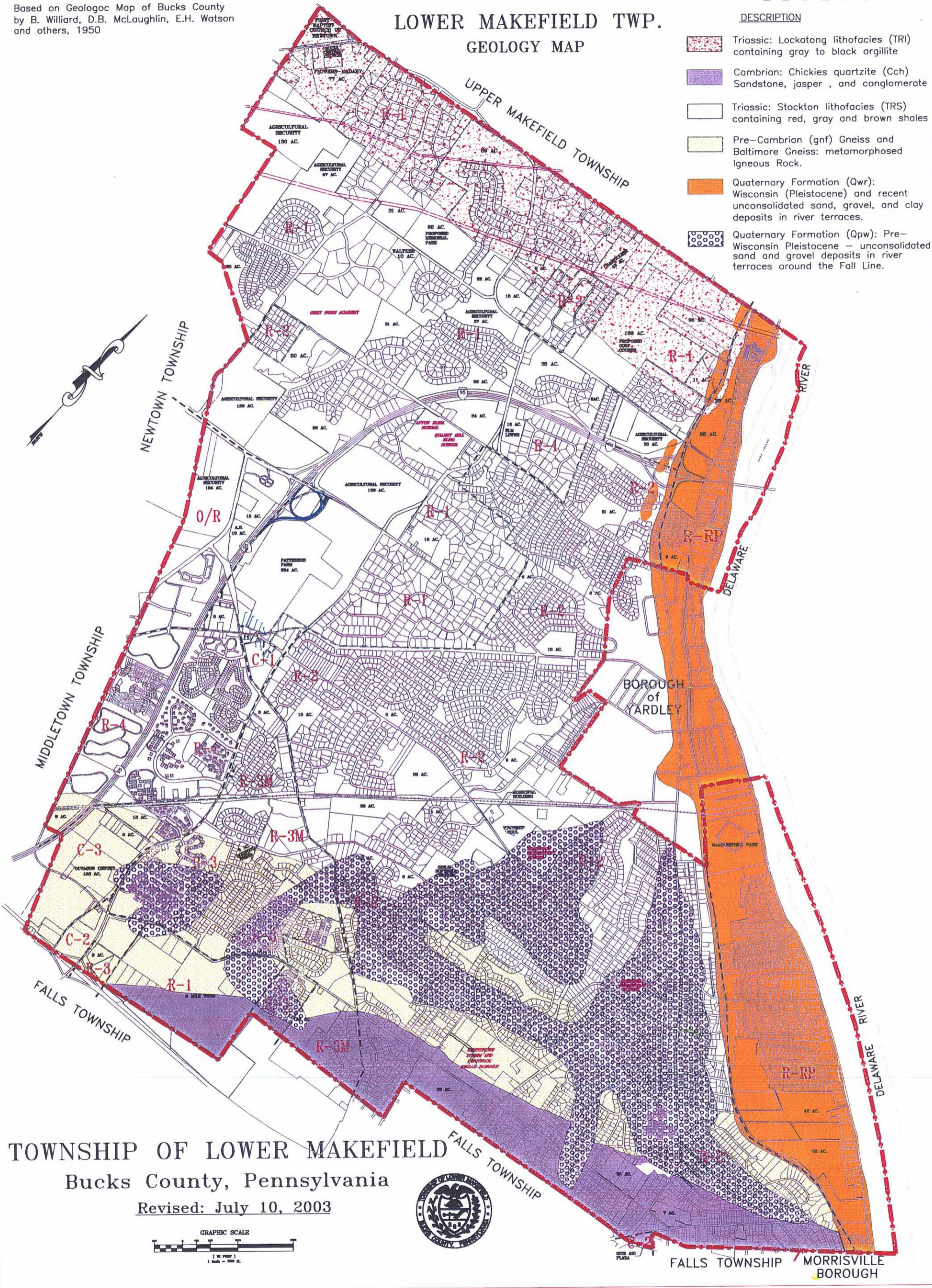
Based on Geologic Map of Bucks County
by B. Williard, D.B. McLaughlin, E.H. Watson
and others, 1950

LOWER MAKEFIELD TWP. GEOLOGY MAP

LEGEND

DESCRIPTION

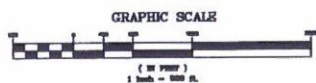
-  Triassic: Lockatong lithofacies (TRI) containing gray to black argillite
-  Cambrian: Chickies quartzite (Cch) Sandstone, jasper, and conglomerate
-  Triassic: Stockton lithofacies (TRS) containing red, gray and brown shales
-  Pre-Cambrian (gnf) Gneiss and Baltimore Gneiss: metamorphosed Igneous Rock.
-  Quaternary Formation (Qwr): Wisconsin (Pleistocene) and recent unconsolidated sand, gravel, and clay deposits in river terraces.
-  Quaternary Formation (Qpw): Pre-Wisconsin Pleistocene - unconsolidated sand and gravel deposits in river terraces around the Fall Line.



TOWNSHIP OF LOWER MAKEFIELD

Bucks County, Pennsylvania

Revised: July 10, 2003



wider, slower moving streams, a high water table, and marshes and swamps. Slopes along the fall line are in excess of 25 percent, with 50-foot drops in some locations.

Agricultural Areas

Soils that are good for agriculture continue to play a role in planning decisions because good farming areas are viewed not as holding zones for future development, but as important natural resources to be protected. Pennsylvania court decisions have affirmed the validity of farmland preservation zoning as a land use planning tool. Amendments to the Pennsylvania Municipalities Planning Code in 2000 require municipalities to preserve agriculture.

Lower Makefield, like much of eastern and lower Bucks County, has large areas of prime agricultural soils (Classes I and II, according to the Natural Resource Conservation Service) and soils of statewide importance. Map 2 shows prime agricultural soils and other natural resources.

The prime undeveloped soils are generally located north of Yardley-Langhorne Road. Soils of statewide importance are those that traditionally have been farmed, and contribute to the state and local farming economy and production.

The township has embraced the concept of preserving land for future farming and other open space uses through its Farmland Preservation Corporation, which owns about 311 acres of farmland. In addition, the township has endorsed the formation of an agricultural security district that includes about 794 acres of land in 19 properties. The district has been formed under the guidelines of Pennsylvania Act 43, which allows for the formation of voluntary farmland districts at the request of local landowners.

The provisions of Act 43 do not restrict or regulate development in farm areas, which continue to be converted to other uses. The size of the agricultural security district has diminished nearly 43 acres to development in the past 10 years. The act does protect farmers from various nuisance complaints (against noise or odors associated with farming) and makes participating landowners eligible for state funding for the purchase of development rights.

The Bucks County Agricultural Land Preservation Program administers this program. Properties can be added to the security district by following certain procedures in Act 43.

The 794 acres in the agricultural security district include the 311 acres within residential developments owned by the Farmland Preservation Corporation. These lands cannot be used for development. The remaining acres are privately owned and can be developed under the terms of the security district.

The township has preserved additional farmland as part of its open space program. Using funds from its 1998 open space bond issue, supplemented by county open space monies, the township acquired the 231-acre Patterson farm, which will remain in agricultural use. The farm is located between Yardley-Newtown Road and I-95.

Watersheds

Lower Makefield lies mostly in the Delaware River watershed, except for a portion of the northern end of the township, which lies in the Neshaminy Creek watershed. Within these areas are 10 smaller drainage areas, or sub-watersheds: Core Creek, Dyers Creek, Buck Creek, Scudder Falls, Brock Creek, Silver Creek, Rock Run, Delaware River/Canal, Queen Anne Creek, and Mill Creek basins.

Most of the watercourses in the township drain directly into the Delaware River through a historic aqueduct system under the Delaware Canal. The Rock Run and Queen Anne Creek basins drain south to Falls Township. The drainage areas of Dyers Creek, Brock Creek, Buck Creek, Scudder Falls, and Silver Creek flow east and north to Yardley Borough and the Delaware River. (Silver Creek flows directly into the Delaware Canal near Yardley Borough.) The Delaware River/Canal drains south to Morrisville Borough.

Core Creek, however, drains west to Newtown Township, and flows into the Neshaminy Creek. Mill Creek drains west to Middletown Township. Map 3 shows the major streams and drainage basins in the township.

Floodplains

Floodplains accommodate floodwater during periods of heavy precipitation. In addition to containing floodwaters, they contribute to the township's scenic beauty, to groundwater recharge, and because of the natural vegetation associated with them, to soil erosion and sedimentation reduction, wildlife protection, and healthy stream conditions. Map 2 shows the location of floodplains.

Lower Makefield Township participates in the National Flood Insurance Program, which is designed to reduce flood hazards through floodplain regulation. The program is the result of an earlier shift in Federal policy away from structural flood control solutions to more comprehensive floodplain management approaches.

The floodplain areas mapped by the National Flood Insurance Program are located along the Delaware River: Buck Creek, Core Creek, Brock Creek, Dyers Creek, Rock Run, and Silver Creek.




Areas not regulated under the Flood Insurance Program but vulnerable to flooding nonetheless are those adjoining smaller order streams and containing alluvial soils. The Soil Conservation Service's *Soil Survey* identifies seven alluvial soil types in Bucks County, at least two of which are located in parts of Lower Makefield Township: Bowmansville silt loam (Bo) and Alton gravelly loam (A1A). The Alton soil series is typical of the areas along the Delaware River.

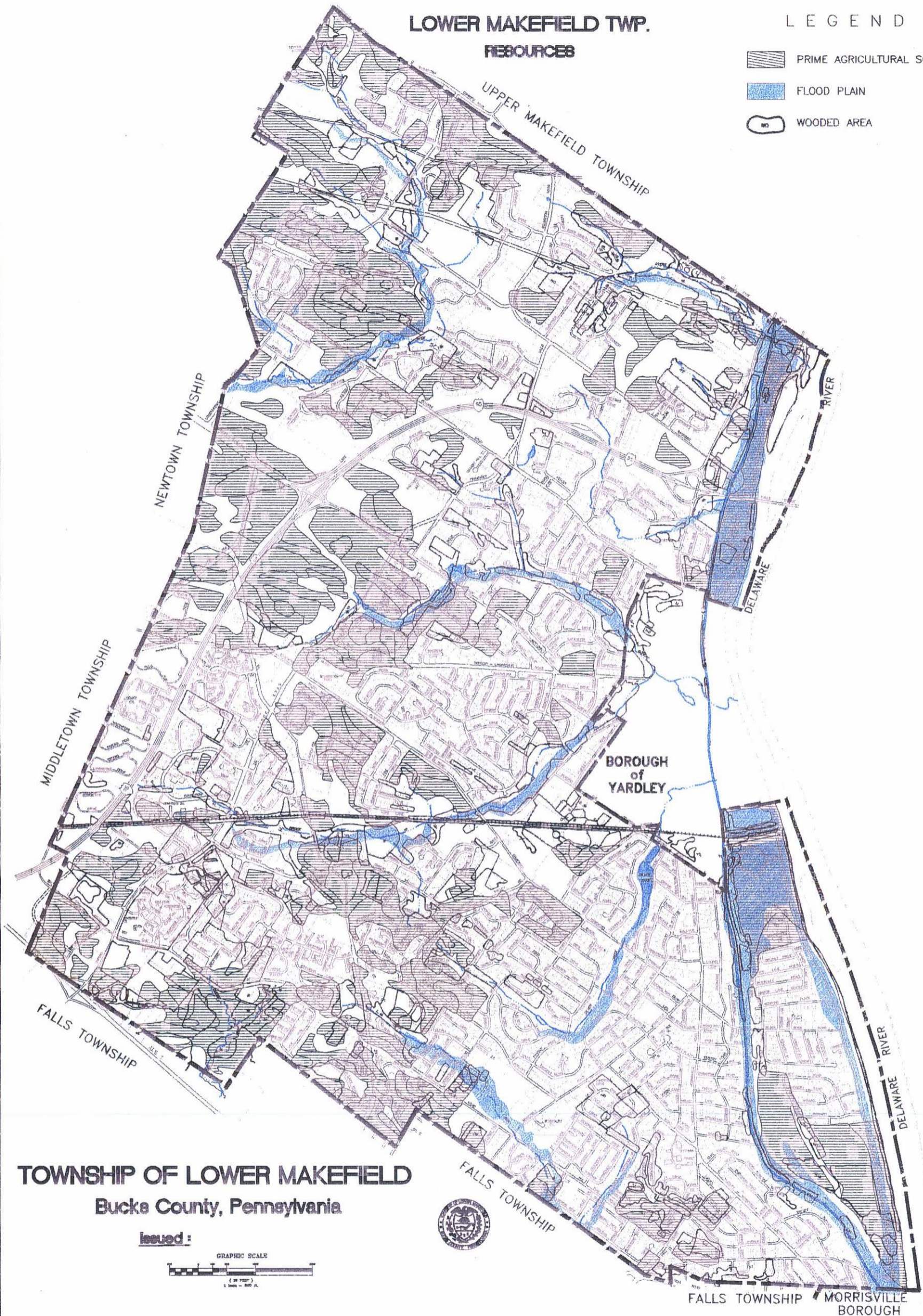
The township regulates development in floodplains and on alluvial soils through its zoning ordinance. The 1981 and 1992 master plans identified stream corridors as areas meriting preservation in permanent open space. In addition to the obvious benefits of reducing flooding, the preservation of stream valleys and floodplains also results in the preservation of woodland areas, steep slopes, and areas of wildlife habitat. There is a long-term potential for use of stream

LOWER MAKEFIELD TWP.

RESOURCES

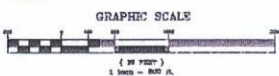
LEGEND

-  PRIME AGRICULTURAL SOILS
-  FLOOD PLAIN
-  WOODED AREA



TOWNSHIP OF LOWER MAKEFIELD
Bucks County, Pennsylvania




Issued:

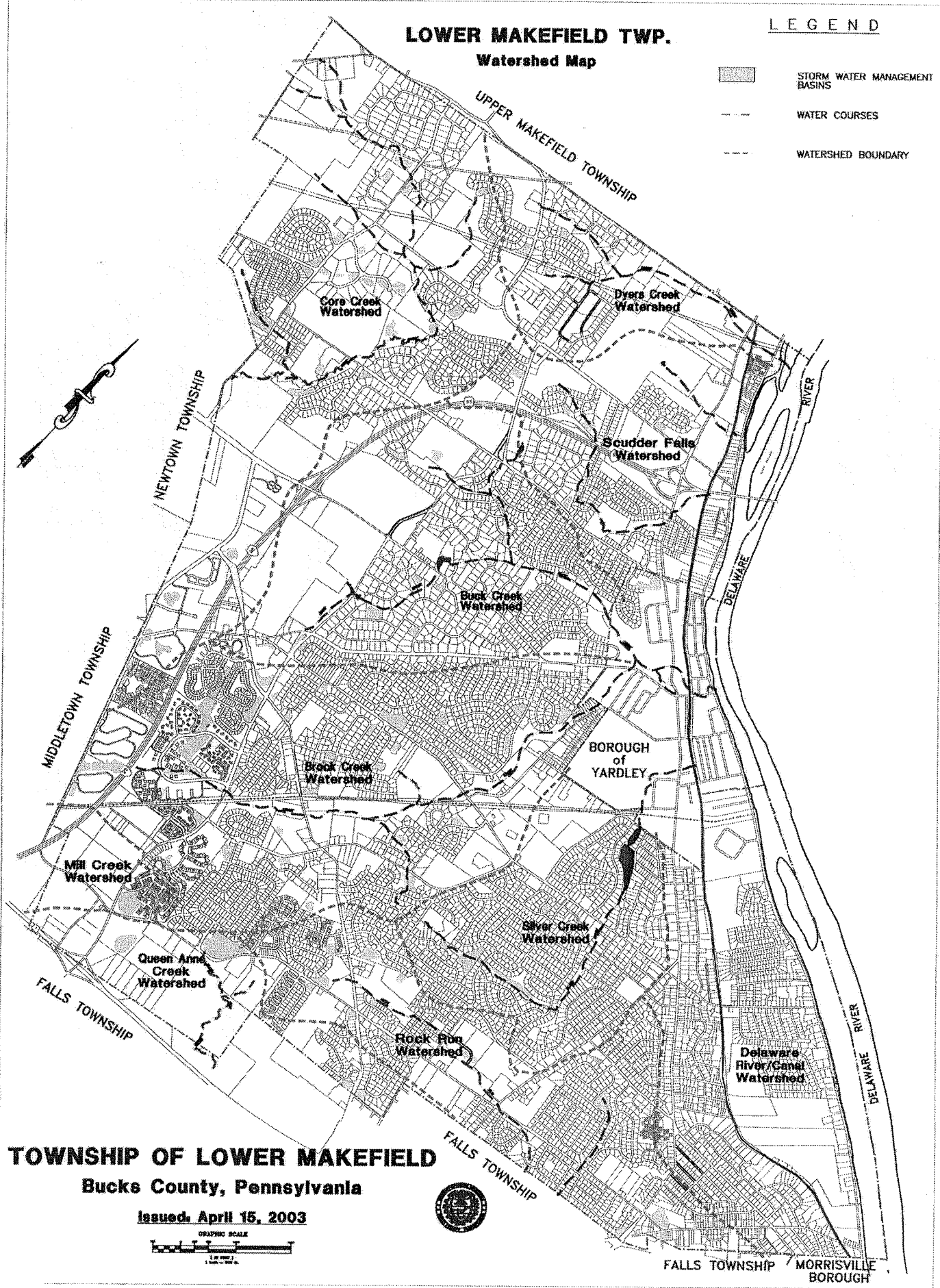
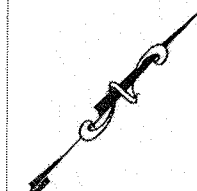


LOWER MAKEFIELD TWP.

Watershed Map

LEGEND

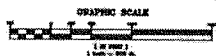
-  STORM WATER MANAGEMENT BASINS
-  WATER COURSES
-  WATERSHED BOUNDARY



TOWNSHIP OF LOWER MAKEFIELD

Bucks County, Pennsylvania

Issued: April 15, 2003



corridors and their associated floodplains for recreational purposes. The Queen Anne Creek flows through the Five Mile Woods area and is protected as part of that forest preserve.

Wetlands

Areas of hydric or wet soils are located throughout the township. These soil types have become important indicators of wetlands, which are areas regulated by the U.S. Army Corps of Engineers and the Pennsylvania Department of Environmental Protection under the federal Clean Water Act and other state laws. The hydric or wetland soils within Bucks County are Bowmansville, Croton, Doylestown, Fallsington, Hatboro, Holly, Lamington, and Towhee.

Soil type is one of three indicators of wetlands, the other two being the presence of wetland vegetation and hydrology—the saturated soil conditions and the drainage characteristics. The definition of wetlands used by the U.S. Army Corps of Engineers is:

Those areas that are inundated and saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.

Many of the wetlands areas in the township are found along creeks and their tributaries. About 584 acres, or 5 percent of the township's area, consists of wetlands, according to a 1999 report by the Heritage Conservancy.

The Army Corps has adopted regulations designed to protect wetlands because of their value to protection of water quality, provision of animal habitats, and their ability to absorb floodwaters. These regulations require a permit from the corps to disturb wetlands areas. State and/or federal agencies that permit wetland disturbance may require that the loss of wetlands be mitigated by the creation of wetland areas elsewhere.

Wetland areas are also subject to regulation by the Pennsylvania Department of Environmental Protection. These regulations are somewhat more restrictive than the federal regulations because the Army Corps exempts some small areas of wetlands as part of its routine permitting procedures.

The township has enacted innovative wetlands regulations in its zoning that minimize disturbance of this natural resource well beyond what is required under minimum state or federal standards. Lower Makefield Township protects wetlands and watercourses with through its wetlands/watercourse buffer requirements. Minimum buffer width is required to be 50 feet with no filling, grading, clearing, or development permitted. Where 2/3 of a contiguous minimum buffer consists of vegetation is less than 12 inches and 20 feet in height, the buffer shall be a minimum 75 feet in width. Where 2/3 of a contiguous minimum buffer consists of vegetation less than 12 inches in height or there is no vegetation, the buffer shall be a minimum 100 feet in width.

Woodlands ¹

Woodland areas play an important role in maintaining the balance and health of the environment by:

- reducing water runoff and soil erosion on slopes
- helping to prevent water pollution by minimizing the sedimentation of lakes and streams
- stabilizing stream banks
- contributing to a more pleasant climate by adjusting the amount of dust and humidity in the air, providing shade, and reducing strong winds
- serving as wildlife habitats, recreational areas, and land use buffers
- adding interest, variety, and beauty to the landscape
- providing shade to keep the water temperature low in streams, thus helping to support the aquatic life in streams
- absorbing carbon dioxide

The Pennsylvania Municipalities Planning Code states that the preservation of forests is one of the purposes of planning; preservation of woodlands is important to community aesthetics. The environmental, aesthetic, and recreational benefits of woodland areas justify their protection in the development process. Map 2 shows the location of woodlands.

Because much of the township was once cultivated, the primary woodland areas remaining are located along stream valleys, along the Delaware River, and on wet soils that were not tillable. The Lower Makefield Township zoning ordinance requires that areas qualifying as woodlands be 70 percent protected.

Natural Areas Program

In June of 1999, an inventory was undertaken to identify and rank the most significant natural areas remaining in Bucks County, including those in Lower Makefield Township. This survey, titled *Natural Areas Inventory of Bucks County, Pennsylvania* provides guidance for implementation of the Natural Areas component of the Bucks County Open Space Initiative. The individual site evaluation to determine the significance of natural areas is based upon 13 criteria addressing biological, ecological, hydrological, and geological components. Sites were assigned one of four levels of importance.

- Priority 1—areas that have statewide or countywide significance based on uniqueness or exceptionally high quality of natural features.
- Priority 2—areas that have countywide or statewide significance based on the overall quality and the diversity and importance of the resources.

¹ A report entitled “Vegetation and Stream Survey, Lower Makefield Township,” was prepared in 1978 by the Academy of Natural Sciences of Philadelphia. It describes the character and locations of terrestrial vegetation, wetland vegetation, and biological and chemical quality of surface waters. This information was used in developing the natural resource protection standards for the township zoning ordinance.

- Priority 3—areas that have local or countywide significance that may contain small or degraded resources.
- Priority 4—areas that have biological or ecological resources that are important at the local level.

Lower Makefield Township contains the following priority sites as identified in the Natural Areas Inventory. (See Map 4)

Five Mile Woods – Priority 1 Site—The Five Mile Woods Preserve contains a large undisturbed section of quartzite outcrops associated with the Fall Line, and for this reason the site has been nominated as a National Natural Landmark. It also encompasses excellent examples of coastal plain forest, mixed coastal plain/piedmont vegetation and at least seven species of rare plants. The preserve also includes a stand of wild cranberry (*Vaccinium macrocarpum*), a rare occurrence in southeastern Pennsylvania. Five Mile Woods is one of the last places New Jersey chorus frogs were known in the state, in 1985. The preserve straddles the boundary between Lower Makefield and Falls townships.

To protect the integrity and biodiversity of the preserve, it is of critical importance that all contiguous forested land be protected. Additional forested land to the east of the preserve and smaller tracts that jut into the preserve along Big Oak Road should be sought for additions to the preserve as the opportunity arises. The growing problem of deer overabundance will also need to be addressed in managing the preserve in the future.

Bucks County owns easements on 295 acres of the preserve, which is managed by the Lower Makefield Township Board of Supervisors.

Scudder Falls Islands – Priority 3 Site—This site includes islands and alluvial riverbanks extending for about one mile upstream from the Scudder Falls Bridge. The islands are forested, with mature trees of typical riparian species such as silver maple, river birch, and sycamore. A small population of a rare shrub, common hop-tree, is present. Backwater channels contain emergent wetland vegetation and at low water, extensive alluvial cobble deposits are exposed. This complex of forested islands, channels, and shores provides excellent habitat for riparian birds and possibly for the cobblestone tiger beetle for which there is a historical record, although searches for this species in 1998 were unsuccessful.

Scudder Falls Islands is not currently protected, but its development potential is limited due to resource restrictions, including lack of access and extensive floodplains and wetlands.

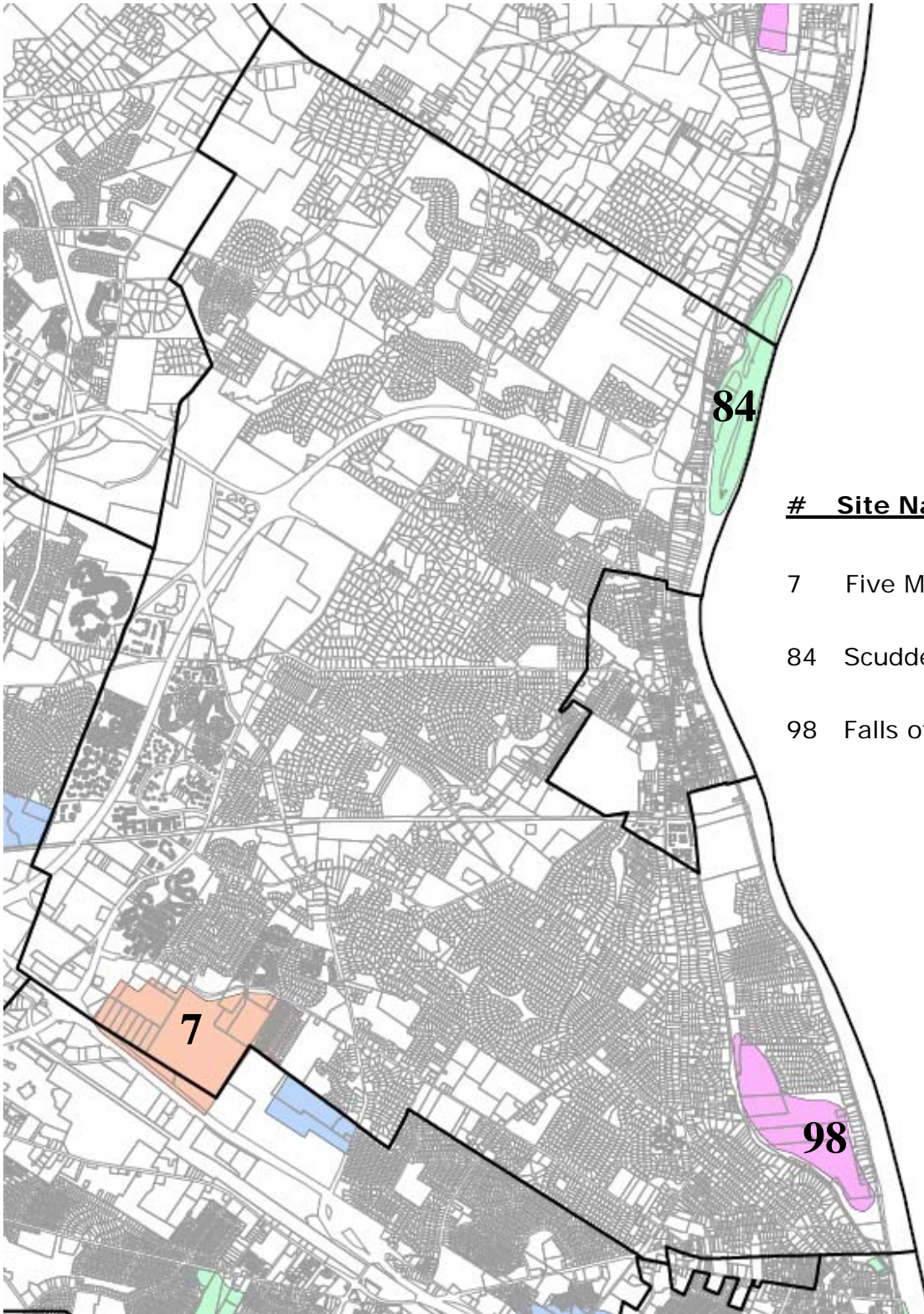
Falls of the Delaware – Priority 4 Site—A band of wooded swamp, emergent wetlands, early successional forest, and disturbed woods extends along the eastern border of Delaware Canal State Park from the township's Macclesfield Park to the Falls of the Delaware Park, recently acquired by the Bucks County Parks Department. Although portions of the site are very severely affected by non-native vegetation (remnants of a former nursery in part), the site is an important part of the green corridor along the Delaware River and canal and provides habitat for a variety of birds. A small population of a rare plant, Netted chain fem, is present. A federally endangered

fresh water mollusk, the Dwarf wedgemussel, was collected at this point early in the 20th century; however, it has not been seen recently.

The Bucks County Parks Department owns 170 acres of the site. The park, known as the Falls of the Delaware Park, remains undeveloped. About 38.3 acres of undeveloped land is adjacent to the park and owned by the township. Another 8.23 acres west of this land and adjacent to the Delaware Canal is owned the Commonwealth of Pennsylvania. Township, county, and state officials should coordinate to enhance and protect these important open space areas along the canal and the river and at the Falls of the Delaware County Park.

Lower Makefield Township

Map 4. Natural Areas Inventory Sites



INVENTORY OF PROTECTED LANDS

Over 2,000 acres of land has been preserved in Lower Makefield Township, including township, State, County, and public school-owned land. This amounts to 17.2 percent of all land in Lower Makefield Township. The table on the following page details land that has been permanently preserved in Lower Makefield Township, categorized by Lower Makefield Township land, Bucks County land, Commonwealth of Pennsylvania Land, and Pennsbury School District land. Lower Makefield Township has no open space that is owned by private land trusts or conservancies. Map 5 shows the locations of these lands.

Recent Township Acquisitions

Lower Makefield Township has had a long-standing history of land preservation, shown by the over 1,200 acres of open space land owned by the township. A number of properties have been acquired by the township in recent years.

Five Mile Woods was purchased by the township to ensure its preservation in the early 1980s. In 2004, however, the township received a grant from the Bucks County Open Space Program to purchase easements on two additional properties (known as the Banko properties). As part of this purchase, the township donated easements to Bucks County on the remaining Five-Mile Woods property. The Board of Supervisors manages the 295-acre preserve.

In 1999, the 23-acre Oxford Roelofs Park was dedicated by the township. The park is primarily used for girls' softball, but the park also includes tennis courts, bocce ball, horseshoe pits, a tot lot, walking trails, and picnic areas. Also in 1999, the township acquired the 11.7-acre Elme Lowne property. A historic Federal-style estate on Dolington Road next to the Snipes tract, it is available for rental use.

In 2000, Lower Makefield Township acquired the 26-acre Samost tract, located between Oxford Roelofs Park and Stoddart Community Park. Also in 2000, the township acquired the 36-acre Snipes tree farm, located at the corner of Dolington and Quarry roads. Both tracts are planned as additional parkland.

Another planned park is a tract of 63.5 acres on Woodside Road in the northern section of the township. Memorial Park will have a memorial to Bucks County residents lost in the September 11, 2001 attack on the World Trade Center. Plans call for the township to install infrastructure improvements at the site, and for a mix of active and passive recreation facilities that includes athletic fields, athletic courts, picnic area, arboretum and a nature trail.

The township acquired land for the Makefield Highlands golf course in 1996 and opened the facility in 2004. The 203-acre, 18-hole public golf course on Woodside Road preserves open space and on-site historic resources, as well as further diversifies the range of recreation options within the township. The golf course includes a practice facility and a clubhouse.

The township acquired the Patterson Farm in 2007, a 231-acre property that has significant value as open space due to its farming value, scenic value, and natural resources.

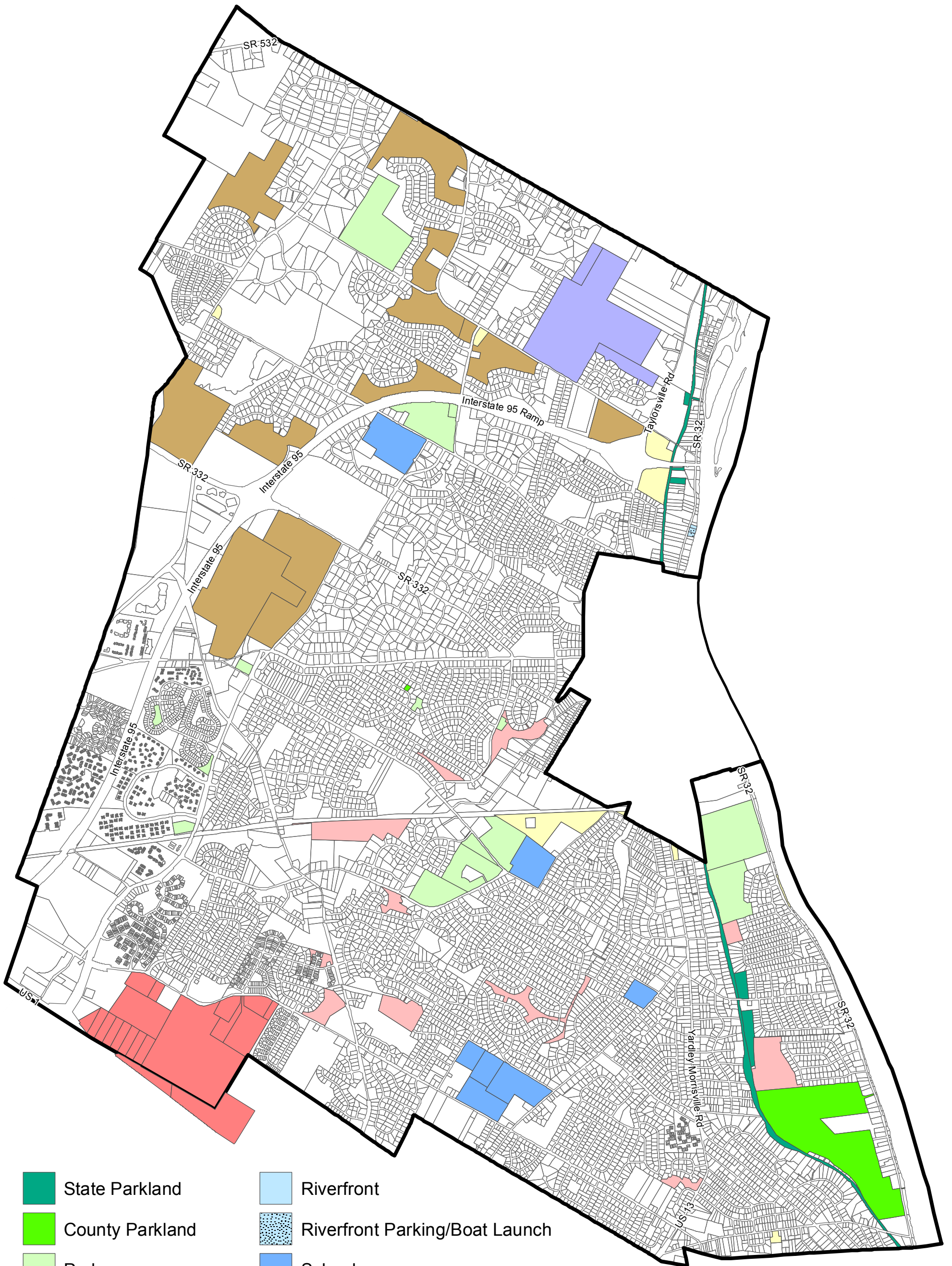
Table 7. Preserved Open Space












Tax Parcel Number	Site Name	Type	Acreage	Ownership	Protection Level	Easement Held By	Public Access?	Notes
20-009-002-001	Makefield Highlands Golf Course	Golf Course	8.49	Lower Makefield Township	Fee Simple		Y	Public golf course; historic structures
20-009-008	Makefield Highlands Golf Course	Golf Course	180.76	Lower Makefield Township	Fee Simple		Y	
20-028-115	Makefield Highlands Golf Course	Golf Course	14.4	Lower Makefield Township	Fee Simple		Y	
20-012-012-001	Heacock Meadows - Heacock Road	Park	3.71	Lower Makefield Township	Fee Simple		Y	Soccerfield, beach volley ball
20-014-064	Heacock Meadows - Cardinal Drive	Park	2.334	Lower Makefield Township	Fee Simple		Y	Tennis Courts
20-015-045	Heacock Meadows - Bluebird Drive	Park	1.852	Lower Makefield Township	Fee Simple		Y	Tot lot
20-034-047	Samost Tract	Park	25.69	Lower Makefield Township	Fee Simple		Y	Planned parkland
20-045-001	Macclesfield Park	Park	63.02	Lower Makefield Township	Fee Simple		Y	Multipurpose fields: soccer, lacrosse, football; baseball, volleyball courts,
20-045-003-001	Macclesfield Park	Park	31.69	Lower Makefield Township	Fee Simple		Y	tot lots, exercise trails, picnic areas, concession stand, access to canal
20-003-027	Proposed Memorial Park	Park	63.51	Lower Makefield Township	Fee Simple		Y	
20-021-005	Veteran's Memorial Park	Park	2.87	Lower Makefield Township	Fee Simple		Y	Tot lot, picnic areas, mini-soccer fields, tee-ball.
20-034-022-002	Stoddart Community Park - Township Pool	Park	25.15	Lower Makefield Township	Fee Simple		Y	Ballfields across street
20-034-046	Stoddart Community Park - Ballfields	Park	7.134	Lower Makefield Township	Fee Simple		Y	Little League Baseball fields -probably part of Semost Tract 20-34-47
20-034-049	Oxford Roelofs Park	Park	22.75	Lower Makefield Township	Fee Simple		Y	Softball fields; tennis courts, bocce ball, horseshoe pits; tot lots; trails, picnic areas
20-025-177	Schuyler Road Tennis Courts	Park	1.494	Lower Makefield Township	Fee Simple		Y	Tennis Courts
20-058-067	Revere Road Tennis Courts	Park	1.528	Lower Makefield Township	Fee Simple		Y	Tennis Courts
20-016-001-001	Proposed Park	Park	2	Lower Makefield Township	Fee Simple		Y	Former Snipes Tree Farm
20-016-002	Proposed Park	Park	34.2	Lower Makefield Township	Fee Simple		Y	Former Snipes Tree Farm
20-003-033		Preserved Farm	4.82	Lower Makefield Farmland Preservation Corporation	Fee Simple		N	
20-003-039	Wright Farm	Preserved Farm	81.36	John Wright	Easement	Bucks County	N	Bucks County Agricultural Preservation Program
20-007-052		Preserved Farm	32.597	Lower Makefield Farmland Preservation Corporation	Fee Simple		N	
20-007-163		Preserved Farm	47.78	Lower Makefield Farmland Preservation Corporation	Fee Simple		N	
20-008-082		Preserved Farm	33.569	Lower Makefield Farmland Preservation Corporation	Fee Simple		N	
20-016-046	Patterson Farm	Preserved Farm	98.3	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	Bucks County Municipal OS Program/County owns easement totaling 71.3557 acres
20-016-049	Patterson Farm	Preserved Farm	132.7	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	Bucks County Municipal OS Program/County owns easement totaling 71.3557 acres
20-017-047		Preserved Farm	24.97	Lower Makefield Farmland Preservation Corporation	Fee Simple		N	
20-072-068		Preserved Farm	24.826	Lower Makefield Farmland Preservation Corporation	Fee Simple		N	
20-077-041		Preserved Farm	68.003	Lower Makefield Farmland Preservation Corporation	Fee Simple		N	
20-080-048		Preserved Farm	39.297	Lower Makefield Farmland Preservation Corporation	Fee Simple		N	
20-074-021		Preserved Farm	58.202	Lower Makefield Farmland Preservation Corporation	Fee Simple		N	
20-025-250		Natural Resource Land	16.662	Lower Makefield Township	Fee Simple		N	
20-034-043		Natural Resource Land	33.431	Lower Makefield Township	Fee Simple		N	
20-039-212		Natural Resource Land	2.3	Lower Makefield Township	Fee Simple		N	
20-039-319		Natural Resource Land	2.76	Lower Makefield Township	Fee Simple		N	
20-046-197		Natural Resource Land	6.4	Lower Makefield Township	Fee Simple		N	Adjacent to canal
20-047-114		Natural Resource Land	38.33	Lower Makefield Township	Fee Simple		N	Adjacent to canal and Falls of the Delaware Park
20-049-324		Natural Resource Land	5.601	Lower Makefield Township	Fee Simple		N	
20-055-102		Natural Resource Land	11.99	Lower Makefield Township	Fee Simple		N	
20-056-052		Natural Resource Land	17.191	Lower Makefield Township	Fee Simple		N	
20-057-202		Natural Resource Land	6.29	Lower Makefield Township	Fee Simple		N	
20-058-155		Natural Resource Land	5.35	Lower Makefield Township	Fee Simple		N	
20-060-122		Natural Resource Land	2.66	Lower Makefield Township	Fee Simple		N	
20-060-280		Natural Resource Land	11.68	Lower Makefield Township	Fee Simple		N	
20-003-034-004		Other Land	1.895	Lower Makefield Township	Fee Simple		N	
20-003-051		Other Land	2.724	Lower Makefield Township	Fee Simple		N	
20-034-020-007		Other Land	0.68	Lower Makefield Township	Fee Simple		N	
20-038-121		Other Land	1.3	Lower Makefield Township	Fee Simple		N	
20-052-116-001		Other Land	2	Lower Makefield Township	Fee Simple		N	
20-030-056-001		Other Land	14.44	Lower Makefield Township	Fee Simple		N	
20-030-056		Other Land	10.037	Lower Makefield Township	Fee Simple		N	
20-045-006-001		Other Land	0.7	Lower Makefield Township	Fee Simple		N	
20-034-020-006		Other Land	29.52	Lower Makefield Township	Fee Simple		N	Adjacent to Stoddart Community Park
20-032-028	5 Mile Woods	Natural Areas Program	5	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	Unique coastal plain flora, forested wetlands, and boggy, herbaceous wetlands.
20-032-029	5 Mile Woods	Natural Areas Program	5	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	

Table 7. Preserved Open Space

Tax Parcel Number	Site Name	Type	Acreage	Ownership	Protection Level	Easement Held By	Public Access?	Notes
20-032-030	5 Mile Woods	Natural Areas Program	5	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-031	5 Mile Woods	Natural Areas Program	5	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-032	5 Mile Woods	Natural Areas Program	5	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-033	5 Mile Woods	Natural Areas Program	5	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-034	5 Mile Woods	Natural Areas Program	4.84	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-035	5 Mile Woods	Natural Areas Program	3.43	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-042	5 Mile Woods	Natural Areas Program	31.823	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-043	5 Mile Woods	Natural Areas Program	3.81	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	Banko Property
20-032-043-001	5 Mile Woods	Natural Areas Program	9.07	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	Banko Property
20-032-045	5 Mile Woods	Natural Areas Program	115.33	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-046	5 Mile Woods	Natural Areas Program	20.21	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-046-001	5 Mile Woods	Natural Areas Program	2.29	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-046-002	5 Mile Woods	Natural Areas Program	11.832	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-046-003	5 Mile Woods	Natural Areas Program	7.343	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
20-032-046-004	5 Mile Woods	Natural Areas Program	7.812	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	
13-003-008	5 Mile Woods	Natural Areas Program	9.69	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	Located in Falls Township
13-003-009-005	5 Mile Woods	Natural Areas Program	37.6	Lower Makefield Township	Fee Simple/County Easement	Bucks County	Y	Located in Falls Township
20-053-042	Falls of the Delaware Park	County Parkland	170.045	Bucks County	Fee Simple		N	
20-027-009	Delaware Canal	State Parkland	6.06	Commonwealth of PA	Fee Simple		Y	Hiking and biking along historic towpath
20-027-010	Delaware Canal	State Parkland	1.06	Commonwealth of PA	Fee Simple		Y	
20-028-012	Delaware Canal	State Parkland	0.39	Commonwealth of PA	Fee Simple		Y	
20-030-058	Delaware Canal	State Parkland	5.86	Commonwealth of PA	Fee Simple		Y	
20-030-059-004	Delaware Canal	State Parkland	0.7	Commonwealth of PA	Fee Simple		Y	
20-030-060	Delaware Canal	State Parkland	1.63	Commonwealth of PA	Fee Simple		Y	
20-040-149	Delaware Canal	State Parkland	7.17	Commonwealth of PA	Fee Simple		Y	
20-040-156	Delaware Canal	State Parkland	5.4	Commonwealth of PA	Fee Simple		Y	
20-043-121	Delaware Canal	State Parkland	8.23	Commonwealth of PA	Fee Simple		Y	Adjacent to the Delaware Canal and Falls of the Delaware Park
20-053-032	Delaware Canal	State Parkland	15.39	Commonwealth of PA	Fee Simple		Y	
20-054-116	Delaware Canal	State Parkland	0.71	Commonwealth of PA	Fee Simple		Y	
20-030-109		Riverfront	0.39	Commonwealth of PA	Fee Simple		Y	
20-030-110		Riverfront Parking/Boat Launch	0.55	Commonwealth of PA	Fee Simple		Y	
20-031-012		Riverfront Parking/Boat Launch	0.63	Commonwealth of PA	Fee Simple		Y	
20-016-010-001	Afton/Quarry Hill Elementary	School	37.09	Pennsbury School District	Fee Simple		Y	
20-034-022	Edgewood Elementary School	School	25.28	Pennsbury School District	Fee Simple		Y	
20-034-086	William Penn Middle School	School	9.09	Pennsbury School District	Fee Simple		Y	
20-034-087	William Penn Middle School	School	11.53	Pennsbury School District	Fee Simple		Y	
20-034-088	Pennwood Middle School	School	29.84	Pennsbury School District	Fee Simple		Y	
20-034-090	Charles Boehm Middle School	School	20.48	Pennsbury School District	Fee Simple		Y	
20-040-041	Makefield Elementary	School	10.12	Pennsbury School District	Fee Simple		Y	

Map 5 Preserved Open Space



- | | |
|---|--|
|  State Parkland |  Riverfront |
|  County Parkland |  Riverfront Parking/Boat Launch |
|  Park |  School |
|  Preserved Farm |  Golf Course |
|  Natural Areas Program |  Other Land |
|  Natural Resource Land | |



POTENTIAL OPEN SPACE LINKAGES

Lower Makefield Township has developed a Walkway System Map, which details existing and proposed walkways, bike paths, and bike lanes as well as public destinations such as public service buildings, recreational facilities, and schools. The Walkway System Map is shown on Map 6.

Linkages are a connected system of open space that allow for the movement of wildlife, plants, and people. Linked trails and greenways provide greater recreational, environmental, and scenic values than isolated parcels of land. The township policy is to provide and support linkages that serve the following purposes:

1. Connection of open spaces and park facilities with the comprehensive township-wide bike path system.
2. Connect parkland and open space by acquiring intervening pieces of land to form connected open space. The 1998 Lower Makefield Open Space Plan listed the Samost property as the most important to achieving this policy. This property was acquired in 2000.
3. Connections of open space along stream corridors to create greenways. The properties identified along Dyers Creek are important, as are properties along the Delaware River and Delaware Canal.
4. Connections by way of bike path or parkland to Yardley Borough.
5. County-planned open space linkages across the township that would connect disparate open space and community resources.²

² The *Bucks County Park and Recreation Plan* (1986) shows a link park along Brock Creek which would serve to connect Core Creek Park with the Delaware Canal in Yardley. Given that Lower Makefield has, in the interim, provided roadside trails that would serve to connect these two resources (with breaks in the links on either end), county policy makers may choose to reprioritize this potential linkage in the updated Bucks County Open Space, Park, and Trail Plan. The township should ensure that future acquisition and development efforts are in keeping with county policy and initiatives.

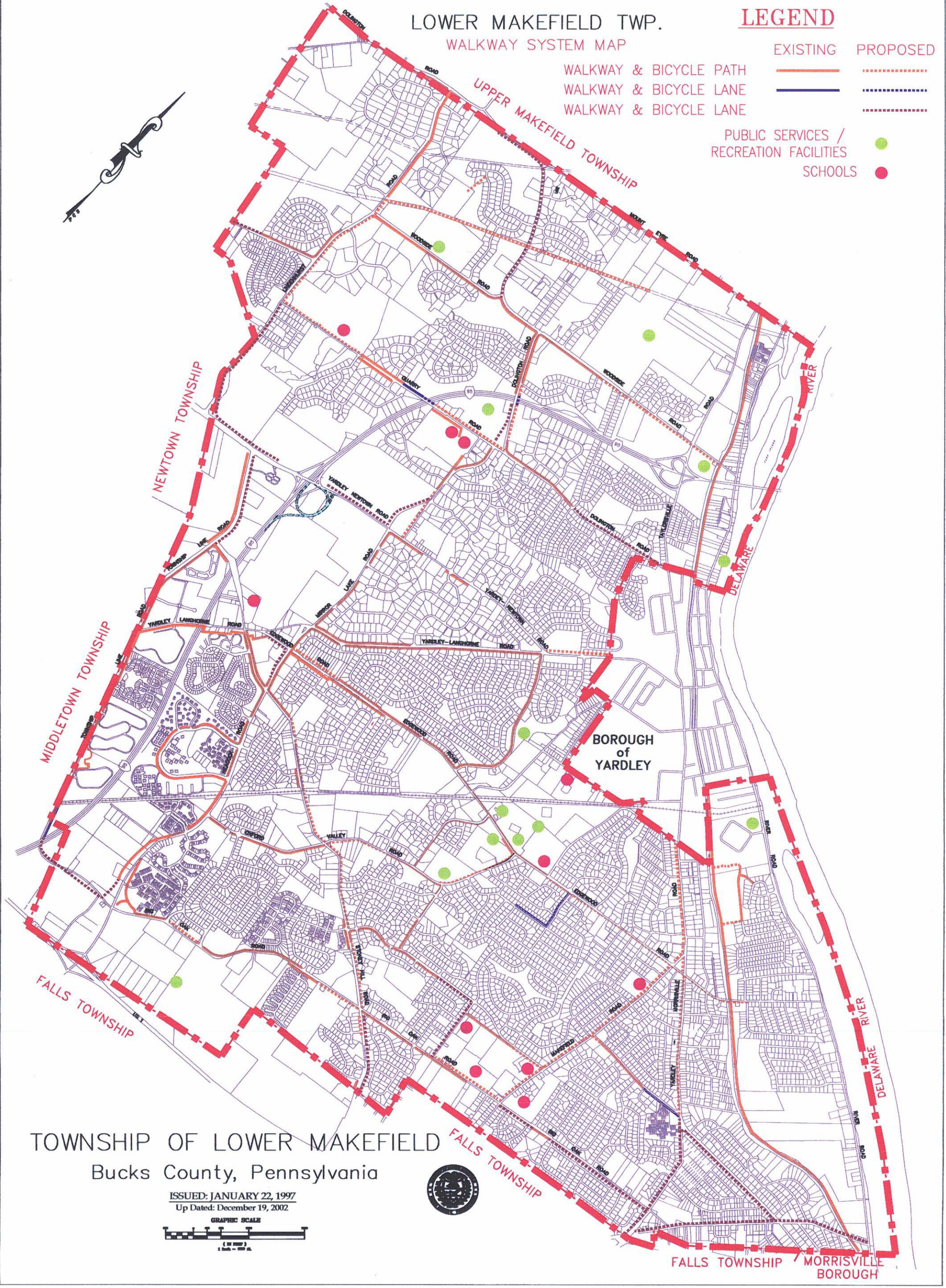
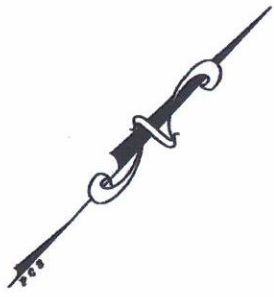
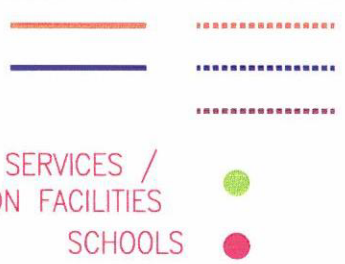
LOWER MAKEFIELD TWP.
WALKWAY SYSTEM MAP

LEGEND

EXISTING PROPOSED

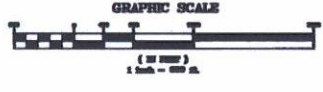
WALKWAY & BICYCLE PATH
WALKWAY & BICYCLE LANE
WALKWAY & BICYCLE LANE

PUBLIC SERVICES /
RECREATION FACILITIES
SCHOOLS



TOWNSHIP OF LOWER MAKEFIELD
Bucks County, Pennsylvania

ISSUED: JANUARY 22, 1997
Up Dated: December 19, 2002



NON-ACQUISITION TOOLS AND TECHNIQUES

Lower Makefield has had plans and ordinances geared to preserving environmental features and open space since the 1970s. The township has used the following non-acquisition tools and techniques to preserve land.

Resource protection standards – All land use ordinances require the identification and protection of natural resources. This includes floodplains, wetlands, stream corridors, steep slopes, and woodlands. Floodplains, wetlands, and stream corridors must be preserved and protected from development or disturbance. Woodlands and steep slopes may be partially disturbed to accommodate building and development. About 271 acres of open space and natural resource land has been dedicated to the township.

Net site density approach – Lower Makefield Township has a unique approach to preservation of resources. The township has developed a net site density approach which allows developers to reduce lot sizes in order to protect natural features. Where a proposed development site is encumbered by resources to be protected, the minimum lot size may be reduced and density increased so that a greater percentage of natural resources are protected.

Farmland preservation option in zoning ordinance – The zoning ordinance includes a Farmland Preservation Option which allows for the preservation of farmland in northern agricultural area of the township. The option is available to developers who may cluster housing on half the land and set aside the remaining half for farmland. During the 1980s, a Farmland Preservation Corporation was formed which receives the farmland and manages it. The Lower Makefield Township Farmland Preservation Corporation has preserved farmland totaling 334 acres, the result of several large developments that incorporated farmland preservation into their plans.

Concern about environmental quality and protection – The township has a long history of concern with the natural environment and natural resources. In 1978, the township hired scientists from the Academy of Natural Sciences in Philadelphia to survey the forest vegetation, wetlands vegetation, biological characteristics of streams, and water quality of the township streams. This work helped form the basis for environmental protection standards and for the ultimate preservation of Five Mile Woods.

More recently, the township has enacted a Low-Impact Development Ordinance, which permits a cluster development option in certain residential zoning districts, with the requirement that more stringent resource protection standards and low-impact development techniques be employed on the site. Applicants are also required to follow a specific design process and demonstrate an understanding of the site's characteristics and resources by developing a site and resource analysis map. The township has also enacted a Native Plants Ordinance, which requires that all plants required as part of a landscape plan be native plants.

Continued monitoring of water and stream quality – The 1978 study served as a basis for a 1997 study conducted by the township. The “Aquatic Assessment and Characterization of Selected Streams within Lower Makefield Township” was prepared in order to “obtain aquatic data related to existing water quality, animal life, and habitat conditions... (to) be utilized by the

township in the development and implementation of strategies concentrating on maintaining and improving the diversity of existing aquatic natural resources.” Aquatic sampling stations were established along Core Creek, Dyers Creek, Buck Creek, Brock Creek, Silver Creek, and Rock Run. The study focused on the effects of stormwater runoff on water quality, degradation and erosion of streambanks. Although the water quality has not declined substantially since 1978, the report does identify stormwater runoff as a threat to water quality in the future. Areas of stream bank erosion are noted. Recommendations were made regarding monitoring and controlling nonpoint source pollutants.

Park and Recreation Planning – In 1988, a “Pool and Park Facilities Plan” was prepared to help the township identify future recreation needs and to establish guidelines for meeting future needs. The plan estimated the amount of land needed to meet future active recreation needs, focusing on large-scale community facilities for active recreation rather than small-scale neighborhood parks and open space for conservation or passive recreation. This study contained a detailed inventory of open space and recreational facilities and described each area in terms of the size, use, access, natural features, recreational use, recreational potential, and maintenance responsibilities.

A second study was completed in 1990 and became known as Volume 2 of the Park Plan. It was prepared largely in response to the changes in the Pennsylvania Municipalities Planning Code, but it also updated the list of township facilities and revised the statement of need for new land and facilities to meet community recreation needs.

The township amended its Subdivision/Land Development Ordinance following the completion of Volume 2 of the Park Plan. This amendment set these requirements for dedication of recreation land:

1. Land in the amount of 2,200 square feet per dwelling unit must be set aside for recreational use as part of any new residential development. This land must meet location and site requirements so that it is suitable for its intended recreational purpose.
2. If the township and the developer agree, a fee in lieu of recreational land can be substituted for the dedication of land.

The township has been divided into three recreation fee districts—northern, central, and southern. The intent is to use fees collected within a district to meet the recreational needs of the residents of that district. Both the northern district and the southern district overlap to some degree with the central district so that some portion of fees can also be used for centralized facilities if needed.

The township updates its park and recreation planning documents regularly to reflect acquisition of properties, expansion of facilities, and changes in user demand. The 1995 and 1997 Parks and Recreation Action Plans inventoried facilities and addressed in detail projected need for land and facilities, possible directions for future park and recreation programs and administration, and fee requirements for new developments. No new park and recreation plan will be developed until the

acquisition and development, administration, and programming goals are reached for the most recent Parks and Recreation Action Plans.

Delaware Canal enhancement—The Delaware Canal Master Plan was completed in the late 1980s and endorsed the concept of municipal canal enhancement ordinances. A model ordinance, entitled “Generalized Suggested Zoning Provisions to Protect and Enhance the Delaware Canal Corridor” was prepared for the 18 municipalities along the canal as part of the canal master plan. Each municipality was asked to consider the generalized suggestions and adopt those provisions that seemed applicable to it. The standards are designed to protect the visual character of lands along the canal in support of the publicly owned lands that are controlled by the state.

The specific zoning standards already in place in Lower Makefield provide the control of uses, signs, and environmental features that the model canal enhancement ordinance promotes. The Lower Makefield Township Zoning Ordinance also features a 150-foot canal setback in which nothing may be permitted.

Support for Delaware River Programs and Preservation Efforts – In addition to enacting its own protective zoning for the riverfront area, the Lower Makefield has recognized the national importance of the river as a resource to be protected. The township supports and participates in the studies and programs designed to protect the river. The township endorsed the goals and policies of the Lower Delaware River Management Plan, a required component of the Lower Delaware River Wild and Scenic River Study. The specific goals endorsed by Lower Makefield were:

- Protection of Water Quality
- Protection of Natural Resources
- Protection of Historic Resources
- Encourage suitable recreational uses
- Allow for suitable economic development
- Preservation of open space

These goals are supported and will continue to be supported through the township's land use planning and ordinance enactment.

In addition, Appendix 1: Open Space Inventory identifies several parcels along the Delaware River as third-tier priorities for preservation. These parcels, known as the “Scudders Falls Islands” in the *Natural Areas Inventory of Bucks County, Pennsylvania*, would have scored higher in the township’s ranking system if it were not for the many natural resources on the site that limit public access and usability. Nevertheless, preserving these important lands along the Delaware River will further the township-endorsed goals and policies of Lower Delaware River Management Plan.

Other Policies and Methods

In addition, the township intends to use the following non-acquisition methods to preserve open space.

Encourage farmers to apply to the Bucks County Agricultural Preservation Program – The farmers enrolled in the Agricultural Security District are eligible to apply to the County program for preservation of farms. Supported jointly by the state and county, the program has been in operation since 1989. To be eligible for consideration, farms must be at least 50 acres in size, actively farmed and enrolled in the Agricultural Security Area. Farms are prioritized for inclusion in the program based on many factors. Among the most important factors are the productivity of a farm, the threat from development, and the prospects for its continued successful operation.

Work with Bucks County Agricultural Preservation Program on preserving eligible farms – In other Bucks County municipalities, townships have worked cooperatively with the County Agricultural Preservation Program to preserve farms that neither government entity could have preserved alone.

Discuss conservation options with landowners such as donations, like-kind exchange, and other methods that involve tax savings – The township can accept donations of conservation easements. The township holds and safeguards the easements in the same way that the county does. Donors may take a tax deduction just as they would if they were dealing with a nonprofit organization.

Seek other funding and assistance – The township can seek other assistance with its open space program, by seeking assistance from other governmental grants and or private foundations.

GOVERNMENT ORGANIZATION AND FINANCING

Lower Makefield Township is a second-class township governed by a five-member board of Supervisors, each elected for a six year term. The township maintains administrative offices, the police department, and the public works department at the municipal complex at 1100 Edgewood Road.

The Board of Supervisors contracts with professional advisors (i.e., solicitor and engineer) who assist in implementing local policies when necessary. The Supervisors also appoint citizens to serve on various municipal panels, including the Planning Commission, Zoning Hearing Board, Historical Commission, Environmental Advisory Council (EAC), and Park and Recreation Board.

The EAC is the panel designated to advise the Board of Supervisors on the acquisition of conservation interests based on Open Space Plan recommendations, including use of Bucks County Municipal Open Space Program funds allocated to the township, and properties that meet the standards for funding under the Bucks County Natural Areas Program.

The Park and Recreation Board is composed of seven members and serve for a term of five years. The Park and Recreation Board assists the township Supervisors in planning and maintaining parks, recreation facilities, and programs.

Funding for Open Space Preservation

Township voters approved a referendum in 1999 authorizing borrowing in the amount of \$7.5 million to fund the cost for open space and land preservation. Between 2000 and 2008, these monies were used to purchase conservation easements and open space, including Elm Lowne, the Samost tract, Snipes farm, Prospect farm, Gates Moontide farm, Ruth Wright farm, and the Banko tract. In November, 2008, voters approved a new municipal bond in the amount of \$15 million to be spent on preserving environmentally sensitive areas and open space for active and passive recreational purposes over the next 10 years.

IMPLEMENTATION

The township proposes the following action steps in order to fulfill its vision of open space preservation. Each action step relates back to specific goals and recommendations identified earlier in the plan. Some of the action steps involve the use of funds while others involve tools and techniques that can be used without public expenditure. Action steps include a responsible entity or entities and an approximate timeline. Timelines are divided into short term (0-1 year), mid term (2-4 years), long term (5-8 years), and ongoing.

Action Step 1

Preserve properties ranked A1 (highest priority), as identified in Appendix 1 “Lower Makefield Township Open Space Inventory.” The EAC ranking considers the acquisition of these parcels to be most beneficial to the township in terms of ecological value, contiguity to existing green space, and aesthetics.

Entity Responsible: Board of Supervisors, Township EAC

Timeline: Ongoing

Action Step 2

Provide and support linkages in accordance with Township Policy as shown on the Walkway System Map.

Entity Responsible: Board of Supervisors, Planning Commission, Township EAC

Timeline: Ongoing

Action Step 3

Preserve the Scudder’s Falls Islands using Natural Areas Inventory funding.

Entity Responsible: Board of Supervisors, Township EAC

Timeline: Mid Term

Action Step 4

Use the Delaware River funding component of the Bucks County Municipal Open Space Program to preserve and enhance land along the Delaware River identified as priorities for preservation in Appendix 1 “Lower Makefield Township Open Space Inventory.”

Entity Responsible: Board of Supervisors, Township EAC

Timeline: Mid Term

Action Step 5

Coordinate with County and State officials to provide full protection to open space lands in and Falls of the Delaware Park.

Entity Responsible: Board of Supervisors, Township EAC

Timeline: Mid Term

Action Step 6

Work with the Bucks County Agricultural Land Preservation Program to preserve the other farms in the northern section of the township.

Entity Responsible: Board of Supervisors, Township EAC

Timeline: Ongoing

Action Step 7

Work with the Bucks County Department of Parks and Recreation to ensure that future acquisition and development efforts are in keeping with county park acquisition initiatives.

Entity Responsible: Board of Supervisors, Township EAC

Timeline: Ongoing

Action Step 8

Acquire open space using methods other than fee simple purchase, including:

- Enforce resource protection requirements.
- Use farmland preservation option.
- Encourage farmers to apply to the Bucks County Agricultural Preservation Program.
- Work with Bucks County Agricultural Preservation Program on preserving eligible farms.
- Discuss conservation options with landowners such as donations, like-kind exchange, and other methods that involve tax savings.
- Enforce mandatory dedication of recreation land through the subdivision process.
- Purchase conservation easements.
- Seek other funding and assistance.

Lower Makefield Township Open Space Plan Update

Entity Responsible: Board of Supervisors, Planning Commission, Township EAC

Timeline: Ongoing

Action Step 9

Use the Open Space Plan in the review and discussion of subdivision and land development applications.

Entity Responsible: Board of Supervisors, Planning Commission

Timeline: Ongoing

**RESOLUTION OF THE BOARD OF SUPERVISORS
OF LOWER MAKEFIELD TOWNSHIP, COUNTY OF BUCKS,
COMMONWEALTH OF PENNSYLVANIA
AUTHORIZING ADOPTION OF THE
OPEN SPACE PLAN DATED JUNE 26, 2009**

**RESOLUTION
NO. 2193**

WHEREAS, the Board of Supervisors of the Township of Lower Makefield recognizes that the Township contains open space and natural areas that contribute to the quality of life and economic health of our community which are worthy of preservation; and

WHEREAS, the Bucks County Commissioners have renewed funding of the Bucks County Open Space Program through a referendum overwhelmingly passed by voters on November 6, 2007, the purpose of which is to protect in perpetuity those natural resource areas and farmlands deemed essential to preserve the unique character of Bucks County; and

WHEREAS, the Bucks County Open Space Program provides an allocation of funding protection of open space resources by municipalities provided that the municipality first prepares an approved municipal open space plan; and

WHEREAS, the Township of Lower Makefield wishes to participate in the Municipal Grant Program; and

NOW, THEREFORE, the Board of Supervisors of the Township of Lower Makefield, Bucks County, Pennsylvania hereby resolves that the Township Open Space Plan, dated June 26, 2009, prepared in compliance with the Municipal Open Space Plan Guidelines distributed by the Bucks County Open Space Program, has been discussed at a public meeting and is hereby adopted in its entirety in the form attached hereto, as the official Open Space Plan of the Township of Lower Makefield; and

BE IT FURTHER RESOLVED, that a certified copy of this Resolution be attached to, and made part of said Open Space Plan; and, furthermore, that the Township of Lower Makefield intends to take actions as appropriate to implement the goals of the Open Space Plan.

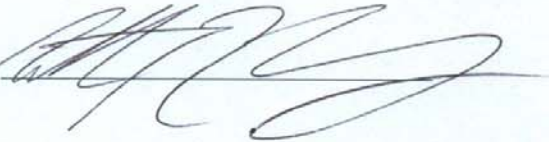
This Resolution has been duly prepared and adopted by the Board Supervisors of the Township of Lower Makefield Township in a public meeting.

RESOLVED, this 19th day of August 2009.

LOWER MAKEFIELD TOWNSHIP
BOARD OF SUPERVISORS

ATTEST:

Marybeth States

BY: 

APPENDICES

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Appendix 1

OPEN SPACE INVENTORY OF LOWER MAKEFIELD TOWNSHIP

Environmental Advisory Council
September 16, 2008

OPEN SPACE INVENTORY OF LOWER MAKEFIELD TOWNSHIP

Environmental Advisory Council

September 16, 2008

Introduction

At the request of the Board of Supervisors in late 2006, the Environmental Advisory Council was tasked with preparing a thorough and comprehensive list of all developable parcels of land within Lower Makefield Township. This information is intended for use by the BOS and other LMT boards and commissions for the purpose of prioritizing land availability within the township, in terms of its projected susceptibility to residential or other development and its importance for ecological, historical, and/or recreational uses. This list will guide the Township in allocating and acquiring resources for preserving these parcels where and when appropriate, and in creating an updated Open Space Plan.

The Open Space Plan dated May, 1998 was utilized as a starting point for this project, but the Task Force does not intend to prepare a new Plan, only a factual and useful Inventory. The identification and protection of a number of parcels within the township would conserve the attractive character of the township, provide natural buffers to absorb the physical effects of development, and aid in creating a greenways grid throughout the township.

Methodology

In preparation for executing this task the EAC obtained from the Bucks County Land Use Office (BCLUO), Open Space Program, a complete listing of all the tax parcels within the township, information which included the tax parcel number, the owner(s), the address, the recorded land use, and the acreage. The parcel data was sorted according to land use and size, and all those parcels which did not meet our initial culling criteria were removed (see Appendix 1.A for a detailed explanation of these criteria and the numerical results of two passes). As a result of this process, a total of 289 properties were identified which, by virtue of their size and land use, were candidates for further inspection and review. The list of 289 tax parcels was then submitted to the BCLUO and a map of the township was prepared with the proposed parcels highlighted.

During the spring and summer of 2007 two EAC members visited the 289 sites, and the parcels were rated using the parameters listed in Appendix 1.B. In addition the properties were reviewed by the Township Engineer in light of zoning and physical realities. The suitability of each property was noted by the Engineer, along with notation of constraints, such as woodlands, wetlands, streams, existing structures, access, zoning considerations, etc. The results of the two independent surveys were combined and the resulting list sorted to find those properties which both the EAC and the Township Engineer consider most vulnerable to development. Further refinement using some of the characteristics noted in an earlier review prepared in 1998 (see Appendix 1.C) resulted in a list of 131 of the most vulnerable properties. These were separated into two categories - high (A1 -

very developable with one or less environmental constraint)) and medium (A2 - developable with two or more environmental constraints). The complete sorted and annotated list of the 289 properties is presented in Appendix 1.D.

The 67 high (A1) priority properties from Appendix 1.D are presented in Tables 1 - 4, ranked according to size. These properties are considered to be most vulnerable to development. The EAC considers that their acquisition would be the most beneficial to the township in terms of ecological value, contiguity to existing green space, and aesthetics.

Table 1
Size > 10 Acres

Parcel Number	Current Owner	Address	Lot Size (Acres)	Apx C#
20-016-011	Harry M. Torbert, Jr	1700 Creamery Rd	108.62	10
20-003-002-001	Thomas McGowan	Gaucks Lane	85.89	3
20-003-034-002	Grey Nuns	1750 Quarry Rd	71.88	
20-012-002	Edward J. Fleming	Stony Hill Rd	51.118	
20-016-012	Elsie W. Wright	1878 Yardley- Newtown Rd	50.551	5
20-034-132	Charles Guzikowski	1205 Big Oak Rd	44.6	1
20-003-002	Thomas McGowan	Twining Rd	44.4	3
20-012-001	Marion H. Fleming	931 Stony Hill Rd	41.178	
20-003-036-001	Moon Nurseries	Quarry Rd	29.722	
20-016-040	Clarence L. Prickett	Stony Hill Rd	18.334	
20-003-034-002	Grey Nuns	Quarry Rd	17.1	
20-008-025		Dogwood La	14.7	
20-016-069-001	Samuel W. Stewart	586 Stony Hill Rd	14.347	
		Total	592.49	

Table 2
Size 5 - 10 Acres

Parcel Number	Current Owner	Address	Lot Size (Acres)	Apx C#
20-035-004	Maryanne E Widenmeyer	Reading Ave	9.879	
20-009-006	Samuel R. Willard	178 Taylorsville Rd	9.74	7
20-012-025-001	Anter Assoc	Dobry Rd	9.18	
20-009-007	Steven M. Willard	178 Taylorsville Rd	9.0	7
20-012-004-001	Cameron C. Troilo	Langhorne-Yardley Rd	9.0	
20-032-036	Eugene W. Hieber	134 Old Oxford Valley Rd	8.582	

20-003-036-002	Nathu Dandora	1931 Quarry Rd	7.38	
20-003-016-001	Wesley W. Hackman Jr	1601 Lindenhurst Rd	6.45	
20-032-044	James M. Foulds	1479 Big Oak Rd	6.38	1&14
20-016-007	Robert M. Zuczek	Woodside Rd	6.0	
20-034-127	Neal J. Bartlett	1101 Big Oak Rd	5.75	13
20-032-036-001	Bharat Dhandhukia	Oxford Valley Rd	5.73	1
20-032-002	Robert Callahan	135 Old Oxford Valley Rd	5.0	
20-016-040-001	Clarence Prickett	930 Stony Hill Rd	5.0	
		Total	103.071	

Table 3
Size 2 - 5 Acres

Parcel Number	Current Owner	Address	Lot Size (Acres)	Apx C#
20-049-034-002	William H. Hardesty	488 Big Oak Rd	4.88	
20-002-001	Robert F. Hyer	1060 Lindenhurst Rd	4.0	5
20-008-010	Carolyn Newsom	Woodside Rd	3.88	
20-034-019	Robert M. Toth	173 Stony Hill Rd	3.8	
20-034-066	Paul D. Allen	1181 Oxford Valley Rd	3.602	
20-012-019	Wm. B. Whitecraft	542 Heacock Rd	3.6	
20-032-001	Eugene W. Hieber	136 Old Oxford Valley Rd	3.55	
20-014-008	David M. Broadway	1730 Langhorne-Yardley Rd	3.395	
20-003-020	Steven R. Lamb	1273 Lindenhurst Rd	3.32	
20-003-044-002	Mary Blazakis	Woodside Rd	3.051	
20-049-034		Big Oak Rd	2.98	
20-064-040	William W. Roberts	1505 Dolington Rd	2.74	
20-016-074	Paul A Hansen	597 Long Acre Lane	2.674	
20-049-005	Richard A. Smith	753 Gordon Dr	2.56	
20-037-122	Kevin D. Flynn	904 Edgewood Rd	2.55	
20-040-030	Blaine Applegate	2001 Makefield Rd	2.50	
20-034-006	Parker Reed	425 Stony Hill Rd	2.43	
20-012-003	Samuel Stewart	Stony Hill Rd	2.39	
20-032-023-001	Kishorchandra Modi	Big Oak Rd	2.39	
20-014-007	Cameron C. Troilo	1742 Langhorne-Yardley Rd	2.3	
20-055-092	John Boccardo	1516 Esther Lane	2.16	

20-035-001-001		Sandy Run Rd	2.14	
20-042-109	Betty E. Neely	1 Sutphin Rd	2.1	
20-042-276-001	John T. Irwin	1619 Makefield Rd	2.077	
20-034-126	Charles Seger	116 Elbow Lane	2.065	
20-018-001-001	Robert J. Dolan	1568 Yardley- Newtown Rd	2.04	
		Total	75.714	

Table 4
Size < 2 Acres

Parcel Number	Current Owner	Address	Lot Size (Acres)	Apx C#
20-012-027	Thomas H. McCullough	Dobry Rd	1.9	
20-003-021	David Monzo	Lindenhurst Rd	1.704	
20-034-089-002	Steven T. Kerrigan	Big Oak Rd	1.611	
20-016-047-001	David R. Miller	Langhorne-Yardley Rd	1.56	
20-032-009	Marie Ann Timko	Dobry Rd	1.412	
20-032-013-001	Theresa Madak	Oxford Valley Rd	1.344	
20-003-040	John J. Park	894 Mount Eyre Rd	1.31	
20-057-208	Catherine V. Beath	413 Countess Dr	1.043	
20-049-032	St. Johns Evangelical Lutheran Church	Big Oak Rd	0.98	
20-052-126	Arborlea Tennis Club	Oak Ave	0.8	
20-037-141	Vera Bongartz	Deerpath La	0.8	
20-050-373	Dayton University	Pine Grove Rd	0.637	
20-054-112	Darrell L. Tuomari	Overton Ave	0.488	
20-012-018	Rex Prop Corp	Heacock Rd	0.400	
		Total	15.989	
		Total Tables 1-4	786.724	

To assist the BOS in visualizing the location of the properties relative to existing open space, a color coded map is provided (Appendix 1.E). This aerial map shows the entire township divided into tax parcels. The existing open space and preserved land is colored in green. The 289 tax parcels from Appendix 1.D are colored according to their category as described above. The A1 (highest priority) properties are colored orange, the A2 properties are colored yellow, and the remaining properties of Appendix 1.D are colored blue. The juxtaposition of developable parcels with current open space should help in deciding which parcels would provide the most benefit from the efficient use of available funds.

The Board of Supervisors asked the Open Space Committee to take a closer look at smaller properties (approximately 1-5 acres) that were not located near larger green belts. The idea is to provide neighborhoods throughout the township with green space that is accessible to pedestrians and that could provide passive recreation, such as sight aesthetics, hiking, birding, and wildlife photography. Table 5 summarizes the results of that closer examination by the Open Space Committee.

**Table 5
Smaller Properties**

Parcel Number	Current Owner Name	Address	Lot Size (Ac)	EAC Comments	Ranking*
20-049-038	SCHLEGEL CHRISTOPHER M	500 BIG OAK RD	8.900	3 properties - mature woods - beech, oak, big leaf magnolias - beautiful are - passive recreation - hiking, birding, nature studies - accessible from Big Oak Road and Woodbrook Drive	3*
20-049-036	SCHLEGEL CHRISTOPHER M & PATRICIA A	BIG OAK RD	5.900	"	3*
20-049-037	BLACK CAROL ANN	510 BIG OAK RD	2.950	"	3*
20-035-004	WIDENMEYER MARYANNE E	READING AVE	9.879	heavily wooded - nice green belt area - riparian corridor - contiguous with other green areas - accessible - in midst of a neighborhood	2*
20-003-016-001	HACKMAN WESLEY W JR & FAY B	1601 LINDEN- HURST RD	6.450	easily sub-dividable - beautiful property - lovely pastoral, rural setting - not in midst of a neighborhood - historic value?	2*
20-016-007	ZUCZEK ROBERT M & JO ANN	WOOD-SIDE RD	6.000	lovely pastoral setting - across street from LMT golf course - potential to create corridor with other twp properties - not in midst of a neighborhood - not readily accessible to pedestrian traffic	2*

20-034-127	BARTLETT NEAL J & CLARA	1101 BIG OAK RD	5.750	some wood chopping taking place - wooded lot- nice green belt for area houses - recommend purchase or easement	2*
20049034-002	HARDESTY WILLIAM H & GAIL B	488 BIG OAK RD	4.880	adjacent to#92, 100, 119- house on each lot - recommend conservation easement - mature woods - corridor creation - keep #32, 42, 92, 100, 119 as a single unit	2*
20-049-034		BIG OAK RD	2.980	"	2*
20032023-001	MODI KISHORCHANDRA N & RANJAN K	BIG OAK RD	2.390	if considering #50 then also consider #122 - same owner - has rural scenic value - twp owned property is across street so a nice large green belt could be created - area in a neighborhood accessible to residents	2*
20-032-023	MODI KISHORCHANDRA N & RANJAN K	BIG OAK RD	2.690	"	2*
20-042-109	NEELY BETTY E & OWEN	1 SUTPHIN RD	2.100	2 houses on property - could easily be subdivided - surrounded by big houses and church - old section of twp - heavily traveled road (corner of Makefield and Sutphin) - recommend purchase or easement	2*
20-037-141	BONGARTZ VERA	DEERPATH LA	0.800	open riparian corridor - nice woodland - backs to Silver Creek - nice green belt - surrounded by houses - woodland area could be restored	2*
20-054-112	TUOMARI DARRELL L & ANNE V	OVERTON AVE	0.488	Low but not wet - very developable - old established neighborhood - nice green belt for area - no other open space in immediate area	2*
20-008-010	NEWSOM CAROLYN CARDALL	WOOD-SIDE RD	3.880	Sub-dividable - not in a neighborhood - beautiful property but not accessible to pedestrian traffic	1*

20-034-066	ALLEN PAUL D & CAROLYN S	1181 OXFORD VALLEY RD	3.602	manor house - could be subdivided - recommend conservation easement	1*
20-012-019	WHITECRAFT WM B & THERESA	542 HEACOCK RD	3.600	Farmette - could be subdivided - not accessible - heavily traveled road	1*
20-037-122	FLYNN KEVIN D	904 EDGE-WOOD RD	2.550	probably would not be divided - old manor house on property - might have historic significance - recommend conservation easement	1*
20-040-036	APPLEGATE BLAINE	2001 MAKE-FIELD RD	2.500	probably would not be developed - beautiful property - conservation easement recommended	1*
20-057-208	BEATH CATHERINE V	413 COUNTESS DR	1.043	Already on site - lawn maintained - very developable but not located in inner part of development that would draw pedestrian traffic	1*
20-052-126	ARBORLEA TENNIS CLUB INC	OAK AVE	0.800	Twp should investigate purchasing development rights or conservation easement - high impervious surface (tennis courts)	1*

Conclusions

The EAC at this point is soliciting comments on the usefulness of the survey and the suitability of the parameters used in winnowing the list of tax parcels. We would welcome any and all feedback on what, if any, further analysis and comparisons would be most useful to the BOS.

Finally, the EAC would like to especially thank the Township Engineer Jim Majewski for providing, on his own time, the detailed analysis of the 289 tax parcels presented in Appendix 1.D. This input was crucial to the usefulness of this survey, and was of extraordinary benefit to the Township.

Submitted by the Open Space Task Force of the EAC

Jim Bray - EAC Chair
Joe Sundeen - EAC Vice Chair
Geoff Goll - EAC Member

Appendix 1.A - Exclusion Criteria

Land Parcels Excluded From Bucks County Master List

Commercial	Log and mansion all
Banks	Misc utility reality all
Bi-level < 2 acres	Mobile home 0.00 acre
Board of Ed	Multi-family all
Bungalow < 2 acres	Multi-office all
Cabin, cottage	Neighborhood shopping all
Cemeteries	Office bidg condo all
Churches – exempt < 5 acres	Other religious 0.00 acres
Clubs and fraternal organizations	Parsonages
Colonial (new) < 3 acres	Public utility all
Condo – all	Ranch < 3 acres
Contemporary < 3 acres	Res/comm. B&B < 2 acres
Department store all	Split level < 2 acres
Duplex all	State-exempt
Farm house < 2 acres	State govt park
Firehouse	Townhouse all
Garden type (Lo-Rise) all	Tranmission towers all
Gas station and minimart	Tudor < 2 acres
Governmental all	Twin all
Local govt park all	Victorian all
Local govt vacant/misc <u>not</u> owned by LMT	

Results **12384** reduced to **614**

Land Parcels excluded from 614 list

Residential < ½ acre	Churches – partial exempt < 5 acres
Residential/professional < 1 acre	Resd. Common area
Lower Makefield ownership	Resd open space
Pennsbury School District	Residential 1-5 acres < 1 acre
Trenton Water Works	Residential care house
Bucks County, Dept Parks, Parks and Rec	Residential/professional all
All remaining with 0.00 acres	Resd detention basin

Results **614** reduced to **289**

Breakdown of 289 list

63 parcels of size >10 acres	111 parcels of size 2-5 acres
47 parcels of size 5-10 acres	68 parcels of size < 2 acres

Appendix 1.B - Site Parameters

Too many natural resources	Needs substantial zoning relief
Lot too small	Detention basin
Edgewood Village	Already developed
Open space for a development or office complex	Record plan restriction
Flag lot from prior subdivision	Previously subdivided
Church	Township open space
Single family dwelling in a development with large acreage	

Appendix 1.C - Open Space Prioritization List

#:	Tax Parcel No.:	(Name):	Size:	Score
1	20-32-43, -43-1 & -44 20-32-36-1, 20-34-132	(Five Mile Woods Ecosystem Buffers)	70 Acres	96
2	20-9-9 & -10 20-27-7, -8 & -10	Willard tract	52 Acres	95
3	20-3-2, -2-1, -3, -4 -8, -11-2, -10 & -13	Sterling Farm (& buffer areas)	220 Acres	94
4	20-16-46 & -49	Patterson Farm	227 Acres	89
5	20-3-39, 20-2-1 20-16-12	Wright Farms	140 Acres	89
6	20-16-94	(Sandy Run Road)	9 Acres	88
7	20-3-43-3, 20-9-1, -1-1 -1-2, -2, -3, -3-1, -5, -6 & -7	(Dyers Creek tract, north of proposed golf course)	137 Acres	84
8	20-16-20, 20-16-35-1	(Houston Rd)	24 Acres	83
9	20-3-28 & -28-2	Mimehart Woods (Adjacent to Vargo)	30 Acres	82
10	20-16-11	Tolbert Farm	109 Acres	78
11	20-3-41-4, 20-5-80	(14 acre parcel near Fisher's plus adjacent)	22 Acres	75

12	20-20-120 20-20-113 & -113-4	(Metz/old Yardley Estate)	52 Acres	65
13	20-34-127, -128 & -129	("36 Acres" on Big Oak Rd.)	31 Acres	63
14	20-32-44 & -43	Faytol	48 Acres	52

NOTE: Acquisition of remaining open space parcels in vicinity of the proposed "Falls of the Delaware" county park site are a Bucks County Parks System priority, and were therefore not considered.

*Prepared 5/97, Revised 2/98 by: John Ryder, John H. Heilferty & David Long
Lower Makefield Environmental Advisory Council*

List of Considerations for Open Space Prioritization (range) **SCORE:**

- **Unique Site Characteristics** (0-25) = _____
(Threatened/Endangered/Declining Species, Wetlands,
Unique Vegetative of Geological Conditions, etc.)
- **Ecological Diversity** (1-20) = _____
Forest: (6), Shrub: (4), Herbaceous: (3)
Wetlands: (6), Agricultural: (1)
- **Watershed Protection Contribution** (0-20) = _____
Water Quality Provision (0-5) _____
Floodplain Management Provisions (0-5) _____
Stream Corridor Protection Provisions (0-5) _____
Aquifer Recharge Provision (0-5) _____
- **Proximity to other Open Space Areas** (0-15) = _____
(0 - isolated) (5,10 or 15 if adjacent)
- **Greenway/Wildlife Corridor Potential** (0-n/a)(6-extends)(15-connects) = _____
- **Site Size** (0-50 = 5) (50-100 = 10) (100-150 = 15) (>150 = 20) = _____
- **Location in "High Needs Area" for Open Space** (1-10) = _____
(1 - adj. to rec. area, 5 - adj. to "o.s.", 10 - no "o.s." in neighborhood)
- **Site's Threat from Development Pressure** (5 or 10) = _____
(Imminent/On Market = 10, Not Currently Available = 5)
- **Site Accessibility** (0-10) = _____
Vehicular: (0 - no potential, 2 - potential, 3 - exist.)
Pedestrian: (0 - n/a, 4 - potent. for ped. access, 7 - near a ped. facility)
- **Aesthetic Value** (0-10 max) = _____
(per 800' of frontage, 1 if res. rd., 2 if arterial rd., 3 if highway)
- **Recommendation of Parks and Recreation Study** (1-5) = _____

- **Cultural/Historic Resources:** (10 if present) (0 or 10) = _____
- **Site's Development Potential for Open Space/Recreation Options** (1-5) = _____
- **Potential Land Maintenance Costs** (negative score, 0-15) = _____
- **Potential liability to Township** (negative score, 0, 5, 15) = _____
 (15 - known hazards or contaminants, 5 - nuisances, other dangers)

Appendix 1.D Annotated List of All Reviewed Properties by Rank

Parcel number	Current owner name	Number	Street		Land use description	Lot Size (Ac)	EAC rating*	Developable or Non-Developable	Reason	ID in Autocad file	Zone	Known Environmental Restrictions	EAC comments
20-016-011	TORBERT HARRY M JR	1700	CREAMERY	RD	RESIDENCE WETLANDS AGRIC USE	108.62	A1	Y	Torbert Farm	54	R-1	few, if any	
20-003-002-001	Thomas McGowan		GAUCKS	LA	FARM AGRIC USE	85.890	A1	Y	Sterling Farm, adjoins large parcel in Newtown Twp.	4	R-1	Stream, radar antenna facility	
20-003-034-002	CHURCH GREY NUNS OF THE SACRED	1750	QUARRY	RD	CONVENTS,RETREAT HOUSES-EXEMPT	71.880	A1	Y	Assisted living has been informally proposed	236	R-1	Stream, wetlands, woodlands	
20-012-002	FLEMING EDWARD J ,JR & DELORES		STONY HILL	RD	FARM AGRIC USE	51.118	A1	Y	Lot line changed (Shady Brook Farm)	39	OR	Pond, Shady Brook Farm business area	
20-016-012	WRIGHT ELSIE W ,TR & DOUGLAS ,TR	1878	YARDLEY-NEWTOWN	RD	RESIDENCE WETLANDS AGRIC USE	50.551	A1	Y	Breezyvale Farm	55	R-1	few, if any	
20-034-132	GUZIKOWSKI CHARLES & SANDRA J	1205	BIG OAK	RD	RESIDENCE WETLANDS AGRIC USE	44.600	A1	Y	Guzikowski Farm	136	R-3M	Woodlands, some wetlands	
20-003-002	Thomas McGowan		TWINING	RD	FARM AGRIC USE	44.450	A1	Y	Sterling Farm, adjoins large parcel in Newtown Twp.	3	R-1	Pond, stream	
20-012-001	FLEMING MARION H; EDW J&W.DAVID	931	STONY HILL	RD	RESIDENCE WETLANDS AGRIC USE	41.178	A1	Y	Lot line changed (Shady Brook Farm)	38	OR	Shady Brook Farm cultivated area	
20-003-036-001	MOON NURSERIES MARYLAND INC		QUARRY	RD	GREENHOUSES, NURSERIES	29.722	A1	Y	Potential for 15-20 houses	238	R-1	Stream, woodlands, pond setback, potential for contamination from nursery operation	
20-016-040	PRICKETT CLARENCE L & LAURA E		STONY HILL	RD	FARM AGRIC USE	18.334	A1	Y	Zoned commercial	61	OR	few, if any	
20-003-034-002	CHURCH GREY NUNS OF THE SACRED		QUARRY	RD	CONVENTS, RETREAT HOUSES-TAXABLE	17.100	A1	Y	Tax Exempt	237	R-1	none, contains school and convent	
20-008-025			DOGWOOD	LA	VACANT	14.700	A1	Y	under review as Harmony Lane				
20016069-001	STEWART SAMUEL W	586	STONY HILL	RD	RESIDENCE WETLANDS AGRIC USE	14.347	A1	Y	Potential for 15-20 houses	257	R-2	few, if any	
20-035-004	WIDENMEYER MARYANNE E		READING	AVE	KENNEL	9.879	A1	maybe	Only if Animal Hospital is abandoned	139	R-2	Woodlands	
20-009-006	WILLARD SAMUEL R & ELAINE M	178	TAYLORSVILLE	RD	RESIDENCE WETLANDS AGRIC USE	9.740	A1	Y	Potential for a few more houses	32	R-1	Steep slopes, Christmas tree farm	
20012025-001	ANTER ASSOC		DOBRY	RD	RESIDENTIAL 5-10 ACRES	9.180	A1	Y	vacant	250	R-4	woodlands, has a billboard in rear. Good candidate for rezoning to telecommunication overlay or office since it abuts railroad and I-95	

*EAC Ranking System: **A1** = EAC yes, Twp. Eng. yes or maybe, 0-1 environmental constraints; **A2** = EAC yes, Twp. Eng. yes or maybe, >1 environmental constraints; **B1** = EAC no, Twp. Eng. yes or maybe; **B2** = EAC no, Twp. Eng. yes, under development; **C** = EAC yes, Twp. Eng. no; **X** = EAC no, Twp. Eng. no.

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Parcel number	Current owner name	Number	Street		Land use description	Lot Size (Ac)	EAC rating*	Developable or Non-Developable	Reason	ID in Autocad file	Zone	Known Environmental Restrictions	EAC comments
20-009-007	WILLARD STEVEN M & JUDITH ANN	178	TAYLORSVILLE	RD	RESIDENCE WETLANDS AGRIC USE	9.000	A1	Y	Potential for a few more houses	33	R-1	Steep slopes, Christmas tree farm	
20012004-001	TROILO CAMERON C & OLGA JEAN		LANGHORNE-YARDLEY	RD	RESD W/ 5-10 ACRES LAND	9.000	A1	Y	Edgewood Village	247	H-C/TND	none	
20-032-036	HIEBER EUGENE W & JACQUELINE C	134	OLD OXFORD VALLEY	RD	REPAIR SHOP OR GARAGES	8.582	A1	Y	Zoned commercial	106	C-3	currently Bucks County International , abuts Route 1	
20-003-036-002	DANDORA NATHU R & ARUNDA	1931	QUARRY	RD	RESD W/ 5-10 ACRES LAND	7.380	A1	Y	Potential for 1 more house	239	R-1	Pond	
20-003-016-001	HACKMAN WESLEY W JR & FAY B	1601	LINDENHURST	RD	RESD W/ 5-10 ACRES LAND	6.450	A1	Y	Potential for 3 more houses	211	R-1	Stream, pond, historic barn	
20-032-044	FOULDS JAMES M, II & LAURA E	1479	BIG OAK	RD	RESD W/ 5-10 ACRES LAND	6.380	A1	Y	Potential for 2 more homes	108	R-1	Stream, wetlands, woodlands, (surrounded by 5 Mile Woods, appraised 3 years ago)	
20-016-007	ZUCZEK ROBERT M & JO ANN		WOODSIDE	RD	RESIDENTIAL 5-10 ACRES	6.000	A1	Y	vacant - potential for 4 houses	52	R-1	none	
20-034-127	BARTLETT NEAL J & CLARA	1101	BIG OAK	RD	RESD W/ 5-10 ACRES LAND	5.750	A1	Y	Potential for 3 or 4 more houses	131	R-2	Some woodlands	
20032036-001	DHANDHUKIA BHARAT & ASHA		OXFORD VALLEY	RD	RESIDENTIAL 5-10 ACRES	5.730	A1	Y	Available (vacant). I saw surveyors on property on 10/23/07	274	R-3	Woodlands, contains a water tower, abuts Route 1, possible wetlands	
20-032-002	CALLIHAN ROBERT R&MARGT C	135	OLD OXFORD VALLEY	RD	CONVENTIONAL	5.000	A1	Y	Zoned commercial	96	C-3	abuts Route 1	
20016040-001	PRICKETT CLARENCE L ETUX	930	STONY HILL	RD	CONVENTIONAL	5.000	A1	Y	Zoned commercial	255	OR	none	
20049034-002	HARDESTY WILLIAM H & GAIL B	488	BIG OAK	RD	CONTEMPORARY	4.880	A1	Y	Potential for 2 more houses	286	R-2	Woodlands, possible wetlands	
20-002-001	HYER ROBERT F & LINDA	1060	LINDENHURST	RD	FARM HOUSE	4.000	A1	Y	Potential for 2 more houses	2	R-1	Stream in corner of property	
20-008-010	NEWSOM CAROLYN CARDALL		WOODSIDE	RD	BARN (RESIDENCE)	3.880	A1	Y	Potential for a few more houses	24	R-2	Woodlands, possible wetlands	
20-034-019	TOTH ROBERT M	173	STONY HILL	RD	FARM HOUSE	3.800	A1	Y	Potential for 1 more house	119	R-3M	few, if any	
20-034-066	ALLEN PAUL D & CAROLYN S	1181	OXFORD VALLEY	RD	FARM HOUSE	3.602	A1	Y	Potential for 1 or 2 more houses	126	R-2	Some woodlands	
20-012-019	WHITCRAFT WM B & THERESA	542	HEACOCK	RD	FARM HOUSE	3.600	A1	Y	Potential for 1 or 2 more houses	44	R-3M	none	
20-032-001	HIEBER EUGENE W & JACQUELINE C	136	OLD OXFORD VALLEY	RD	CONVENTIONAL	3.550	A1	Y	Zoned commercial	95	C-3	none	
20-014-008	BROADWAY DAVID M & MILDRED R	1730	LANGHORNE-YARDLEY	RD	RES/COMM (BED & BREAKFAST, ETC)	3.395	A1	Y	Edgewood Village	51	H-C/TND	previously a gas station	

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Appendix 1.D Annotated List of All Reviewed Properties by Rank

Parcel number	Current owner name	Number	Street		Land use description	Lot Size (Ac)	EAC rating*	Developable or Non-Developable	Reason	ID in Autocad file	Zone	Known Environmental Restrictions	EAC comments
20-003-020	LAMB STEVEN R & AMY F	1273	LINDENHURST	RD	FARM HOUSE	3.320	A1	Y	Potential for 1 or 2 more houses	11	R-1	none	Was listed for Tax Sale last year
20-003-044-002	BLAZAKIS MARY		WOODSIDE	RD	RESIDENTIAL 1-5 ACRES	3.051	A1	Y	Potential for 1 house (vacant)	241	R-1	none	
20-049-034			BIG OAK	RD	RESIDENTIAL 1-5 ACRES	2.980	A1	Y	could be combined with adjoining A1 parcels to be developed				
20-064-040	ROBERTS WILLIAM W, III	1505	DOLINGTON	RD	FARM HOUSE	2.740	A1	Y	Potential for 1 more house	200	R-2	Some woodlands	
20-016-074	HANSEN PAUL A & JACQUELINE L	597	LONG ACRE	LN	RESIDENCE WETLANDS AGRIC USE	2.674	A1	Y	Potential for 1 or 2 more houses	68	R-2	Abuts railroad, access may be a problem	
20-049-005	SMITH RICHARD A & IDA M	753	GORDON	DR	FARM HOUSE	2.560	A1	Y	Potential for 2 or 3 more houses	160	R-2	Some woodlands	
20-037-122	FLYNN KEVIN D	904	EDGEWOOD	RD	FARM HOUSE	2.550	A1	Y	Potential for 1 new house	143	R-2	none	
20-040-036	APPLEGATE BLAINE	2001	MAKEFIELD	RD	COLONIAL (NEW)	2.500	A1	Y	potential for 2-4 more houses				
20-034-006	REED PARKER & EDNA MAY	425	STONY HILL	RD	FARM HOUSE	2.430	A1	Y	Potential for 1 more house	114	R-3M	some woodlands	
20-012-003	STEWART SAMUEL WILLIAM JR&KENNETH C		STONY HILL	RD	RESIDENTIAL AGRIC USE	2.390	A1	Y	Edgewood Village	40	R-1/TND	none	
20032023-001	MODI KISHORCHANDRA N & RANJAN K		BIG OAK	RD	RESIDENTIAL 1-5 ACRES	2.390	A1	Y	Under review (Lotus Tract)	273	R-3	Woodlands	
20-014-007	TROILO CAMERON C & OLGA JEAN	1742	LANGHORNE-YARDLEY	RD	FARM HOUSE	2.300	A1	Y	Edgewood Village	50	H-C/TND	none	
20-055-092	BOCCARDO JOHN & KATHERINE	1516	ESTHER	LN	FARM HOUSE	2.160	A1	Y	Potential for 1 or 2 more houses	197	R-2	Stream	
20-035-001-001			SANDY RUN	RD	VACANT	2.140	A1	Y	adjacent to A2 parcel				
20-042-109	NEELY BETTY E & OWEN	1	SUTPHIN	RD	FARM HOUSE	2.100	A1	Y	Potential for 2 new houses	150	R-2	Historic house, some woodlands (subdivision has been discueed with Historic Commission)	
20042276-001	IRWIN JOHN T & CAMILLE M	1619	MAKEFIELD	RD	COLONIAL (OLD IN-TOWN HOUSE)	2.077	A1	Y	Potential for 1 new house	284	R-2	Woodlands	
20-034-126	SEGER CHARLES & ANN	116	ELBOW	LN	FARM HOUSE	2.065	A1	y	Potential for 1 more house	130	R-2	Some woodlands	
20018001-001	DOLAN ROBERT J	1568	YARDLEY-NEWTOWN	RD	FARM HOUSE	2.040	A1	Y	Potential for 1 more house	260	R-1	some woodlands	
20-012-027	MCCULLOUGH THOMAS H & THERESA J		DOBRY	RD	RESIDENTIAL 1-5 ACRES	1.900	A1	Y	Zoned commercial	46	C-3	junkyard in rear of property	

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20-003-021	MONZO DAVID & DAWN		LINDENHURST	RD	RESIDENTIAL 1-5 ACRES	1.704	A1	Y	Potential for 1 house (vacant)	12	R-1	none	
20034089-002	KERRIGAN STEPHEN T & MARGARET W		BIG OAK	RD	RESIDENTIAL 1-5 ACRES	1.611	A1	Y	Potential for 2 houses	281	R-2	none	
20016047-001	MILLER DAVID R & ELIZABETH S		LANGHORNE-YARDLEY	RD	RESIDENTIAL 1-5 ACRES	1.560	A1	Y	Edgewood Village	256	H-C/TND	woodlands	
20-032-009	TIMKO MARIE ANN		DOBRY	RD	RESIDENTIAL 1-5 ACRES	1.412	A1	Y	Zoned commercial	101	C-3	Woodlands, maybe some wetlands	
20032013-001	MADAK THERESA		OXFORD VALLEY	RD	RESIDENTIAL 1-5 ACRES	1.344	A1	Y	Zoned commercial	271	C-3		
20-003-040	PARK JOHN J & DONNA L	894	MOUNT EYRE	RD	COLONIAL (OLD IN-TOWN HOUSE)	1.310	A1	Y	Potential for 1 more house	18	R-1	none	
20-057-208	BEATH CATHERINE V	413	COUNTESS	DR	RESIDENTIAL 1-5 ACRES	1.043	A1	maybe	Potential for 1 more house	198	R-2	Some woodlands	
20-049-032	CHURCH ST JOHNS EVANGELICAL LU THER		BIG OAK	RD	VACANT	0.980	A1	maybe	Could be combined with adjoining properties and developed	161	R-2	Woodlands	
20-052-126	ARBORLEA TENNIS CLUB INC		OAK	AVE	MISC. 1/2 TO 1 ACRE	0.800	A1	Y	Potential for 1 house if tennis courts are demolished	188	R-2	Woodlands	
20-037-141	BONGARTZ VERA		DEERPATH	LA	RESIDENTIAL 1/2-1 ACRE	0.800	A1	Y	Potential for 1 new house. May need woodlands variance.		R-2	Stream at rear property line, woodlands	
20-050-373	UNIVERSITY DAYTON		PINE GROVE	RD	VACANT RESIDENTIAL < 1/2 ACRE	0.637	A1	Y	adjoins township open space				
20-054-112	TUOMARI DARRELL L & ANNE V		OVERTON	AVE	MISC. UNDER 1/2 ACRE	0.488	A1	Y	Potential for 1 more house	195	R-2	few, if any	
20-012-018	REX PROP CORP		HEACOCK	RD	VACANT RESIDENTIAL < 1/2 ACRE	0.400	A1	Y	undersized parcel				
20-016-073	QUAKER GRP BUCKS ASSOC INC	1269	EDGEWOOD	RD	RESIDENCE WETLANDS AGRIC USE	38.990	A2	Y	Under review (Fieldstone, aka Harris Farm)	67	R-2	Landfill, stream, wetlands, woodlands	
20-009-003	FERRI DAVID JR	173	MOUNT EYRE	RD	RESIDENCE WETLANDS FOREST RESERVE	37.500	A2	maybe	Could get zoning relief for a few homes	29	R-1	stream, woodlands, steep slopes, gas pipeline	
20-027-007	WILLARD SAMUEL R		TAYLORSVILLE	RD	MISC 20+ ACRES	25.930	A2	Y	Potential for 1 to 2 houses	84	R-RP	Stream, wetlands, floodplain, Canal, woodlands	
20-003-028	MINEHART THOMAS III & CATHIE		WOODSIDE	RD	FARM AGRIC USE	19.855	A2	Y	Recently subdivided	13	R-1	Stream, wetlands, woodlands	
20-020-120	FIORI DAVID & ESTHER R		DOLINGTON	RD	RESIDENCE WETLANDS FOREST RESERVE	19.600	A2	Y	Potential for 3 to 7 lots	79	R-2	Streams, wetlands, woodlands	

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20-009-005	MEEKS J RALPH & MARGARET Q	176	TAYLORSVILLE	RD	RESIDENCE WETLANDS FOREST RESERVE	19.370	A2	Y	Potential for a few more houses	31	R-1	Steep slopes, woodlands, gas pipeline	
20-034-129	FERRI DAVID, JR & JACKIE L	917	BIG OAK	RD	RESIDENCE WETLANDS AGRIC USE	18.600	A2	Y	Potential for 10 to 13 new homes	133	R-2	Wetlands, woodlands, poor soils	
20-016-032	QUAKER GRP BUCKS II	300	NEWTOWN-YARDLEY	RD	RESD W/ 10-20 ACRES LAND	17.612	A2	Y	Potential for up to 14 houses (Scammel Tract)	58	R-2	Woodlands (prior removal in litigation)	
20-009-002	BRAMHAM NANCY S	170	MOUNT EYRE	RD	RESIDENCE WETLANDS FOREST RESERVE	15.050	A2	maybe	Could get zoning relief for 1 more home	28	R-1	stream, woodlands, steep slopes	
20-008-075	CLEMENSON JOSEPH F & JEANETTE A	1560	ROLLING GREEN	RD	RESIDENCE WETLANDS FOREST RESERVE	15.000	A2	Y	Under review (Harmony Lane)	26	R-2	Streams, woodlands, wetlands, steep slopes	
20-034-038	DISTEFANO ANTHONY	484	STONY HILL	RD	FARM FOREST RESERVE	11.790	A2	Y	Potential for 1 more house	122	R-2	Stream, wetlands, woodlands	
20027005-002	BERGEY MICHAEL S & SHEILA A	182A	TAYLORSVILLE	RD	RESD W/ 10-20 ACRES LAND	11.520	A2	maybe	Need substantial zoning relief	264	R-1	Stream, woodlands, steep slopes	
20-018-001	LOFTUS WILLIAM M&JANET&CHRISTA AGNE	1566	YARDLEY-NEWTOWN	RD	RESIDENCE WETLANDS FOREST RESERVE	11.224	A2	Y	Potential for 6 to 10 lots	77	R-1	Intermittent stream, woodlands, currently a trucking operation	
20-003-028-002	MCGINN JOHN C		LINDENHURST	RD	MISC 10-20 ACRES	11.004	A2	Y	Recently subdivided	216	R-1	Gas pipeline easement	
20-034-014	HILDEBRAND JOHN F & JANET H	1150	BIG OAK	RD	RESIDENCE WETLANDS FOREST RESERVE	11.000	A2	Y	Potential for 1 to 3 more houses	118	R-3M	Stream, wetlands, woodlands	
20-034-001	BROOKSIDE SWIM CLUB INC		STONY HILL	RD	PARKS, RECREATION FAC., SW. POOLS	10.630	A2	Y	Brookside Swim Club	112	R-3M	Stream, wetlands, woodlands	
20-034-036	SANFORD CRAIG & MARY JO	1372	OXFORD VALLEY	RD	RESIDENCE WETLANDS FOREST RESERVE	10.576	A2	Y	Potential for a few more houses with zoning relief	121	R-2	Stream, wetlands, woodlands, well & septic	
20-016-070	MEEHAN AUSTIN ,III & MAUREEN	1401	EDGEWOOD	RD	CONVENTIONAL	10.000	A2	maybe	Previously subdivided (Austin Meehan Subdivision)	66	R-2	Stream, wetlands, woodlands	
20-031-004	JENNINGS JOSEPH T	2	MCKINLEY	AVE	RESD W/ 5-10 ACRES LAND	9.790	A2	Y	Potential for 1 or 2 houses	93	R-RP	Wetlands, floodplain, woodlands, Canal setback	
20-009-010	WILLARD SAMUEL R JR & ELAINE M		TAYLORSVILLE	RD	VACANT WET LANDS	9.210	A2	maybe	needs substantial zoning relief for 1 or 2 houses	35	R-RP	Stream, Canal, wetlands, existing parking area for Jug Hill Farm	
20-049-038	SCHLEGEL CHRISTOPHER M	500	BIG OAK	RD	RESIDENCE WETLANDS AGRIC USE	8.900	A2	Y	Potential for 4 to 7 more houses	164	R-2	Stream, woodlands, possible wetlands	
20-016-094	MISKIEL EDWARD J		SANDY RUN	RD	RESIDENTIAL 5-10 ACRES	8.880	A2	Y	Approved for 1 house (Miskiel-Darrah Subdivision)	72	R-2	Stream, wetlands, woodlands	
20-034-064	VINCENT TROY D & TOMMI	460	ROELOFFS	RD	RESD W/ 5-10 ACRES LAND	8.196	A2	Y	Potential for 1 or 2 more houses	125	R-2	Stream, wetlands, pond, woodlands	

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Appendix 1.D Annotated List of All Reviewed Properties by Rank

Parcel number	Current owner name	Number	Street		Land use description	Lot Size (Ac)	EAC rating*	Developable or Non-Developable	Reason	ID in Autocad file	Zone	Known Environmental Restrictions	EAC comments
20-003-003	LANGE MICHAEL	16	GAUCKS	LN	BARN (RESIDENCE)	7.910	A2	Y	Potential for 2 more houses	5	R-1	Stream, wetlands, woodlands, well & septic	
20-009-004	JUDY DONALD B & DEBBIE	175	MOUNT EYRE	RD	SPLIT-LEVEL	7.634	A2	Y	Potential for 1 more house	30	R-1	Stream, steep slopes	Stonedale Plan
20-020-235	GRABER PETER A & RUTH L	27	CONCORD	LN	BI-LEVEL	6.300	A2	maybe	Need to acquire access from others (doubtful)	80	R-2	Woodlands, abuts I-95, flag lot	
20-034-039	WITIAK DAVID & JOANNE L	500	STONY HILL	RD	RESD W/ 5-10 ACRES LAND	6.000	A2	Y	Potential for 2 more houses as flag lots	123	R-2	Floodplain, woodlands	
20034064-001	KURONYA THOMAS DANIEL		ROELOFS	RD	RESIDENTIAL 5-10 ACRES	5.917	A2	Y	Approved for 1 house (Manto Subdivision)	279	R-2	Stream, woodlands, pond setback	
20-049-036	SCHLEGEL CHRISTOPHER M & PATRICIA A		BIG OAK	RD	RESIDENTIAL AGRIC USE	5.900	A2	Y	Potential for 5 to 7 new houses	162	R-2	Stream, woodlands, possible wetlands	
20-003-017	SMITH JOSEPH	1511	LINDENHURST	RD	RESD W/ 5-10 ACRES LAND	5.150	A2	Y	Potential for 1 or 2 more houses	10	R-1	Stream, Woodlands	
20-003-009	ST MARKS A M E ZION CHURCH	583	WASHINGTON CROSSING	RD	RESIDENTIAL 5-10 ACRES	5.000	A2	Y	Potential for 2 houses	8	R-1	Stream, wetlands, woodlands, well & septic	
20-003-026-001	RYAN ANN TRUST	1561	DOLINGTON	RD	FARM HOUSE	4.820	A2	Y	Potential for 2 more houses	215	R-1	Historic house & barn, well & septic	
20-017-047	SCERBO ALBERT & DENISE	29	CONCORD	LN	COLONIAL (NEW)	4.550	A2	maybe	Need to acquire access from others (doubtful)	74	R-2	Woodlands, landlocked, abuts I-95 & water tower	
20-003-018-001	HEANEY ROBERT J	53	HEATHER RIDGE	DR	FARM HOUSE	4.495	A2	Y	Potential for 1 or 2 more houses	212	R-1	Pond, flag lot (need to acquire access)	
20034020-004	TIMKO CAROLINE E	1140	EDGEWOOD	RD	RESIDENTIAL 1-5 ACRES	4.170	A2	Y	Potential for 2 houses	277	R-2	Stream, woodlands, some steep slopes, abuts railroad	
20-032-018	GOULD FRANCIS J & DEBORAH J	1466	OXFORD VALLEY	RD	COLONIAL (OLD IN-TOWN HOUSE)	4.040	A2	Y	Potential for 1 more house	103	R-2	Stream, wetlands, woodlands	
20-016-031	RUDDY DONALD C		KNOLL	DR	RESIDENTIAL 1-5 ACRES	3.990	A2	maybe	Potential for 1 house with substantial zoning relief	57	R-2	Stream, wetlands, woodlands, access issues	
20020113-004	FIORI DAVID & ESTHER		DOLINGTON	RD	MISC. 1-5 ACRES	3.740	A2	Y	Potential for 1 or 2 more houses	262	R-2	Stream, woodlands, need access through adjoining property	
20-016-060	HAHN RICHARD G & ELEANOR L	565	STONY HILL	RD	CONVENTIONAL	3.721	A2	Y	Potential for 2 or 3 more houses	65	R-3M	Stream, woodlands	
20-003-004-001	ENGLISH JAMES & RUTH	10	GAUCKS	LN	FARM HOUSE	3.700	A2	Y	Potential for 1 more house	209	R-1	Historic house & barn, well & septic	
20-011-015	WILLARD SAMUEL R JR & ELAINE M		RIVER	RD	VACANT WET LANDS	3.700	A2	maybe	needs substantial zoning relief for even 1 house	36	R-RP	Stream, Canal, wetlands, floodplain	
20-016-047	MILLER DAVID R & ELIZABETH S	1648	LANGHORNE-YARDLEY	RD	FARM HOUSE	3.660	A2	Y	Edgewood Village	63	H-C/TND	Stream, woodlands, historic house	

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20-034-007	STEACKER CLAYTON E	417	STONY HILL	RD	FARM HOUSE	3.600	A2	Y	Potential for 1 or 2 more houses	115	R-3M	Stream, woodlands	
20-038-122	PESEL RUTH I	20	MAHLON	DR	CONVENTIONAL	3.540	A2	Y	Under review for 2 new houses (Middlesmiss subdivision)	145	R-2	Steep slopes, woodlands, Canal setback	
20-012-017	MORTON RUTH G	1760	DOBRY	RD	RANCH	3.330	A2	maybe	Landlocked	43	R-4	abuts railroad, need access through Makefield Glen (doubtful)	
20-016-091	HARRIS CHARLES S & FRANCINE	855	SANDY RUN	RD	RANCH	3.250	A2	Y	Potential for 1 more house	71	R-2	Stream buffer, woodlands	
20032017-001	COLEMAN JOHN J & LORI L	1436	OXFORD VALLEY	RD	SPLIT-LEVEL	2.990	A2	Y	Potential for 1 more house	272	R-2	Some woodlands, stream buffer	
20-049-037	BLACK CAROL ANN	510	BIG OAK	RD	BUNGALOW	2.950	A2	Y	Potential for 1 more house	163	R-2	Stream, woodlands, possible wetlands	
20-031-010	SOMMER JULIET CHARLOTTE		RIVER	RD	RESIDENTIAL 1-5 ACRES	2.905	A2	maybe	Need substantial zoning relief	94	R-RP	Floodplain, woodlands, Canal setback	
20018001-002	KATZOFF GERALD & LYDIA S	1505	YARDLEY-NEWTOWN	RD	RESIDENTIAL 1-5 ACRES	2.767	A2	Y	Potential for 1 or 2 houses	261	R-1	Woodlands, pond setback	
20-032-023	MODI KISHORCHANDRA N & RANJAN K		BIG OAK	RD	RESIDENTIAL 1-5 ACRES	2.690	A2	Y	Potential for 1 house (fka Clover Tract Minor Subdivision)	105	R-3	Stream, wetlands, woodlands (previous application for 2 homes withdrawn)	
20-009-009	SAW WILL INC		TAYLORSVILLE	RD	RESIDENTIAL 1-5 ACRES	2.560	A2	maybe	needs substantial zoning relief for even 1 house	34	R-RP	Stream, Canal, possible wetlands	
20050159-001	GOODWIN DAVID A & BARBARA LYNN		PINE GROVE	RD	RESIDENTIAL 1-5 ACRES	2.288	A2	maybe	Need substantial zoning relief	288	R-2	Wetlands, woodlands, a new home permit was rejected 10/07/07	
20-034-003	KORTLUCKE DEREK G & TRINIDAD R	1310	OXFORD VALLEY	RD	BI-LEVEL	2.280	A2	Y	Potential for 1 more house	113	R-3M	Stream, woodlands	
20006017-001	KRATZ ALBERT J & HELEN		LINDENHURST	RD	RESIDENTIAL 1-5 ACRES	2.250	A2	Maybe	Big enough, but landlocked	243	R-2	Stream, woodlands, no access	
20028013-001	WILLARD SAMUEL R		RIVER	RD	VACANT WET LANDS	2.210	A2	maybe	Need substantial zoning relief	266	R-RP	Wetlands, floodplain, woodlands	
20-035-001	DODD PHILOMENA M	748	SANDY RUN	RD	RESIDENTIAL 1-5 ACRES	2.094	A2	maybe	Potential for 2 houses if existing house is demolished	137	R-2	Stream, some woodlands	
20-012-016	MORTON TEDDY		DOBRY	RD	RESIDENTIAL 1-5 ACRES	2.000	A2	maybe	Landlocked	42	R-4	abuts railroad, need access through Makefield Glen (doubtful)	
20-034-130	HARRIS CHARLES S & FRANCINE		EDGEWOOD	RD	RESIDENTIAL 1-5 ACRES	1.840	A2	Y	Potential for 1 house with substantial zoning relief	134	R-2	Stream, wetlands, woodlands	
20-036-043	KELLY DAVID P & NANCY M		READING	AVE	RESIDENTIAL 1-5 ACRES	1.790	A2	maybe	Need substantial zoning relief	141	R-2	Stream, woodlands, steep slopes, abuts railroad	

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20-016-036	BROADWAY DAVID M & MILDRED R		STONY HILL	RD	RESIDENTIAL 1-5 ACRES	1.590	A2	Y	Edgewood Village	59	H-C/TND	small wetland area near road, poor soils	
20-053-052	SHERIDAN THOMAS H & Judy Curlee		RIVER	RD	RESIDENTIAL 1/2-1 ACRE	1.310	A2	maybe	Need substantial zoning relief	190	R-RP	Some floodplain, woodlands	
20047108-001	BREWARD ALAN D & JOAN S		RIVER	RD	RESIDENTIAL 1/2-1 ACRE	1.197	A2	maybe	Need substantial zoning relief	285	R-RP	Floodplain, woodlands	
20-053-055	MAIORINO DAVID E & DIANE P	521	RIVER	RD	RESIDENTIAL 1/2-1 ACRE	1.110	A2	maybe	Need substantial zoning relief	191	R-RP	Some floodplain, woodlands, flag lot	
20-030-063	LOUDERBACK WILLIAM & JOYCE		ROBINSON	PL	MISC. 1-5 ACRES	1.040	A2	maybe	Need substantial zoning relief	90	R-RP	floodplain, Canal setback	
20040005-001	INGWERSON DELES D & MADELYN		CRESCENT	BLV D	RESIDENTIAL < 1/2 ACRE	0.710	A2	Y	Potential for 1 new house. Remanded to ZHB by recent Court decision		R-2	Wetlands, spring, woodlands	
20-025-002	ABT REALTY LLC	943	SANDY RUN	RD	RESIDENTIAL 1/2-1 ACRE	0.64	A2	maybe	Previous house was condemned and demolished by Township. Potential for 1 new house if approved by Court		R-2	Floodplain	
20-037-002	POWERS JAMES N & NANCY E		EDGEWOOD	RD	MISC. UNDER 1/2 ACRE	0.340	A2	Y	Need zoning relief for 1 house	142	R-2	contains a tennis court	
20-012-028	SCOTT LILY A & JACQUELINE G BREECH	1684	DOBRY	RD	RESIDENCE WETLANDS AGRIC USE	17.570	B1	Y	Under review (Gatherings at Yardley)	47	C-3/AQ	wetlands, poor soils, abuts railroad	
20-016-039	SHADY BROOK FARM INC		STONY HILL	RD	FARM 10-20 ACRES	10.239	B1	Y	Under review (Fleming Tract, BPG Properties)	60	OR	few	
20-052-002	RAGAN STEIN ASSOC		W FERRY	RD	RESIDENTIAL 5-10 ACRES	7.060	B1	Y	Potential for 1 to 3 houses (may need zoning relief)	186	R-2	Wetlands, woodlands	
20016036-001	CENTER INVESTORS	748	STONY HILL	RD	DAY CARE CAMP	7.050	B1	Y	Edgewood Village (Children's Learning Center)	254	H-C/TND	Wetlands, woodlands	
20032008-002	SHENNARD THEODORE I & MARY A & JOSE	1667	DOBRY	RD	RESD W/ 5-10 ACRES LAND	6.540	B1	Y	Zoned commercial	270	C-3	Previously approved for a cell tower	
20-043-108	ROMANO THOMAS & CAROL ANN		WARWICK	RD	RESIDENTIAL 1-5 ACRES	1.040	B1	maybe	Need substantial zoning relief	152	R-2	Pond, steep slopes, woodlands, unimproved road	
20-050-120	GERVASIO JOSEPH & MARIAN E		MAPLEWOOD	LA	VACANT WET LANDS	0.275	B1	maybe	Potential for 1 house with substantial zoning relief	167	R-2	Woodlands, possible wetlands, fronts on an unimproved street	
20-012-025	Matrix Lower Makefield Land		DOBRY	RD	FARM AGRIC USE	62.590	B2	Y	Matrix Octagon Center	45	C-3/AQ		
20032001-002	Matrix Lower Makefield Land		OLD OXFORD VALLEY		INDUSTRIAL AGRIC USE	37.900	B2	Y	Matrix Octagon Center	269	C-3/AQ		

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20-003-011-002	ORLEANS AT BROOKSHIRE ESTATES	587	WASHINGTON CROSSING	RD	RESD W/ 20 + ACRES LAND	37.200	B2	Y	Final Approval received	210	R-1	Stream, wetlands, woodlands	
20-003-004	ORLEANS AT BROOKSHIRE ESTATES		GAUCKS	LA	FARM AGRIC USE	28.650	B2	Y	Preliminary Approval received	6	R-1	Streams, wetlands, woodlands	
20-032-007	Matrix Lower Makefield Land		OXFORD VALLEY	RD	FARM 20+ ACRES	20.050	B2	Y	Matrix Octagon Center	100	C-3/AQ		
20-034-092	CARA MIA UNLIMITED L L C		BIG OAK	RD	FARM 10-20 ACRES	10.220	B2	Y	Approved for 3 houses (Fiorello Grove)	129	R-2	Stream, wetlands, woodlands	
20-024-001	SUNRISE LOWER MAKEFIELD PA SR	631	STONY HILL	RD	RESD W/ 5-10 ACRES LAND	9.250	B2	Y	under construction	82	R-3M	Stream, woodlands	
20-032-048	Matrix Middletown Land		BIG OAK	RD	INDUSTRIAL AGRIC RESERVE	8.080	B2	Y	Matrix Octagon Center	109	Middletown Township		
20-003-010	BROOKSHIRE ESTATES L P		WASHINGTON CROSSING	RD	RESIDENTIAL 5-10 ACRES	8.020	B2	Y	Final Approval received	9	R-1	Streams, wetlands, woodlands	
20-032-021	BOXWOOD FARM L L C	1403	OXFORD VALLEY	RD	FARM HOUSE	5.838	B2	Y	Under construction (Boxwood Farm)	104	R-2	some woodlands	
20013005-001	DELUCA ENT INC	108	FLORAL VALE	BLV D	COMMERCIAL 5 - 10 ACRES	5.703	B2	Y	Submitting next week for Amended Final Land Development approval for a 4-story office building	251	OR	none	
20-032-003	Matrix Lower Makefield Land		BIG OAK	RD	RESIDENTIAL 1-5 ACRES	5.000	B2	Y	Matrix Octagon Center	97	C-3/AQ		
20-032-038	Matrix Lower Makefield Land		OLD OXFORD VALLEY	RD	RESIDENTIAL 1-5 ACRES	4.700	B2	Y	Matrix Octagon Center	107	C-3/AQ		
20-054-071	BUCCI EDWARD BLDR INC		YARDLEY-MORRISVILLE	RD	RESIDENTIAL 1-5 ACRES	2.040	B2	Y	Approved for 1 house (Rawlins Lot Line Change)	194	R-2	none (construction started, now stopped)	
20-032-004	Matrix Lower Makefield Land	173	OXFORD VALLEY	RD	COMMERCIAL 1 - 5 ACRES	2.000	B2	Y	Matrix Octagon Center	98	C-3/AQ		
20-032-005	Matrix Lower Makefield Land		BIG OAK	RD	RESIDENTIAL 1-5 ACRES	2.000	B2	Y	Matrix Octagon Center	99	C-3/AQ		
20034132-001	MAR MAR BUILDERS		BIG OAK	RD	RESIDENTIAL 1/2-1 ACRE	1.500	B2	Y	Approved for 2 houses (Prime Properties Subdivision)	282	R-3M	none	
20-035-006	SHOEMAKER SAMUEL E REV MSR		READING	AVE	CHURCHES - EXEMPT	33.030	C	N	Already developed (St. Ignatius)	140	R-2	Stream, woodlands	
20-041-080	CHURCH ST JOHN EVANGELIST ROMAN CAT	782	BIG OAK	RD	CHURCHES - PARTIAL EXEMPT	20.400	C	N	Already developed (St. John's)	148	R-2	stream, wetlands, woodlands	
20-027-008	WILLARD SAMUEL R		TAYLORSVILLE	RD	VACANT WET LANDS	13.790	C	N	too many natural resources	85	R-RP	Stream, wetlands, floodplain, Canal, woodlands	

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20-034-008	CONGREGATION BETH EL	1235	STONY HILL	RD	CHURCHES - TAXABLE	12.826	C	N	Already developed (Congregation Beth El)	116	R-3M	Wetlands, woodlands	
20-016-075	CONNER LAWRENCE A & ELIZABETH B	524	STONY HILL	RD	RESD W/ 10-20 ACRES LAND	11.730	C	N	Already has 2 houses, access issues	69	R-2	Pond, stream, wetlands, abuts railroad	
20034036-004	KOL EMET YARDLEY RECONSTRUCTIO NIST	301	OXFORD VALLEY	RD	OTHER-RELIGIOUS ORGANIZATIONS	10.064	C	N	Already developed (Kol Emet)	278	R-2	Stream, woodlands	
20-034-021	BIBLE FELLOWSHIP EVAN FREE CH	725	OXFORD VALLEY	RD	INSTITUTIONAL 5 - 9.99 AC	8.000	C	N	Already developed	120	R-2	Wetlands, woodlands	
20-016-027	KATZOFF GERALD & LYDIA S	1472	YARDLEY-NEWTOWN	RD	RESD W/ 5-10 ACRES LAND	7.456	C	N	too many natural resources	56	R-1	Ponds, stream, woodlands	
20-034-128	GATES KAREN	955	BIG OAK	RD	RESD W/ 5-10 ACRES LAND	7.190	C	N	Township Conservation Easement	132	R-2	Woodlands	
20034089-001	CHURCH PROT EPIS INCARNATION M ORRI		MAKEFIELD	RD	RESIDENTIAL 1-5 ACRES	6.920	C	N	tax exempt church	280	R-2	Stream, some woodlands	
20-074-038	PATEL CHANDRESH	2024	TROWBRIDGE	DR	COLONIAL (NEW)	5.910	C	N	Already subdivided (Dolington Estates)	206	R-1	n/a	
20016035-001	HECHT DREW H & JEANENE	1130	S HOUSTON	RD	RESD W/ 5-10 ACRES LAND	4.491	C	N	Already developed (Thomas Gough subdivision)	253	R-2	Stream, pond, woodlands	
20016030-002	DEON PASQUALE		KNOLL	DR	RESIDENTIAL 1-5 ACRES	4.410	C	N	too many natural resources	252	R-2	Stream, wetlands, woodlands	
20-020-113	TROILO CAMERON C	106	DOLINGTON	RD	RESD W/ 20 + ACRES LAND	4.260	C	N	Previously subdivided (Prospect Manor)	78	R-2	n/a	
20-016-009	ALBAHARY A SCOTT & DOREEN D	1682	CLYDESDALE	CIR	FARM HOUSE	4.193	C	N	Flag lot from prior subdivision	53	R-1	Woodlands, historic house	
20-016-084	TROILO CAMERON C & OLGA JEAN	1	SANDY RUN	RD	COLONIAL (OLD IN-TOWN HOUSE)	3.750	C	N	Would need to demolish existing house	70	R-2	Potential for 1 more house if barn is demolished	
20-030-073	FISCHER KEVIN & BARBARA L	1385	River	RD	COLONIAL (NEW)	3.650	C	N	Already developed	92	R-RP	floodplain, Canal setback	
20-054-051	MALADY JOHN E	495	RIVER	RD	UNIQUE	3.380	C	N	Lot not big enough	192	R-RP	Floodplain, woodlands	
20-016-053	EMSLIE MILDRED R	1501	YARDLEY-NEWTOWN	RD	RANCH	3.330	C	N	too many natural resources	64	R-2	Stream, woodlands	
20031010-001	SOMMER JULIET C	139	RIVER	RD	FARM HOUSE	3.330	C	N	Already developed	268	R-RP	floodplain, Canal setback	
20-047-112	GLOSSBRENNER ALFRED K & EMILY S	699	RIVER	RD	FARM HOUSE	3.310	C	N	Lot not big enough	158	R-RP	floodplain, woodlands	
20-034-071	DODDS PETER M & KAREN WINTERFIELD-	843	EDGEWOOD	RD	CONVENTIONAL	3.150	C	N	too many natural resources	127	R-2	Stream, woodlands	
20-030-059	MORRIS JAMES J	1149	WOODSIDE	RD	CONVENTIONAL	3.140	C	N	too many natural resources	89	R-RP	Stream, wetlands, floodplain, probably condemned for Scudders Falls Bridge	

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20-042-033	LUTHERAN CHURCH OF THE RESURRECTION		MAKEFIELD	RD	RESIDENTIAL 1-5 ACRES	3.125	C	N	Already developed (expansion planned)	149	R-2	none (ZHB application for expansion)	
20-030-071	FISCHER KEVIN & BARBARA		RIVER	RD	RESIDENTIAL 1-5 ACRES	3.080	C	N	Already developed	91	R-RP	floodplain, Canal setback	
20-046-142	SHOWS GEORGE A	72	BLACK ROCK	RD	CONVENTIONAL	3.000	C	N	Lot not big enough	157	R-RP		
20016095-001	HARBISON THOMAS J	775	SANDY RUN	RD	RANCH	3.000	C	N	too many natural resources	259	R-2	Stream, woodlands	
20050001-001	MARRAZZO DAN & CARMELA P		YARDLEY-MORRISVILLE	RD	GREENHOUSES, NURSERIES	2.600	C	N	Already developed (Manor Lane Florist)	287	R-2	none	
20-054-059	BOUREAU SILVERE F	203	E FERRY	RD	FARM HOUSE	2.266	C	N	Flag lot from prior subdivision	193	R-2	Woodlands, steep slopes, too narrow	
20-052-140	FAIRLESS PROP L L C		W TRENTON	AVE	COMMERCIAL 1 - 5 ACRES	2.020	C	N	Need substantial zoning relief	189	R-2	Woodlands (owned by commercial on West Trenton Ave.)	
20-034-131	RONALDO CHARLES E & JOAN M	1211	EDGEWOOD	RD	RESD W/ 5-10 ACRES LAND	1.830	C	N	Lot line changed (Ronaldo/ADA)	135	R-2	Stream, wetlands, woodlands	
20009004-003	FORMICA JOSEPH P		MT EYRE	RD	RESIDENTIAL 1-5 ACRES	1.798	C	N	too small & narrow	245	R-1	steep slopes	
20-035-002	FRANCOMACARO DARRYL V & MARIA T	1085	READING	AVE	VETERINARY-DOG KENNELS	1.755	C	N	Already developed (Animal hospital)	138	R-2	Some woodlands	
20-016-096	TIMKO FAMILY ASSOC L P	875	EDGEWOOD	RD	RESIDENTIAL 1-5 ACRES	1.420	C	N	too many natural resources	73	R-2	Stream, woodlands, too narrow	
20-048-022	PECO ENERGY CO		BIG OAK	RD	RESIDENTIAL 1/2-1 ACRE	1.340	C	N	too many natural resources	159	R-2	Stream, wetlands, woodlands	
20-052-110	HOME PROP CASTLE CLUB L L C	108	W TRENTON	AVE	COMMERCIAL 1 - 5 ACRES	1.220	C	N	Need substantial zoning relief	187	R-2	Woodlands (owned by commercial on West Trenton Ave.)	
20-011-032	RYAN BEATRICE E		RIVER	RD	RESIDENTIAL 1/2-1 ACRE	1.110	C	N	too many natural resources	37	R-RP	Floodway, steep slopes	
20-064-041	SCOTT JOY TRUST	1509	QUARRY	RD	BARN (RESIDENCE)	0.890	C	N	Lot not big enough	201	R-2	Stream, woodlands, landlocked	
20-034-011	KUPIEC JOHN & JEAN		STONY HILL	RD	MISC. UNDER 1/2 ACRE	0.470	C	N	too narrow	117	R-3M	Woodlands, stream	
20-049-053	CHURCH ST JOHNS EVAN LUTH MORR ISVI		PINE GROVE	RD	VACANT	0.400	C	N	Already contains 1 house	165	R-2	none	
20-003-039	WRIGHT JOHN E & RUTH O	1036	LINDENHURST	RD	RESIDENCE WETLANDS AGRIC USE	81.360	X	N	Township and County conservation easement	17	R-1	n/a	
20-013-005	DELUCA ENT INC		LANGHORNE-YARDLEY	RD	COMM. COMMON AREA	31.073	X	N	Floral Vale common area	49	OR	man made pond	

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Appendix 1.D Annotated List of All Reviewed Properties by Rank

Parcel number	Current owner name	Number	Street		Land use description	Lot Size (Ac)	EAC rating*	Developable or Non-Developable	Reason	ID in Autocad file	Zone	Known Environmental Restrictions	EAC comments
20-027-014	HOLT LEO A	260	RIVER	RD	FARM 20+ ACRES	30.850	X	N	too many natural resources	87	R-RP	floodway	
20012006-003	DELUCA ENT INC	107	STONY HILL	RD	COMM. COMMON AREA	26.746	X	N	Lower Makefield Corporate Center South	248	OR	man made pond	
20-033-239	ERIN DEVT CO	301	OXFORD VALLEY	RD	COMM. COMMON AREA	23.429	X	N	Previously developed (Makefield Executive Quarters)	111	C-3	Stream, woodlands	
20-016-041	NEWTOWN INVEST PART L P	6	STONY HILL	RD	COMMERCIAL 10 - 20 ACRES	22.554	X	N	Already developed (Lower Makefield Corporate Center)	62	OR	n/a	
20-072-108	FARMVIEW ASSOC LTD PART		DOLINGTON	RD	LOCAL GOVT VACANT/MISC	19.874	X	N	Farmland Preservation	204	R-1	n/a	
20-066-001	HEACOCK MEADOWS INC	227	STONY HILL	RD	MISC. COMMON AREA	19.752	X	N	Heacock Meadows Open Space	202		n/a	
20-001-001	FIRST BAPTIST CHURCH OF NEWTWN	592	WASHINGTON CROSSING	R	CHURCHES - EXEMPT	19.574	X	N	Church	1	R-1	Wetlands & woodlands	
20034001-001	MANOR HEALTHCARE CORP	1480	OXFORD VALLEY	RD	NURSING HOME, CLINIC	17.460	X	N	Already developed (Manorcare)	275	R-2	Stream, wetlands, woodlands	
20-012-015	MAKEFIELD GLEN LTD PART		COVINGTON	RD	MISC 20+ ACRES	16.542	X	N	too many natural resources	41	R-4	Streams, wetlands, woodlands	
20-027-013	WILLARD SAMUEL R		RIVER	RD	FARM 10-20 ACRES	12.860	X	N	too many natural resources	86	R-RP	floodway	
20-033-101	TANGLEWOOD COM ASSN		WILLOW POND	DR	MISC. OPEN SPACE	11.976	X	N	Previously subdivided (Tanglewood)	110	R-3	Stream, wetlands, woodlands, steep slopes	
20012006-005	LIBERTY PROP LTD PART	777	TOWNSHIP LINE	RD	WHSE/MFG 25,000-50,000 SQ FT	10.930	X	N	Office building already built	249	OR	man made pond	
20-003-031-003	PAUL C MARSHALL & MIRIAM F	1995	WOODSIDE	RD	RESD W/ 10-20 ACRES LAND	10.070	X	N	Record Plan restriction	219	R-1	No further subdivision unless full road improvements are done	
20-003-031-001	CROSS GLORIA	1935	WOODSIDE	RD	RESD W/ 10-20 ACRES LAND	10.056	X	N	Record Plan restriction	217	R-1	No further subdivision unless full road improvements are done	
20-003-031-008	DEVINE MICHAEL F , III & MARY D	1940	TIMBER LAKES	DR	RESD W/ 10-20 ACRES LAND	10.013	X	N	Record Plan restriction	224	R-1	No further subdivision unless full road improvements are done	
20-003-031-002	WOODSIDE TR	1965	WOODSIDE	RD	RESIDENCE WETLANDS FOREST RESERVE	10.000	X	N	Record Plan restriction	218	R-1	No further subdivision unless full road improvements are done	
20-003-031-021	CLOMAN KYLE D & RUTHANN	1435	PHEASANT RUN	CIR	COLONIAL (NEW)	7.065	X	N	Record Plan restriction	232	R-1	No further subdivision unless full road improvements are done	

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Parcel number	Current owner name	Number	Street		Land use description	Lot Size (Ac)	EAC rating*	Developable or Non-Developable	Reason	ID in Autocad file	Zone	Known Environmental Restrictions	EAC comments
20-003-031	TURNER JOHN & DOROTHY	1995	TIMBER LAKES	DR	RESD W/ 5-10 ACRES LAND	6.320	X	N	Record Plan restriction	15	R-1	No further subdivision unless full road improvements are done	
20-005-080	REALEN HOMES L L C		DOLINGTON	RD	LOCAL GOVT VACANT/MISC	6.194	X	N	Township Owned Detention basin lot	22	R-1	Wetlands, Stream	
20-017-117	DELUCA ENT INC		BARTLETT	CT	LOCAL GOVT VACANT/MISC	5.828	X	N	Township owned detention basin	76	R-1	n/a	
20-032-014	M & S LTD PART	385	OXFORD VALLEY	RD	COMM. COMMON AREA	5.358	X	Y	Zoned commercial	102	C-3	Some woodlands, abuts railroad	
20-005-094	WERYNSKI STEVEN D & PATRICIA	1600	THISTLEWOOD	DR	RESD W/ 5-10 ACRES LAND	5.057	X	N	Detention basin easement	23	R-1	Wetlands	
20-029-030	WILLARD SAMUEL R JR & ELAINE M		RIVER	RD	VACANT WET LANDS	4.510	X	N	too many natural resources	88	R-RP	floodway	
20-003-031-019	MCGUINNESS KEVIN F & LINDA J	1405	PHEASANT RUN	CIR	COLONIAL (NEW)	4.454	X	N	Record Plan restriction	230	R-1	No further subdivision unless full road improvements are done	
20-012-030	SUNRISE FLORAL VALE SR LIVING	600	TOWNSHIP LINE	RD	PERSONAL CARE FACILITY	4.376	X	N	Already developed	48	OR	none	
20-051-013	MORRFIELDFALLS L L C C/O CVS PHARMA	590	W TRENTON	AVE	RETAIL & SHOP	4.309	X	N	Already developed (CVS)	185	C-2	n/a	
20-003-031-012	MUNDENAR MICHAEL J & JILL	1965	TIMBER LAKES	DR	COLONIAL (NEW)	4.129	X	N	Record Plan restriction	227	R-1	No further subdivision unless full road improvements are done	
20-003-031-020	MCCORMACK DOROTHY	1415	PHEASANT RUN	CIR	COLONIAL (NEW)	4.113	X	N	Record Plan restriction	231	R-1	No further subdivision unless full road improvements are done	
20-003-031-005	SALEMME F RAYMOND & PATRICIA W	1970	TIMBER LAKES	DR	CONTEMPORARY	3.906	X	N	Record Plan restriction	221	R-1	No further subdivision unless full road improvements are done	
20-003-031-011	DE NIRMAL K & REKHA	1955	TIMBER LAKES	DR	TUDOR	3.894	X	N	Record Plan restriction	226	R-1	No further subdivision unless full road improvements are done	
20-003-031-004	WILHELM GLENN & JILL	1980	TIMBER LAKES	DR	CONTEMPORARY	3.863	X	N	Record Plan restriction	220	R-1	No further subdivision unless full road improvements are done	
20-003-036	REECE NORVAL D & ANN B	1875	QUARRY	RD	FARM HOUSE	3.790	X	N	Flag lot from prior subdivision	16	R-1	Floodplain, woodlands, pond setback	
20-003-031-006	PRICKETT CRAIG B & SALOME B	1960	TIMBER LAKES	DR	COLONIAL (NEW)	3.644	X	N	Record Plan restriction	222	R-1	No further subdivision unless full road improvements are done	

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Parcel number	Current owner name	Number	Street		Land use description	Lot Size (Ac)	EAC rating*	Developable or Non-Developable	Reason	ID in Autocad file	Zone	Known Environmental Restrictions	EAC comments
20-003-031-014	HAMMANT CLIVE A , TR & LUCILLE R,TR	1440	PHEASANT RUN	CIR	CONVENTIONAL	3.521	X	N	Record Plan restriction	228	R-1	No further subdivision unless full road improvements are done	
20-074-026	ATTIA ZUHAIR & STELLINA	2046	SILVERWOOD	DR	COLONIAL (NEW)	3.484	X	N	Already subdivided (Dolington Estates)	205	R-1	n/a	
20-003-031-022	WARRINER WATSON C JR	1985	TIMBER LAKES	DR	CONTEMPORARY	3.351	X	N	Record Plan restriction	233	R-1	No further subdivision unless full road improvements are done	
20-003-019-004	EINGORN DAVID & BETSY	2183	TWINING	RD	COLONIAL (NEW)	3.301	X	N	Flag lot from prior subdivision	213	R-1	Woodlands	
20-003-031-007	KAMENS M MICHAEL & JOAN H	1950	TIMBER LAKES	DR	CONVENTIONAL	3.289	X	N	Record Plan restriction	223	R-1	No further subdivision unless full road improvements are done	
20-003-031-009	MILLER LEE H & LYNNE W	1935	TIMBER LAKES	DR	CONVENTIONAL	3.235	X	N	Record Plan restriction	225	R-1	No further subdivision unless full road improvements are done	
20-003-031-018	FREEDMAN JEFFREY J	1400	PHEASANT RUN	CIR	COLONIAL (NEW)	3.202	X	N	Record Plan restriction	229	R-1	No further subdivision unless full road improvements are done	
20-082-001	JEFFRIES JEREMY	2042	SILVERWOOD	DR	COLONIAL (NEW)	3.133	X	N	Already subdivided (Dolington Estates)	207	R-1	n/a	
20016094-001	PIZAGNO CHARLES A, III &	837	SANDY RUN	RD	CONVENTIONAL	3.100	X	N	too many natural resources	258	R-2	Stream, woodlands	
20-043-221	SUTPHIN PINES SERVICE CORP		SUTHPIN	RD	MISC. OPEN SPACE	3.020	X	N	Sutphin Pines Open Space	156	R-2	n/a	
20-003-024-002	COLAVITA ROBERT W & DOROTHEA F	1759	DOLINGTON	RD	FARM HOUSE	3.007	X	N	too many natural resources	214	R-1	Stream, pond, woodlands	
20-003-049	BELLO PATRICK J & KENDALL	1608	DOLINGTON	RD	SPLIT-LEVEL	3.000	X	N	Insufficient lot width	21	R-1	Woodlands	
20-003-049-001	FATENKO ALEXANDER & EVA M	1578	DOLINGTON	RD	CONTEMPORARY	3.000	X	N	Insufficient lot width	242	R-1	Woodlands	
20-050-367	SUTPHIN PINES SERVICE CORP		SUTHPIN	PIN ES	MISC. 1-5 ACRES	2.900	X	N	Sutphin Pines Open Space	184	R-2	n/a	
20009001-002	STEPANOFF LUDMILLA&ANDREW &PAUL& MI	169	MOUNT EYRE	RD	RESD W/ 5-10 ACRES LAND	2.811	X	N	Lot line changed (Chanticleer)	244	R-1	Stream, woodlands	
20-050-366	SUTPHIN PINES SERVICE CORP		SUTHPIN	PIN ES	MISC. 1-5 ACRES	2.750	X	N	Sutphin Pines Open Space	183	R-2	n/a	
20052002-001	CHURCH JESUS CHRIST LATTER DAY		BIG OAK	RD	CHURCH MISC. VACANT TAXABLE	2.660	X	N	Already developed	289	R-2	Wetlands, woodlands	

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20-003-008	LOGAN GERTRUDE E		WASHINGTON CROSSING	RD	RESIDENTIAL 1-5 ACRES	2.600	X	N	Vacant - potential for 1 house	7	R-1	Wetlands, woodlands, well & septic	
20030080-001	KELLY PATRICK J	1473	RIVER	RD	RESIDENTIAL 1-5 ACRES	2.173	X	N	House rebuilt and raised after flood	267	R-RP	floodplain	
20-003-032-002	PATEL KIRTIKUMAR & DIPTI K	1642	FAIRFIELD	RD	UNIQUE	2.074	X	N	Flag lot from prior subdivision	235	R-1		
20-021-006	TROILO CAMERON C & OLGA JEAN	1675	LANGHORNE-YARDLEY	RD	RETAIL & SHOP	2.065	X	N	Edgewood Village (CVS)	81	C-1/TND		
20-043-188	SANFORD ROBT R & ELLEN MILLER		EFFINGHAM	RD	RESIDENTIAL 1-5 ACRES	2.050	X	N	too many natural resources	155	R-2	Steep slopes, woodlands, Canal setback	
20-003-032-001	FRENIER LEON E & EDITH M	1487	BROOKFIELD	RD	FARM HOUSE	2.024	X	N	Flag lot from prior subdivision	234	R-1		
20027006-003	LOIK VIVIAN	186	TAYLORSVILLE	RD	FARM HOUSE	2.000	X	N	too many natural resources	265	R-1	Stream, woodlands, steep slopes	
20-017-116	DELUCA ENT INC		POWNA	DR	LOCAL GOVT VACANT/MISC	1.937	X	N	Township owned detention basin	75	R-1	n/a	
20-024-184	DELUCA ENT INC	1519	CANDACE	LN	COUNTY GOVT VACANT/MISC	1.867	X	N	Township owned detention basin	83	R-2	n/a	
20021006-001	TROILO CAMERON C & OLGA JEAN	1675	YARDLEY-LANGHORNE	RD	RESIDENTIAL 1-5 ACRES	1.840	X	N	Edgewood Village (CVS)	263	C-1/TND	none	
20-068-079	BRIDLE ESTATES L P		QUARRY	RD	LOCAL GOVT VACANT/MISC	1.716	X	N	Township Detention Basin	203	R-1	n/a	
20-001-001-001	PENNA AMER WATER CO C/O AMERICAN SH		WASHINGTON CROSSING	RD	RESIDENTIAL 1-5 ACRES	1.450	X	N	Contains a water tower	208	R-1	Near a stream	
20-057-235	HIDDEN OAKS DEVT ASSOC L P		BANCROFT	LA	LOCAL GOVT VACANT/MISC	1.390	X	N	Township Owned Detention basin	199	R-2	n/a	
20-003-044	RUSSO NEIL & DIANE		WOODSIDE	RD	RESIDENTIAL 1-5 ACRES	1.279	X	N	Potential for 1 house (vacant)	19	R-1	none	
20-054-117	FERRY RD TRUST	15	E FERRY	RD	RESIDENTIAL 1/2-1 ACRE	1.231	X	N	too many natural resources	196	R-RP	Stream, floodplain, steep slopes, woodlands	
20-043-182	STRAUSS ANDREW L & DIANE R		EFFINGHAM	RD	RESIDENTIAL 1-5 ACRES	1.140	X	N	too many natural resources	154	R-2	Steep slopes, woodlands, Canal setback	
20-038-168	HARDY SANDRA C	862	GAINSWAY	RD	UNIQUE	0.980	X	N	too many natural resources	146	R-2	Stream, woodlands, too narrow	
20042035-001	MASON ROBERT L	598	BARN	DR	BARN (RESIDENCE)	0.930	X	N	Lot not big enough	283	R-2	few, if any	
20-040-006	STEPHENSON EDWARD & TONYA	2	MORNINGSIDE	DR	UNIQUE	0.850	X	N	Lot not big enough	147	R-2	wetland setback, woodlands	

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20-003-029	MINEHART THOMAS Z III & CATHIE M	1850	WOODSIDE	RD	RESIDENTIAL 1/2-1 ACRES	0.810	X	N	too small	14	R-1	Woodlands	
20-008-055	SCHAEFFER RICHARD J	38	DELAWARE RIM	DR	CONVENTIONAL	0.583	X	N	lot area listed incorrectly	25	R-2		
20-043-068	REILLY LEO WILLIAM, JR	1609	WESTOVER	RD	COLONIAL (OLD IN-TOWN HOUSE)	0.520	X	N	Lot not big enough	151	R-2	n/a	
20-050-121	GERVASIO JOSEPH & MARIAN E		MAPLEWOOD	LA	VACANT WET LANDS	0.275	X	N	Needs substantial zoning relief	168	R-2	Woodlands, possible wetlands, fronts on an unimproved street	
20-050-122	GERVASIO JOSEPH & MARIAN E		MAPLEWOOD	LA	VACANT WET LANDS	0.275	X	N	Needs substantial zoning relief	169	R-2	Woodlands, possible wetlands, fronts on an unimproved street	
20-050-123	GERVASIO JOSEPH & MARIAN E		PINE GROVE	RD	VACANT WET LANDS	0.275	X	N	Needs substantial zoning relief	170	R-2	Woodlands, possible wetlands, fronts on an unimproved street	
20-050-124	GERVASIO JOSEPH & MARIAN E		PINE GROVE	RD	VACANT WET LANDS	0.275	X	N	Needs substantial zoning relief	171	R-2	Woodlands, possible wetlands, fronts on an unimproved street	
20-050-126	DEON PASQUALE		PINE GROVE	RD	VACANT WET LANDS	0.260	X	N	too many natural resources	172	R-2	Stream, wetlands, woodlands	
20-050-127	DEON PASQUALE		PINE GROVE	RD	VACANT WET LANDS	0.260	X	N	too many natural resources	173	R-2	Stream, wetlands, woodlands	Denied previously by ZHB
20-050-128	DEON PASQUALE		PINE GROVE	RD	VACANT WET LANDS	0.260	X	N	too many natural resources	174	R-2	Stream, wetlands, woodlands	
20-050-129	DEON PASQUALE		PINE GROVE	RD	VACANT WET LANDS	0.260	X	N	too many natural resources	175	R-2	Stream, wetlands, woodlands	
20-050-130	DEON PASQUALE		MAPLEWOOD	LA	VACANT WET LANDS	0.260	X	N	too many natural resources	176	R-2	Stream, wetlands, woodlands	
20-050-131	DEON PASQUALE		MAPLEWOOD	LA	VACANT WET LANDS	0.260	X	N	too many natural resources	177	R-2	Stream, wetlands, woodlands	
20-050-132	DEON PASQUALE		MAPLEWOOD	LA	VACANT WET LANDS	0.260	X	N	too many natural resources	178	R-2	Stream, wetlands, woodlands	
20-050-133	DEON PASQUALE		MAPLEWOOD	LA	VACANT WET LANDS	0.260	X	N	too many natural resources	179	R-2	Stream, wetlands, woodlands	
20-050-138	DEON PASQUALE		PINE GROVE	RD	VACANT WET LANDS	0.260	X	N	too many natural resources	180	R-2	Stream, wetlands, woodlands	
20-050-139	DEON PASQUALE		PINE GROVE	RD	VACANT WET LANDS	0.260	X	N	too many natural resources	181	R-2	Stream, wetlands, woodlands	
20-050-148	DEON PASQUALE		ARBORLEA	AVE	VACANT WET LANDS	0.260	X	N	too many natural resources	182	R-2	Stream, wetlands, woodlands	
20-043-167	GERENSER ROBERT V		BLACK ROCK	RD	VACANT	0.150	X	N	too many natural resources	153	R-2	Wetlands, Canal setback, woodlands, no access	

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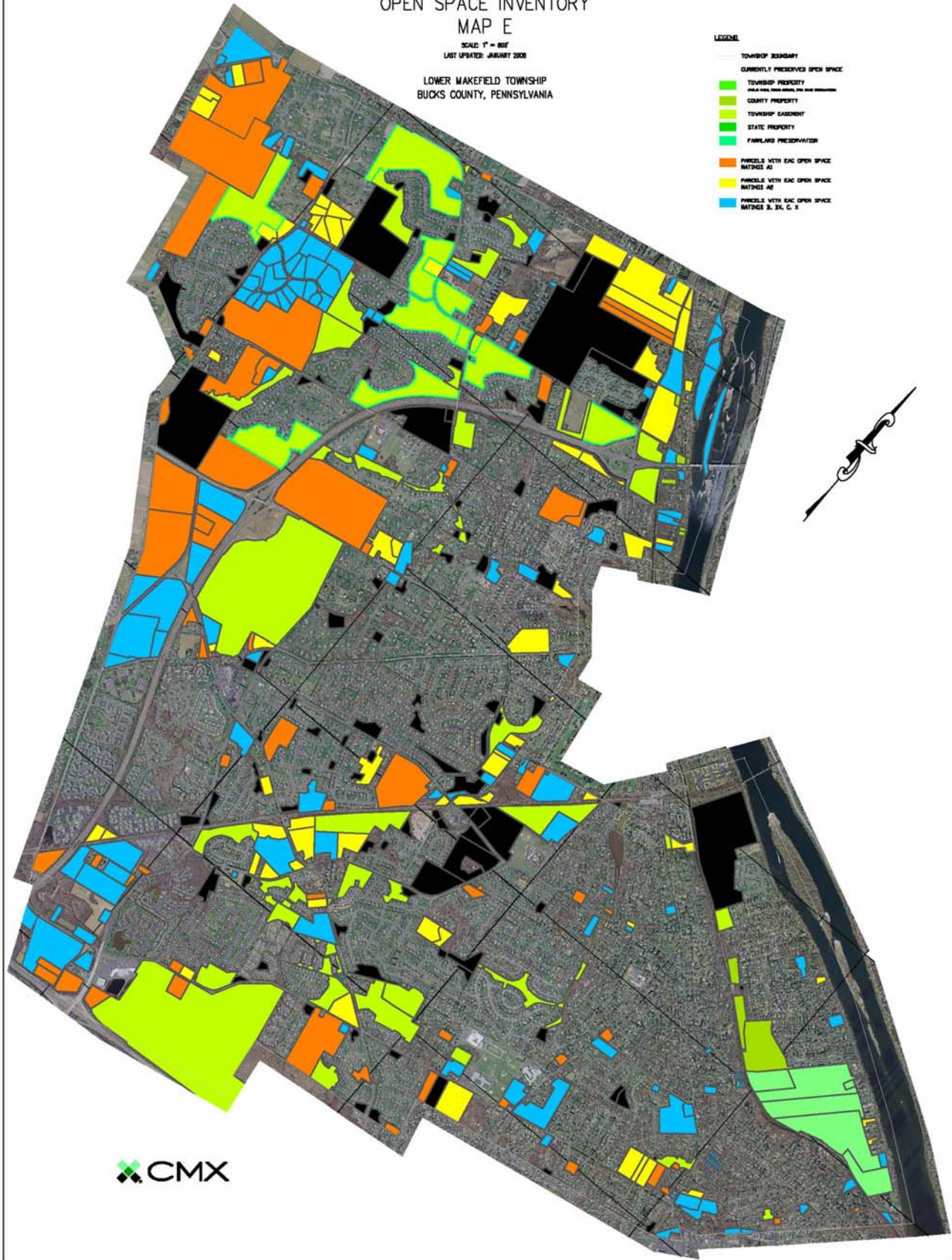
OPEN SPACE INVENTORY MAP E

SCALE 1" = 800'
LAST UPDATED: JANUARY 2009

LOWER MAKEFIELD TOWNSHIP
BUCKS COUNTY, PENNSYLVANIA

LEGEND

- TOWNSHIP BOUNDARY
- COUNTRYSIDE PRESERVES OPEN SPACE
- TOWNSHIP PROPERTY
- PARKS, RECREATION, AND OPEN SPACES
- COUNTY PROPERTY
- TOWNSHIP EASEMENT
- STATE PROPERTY
- FARMLAND PRESERVATION
- PARCELS WITH EAC OPEN SPACE RATING A2
- PARCELS WITH EAC OPEN SPACE RATING A1
- PARCELS WITH EAC OPEN SPACE RATING B, B+, C, X



Appendix 2

PROPERTY STATUS REPORT

Property Status Report

Property Name: Banks Tract Municipality: Lower Makefield Twp

Property Owner Name: Lower Makefield Twp.

Tax Map Parcel#(s): 20-32-43, -43-1 Date of Visit 6-4-09

Are there any changes in the property? (e.g. construction, dredging or filling, trails, timber harvest, evidence of trespass, trash, flooding, fire, etc.) Attach current photos with sites marked on a map.

No.

Are these changes consistent with the terms and conditions of the easement?

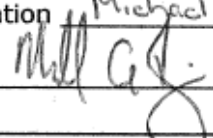
N/A

Any changes/improvements planned for property by municipality?

No.

RECOMMENDED ACTIONS:

None

Monitor name and affiliation	<u>Michael Roedig, Bucks Cty Planning Commission</u>
Signature of monitor	<u></u>

Photographs – Banko Tract



Property Status Report

Property Name: Patterson Farm Municipality: Lower Makefield Twp

Property Owner Name: Lower Makefield Twp.

Tax Map Parcel#(s): 20-16-46-49 Date of Visit 6-4-09

Are there any changes in the property? (e.g. construction, dredging or filling, trails, timber harvest, evidence of trespass, trash, flooding, fire, etc.) Attach current photos with sites marked on a map.

No.

Are these changes consistent with the terms and conditions of the easement?

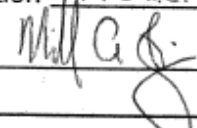
N/A

Any changes/improvements planned for property by municipality?

Possible installation of solar array system on non-easement portion of property

RECOMMENDED ACTIONS:

None.

Monitor name and affiliation	<u>Michael Roedig, Bucks Cty Planning Commission</u>
Signature of monitor	<u></u>

Photographs – Patterson Tract

